



NEW YORK
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OPPORTUNITY.

**Department of
Environmental
Conservation**

2015 SOIL VAPOR INTRUSION SAMPLING SUMMARY

Former Ithaca Gun Factory – Off-site, C755019A

September 2015

NYSDEC, DIVISION OF ENVIRONMENTAL REMEDIATION, REGION 7

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Table of Contents

1.0 Introduction	1
2.0 Project Background.....	1
3.0 Scope of Work	3
4.0 Methodology	3
5.0 Results	4
6.0 Conclusions	5

Attachments

Attachment A – Site Figure

Attachment B – Laboratory Analytical Results Summary Table

Attachment C – Laboratory Analytical Reports

Attachment D – Data Validation Usability Summary Report

1.0 Introduction

The New York State Department of Environmental Conservation has prepared this report to summarize the results of vapor intrusion investigation conducted in February and March 2015 for the Former Ithaca Gun Factory – Off-Site area. The “off-site area” encompasses the neighborhood to the west of the Brownfield Cleanup Program (BCP) site identified as the Former Ithaca Gun Factory (Site No.: C755019) located a 121-125 Lake Street in the City of Ithaca, Tompkins County, New York (site)(Attachment A).

Based on the results of previous soil and groundwater investigations of the off-site area, which were conducted by Aztech Technologies, Inc. (Aztech) from June 2013 to November 2013, the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH) determined further investigation was necessary in order to evaluate if groundwater contaminated with volatile organic compounds (VOCs) is impacting indoor air quality through vapor intrusion. The vapor intrusion investigation in the off-site area was initiated in February 2014. Sampling conducted for the 2014 event is documented in the report titled, “Soil Vapor Intrusion Investigation for Former Ithaca Gun Factory – Offsite”, dated July 2014.

The vapor intrusion investigation area is predominantly residential with a mix of commercial properties. The vapor intrusion investigation has been performed generally in the area from Lake Street west to North Aurora Street and East Falls Street south to Queen Street (Attachment A).

2.0 Project Background

The Ithaca Gun Company operated from approximately 1885 through 1986 at a property located to the east and uphill from this off-site neighborhood area. The main operations included manufacturing of firearms and munitions. Supporting manufacturing activities and site uses included: spray painting; oven drying of gun stocks; firing ranged; metal plating; machine shop, and; forging. Operations at the Ithaca Gun Company appear to have led to the contamination of both on-site and near off-site areas.

From 1995 to 1998, following discovery of lead shot in the Fall Creek gorge area, soil sampling was conducted in on-site and off-site areas. In 2000, leaking transformers and associated PCB-contaminated soils were removed from the site. From 2000 to 2002, the USEPA conducted a removal assessment, limited building demolition, and soil removal activities (mostly on adjacent off-site areas; however, some portions of the former Ithaca Gun Factory property were included). In 2001, an Environmental Site Assessment and a Site Investigation were completed on behalf of, and funded by, the property owner at the time. In 2002, the former Ithaca Gun Factory property entered the Voluntary Cleanup Program (VCP), with the site identification number of V00511. The original factory

property has since been divided and is identified as two separate sites; the Ithaca Falls Overlook, Environmental Restoration Program (ERP) site which is owned by the City of Ithaca, and the Former Ithaca Gun Factory, BCP site which is owned by IFR Development, LLC.

Laboratory analytical results of groundwater samples collected in 2012, as part of investigations for the ERP site, indicated presence of VOCs, specifically tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene, and vinyl chloride, at monitoring wells hydraulically down-gradient from the BCP site at concentrations exceeding respective NYSDEC groundwater standards. The ERP investigations were limited to areas east of Lake Street. As a result, in July 2013, the NYSDEC contracted Aztech to conduct a subsurface investigation and characterization of an off-site area located topographically down-gradient from the former Ithaca Gun Factory site and in areas west of Lake Street. Investigation details and results are documented in the report titled “Site Characterization Report for Former Ithaca Gun Factory – Offsite”, dated February 2014.

The site characterization work included collection of groundwater and soil vapor samples from temporary points installed using direct-push technology, installation of permanent groundwater monitoring wells, a professional survey, and groundwater sampling from the monitoring wells. The site characterization results have allowed for the general delineation of the area with presence of VOCs.

Laboratory analytical data indicated that VOCs were detected in groundwater; however, all compounds detected were below their respective NYSDEC groundwater standards. The only apparent site related VOC detected in groundwater was TCE with concentrations ranging from 0.82 to 4.8 micrograms per liter (ug/l); the groundwater standard for TCE is 5 ug/l. TCE was detected in five of the ten wells sampled. Soil vapor results indicated presence of more VOCs than those detected in groundwater; however, the primary contaminant of concern in soil vapor is TCE.

Additional groundwater sampling conducted as a second event in June 2014 indicated similar conditions to those reported for the site characterization. TCE concentrations ranged from 1.4 to 3.2 ug/l and detections occurred in the same five wells. Results for this groundwater sampling event are documented in the report titled, “Annual 2015 Site Status Report for Former Ithaca Gun Factory – Offsite”, dated August 2015.

Based on the results of previous investigations, the scope of work described in the following sections was completed.

3.0 Scope of Work

The overall purpose of this investigation is to evaluate whether or not the process of vapor intrusion is occurring at homes or businesses in the area where presence of VOCs are known to exist in either groundwater or soil vapor. Tasks performed during the investigation included:

- Collection of vapor intrusion samples (combined sample sets including sub-slab, indoor, and outside air) from 12 locations,
- Completion of Structural Sampling Questionnaires and Building Inventory Logs, and;
- Collection of Quality Assurance/Quality Control (QA/QC) duplicate samples.

4.0 Methodology

At the end of January 2015; the NYSDEC contacted the owners of 43 home or commercial properties in the off-site area to explain the investigation program and to inquire about the property owner's willingness to participate in the investigation. Contact was made by a letter to the property owner and by telephone if numbers are available. The letter provides three methods for contacting the DEC project manager; the recipient can choose to use: a postcard provided with prepaid return postage, electronic mail, or telephone. Of the 43 properties, 13 were new locations, five were locations to be monitored, two were previous declines, and 23 were previously unresponsive. As a result, 12 owners accepted the sampling offer, and 31 owners did not respond. The sampling locations are shown on Attachment A. The sampling locations from 2014 and 2015 appear to provide a decent spatial distribution for data collection over the area with known presence of contamination in groundwater.

Below is a list of structures that were sampled for sub-slab and indoor air during the February and March 2015 sampling event along with the structure's Sample Location Designation (i.e., the H number).

- H3 405 East Lincoln Street
- H15 1006 North Aurora Street
- H16 1008 North Aurora Street
- H20 1111 North Aurora Street
- H23 402 East Lincoln Street
- H24 218 East Falls Street
- H25 302 East Falls Street
- H26 304 East Falls Street

- H27 110 Queen Street
- H28 1108 North Aurora Street
- H29 1110 North Aurora Street
- H30 114 Queen Street

All sampling was conducted in accordance with the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006. During the sample collection, Structural Sampling Questionnaires and Building Inventory Logs were completed at each of the structures along with a photographic inventory of products stored in the basements. Generally, two (2) samples were collected at each location (one sub-slab vapor sample and one indoor basement air sample). In some cases more than one indoor air sample was collected. This applied if there were areas of the basement that were disconnected from the main portion, or if it was decided that vapors could “pool” in a particular location (i.e. crawlspace). In these cases, an additional sampling canister was placed in those areas. Several basements had earthen floors, at these locations no sub-slab vapor sample could be collected and samples were limited to indoor basement air.

The samples were collected using six-liter batch certified summa canisters equipped with laboratory-calibrated flow controller valves to collect the samples over a 24-hour period. Outdoor ambient air samples were collected each day of sampling in order to obtain background conditions. After collection, samples were submitted to the Test America’s Knoxville, Tennessee laboratory where they were analyzed in accordance with analytical method TO-15 for the full list of VOCs. The full list of compounds and sampling results can be found in the laboratory analytical reports included as Attachment C. The table included as Attachment B provides a summary of results for compounds that are included within the NYSDOH Guidance decision matrices. Not all of the compounds within the summary table are site-related contaminants as detailed in Section 2.0.

5.0 Results

Laboratory analysis indicated that detectable TCE concentrations in the air samples ranged from 0.25 to 69 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). Generally, concentrations were found to be higher below concrete slabs (sub-slab) and lower in the indoor basement air. Three homes had no detection of TCE in the sub-slab or indoor air; six homes had no detection of TCE in the indoor air.

Detectable PCE concentrations in air samples ranged from 3.4 to 9.3 $\mu\text{g}/\text{m}^3$. Six homes had no detection of PCE in the sub-slab or indoor air; ten homes had not detection of PCE in the indoor air.

Although not site related, low concentrations of 1,1,1-trichlorethane and carbon tetrachloride were also detected at several properties. It should be noted that indoor air concentrations for carbon tetrachloride were similar to those found in outdoor/ambient air.

A third party data usability summary report (DUSR) was completed by ZDataReports, Data Management and Validation Services of Syracuse, New York. ZDataReports validated the analytical data package submitted to NYSDEC by Test America; reviewing it for completeness and compliance as defined by the requirements for NYSDEC Analytical Services Protocol Category B deliverables.

The DUSR executive summary indicated that the volatile organic analyses were determined to be usable for qualitative and quantitative purposes with minor qualification. Sample results for several compounds were qualified based on deviations from continuing calibration and field duplicate criteria. The DUSR is included as Attachment D.

6.0 Conclusions

The NYSDEC and NYSDOH have evaluated the data generated during the soil vapor intrusion investigation in conjunction with current understanding of the nature and extent of contamination.

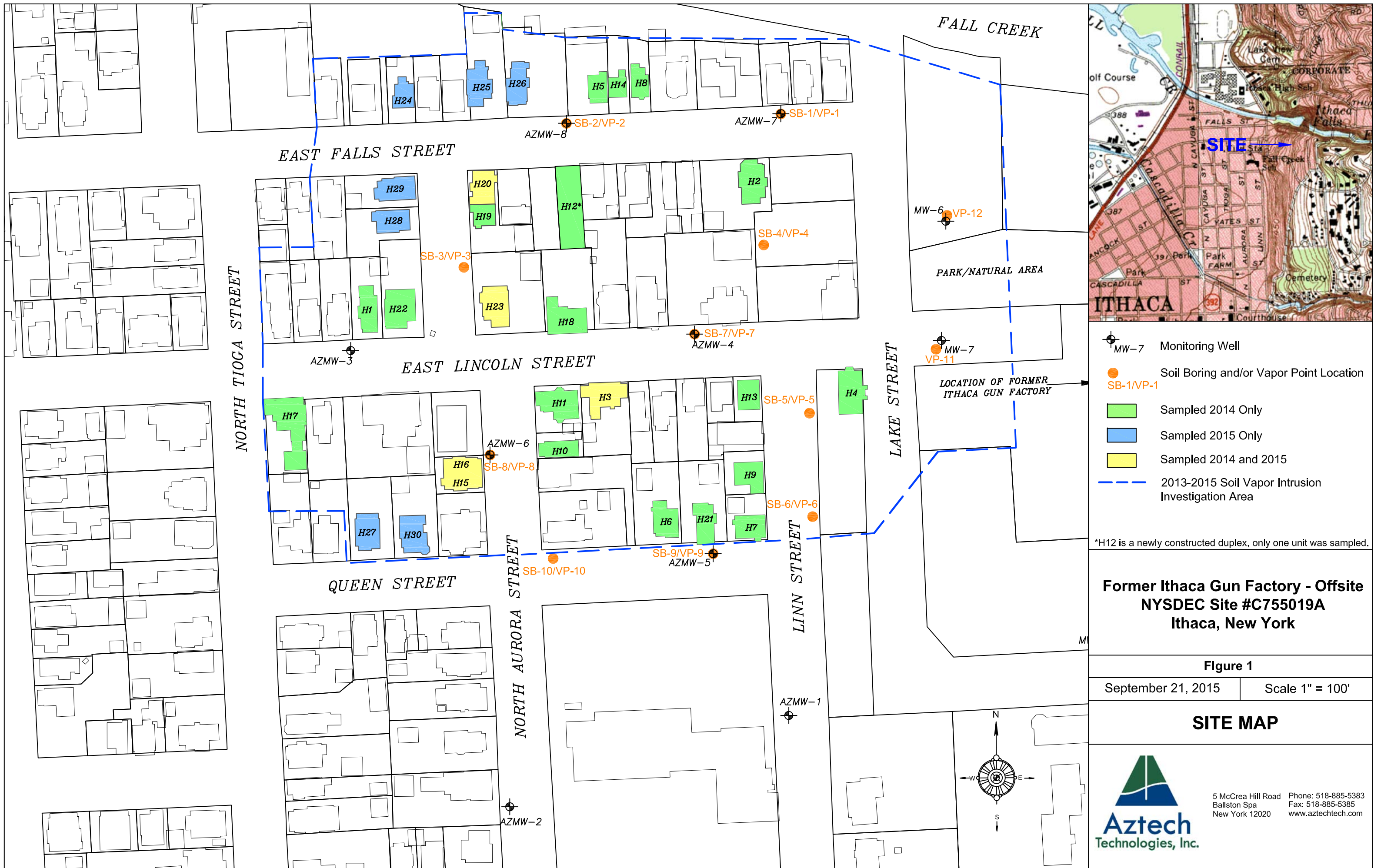
Based on this evaluation the NYSDEC and NYSDOH have recommended monitoring for five homes. At the monitoring locations, the NYSDEC will offer resampling during the 2015-2016 heating season. In addition, sampling will be offered to any locations that previously declined or were unresponsive and new locations which will be determined by the NYSDEC and NYSDOH.

No further actions were recommended for seven properties sampled during this investigation.

Letters transmitting sampling results and recommendations were sent to property owners at each sampling location by the NYSDOH.

In August 2015, the NYSDOH released fact sheets describing changes to their guideline concentration of TCE in indoor air. The fact sheets are available on the NYSDOH webpage at: <https://www.health.ny.gov/environmental/chemicals/trichloroethene/>. Due to these changes, the NYSDEC has requested NYSDOH review the sampling data for this site. Any changes in the recommendations for individual homes will be transmitted to property owners and detailed in the 2015-2016 heating season sampling summary.

Attachment A – Site Figure



*H12 is a newly constructed duplex, only one unit was sampled.

Attachment B – Laboratory Analytical Results
Summary Table

February - March 2015 Sub-Slab and Indoor Air Sampling Data Summary
Former Ithaca Gun Factory - Off-Site
NYSDEC Site C755019A
Ithaca, New York

Sample ID Location	H3-BA-2015 Basement		H3-SS-2015 Basement Sub-slab		H15-BA-2015 Basement		H15-BA2-2015 Basement		H15-SS-2015 Basement Sub-slab	
Lab Sample ID	140-2815-10		140-2815-11		140-2797-3		140-2815-12		140-2797-4	
Sample Type	Indoor Air		Sub-slab Air		Indoor Air		Indoor Air		Sub-slab Air	
Sample Date	2/25/2015		2/25/2015		2/24/2015		2/27/2015		2/24/2015	
TO-15 (µg/m ³)	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
1,1,1-Trichloroethane	0.55	0.44	0.7	0.44	ND	0.44	ND	0.44	9.5	0.44
1,1-Dichloroethene	ND	0.32	ND	0.32	ND	0.32	ND	0.32	ND	0.32
Carbon tetrachloride	0.77	0.25	0.68	0.25	0.49	0.25	0.43	0.25	6.3	0.25
cis-1,2-Dichloroethylene	ND	0.32	ND	0.32	ND	0.32	ND	0.32	ND	0.32
Tetrachloroethylene (PCE)	ND	0.54	1.1	0.54	ND	0.54	ND	0.54	6.3	0.54
Trichloroethene (TCE)	4.7	0.21	4.4	0.21	0.27	0.21	0.25	0.21	63	0.21
Vinyl Chloride	ND	0.20	ND	0.20	ND	0.20	ND	0.20	ND	0.20

Sample ID Location	H16-BA-2015 Basement		H16-SS-2015 Basement Sub-slab		H20-BA-2015 Basement		DUP1-2015 Basement	
Lab Sample ID	140-2797-5		140-2797-6		140-2815-1		140-2815-2	
Sample Type	Indoor Air		Sub-slab Air		Indoor Air		Indoor Air	
Sample Date	2/24/2015		2/24/2015		2/27/2015		2/27/2015	
TO-15 (µg/m ³)	Results	RL	Results	RL	Results	RL	Results	RL
1,1,1-Trichloroethane	ND	0.44	2.0	0.44	ND	0.44	ND	0.44
1,1-Dichloroethene	ND	0.32	ND	0.32	ND	0.32	ND	0.32
Carbon tetrachloride	0.50	0.25	1.6	0.25	0.45	0.25	0.73	0.25
cis-1,2-Dichloroethylene	ND	0.32	ND	0.32	ND	0.32	ND	0.32
Tetrachloroethylene (PCE)	6.5	0.54	2.5	0.54	4.6	0.54	5	0.54
Trichloroethene (TCE)	0.68	0.21	41	0.21	1.4	0.21	1.5	0.21
Vinyl Chloride	ND	0.20	ND	0.20	ND	0.20	ND	0.20

February - March 2015 Sub-Slab and Indoor Air Sampling Data Summary
Former Ithaca Gun Factory - Off-Site
NYSDEC Site C755019A
Ithaca, New York

Sample ID Location	H23-BA-2015 Basement		H23-SS-2015 Basement Sub-slab		DUP2-2015 Basement Sub-slab		H24-BA-2015 Basement		H24-SS-2015 Basement Sub-slab	
Lab Sample ID	140-2815-4		140-2815-5		140-2815-6		140-2797-1		140-2797-2	
Sample Type	Indoor Air		Sub-slab Air		Sub-slab Air		Indoor Air		Sub-slab Air	
Sample Date	2/27/2015		2/27/2015		2/27/2015		2/24/2015		2/24/2015	
TO-15 ($\mu\text{g}/\text{m}^3$)	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
1,1,1-Trichloroethane	ND	0.44	ND	0.44	ND	0.44	ND	0.44	ND	0.44
1,1-Dichloroethene	ND	0.32	ND	0.32	ND	0.32	ND	0.32	ND	0.32
Carbon tetrachloride	0.50	0.25	ND	0.25	ND	0.25	0.44	0.25	0.79	0.25
cis-1,2-Dichloroethylene	ND	0.32	ND	0.32	ND	0.32	ND	0.32	ND	0.32
Tetrachloroethylene (PCE)	ND	0.54	ND	0.54	ND	0.54	ND	0.54	ND	0.54
Trichloroethene (TCE)	0.75	0.21	ND	0.21	ND	0.21	ND	0.21	ND	0.21
Vinyl Chloride	ND	0.20	ND	0.20	ND	0.20	ND	0.20	ND	0.20

Sample ID Location	H25-BA-2015 Basement		H26-BA-2015 Basement		H26-CS-2015 Crawlspace		H26-SS-2015 Basement Sub-slab		H27-BA-2015 Basement	
Lab Sample ID	140-2797-7		140-2797-8		140-2797-10		140-2797-9		140-2797-12	
Sample Type	Indoor Air		Indoor Air		Indoor Air		Sub-slab Air		Indoor Air	
Sample Date	2/24/2015		2/24/2015		2/24/2015		2/24/2015		2/25/2015	
TO-15 ($\mu\text{g}/\text{m}^3$)	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
1,1,1-Trichloroethane	ND	0.44	ND	0.44	ND	0.44	ND	0.44	ND	0.44
1,1-Dichloroethene	ND	0.32	ND	0.32	ND	0.32	ND	0.32	ND	0.32
Carbon tetrachloride	0.47	0.25	0.49	0.25	0.41	0.25	0.35	0.25	0.53	0.25
cis-1,2-Dichloroethylene	ND	0.32	ND	0.32	ND	0.32	ND	0.32	ND	0.32
Tetrachloroethylene (PCE)	ND	0.54	ND	0.54	ND	0.54	ND	0.54	ND	0.54
Trichloroethene (TCE)	ND	0.21	ND	0.21	ND	0.21	0.72	0.21	ND	0.21
Vinyl Chloride	ND	0.20	ND	0.20	ND	0.20	ND	0.20	ND	0.20

February - March 2015 Sub-Slab and Indoor Air Sampling Data Summary
Former Ithaca Gun Factory - Off-Site
NYSDEC Site C755019A
Ithaca, New York

Sample ID Location	H28-BA-2015 Basement		H28-SS-2015 Basement Sub-slab		H29-BA-2015 Basement		H29-SS-2015 Basement Sub-slab		H30-BA-2015 Basement	
Lab Sample ID	140-2815-8		140-2815-9		140-2950-2		140-2950-1		140-2950-5	
Sample Type	Indoor Air		Sub-slab Air		Indoor Air		Sub-slab Air		Indoor Air	
Sample Date	2/25/2015		2/25/2015		3/24/2015		3/24/2015		3/24/2015	
TO-15 ($\mu\text{g}/\text{m}^3$)	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
1,1,1-Trichloroethane	ND	0.44	2.5	0.44	ND	0.44	8.8	0.44	ND	0.44
1,1-Dichloroethene	ND	0.32	ND	0.32	ND	0.32	ND	0.32	ND	0.32
Carbon tetrachloride	0.42	0.25	1.4	0.25	0.49	0.25	6.2	0.25	0.46	0.25
cis-1,2-Dichloroethylene	ND	0.32	ND	0.32	ND	0.32	ND	0.32	ND	0.32
Tetrachloroethylene (PCE)	ND	0.54	ND	0.54	ND	0.54	3.4	0.54	ND	0.54
Trichloroethene (TCE)	ND	0.21	5.8	0.21	0.40	0.21	69	0.21	ND	0.21
Vinyl Chloride	ND	0.20	ND	0.20	ND	0.20	ND	0.20	ND	0.20

Sample ID Location	H30-SS-2015 Basement Sub-slab		D1-OA-2015 Outdoor		D2-OA-2015 Outdoor		D3-OA-2015 Outdoor		D4-OA-2015 Outdoor	
Lab Sample ID	140-2950-4		140-2797-11		140-2815-7		140-2815-3		140-2950-3	
Sample Type	Sub-slab Air		Ambient Air		Ambient Air		Ambient Air		Ambient Air	
Sample Date	3/24/2015		2/24/2015		2/25/2015		2/27/2015		3/24/2015	
TO-15 ($\mu\text{g}/\text{m}^3$)	Results	RL	Results	RL	Results	RL	Results	RL	Results	RL
1,1,1-Trichloroethane	3.9	0.44	ND	0.44	ND	0.44	ND	0.44	ND	0.44
1,1-Dichloroethene	ND	0.32	ND	0.32	ND	0.32	ND	0.32	ND	0.32
Carbon tetrachloride	0.31	0.25	0.48	0.25	0.46	0.25	0.39	0.25	0.38	0.25
cis-1,2-Dichloroethylene	ND	0.32	ND	0.32	ND	0.32	ND	0.32	ND	0.32
Tetrachloroethylene (PCE)	9.3	0.54	ND	0.54	ND	0.54	ND	0.54	ND	0.54
Trichloroethene (TCE)	9.6	0.21	ND	0.21	ND	0.21	ND	0.21	ND	0.21
Vinyl Chloride	ND	0.20	ND	0.20	ND	0.20	ND	0.20	ND	0.20

Attachment C – Laboratory Analytical Reports

ANALYTICAL REPORT

Job Number: 140-2797-1

Job Description: Former Ithaca Gun Factory # C755019A

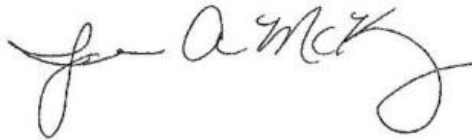
For:

New York State D.E.C.

1679 Rte. 11

Kirkwood, NY 13795

Attention: Gary Priscott



Approved for release.
Jamie A McKinney
Senior Project Manager
3/16/2015 12:29 PM

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03/16/2015
Revision: 1

The test results in this report meet all 2003 NELAC and 2003 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Table of Contents

Cover Title Page	1
Data Summaries	4
Definitions	4
Case Narrative	5
Detection Summary	6
Client Sample Results	13
Default Detection Limits	42
Surrogate Summary	44
QC Sample Results	45
QC Association	55
Chronicle	56
Certification Summary	59
Method Summary	60
Sample Summary	61
Organic Sample Data	62
Air - GC/MS VOA	62
Method TO15 Low Level	62
Method TO15 Low Level QC Summary	63
Method TO15 Low Level Sample Data	76
Standards Data	287
Method TO15 Low Level ICAL Data	287
Method TO15 Low Level CCAL Data	364
Raw QC Data	385
Method TO15 Low Level Tune Data	385
Method TO15 Low Level Blank Data	397
Method TO15 Low Level LCS/LCSD Data	409

Table of Contents

Method TO15 Low Level Run Logs	421
Clean Canister Certification	432
Clean Canister Data	432
Shipping and Receiving Documents	450
Client Chain of Custody	451
Sample Receipt Checklist	453

Definitions/Glossary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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
140-2797-1

Comments

No additional comments.

Receipt

The samples were received on 2/27/2015 11:15 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: Quantitation for ethanol was previously based on a one-point calibration standard at the reporting limit. This compound was quantitated based on a minimum 5-point calibration curve. The following interim criteria are being used until the method performance for this additional analyte is fully established:

- The initial calibration acceptance criteria is set at 40% RSD. Any compound greater than 40% RSD was changed to a linear or quadratic model with an $r^2 \geq 0.990$ acceptance criteria.
- There are no criteria for second source standard verification % D. The second source standard was independently prepared from the same parent mixture (as the primary source).
- The continuing calibration verification criteria are set at 50% D. Any compound greater than 50% D must pass the LCS criteria.
- The LCS recovery criteria are set at 20% to 180%.
- A method detection limit study has not been performed. The detection of the analytes is demonstrated by detection of the calibration standard at the reporting limit. No estimated results are reported below the reporting limit.

Method(s) TO 14A, 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 TestAmerica Knoxville.

Method(s) TO 15 LL, TO-15: The continuing calibration verification (CCV) associated with batch 2449 exhibited % difference of > 30% for the following analyte(s), methyl tert-butyl ether and ethylbenzene, 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, TO-15: The following analyte(s) recovered outside control limits for the LCS associated with batch 2449: ethylbenzene. 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: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H24-BA-2015

Lab Sample ID: 140-2797-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4-Methyl-2-pentanone (MIBK)	0.25		0.20		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.22		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.070		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.39		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.37		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	26		0.80		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.30		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.099		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.28		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.17		0.080		ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4-Methyl-2-pentanone (MIBK)	1.0		0.82		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.70		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.44		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.80		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.8		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	49		1.5		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	1.1		0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.43		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	1.1		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.95		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H24-SS-2015

Lab Sample ID: 140-2797-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.12		0.040		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.36		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	2.0		0.80		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.37		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.10		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.15		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.14		0.080		ppb v/v	1		TO 15 LL	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.79		0.25		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.8		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	3.7		1.5		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	1.3		0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.44		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	0.56		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.81		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H15-BA-2015

Lab Sample ID: 140-2797-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.15		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.077		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.45		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.38		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	4.8		0.80		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.20		0.20		ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Knoxville

Detection Summary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H15-BA-2015 (Continued)

Lab Sample ID: 140-2797-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.050		0.040		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.17		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.48		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.49		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.92		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.9		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	9.1		1.5		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	0.68		0.69		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	0.27		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.95		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H15-SS-2015

Lab Sample ID: 140-2797-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.7		0.080		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.16		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	1.0		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	5.1		0.080		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.23		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.40		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	3.1		0.80		ppb v/v	1		TO 15 LL	Total/NA
Hexane	0.20		0.20		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.27		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.091		0.080		ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.93		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.21		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	12		0.040		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.17		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	9.5		0.44		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.51		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	6.3		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	25		0.39		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.48		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.0		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	5.9		1.5		ug/m3	1		TO 15 LL	Total/NA
Hexane	0.71		0.70		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	0.93		0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.39		0.35		ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	6.3		0.54		ug/m3	1		TO 15 LL	Total/NA
Toluene	0.77		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	63		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.94		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H16-BA-2015

Lab Sample ID: 140-2797-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	0.58		0.32		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.33		0.080		ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Knoxville

Detection Summary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H16-BA-2015 (Continued)

Lab Sample ID: 140-2797-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.079		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.44		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.41		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	6.8		0.80		ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.20	*	0.080		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.23		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.36		0.080		ppb v/v	1		TO 15 LL	Total/NA
o-Xylene	0.12		0.080		ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.96		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.0		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.13		0.040		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.19		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	1.7		0.94		ug/m3	1		TO 15 LL	Total/NA
Benzene	1.1		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.50		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.90		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.0		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	13		1.5		ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.87	*	0.35		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	0.81		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	0.51		0.35		ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	6.5		0.54		ug/m3	1		TO 15 LL	Total/NA
Toluene	3.8		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	0.68		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.1		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H16-SS-2015

Lab Sample ID: 140-2797-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.37		0.080		ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.13		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.45		0.32		ppb v/v	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	0.60		0.20		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.24		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.25		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	1.9		0.080		ppb v/v	1		TO 15 LL	Total/NA
Cyclohexane	0.22		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.36		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	3.0		0.80		ppb v/v	1		TO 15 LL	Total/NA
Hexane	0.47		0.20		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.37		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.31		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
Tetrachloroethene	0.37		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.54		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	7.6		0.040		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.16		0.080		ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Knoxville

Detection Summary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H16-SS-2015 (Continued)

Lab Sample ID: 140-2797-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	2.0		0.44		ug/m3	1		TO 15 LL	Total/NA
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
4-Methyl-2-pentanone (MIBK)	2.5		0.82		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.77		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	1.6		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	9.2		0.39		ug/m3	1		TO 15 LL	Total/NA
Cyclohexane	0.75		0.69		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.8		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	5.6		1.5		ug/m3	1		TO 15 LL	Total/NA
Hexane	1.7		0.70		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	1.3		0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	1.4		0.35		ug/m3	1		TO 15 LL	Total/NA
o-Xylene	0.56		0.35		ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	2.5		0.54		ug/m3	1		TO 15 LL	Total/NA
Toluene	2.0		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	41		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.91		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H25-BA-2015

Lab Sample ID: 140-2797-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.11		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	0.26		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.075		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.41		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.40		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	6.8		0.80		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.64		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.21		0.080		ppb v/v	1		TO 15 LL	Total/NA
o-Xylene	0.087		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.39		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.19		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	0.55		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	0.84		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.47		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.85		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.0		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	13		1.5		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	2.2		0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.92		0.35		ug/m3	1		TO 15 LL	Total/NA
o-Xylene	0.38		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	1.5		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.1		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H26-BA-2015

Lab Sample ID: 140-2797-8

This Detection Summary does not include radiochemical test results.

TestAmerica Knoxville

Detection Summary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H26-BA-2015 (Continued)

Lab Sample ID: 140-2797-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	2.1		0.32		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.26		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.077		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.19		0.080		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.41		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.38		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	7.6		0.80		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.20		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.19		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.30		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.17		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	6.2		0.94		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.82		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.49		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.90		0.39		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.85		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.9		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	14		1.5		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	0.69		0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.84		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	1.1		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.95		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H26-SS-2015

Lab Sample ID: 140-2797-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	0.51		0.32		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.18		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.056		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	1.2		0.080		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.31		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	3.2		0.80		ppb v/v	1		TO 15 LL	Total/NA
Hexane	0.58		0.20		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.26		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.26		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.80		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.13		0.040		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.13		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	1.5		0.94		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.57		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.35		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	5.6		0.39		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.6		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	6.0		1.5		ug/m3	1		TO 15 LL	Total/NA
Hexane	2.0		0.70		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	0.91		0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	1.1		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	3.0		0.45		ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Knoxville

Detection Summary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H26-SS-2015 (Continued)

Lab Sample ID: 140-2797-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.72		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.73		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H26-CS-2015

Lab Sample ID: 140-2797-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4-Methyl-2-pentanone (MIBK)	0.64		0.20		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.23		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.066		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.080		0.080		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.43		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.39		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	9.2		0.80		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.36		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.20		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.38		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.17		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4-Methyl-2-pentanone (MIBK)	2.6		0.82		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.74		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.41		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.39		0.39		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.90		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.9		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	17		1.5		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	1.2		0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.86		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	1.4		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.97		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: DI-OA-2015

Lab Sample ID: 140-2797-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	0.35		0.32		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.31		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.076		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.43		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.37		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	3.4		0.80		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.16		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.29		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.18		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	1.0		0.94		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.98		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.48		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.89		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.8		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	6.5		1.5		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.71		0.35		ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Knoxville

Detection Summary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: DI-OA-2015 (Continued)

Lab Sample ID: 140-2797-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	1.1		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.99		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H27-BA-2015

Lab Sample ID: 140-2797-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.23		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.085		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.52		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.41		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	47		0.80		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.12		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.23		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.18		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.74		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.53		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	1.1		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.0		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	89		1.5		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.54		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	0.88		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.0		0.45		ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H24-BA-2015

Lab Sample ID: 140-2797-1

Date Collected: 02/24/15 08:42

Matrix: Air

Date Received: 02/27/15 11:15

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			03/04/15 00:51	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/04/15 00:51	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/04/15 00:51	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/04/15 00:51	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/04/15 00:51	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/04/15 00:51	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/04/15 00:51	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/04/15 00:51	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/04/15 00:51	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 00:51	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/04/15 00:51	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/04/15 00:51	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/04/15 00:51	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/04/15 00:51	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 00:51	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 00:51	1
1,4-Dioxane	ND		0.20		ppb v/v			03/04/15 00:51	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/04/15 00:51	1
2-Butanone	ND		0.32		ppb v/v			03/04/15 00:51	1
4-Methyl-2-pentanone (MIBK)	0.25		0.20		ppb v/v			03/04/15 00:51	1
Benzene	0.22		0.080		ppb v/v			03/04/15 00:51	1
Benzyl chloride	ND		0.16		ppb v/v			03/04/15 00:51	1
Bromodichloromethane	ND		0.080		ppb v/v			03/04/15 00:51	1
Bromoform	ND		0.080		ppb v/v			03/04/15 00:51	1
Bromomethane	ND		0.080		ppb v/v			03/04/15 00:51	1
Carbon tetrachloride	0.070		0.040		ppb v/v			03/04/15 00:51	1
Chlorobenzene	ND		0.080		ppb v/v			03/04/15 00:51	1
Chloroethane	ND		0.080		ppb v/v			03/04/15 00:51	1
Chloroform	ND		0.080		ppb v/v			03/04/15 00:51	1
Chloromethane	0.39		0.20		ppb v/v			03/04/15 00:51	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 00:51	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/04/15 00:51	1
Cyclohexane	ND		0.20		ppb v/v			03/04/15 00:51	1
Dibromochloromethane	ND		0.080		ppb v/v			03/04/15 00:51	1
Dichlorodifluoromethane	0.37		0.080		ppb v/v			03/04/15 00:51	1
Ethanol	26		0.80		ppb v/v			03/04/15 00:51	1
Ethylbenzene	ND	*	0.080		ppb v/v			03/04/15 00:51	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/04/15 00:51	1
Hexane	ND		0.20		ppb v/v			03/04/15 00:51	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/04/15 00:51	1
Methylene Chloride	0.30		0.20		ppb v/v			03/04/15 00:51	1
m-Xylene & p-Xylene	0.099		0.080		ppb v/v			03/04/15 00:51	1
o-Xylene	ND		0.080		ppb v/v			03/04/15 00:51	1
Styrene	ND		0.080		ppb v/v			03/04/15 00:51	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/04/15 00:51	1
Tetrachloroethene	ND		0.080		ppb v/v			03/04/15 00:51	1
Toluene	0.28		0.12		ppb v/v			03/04/15 00:51	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 00:51	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H24-BA-2015

Lab Sample ID: 140-2797-1

Date Collected: 02/24/15 08:42

Matrix: Air

Date Received: 02/27/15 11:15

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			03/04/15 00:51	1
Trichloroethene	ND		0.040		ppb v/v			03/04/15 00:51	1
Trichlorofluoromethane	0.17		0.080		ppb v/v			03/04/15 00:51	1
Vinyl chloride	ND		0.080		ppb v/v			03/04/15 00:51	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/04/15 00:51	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/04/15 00:51	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/04/15 00:51	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/04/15 00:51	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/04/15 00:51	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/04/15 00:51	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/04/15 00:51	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/04/15 00:51	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/04/15 00:51	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 00:51	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/04/15 00:51	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/04/15 00:51	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/04/15 00:51	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/04/15 00:51	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 00:51	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 00:51	1
1,4-Dioxane	ND		0.72		ug/m3			03/04/15 00:51	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/04/15 00:51	1
2-Butanone	ND		0.94		ug/m3			03/04/15 00:51	1
4-Methyl-2-pentanone (MIBK)	1.0		0.82		ug/m3			03/04/15 00:51	1
Benzene	0.70		0.26		ug/m3			03/04/15 00:51	1
Benzyl chloride	ND		0.83		ug/m3			03/04/15 00:51	1
Bromodichloromethane	ND		0.54		ug/m3			03/04/15 00:51	1
Bromoform	ND		0.83		ug/m3			03/04/15 00:51	1
Bromomethane	ND		0.31		ug/m3			03/04/15 00:51	1
Carbon tetrachloride	0.44		0.25		ug/m3			03/04/15 00:51	1
Chlorobenzene	ND		0.37		ug/m3			03/04/15 00:51	1
Chloroethane	ND		0.21		ug/m3			03/04/15 00:51	1
Chloroform	ND		0.39		ug/m3			03/04/15 00:51	1
Chloromethane	0.80		0.41		ug/m3			03/04/15 00:51	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 00:51	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 00:51	1
Cyclohexane	ND		0.69		ug/m3			03/04/15 00:51	1
Dibromochloromethane	ND		0.68		ug/m3			03/04/15 00:51	1
Dichlorodifluoromethane	1.8		0.40		ug/m3			03/04/15 00:51	1
Ethanol	49		1.5		ug/m3			03/04/15 00:51	1
Ethylbenzene	ND	*	0.35		ug/m3			03/04/15 00:51	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/04/15 00:51	1
Hexane	ND		0.70		ug/m3			03/04/15 00:51	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/04/15 00:51	1
Methylene Chloride	1.1		0.69		ug/m3			03/04/15 00:51	1
m-Xylene & p-Xylene	0.43		0.35		ug/m3			03/04/15 00:51	1
o-Xylene	ND		0.35		ug/m3			03/04/15 00:51	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H24-BA-2015

Lab Sample ID: 140-2797-1

Date Collected: 02/24/15 08:42

Matrix: Air

Date Received: 02/27/15 11:15

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			03/04/15 00:51	1
t-Butyl alcohol	ND		0.97		ug/m3			03/04/15 00:51	1
Tetrachloroethene	ND		0.54		ug/m3			03/04/15 00:51	1
Toluene	1.1		0.45		ug/m3			03/04/15 00:51	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 00:51	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 00:51	1
Trichloroethene	ND		0.21		ug/m3			03/04/15 00:51	1
Trichlorofluoromethane	0.95		0.45		ug/m3			03/04/15 00:51	1
Vinyl chloride	ND		0.20		ug/m3			03/04/15 00:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		60 - 140					03/04/15 00:51	1

Client Sample ID: H24-SS-2015

Lab Sample ID: 140-2797-2

Date Collected: 02/24/15 08:44

Matrix: Air

Date Received: 02/27/15 11:15

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			03/04/15 01:46	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/04/15 01:46	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/04/15 01:46	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/04/15 01:46	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/04/15 01:46	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/04/15 01:46	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/04/15 01:46	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/04/15 01:46	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/04/15 01:46	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 01:46	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/04/15 01:46	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/04/15 01:46	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/04/15 01:46	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/04/15 01:46	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 01:46	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 01:46	1
1,4-Dioxane	ND		0.20		ppb v/v			03/04/15 01:46	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/04/15 01:46	1
2-Butanone	ND		0.32		ppb v/v			03/04/15 01:46	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/04/15 01:46	1
Benzene	ND		0.080		ppb v/v			03/04/15 01:46	1
Benzyl chloride	ND		0.16		ppb v/v			03/04/15 01:46	1
Bromodichloromethane	ND		0.080		ppb v/v			03/04/15 01:46	1
Bromoform	ND		0.080		ppb v/v			03/04/15 01:46	1
Bromomethane	ND		0.080		ppb v/v			03/04/15 01:46	1
Carbon tetrachloride	0.12		0.040		ppb v/v			03/04/15 01:46	1
Chlorobenzene	ND		0.080		ppb v/v			03/04/15 01:46	1
Chloroethane	ND		0.080		ppb v/v			03/04/15 01:46	1
Chloroform	ND		0.080		ppb v/v			03/04/15 01:46	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H24-SS-2015

Lab Sample ID: 140-2797-2

Date Collected: 02/24/15 08:44

Matrix: Air

Date Received: 02/27/15 11:15

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		0.20		ppb v/v			03/04/15 01:46	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 01:46	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/04/15 01:46	1
Cyclohexane	ND		0.20		ppb v/v			03/04/15 01:46	1
Dibromochloromethane	ND		0.080		ppb v/v			03/04/15 01:46	1
Dichlorodifluoromethane	0.36		0.080		ppb v/v			03/04/15 01:46	1
Ethanol	2.0		0.80		ppb v/v			03/04/15 01:46	1
Ethylbenzene	ND	*	0.080		ppb v/v			03/04/15 01:46	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/04/15 01:46	1
Hexane	ND		0.20		ppb v/v			03/04/15 01:46	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/04/15 01:46	1
Methylene Chloride	0.37		0.20		ppb v/v			03/04/15 01:46	1
m-Xylene & p-Xylene	0.10		0.080		ppb v/v			03/04/15 01:46	1
o-Xylene	ND		0.080		ppb v/v			03/04/15 01:46	1
Styrene	ND		0.080		ppb v/v			03/04/15 01:46	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/04/15 01:46	1
Tetrachloroethene	ND		0.080		ppb v/v			03/04/15 01:46	1
Toluene	0.15		0.12		ppb v/v			03/04/15 01:46	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 01:46	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/04/15 01:46	1
Trichloroethene	ND		0.040		ppb v/v			03/04/15 01:46	1
Trichlorofluoromethane	0.14		0.080		ppb v/v			03/04/15 01:46	1
Vinyl chloride	ND		0.080		ppb v/v			03/04/15 01:46	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/04/15 01:46	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/04/15 01:46	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/04/15 01:46	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/04/15 01:46	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/04/15 01:46	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/04/15 01:46	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/04/15 01:46	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/04/15 01:46	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/04/15 01:46	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 01:46	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/04/15 01:46	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/04/15 01:46	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/04/15 01:46	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/04/15 01:46	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 01:46	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 01:46	1
1,4-Dioxane	ND		0.72		ug/m3			03/04/15 01:46	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/04/15 01:46	1
2-Butanone	ND		0.94		ug/m3			03/04/15 01:46	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/04/15 01:46	1
Benzene	ND		0.26		ug/m3			03/04/15 01:46	1
Benzyl chloride	ND		0.83		ug/m3			03/04/15 01:46	1
Bromodichloromethane	ND		0.54		ug/m3			03/04/15 01:46	1
Bromoform	ND		0.83		ug/m3			03/04/15 01:46	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H24-SS-2015

Lab Sample ID: 140-2797-2

Date Collected: 02/24/15 08:44

Matrix: Air

Date Received: 02/27/15 11:15

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		0.31		ug/m3			03/04/15 01:46	1
Carbon tetrachloride	0.79		0.25		ug/m3			03/04/15 01:46	1
Chlorobenzene	ND		0.37		ug/m3			03/04/15 01:46	1
Chloroethane	ND		0.21		ug/m3			03/04/15 01:46	1
Chloroform	ND		0.39		ug/m3			03/04/15 01:46	1
Chloromethane	ND		0.41		ug/m3			03/04/15 01:46	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 01:46	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 01:46	1
Cyclohexane	ND		0.69		ug/m3			03/04/15 01:46	1
Dibromochloromethane	ND		0.68		ug/m3			03/04/15 01:46	1
Dichlorodifluoromethane	1.8		0.40		ug/m3			03/04/15 01:46	1
Ethanol	3.7		1.5		ug/m3			03/04/15 01:46	1
Ethylbenzene	ND	*	0.35		ug/m3			03/04/15 01:46	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/04/15 01:46	1
Hexane	ND		0.70		ug/m3			03/04/15 01:46	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/04/15 01:46	1
Methylene Chloride	1.3		0.69		ug/m3			03/04/15 01:46	1
m-Xylene & p-Xylene	0.44		0.35		ug/m3			03/04/15 01:46	1
o-Xylene	ND		0.35		ug/m3			03/04/15 01:46	1
Styrene	ND		0.34		ug/m3			03/04/15 01:46	1
t-Butyl alcohol	ND		0.97		ug/m3			03/04/15 01:46	1
Tetrachloroethene	ND		0.54		ug/m3			03/04/15 01:46	1
Toluene	0.56		0.45		ug/m3			03/04/15 01:46	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 01:46	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 01:46	1
Trichloroethene	ND		0.21		ug/m3			03/04/15 01:46	1
Trichlorofluoromethane	0.81		0.45		ug/m3			03/04/15 01:46	1
Vinyl chloride	ND		0.20		ug/m3			03/04/15 01:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		60 - 140		03/04/15 01:46	1

Client Sample ID: H15-BA-2015

Lab Sample ID: 140-2797-3

Date Collected: 02/24/15 10:26

Matrix: Air

Date Received: 02/27/15 11:15

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			03/04/15 02:40	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/04/15 02:40	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/04/15 02:40	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/04/15 02:40	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/04/15 02:40	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/04/15 02:40	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/04/15 02:40	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/04/15 02:40	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/04/15 02:40	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 02:40	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H15-BA-2015

Lab Sample ID: 140-2797-3

Date Collected: 02/24/15 10:26

Matrix: Air

Date Received: 02/27/15 11:15

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			03/04/15 02:40	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/04/15 02:40	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/04/15 02:40	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/04/15 02:40	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 02:40	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 02:40	1
1,4-Dioxane	ND		0.20		ppb v/v			03/04/15 02:40	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/04/15 02:40	1
2-Butanone	ND		0.32		ppb v/v			03/04/15 02:40	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/04/15 02:40	1
Benzene	0.15		0.080		ppb v/v			03/04/15 02:40	1
Benzyl chloride	ND		0.16		ppb v/v			03/04/15 02:40	1
Bromodichloromethane	ND		0.080		ppb v/v			03/04/15 02:40	1
Bromoform	ND		0.080		ppb v/v			03/04/15 02:40	1
Bromomethane	ND		0.080		ppb v/v			03/04/15 02:40	1
Carbon tetrachloride	0.077		0.040		ppb v/v			03/04/15 02:40	1
Chlorobenzene	ND		0.080		ppb v/v			03/04/15 02:40	1
Chloroethane	ND		0.080		ppb v/v			03/04/15 02:40	1
Chloroform	ND		0.080		ppb v/v			03/04/15 02:40	1
Chloromethane	0.45		0.20		ppb v/v			03/04/15 02:40	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 02:40	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/04/15 02:40	1
Cyclohexane	ND		0.20		ppb v/v			03/04/15 02:40	1
Dibromochloromethane	ND		0.080		ppb v/v			03/04/15 02:40	1
Dichlorodifluoromethane	0.38		0.080		ppb v/v			03/04/15 02:40	1
Ethanol	4.8		0.80		ppb v/v			03/04/15 02:40	1
Ethylbenzene	ND	*	0.080		ppb v/v			03/04/15 02:40	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/04/15 02:40	1
Hexane	ND		0.20		ppb v/v			03/04/15 02:40	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/04/15 02:40	1
Methylene Chloride	0.20		0.20		ppb v/v			03/04/15 02:40	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			03/04/15 02:40	1
o-Xylene	ND		0.080		ppb v/v			03/04/15 02:40	1
Styrene	ND		0.080		ppb v/v			03/04/15 02:40	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/04/15 02:40	1
Tetrachloroethene	ND		0.080		ppb v/v			03/04/15 02:40	1
Toluene	ND		0.12		ppb v/v			03/04/15 02:40	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 02:40	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/04/15 02:40	1
Trichloroethene	0.050		0.040		ppb v/v			03/04/15 02:40	1
Trichlorofluoromethane	0.17		0.080		ppb v/v			03/04/15 02:40	1
Vinyl chloride	ND		0.080		ppb v/v			03/04/15 02:40	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/04/15 02:40	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/04/15 02:40	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/04/15 02:40	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/04/15 02:40	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/04/15 02:40	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H15-BA-2015

Lab Sample ID: 140-2797-3

Date Collected: 02/24/15 10:26

Matrix: Air

Date Received: 02/27/15 11:15

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		0.32		ug/m3			03/04/15 02:40	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/04/15 02:40	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/04/15 02:40	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/04/15 02:40	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 02:40	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/04/15 02:40	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/04/15 02:40	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/04/15 02:40	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/04/15 02:40	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 02:40	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 02:40	1
1,4-Dioxane	ND		0.72		ug/m3			03/04/15 02:40	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/04/15 02:40	1
2-Butanone	ND		0.94		ug/m3			03/04/15 02:40	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/04/15 02:40	1
Benzene	0.48		0.26		ug/m3			03/04/15 02:40	1
Benzyl chloride	ND		0.83		ug/m3			03/04/15 02:40	1
Bromodichloromethane	ND		0.54		ug/m3			03/04/15 02:40	1
Bromoform	ND		0.83		ug/m3			03/04/15 02:40	1
Bromomethane	ND		0.31		ug/m3			03/04/15 02:40	1
Carbon tetrachloride	0.49		0.25		ug/m3			03/04/15 02:40	1
Chlorobenzene	ND		0.37		ug/m3			03/04/15 02:40	1
Chloroethane	ND		0.21		ug/m3			03/04/15 02:40	1
Chloroform	ND		0.39		ug/m3			03/04/15 02:40	1
Chloromethane	0.92		0.41		ug/m3			03/04/15 02:40	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 02:40	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 02:40	1
Cyclohexane	ND		0.69		ug/m3			03/04/15 02:40	1
Dibromochloromethane	ND		0.68		ug/m3			03/04/15 02:40	1
Dichlorodifluoromethane	1.9		0.40		ug/m3			03/04/15 02:40	1
Ethanol	9.1		1.5		ug/m3			03/04/15 02:40	1
Ethylbenzene	ND	*	0.35		ug/m3			03/04/15 02:40	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/04/15 02:40	1
Hexane	ND		0.70		ug/m3			03/04/15 02:40	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/04/15 02:40	1
Methylene Chloride	0.68		0.69		ug/m3			03/04/15 02:40	1
m-Xylene & p-Xylene	ND		0.35		ug/m3			03/04/15 02:40	1
o-Xylene	ND		0.35		ug/m3			03/04/15 02:40	1
Styrene	ND		0.34		ug/m3			03/04/15 02:40	1
t-Butyl alcohol	ND		0.97		ug/m3			03/04/15 02:40	1
Tetrachloroethene	ND		0.54		ug/m3			03/04/15 02:40	1
Toluene	ND		0.45		ug/m3			03/04/15 02:40	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 02:40	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 02:40	1
Trichloroethene	0.27		0.21		ug/m3			03/04/15 02:40	1
Trichlorofluoromethane	0.95		0.45		ug/m3			03/04/15 02:40	1
Vinyl chloride	ND		0.20		ug/m3			03/04/15 02:40	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H15-BA-2015

Lab Sample ID: 140-2797-3

Date Collected: 02/24/15 10:26

Matrix: Air

Date Received: 02/27/15 11:15

Sample Container: Summa Canister 6L

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		60 - 140		03/04/15 02:40	1

Client Sample ID: H15-SS-2015

Lab Sample ID: 140-2797-4

Date Collected: 02/24/15 10:26

Matrix: Air

Date Received: 02/27/15 11:15

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	1.7		0.080		ppb v/v			03/04/15 03:36	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/04/15 03:36	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/04/15 03:36	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/04/15 03:36	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/04/15 03:36	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/04/15 03:36	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/04/15 03:36	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/04/15 03:36	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/04/15 03:36	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 03:36	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/04/15 03:36	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/04/15 03:36	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/04/15 03:36	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/04/15 03:36	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 03:36	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 03:36	1
1,4-Dioxane	ND		0.20		ppb v/v			03/04/15 03:36	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/04/15 03:36	1
2-Butanone	ND		0.32		ppb v/v			03/04/15 03:36	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/04/15 03:36	1
Benzene	0.16		0.080		ppb v/v			03/04/15 03:36	1
Benzyl chloride	ND		0.16		ppb v/v			03/04/15 03:36	1
Bromodichloromethane	ND		0.080		ppb v/v			03/04/15 03:36	1
Bromoform	ND		0.080		ppb v/v			03/04/15 03:36	1
Bromomethane	ND		0.080		ppb v/v			03/04/15 03:36	1
Carbon tetrachloride	1.0		0.040		ppb v/v			03/04/15 03:36	1
Chlorobenzene	ND		0.080		ppb v/v			03/04/15 03:36	1
Chloroethane	ND		0.080		ppb v/v			03/04/15 03:36	1
Chloroform	5.1		0.080		ppb v/v			03/04/15 03:36	1
Chloromethane	0.23		0.20		ppb v/v			03/04/15 03:36	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 03:36	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/04/15 03:36	1
Cyclohexane	ND		0.20		ppb v/v			03/04/15 03:36	1
Dibromochloromethane	ND		0.080		ppb v/v			03/04/15 03:36	1
Dichlorodifluoromethane	0.40		0.080		ppb v/v			03/04/15 03:36	1
Ethanol	3.1		0.80		ppb v/v			03/04/15 03:36	1
Ethylbenzene	ND	*	0.080		ppb v/v			03/04/15 03:36	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/04/15 03:36	1
Hexane	0.20		0.20		ppb v/v			03/04/15 03:36	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/04/15 03:36	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H15-SS-2015

Lab Sample ID: 140-2797-4

Date Collected: 02/24/15 10:26

Matrix: Air

Date Received: 02/27/15 11:15

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	0.27		0.20		ppb v/v			03/04/15 03:36	1
m-Xylene & p-Xylene	0.091		0.080		ppb v/v			03/04/15 03:36	1
o-Xylene	ND		0.080		ppb v/v			03/04/15 03:36	1
Styrene	ND		0.080		ppb v/v			03/04/15 03:36	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/04/15 03:36	1
Tetrachloroethene	0.93		0.080		ppb v/v			03/04/15 03:36	1
Toluene	0.21		0.12		ppb v/v			03/04/15 03:36	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 03:36	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/04/15 03:36	1
Trichloroethene	12		0.040		ppb v/v			03/04/15 03:36	1
Trichlorofluoromethane	0.17		0.080		ppb v/v			03/04/15 03:36	1
Vinyl chloride	ND		0.080		ppb v/v			03/04/15 03:36	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	9.5		0.44		ug/m3			03/04/15 03:36	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/04/15 03:36	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/04/15 03:36	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/04/15 03:36	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/04/15 03:36	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/04/15 03:36	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/04/15 03:36	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/04/15 03:36	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/04/15 03:36	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 03:36	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/04/15 03:36	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/04/15 03:36	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/04/15 03:36	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/04/15 03:36	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 03:36	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 03:36	1
1,4-Dioxane	ND		0.72		ug/m3			03/04/15 03:36	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/04/15 03:36	1
2-Butanone	ND		0.94		ug/m3			03/04/15 03:36	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/04/15 03:36	1
Benzene	0.51		0.26		ug/m3			03/04/15 03:36	1
Benzyl chloride	ND		0.83		ug/m3			03/04/15 03:36	1
Bromodichloromethane	ND		0.54		ug/m3			03/04/15 03:36	1
Bromoform	ND		0.83		ug/m3			03/04/15 03:36	1
Bromomethane	ND		0.31		ug/m3			03/04/15 03:36	1
Carbon tetrachloride	6.3		0.25		ug/m3			03/04/15 03:36	1
Chlorobenzene	ND		0.37		ug/m3			03/04/15 03:36	1
Chloroethane	ND		0.21		ug/m3			03/04/15 03:36	1
Chloroform	25		0.39		ug/m3			03/04/15 03:36	1
Chloromethane	0.48		0.41		ug/m3			03/04/15 03:36	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 03:36	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 03:36	1
Cyclohexane	ND		0.69		ug/m3			03/04/15 03:36	1
Dibromochloromethane	ND		0.68		ug/m3			03/04/15 03:36	1
Dichlorodifluoromethane	2.0		0.40		ug/m3			03/04/15 03:36	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H15-SS-2015

Lab Sample ID: 140-2797-4

Date Collected: 02/24/15 10:26

Matrix: Air

Date Received: 02/27/15 11:15

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	5.9		1.5		ug/m3			03/04/15 03:36	1
Ethylbenzene	ND	*	0.35		ug/m3			03/04/15 03:36	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/04/15 03:36	1
Hexane	0.71		0.70		ug/m3			03/04/15 03:36	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/04/15 03:36	1
Methylene Chloride	0.93		0.69		ug/m3			03/04/15 03:36	1
m-Xylene & p-Xylene	0.39		0.35		ug/m3			03/04/15 03:36	1
o-Xylene	ND		0.35		ug/m3			03/04/15 03:36	1
Styrene	ND		0.34		ug/m3			03/04/15 03:36	1
t-Butyl alcohol	ND		0.97		ug/m3			03/04/15 03:36	1
Tetrachloroethene	6.3		0.54		ug/m3			03/04/15 03:36	1
Toluene	0.77		0.45		ug/m3			03/04/15 03:36	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 03:36	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 03:36	1
Trichloroethene	63		0.21		ug/m3			03/04/15 03:36	1
Trichlorofluoromethane	0.94		0.45		ug/m3			03/04/15 03:36	1
Vinyl chloride	ND		0.20		ug/m3			03/04/15 03:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		60 - 140					03/04/15 03:36	1

Client Sample ID: H16-BA-2015

Lab Sample ID: 140-2797-5

Date Collected: 02/24/15 10:17

Matrix: Air

Date Received: 02/27/15 11:15

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			03/04/15 04:30	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/04/15 04:30	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/04/15 04:30	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/04/15 04:30	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/04/15 04:30	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/04/15 04:30	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/04/15 04:30	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/04/15 04:30	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/04/15 04:30	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 04:30	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/04/15 04:30	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/04/15 04:30	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/04/15 04:30	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/04/15 04:30	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 04:30	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 04:30	1
1,4-Dioxane	ND		0.20		ppb v/v			03/04/15 04:30	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/04/15 04:30	1
2-Butanone	0.58		0.32		ppb v/v			03/04/15 04:30	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/04/15 04:30	1
Benzene	0.33		0.080		ppb v/v			03/04/15 04:30	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H16-BA-2015

Lab Sample ID: 140-2797-5

Date Collected: 02/24/15 10:17

Matrix: Air

Date Received: 02/27/15 11:15

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			03/04/15 04:30	1
Bromodichloromethane	ND		0.080		ppb v/v			03/04/15 04:30	1
Bromoform	ND		0.080		ppb v/v			03/04/15 04:30	1
Bromomethane	ND		0.080		ppb v/v			03/04/15 04:30	1
Carbon tetrachloride	0.079		0.040		ppb v/v			03/04/15 04:30	1
Chlorobenzene	ND		0.080		ppb v/v			03/04/15 04:30	1
Chloroethane	ND		0.080		ppb v/v			03/04/15 04:30	1
Chloroform	ND		0.080		ppb v/v			03/04/15 04:30	1
Chloromethane	0.44		0.20		ppb v/v			03/04/15 04:30	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 04:30	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/04/15 04:30	1
Cyclohexane	ND		0.20		ppb v/v			03/04/15 04:30	1
Dibromochloromethane	ND		0.080		ppb v/v			03/04/15 04:30	1
Dichlorodifluoromethane	0.41		0.080		ppb v/v			03/04/15 04:30	1
Ethanol	6.8		0.80		ppb v/v			03/04/15 04:30	1
Ethylbenzene	0.20	*	0.080		ppb v/v			03/04/15 04:30	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/04/15 04:30	1
Hexane	ND		0.20		ppb v/v			03/04/15 04:30	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/04/15 04:30	1
Methylene Chloride	0.23		0.20		ppb v/v			03/04/15 04:30	1
m-Xylene & p-Xylene	0.36		0.080		ppb v/v			03/04/15 04:30	1
o-Xylene	0.12		0.080		ppb v/v			03/04/15 04:30	1
Styrene	ND		0.080		ppb v/v			03/04/15 04:30	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/04/15 04:30	1
Tetrachloroethene	0.96		0.080		ppb v/v			03/04/15 04:30	1
Toluene	1.0		0.12		ppb v/v			03/04/15 04:30	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 04:30	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/04/15 04:30	1
Trichloroethene	0.13		0.040		ppb v/v			03/04/15 04:30	1
Trichlorofluoromethane	0.19		0.080		ppb v/v			03/04/15 04:30	1
Vinyl chloride	ND		0.080		ppb v/v			03/04/15 04:30	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/04/15 04:30	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/04/15 04:30	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/04/15 04:30	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/04/15 04:30	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/04/15 04:30	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/04/15 04:30	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/04/15 04:30	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/04/15 04:30	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/04/15 04:30	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 04:30	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/04/15 04:30	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/04/15 04:30	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/04/15 04:30	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/04/15 04:30	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 04:30	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 04:30	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H16-BA-2015

Lab Sample ID: 140-2797-5

Date Collected: 02/24/15 10:17

Matrix: Air

Date Received: 02/27/15 11:15

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			03/04/15 04:30	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/04/15 04:30	1
2-Butanone	1.7		0.94		ug/m3			03/04/15 04:30	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/04/15 04:30	1
Benzene	1.1		0.26		ug/m3			03/04/15 04:30	1
Benzyl chloride	ND		0.83		ug/m3			03/04/15 04:30	1
Bromodichloromethane	ND		0.54		ug/m3			03/04/15 04:30	1
Bromoform	ND		0.83		ug/m3			03/04/15 04:30	1
Bromomethane	ND		0.31		ug/m3			03/04/15 04:30	1
Carbon tetrachloride	0.50		0.25		ug/m3			03/04/15 04:30	1
Chlorobenzene	ND		0.37		ug/m3			03/04/15 04:30	1
Chloroethane	ND		0.21		ug/m3			03/04/15 04:30	1
Chloroform	ND		0.39		ug/m3			03/04/15 04:30	1
Chloromethane	0.90		0.41		ug/m3			03/04/15 04:30	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 04:30	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 04:30	1
Cyclohexane	ND		0.69		ug/m3			03/04/15 04:30	1
Dibromochloromethane	ND		0.68		ug/m3			03/04/15 04:30	1
Dichlorodifluoromethane	2.0		0.40		ug/m3			03/04/15 04:30	1
Ethanol	13		1.5		ug/m3			03/04/15 04:30	1
Ethylbenzene	0.87	*	0.35		ug/m3			03/04/15 04:30	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/04/15 04:30	1
Hexane	ND		0.70		ug/m3			03/04/15 04:30	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/04/15 04:30	1
Methylene Chloride	0.81		0.69		ug/m3			03/04/15 04:30	1
m-Xylene & p-Xylene	1.5		0.35		ug/m3			03/04/15 04:30	1
o-Xylene	0.51		0.35		ug/m3			03/04/15 04:30	1
Styrene	ND		0.34		ug/m3			03/04/15 04:30	1
t-Butyl alcohol	ND		0.97		ug/m3			03/04/15 04:30	1
Tetrachloroethene	6.5		0.54		ug/m3			03/04/15 04:30	1
Toluene	3.8		0.45		ug/m3			03/04/15 04:30	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 04:30	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 04:30	1
Trichloroethene	0.68		0.21		ug/m3			03/04/15 04:30	1
Trichlorofluoromethane	1.1		0.45		ug/m3			03/04/15 04:30	1
Vinyl chloride	ND		0.20		ug/m3			03/04/15 04:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		60 - 140					03/04/15 04:30	1

Client Sample ID: H16-SS-2015

Lab Sample ID: 140-2797-6

Date Collected: 02/24/15 10:17

Matrix: Air

Date Received: 02/27/15 11:15

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	0.37		0.080		ppb v/v			03/04/15 05:26	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/04/15 05:26	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H16-SS-2015

Lab Sample ID: 140-2797-6

Date Collected: 02/24/15 10:17

Matrix: Air

Date Received: 02/27/15 11:15

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		0.080		ppb v/v			03/04/15 05:26	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/04/15 05:26	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/04/15 05:26	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/04/15 05:26	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/04/15 05:26	1
1,2,4-Trimethylbenzene	0.13		0.080		ppb v/v			03/04/15 05:26	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/04/15 05:26	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 05:26	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/04/15 05:26	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/04/15 05:26	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/04/15 05:26	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/04/15 05:26	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 05:26	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 05:26	1
1,4-Dioxane	ND		0.20		ppb v/v			03/04/15 05:26	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/04/15 05:26	1
2-Butanone	0.45		0.32		ppb v/v			03/04/15 05:26	1
4-Methyl-2-pentanone (MIBK)	0.60		0.20		ppb v/v			03/04/15 05:26	1
Benzene	0.24		0.080		ppb v/v			03/04/15 05:26	1
Benzyl chloride	ND		0.16		ppb v/v			03/04/15 05:26	1
Bromodichloromethane	ND		0.080		ppb v/v			03/04/15 05:26	1
Bromoform	ND		0.080		ppb v/v			03/04/15 05:26	1
Bromomethane	ND		0.080		ppb v/v			03/04/15 05:26	1
Carbon tetrachloride	0.25		0.040		ppb v/v			03/04/15 05:26	1
Chlorobenzene	ND		0.080		ppb v/v			03/04/15 05:26	1
Chloroethane	ND		0.080		ppb v/v			03/04/15 05:26	1
Chloroform	1.9		0.080		ppb v/v			03/04/15 05:26	1
Chloromethane	ND		0.20		ppb v/v			03/04/15 05:26	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 05:26	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/04/15 05:26	1
Cyclohexane	0.22		0.20		ppb v/v			03/04/15 05:26	1
Dibromochloromethane	ND		0.080		ppb v/v			03/04/15 05:26	1
Dichlorodifluoromethane	0.36		0.080		ppb v/v			03/04/15 05:26	1
Ethanol	3.0		0.80		ppb v/v			03/04/15 05:26	1
Ethylbenzene	ND	*	0.080		ppb v/v			03/04/15 05:26	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/04/15 05:26	1
Hexane	0.47		0.20		ppb v/v			03/04/15 05:26	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/04/15 05:26	1
Methylene Chloride	0.37		0.20		ppb v/v			03/04/15 05:26	1
m-Xylene & p-Xylene	0.31		0.080		ppb v/v			03/04/15 05:26	1
o-Xylene	0.13		0.080		ppb v/v			03/04/15 05:26	1
Styrene	ND		0.080		ppb v/v			03/04/15 05:26	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/04/15 05:26	1
Tetrachloroethene	0.37		0.080		ppb v/v			03/04/15 05:26	1
Toluene	0.54		0.12		ppb v/v			03/04/15 05:26	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 05:26	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/04/15 05:26	1
Trichloroethene	7.6		0.040		ppb v/v			03/04/15 05:26	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H16-SS-2015

Lab Sample ID: 140-2797-6

Date Collected: 02/24/15 10:17

Matrix: Air

Date Received: 02/27/15 11:15

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	0.16		0.080		ppb v/v			03/04/15 05:26	1
Vinyl chloride	ND		0.080		ppb v/v			03/04/15 05:26	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	2.0		0.44		ug/m3			03/04/15 05:26	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/04/15 05:26	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/04/15 05:26	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/04/15 05:26	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/04/15 05:26	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/04/15 05:26	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/04/15 05:26	1
1,2,4-Trimethylbenzene	0.63		0.39		ug/m3			03/04/15 05:26	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/04/15 05:26	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 05:26	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/04/15 05:26	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/04/15 05:26	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/04/15 05:26	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/04/15 05:26	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 05:26	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 05:26	1
1,4-Dioxane	ND		0.72		ug/m3			03/04/15 05:26	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/04/15 05:26	1
2-Butanone	1.3		0.94		ug/m3			03/04/15 05:26	1
4-Methyl-2-pentanone (MIBK)	2.5		0.82		ug/m3			03/04/15 05:26	1
Benzene	0.77		0.26		ug/m3			03/04/15 05:26	1
Benzyl chloride	ND		0.83		ug/m3			03/04/15 05:26	1
Bromodichloromethane	ND		0.54		ug/m3			03/04/15 05:26	1
Bromoform	ND		0.83		ug/m3			03/04/15 05:26	1
Bromomethane	ND		0.31		ug/m3			03/04/15 05:26	1
Carbon tetrachloride	1.6		0.25		ug/m3			03/04/15 05:26	1
Chlorobenzene	ND		0.37		ug/m3			03/04/15 05:26	1
Chloroethane	ND		0.21		ug/m3			03/04/15 05:26	1
Chloroform	9.2		0.39		ug/m3			03/04/15 05:26	1
Chloromethane	ND		0.41		ug/m3			03/04/15 05:26	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 05:26	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 05:26	1
Cyclohexane	0.75		0.69		ug/m3			03/04/15 05:26	1
Dibromochloromethane	ND		0.68		ug/m3			03/04/15 05:26	1
Dichlorodifluoromethane	1.8		0.40		ug/m3			03/04/15 05:26	1
Ethanol	5.6		1.5		ug/m3			03/04/15 05:26	1
Ethylbenzene	ND	*	0.35		ug/m3			03/04/15 05:26	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/04/15 05:26	1
Hexane	1.7		0.70		ug/m3			03/04/15 05:26	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/04/15 05:26	1
Methylene Chloride	1.3		0.69		ug/m3			03/04/15 05:26	1
m-Xylene & p-Xylene	1.4		0.35		ug/m3			03/04/15 05:26	1
o-Xylene	0.56		0.35		ug/m3			03/04/15 05:26	1
Styrene	ND		0.34		ug/m3			03/04/15 05:26	1
t-Butyl alcohol	ND		0.97		ug/m3			03/04/15 05:26	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H16-SS-2015

Lab Sample ID: 140-2797-6

Date Collected: 02/24/15 10:17

Matrix: Air

Date Received: 02/27/15 11:15

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	2.5		0.54		ug/m3			03/04/15 05:26	1
Toluene	2.0		0.45		ug/m3			03/04/15 05:26	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 05:26	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 05:26	1
Trichloroethene	41		0.21		ug/m3			03/04/15 05:26	1
Trichlorofluoromethane	0.91		0.45		ug/m3			03/04/15 05:26	1
Vinyl chloride	ND		0.20		ug/m3			03/04/15 05:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		60 - 140					03/04/15 05:26	1

Client Sample ID: H25-BA-2015

Lab Sample ID: 140-2797-7

Date Collected: 02/24/15 11:30

Matrix: Air

Date Received: 02/27/15 11:15

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			03/04/15 06:22	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/04/15 06:22	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/04/15 06:22	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/04/15 06:22	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/04/15 06:22	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/04/15 06:22	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/04/15 06:22	1
1,2,4-Trimethylbenzene	0.11		0.080		ppb v/v			03/04/15 06:22	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/04/15 06:22	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 06:22	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/04/15 06:22	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/04/15 06:22	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/04/15 06:22	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/04/15 06:22	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 06:22	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 06:22	1
1,4-Dioxane	ND		0.20		ppb v/v			03/04/15 06:22	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/04/15 06:22	1
2-Butanone	0.43		0.32		ppb v/v			03/04/15 06:22	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/04/15 06:22	1
Benzene	0.26		0.080		ppb v/v			03/04/15 06:22	1
Benzyl chloride	ND		0.16		ppb v/v			03/04/15 06:22	1
Bromodichloromethane	ND		0.080		ppb v/v			03/04/15 06:22	1
Bromoform	ND		0.080		ppb v/v			03/04/15 06:22	1
Bromomethane	ND		0.080		ppb v/v			03/04/15 06:22	1
Carbon tetrachloride	0.075		0.040		ppb v/v			03/04/15 06:22	1
Chlorobenzene	ND		0.080		ppb v/v			03/04/15 06:22	1
Chloroethane	ND		0.080		ppb v/v			03/04/15 06:22	1
Chloroform	ND		0.080		ppb v/v			03/04/15 06:22	1
Chloromethane	0.41		0.20		ppb v/v			03/04/15 06:22	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 06:22	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H25-BA-2015

Lab Sample ID: 140-2797-7

Date Collected: 02/24/15 11:30

Matrix: Air

Date Received: 02/27/15 11:15

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			03/04/15 06:22	1
Cyclohexane	ND		0.20		ppb v/v			03/04/15 06:22	1
Dibromochloromethane	ND		0.080		ppb v/v			03/04/15 06:22	1
Dichlorodifluoromethane	0.40		0.080		ppb v/v			03/04/15 06:22	1
Ethanol	6.8		0.80		ppb v/v			03/04/15 06:22	1
Ethylbenzene	ND	*	0.080		ppb v/v			03/04/15 06:22	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/04/15 06:22	1
Hexane	ND		0.20		ppb v/v			03/04/15 06:22	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/04/15 06:22	1
Methylene Chloride	0.64		0.20		ppb v/v			03/04/15 06:22	1
m-Xylene & p-Xylene	0.21		0.080		ppb v/v			03/04/15 06:22	1
o-Xylene	0.087		0.080		ppb v/v			03/04/15 06:22	1
Styrene	ND		0.080		ppb v/v			03/04/15 06:22	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/04/15 06:22	1
Tetrachloroethene	ND		0.080		ppb v/v			03/04/15 06:22	1
Toluene	0.39		0.12		ppb v/v			03/04/15 06:22	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 06:22	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/04/15 06:22	1
Trichloroethene	ND		0.040		ppb v/v			03/04/15 06:22	1
Trichlorofluoromethane	0.19		0.080		ppb v/v			03/04/15 06:22	1
Vinyl chloride	ND		0.080		ppb v/v			03/04/15 06:22	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/04/15 06:22	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/04/15 06:22	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/04/15 06:22	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/04/15 06:22	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/04/15 06:22	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/04/15 06:22	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/04/15 06:22	1
1,2,4-Trimethylbenzene	0.55		0.39		ug/m3			03/04/15 06:22	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/04/15 06:22	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 06:22	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/04/15 06:22	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/04/15 06:22	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/04/15 06:22	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/04/15 06:22	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 06:22	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 06:22	1
1,4-Dioxane	ND		0.72		ug/m3			03/04/15 06:22	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/04/15 06:22	1
2-Butanone	1.3		0.94		ug/m3			03/04/15 06:22	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/04/15 06:22	1
Benzene	0.84		0.26		ug/m3			03/04/15 06:22	1
Benzyl chloride	ND		0.83		ug/m3			03/04/15 06:22	1
Bromodichloromethane	ND		0.54		ug/m3			03/04/15 06:22	1
Bromoform	ND		0.83		ug/m3			03/04/15 06:22	1
Bromomethane	ND		0.31		ug/m3			03/04/15 06:22	1
Carbon tetrachloride	0.47		0.25		ug/m3			03/04/15 06:22	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H25-BA-2015

Lab Sample ID: 140-2797-7

Date Collected: 02/24/15 11:30

Matrix: Air

Date Received: 02/27/15 11:15

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			03/04/15 06:22	1
Chloroethane	ND		0.21		ug/m3			03/04/15 06:22	1
Chloroform	ND		0.39		ug/m3			03/04/15 06:22	1
Chloromethane	0.85		0.41		ug/m3			03/04/15 06:22	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 06:22	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 06:22	1
Cyclohexane	ND		0.69		ug/m3			03/04/15 06:22	1
Dibromochloromethane	ND		0.68		ug/m3			03/04/15 06:22	1
Dichlorodifluoromethane	2.0		0.40		ug/m3			03/04/15 06:22	1
Ethanol	13		1.5		ug/m3			03/04/15 06:22	1
Ethylbenzene	ND	*	0.35		ug/m3			03/04/15 06:22	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/04/15 06:22	1
Hexane	ND		0.70		ug/m3			03/04/15 06:22	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/04/15 06:22	1
Methylene Chloride	2.2		0.69		ug/m3			03/04/15 06:22	1
m-Xylene & p-Xylene	0.92		0.35		ug/m3			03/04/15 06:22	1
o-Xylene	0.38		0.35		ug/m3			03/04/15 06:22	1
Styrene	ND		0.34		ug/m3			03/04/15 06:22	1
t-Butyl alcohol	ND		0.97		ug/m3			03/04/15 06:22	1
Tetrachloroethene	ND		0.54		ug/m3			03/04/15 06:22	1
Toluene	1.5		0.45		ug/m3			03/04/15 06:22	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 06:22	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 06:22	1
Trichloroethene	ND		0.21		ug/m3			03/04/15 06:22	1
Trichlorofluoromethane	1.1		0.45		ug/m3			03/04/15 06:22	1
Vinyl chloride	ND		0.20		ug/m3			03/04/15 06:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		60 - 140					03/04/15 06:22	1

Client Sample ID: H26-BA-2015

Lab Sample ID: 140-2797-8

Date Collected: 02/24/15 14:24

Matrix: Air

Date Received: 02/27/15 11:15

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			03/04/15 07:17	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/04/15 07:17	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/04/15 07:17	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/04/15 07:17	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/04/15 07:17	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/04/15 07:17	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/04/15 07:17	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/04/15 07:17	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/04/15 07:17	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 07:17	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/04/15 07:17	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/04/15 07:17	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H26-BA-2015

Lab Sample ID: 140-2797-8

Date Collected: 02/24/15 14:24

Matrix: Air

Date Received: 02/27/15 11:15

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			03/04/15 07:17	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/04/15 07:17	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 07:17	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 07:17	1
1,4-Dioxane	ND		0.20		ppb v/v			03/04/15 07:17	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/04/15 07:17	1
2-Butanone	2.1		0.32		ppb v/v			03/04/15 07:17	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/04/15 07:17	1
Benzene	0.26		0.080		ppb v/v			03/04/15 07:17	1
Benzyl chloride	ND		0.16		ppb v/v			03/04/15 07:17	1
Bromodichloromethane	ND		0.080		ppb v/v			03/04/15 07:17	1
Bromoform	ND		0.080		ppb v/v			03/04/15 07:17	1
Bromomethane	ND		0.080		ppb v/v			03/04/15 07:17	1
Carbon tetrachloride	0.077		0.040		ppb v/v			03/04/15 07:17	1
Chlorobenzene	ND		0.080		ppb v/v			03/04/15 07:17	1
Chloroethane	ND		0.080		ppb v/v			03/04/15 07:17	1
Chloroform	0.19		0.080		ppb v/v			03/04/15 07:17	1
Chloromethane	0.41		0.20		ppb v/v			03/04/15 07:17	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 07:17	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/04/15 07:17	1
Cyclohexane	ND		0.20		ppb v/v			03/04/15 07:17	1
Dibromochloromethane	ND		0.080		ppb v/v			03/04/15 07:17	1
Dichlorodifluoromethane	0.38		0.080		ppb v/v			03/04/15 07:17	1
Ethanol	7.6		0.80		ppb v/v			03/04/15 07:17	1
Ethylbenzene	ND	*	0.080		ppb v/v			03/04/15 07:17	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/04/15 07:17	1
Hexane	ND		0.20		ppb v/v			03/04/15 07:17	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/04/15 07:17	1
Methylene Chloride	0.20		0.20		ppb v/v			03/04/15 07:17	1
m-Xylene & p-Xylene	0.19		0.080		ppb v/v			03/04/15 07:17	1
o-Xylene	ND		0.080		ppb v/v			03/04/15 07:17	1
Styrene	ND		0.080		ppb v/v			03/04/15 07:17	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/04/15 07:17	1
Tetrachloroethene	ND		0.080		ppb v/v			03/04/15 07:17	1
Toluene	0.30		0.12		ppb v/v			03/04/15 07:17	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 07:17	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/04/15 07:17	1
Trichloroethene	ND		0.040		ppb v/v			03/04/15 07:17	1
Trichlorofluoromethane	0.17		0.080		ppb v/v			03/04/15 07:17	1
Vinyl chloride	ND		0.080		ppb v/v			03/04/15 07:17	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/04/15 07:17	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/04/15 07:17	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/04/15 07:17	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/04/15 07:17	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/04/15 07:17	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/04/15 07:17	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/04/15 07:17	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H26-BA-2015

Lab Sample ID: 140-2797-8

Date Collected: 02/24/15 14:24

Matrix: Air

Date Received: 02/27/15 11:15

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	ND		0.39		ug/m3			03/04/15 07:17	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/04/15 07:17	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 07:17	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/04/15 07:17	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/04/15 07:17	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/04/15 07:17	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/04/15 07:17	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 07:17	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 07:17	1
1,4-Dioxane	ND		0.72		ug/m3			03/04/15 07:17	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/04/15 07:17	1
2-Butanone	6.2		0.94		ug/m3			03/04/15 07:17	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/04/15 07:17	1
Benzene	0.82		0.26		ug/m3			03/04/15 07:17	1
Benzyl chloride	ND		0.83		ug/m3			03/04/15 07:17	1
Bromodichloromethane	ND		0.54		ug/m3			03/04/15 07:17	1
Bromoform	ND		0.83		ug/m3			03/04/15 07:17	1
Bromomethane	ND		0.31		ug/m3			03/04/15 07:17	1
Carbon tetrachloride	0.49		0.25		ug/m3			03/04/15 07:17	1
Chlorobenzene	ND		0.37		ug/m3			03/04/15 07:17	1
Chloroethane	ND		0.21		ug/m3			03/04/15 07:17	1
Chloroform	0.90		0.39		ug/m3			03/04/15 07:17	1
Chloromethane	0.85		0.41		ug/m3			03/04/15 07:17	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 07:17	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 07:17	1
Cyclohexane	ND		0.69		ug/m3			03/04/15 07:17	1
Dibromochloromethane	ND		0.68		ug/m3			03/04/15 07:17	1
Dichlorodifluoromethane	1.9		0.40		ug/m3			03/04/15 07:17	1
Ethanol	14		1.5		ug/m3			03/04/15 07:17	1
Ethylbenzene	ND	*	0.35		ug/m3			03/04/15 07:17	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/04/15 07:17	1
Hexane	ND		0.70		ug/m3			03/04/15 07:17	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/04/15 07:17	1
Methylene Chloride	0.69		0.69		ug/m3			03/04/15 07:17	1
m-Xylene & p-Xylene	0.84		0.35		ug/m3			03/04/15 07:17	1
o-Xylene	ND		0.35		ug/m3			03/04/15 07:17	1
Styrene	ND		0.34		ug/m3			03/04/15 07:17	1
t-Butyl alcohol	ND		0.97		ug/m3			03/04/15 07:17	1
Tetrachloroethene	ND		0.54		ug/m3			03/04/15 07:17	1
Toluene	1.1		0.45		ug/m3			03/04/15 07:17	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 07:17	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 07:17	1
Trichloroethene	ND		0.21		ug/m3			03/04/15 07:17	1
Trichlorofluoromethane	0.95		0.45		ug/m3			03/04/15 07:17	1
Vinyl chloride	ND		0.20		ug/m3			03/04/15 07:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		60 - 140		03/04/15 07:17	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H26-SS-2015

Lab Sample ID: 140-2797-9

Date Collected: 02/24/15 14:24

Matrix: Air

Date Received: 02/27/15 11:15

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			03/04/15 08:12	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/04/15 08:12	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/04/15 08:12	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/04/15 08:12	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/04/15 08:12	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/04/15 08:12	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/04/15 08:12	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/04/15 08:12	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/04/15 08:12	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 08:12	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/04/15 08:12	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/04/15 08:12	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/04/15 08:12	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/04/15 08:12	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 08:12	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 08:12	1
1,4-Dioxane	ND		0.20		ppb v/v			03/04/15 08:12	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/04/15 08:12	1
2-Butanone	0.51		0.32		ppb v/v			03/04/15 08:12	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/04/15 08:12	1
Benzene	0.18		0.080		ppb v/v			03/04/15 08:12	1
Benzyl chloride	ND		0.16		ppb v/v			03/04/15 08:12	1
Bromodichloromethane	ND		0.080		ppb v/v			03/04/15 08:12	1
Bromoform	ND		0.080		ppb v/v			03/04/15 08:12	1
Bromomethane	ND		0.080		ppb v/v			03/04/15 08:12	1
Carbon tetrachloride	0.056		0.040		ppb v/v			03/04/15 08:12	1
Chlorobenzene	ND		0.080		ppb v/v			03/04/15 08:12	1
Chloroethane	ND		0.080		ppb v/v			03/04/15 08:12	1
Chloroform	1.2		0.080		ppb v/v			03/04/15 08:12	1
Chloromethane	ND		0.20		ppb v/v			03/04/15 08:12	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 08:12	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/04/15 08:12	1
Cyclohexane	ND		0.20		ppb v/v			03/04/15 08:12	1
Dibromochloromethane	ND		0.080		ppb v/v			03/04/15 08:12	1
Dichlorodifluoromethane	0.31		0.080		ppb v/v			03/04/15 08:12	1
Ethanol	3.2		0.80		ppb v/v			03/04/15 08:12	1
Ethylbenzene	ND	*	0.080		ppb v/v			03/04/15 08:12	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/04/15 08:12	1
Hexane	0.58		0.20		ppb v/v			03/04/15 08:12	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/04/15 08:12	1
Methylene Chloride	0.26		0.20		ppb v/v			03/04/15 08:12	1
m-Xylene & p-Xylene	0.26		0.080		ppb v/v			03/04/15 08:12	1
o-Xylene	ND		0.080		ppb v/v			03/04/15 08:12	1
Styrene	ND		0.080		ppb v/v			03/04/15 08:12	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/04/15 08:12	1
Tetrachloroethene	ND		0.080		ppb v/v			03/04/15 08:12	1
Toluene	0.80		0.12		ppb v/v			03/04/15 08:12	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 08:12	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H26-SS-2015

Lab Sample ID: 140-2797-9

Date Collected: 02/24/15 14:24

Matrix: Air

Date Received: 02/27/15 11:15

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			03/04/15 08:12	1
Trichloroethene	0.13		0.040		ppb v/v			03/04/15 08:12	1
Trichlorofluoromethane	0.13		0.080		ppb v/v			03/04/15 08:12	1
Vinyl chloride	ND		0.080		ppb v/v			03/04/15 08:12	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/04/15 08:12	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/04/15 08:12	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/04/15 08:12	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/04/15 08:12	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/04/15 08:12	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/04/15 08:12	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/04/15 08:12	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/04/15 08:12	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/04/15 08:12	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 08:12	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/04/15 08:12	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/04/15 08:12	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/04/15 08:12	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/04/15 08:12	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 08:12	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 08:12	1
1,4-Dioxane	ND		0.72		ug/m3			03/04/15 08:12	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/04/15 08:12	1
2-Butanone	1.5		0.94		ug/m3			03/04/15 08:12	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/04/15 08:12	1
Benzene	0.57		0.26		ug/m3			03/04/15 08:12	1
Benzyl chloride	ND		0.83		ug/m3			03/04/15 08:12	1
Bromodichloromethane	ND		0.54		ug/m3			03/04/15 08:12	1
Bromoform	ND		0.83		ug/m3			03/04/15 08:12	1
Bromomethane	ND		0.31		ug/m3			03/04/15 08:12	1
Carbon tetrachloride	0.35		0.25		ug/m3			03/04/15 08:12	1
Chlorobenzene	ND		0.37		ug/m3			03/04/15 08:12	1
Chloroethane	ND		0.21		ug/m3			03/04/15 08:12	1
Chloroform	5.6		0.39		ug/m3			03/04/15 08:12	1
Chloromethane	ND		0.41		ug/m3			03/04/15 08:12	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 08:12	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 08:12	1
Cyclohexane	ND		0.69		ug/m3			03/04/15 08:12	1
Dibromochloromethane	ND		0.68		ug/m3			03/04/15 08:12	1
Dichlorodifluoromethane	1.6		0.40		ug/m3			03/04/15 08:12	1
Ethanol	6.0		1.5		ug/m3			03/04/15 08:12	1
Ethylbenzene	ND	*	0.35		ug/m3			03/04/15 08:12	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/04/15 08:12	1
Hexane	2.0		0.70		ug/m3			03/04/15 08:12	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/04/15 08:12	1
Methylene Chloride	0.91		0.69		ug/m3			03/04/15 08:12	1
m-Xylene & p-Xylene	1.1		0.35		ug/m3			03/04/15 08:12	1
o-Xylene	ND		0.35		ug/m3			03/04/15 08:12	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H26-SS-2015

Lab Sample ID: 140-2797-9

Date Collected: 02/24/15 14:24

Matrix: Air

Date Received: 02/27/15 11:15

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			03/04/15 08:12	1
t-Butyl alcohol	ND		0.97		ug/m3			03/04/15 08:12	1
Tetrachloroethene	ND		0.54		ug/m3			03/04/15 08:12	1
Toluene	3.0		0.45		ug/m3			03/04/15 08:12	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 08:12	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 08:12	1
Trichloroethene	0.72		0.21		ug/m3			03/04/15 08:12	1
Trichlorofluoromethane	0.73		0.45		ug/m3			03/04/15 08:12	1
Vinyl chloride	ND		0.20		ug/m3			03/04/15 08:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		60 - 140					03/04/15 08:12	1

Client Sample ID: H26-CS-2015

Lab Sample ID: 140-2797-10

Date Collected: 02/24/15 14:22

Matrix: Air

Date Received: 02/27/15 11:15

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			03/04/15 09:06	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/04/15 09:06	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/04/15 09:06	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/04/15 09:06	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/04/15 09:06	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/04/15 09:06	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/04/15 09:06	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/04/15 09:06	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/04/15 09:06	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 09:06	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/04/15 09:06	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/04/15 09:06	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/04/15 09:06	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/04/15 09:06	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 09:06	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 09:06	1
1,4-Dioxane	ND		0.20		ppb v/v			03/04/15 09:06	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/04/15 09:06	1
2-Butanone	ND		0.32		ppb v/v			03/04/15 09:06	1
4-Methyl-2-pentanone (MIBK)	0.64		0.20		ppb v/v			03/04/15 09:06	1
Benzene	0.23		0.080		ppb v/v			03/04/15 09:06	1
Benzyl chloride	ND		0.16		ppb v/v			03/04/15 09:06	1
Bromodichloromethane	ND		0.080		ppb v/v			03/04/15 09:06	1
Bromoform	ND		0.080		ppb v/v			03/04/15 09:06	1
Bromomethane	ND		0.080		ppb v/v			03/04/15 09:06	1
Carbon tetrachloride	0.066		0.040		ppb v/v			03/04/15 09:06	1
Chlorobenzene	ND		0.080		ppb v/v			03/04/15 09:06	1
Chloroethane	ND		0.080		ppb v/v			03/04/15 09:06	1
Chloroform	0.080		0.080		ppb v/v			03/04/15 09:06	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H26-CS-2015

Lab Sample ID: 140-2797-10

Date Collected: 02/24/15 14:22

Matrix: Air

Date Received: 02/27/15 11:15

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	0.43		0.20		ppb v/v			03/04/15 09:06	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 09:06	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/04/15 09:06	1
Cyclohexane	ND		0.20		ppb v/v			03/04/15 09:06	1
Dibromochloromethane	ND		0.080		ppb v/v			03/04/15 09:06	1
Dichlorodifluoromethane	0.39		0.080		ppb v/v			03/04/15 09:06	1
Ethanol	9.2		0.80		ppb v/v			03/04/15 09:06	1
Ethylbenzene	ND	*	0.080		ppb v/v			03/04/15 09:06	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/04/15 09:06	1
Hexane	ND		0.20		ppb v/v			03/04/15 09:06	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/04/15 09:06	1
Methylene Chloride	0.36		0.20		ppb v/v			03/04/15 09:06	1
m-Xylene & p-Xylene	0.20		0.080		ppb v/v			03/04/15 09:06	1
o-Xylene	ND		0.080		ppb v/v			03/04/15 09:06	1
Styrene	ND		0.080		ppb v/v			03/04/15 09:06	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/04/15 09:06	1
Tetrachloroethene	ND		0.080		ppb v/v			03/04/15 09:06	1
Toluene	0.38		0.12		ppb v/v			03/04/15 09:06	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 09:06	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/04/15 09:06	1
Trichloroethene	ND		0.040		ppb v/v			03/04/15 09:06	1
Trichlorofluoromethane	0.17		0.080		ppb v/v			03/04/15 09:06	1
Vinyl chloride	ND		0.080		ppb v/v			03/04/15 09:06	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/04/15 09:06	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/04/15 09:06	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/04/15 09:06	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/04/15 09:06	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/04/15 09:06	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/04/15 09:06	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/04/15 09:06	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/04/15 09:06	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/04/15 09:06	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 09:06	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/04/15 09:06	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/04/15 09:06	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/04/15 09:06	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/04/15 09:06	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 09:06	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 09:06	1
1,4-Dioxane	ND		0.72		ug/m3			03/04/15 09:06	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/04/15 09:06	1
2-Butanone	ND		0.94		ug/m3			03/04/15 09:06	1
4-Methyl-2-pentanone (MIBK)	2.6		0.82		ug/m3			03/04/15 09:06	1
Benzene	0.74		0.26		ug/m3			03/04/15 09:06	1
Benzyl chloride	ND		0.83		ug/m3			03/04/15 09:06	1
Bromodichloromethane	ND		0.54		ug/m3			03/04/15 09:06	1
Bromoform	ND		0.83		ug/m3			03/04/15 09:06	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H26-CS-2015

Lab Sample ID: 140-2797-10

Date Collected: 02/24/15 14:22

Matrix: Air

Date Received: 02/27/15 11:15

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		0.31		ug/m3			03/04/15 09:06	1
Carbon tetrachloride	0.41		0.25		ug/m3			03/04/15 09:06	1
Chlorobenzene	ND		0.37		ug/m3			03/04/15 09:06	1
Chloroethane	ND		0.21		ug/m3			03/04/15 09:06	1
Chloroform	0.39		0.39		ug/m3			03/04/15 09:06	1
Chloromethane	0.90		0.41		ug/m3			03/04/15 09:06	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 09:06	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 09:06	1
Cyclohexane	ND		0.69		ug/m3			03/04/15 09:06	1
Dibromochloromethane	ND		0.68		ug/m3			03/04/15 09:06	1
Dichlorodifluoromethane	1.9		0.40		ug/m3			03/04/15 09:06	1
Ethanol	17		1.5		ug/m3			03/04/15 09:06	1
Ethylbenzene	ND	*	0.35		ug/m3			03/04/15 09:06	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/04/15 09:06	1
Hexane	ND		0.70		ug/m3			03/04/15 09:06	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/04/15 09:06	1
Methylene Chloride	1.2		0.69		ug/m3			03/04/15 09:06	1
m-Xylene & p-Xylene	0.86		0.35		ug/m3			03/04/15 09:06	1
o-Xylene	ND		0.35		ug/m3			03/04/15 09:06	1
Styrene	ND		0.34		ug/m3			03/04/15 09:06	1
t-Butyl alcohol	ND		0.97		ug/m3			03/04/15 09:06	1
Tetrachloroethene	ND		0.54		ug/m3			03/04/15 09:06	1
Toluene	1.4		0.45		ug/m3			03/04/15 09:06	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 09:06	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 09:06	1
Trichloroethene	ND		0.21		ug/m3			03/04/15 09:06	1
Trichlorofluoromethane	0.97		0.45		ug/m3			03/04/15 09:06	1
Vinyl chloride	ND		0.20		ug/m3			03/04/15 09:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		60 - 140		03/04/15 09:06	1

Client Sample ID: DI-OA-2015

Lab Sample ID: 140-2797-11

Date Collected: 02/24/15 14:30

Matrix: Air

Date Received: 02/27/15 11:15

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			03/05/15 06:27	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/05/15 06:27	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/05/15 06:27	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/05/15 06:27	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/05/15 06:27	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/05/15 06:27	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/05/15 06:27	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 06:27	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/05/15 06:27	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 06:27	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: DI-OA-2015

Lab Sample ID: 140-2797-11

Date Collected: 02/24/15 14:30

Matrix: Air

Date Received: 02/27/15 11:15

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			03/05/15 06:27	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/05/15 06:27	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/05/15 06:27	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 06:27	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 06:27	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 06:27	1
1,4-Dioxane	ND		0.20		ppb v/v			03/05/15 06:27	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/05/15 06:27	1
2-Butanone	0.35		0.32		ppb v/v			03/05/15 06:27	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/05/15 06:27	1
Benzene	0.31		0.080		ppb v/v			03/05/15 06:27	1
Benzyl chloride	ND		0.16		ppb v/v			03/05/15 06:27	1
Bromodichloromethane	ND		0.080		ppb v/v			03/05/15 06:27	1
Bromoform	ND		0.080		ppb v/v			03/05/15 06:27	1
Bromomethane	ND		0.080		ppb v/v			03/05/15 06:27	1
Carbon tetrachloride	0.076		0.040		ppb v/v			03/05/15 06:27	1
Chlorobenzene	ND		0.080		ppb v/v			03/05/15 06:27	1
Chloroethane	ND		0.080		ppb v/v			03/05/15 06:27	1
Chloroform	ND		0.080		ppb v/v			03/05/15 06:27	1
Chloromethane	0.43		0.20		ppb v/v			03/05/15 06:27	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 06:27	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 06:27	1
Cyclohexane	ND		0.20		ppb v/v			03/05/15 06:27	1
Dibromochloromethane	ND		0.080		ppb v/v			03/05/15 06:27	1
Dichlorodifluoromethane	0.37		0.080		ppb v/v			03/05/15 06:27	1
Ethanol	3.4		0.80		ppb v/v			03/05/15 06:27	1
Ethylbenzene	ND		0.080		ppb v/v			03/05/15 06:27	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/05/15 06:27	1
Hexane	ND		0.20		ppb v/v			03/05/15 06:27	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/05/15 06:27	1
Methylene Chloride	ND		0.20		ppb v/v			03/05/15 06:27	1
m-Xylene & p-Xylene	0.16		0.080		ppb v/v			03/05/15 06:27	1
o-Xylene	ND		0.080		ppb v/v			03/05/15 06:27	1
Styrene	ND		0.080		ppb v/v			03/05/15 06:27	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/05/15 06:27	1
Tetrachloroethene	ND		0.080		ppb v/v			03/05/15 06:27	1
Toluene	0.29		0.12		ppb v/v			03/05/15 06:27	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 06:27	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 06:27	1
Trichloroethene	ND		0.040		ppb v/v			03/05/15 06:27	1
Trichlorofluoromethane	0.18		0.080		ppb v/v			03/05/15 06:27	1
Vinyl chloride	ND		0.080		ppb v/v			03/05/15 06:27	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/05/15 06:27	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/05/15 06:27	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/05/15 06:27	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/05/15 06:27	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/05/15 06:27	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: DI-OA-2015

Lab Sample ID: 140-2797-11

Date Collected: 02/24/15 14:30

Matrix: Air

Date Received: 02/27/15 11:15

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		0.32		ug/m3			03/05/15 06:27	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/05/15 06:27	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 06:27	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/05/15 06:27	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 06:27	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/05/15 06:27	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/05/15 06:27	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/05/15 06:27	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 06:27	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 06:27	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 06:27	1
1,4-Dioxane	ND		0.72		ug/m3			03/05/15 06:27	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/05/15 06:27	1
2-Butanone	1.0		0.94		ug/m3			03/05/15 06:27	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/05/15 06:27	1
Benzene	0.98		0.26		ug/m3			03/05/15 06:27	1
Benzyl chloride	ND		0.83		ug/m3			03/05/15 06:27	1
Bromodichloromethane	ND		0.54		ug/m3			03/05/15 06:27	1
Bromoform	ND		0.83		ug/m3			03/05/15 06:27	1
Bromomethane	ND		0.31		ug/m3			03/05/15 06:27	1
Carbon tetrachloride	0.48		0.25		ug/m3			03/05/15 06:27	1
Chlorobenzene	ND		0.37		ug/m3			03/05/15 06:27	1
Chloroethane	ND		0.21		ug/m3			03/05/15 06:27	1
Chloroform	ND		0.39		ug/m3			03/05/15 06:27	1
Chloromethane	0.89		0.41		ug/m3			03/05/15 06:27	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 06:27	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 06:27	1
Cyclohexane	ND		0.69		ug/m3			03/05/15 06:27	1
Dibromochloromethane	ND		0.68		ug/m3			03/05/15 06:27	1
Dichlorodifluoromethane	1.8		0.40		ug/m3			03/05/15 06:27	1
Ethanol	6.5		1.5		ug/m3			03/05/15 06:27	1
Ethylbenzene	ND		0.35		ug/m3			03/05/15 06:27	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/05/15 06:27	1
Hexane	ND		0.70		ug/m3			03/05/15 06:27	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/05/15 06:27	1
Methylene Chloride	ND		0.69		ug/m3			03/05/15 06:27	1
m-Xylene & p-Xylene	0.71		0.35		ug/m3			03/05/15 06:27	1
o-Xylene	ND		0.35		ug/m3			03/05/15 06:27	1
Styrene	ND		0.34		ug/m3			03/05/15 06:27	1
t-Butyl alcohol	ND		0.97		ug/m3			03/05/15 06:27	1
Tetrachloroethene	ND		0.54		ug/m3			03/05/15 06:27	1
Toluene	1.1		0.45		ug/m3			03/05/15 06:27	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 06:27	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 06:27	1
Trichloroethene	ND		0.21		ug/m3			03/05/15 06:27	1
Trichlorofluoromethane	0.99		0.45		ug/m3			03/05/15 06:27	1
Vinyl chloride	ND		0.20		ug/m3			03/05/15 06:27	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: DI-OA-2015

Lab Sample ID: 140-2797-11

Date Collected: 02/24/15 14:30

Matrix: Air

Date Received: 02/27/15 11:15

Sample Container: Summa Canister 6L

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		60 - 140		03/05/15 06:27	1

Client Sample ID: H27-BA-2015

Lab Sample ID: 140-2797-12

Date Collected: 02/25/15 08:30

Matrix: Air

Date Received: 02/27/15 11:15

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			03/05/15 07:21	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/05/15 07:21	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/05/15 07:21	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/05/15 07:21	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/05/15 07:21	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/05/15 07:21	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/05/15 07:21	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 07:21	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/05/15 07:21	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 07:21	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/05/15 07:21	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/05/15 07:21	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/05/15 07:21	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 07:21	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 07:21	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 07:21	1
1,4-Dioxane	ND		0.20		ppb v/v			03/05/15 07:21	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/05/15 07:21	1
2-Butanone	ND		0.32		ppb v/v			03/05/15 07:21	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/05/15 07:21	1
Benzene	0.23		0.080		ppb v/v			03/05/15 07:21	1
Benzyl chloride	ND		0.16		ppb v/v			03/05/15 07:21	1
Bromodichloromethane	ND		0.080		ppb v/v			03/05/15 07:21	1
Bromoform	ND		0.080		ppb v/v			03/05/15 07:21	1
Bromomethane	ND		0.080		ppb v/v			03/05/15 07:21	1
Carbon tetrachloride	0.085		0.040		ppb v/v			03/05/15 07:21	1
Chlorobenzene	ND		0.080		ppb v/v			03/05/15 07:21	1
Chloroethane	ND		0.080		ppb v/v			03/05/15 07:21	1
Chloroform	ND		0.080		ppb v/v			03/05/15 07:21	1
Chloromethane	0.52		0.20		ppb v/v			03/05/15 07:21	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 07:21	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 07:21	1
Cyclohexane	ND		0.20		ppb v/v			03/05/15 07:21	1
Dibromochloromethane	ND		0.080		ppb v/v			03/05/15 07:21	1
Dichlorodifluoromethane	0.41		0.080		ppb v/v			03/05/15 07:21	1
Ethanol	47		0.80		ppb v/v			03/05/15 07:21	1
Ethylbenzene	ND		0.080		ppb v/v			03/05/15 07:21	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/05/15 07:21	1
Hexane	ND		0.20		ppb v/v			03/05/15 07:21	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/05/15 07:21	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H27-BA-2015

Lab Sample ID: 140-2797-12

Date Collected: 02/25/15 08:30

Matrix: Air

Date Received: 02/27/15 11:15

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	ND		0.20		ppb v/v			03/05/15 07:21	1
m-Xylene & p-Xylene	0.12		0.080		ppb v/v			03/05/15 07:21	1
o-Xylene	ND		0.080		ppb v/v			03/05/15 07:21	1
Styrene	ND		0.080		ppb v/v			03/05/15 07:21	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/05/15 07:21	1
Tetrachloroethene	ND		0.080		ppb v/v			03/05/15 07:21	1
Toluene	0.23		0.12		ppb v/v			03/05/15 07:21	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 07:21	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 07:21	1
Trichloroethene	ND		0.040		ppb v/v			03/05/15 07:21	1
Trichlorofluoromethane	0.18		0.080		ppb v/v			03/05/15 07:21	1
Vinyl chloride	ND		0.080		ppb v/v			03/05/15 07:21	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/05/15 07:21	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/05/15 07:21	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/05/15 07:21	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/05/15 07:21	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/05/15 07:21	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/05/15 07:21	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/05/15 07:21	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 07:21	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/05/15 07:21	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 07:21	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/05/15 07:21	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/05/15 07:21	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/05/15 07:21	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 07:21	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 07:21	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 07:21	1
1,4-Dioxane	ND		0.72		ug/m3			03/05/15 07:21	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/05/15 07:21	1
2-Butanone	ND		0.94		ug/m3			03/05/15 07:21	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/05/15 07:21	1
Benzene	0.74		0.26		ug/m3			03/05/15 07:21	1
Benzyl chloride	ND		0.83		ug/m3			03/05/15 07:21	1
Bromodichloromethane	ND		0.54		ug/m3			03/05/15 07:21	1
Bromoform	ND		0.83		ug/m3			03/05/15 07:21	1
Bromomethane	ND		0.31		ug/m3			03/05/15 07:21	1
Carbon tetrachloride	0.53		0.25		ug/m3			03/05/15 07:21	1
Chlorobenzene	ND		0.37		ug/m3			03/05/15 07:21	1
Chloroethane	ND		0.21		ug/m3			03/05/15 07:21	1
Chloroform	ND		0.39		ug/m3			03/05/15 07:21	1
Chloromethane	1.1		0.41		ug/m3			03/05/15 07:21	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 07:21	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 07:21	1
Cyclohexane	ND		0.69		ug/m3			03/05/15 07:21	1
Dibromochloromethane	ND		0.68		ug/m3			03/05/15 07:21	1
Dichlorodifluoromethane	2.0		0.40		ug/m3			03/05/15 07:21	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H27-BA-2015

Lab Sample ID: 140-2797-12

Date Collected: 02/25/15 08:30

Matrix: Air

Date Received: 02/27/15 11:15

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	89		1.5		ug/m3			03/05/15 07:21	1
Ethylbenzene	ND		0.35		ug/m3			03/05/15 07:21	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/05/15 07:21	1
Hexane	ND		0.70		ug/m3			03/05/15 07:21	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/05/15 07:21	1
Methylene Chloride	ND		0.69		ug/m3			03/05/15 07:21	1
m-Xylene & p-Xylene	0.54		0.35		ug/m3			03/05/15 07:21	1
o-Xylene	ND		0.35		ug/m3			03/05/15 07:21	1
Styrene	ND		0.34		ug/m3			03/05/15 07:21	1
t-Butyl alcohol	ND		0.97		ug/m3			03/05/15 07:21	1
Tetrachloroethene	ND		0.54		ug/m3			03/05/15 07:21	1
Toluene	0.88		0.45		ug/m3			03/05/15 07:21	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 07:21	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 07:21	1
Trichloroethene	ND		0.21		ug/m3			03/05/15 07:21	1
Trichlorofluoromethane	1.0		0.45		ug/m3			03/05/15 07:21	1
Vinyl chloride	ND		0.20		ug/m3			03/05/15 07:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		60 - 140					03/05/15 07:21	1

Default Detection Limits

Client: New York State D.E.C.

TestAmerica Job ID: 140-2797-1

Project/Site: Former Ithaca Gun Factory # C755019A

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

Analyte	RL	MDL	Units	Method
1,1,1-Trichloroethane	0.080	0.012	ppb v/v	TO 15 LL
1,1,1-Trichloroethane	0.44	0.065	ug/m3	TO 15 LL
1,1,2,2-Tetrachloroethane	0.080	0.024	ppb v/v	TO 15 LL
1,1,2,2-Tetrachloroethane	0.55	0.16	ug/m3	TO 15 LL
1,1,2-Trichloroethane	0.080	0.021	ppb v/v	TO 15 LL
1,1,2-Trichloroethane	0.44	0.11	ug/m3	TO 15 LL
1,1,2-Trichlorotrifluoroethane	0.080	0.012	ppb v/v	TO 15 LL
1,1,2-Trichlorotrifluoroethane	0.61	0.092	ug/m3	TO 15 LL
1,1-Dichloroethane	0.080	0.010	ppb v/v	TO 15 LL
1,1-Dichloroethane	0.32	0.040	ug/m3	TO 15 LL
1,1-Dichloroethene	0.080	0.014	ppb v/v	TO 15 LL
1,1-Dichloroethene	0.32	0.056	ug/m3	TO 15 LL
1,2,4-Trichlorobenzene	0.080	0.039	ppb v/v	TO 15 LL
1,2,4-Trichlorobenzene	0.59	0.29	ug/m3	TO 15 LL
1,2,4-Trimethylbenzene	0.080	0.025	ppb v/v	TO 15 LL
1,2,4-Trimethylbenzene	0.39	0.12	ug/m3	TO 15 LL
1,2-Dibromoethane	0.080	0.018	ppb v/v	TO 15 LL
1,2-Dibromoethane	0.61	0.14	ug/m3	TO 15 LL
1,2-Dichlorobenzene	0.080	0.028	ppb v/v	TO 15 LL
1,2-Dichlorobenzene	0.48	0.17	ug/m3	TO 15 LL
1,2-Dichloroethane	0.080	0.019	ppb v/v	TO 15 LL
1,2-Dichloroethane	0.32	0.077	ug/m3	TO 15 LL
1,2-Dichloropropane	0.080	0.021	ppb v/v	TO 15 LL
1,2-Dichloropropane	0.37	0.097	ug/m3	TO 15 LL
1,2-Dichlorotetrafluoroethane	0.080	0.013	ppb v/v	TO 15 LL
1,2-Dichlorotetrafluoroethane	0.56	0.091	ug/m3	TO 15 LL
1,3,5-Trimethylbenzene	0.080	0.026	ppb v/v	TO 15 LL
1,3,5-Trimethylbenzene	0.39	0.13	ug/m3	TO 15 LL
1,3-Dichlorobenzene	0.080	0.026	ppb v/v	TO 15 LL
1,3-Dichlorobenzene	0.48	0.16	ug/m3	TO 15 LL
1,4-Dichlorobenzene	0.080	0.026	ppb v/v	TO 15 LL
1,4-Dichlorobenzene	0.48	0.16	ug/m3	TO 15 LL
1,4-Dioxane	0.20	0.032	ppb v/v	TO 15 LL
1,4-Dioxane	0.72	0.12	ug/m3	TO 15 LL
2,2,4-Trimethylpentane	0.20	0.016	ppb v/v	TO 15 LL
2,2,4-Trimethylpentane	0.93	0.075	ug/m3	TO 15 LL
2-Butanone	0.32	0.080	ppb v/v	TO 15 LL
2-Butanone	0.94	0.24	ug/m3	TO 15 LL
4-Methyl-2-pentanone (MIBK)	0.20	0.018	ppb v/v	TO 15 LL
4-Methyl-2-pentanone (MIBK)	0.82	0.074	ug/m3	TO 15 LL
Benzene	0.080	0.023	ppb v/v	TO 15 LL
Benzene	0.26	0.073	ug/m3	TO 15 LL
Benzyl chloride	0.16	0.031	ppb v/v	TO 15 LL
Benzyl chloride	0.83	0.16	ug/m3	TO 15 LL
Bromodichloromethane	0.080	0.018	ppb v/v	TO 15 LL
Bromodichloromethane	0.54	0.12	ug/m3	TO 15 LL
Bromoform	0.080	0.019	ppb v/v	TO 15 LL
Bromoform	0.83	0.20	ug/m3	TO 15 LL
Bromomethane	0.080	0.013	ppb v/v	TO 15 LL
Bromomethane	0.31	0.050	ug/m3	TO 15 LL
Carbon tetrachloride	0.040	0.015	ppb v/v	TO 15 LL
Carbon tetrachloride	0.25	0.094	ug/m3	TO 15 LL

TestAmerica Knoxville

Default Detection Limits

Client: New York State D.E.C.

TestAmerica Job ID: 140-2797-1

Project/Site: Former Ithaca Gun Factory # C755019A

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

Analyte	RL	MDL	Units	Method
Chlorobenzene	0.080	0.020	ppb v/v	TO 15 LL
Chlorobenzene	0.37	0.092	ug/m3	TO 15 LL
Chloroethane	0.080	0.014	ppb v/v	TO 15 LL
Chloroethane	0.21	0.037	ug/m3	TO 15 LL
Chloroform	0.080	0.015	ppb v/v	TO 15 LL
Chloroform	0.39	0.073	ug/m3	TO 15 LL
Chloromethane	0.20	0.064	ppb v/v	TO 15 LL
Chloromethane	0.41	0.13	ug/m3	TO 15 LL
cis-1,2-Dichloroethene	0.080	0.024	ppb v/v	TO 15 LL
cis-1,2-Dichloroethene	0.32	0.095	ug/m3	TO 15 LL
cis-1,3-Dichloropropene	0.080	0.029	ppb v/v	TO 15 LL
cis-1,3-Dichloropropene	0.36	0.13	ug/m3	TO 15 LL
Cyclohexane	0.20	0.016	ppb v/v	TO 15 LL
Cyclohexane	0.69	0.055	ug/m3	TO 15 LL
Dibromochloromethane	0.080	0.017	ppb v/v	TO 15 LL
Dibromochloromethane	0.68	0.14	ug/m3	TO 15 LL
Dichlorodifluoromethane	0.080	0.027	ppb v/v	TO 15 LL
Dichlorodifluoromethane	0.40	0.13	ug/m3	TO 15 LL
Ethanol	0.80	0.80	ppb v/v	TO 15 LL
Ethanol	1.5	1.5	ug/m3	TO 15 LL
Ethylbenzene	0.080	0.027	ppb v/v	TO 15 LL
Ethylbenzene	0.35	0.12	ug/m3	TO 15 LL
Hexachlorobutadiene	0.080	0.049	ppb v/v	TO 15 LL
Hexachlorobutadiene	0.85	0.52	ug/m3	TO 15 LL
Hexane	0.20	0.013	ppb v/v	TO 15 LL
Hexane	0.70	0.046	ug/m3	TO 15 LL
Methyl tert-butyl ether	0.16	0.068	ppb v/v	TO 15 LL
Methyl tert-butyl ether	0.58	0.25	ug/m3	TO 15 LL
Methylene Chloride	0.20	0.13	ppb v/v	TO 15 LL
Methylene Chloride	0.69	0.45	ug/m3	TO 15 LL
m-Xylene & p-Xylene	0.080	0.053	ppb v/v	TO 15 LL
m-Xylene & p-Xylene	0.35	0.23	ug/m3	TO 15 LL
o-Xylene	0.080	0.024	ppb v/v	TO 15 LL
o-Xylene	0.35	0.10	ug/m3	TO 15 LL
Styrene	0.080	0.023	ppb v/v	TO 15 LL
Styrene	0.34	0.098	ug/m3	TO 15 LL
t-Butyl alcohol	0.32	0.015	ppb v/v	TO 15 LL
t-Butyl alcohol	0.97	0.045	ug/m3	TO 15 LL
Tetrachloroethene	0.080	0.016	ppb v/v	TO 15 LL
Tetrachloroethene	0.54	0.11	ug/m3	TO 15 LL
Toluene	0.12	0.12	ppb v/v	TO 15 LL
Toluene	0.45	0.45	ug/m3	TO 15 LL
trans-1,2-Dichloroethene	0.080	0.020	ppb v/v	TO 15 LL
trans-1,2-Dichloroethene	0.32	0.079	ug/m3	TO 15 LL
trans-1,3-Dichloropropene	0.080	0.019	ppb v/v	TO 15 LL
trans-1,3-Dichloropropene	0.36	0.086	ug/m3	TO 15 LL
Trichloroethene	0.040	0.014	ppb v/v	TO 15 LL
Trichloroethene	0.21	0.075	ug/m3	TO 15 LL
Trichlorofluoromethane	0.080	0.010	ppb v/v	TO 15 LL
Trichlorofluoromethane	0.45	0.056	ug/m3	TO 15 LL
Vinyl chloride	0.080	0.029	ppb v/v	TO 15 LL
Vinyl chloride	0.20	0.074	ug/m3	TO 15 LL

Surrogate Summary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

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)						
140-2797-1	H24-BA-2015	94						
140-2797-2	H24-SS-2015	96						
140-2797-3	H15-BA-2015	90						
140-2797-4	H15-SS-2015	94						
140-2797-5	H16-BA-2015	86						
140-2797-6	H16-SS-2015	95						
140-2797-7	H25-BA-2015	93						
140-2797-8	H26-BA-2015	92						
140-2797-9	H26-SS-2015	96						
140-2797-10	H26-CS-2015	90						
140-2797-11	DI-OA-2015	80						
140-2797-12	H27-BA-2015	93						
LCS 140-2449/1002	Lab Control Sample	91						
LCS 140-2450/1002	Lab Control Sample	104						
MB 140-2449/5	Method Blank	91						
MB 140-2450/7	Method Blank	96						

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

QC Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

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

Lab Sample ID: MB 140-2449/5

Matrix: Air

Analysis Batch: 2449

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			03/03/15 20:18	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/03/15 20:18	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/03/15 20:18	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/03/15 20:18	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/03/15 20:18	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/03/15 20:18	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/03/15 20:18	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/03/15 20:18	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/03/15 20:18	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/03/15 20:18	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/03/15 20:18	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/03/15 20:18	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/03/15 20:18	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/03/15 20:18	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/03/15 20:18	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/03/15 20:18	1
1,4-Dioxane	ND		0.20		ppb v/v			03/03/15 20:18	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/03/15 20:18	1
2-Butanone	ND		0.32		ppb v/v			03/03/15 20:18	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/03/15 20:18	1
Benzene	ND		0.080		ppb v/v			03/03/15 20:18	1
Benzyl chloride	ND		0.16		ppb v/v			03/03/15 20:18	1
Bromodichloromethane	ND		0.080		ppb v/v			03/03/15 20:18	1
Bromoform	ND		0.080		ppb v/v			03/03/15 20:18	1
Bromomethane	ND		0.080		ppb v/v			03/03/15 20:18	1
Carbon tetrachloride	ND		0.040		ppb v/v			03/03/15 20:18	1
Chlorobenzene	ND		0.080		ppb v/v			03/03/15 20:18	1
Chloroethane	ND		0.080		ppb v/v			03/03/15 20:18	1
Chloroform	ND		0.080		ppb v/v			03/03/15 20:18	1
Chloromethane	ND		0.20		ppb v/v			03/03/15 20:18	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/03/15 20:18	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/03/15 20:18	1
Cyclohexane	ND		0.20		ppb v/v			03/03/15 20:18	1
Dibromochloromethane	ND		0.080		ppb v/v			03/03/15 20:18	1
Dichlorodifluoromethane	ND		0.080		ppb v/v			03/03/15 20:18	1
Ethanol	ND		0.80		ppb v/v			03/03/15 20:18	1
Ethylbenzene	ND		0.080		ppb v/v			03/03/15 20:18	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/03/15 20:18	1
Hexane	ND		0.20		ppb v/v			03/03/15 20:18	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/03/15 20:18	1
Methylene Chloride	ND		0.20		ppb v/v			03/03/15 20:18	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			03/03/15 20:18	1
o-Xylene	ND		0.080		ppb v/v			03/03/15 20:18	1
Styrene	ND		0.080		ppb v/v			03/03/15 20:18	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/03/15 20:18	1
Tetrachloroethene	ND		0.080		ppb v/v			03/03/15 20:18	1
Toluene	ND		0.12		ppb v/v			03/03/15 20:18	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/03/15 20:18	1

TestAmerica Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

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

Lab Sample ID: MB 140-2449/5

Matrix: Air

Analysis Batch: 2449

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			03/03/15 20:18	1
Trichloroethene	ND		0.040		ppb v/v			03/03/15 20:18	1
Trichlorofluoromethane	ND		0.080		ppb v/v			03/03/15 20:18	1
Vinyl chloride	ND		0.080		ppb v/v			03/03/15 20:18	1
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/03/15 20:18	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/03/15 20:18	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/03/15 20:18	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/03/15 20:18	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/03/15 20:18	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/03/15 20:18	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/03/15 20:18	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/03/15 20:18	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/03/15 20:18	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/03/15 20:18	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/03/15 20:18	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/03/15 20:18	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/03/15 20:18	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/03/15 20:18	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/03/15 20:18	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/03/15 20:18	1
1,4-Dioxane	ND		0.72		ug/m3			03/03/15 20:18	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/03/15 20:18	1
2-Butanone	ND		0.94		ug/m3			03/03/15 20:18	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/03/15 20:18	1
Benzene	ND		0.26		ug/m3			03/03/15 20:18	1
Benzyl chloride	ND		0.83		ug/m3			03/03/15 20:18	1
Bromodichloromethane	ND		0.54		ug/m3			03/03/15 20:18	1
Bromoform	ND		0.83		ug/m3			03/03/15 20:18	1
Bromomethane	ND		0.31		ug/m3			03/03/15 20:18	1
Carbon tetrachloride	ND		0.25		ug/m3			03/03/15 20:18	1
Chlorobenzene	ND		0.37		ug/m3			03/03/15 20:18	1
Chloroethane	ND		0.21		ug/m3			03/03/15 20:18	1
Chloroform	ND		0.39		ug/m3			03/03/15 20:18	1
Chloromethane	ND		0.41		ug/m3			03/03/15 20:18	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/03/15 20:18	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/03/15 20:18	1
Cyclohexane	ND		0.69		ug/m3			03/03/15 20:18	1
Dibromochloromethane	ND		0.68		ug/m3			03/03/15 20:18	1
Dichlorodifluoromethane	ND		0.40		ug/m3			03/03/15 20:18	1
Ethanol	ND		1.5		ug/m3			03/03/15 20:18	1
Ethylbenzene	ND		0.35		ug/m3			03/03/15 20:18	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/03/15 20:18	1
Hexane	ND		0.70		ug/m3			03/03/15 20:18	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/03/15 20:18	1
Methylene Chloride	ND		0.69		ug/m3			03/03/15 20:18	1

TestAmerica Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

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

Lab Sample ID: MB 140-2449/5

Matrix: Air

Analysis Batch: 2449

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			03/03/15 20:18	1
o-Xylene	ND		0.35		ug/m3			03/03/15 20:18	1
Styrene	ND		0.34		ug/m3			03/03/15 20:18	1
t-Butyl alcohol	ND		0.97		ug/m3			03/03/15 20:18	1
Tetrachloroethene	ND		0.54		ug/m3			03/03/15 20:18	1
Toluene	ND		0.45		ug/m3			03/03/15 20:18	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/03/15 20:18	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/03/15 20:18	1
Trichloroethene	ND		0.21		ug/m3			03/03/15 20:18	1
Trichlorofluoromethane	ND		0.45		ug/m3			03/03/15 20:18	1
Vinyl chloride	ND		0.20		ug/m3			03/03/15 20:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		60 - 140		03/03/15 20:18	1

Lab Sample ID: LCS 140-2449/1002

Matrix: Air

Analysis Batch: 2449

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	2.04		ppb v/v		102	70 - 130
1,1,2,2-Tetrachloroethane	2.00	2.36		ppb v/v		118	70 - 130
1,1,2-Trichloroethane	2.00	2.33		ppb v/v		116	70 - 130
1,1,2-Trichlorotrifluoroethane	2.00	2.41		ppb v/v		121	70 - 130
1,1-Dichloroethane	2.00	2.02		ppb v/v		101	70 - 130
1,1-Dichloroethene	2.00	2.51		ppb v/v		125	70 - 130
1,2,4-Trichlorobenzene	2.00	1.73		ppb v/v		86	60 - 140
1,2,4-Trimethylbenzene	2.00	2.37		ppb v/v		119	70 - 130
1,2-Dibromoethane	2.00	2.29		ppb v/v		114	70 - 130
1,2-Dichlorobenzene	2.00	2.14		ppb v/v		107	70 - 130
1,2-Dichloroethane	2.00	2.10		ppb v/v		105	70 - 130
1,2-Dichloropropane	2.00	2.30		ppb v/v		115	70 - 130
1,2-Dichlorotetrafluoroethane	2.00	2.19		ppb v/v		109	60 - 140
1,3,5-Trimethylbenzene	2.00	2.52		ppb v/v		126	70 - 130
1,3-Dichlorobenzene	2.00	2.07		ppb v/v		104	70 - 130
1,4-Dichlorobenzene	2.00	1.99		ppb v/v		100	70 - 130
1,4-Dioxane	2.00	2.05		ppb v/v		103	60 - 140
2,2,4-Trimethylpentane	2.00	2.20		ppb v/v		110	70 - 130
2-Butanone	2.00	2.15		ppb v/v		108	60 - 140
4-Methyl-2-pentanone (MIBK)	2.00	2.28		ppb v/v		114	60 - 140
Benzene	2.00	2.00		ppb v/v		100	70 - 130
Benzyl chloride	2.00	2.26		ppb v/v		113	70 - 130
Bromodichloromethane	2.00	2.09		ppb v/v		105	70 - 130
Bromoform	2.00	2.27		ppb v/v		114	60 - 140
Bromomethane	2.00	2.21		ppb v/v		110	70 - 130
Carbon tetrachloride	2.00	2.47		ppb v/v		124	70 - 130
Chlorobenzene	2.00	2.30		ppb v/v		115	70 - 130

TestAmerica Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

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

Lab Sample ID: LCS 140-2449/1002

Matrix: Air

Analysis Batch: 2449

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	2.20		ppb v/v		110	70 - 130
Chloroform	2.00	2.16		ppb v/v		108	70 - 130
Chloromethane	2.00	2.14		ppb v/v		107	60 - 140
cis-1,2-Dichloroethene	2.00	2.12		ppb v/v		106	70 - 130
cis-1,3-Dichloropropene	2.00	2.40		ppb v/v		120	70 - 130
Cyclohexane	2.00	2.00		ppb v/v		100	70 - 130
Dibromochloromethane	2.00	2.32		ppb v/v		116	70 - 130
Dichlorodifluoromethane	2.00	2.18		ppb v/v		109	60 - 140
Ethanol	10.0	10.2		ppb v/v		102	20 - 180
Ethylbenzene	2.00	2.70	*	ppb v/v		135	70 - 130
Hexachlorobutadiene	2.00	1.85		ppb v/v		92	60 - 140
Hexane	2.00	1.96		ppb v/v		98	70 - 130
Methyl tert-butyl ether	2.00	2.62		ppb v/v		131	60 - 140
Methylene Chloride	2.00	2.26		ppb v/v		113	70 - 130
m-Xylene & p-Xylene	4.00	5.18		ppb v/v		129	70 - 130
o-Xylene	2.00	2.53		ppb v/v		126	70 - 130
Styrene	2.00	2.54		ppb v/v		127	70 - 130
t-Butyl alcohol	2.00	2.16		ppb v/v		108	60 - 140
Tetrachloroethene	2.00	2.24		ppb v/v		112	70 - 130
Toluene	2.00	2.55		ppb v/v		128	70 - 130
trans-1,2-Dichloroethene	2.00	2.06		ppb v/v		103	70 - 130
trans-1,3-Dichloropropene	2.00	2.22		ppb v/v		111	70 - 130
Trichloroethene	2.00	2.12		ppb v/v		106	70 - 130
Trichlorofluoromethane	2.00	2.14		ppb v/v		107	60 - 140
Vinyl chloride	2.00	2.32		ppb v/v		116	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	11	11.1		ug/m3		102	70 - 130
1,1,1,2-Tetrachloroethane	14	16.2		ug/m3		118	70 - 130
1,1,2-Trichloroethane	11	12.7		ug/m3		116	70 - 130
1,1,2-Trichlorotrifluoroethane	15	18.5		ug/m3		121	70 - 130
1,1-Dichloroethane	8.1	8.18		ug/m3		101	70 - 130
1,1-Dichloroethene	7.9	9.94		ug/m3		125	70 - 130
1,2,4-Trichlorobenzene	15	12.8		ug/m3		86	60 - 140
1,2,4-Trimethylbenzene	9.8	11.7		ug/m3		119	70 - 130
1,2-Dibromoethane	15	17.6		ug/m3		114	70 - 130
1,2-Dichlorobenzene	12	12.9		ug/m3		107	70 - 130
1,2-Dichloroethane	8.1	8.49		ug/m3		105	70 - 130
1,2-Dichloropropane	9.2	10.6		ug/m3		115	70 - 130
1,2-Dichlorotetrafluoroethane	14	15.3		ug/m3		109	60 - 140
1,3,5-Trimethylbenzene	9.8	12.4		ug/m3		126	70 - 130
1,3-Dichlorobenzene	12	12.5		ug/m3		104	70 - 130
1,4-Dichlorobenzene	12	12.0		ug/m3		100	70 - 130
1,4-Dioxane	7.2	7.40		ug/m3		103	60 - 140
2,2,4-Trimethylpentane	9.3	10.3		ug/m3		110	70 - 130
2-Butanone	5.9	6.35		ug/m3		108	60 - 140
4-Methyl-2-pentanone (MIBK)	8.2	9.34		ug/m3		114	60 - 140

TestAmerica Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

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

Lab Sample ID: LCS 140-2449/1002

Matrix: Air

Analysis Batch: 2449

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	6.40		ug/m3		100	70 - 130
Benzyl chloride	10	11.7		ug/m3		113	70 - 130
Bromodichloromethane	13	14.0		ug/m3		105	70 - 130
Bromoform	21	23.5		ug/m3		114	60 - 140
Bromomethane	7.8	8.56		ug/m3		110	70 - 130
Carbon tetrachloride	13	15.6		ug/m3		124	70 - 130
Chlorobenzene	9.2	10.6		ug/m3		115	70 - 130
Chloroethane	5.3	5.82		ug/m3		110	70 - 130
Chloroform	9.8	10.6		ug/m3		108	70 - 130
Chloromethane	4.1	4.41		ug/m3		107	60 - 140
cis-1,2-Dichloroethene	7.9	8.39		ug/m3		106	70 - 130
cis-1,3-Dichloropropene	9.1	10.9		ug/m3		120	70 - 130
Cyclohexane	6.9	6.90		ug/m3		100	70 - 130
Dibromochloromethane	17	19.8		ug/m3		116	70 - 130
Dichlorodifluoromethane	9.9	10.8		ug/m3		109	60 - 140
Ethanol	19	19.3		ug/m3		102	20 - 180
Ethylbenzene	8.7	11.7	*	ug/m3		135	70 - 130
Hexachlorobutadiene	21	19.7		ug/m3		92	60 - 140
Hexane	7.1	6.90		ug/m3		98	70 - 130
Methyl tert-butyl ether	7.2	9.46		ug/m3		131	60 - 140
Methylene Chloride	7.0	7.85		ug/m3		113	70 - 130
m-Xylene & p-Xylene	17	22.5		ug/m3		129	70 - 130
o-Xylene	8.7	11.0		ug/m3		126	70 - 130
Styrene	8.5	10.8		ug/m3		127	70 - 130
t-Butyl alcohol	6.1	6.55		ug/m3		108	60 - 140
Tetrachloroethene	14	15.2		ug/m3		112	70 - 130
Toluene	7.5	9.62		ug/m3		128	70 - 130
trans-1,2-Dichloroethene	7.9	8.18		ug/m3		103	70 - 130
trans-1,3-Dichloropropene	9.1	10.1		ug/m3		111	70 - 130
Trichloroethene	11	11.4		ug/m3		106	70 - 130
Trichlorofluoromethane	11	12.0		ug/m3		107	60 - 140
Vinyl chloride	5.1	5.93		ug/m3		116	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		60 - 140

Lab Sample ID: MB 140-2450/7

Matrix: Air

Analysis Batch: 2450

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			03/04/15 21:23	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/04/15 21:23	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/04/15 21:23	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/04/15 21:23	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/04/15 21:23	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/04/15 21:23	1

TestAmerica Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

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

Lab Sample ID: MB 140-2450/7

Matrix: Air

Analysis Batch: 2450

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			03/04/15 21:23	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/04/15 21:23	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/04/15 21:23	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 21:23	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/04/15 21:23	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/04/15 21:23	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/04/15 21:23	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/04/15 21:23	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 21:23	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/04/15 21:23	1
1,4-Dioxane	ND		0.20		ppb v/v			03/04/15 21:23	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/04/15 21:23	1
2-Butanone	ND		0.32		ppb v/v			03/04/15 21:23	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/04/15 21:23	1
Benzene	ND		0.080		ppb v/v			03/04/15 21:23	1
Benzyl chloride	ND		0.16		ppb v/v			03/04/15 21:23	1
Bromodichloromethane	ND		0.080		ppb v/v			03/04/15 21:23	1
Bromoform	ND		0.080		ppb v/v			03/04/15 21:23	1
Bromomethane	ND		0.080		ppb v/v			03/04/15 21:23	1
Carbon tetrachloride	ND		0.040		ppb v/v			03/04/15 21:23	1
Chlorobenzene	ND		0.080		ppb v/v			03/04/15 21:23	1
Chloroethane	ND		0.080		ppb v/v			03/04/15 21:23	1
Chloroform	ND		0.080		ppb v/v			03/04/15 21:23	1
Chloromethane	ND		0.20		ppb v/v			03/04/15 21:23	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 21:23	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/04/15 21:23	1
Cyclohexane	ND		0.20		ppb v/v			03/04/15 21:23	1
Dibromochloromethane	ND		0.080		ppb v/v			03/04/15 21:23	1
Dichlorodifluoromethane	ND		0.080		ppb v/v			03/04/15 21:23	1
Ethanol	ND		0.80		ppb v/v			03/04/15 21:23	1
Ethylbenzene	ND		0.080		ppb v/v			03/04/15 21:23	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/04/15 21:23	1
Hexane	ND		0.20		ppb v/v			03/04/15 21:23	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/04/15 21:23	1
Methylene Chloride	ND		0.20		ppb v/v			03/04/15 21:23	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			03/04/15 21:23	1
o-Xylene	ND		0.080		ppb v/v			03/04/15 21:23	1
Styrene	ND		0.080		ppb v/v			03/04/15 21:23	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/04/15 21:23	1
Tetrachloroethene	ND		0.080		ppb v/v			03/04/15 21:23	1
Toluene	ND		0.12		ppb v/v			03/04/15 21:23	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/04/15 21:23	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/04/15 21:23	1
Trichloroethene	ND		0.040		ppb v/v			03/04/15 21:23	1
Trichlorofluoromethane	ND		0.080		ppb v/v			03/04/15 21:23	1
Vinyl chloride	ND		0.080		ppb v/v			03/04/15 21:23	1

TestAmerica Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

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

Lab Sample ID: MB 140-2450/7

Matrix: Air

Analysis Batch: 2450

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		0.44		ug/m3			03/04/15 21:23	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/04/15 21:23	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/04/15 21:23	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/04/15 21:23	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/04/15 21:23	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/04/15 21:23	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/04/15 21:23	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/04/15 21:23	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/04/15 21:23	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 21:23	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/04/15 21:23	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/04/15 21:23	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/04/15 21:23	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/04/15 21:23	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 21:23	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/04/15 21:23	1
1,4-Dioxane	ND		0.72		ug/m3			03/04/15 21:23	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/04/15 21:23	1
2-Butanone	ND		0.94		ug/m3			03/04/15 21:23	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/04/15 21:23	1
Benzene	ND		0.26		ug/m3			03/04/15 21:23	1
Benzyl chloride	ND		0.83		ug/m3			03/04/15 21:23	1
Bromodichloromethane	ND		0.54		ug/m3			03/04/15 21:23	1
Bromoform	ND		0.83		ug/m3			03/04/15 21:23	1
Bromomethane	ND		0.31		ug/m3			03/04/15 21:23	1
Carbon tetrachloride	ND		0.25		ug/m3			03/04/15 21:23	1
Chlorobenzene	ND		0.37		ug/m3			03/04/15 21:23	1
Chloroethane	ND		0.21		ug/m3			03/04/15 21:23	1
Chloroform	ND		0.39		ug/m3			03/04/15 21:23	1
Chloromethane	ND		0.41		ug/m3			03/04/15 21:23	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 21:23	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 21:23	1
Cyclohexane	ND		0.69		ug/m3			03/04/15 21:23	1
Dibromochloromethane	ND		0.68		ug/m3			03/04/15 21:23	1
Dichlorodifluoromethane	ND		0.40		ug/m3			03/04/15 21:23	1
Ethanol	ND		1.5		ug/m3			03/04/15 21:23	1
Ethylbenzene	ND		0.35		ug/m3			03/04/15 21:23	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/04/15 21:23	1
Hexane	ND		0.70		ug/m3			03/04/15 21:23	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/04/15 21:23	1
Methylene Chloride	ND		0.69		ug/m3			03/04/15 21:23	1
m-Xylene & p-Xylene	ND		0.35		ug/m3			03/04/15 21:23	1
o-Xylene	ND		0.35		ug/m3			03/04/15 21:23	1
Styrene	ND		0.34		ug/m3			03/04/15 21:23	1
t-Butyl alcohol	ND		0.97		ug/m3			03/04/15 21:23	1
Tetrachloroethene	ND		0.54		ug/m3			03/04/15 21:23	1
Toluene	ND		0.45		ug/m3			03/04/15 21:23	1

TestAmerica Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

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

Lab Sample ID: MB 140-2450/7

Matrix: Air

Analysis Batch: 2450

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/04/15 21:23	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/04/15 21:23	1
Trichloroethene	ND		0.21		ug/m3			03/04/15 21:23	1
Trichlorofluoromethane	ND		0.45		ug/m3			03/04/15 21:23	1
Vinyl chloride	ND		0.20		ug/m3			03/04/15 21:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		60 - 140		03/04/15 21:23	1

Lab Sample ID: LCS 140-2450/1002

Matrix: Air

Analysis Batch: 2450

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	1.55		ppb v/v		77	70 - 130
1,1,2,2-Tetrachloroethane	2.00	1.80		ppb v/v		90	70 - 130
1,1,2-Trichloroethane	2.00	1.56		ppb v/v		78	70 - 130
1,1,2-Trichlorotrifluoroethane	2.00	1.61		ppb v/v		81	70 - 130
1,1-Dichloroethane	2.00	1.59		ppb v/v		79	70 - 130
1,1-Dichloroethene	2.00	1.79		ppb v/v		89	70 - 130
1,2,4-Trichlorobenzene	2.00	1.63		ppb v/v		81	60 - 140
1,2,4-Trimethylbenzene	2.00	1.78		ppb v/v		89	70 - 130
1,2-Dibromoethane	2.00	1.54		ppb v/v		77	70 - 130
1,2-Dichlorobenzene	2.00	1.68		ppb v/v		84	70 - 130
1,2-Dichloroethane	2.00	1.43		ppb v/v		71	70 - 130
1,2-Dichloropropane	2.00	1.46		ppb v/v		73	70 - 130
1,2-Dichlorotetrafluoroethane	2.00	1.92		ppb v/v		96	60 - 140
1,3,5-Trimethylbenzene	2.00	1.84		ppb v/v		92	70 - 130
1,3-Dichlorobenzene	2.00	1.59		ppb v/v		80	70 - 130
1,4-Dichlorobenzene	2.00	1.58		ppb v/v		79	70 - 130
1,4-Dioxane	2.00	1.69		ppb v/v		84	60 - 140
2,2,4-Trimethylpentane	2.00	1.72		ppb v/v		86	70 - 130
2-Butanone	2.00	1.48		ppb v/v		74	60 - 140
4-Methyl-2-pentanone (MIBK)	2.00	1.78		ppb v/v		89	60 - 140
Benzene	2.00	1.40		ppb v/v		70	70 - 130
Benzyl chloride	2.00	1.73		ppb v/v		86	70 - 130
Bromodichloromethane	2.00	1.58		ppb v/v		79	70 - 130
Bromoform	2.00	1.51		ppb v/v		75	60 - 140
Bromomethane	2.00	1.89		ppb v/v		94	70 - 130
Carbon tetrachloride	2.00	1.54		ppb v/v		77	70 - 130
Chlorobenzene	2.00	1.56		ppb v/v		78	70 - 130
Chloroethane	2.00	1.88		ppb v/v		94	70 - 130
Chloroform	2.00	1.60		ppb v/v		80	70 - 130
Chloromethane	2.00	1.88		ppb v/v		94	60 - 140
cis-1,2-Dichloroethene	2.00	1.57		ppb v/v		78	70 - 130
cis-1,3-Dichloropropene	2.00	1.45		ppb v/v		72	70 - 130
Cyclohexane	2.00	1.64		ppb v/v		82	70 - 130

TestAmerica Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

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

Lab Sample ID: LCS 140-2450/1002

Matrix: Air

Analysis Batch: 2450

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibromochloromethane	2.00	1.62		ppb v/v		81	70 - 130
Dichlorodifluoromethane	2.00	1.95		ppb v/v		97	60 - 140
Ethanol	10.0	8.92		ppb v/v		89	20 - 180
Ethylbenzene	2.00	1.72		ppb v/v		86	70 - 130
Hexachlorobutadiene	2.00	1.67		ppb v/v		83	60 - 140
Hexane	2.00	1.53		ppb v/v		77	70 - 130
Methyl tert-butyl ether	2.00	1.66		ppb v/v		83	60 - 140
Methylene Chloride	2.00	1.55		ppb v/v		77	70 - 130
m-Xylene & p-Xylene	4.00	3.39		ppb v/v		85	70 - 130
o-Xylene	2.00	1.69		ppb v/v		84	70 - 130
Styrene	2.00	1.71		ppb v/v		85	70 - 130
t-Butyl alcohol	2.00	1.64		ppb v/v		82	60 - 140
Tetrachloroethene	2.00	1.71		ppb v/v		86	70 - 130
Toluene	2.00	1.64		ppb v/v		82	70 - 130
trans-1,2-Dichloroethene	2.00	1.63		ppb v/v		81	70 - 130
trans-1,3-Dichloropropene	2.00	1.51		ppb v/v		76	70 - 130
Trichloroethene	2.00	1.58		ppb v/v		79	70 - 130
Trichlorofluoromethane	2.00	1.81		ppb v/v		91	60 - 140
Vinyl chloride	2.00	1.99		ppb v/v		99	70 - 130
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	11	8.44		ug/m3		77	70 - 130
1,1,2,2-Tetrachloroethane	14	12.4		ug/m3		90	70 - 130
1,1,2-Trichloroethane	11	8.51		ug/m3		78	70 - 130
1,1,2-Trichlorotrifluoroethane	15	12.4		ug/m3		81	70 - 130
1,1-Dichloroethane	8.1	6.42		ug/m3		79	70 - 130
1,1-Dichloroethene	7.9	7.09		ug/m3		89	70 - 130
1,2,4-Trichlorobenzene	15	12.1		ug/m3		81	60 - 140
1,2,4-Trimethylbenzene	9.8	8.73		ug/m3		89	70 - 130
1,2-Dibromoethane	15	11.9		ug/m3		77	70 - 130
1,2-Dichlorobenzene	12	10.1		ug/m3		84	70 - 130
1,2-Dichloroethane	8.1	5.79		ug/m3		71	70 - 130
1,2-Dichloropropane	9.2	6.76		ug/m3		73	70 - 130
1,2-Dichlorotetrafluoroethane	14	13.4		ug/m3		96	60 - 140
1,3,5-Trimethylbenzene	9.8	9.02		ug/m3		92	70 - 130
1,3-Dichlorobenzene	12	9.58		ug/m3		80	70 - 130
1,4-Dichlorobenzene	12	9.51		ug/m3		79	70 - 130
1,4-Dioxane	7.2	6.08		ug/m3		84	60 - 140
2,2,4-Trimethylpentane	9.3	8.04		ug/m3		86	70 - 130
2-Butanone	5.9	4.36		ug/m3		74	60 - 140
4-Methyl-2-pentanone (MIBK)	8.2	7.28		ug/m3		89	60 - 140
Benzene	6.4	4.47		ug/m3		70	70 - 130
Benzyl chloride	10	8.95		ug/m3		86	70 - 130
Bromodichloromethane	13	10.6		ug/m3		79	70 - 130
Bromoform	21	15.6		ug/m3		75	60 - 140
Bromomethane	7.8	7.34		ug/m3		94	70 - 130
Carbon tetrachloride	13	9.69		ug/m3		77	70 - 130

TestAmerica Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

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

Lab Sample ID: LCS 140-2450/1002

Matrix: Air

Analysis Batch: 2450

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	9.2	7.18		ug/m3		78	70 - 130
Chloroethane	5.3	4.97		ug/m3		94	70 - 130
Chloroform	9.8	7.80		ug/m3		80	70 - 130
Chloromethane	4.1	3.87		ug/m3		94	60 - 140
cis-1,2-Dichloroethene	7.9	6.21		ug/m3		78	70 - 130
cis-1,3-Dichloropropene	9.1	6.57		ug/m3		72	70 - 130
Cyclohexane	6.9	5.64		ug/m3		82	70 - 130
Dibromochloromethane	17	13.8		ug/m3		81	70 - 130
Dichlorodifluoromethane	9.9	9.63		ug/m3		97	60 - 140
Ethanol	19	16.8		ug/m3		89	20 - 180
Ethylbenzene	8.7	7.47		ug/m3		86	70 - 130
Hexachlorobutadiene	21	17.8		ug/m3		83	60 - 140
Hexane	7.1	5.40		ug/m3		77	70 - 130
Methyl tert-butyl ether	7.2	5.99		ug/m3		83	60 - 140
Methylene Chloride	7.0	5.38		ug/m3		77	70 - 130
m-Xylene & p-Xylene	17	14.7		ug/m3		85	70 - 130
o-Xylene	8.7	7.33		ug/m3		84	70 - 130
Styrene	8.5	7.26		ug/m3		85	70 - 130
t-Butyl alcohol	6.1	4.97		ug/m3		82	60 - 140
Tetrachloroethene	14	11.6		ug/m3		86	70 - 130
Toluene	7.5	6.17		ug/m3		82	70 - 130
trans-1,2-Dichloroethene	7.9	6.45		ug/m3		81	70 - 130
trans-1,3-Dichloropropene	9.1	6.86		ug/m3		76	70 - 130
Trichloroethene	11	8.49		ug/m3		79	70 - 130
Trichlorofluoromethane	11	10.2		ug/m3		91	60 - 140
Vinyl chloride	5.1	5.08		ug/m3		99	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		60 - 140

QC Association Summary

Client: New York State D.E.C.

TestAmerica Job ID: 140-2797-1

Project/Site: Former Ithaca Gun Factory # C755019A

Air - GC/MS VOA

Analysis Batch: 2449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-2797-1	H24-BA-2015	Total/NA	Air	TO 15 LL	
140-2797-2	H24-SS-2015	Total/NA	Air	TO 15 LL	
140-2797-3	H15-BA-2015	Total/NA	Air	TO 15 LL	
140-2797-4	H15-SS-2015	Total/NA	Air	TO 15 LL	
140-2797-5	H16-BA-2015	Total/NA	Air	TO 15 LL	
140-2797-6	H16-SS-2015	Total/NA	Air	TO 15 LL	
140-2797-7	H25-BA-2015	Total/NA	Air	TO 15 LL	
140-2797-8	H26-BA-2015	Total/NA	Air	TO 15 LL	
140-2797-9	H26-SS-2015	Total/NA	Air	TO 15 LL	
140-2797-10	H26-CS-2015	Total/NA	Air	TO 15 LL	
LCS 140-2449/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	
MB 140-2449/5	Method Blank	Total/NA	Air	TO 15 LL	

Analysis Batch: 2450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-2797-11	DI-OA-2015	Total/NA	Air	TO 15 LL	
140-2797-12	H27-BA-2015	Total/NA	Air	TO 15 LL	
LCS 140-2450/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	
MB 140-2450/7	Method Blank	Total/NA	Air	TO 15 LL	

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H24-BA-2015

Date Collected: 02/24/15 08:42

Date Received: 02/27/15 11:15

Lab Sample ID: 140-2797-1

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	2449	03/04/15 00:51	HMT	TAL KNX
Instrument ID: MJ										

Client Sample ID: H24-SS-2015

Date Collected: 02/24/15 08:44

Date Received: 02/27/15 11:15

Lab Sample ID: 140-2797-2

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	2449	03/04/15 01:46	HMT	TAL KNX
Instrument ID: MJ										

Client Sample ID: H15-BA-2015

Date Collected: 02/24/15 10:26

Date Received: 02/27/15 11:15

Lab Sample ID: 140-2797-3

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	2449	03/04/15 02:40	HMT	TAL KNX
Instrument ID: MJ										

Client Sample ID: H15-SS-2015

Date Collected: 02/24/15 10:26

Date Received: 02/27/15 11:15

Lab Sample ID: 140-2797-4

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	2449	03/04/15 03:36	HMT	TAL KNX
Instrument ID: MJ										

Client Sample ID: H16-BA-2015

Date Collected: 02/24/15 10:17

Date Received: 02/27/15 11:15

Lab Sample ID: 140-2797-5

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	2449	03/04/15 04:30	HMT	TAL KNX
Instrument ID: MJ										

Client Sample ID: H16-SS-2015

Date Collected: 02/24/15 10:17

Date Received: 02/27/15 11:15

Lab Sample ID: 140-2797-6

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	2449	03/04/15 05:26	HMT	TAL KNX
Instrument ID: MJ										

TestAmerica Knoxville

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: H25-BA-2015

Date Collected: 02/24/15 11:30

Date Received: 02/27/15 11:15

Lab Sample ID: 140-2797-7

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	2449	03/04/15 06:22	HMT	TAL KNX
Instrument ID: MJ										

Client Sample ID: H26-BA-2015

Date Collected: 02/24/15 14:24

Date Received: 02/27/15 11:15

Lab Sample ID: 140-2797-8

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	2449	03/04/15 07:17	HMT	TAL KNX
Instrument ID: MJ										

Client Sample ID: H26-SS-2015

Date Collected: 02/24/15 14:24

Date Received: 02/27/15 11:15

Lab Sample ID: 140-2797-9

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	2449	03/04/15 08:12	HMT	TAL KNX
Instrument ID: MJ										

Client Sample ID: H26-CS-2015

Date Collected: 02/24/15 14:22

Date Received: 02/27/15 11:15

Lab Sample ID: 140-2797-10

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	2449	03/04/15 09:06	HMT	TAL KNX
Instrument ID: MJ										

Client Sample ID: DI-OA-2015

Date Collected: 02/24/15 14:30

Date Received: 02/27/15 11:15

Lab Sample ID: 140-2797-11

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	2450	03/05/15 06:27	HMT	TAL KNX
Instrument ID: MJ										

Client Sample ID: H27-BA-2015

Date Collected: 02/25/15 08:30

Date Received: 02/27/15 11:15

Lab Sample ID: 140-2797-12

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	2450	03/05/15 07:21	HMT	TAL KNX
Instrument ID: MJ										

TestAmerica Knoxville

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 140-2449/1002

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	2449	03/03/15 17:45	HMT	TAL KNX
Instrument ID: MJ										

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 140-2450/1002

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	2450	03/04/15 16:35	HMT	TAL KNX
Instrument ID: MJ										

Client Sample ID: Method Blank

Lab Sample ID: MB 140-2449/5

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	2449	03/03/15 20:18	HMT	TAL KNX
Instrument ID: MJ										

Client Sample ID: Method Blank

Lab Sample ID: MB 140-2450/7

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	2450	03/04/15 21:23	HMT	TAL KNX
Instrument ID: MJ										

Laboratory References:

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

Certification Summary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2797-1

Laboratory: TestAmerica Knoxville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10781	03-31-15

The following analytes are included in this report, but are not certified under this 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	1,4-Dioxane
TO 15 LL		Air	Bromodichloromethane
TO 15 LL		Air	Cyclohexane
TO 15 LL		Air	Dibromochloromethane
TO 15 LL		Air	Dichlorodifluoromethane
TO 15 LL		Air	o-Xylene
TO 15 LL		Air	Trichlorofluoromethane

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
TO 15 LL		Air	Ethanol
TO 15 LL		Air	t-Butyl alcohol

Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 140-2797-1

Project/Site: Former Ithaca Gun Factory # C755019A

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

Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 140-2797-1

Project/Site: Former Ithaca Gun Factory # C755019A

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
140-2797-1	H24-BA-2015	Air	02/24/15 08:42	02/27/15 11:15
140-2797-2	H24-SS-2015	Air	02/24/15 08:44	02/27/15 11:15
140-2797-3	H15-BA-2015	Air	02/24/15 10:26	02/27/15 11:15
140-2797-4	H15-SS-2015	Air	02/24/15 10:26	02/27/15 11:15
140-2797-5	H16-BA-2015	Air	02/24/15 10:17	02/27/15 11:15
140-2797-6	H16-SS-2015	Air	02/24/15 10:17	02/27/15 11:15
140-2797-7	H25-BA-2015	Air	02/24/15 11:30	02/27/15 11:15
140-2797-8	H26-BA-2015	Air	02/24/15 14:24	02/27/15 11:15
140-2797-9	H26-SS-2015	Air	02/24/15 14:24	02/27/15 11:15
140-2797-10	H26-CS-2015	Air	02/24/15 14:22	02/27/15 11:15
140-2797-11	DI-OA-2015	Air	02/24/15 14:30	02/27/15 11:15
140-2797-12	H27-BA-2015	Air	02/25/15 08:30	02/27/15 11:15

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: TestAmerica Knoxville Job No.: 140-2797-1
SDG No.: _____
Matrix: Air Level: Low
GC Column (1): RTX-5 ID: 0.32 (mm)

Client Sample ID	Lab Sample ID	BFB #
H24-BA-2015	140-2797-1	94
H24-SS-2015	140-2797-2	96
H15-BA-2015	140-2797-3	90
H15-SS-2015	140-2797-4	94
H16-BA-2015	140-2797-5	86
H16-SS-2015	140-2797-6	95
H25-BA-2015	140-2797-7	93
H26-BA-2015	140-2797-8	92
H26-SS-2015	140-2797-9	96
H26-CS-2015	140-2797-10	90
DI-OA-2015	140-2797-11	80
H27-BA-2015	140-2797-12	93
	MB 140-2449/5	91
	MB 140-2450/7	96
	LCS 140-2449/1002	91
	LCS 140-2450/1002	104

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: TestAmerica Knoxville Job No.: 140-2797-1
SDG No.: _____
Matrix: Air Level: Low Lab File ID: JCCVC04C-LCS.d
Lab ID: LCS 140-2449/1002 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	2.00	2.04	102	70-130	
1,1,2,2-Tetrachloroethane	2.00	2.36	118	70-130	
1,1,2-Trichloroethane	2.00	2.33	116	70-130	
1,1,2-Trichlorotrifluoroethane	2.00	2.41	121	70-130	
1,1-Dichloroethane	2.00	2.02	101	70-130	
1,1-Dichloroethene	2.00	2.51	125	70-130	
1,2,4-Trichlorobenzene	2.00	1.73	86	60-140	
1,2,4-Trimethylbenzene	2.00	2.37	119	70-130	
1,2-Dibromoethane	2.00	2.29	114	70-130	
1,2-Dichlorobenzene	2.00	2.14	107	70-130	
1,2-Dichloroethane	2.00	2.10	105	70-130	
1,2-Dichloropropane	2.00	2.30	115	70-130	
1,2-Dichlorotetrafluoroethane	2.00	2.19	109	60-140	
1,3,5-Trimethylbenzene	2.00	2.52	126	70-130	
1,3-Dichlorobenzene	2.00	2.07	104	70-130	
1,4-Dichlorobenzene	2.00	1.99	100	70-130	
1,4-Dioxane	2.00	2.05	103	60-140	
2,2,4-Trimethylpentane	2.00	2.20	110	70-130	
2-Butanone	2.00	2.15	108	60-140	
4-Methyl-2-pentanone (MIBK)	2.00	2.28	114	60-140	
Benzene	2.00	2.00	100	70-130	
Benzyl chloride	2.00	2.26	113	70-130	
Bromodichloromethane	2.00	2.09	105	70-130	
Bromoform	2.00	2.27	114	60-140	
Bromomethane	2.00	2.21	110	70-130	
Carbon tetrachloride	2.00	2.47	124	70-130	
Chlorobenzene	2.00	2.30	115	70-130	
Chloroethane	2.00	2.20	110	70-130	
Chloroform	2.00	2.16	108	70-130	
Chloromethane	2.00	2.14	107	60-140	
cis-1,2-Dichloroethene	2.00	2.12	106	70-130	
cis-1,3-Dichloropropene	2.00	2.40	120	70-130	
Cyclohexane	2.00	2.00	100	70-130	
Dibromochloromethane	2.00	2.32	116	70-130	
Dichlorodifluoromethane	2.00	2.18	109	60-140	
Ethanol	10.0	10.2	102	20-180	
Ethylbenzene	2.00	2.70	135	70-130	*
Hexachlorobutadiene	2.00	1.85	92	60-140	
Hexane	2.00	1.96	98	70-130	
Methyl tert-butyl ether	2.00	2.62	131	60-140	
Methylene Chloride	2.00	2.26	113	70-130	
m-Xylene & p-Xylene	4.00	5.18	129	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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Matrix: Air Level: Low Lab File ID: JCCVC04C-LCS.d
 Lab ID: LCS 140-2449/1002 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
o-Xylene	2.00	2.53	126	70-130	
Styrene	2.00	2.54	127	70-130	
t-Butyl alcohol	2.00	2.16	108	60-140	
Tetrachloroethene	2.00	2.24	112	70-130	
Toluene	2.00	2.55	128	70-130	
trans-1,2-Dichloroethene	2.00	2.06	103	70-130	
trans-1,3-Dichloropropene	2.00	2.22	111	70-130	
Trichloroethene	2.00	2.12	106	70-130	
Trichlorofluoromethane	2.00	2.14	107	60-140	
Vinyl chloride	2.00	2.32	116	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: TestAmerica Knoxville Job No.: 140-2797-1
SDG No.: _____
Matrix: Air Level: Low Lab File ID: JCCVC04-LCS.d
Lab ID: LCS 140-2450/1002 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	2.00	1.55	77	70-130	
1,1,2,2-Tetrachloroethane	2.00	1.80	90	70-130	
1,1,2-Trichloroethane	2.00	1.56	78	70-130	
1,1,2-Trichlorotrifluoroethane	2.00	1.61	81	70-130	
1,1-Dichloroethane	2.00	1.59	79	70-130	
1,1-Dichloroethene	2.00	1.79	89	70-130	
1,2,4-Trichlorobenzene	2.00	1.63	81	60-140	
1,2,4-Trimethylbenzene	2.00	1.78	89	70-130	
1,2-Dibromoethane	2.00	1.54	77	70-130	
1,2-Dichlorobenzene	2.00	1.68	84	70-130	
1,2-Dichloroethane	2.00	1.43	71	70-130	
1,2-Dichloropropane	2.00	1.46	73	70-130	
1,2-Dichlorotetrafluoroethane	2.00	1.92	96	60-140	
1,3,5-Trimethylbenzene	2.00	1.84	92	70-130	
1,3-Dichlorobenzene	2.00	1.59	80	70-130	
1,4-Dichlorobenzene	2.00	1.58	79	70-130	
1,4-Dioxane	2.00	1.69	84	60-140	
2,2,4-Trimethylpentane	2.00	1.72	86	70-130	
2-Butanone	2.00	1.48	74	60-140	
4-Methyl-2-pentanone (MIBK)	2.00	1.78	89	60-140	
Benzene	2.00	1.40	70	70-130	
Benzyl chloride	2.00	1.73	86	70-130	
Bromodichloromethane	2.00	1.58	79	70-130	
Bromoform	2.00	1.51	75	60-140	
Bromomethane	2.00	1.89	94	70-130	
Carbon tetrachloride	2.00	1.54	77	70-130	
Chlorobenzene	2.00	1.56	78	70-130	
Chloroethane	2.00	1.88	94	70-130	
Chloroform	2.00	1.60	80	70-130	
Chloromethane	2.00	1.88	94	60-140	
cis-1,2-Dichloroethene	2.00	1.57	78	70-130	
cis-1,3-Dichloropropene	2.00	1.45	72	70-130	
Cyclohexane	2.00	1.64	82	70-130	
Dibromochloromethane	2.00	1.62	81	70-130	
Dichlorodifluoromethane	2.00	1.95	97	60-140	
Ethanol	10.0	8.92	89	20-180	
Ethylbenzene	2.00	1.72	86	70-130	
Hexachlorobutadiene	2.00	1.67	83	60-140	
Hexane	2.00	1.53	77	70-130	
Methyl tert-butyl ether	2.00	1.66	83	60-140	
Methylene Chloride	2.00	1.55	77	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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Matrix: Air Level: Low Lab File ID: JCCVC04-LCS.d
 Lab ID: LCS 140-2450/1002 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
o-Xylene	2.00	1.69	84	70-130	
Styrene	2.00	1.71	85	70-130	
t-Butyl alcohol	2.00	1.64	82	60-140	
Tetrachloroethene	2.00	1.71	86	70-130	
Toluene	2.00	1.64	82	70-130	
trans-1,2-Dichloroethene	2.00	1.63	81	70-130	
trans-1,3-Dichloropropene	2.00	1.51	76	70-130	
Trichloroethene	2.00	1.58	79	70-130	
Trichlorofluoromethane	2.00	1.81	91	60-140	
Vinyl chloride	2.00	1.99	99	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1
SDG No.: _____
Lab File ID: J500BC03.D Lab Sample ID: MB 140-2449/5
Matrix: Air Heated Purge: (Y/N) N
Instrument ID: MJ Date Analyzed: 03/03/2015 20:18
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
H24-BA-2015	140-2797-1	JC03P105.D	03/04/2015 00:51
H24-SS-2015	140-2797-2	JC03P106.D	03/04/2015 01:46
H15-BA-2015	140-2797-3	JC03P107.D	03/04/2015 02:40
H15-SS-2015	140-2797-4	JC03P108.D	03/04/2015 03:36
H16-BA-2015	140-2797-5	JC03P109.D	03/04/2015 04:30
H16-SS-2015	140-2797-6	JC03P110.D	03/04/2015 05:26
H25-BA-2015	140-2797-7	JC03P111.D	03/04/2015 06:22
H26-BA-2015	140-2797-8	JC03P112.D	03/04/2015 07:17
H26-SS-2015	140-2797-9	JC03P113.D	03/04/2015 08:12
H26-CS-2015	140-2797-10	JC03P114.D	03/04/2015 09:06

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1
SDG No.: _____
Lab File ID: JC04MB500.D Lab Sample ID: MB 140-2450/7
Matrix: Air Heated Purge: (Y/N) N
Instrument ID: MJ Date Analyzed: 03/04/2015 21:23
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 140-2450/1002	JCCVC04-LCS .d	03/04/2015 16:35
DI-OA-2015	140-2797-11	JC04P108.D	03/05/2015 06:27
H27-BA-2015	140-2797-12	JC04P109.D	03/05/2015 07:21

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Lab File ID: JBFB02.D BFB Injection Date: 02/02/2015
 Instrument ID: MJ BFB Injection Time: 12:20
 Analysis Batch No.: 2321

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	21.2
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	7.3
173	Less than 2.0 % of mass 174	0.0 (0.0)1
174	50.0 - 120.00 % of mass 95	107.4
175	5.0 - 9.0 % of mass 174	8.5 (7.9)1
176	95.0 - 101.0 % of mass 174	105.1 (97.9)1
177	5.0 - 9.0 % of mass 176	7.2 (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
	IC 140-2321/2	JB02icL1.D	02/02/2015	12:48
	IC 140-2321/3	JB02icL2.D	02/02/2015	13:43
	IC 140-2321/4	JB02icL3.D	02/02/2015	14:37
	IC 140-2321/5	JB02icL4.D	02/02/2015	15:32
	IC 140-2321/6	JB02icL5.D	02/02/2015	16:27
	ICIS 140-2321/7	JB02icisL6.D	02/02/2015	17:21
	IC 140-2321/8	JB02icL7.D	02/02/2015	18:16
	IC 140-2321/9	JB02icL8.D	02/02/2015	19:10
	IC 140-2321/10	JB02icL9.D	02/02/2015	20:05
	ICV 140-2321/13	JB02LCS.D	02/02/2015	22:48

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Lab File ID: JBFB04C.D BFB Injection Date: 03/03/2015
 Instrument ID: MJ BFB Injection Time: 17:17
 Analysis Batch No.: 2449

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	21.8
75	30.0 - 60.0 % of mass 95	48.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.0
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	106.7
175	5.0 - 9.0 % of mass 174	8.2 (7.7) 1
176	95.0 - 101.0 % of mass 174	105.1 (98.5) 1
177	5.0 - 9.0 % of mass 176	7.1 (6.7) 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 140-2449/2	JCCVC04C.D	03/03/2015	17:45
	LCS 140-2449/1002	JCCVC04C-LCS.d	03/03/2015	17:45
	MB 140-2449/5	J500BC03.D	03/03/2015	20:18
H24-BA-2015	140-2797-1	JC03P105.D	03/04/2015	00:51
H24-SS-2015	140-2797-2	JC03P106.D	03/04/2015	01:46
H15-BA-2015	140-2797-3	JC03P107.D	03/04/2015	02:40
H15-SS-2015	140-2797-4	JC03P108.D	03/04/2015	03:36
H16-BA-2015	140-2797-5	JC03P109.D	03/04/2015	04:30
H16-SS-2015	140-2797-6	JC03P110.D	03/04/2015	05:26
H25-BA-2015	140-2797-7	JC03P111.D	03/04/2015	06:22
H26-BA-2015	140-2797-8	JC03P112.D	03/04/2015	07:17
H26-SS-2015	140-2797-9	JC03P113.D	03/04/2015	08:12
H26-CS-2015	140-2797-10	JC03P114.D	03/04/2015	09:06

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Lab File ID: JBFB04.D BFB Injection Date: 03/04/2015
 Instrument ID: MJ BFB Injection Time: 16:08
 Analysis Batch No.: 2450

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	23.2
75	30.0 - 60.0 % of mass 95	50.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.0
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	103.4
175	5.0 - 9.0 % of mass 174	8.0 (7.8) 1
176	95.0 - 101.0 % of mass 174	100.8 (97.5) 1
177	5.0 - 9.0 % of mass 176	6.7 (6.7) 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 140-2450/2	JCCVC04.D	03/04/2015	16:35
	LCS 140-2450/1002	JCCVC04-LCS. d	03/04/2015	16:35
	MB 140-2450/7	JC04MB500.D	03/04/2015	21:23
DI-OA-2015	140-2797-11	JC04P108.D	03/05/2015	06:27
H27-BA-2015	140-2797-12	JC04P109.D	03/05/2015	07:21

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1
SDG No.: _____
Sample No.: ICIS 140-2321/7 Date Analyzed: 02/02/2015 17:21
Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm)
Lab File ID (Standard): JB02icisL6.D Heated Purge: (Y/N) N
Calibration ID: 275

	CBM		DFB		CBZ	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	289189	9.60	1333947	11.74	1321331	16.38
UPPER LIMIT	404865	9.93	1867526	12.07	1849863	16.71
LOWER LIMIT	173513	9.27	800368	11.41	792799	16.05
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 140-2321/13		299316	9.59	1429867	11.74	1314806
						16.38

CBM = Chlorobromomethane (IS)

DFB = 1,4-Difluorobenzene

CBZ = 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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Sample No.: CCVIS 140-2449/2 Date Analyzed: 03/03/2015 17:45
 Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm)
 Lab File ID (Standard): JCCVC04C.D Heated Purge: (Y/N) N
 Calibration ID: 275

	CBM		DFB		CBZ	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	247394	9.59	1140650	11.73	1019974	16.37
UPPER LIMIT	346352	9.92	1596910	12.06	1427964	16.70
LOWER LIMIT	148436	9.26	684390	11.40	611984	16.04
LAB SAMPLE ID	CLIENT SAMPLE ID					
LCS 140-2449/1002		247394	9.59	1140650	11.73	1019974
MB 140-2449/5		314590	9.59	1405938	11.72	1130381
140-2797-1	H24-BA-2015	282544	9.58	1329306	11.72	1146699
140-2797-2	H24-SS-2015	255293	9.58	1178878	11.72	977762
140-2797-3	H15-BA-2015	263465	9.58	1212293	11.72	1019276
140-2797-4	H15-SS-2015	260682	9.59	1181391	11.73	989460
140-2797-5	H16-BA-2015	254054	9.59	1177095	11.72	969928
140-2797-6	H16-SS-2015	278791	9.58	1281754	11.72	1083702
140-2797-7	H25-BA-2015	261938	9.59	1224948	11.73	1013000
140-2797-8	H26-BA-2015	280064	9.59	1247521	11.72	1070452
140-2797-9	H26-SS-2015	303757	9.59	1415263	11.72	1231980
140-2797-10	H26-CS-2015	280888	9.58	1361857	11.72	1159623

CBM = Chlorobromomethane (IS)

DFB = 1,4-Difluorobenzene

CBZ = 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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Sample No.: CCVIS 140-2450/2 Date Analyzed: 03/04/2015 16:35
 Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm)
 Lab File ID (Standard): JCCVC04.D Heated Purge: (Y/N) N
 Calibration ID: 275

	CBM		DFB		CBZ	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	264856	9.59	1173359	11.72	999917	16.37
UPPER LIMIT	370798	9.92	1642703	12.05	1399884	16.70
LOWER LIMIT	158914	9.26	704015	11.39	599950	16.04
LAB SAMPLE ID	CLIENT SAMPLE ID					
LCS 140-2450/1002		264856	9.59	1173359	11.72	999917
MB 140-2450/7		275672	9.59	1223275	11.73	1071492
140-2797-11	DI-OA-2015	299881	9.59	1393461	11.72	1159958
140-2797-12	H27-BA-2015	271253	9.58	1256504	11.72	1033438

CBM = Chlorobromomethane (IS)

DFB = 1,4-Difluorobenzene

CBZ = 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: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: H24-BA-2015 Lab Sample ID: 140-2797-1

Matrix: Air Lab File ID: JC03P105.D

Analysis Method: TO 15 LL Date Collected: 02/24/2015 08:42

Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 00:51

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.: 2449 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		0.080	
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	0.25		0.20	
71-43-2	Benzene	78.11	0.22		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	0.070		0.040	
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	0.39		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H24-BA-2015 Lab Sample ID: 140-2797-1
 Matrix: Air Lab File ID: JC03P105.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 08:42
 Sample wt/vol: 500(mL) Date Analyzed: 03/04/2015 00:51
 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.: 2449 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	0.37		0.080	
64-17-5	Ethanol	46.07	26		0.80	
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	0.30		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.099		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	0.28		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		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.17		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: H24-BA-2015 Lab Sample ID: 140-2797-1

Matrix: Air Lab File ID: JC03P105.D

Analysis Method: TO 15 LL Date Collected: 02/24/2015 08:42

Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 00:51

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.: 2449 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		0.32	
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	1.0		0.82	
71-43-2	Benzene	78.11	0.70		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	0.44		0.25	
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	0.80		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H24-BA-2015 Lab Sample ID: 140-2797-1
 Matrix: Air Lab File ID: JC03P105.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 08:42
 Sample wt/vol: 500(mL) Date Analyzed: 03/04/2015 00:51
 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.: 2449 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	1.8		0.40	
64-17-5	Ethanol	46.07	49		1.5	
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	1.1		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	0.43		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	1.1		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	ND		0.21	
75-69-4	Trichlorofluoromethane	137.37	0.95		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P105.D
 Lims ID: 140-2797-A-1 Lab Sample ID: 140-2797-1
 Client ID: H24-BA-2015
 Sample Type: Client
 Inject. Date: 04-Mar-2015 00:51:30 ALS Bottle#: 5 Worklist Smp#: 10
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2797-a-1
 Misc. Info.: J030315,TO15,,140-0001414-010
 Operator ID: 403648 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150228-1414.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 11:02:31 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK052

First Level Reviewer: tajh

Date: 04-Mar-2015 08:37:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.582	9.587	-0.005	97	282544	4.00	
* 2 1,4-Difluorobenzene	114	11.724	11.728	-0.004	96	1329306	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.366	16.370	-0.004	89	1146699	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.980	17.979	0.001	88	706297	3.76	
8 Dichlorodifluoromethane	85	4.112	4.105	0.007	96	117074	0.3681	
9 Chloromethane	52	4.316	4.315	0.001	99	17615	0.3894	
17 Ethanol	31	5.236	5.240	-0.004	97	1027106	26.1	
20 Trichlorofluoromethane	101	5.774	5.778	-0.004	93	46983	0.1687	
28 2-Methyl-2-propanol	59	6.645	6.633	0.012	67	7084	0.0425	
30 1,1,2-Trichloro-1,2,2-trif	101	6.726	6.730	-0.004	68	10932	0.0583	
31 Methylene Chloride	84	6.914	6.924	-0.010	95	27428	0.3028	
39 2-Butanone (MEK)	72	8.792	8.785	0.007	89	9038	0.2686	
40 Hexane	56	8.802	8.807	-0.005	69	13048	0.1385	
43 Chloroform	83	9.588	9.598	-0.010	3	6043	0.0339	
49 Cyclohexane	69	11.212	11.211	0.001	10	1236	0.0244	
48 Benzene	78	11.212	11.217	-0.005	95	54076	0.2202	
50 Carbon tetrachloride	117	11.234	11.238	-0.004	85	12700	0.0701	
53 Isooctane	57	11.928	11.932	-0.004	74	17167	0.0352	
62 4-Methyl-2-pentanone (MIBK	43	13.547	13.546	0.001	92	49981	0.2474	
65 Toluene	91	14.419	14.423	-0.004	89	59314	0.2835	
73 Tetrachloroethene	129	15.548	15.547	0.001	49	1583	0.0174	
76 Ethylbenzene	91	16.689	16.693	-0.004	43	10074	0.0412	
78 m-Xylene & p-Xylene	91	16.839	16.849	-0.010	82	19495	0.0989	
82 o-Xylene	91	17.372	17.371	0.001	49	7741	0.0360	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P105.D

Injection Date: 04-Mar-2015 00:51:30

Instrument ID: MJ

Operator ID: 403648

Lims ID: 140-2797-A-1

Lab Sample ID: 140-2797-1

Worklist Smp#: 10

Client ID: H24-BA-2015

Purge Vol: 500.000 mL

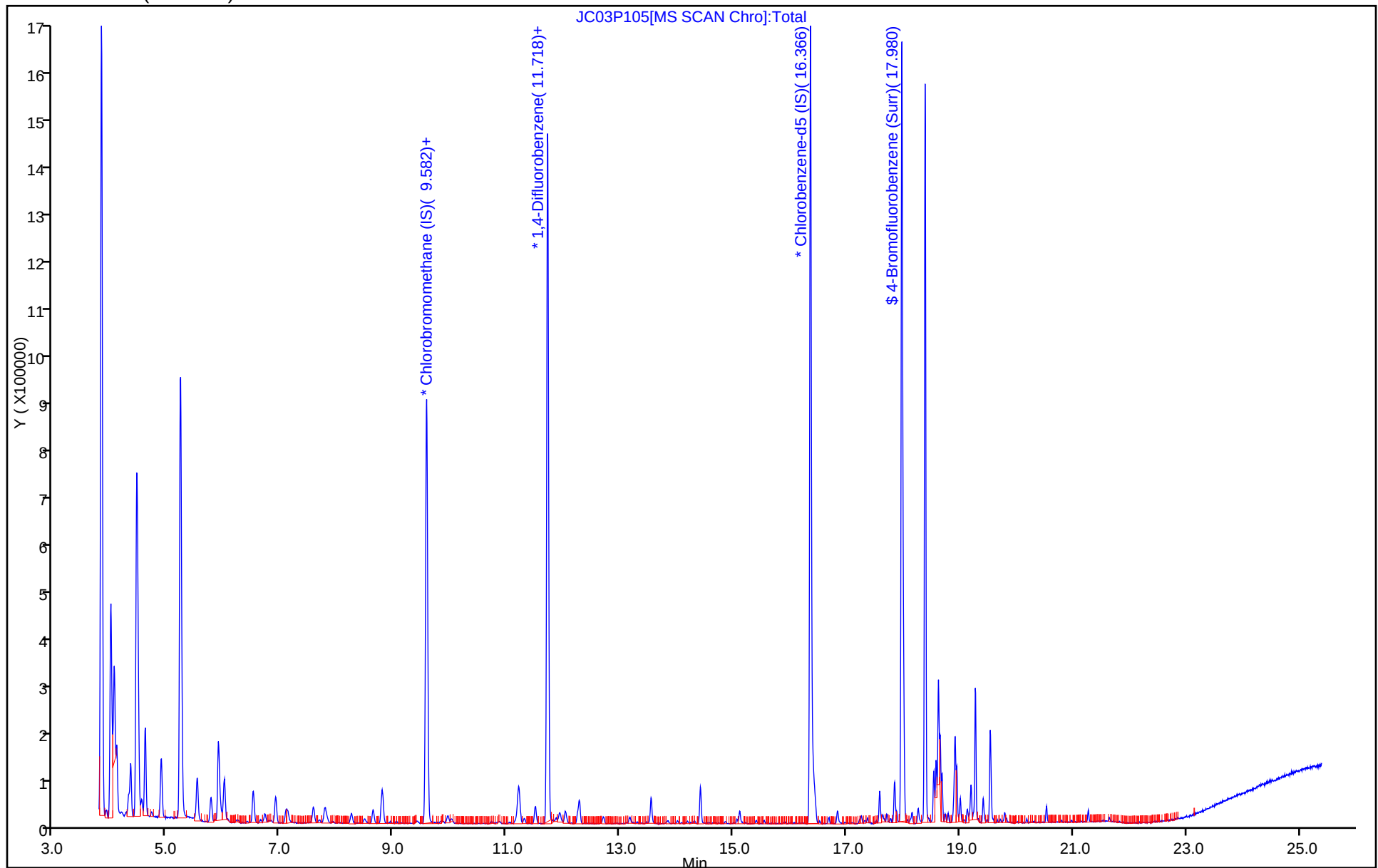
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P105.D

Injection Date: 04-Mar-2015 00:51:30

Instrument ID: MJ

Lims ID: 140-2797-A-1

Lab Sample ID: 140-2797-1

Client ID: H24-BA-2015

Operator ID: 403648

ALS Bottle#: 5

Worklist Smp#: 10

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

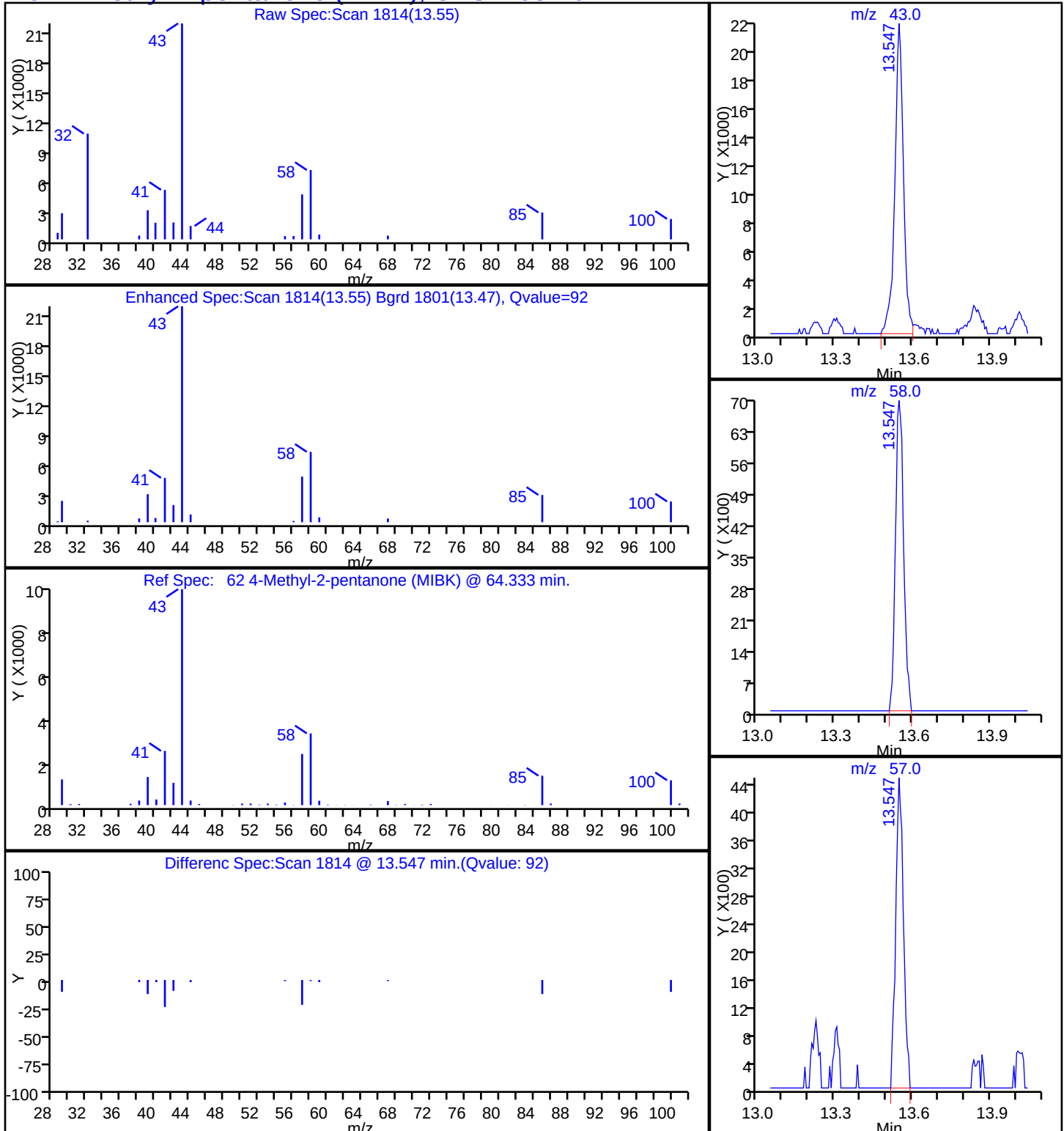
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

62 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P105.D

Injection Date: 04-Mar-2015 00:51:30

Instrument ID: MJ

Lims ID: 140-2797-A-1

Lab Sample ID: 140-2797-1

Client ID: H24-BA-2015

Operator ID: 403648

ALS Bottle#: 5

Worklist Smp#: 10

Purge Vol: 500.000 mL

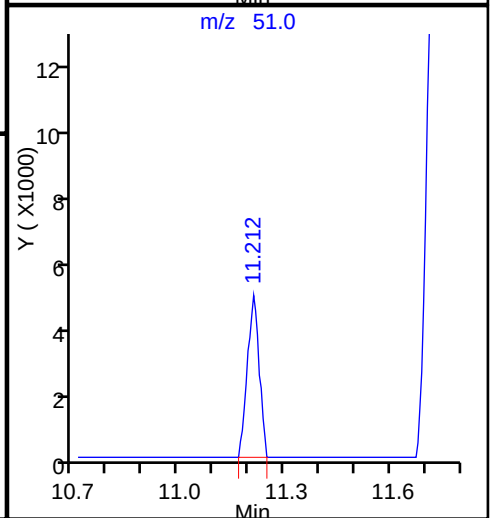
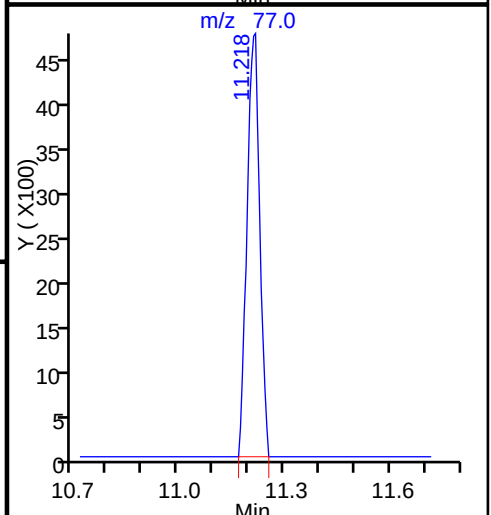
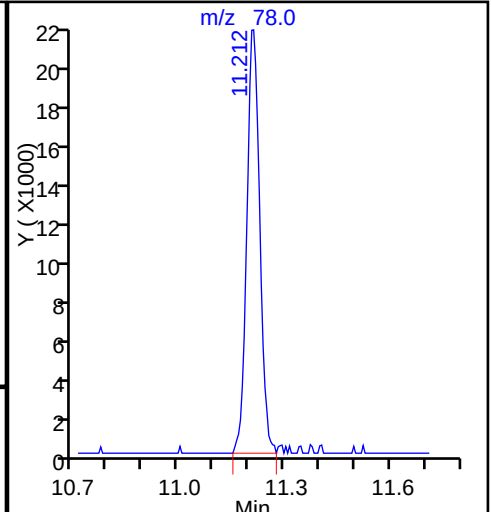
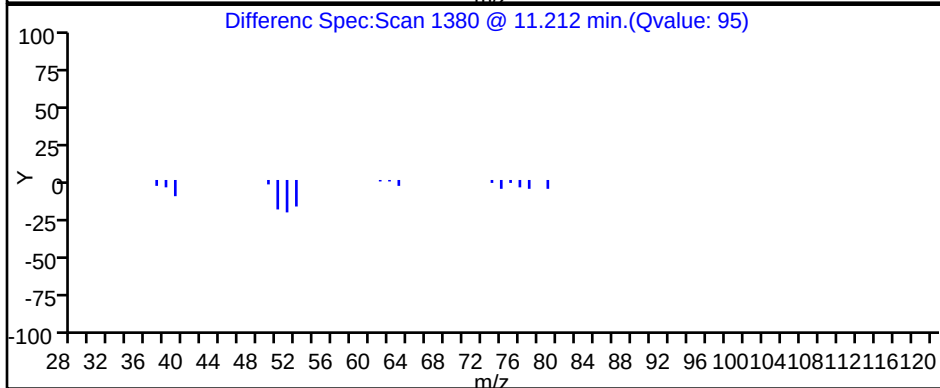
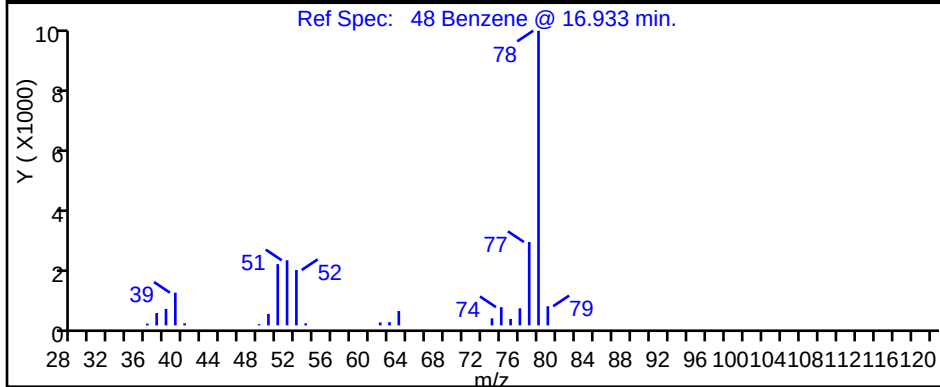
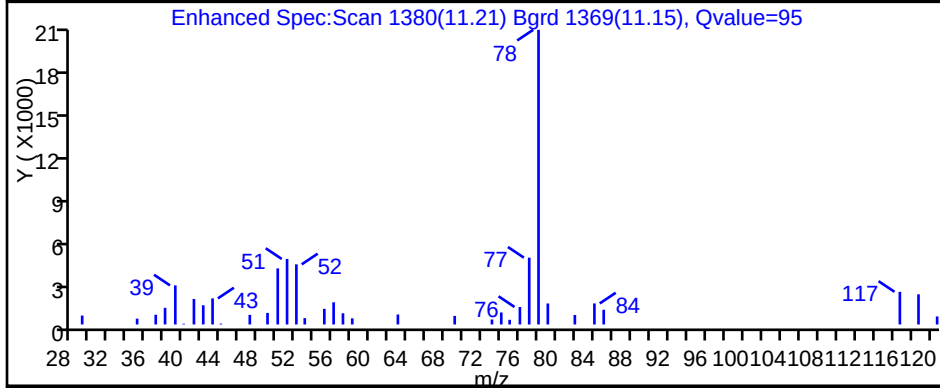
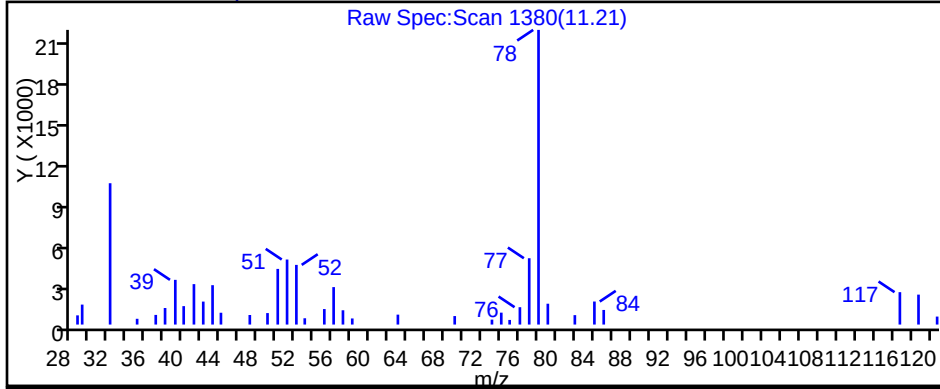
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P105.D

Injection Date: 04-Mar-2015 00:51:30

Instrument ID: MJ

Lims ID: 140-2797-A-1

Lab Sample ID: 140-2797-1

Client ID: H24-BA-2015

Operator ID: 403648

ALS Bottle#: 5

Worklist Smp#: 10

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

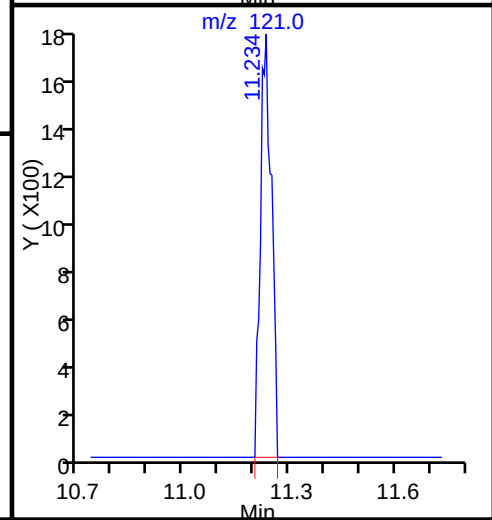
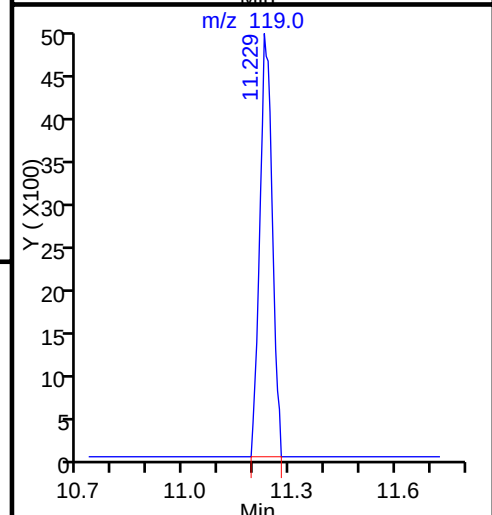
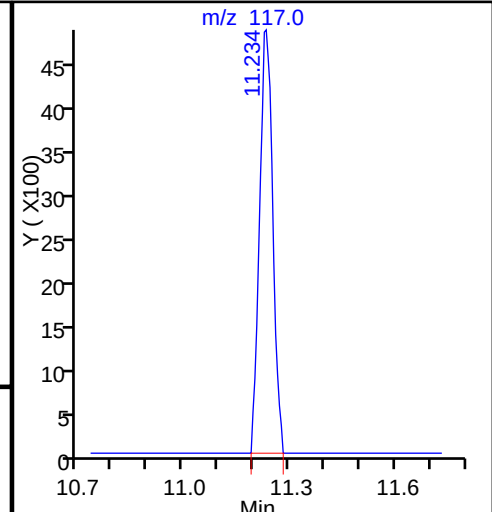
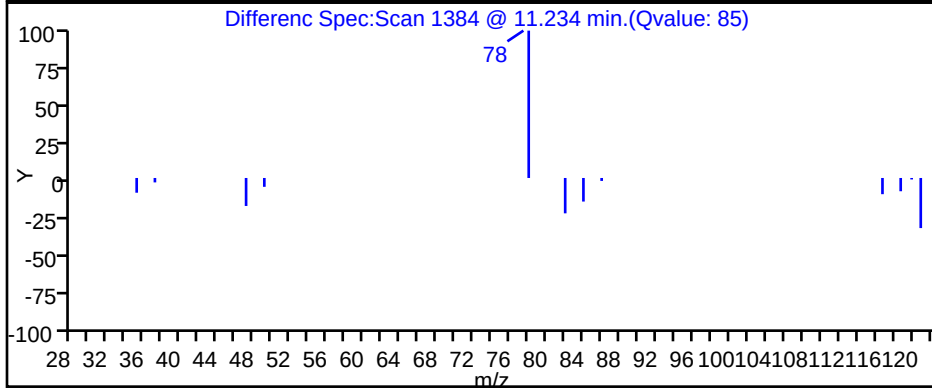
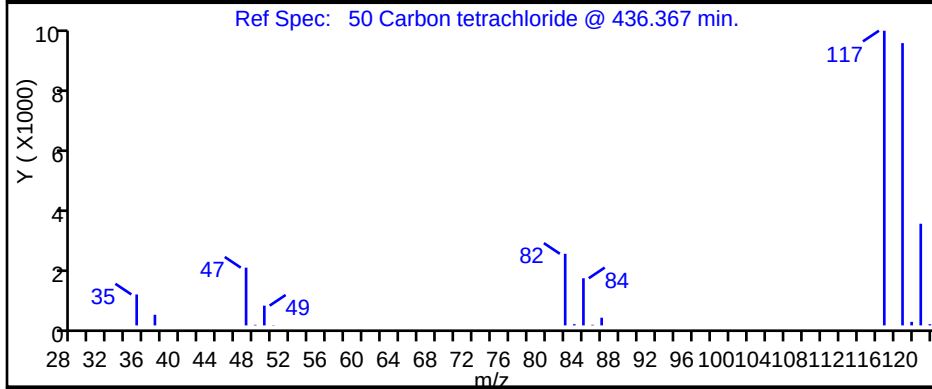
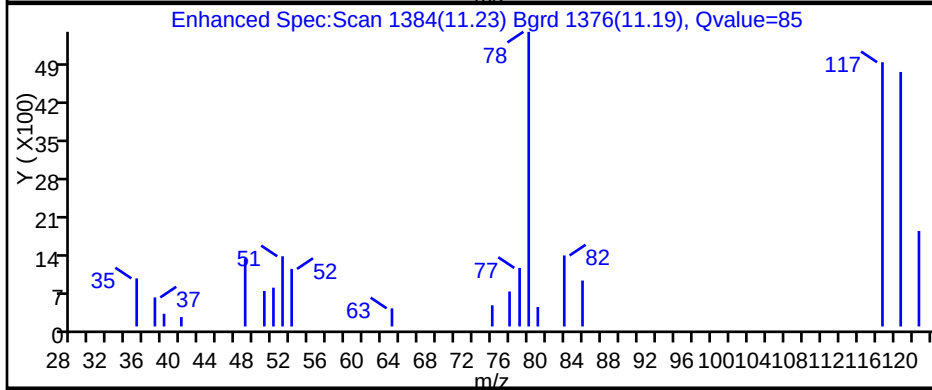
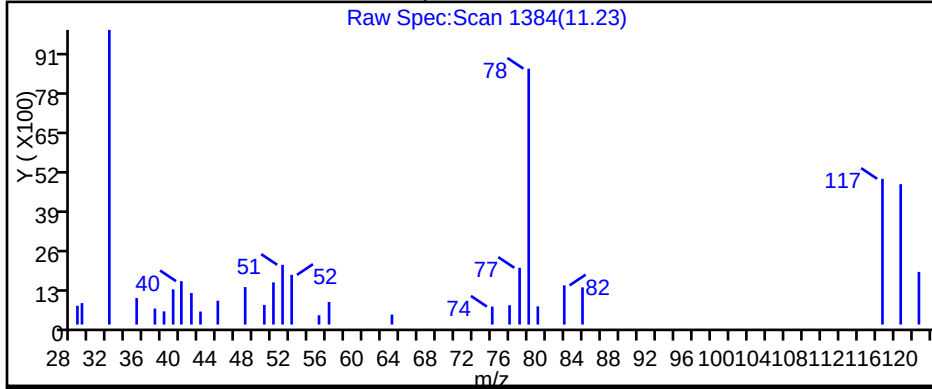
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P105.D

Injection Date: 04-Mar-2015 00:51:30

Instrument ID: MJ

Lims ID: 140-2797-A-1

Lab Sample ID: 140-2797-1

Client ID: H24-BA-2015

Operator ID: 403648

ALS Bottle#: 5

Worklist Smp#: 10

Purge Vol: 500.000 mL

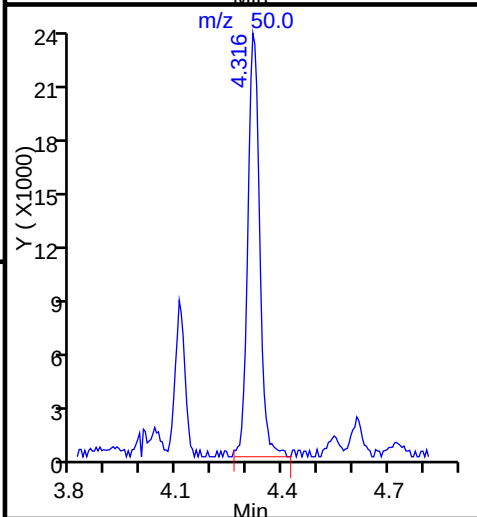
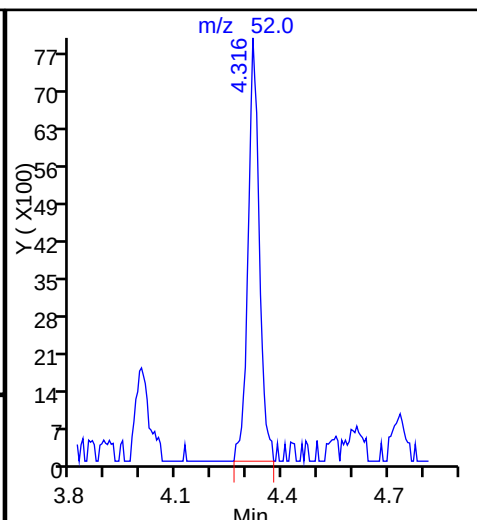
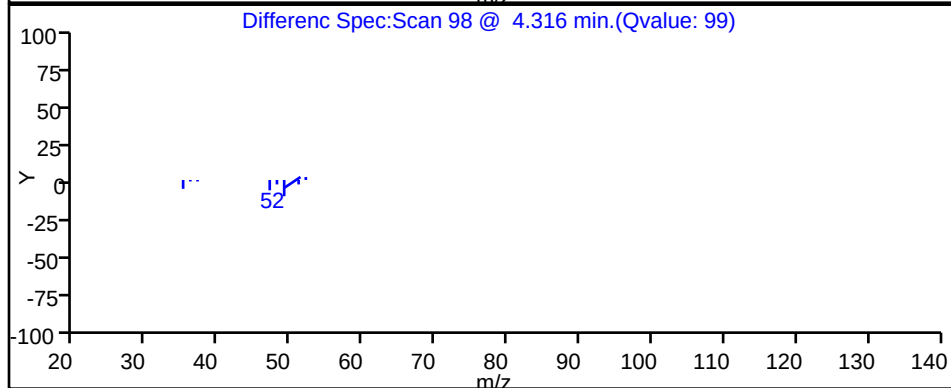
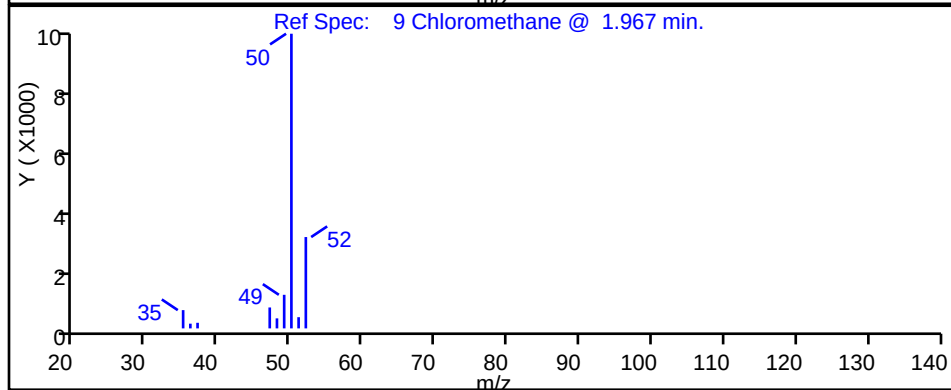
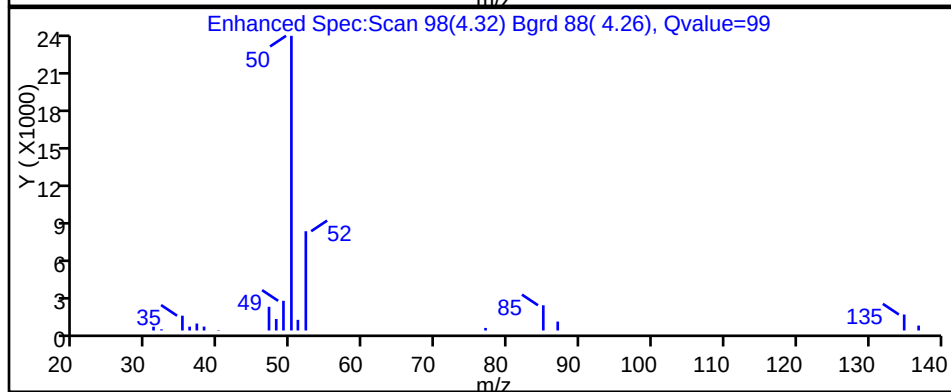
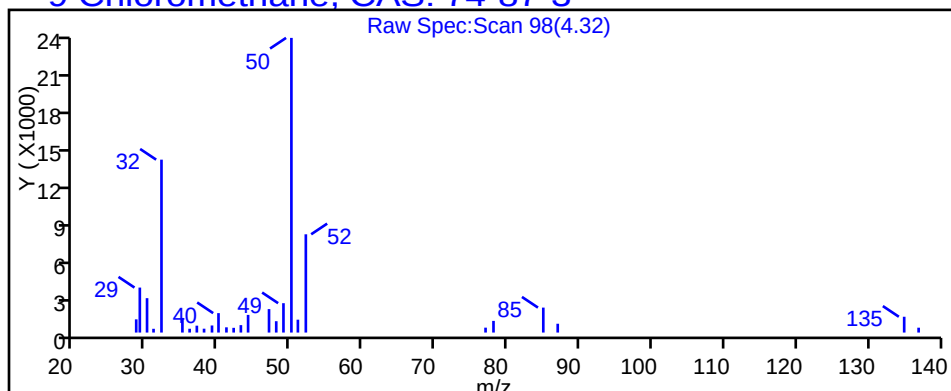
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P105.D

Injection Date: 04-Mar-2015 00:51:30

Instrument ID: MJ

Lims ID: 140-2797-A-1

Lab Sample ID: 140-2797-1

Client ID: H24-BA-2015

Operator ID: 403648

ALS Bottle#: 5

Worklist Smp#: 10

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

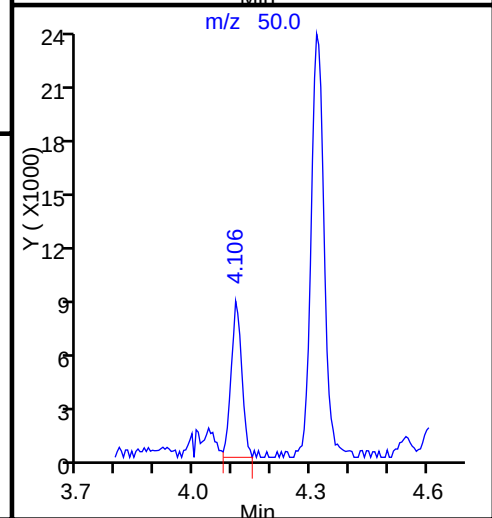
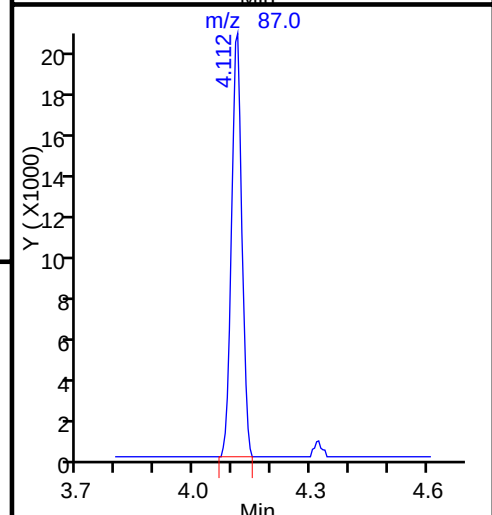
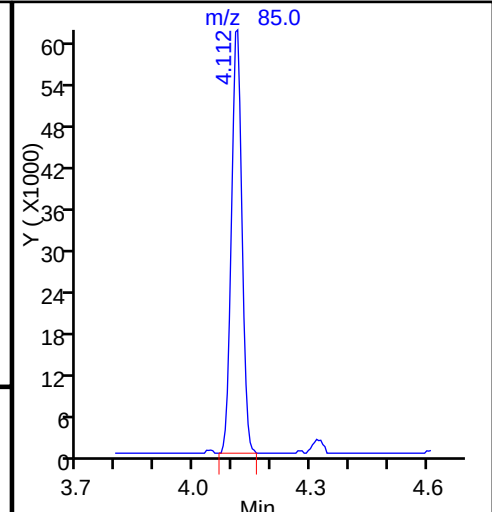
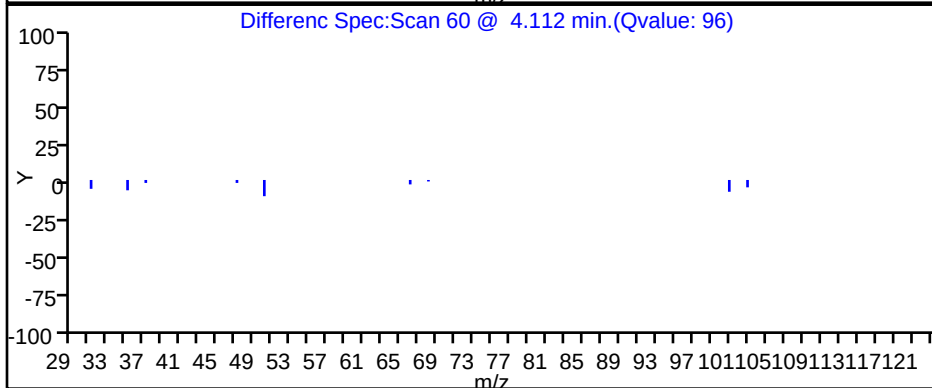
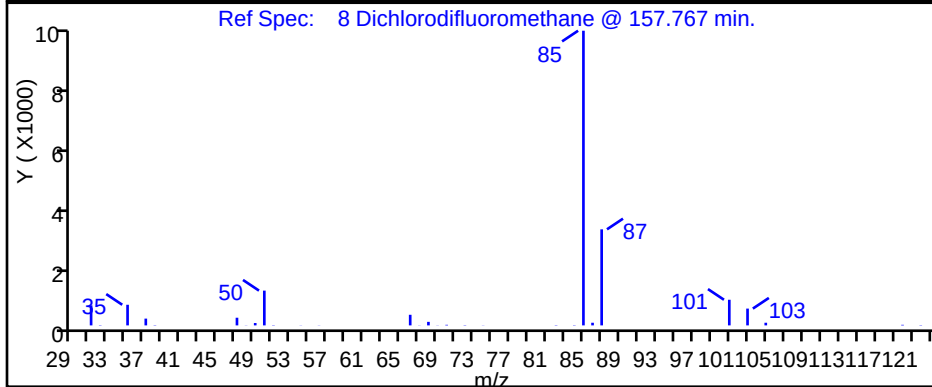
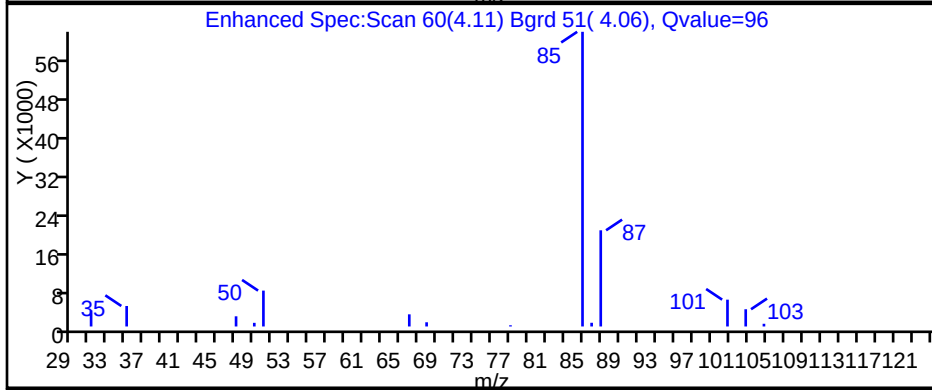
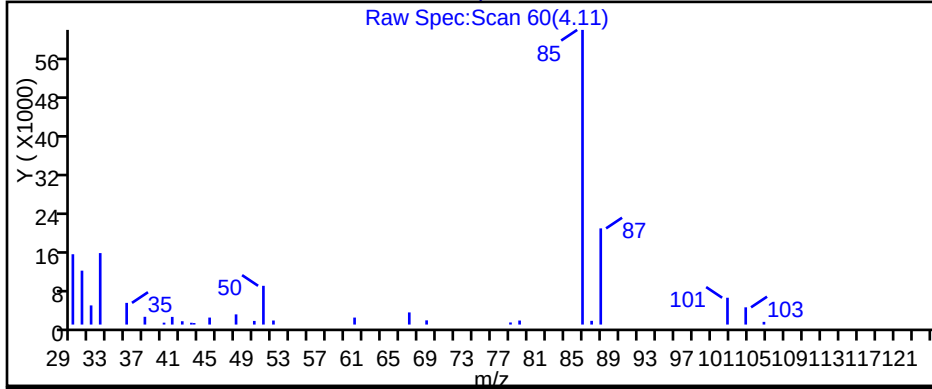
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P105.D

Injection Date: 04-Mar-2015 00:51:30

Instrument ID: MJ

Lims ID: 140-2797-A-1

Lab Sample ID: 140-2797-1

Client ID: H24-BA-2015

Operator ID: 403648

ALS Bottle#: 5

Worklist Smp#: 10

Purge Vol: 500.000 mL

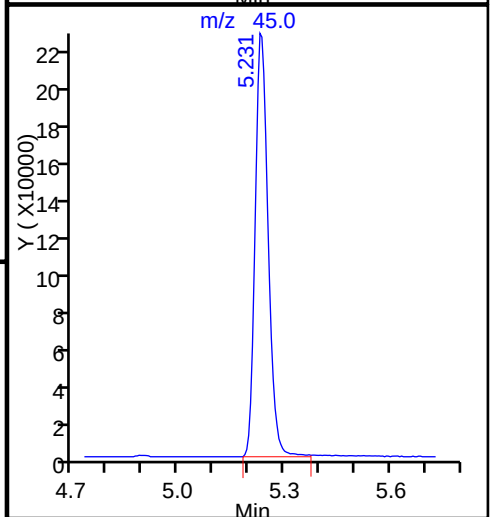
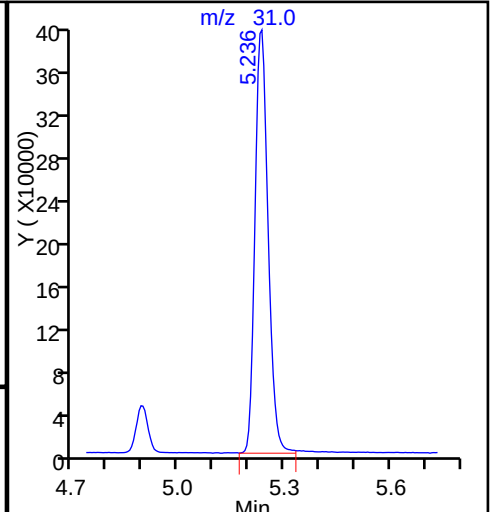
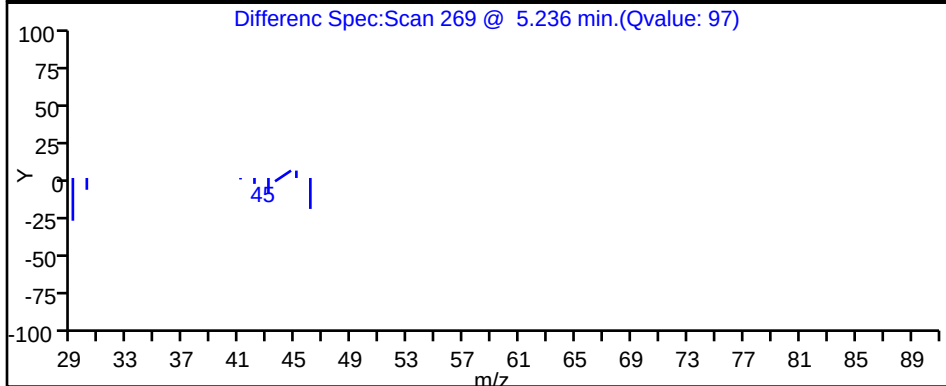
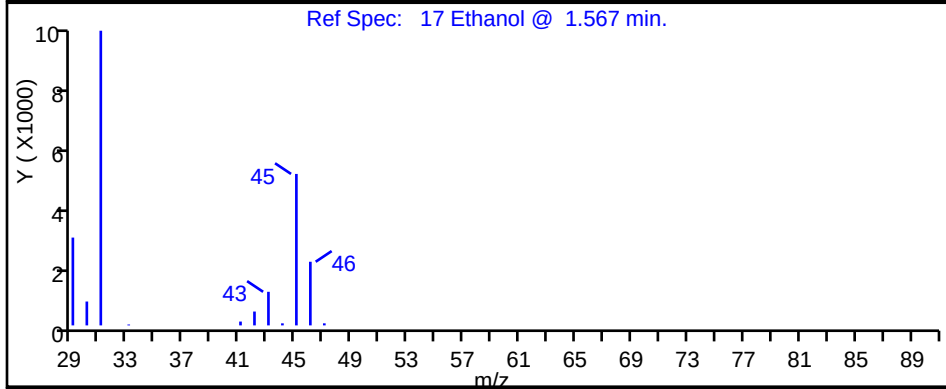
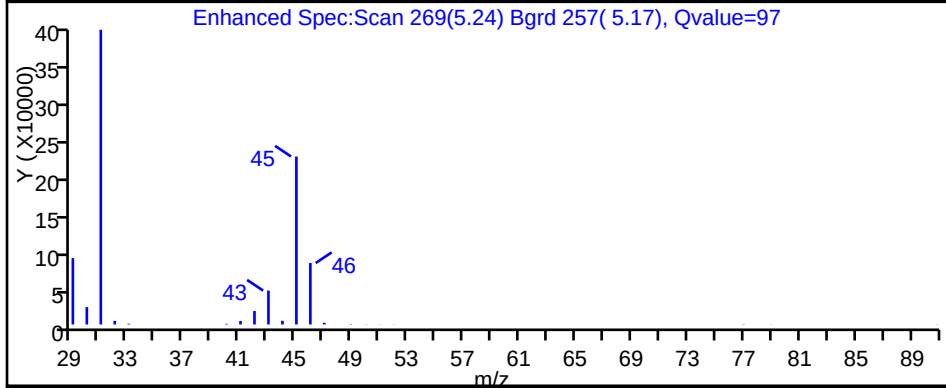
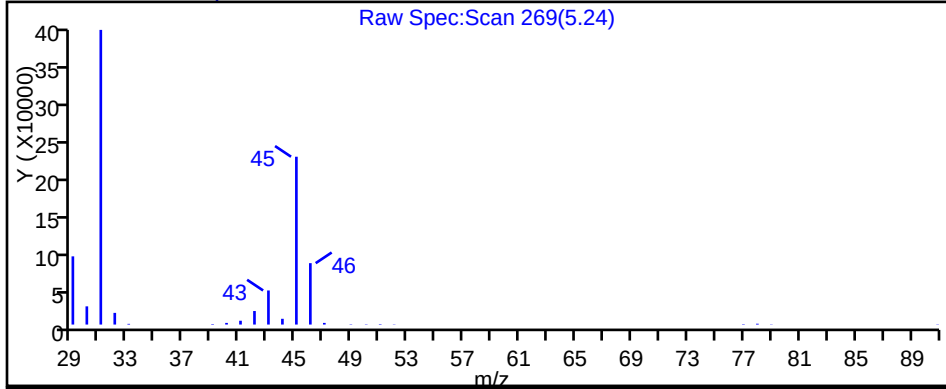
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P105.D

Injection Date: 04-Mar-2015 00:51:30

Instrument ID: MJ

Lims ID: 140-2797-A-1

Lab Sample ID: 140-2797-1

Client ID: H24-BA-2015

Operator ID: 403648

ALS Bottle#: 5

Worklist Smp#: 10

Purge Vol: 500.000 mL

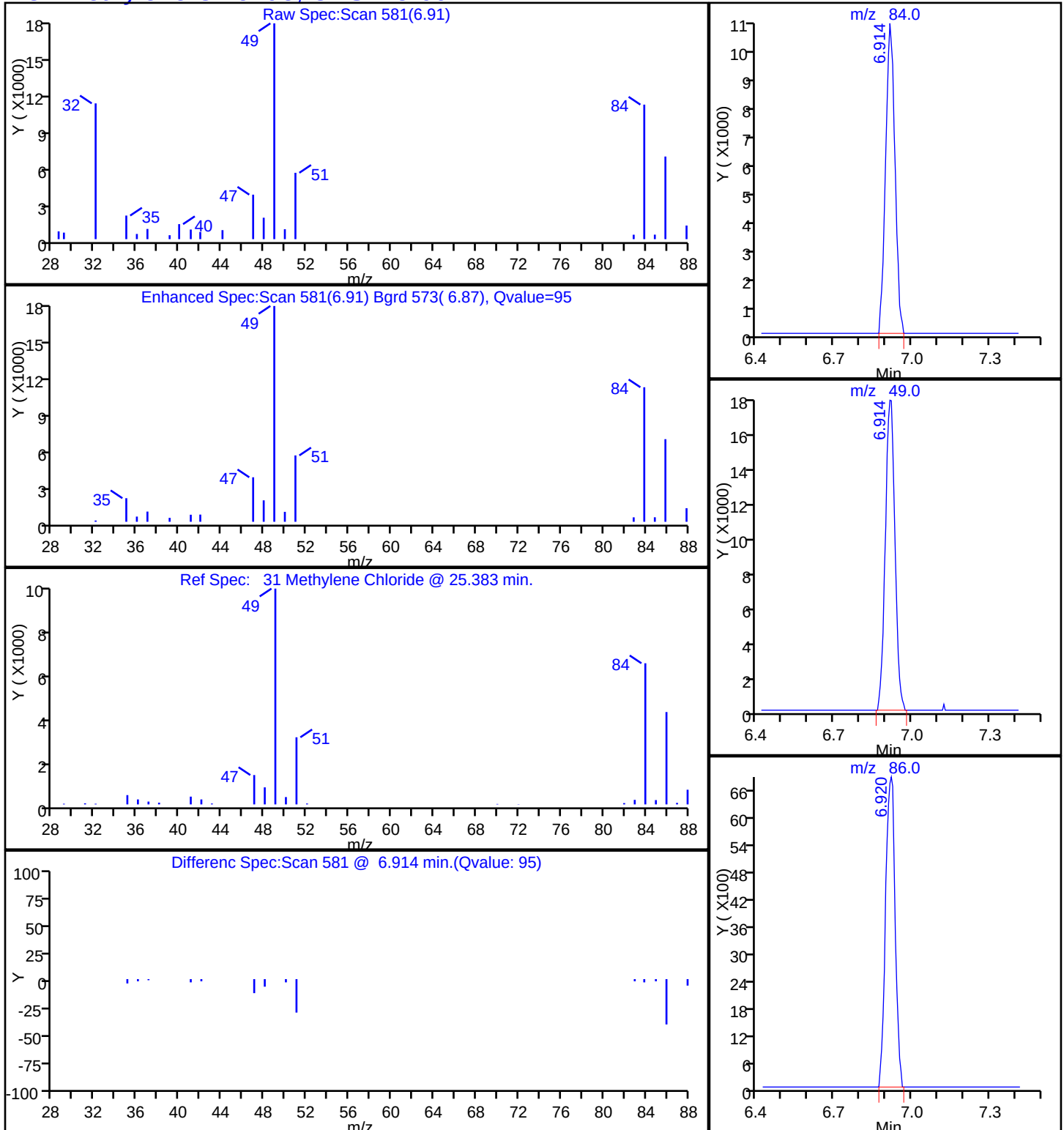
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P105.D

Injection Date: 04-Mar-2015 00:51:30

Instrument ID: MJ

Lims ID: 140-2797-A-1

Lab Sample ID: 140-2797-1

Client ID: H24-BA-2015

Operator ID: 403648

ALS Bottle#: 5

Worklist Smp#: 10

Purge Vol: 500.000 mL

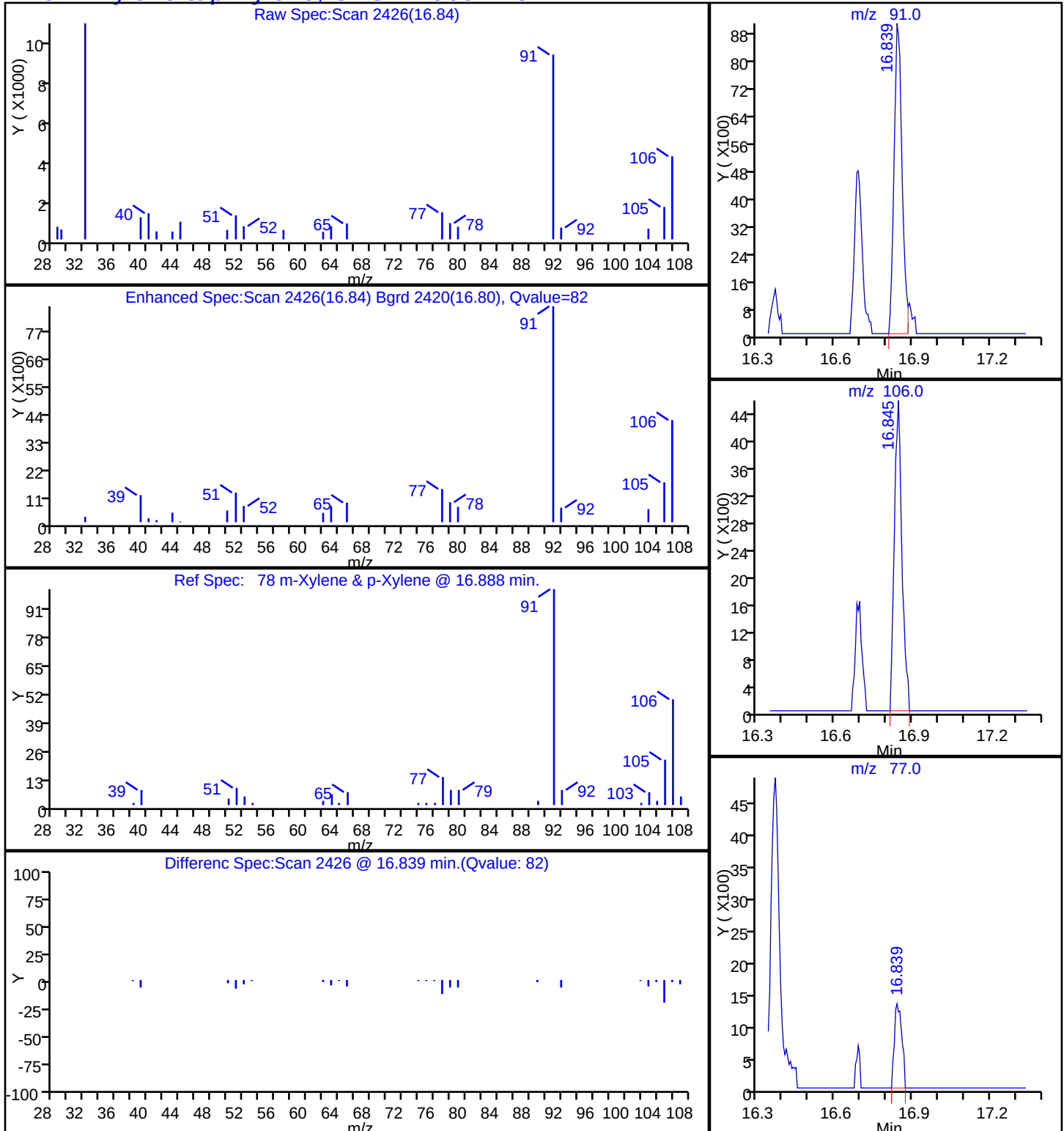
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P105.D

Injection Date: 04-Mar-2015 00:51:30

Instrument ID: MJ

Lims ID: 140-2797-A-1

Lab Sample ID: 140-2797-1

Client ID: H24-BA-2015

Operator ID: 403648

ALS Bottle#: 5

Worklist Smp#: 10

Purge Vol: 500.000 mL

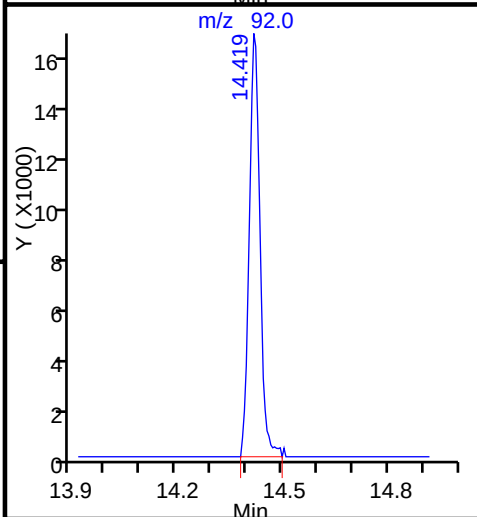
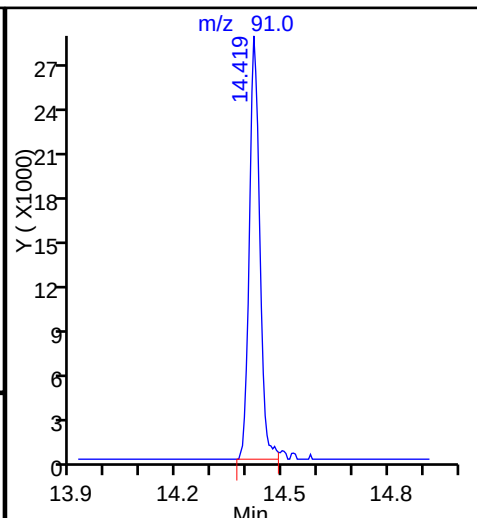
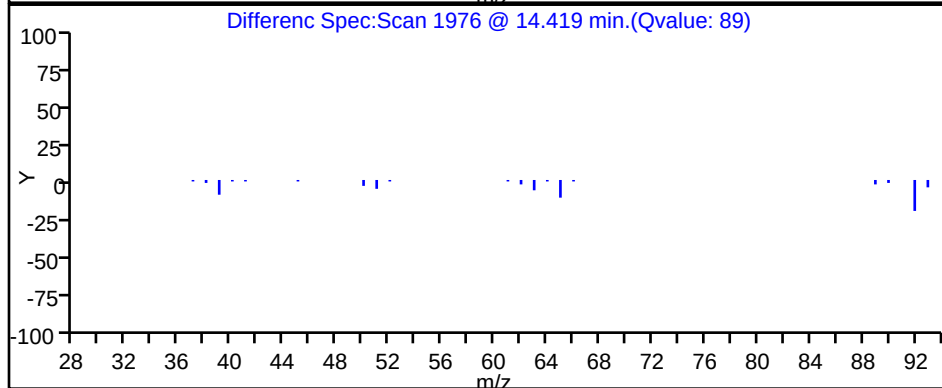
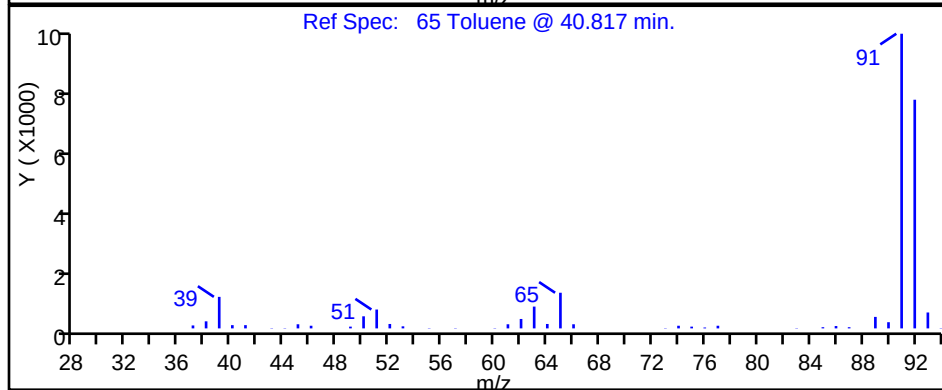
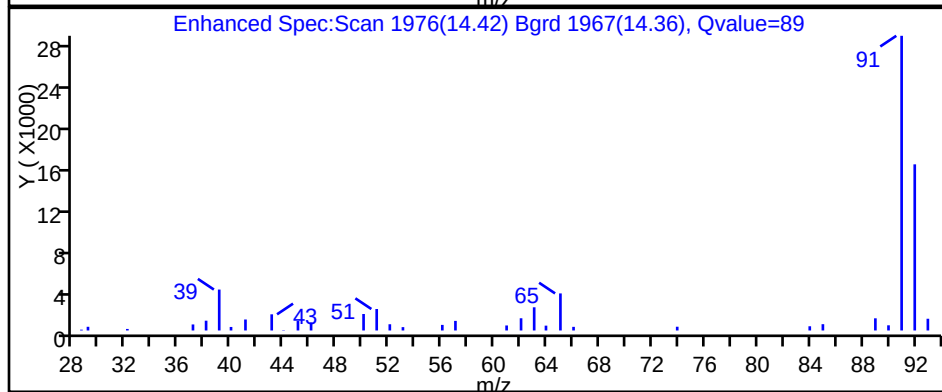
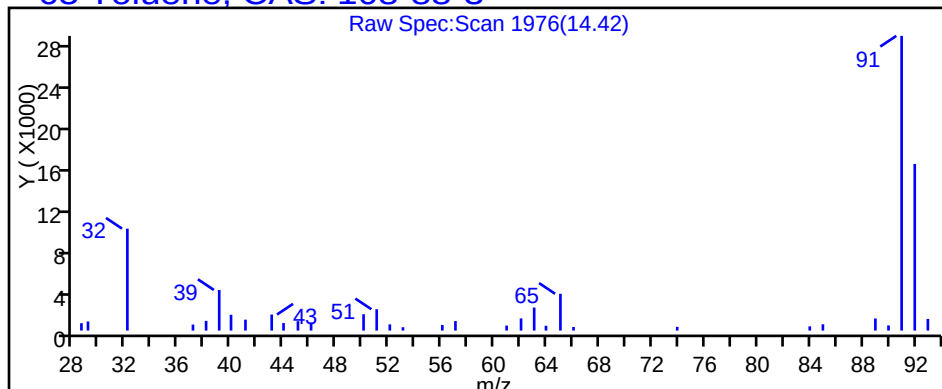
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P105.D

Injection Date: 04-Mar-2015 00:51:30

Instrument ID: MJ

Lims ID: 140-2797-A-1

Lab Sample ID: 140-2797-1

Client ID: H24-BA-2015

Operator ID: 403648

ALS Bottle#: 5

Worklist Smp#: 10

Purge Vol: 500.000 mL

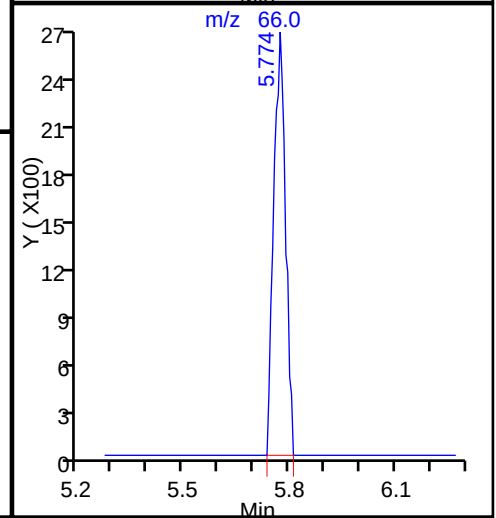
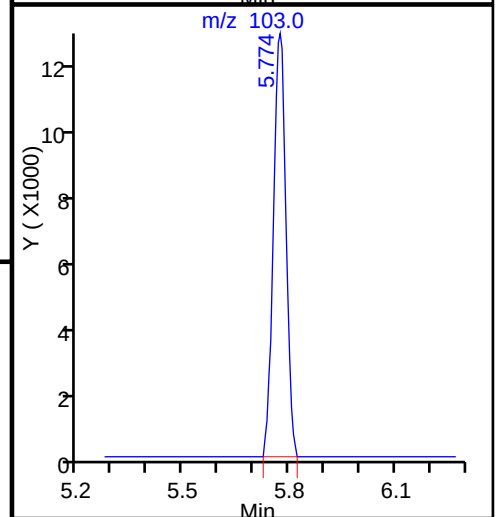
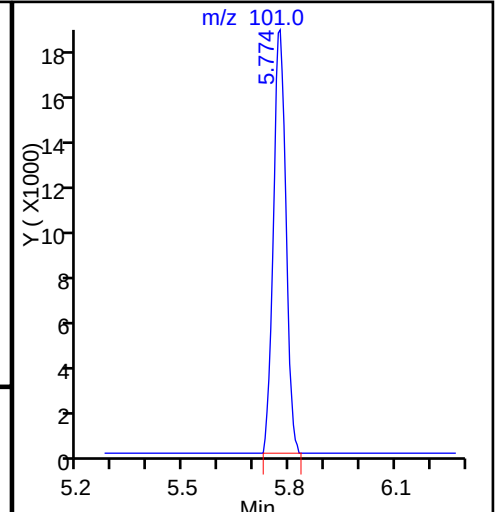
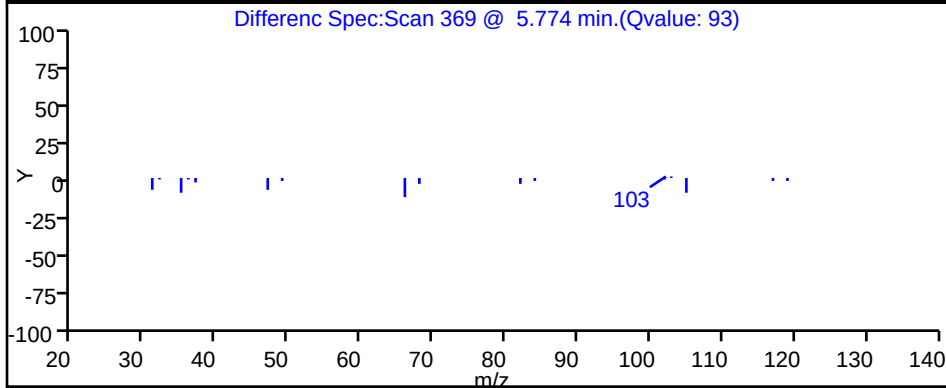
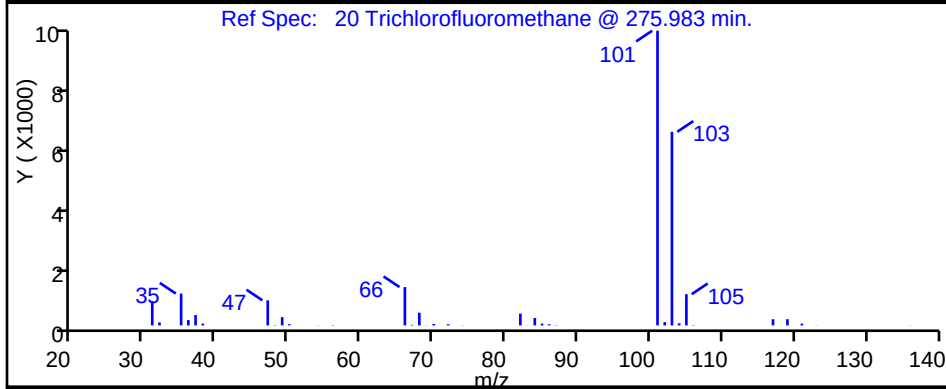
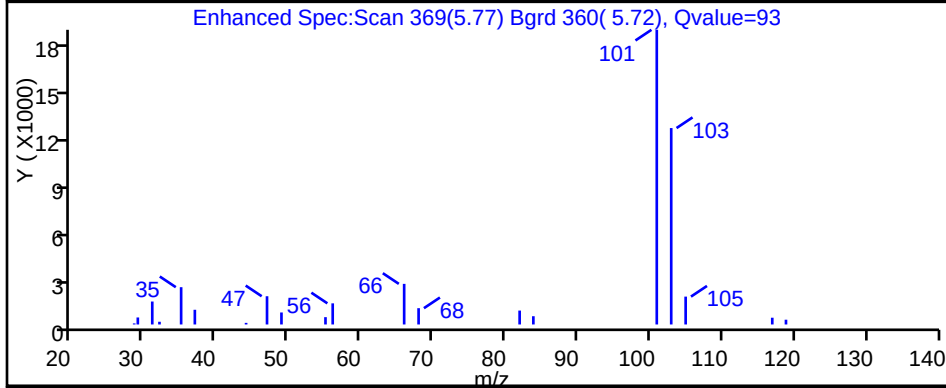
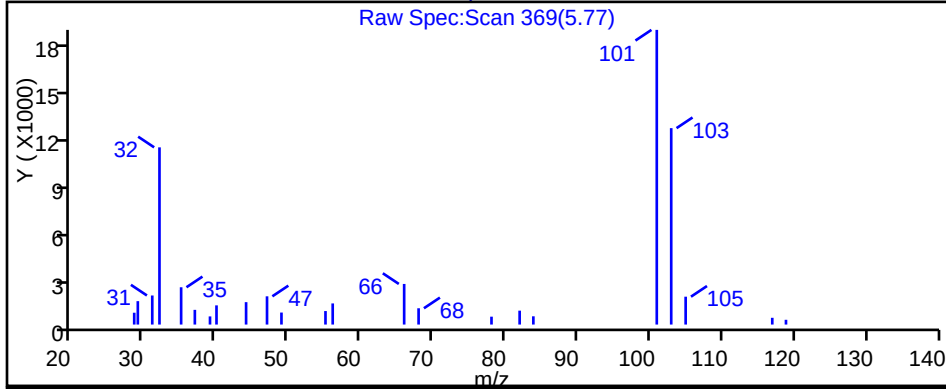
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: H24-SS-2015 Lab Sample ID: 140-2797-2

Matrix: Air Lab File ID: JC03P106.D

Analysis Method: TO 15 LL Date Collected: 02/24/2015 08:44

Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 01:46

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.: 2449 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		0.080	
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	0.12		0.040	
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		0.080	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H24-SS-2015 Lab Sample ID: 140-2797-2
 Matrix: Air Lab File ID: JC03P106.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 08:44
 Sample wt/vol: 500(mL) Date Analyzed: 03/04/2015 01:46
 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.: 2449 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	0.36		0.080	
64-17-5	Ethanol	46.07	2.0		0.80	
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	0.37		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.10		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	0.15		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		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.14		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

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: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: H24-SS-2015 Lab Sample ID: 140-2797-2

Matrix: Air Lab File ID: JC03P106.D

Analysis Method: TO 15 LL Date Collected: 02/24/2015 08:44

Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 01:46

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.: 2449 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		0.32	
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	0.79		0.25	
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		0.32	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H24-SS-2015 Lab Sample ID: 140-2797-2
 Matrix: Air Lab File ID: JC03P106.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 08:44
 Sample wt/vol: 500(mL) Date Analyzed: 03/04/2015 01:46
 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.: 2449 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	1.8		0.40	
64-17-5	Ethanol	46.07	3.7		1.5	
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	1.3		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	0.44		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	0.56		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		0.21	
75-69-4	Trichlorofluoromethane	137.37	0.81		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

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

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P106.D
 Lims ID: 140-2797-A-2 Lab Sample ID: 140-2797-2
 Client ID: H24-SS-2015
 Sample Type: Client
 Inject. Date: 04-Mar-2015 01:46:30 ALS Bottle#: 6 Worklist Smp#: 11
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2797-a-2
 Misc. Info.: J030315,TO15,,140-0001414-011
 Operator ID: 403648 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150228-1414.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 11:02:31 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK052

First Level Reviewer: tajh

Date: 04-Mar-2015 08:38:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.582	9.587	-0.005	97	255293	4.00	
* 2 1,4-Difluorobenzene	114	11.718	11.728	-0.010	96	1178878	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.366	16.370	-0.004	90	977762	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.980	17.979	0.001	95	612438	3.83	
8 Dichlorodifluoromethane	85	4.106	4.105	0.001	100	103186	0.3590	
9 Chloromethane	52	4.316	4.315	0.001	96	3011	0.0737	
17 Ethanol	31	5.230	5.240	-0.010	97	69288	1.95	
20 Trichlorofluoromethane	101	5.768	5.778	-0.010	99	36163	0.1437	
28 2-Methyl-2-propanol	59	6.645	6.633	0.012	94	6816	0.0452	
30 1,1,2-Trichloro-1,2,2-trif	101	6.721	6.730	-0.009	92	9565	0.0565	
31 Methylene Chloride	84	6.914	6.924	-0.010	97	29974	0.3662	
39 2-Butanone (MEK)	72	8.792	8.785	0.007	98	7311	0.2405	
40 Hexane	56	8.802	8.807	-0.005	72	4038	0.0474	
48 Benzene	78	11.202	11.217	-0.015	96	9609	0.0441	
50 Carbon tetrachloride	117	11.234	11.238	-0.004	96	20083	0.1250	
62 4-Methyl-2-pentanone (MIBK	43	13.552	13.546	0.006	98	13341	0.0745	
65 Toluene	91	14.419	14.423	-0.004	93	26729	0.1498	
73 Tetrachloroethene	129	15.548	15.547	0.001	87	1401	0.0180	
76 Ethylbenzene	91	16.694	16.693	0.001	93	6450	0.0309	
78 m-Xylene & p-Xylene	91	16.845	16.849	-0.004	97	16872	0.1004	
82 o-Xylene	91	17.372	17.371	0.001	96	5687	0.0310	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P106.D

Injection Date: 04-Mar-2015 01:46:30

Instrument ID: MJ

Operator ID: 403648

Lims ID: 140-2797-A-2

Lab Sample ID: 140-2797-2

Worklist Smp#: 11

Client ID: H24-SS-2015

Purge Vol: 500.000 mL

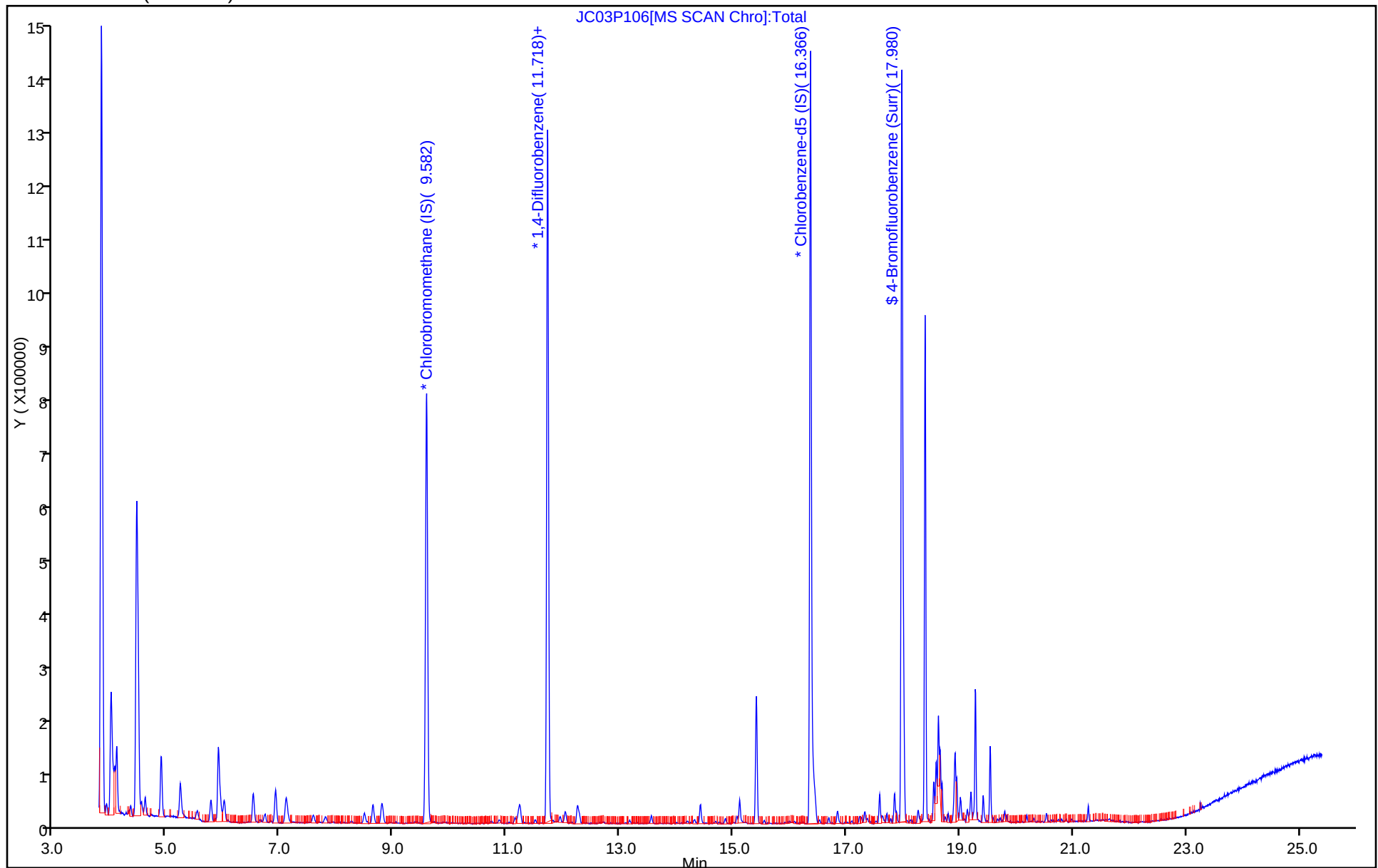
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P106.D

Injection Date: 04-Mar-2015 01:46:30

Instrument ID: MJ

Lims ID: 140-2797-A-2

Lab Sample ID: 140-2797-2

Client ID: H24-SS-2015

Operator ID: 403648

ALS Bottle#: 6

Worklist Smp#: 11

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

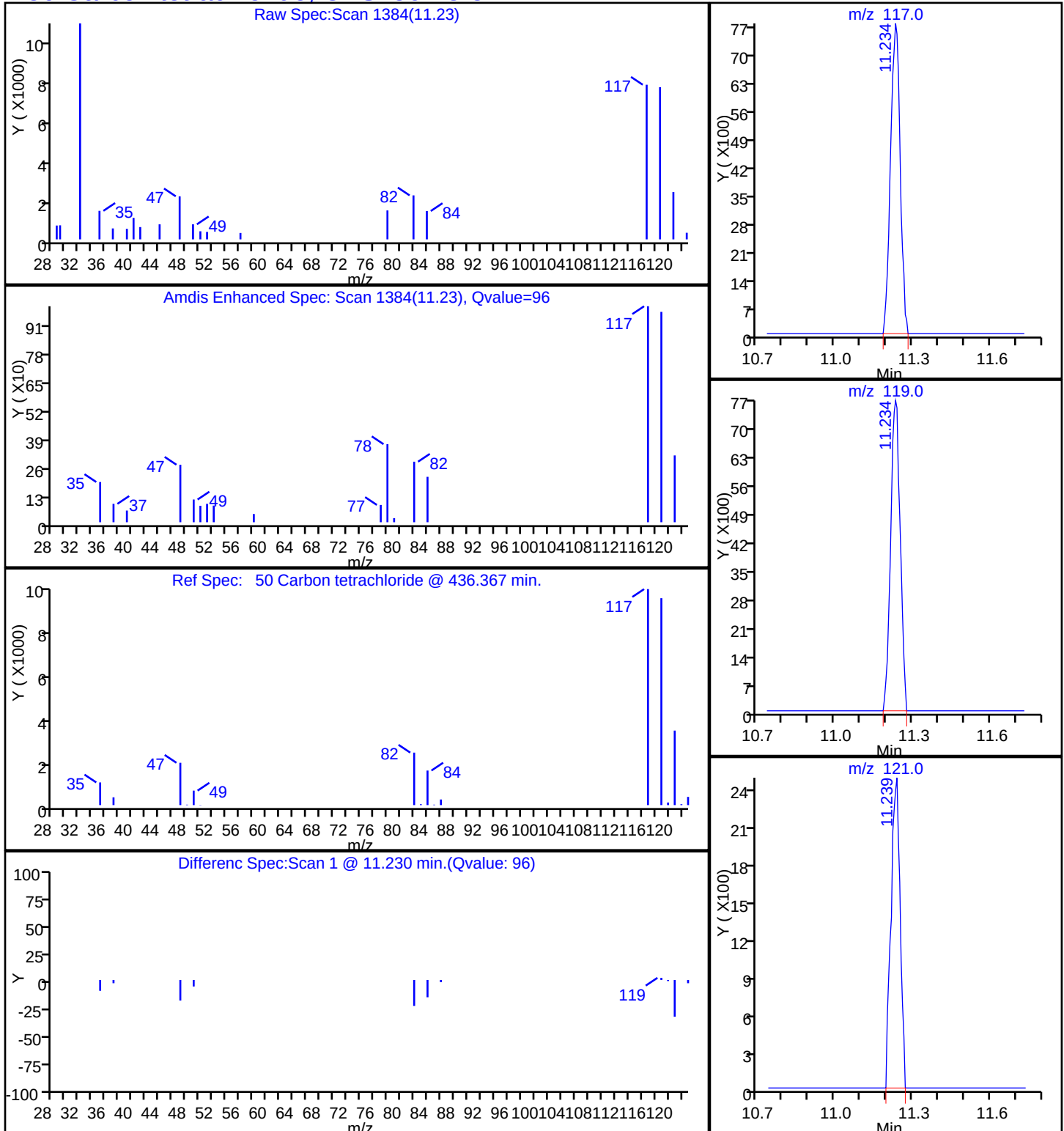
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P106.D

Injection Date: 04-Mar-2015 01:46:30

Instrument ID: MJ

Lims ID: 140-2797-A-2

Lab Sample ID: 140-2797-2

Client ID: H24-SS-2015

Operator ID: 403648

ALS Bottle#: 6

Worklist Smp#: 11

Purge Vol: 500.000 mL

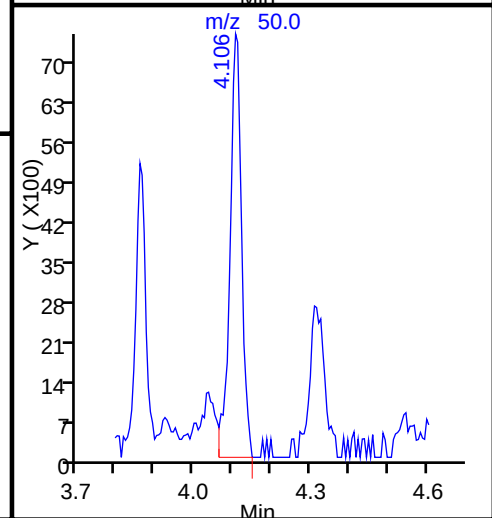
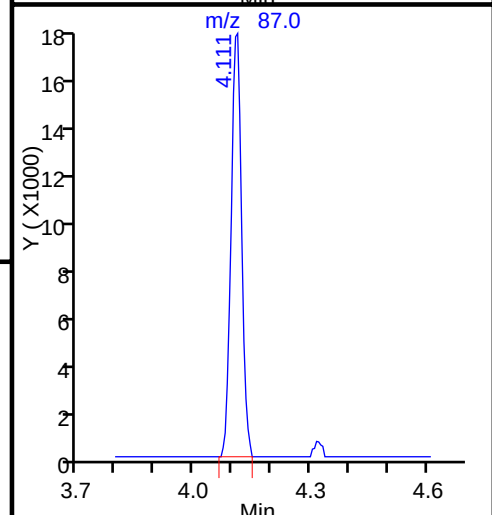
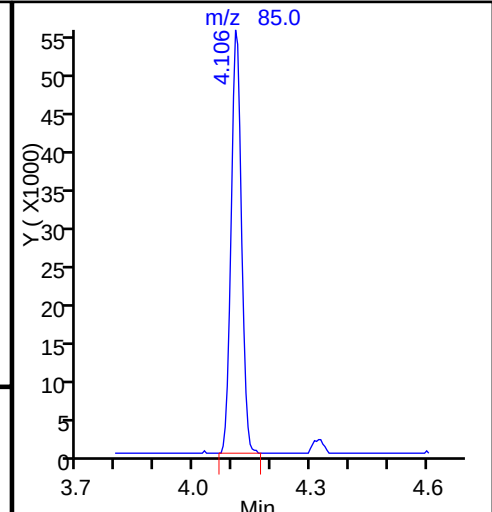
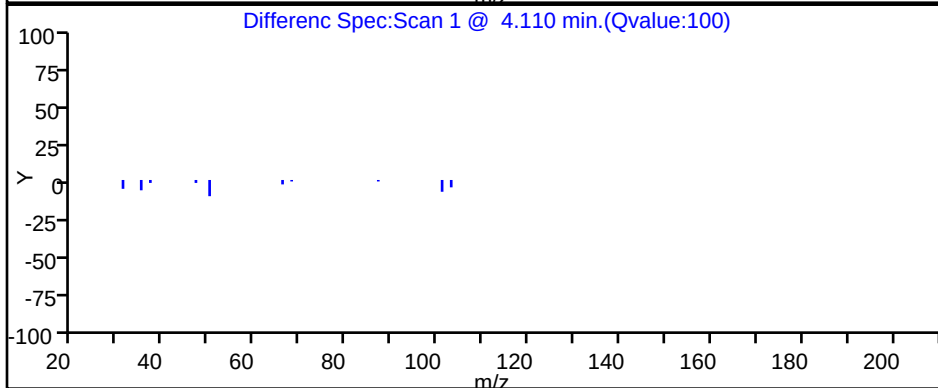
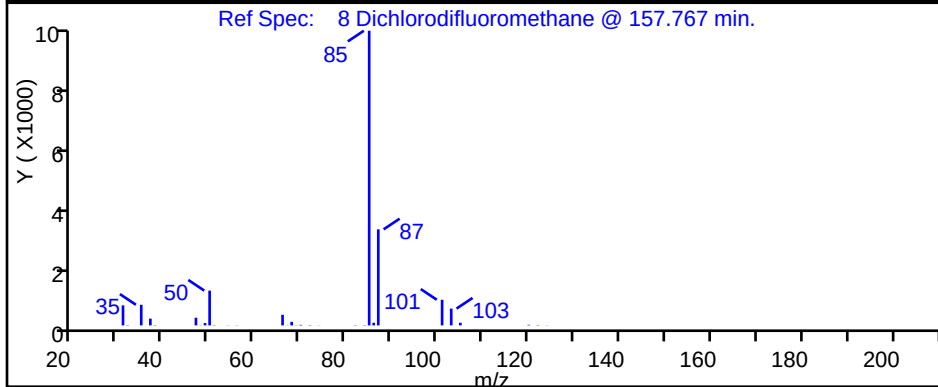
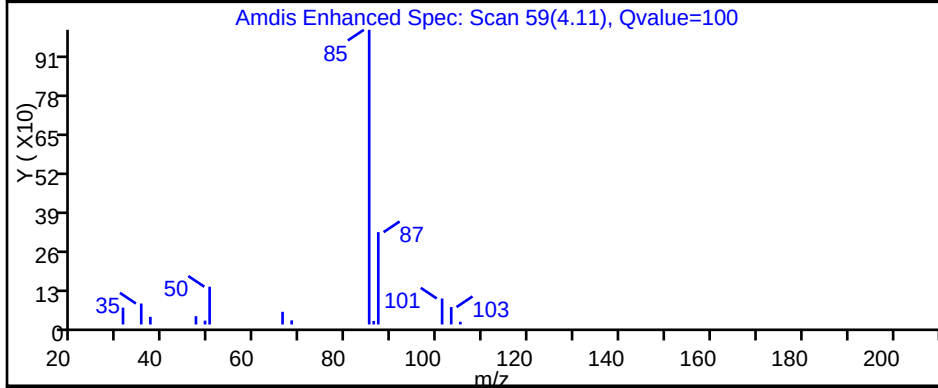
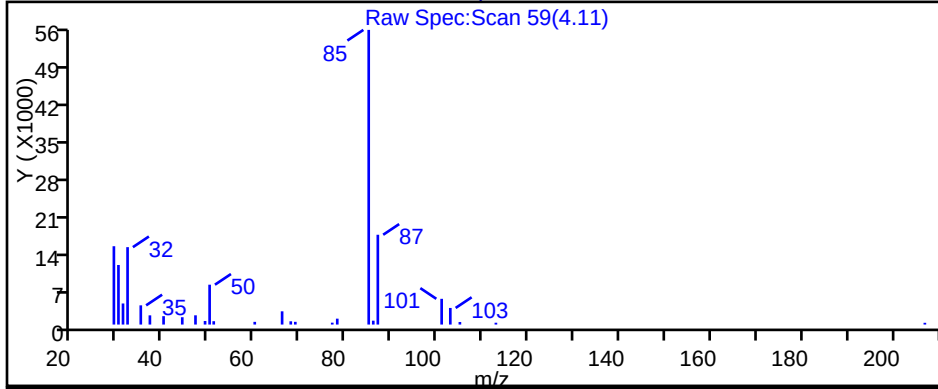
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P106.D

Injection Date: 04-Mar-2015 01:46:30

Instrument ID: MJ

Lims ID: 140-2797-A-2

Lab Sample ID: 140-2797-2

Client ID: H24-SS-2015

Operator ID: 403648

ALS Bottle#: 6

Worklist Smp#: 11

Purge Vol: 500.000 mL

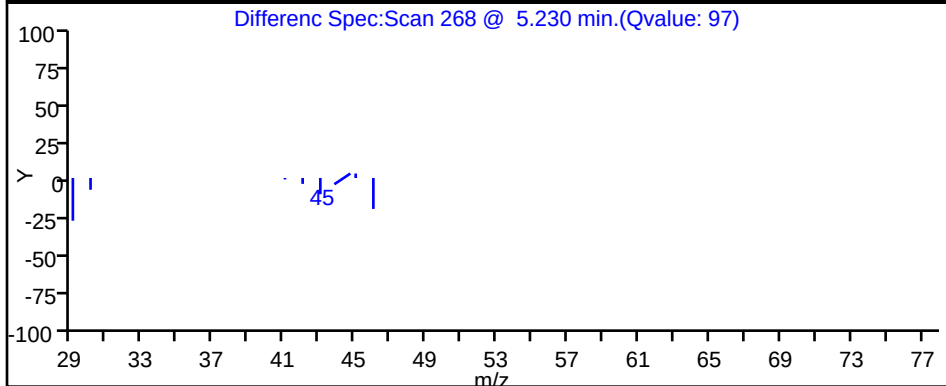
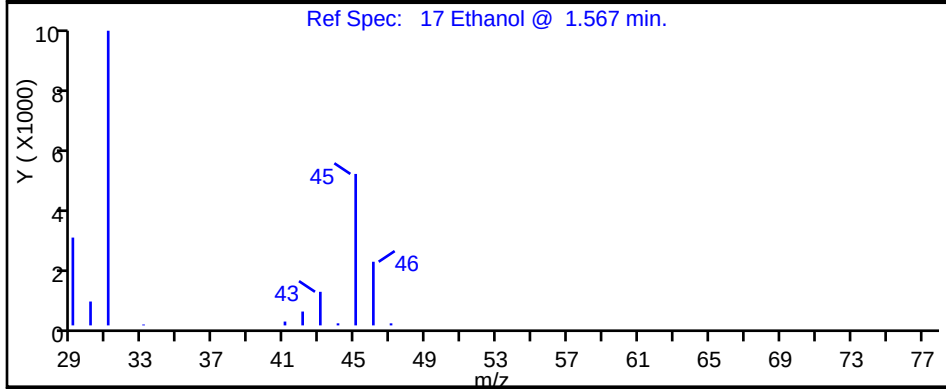
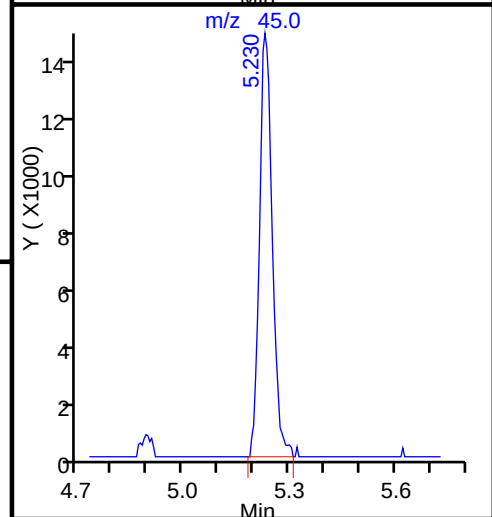
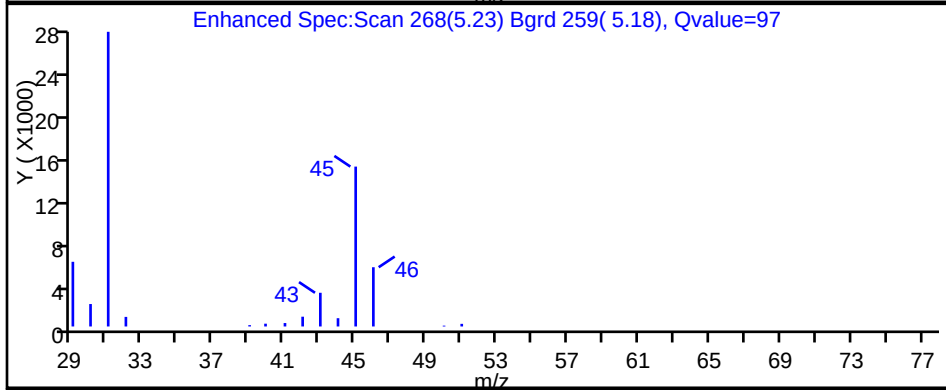
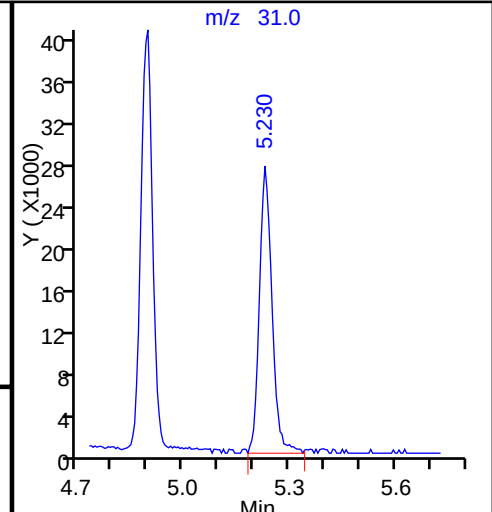
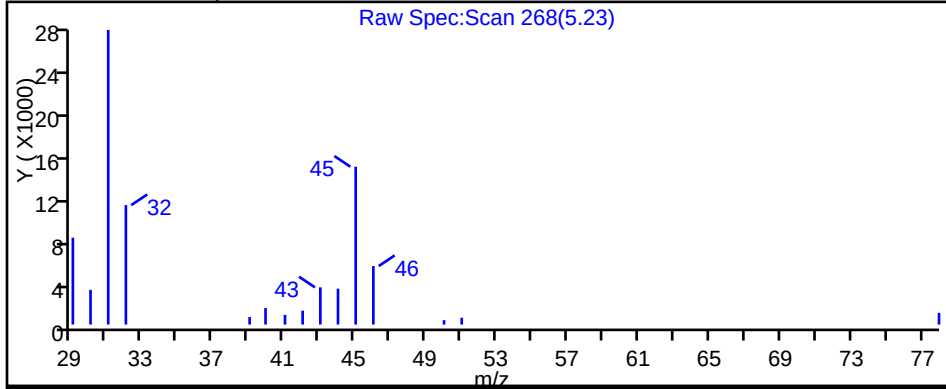
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P106.D

Injection Date: 04-Mar-2015 01:46:30

Instrument ID: MJ

Lims ID: 140-2797-A-2

Lab Sample ID: 140-2797-2

Client ID: H24-SS-2015

Operator ID: 403648

ALS Bottle#: 6

Worklist Smp#: 11

Purge Vol: 500.000 mL

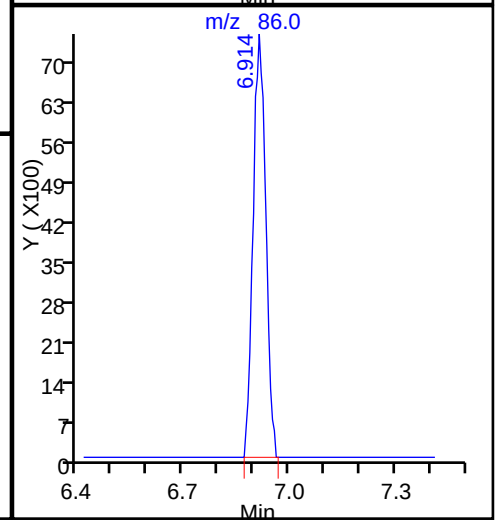
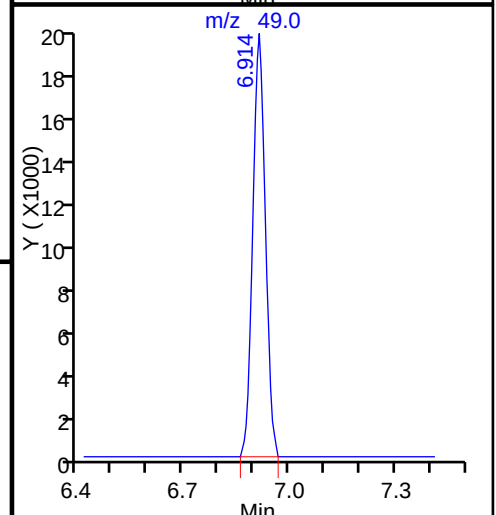
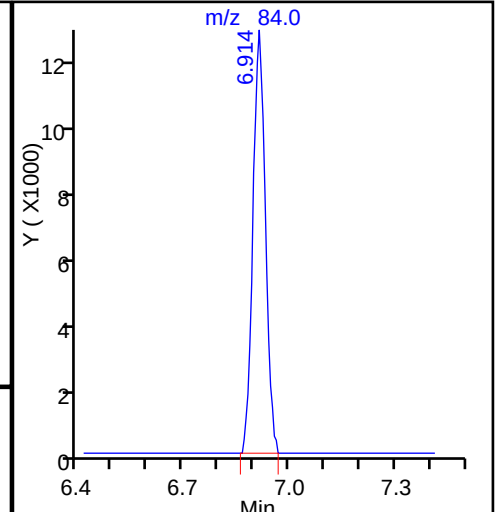
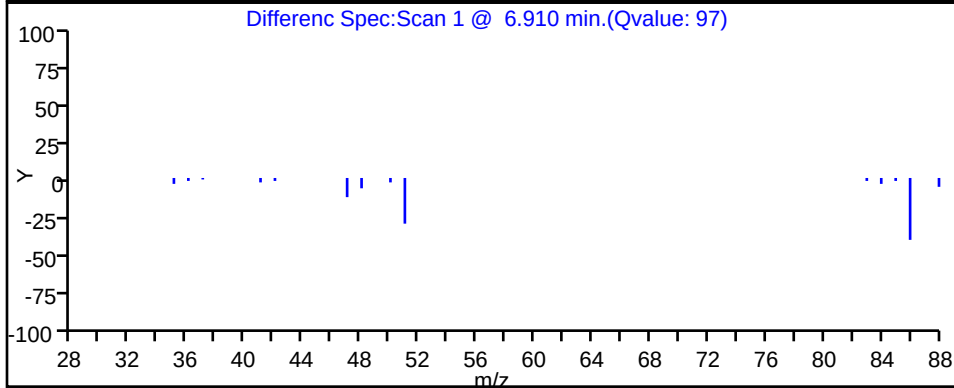
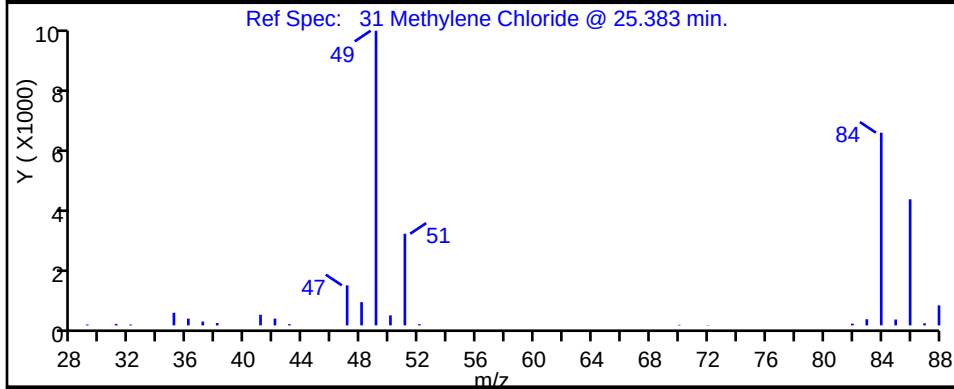
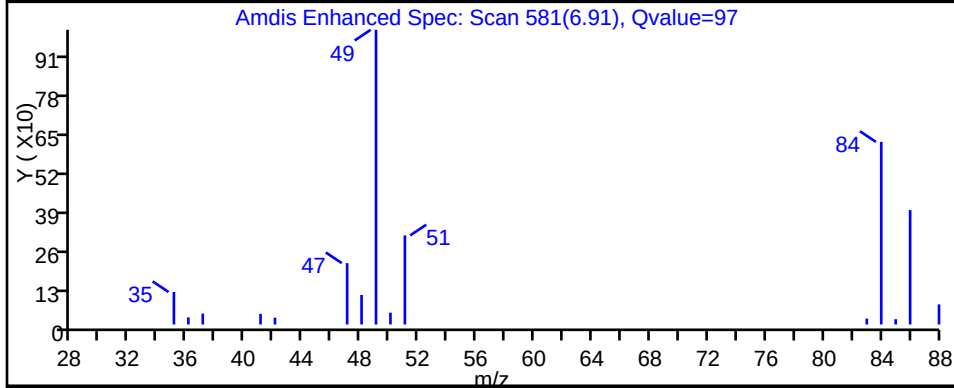
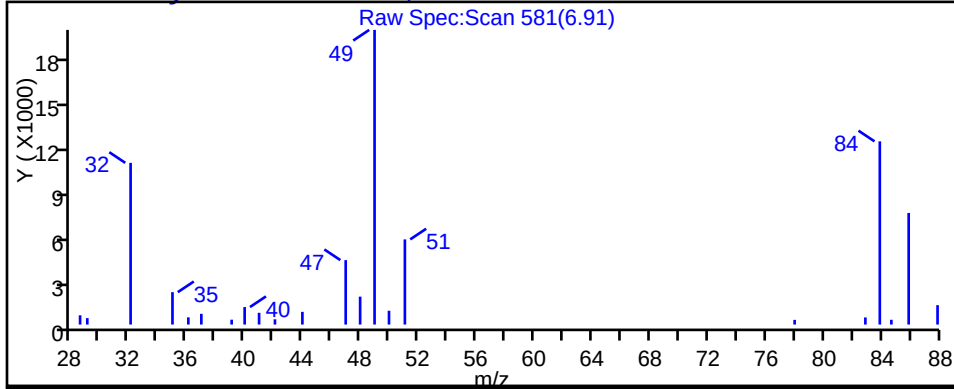
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P106.D

Injection Date: 04-Mar-2015 01:46:30

Instrument ID: MJ

Lims ID: 140-2797-A-2

Lab Sample ID: 140-2797-2

Client ID: H24-SS-2015

Operator ID: 403648

ALS Bottle#: 6

Worklist Smp#: 11

Purge Vol: 500.000 mL

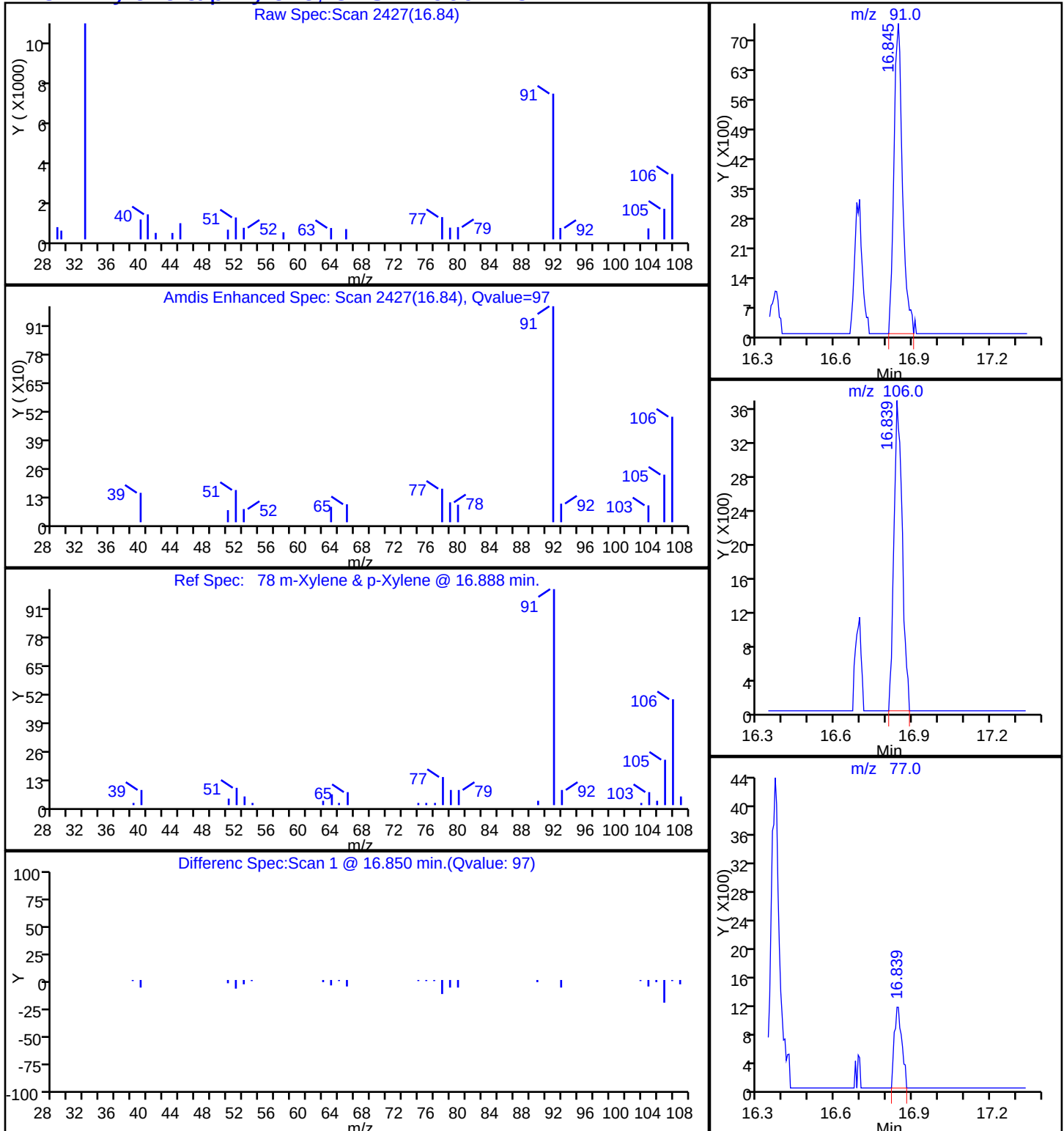
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P106.D

Injection Date: 04-Mar-2015 01:46:30

Instrument ID: MJ

Lims ID: 140-2797-A-2

Lab Sample ID: 140-2797-2

Client ID: H24-SS-2015

Operator ID: 403648

ALS Bottle#: 6

Worklist Smp#: 11

Purge Vol: 500.000 mL

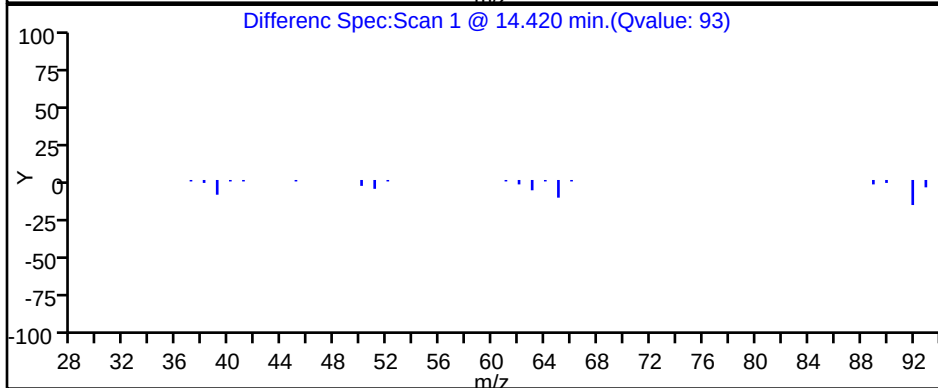
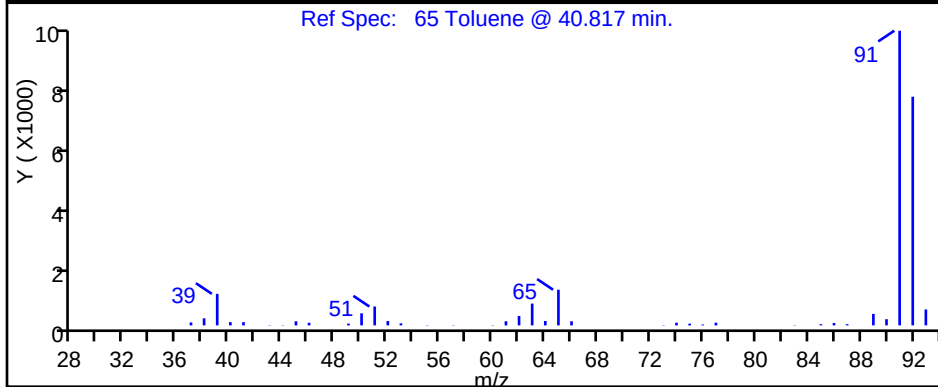
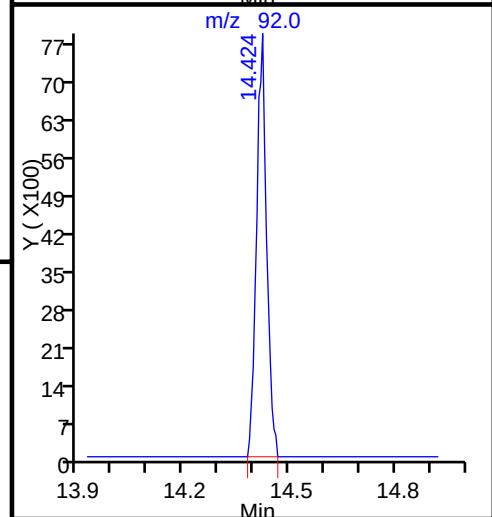
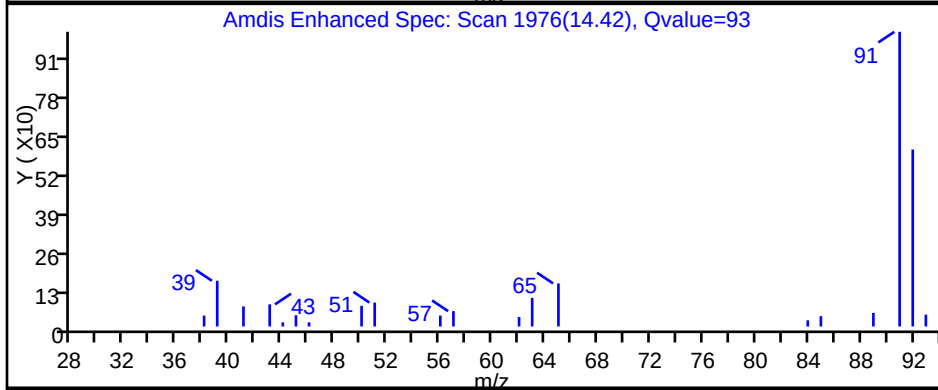
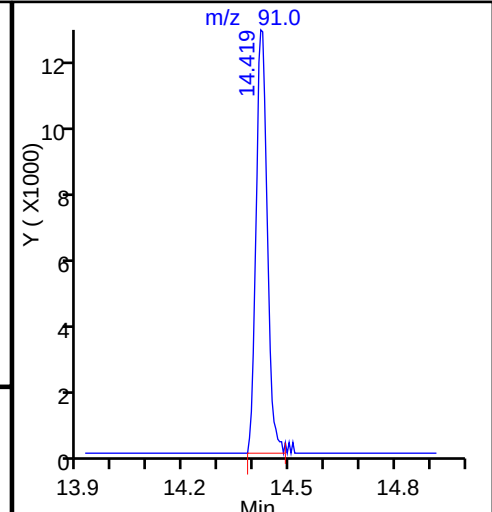
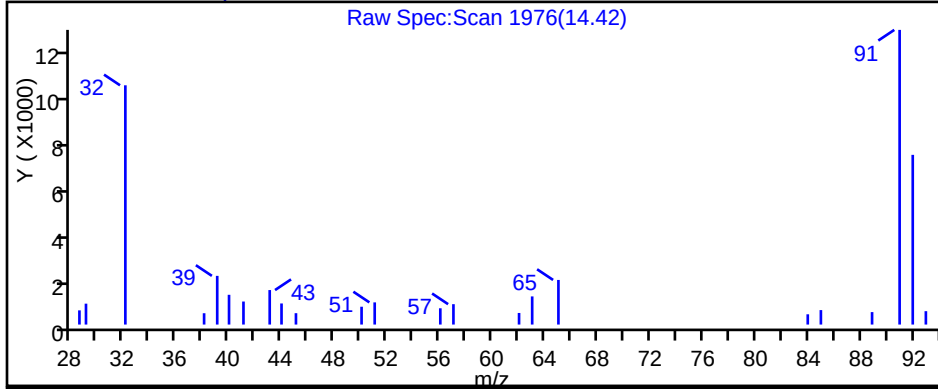
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P106.D

Injection Date: 04-Mar-2015 01:46:30

Instrument ID: MJ

Lims ID: 140-2797-A-2

Lab Sample ID: 140-2797-2

Client ID: H24-SS-2015

Operator ID: 403648

ALS Bottle#: 6

Worklist Smp#: 11

Purge Vol: 500.000 mL

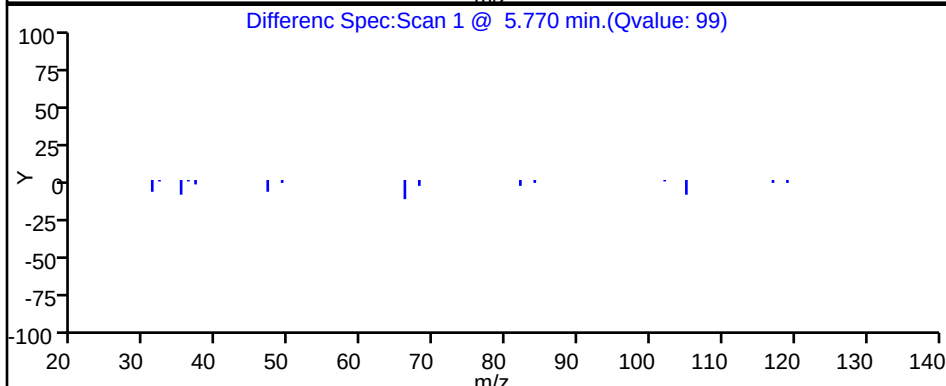
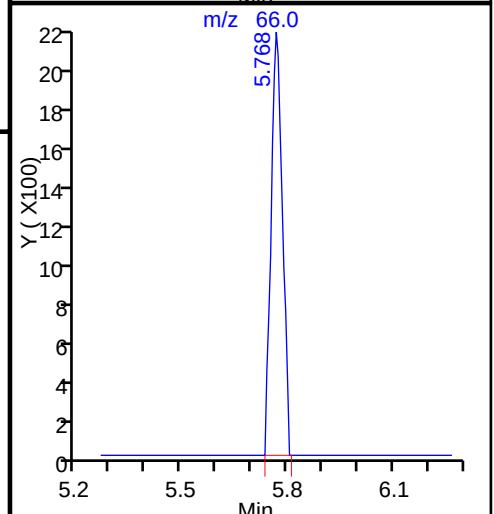
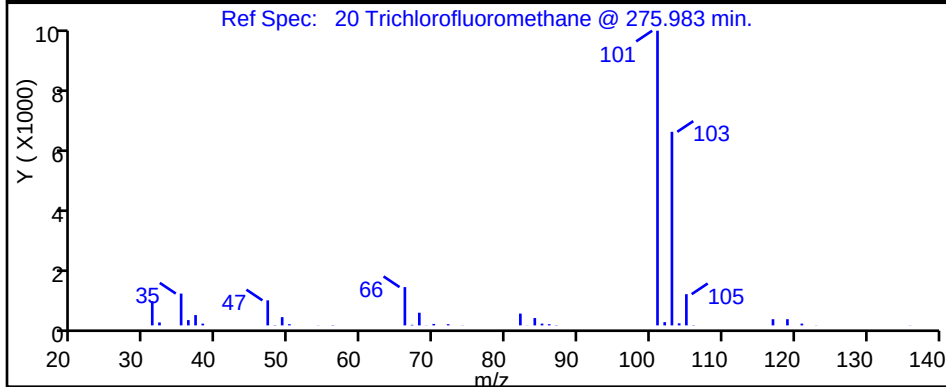
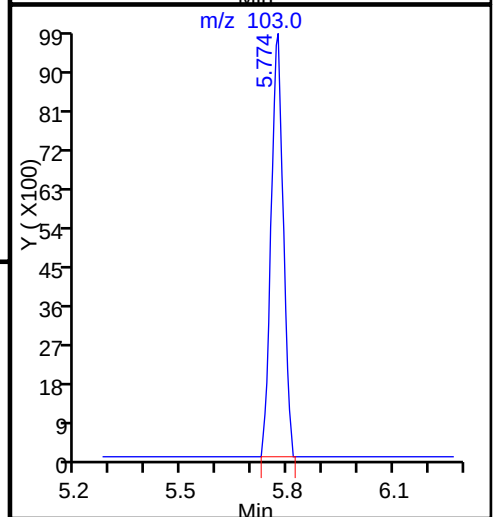
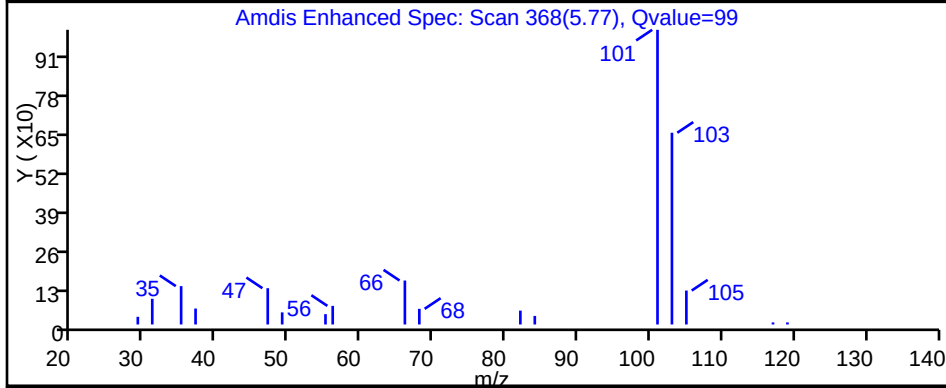
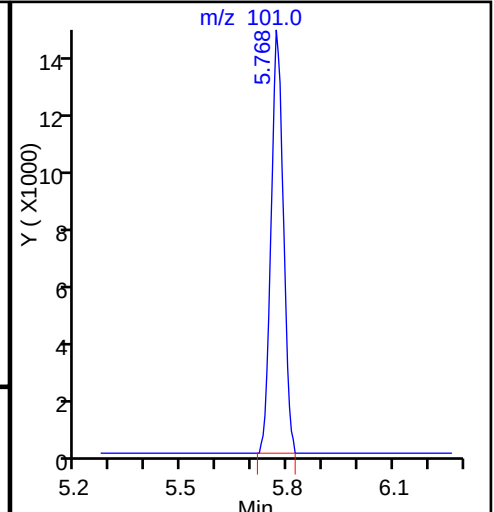
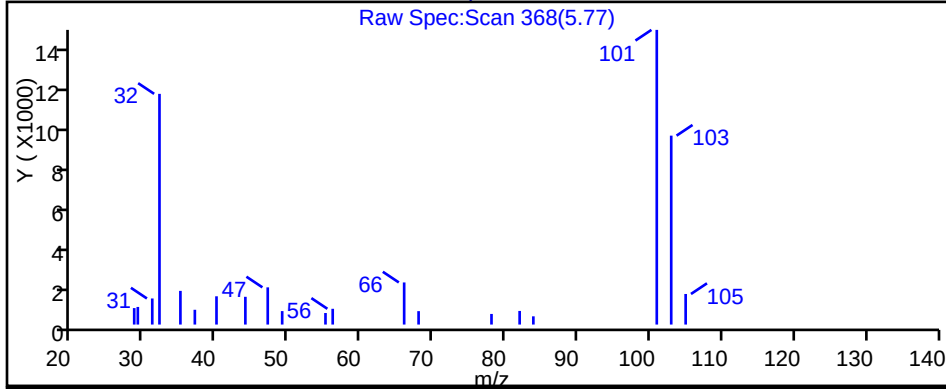
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: H15-BA-2015 Lab Sample ID: 140-2797-3

Matrix: Air Lab File ID: JC03P107.D

Analysis Method: TO 15 LL Date Collected: 02/24/2015 10:26

Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 02:40

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.: 2449 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		0.080	
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	0.15		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	0.077		0.040	
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	0.45		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H15-BA-2015 Lab Sample ID: 140-2797-3
 Matrix: Air Lab File ID: JC03P107.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 10:26
 Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 02:40
 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.: 2449 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	0.38		0.080	
64-17-5	Ethanol	46.07	4.8		0.80	
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	0.20		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	0.050		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.17		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

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: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: H15-BA-2015 Lab Sample ID: 140-2797-3

Matrix: Air Lab File ID: JC03P107.D

Analysis Method: TO 15 LL Date Collected: 02/24/2015 10:26

Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 02:40

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.: 2449 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		0.32	
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	0.48		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	0.49		0.25	
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	0.92		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H15-BA-2015 Lab Sample ID: 140-2797-3
 Matrix: Air Lab File ID: JC03P107.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 10:26
 Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 02:40
 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.: 2449 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	1.9		0.40	
64-17-5	Ethanol	46.07	9.1		1.5	
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	0.68		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	0.27		0.21	
75-69-4	Trichlorofluoromethane	137.37	0.95		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

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

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P107.D
 Lims ID: 140-2797-A-3 Lab Sample ID: 140-2797-3
 Client ID: H15-BA-2015
 Sample Type: Client
 Inject. Date: 04-Mar-2015 02:40:30 ALS Bottle#: 7 Worklist Smp#: 12
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2797-a-3
 Misc. Info.: J030315,TO15,,140-0001414-012
 Operator ID: 403648 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150228-1414.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 11:02:31 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK052

First Level Reviewer: tajh

Date: 04-Mar-2015 08:38:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.581	9.587	-0.006	97	263465	4.00	
* 2 1,4-Difluorobenzene	114	11.722	11.728	-0.006	96	1212293	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.365	16.370	-0.005	90	1019276	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.979	17.979	0.000	88	600707	3.60	
8 Dichlorodifluoromethane	85	4.110	4.105	0.005	100	113887	0.3840	
9 Chloromethane	52	4.315	4.315	0.000	99	18790	0.4455	
17 Ethanol	31	5.229	5.240	-0.011	96	176136	4.81	
20 Trichlorofluoromethane	101	5.773	5.778	-0.005	99	43851	0.1688	
30 1,1,2-Trichloro-1,2,2-trif	101	6.730	6.730	0.000	93	10766	0.0616	
31 Methylene Chloride	84	6.913	6.924	-0.011	97	16605	0.1966	
39 2-Butanone (MEK)	72	8.791	8.785	0.006	88	3898	0.1243	
40 Hexane	56	8.801	8.807	-0.006	64	5837	0.0664	
43 Chloroform	83	9.587	9.598	-0.011	28	6425	0.0386	
45 1,1,1-Trichloroethane	97	10.625	10.636	-0.011	89	2387	0.0137	
48 Benzene	78	11.206	11.217	-0.011	98	33731	0.1506	
50 Carbon tetrachloride	117	11.233	11.238	-0.005	95	12755	0.0772	
53 Isooctane	57	11.932	11.932	0.000	97	7864	0.0177	
56 Trichloroethene	130	12.422	12.427	-0.005	92	4903	0.0503	
65 Toluene	91	14.417	14.423	-0.006	92	17398	0.0935	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P107.D

Injection Date: 04-Mar-2015 02:40:30

Instrument ID: MJ

Operator ID: 403648

Lims ID: 140-2797-A-3

Lab Sample ID: 140-2797-3

Worklist Smp#: 12

Client ID: H15-BA-2015

Purge Vol: 500.000 mL

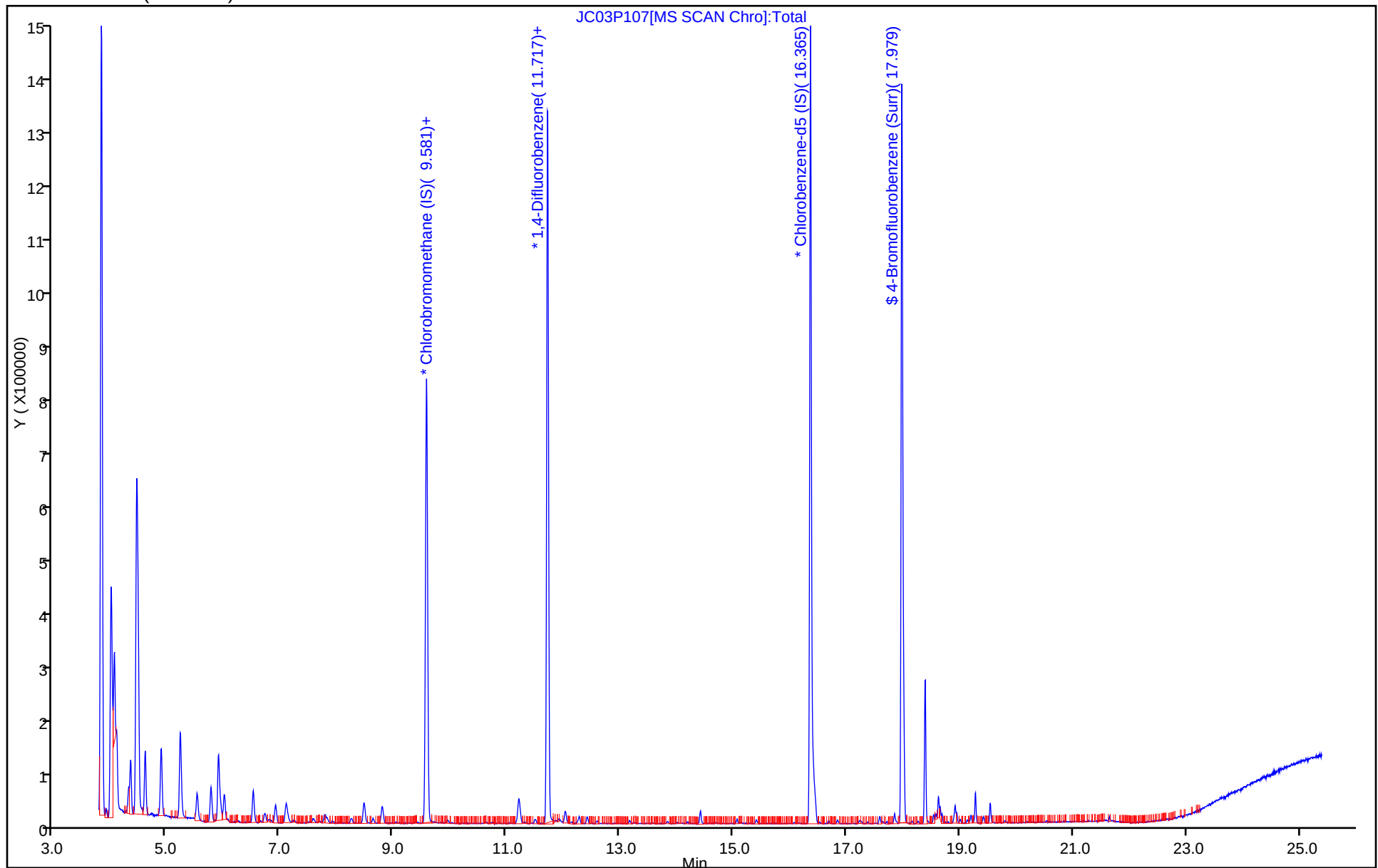
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P107.D

Injection Date: 04-Mar-2015 02:40:30

Instrument ID: MJ

Lims ID: 140-2797-A-3

Lab Sample ID: 140-2797-3

Client ID: H15-BA-2015

Operator ID: 403648

ALS Bottle#: 7

Worklist Smp#: 12

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

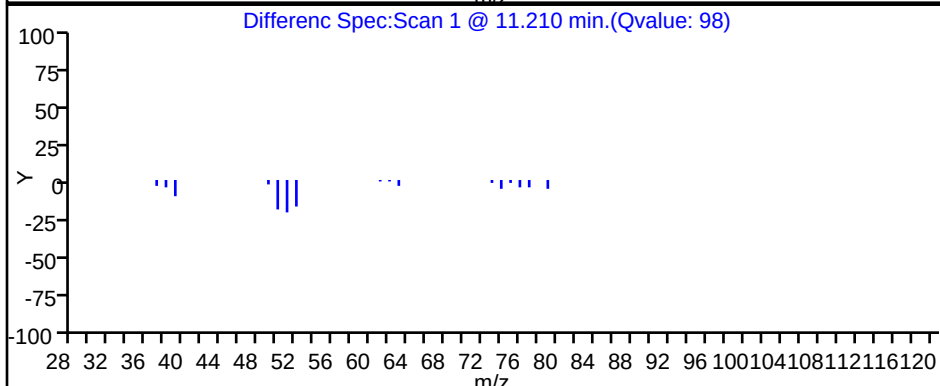
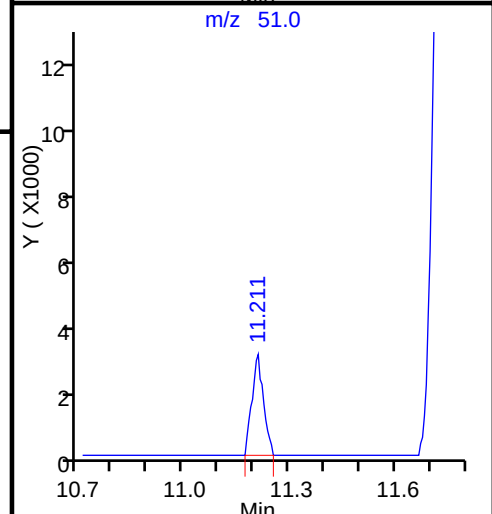
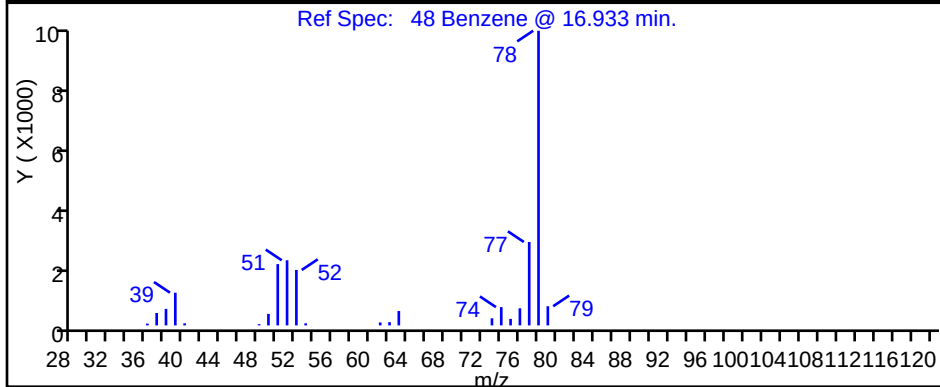
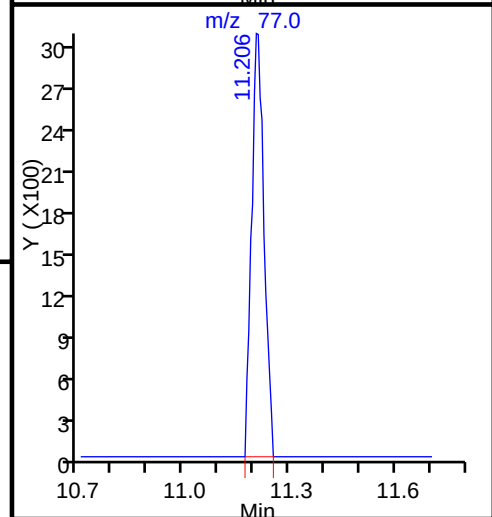
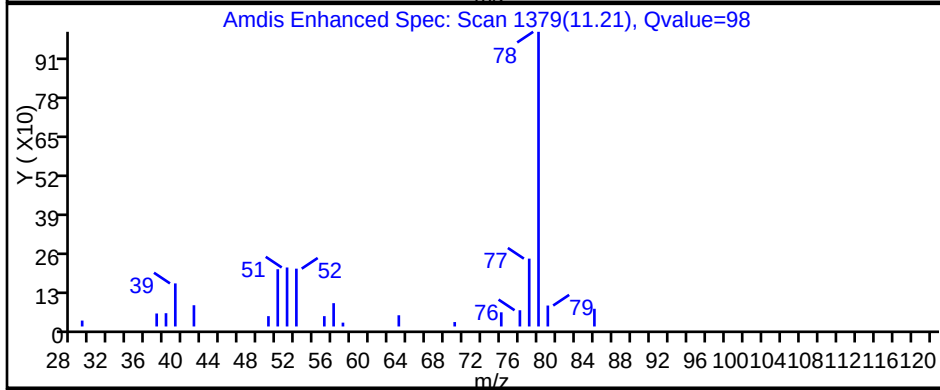
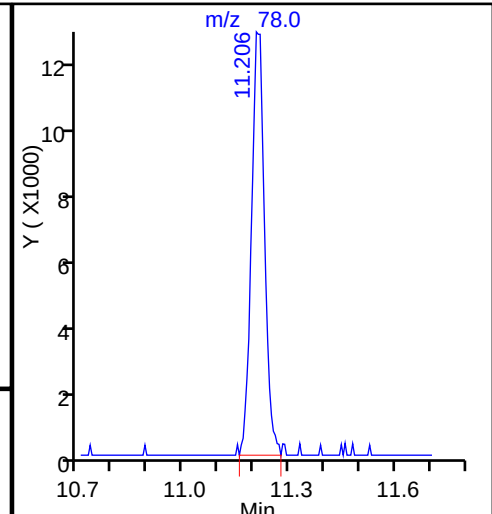
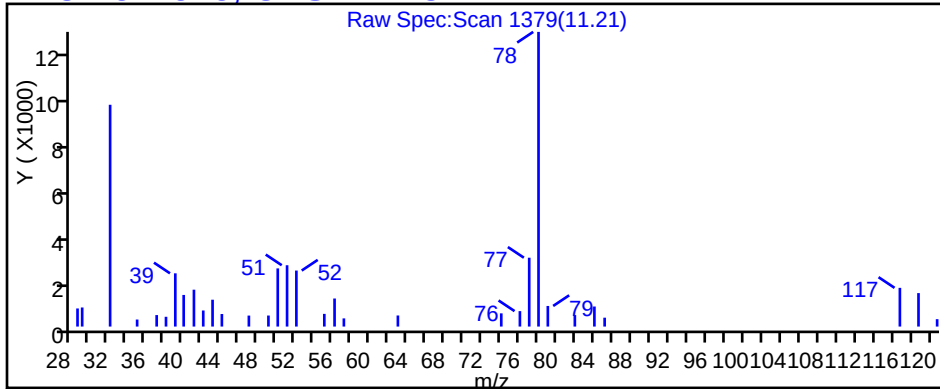
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P107.D

Injection Date: 04-Mar-2015 02:40:30

Instrument ID: MJ

Lims ID: 140-2797-A-3

Lab Sample ID: 140-2797-3

Client ID: H15-BA-2015

Operator ID: 403648

ALS Bottle#: 7

Worklist Smp#: 12

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

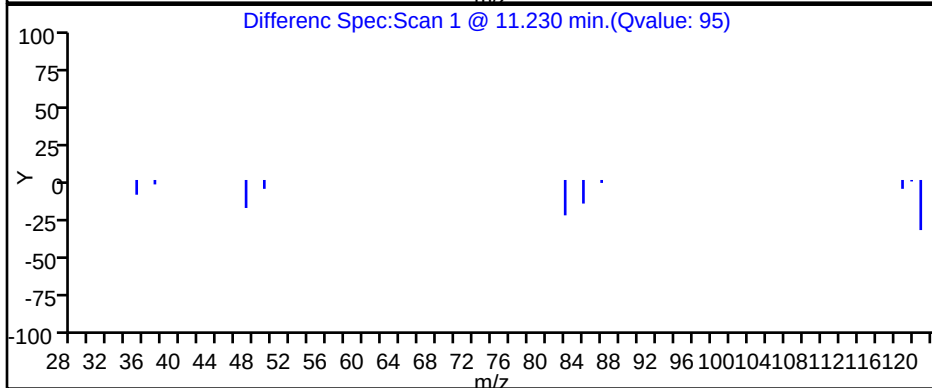
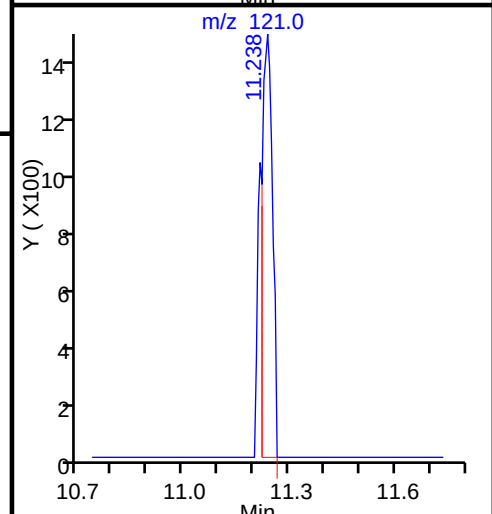
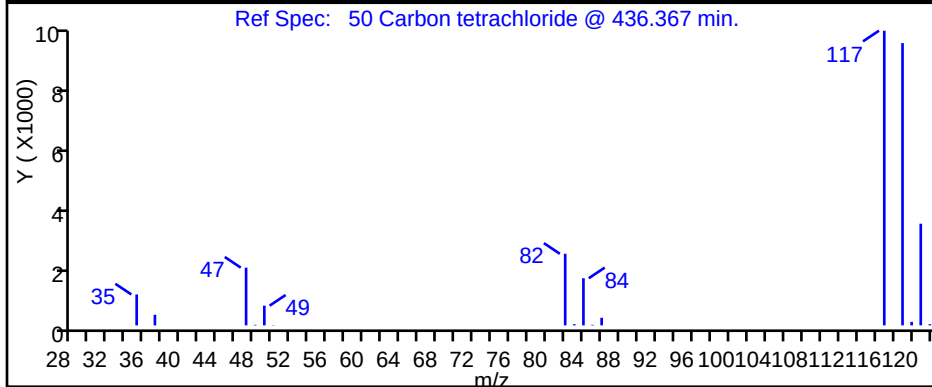
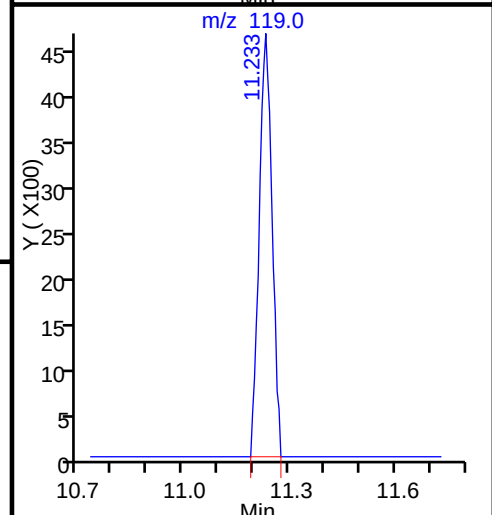
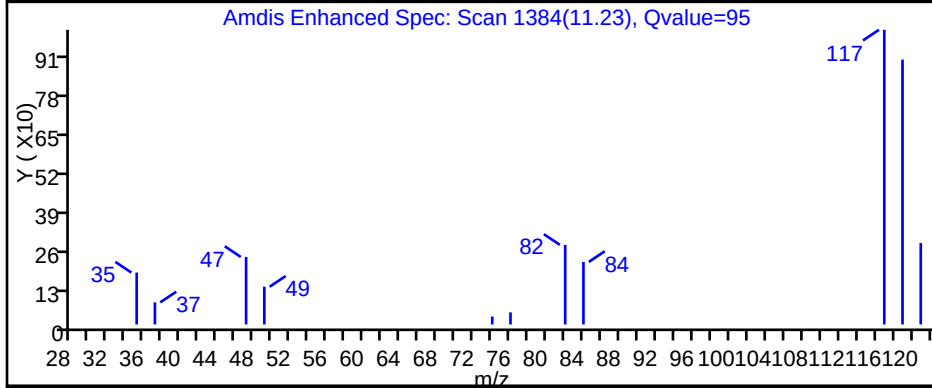
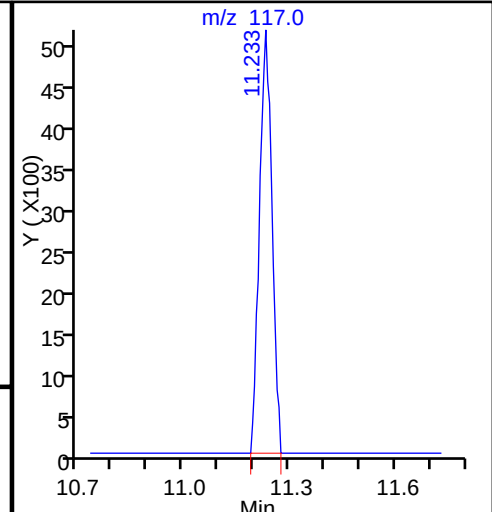
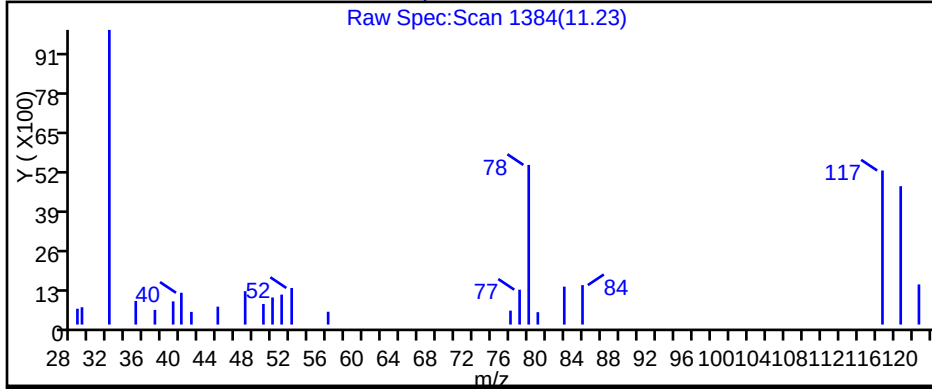
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P107.D

Injection Date: 04-Mar-2015 02:40:30

Instrument ID: MJ

Lims ID: 140-2797-A-3

Lab Sample ID: 140-2797-3

Client ID: H15-BA-2015

Operator ID: 403648

ALS Bottle#: 7

Worklist Smp#: 12

Purge Vol: 500.000 mL

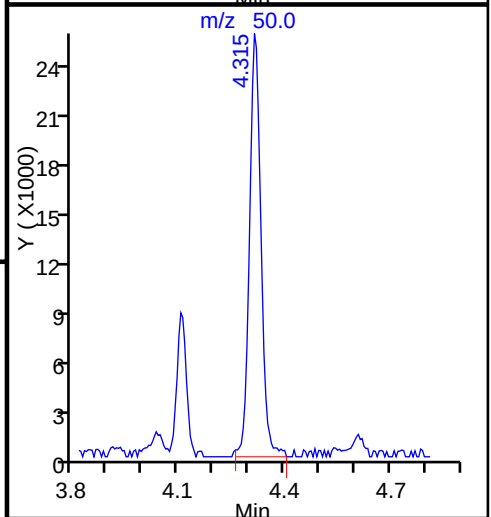
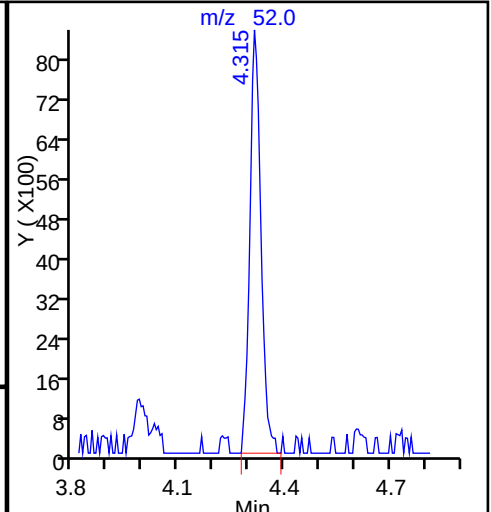
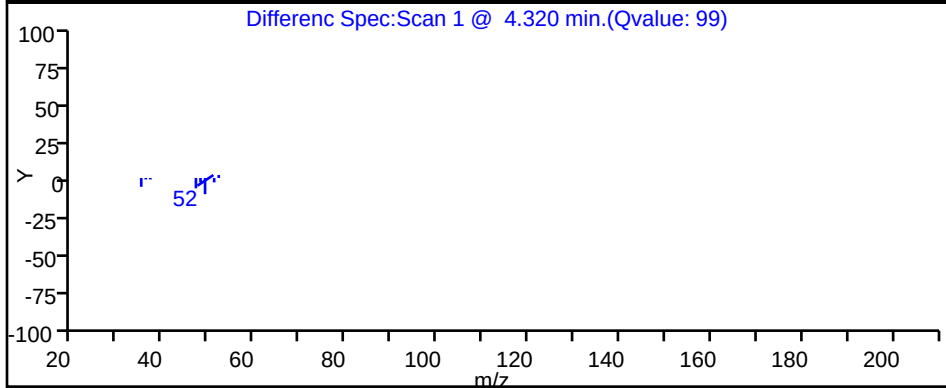
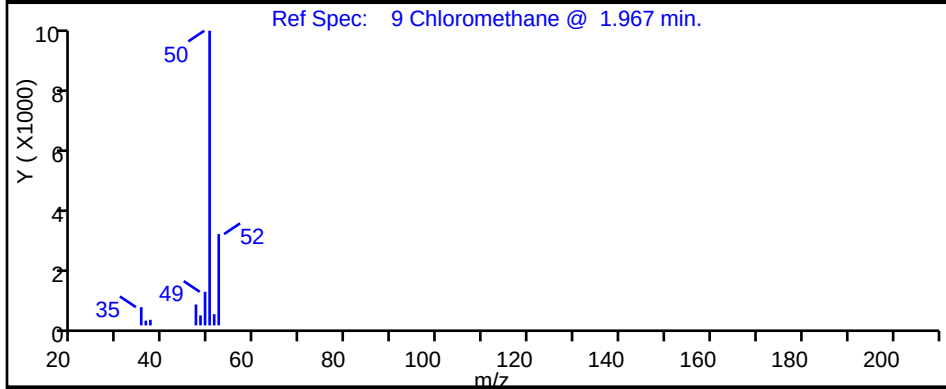
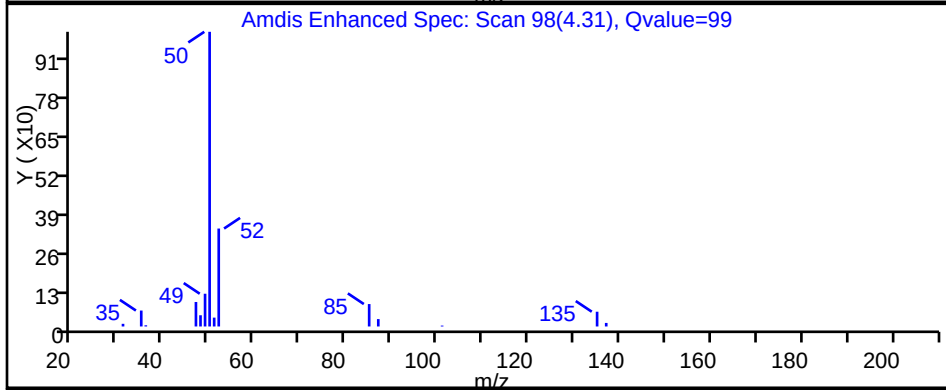
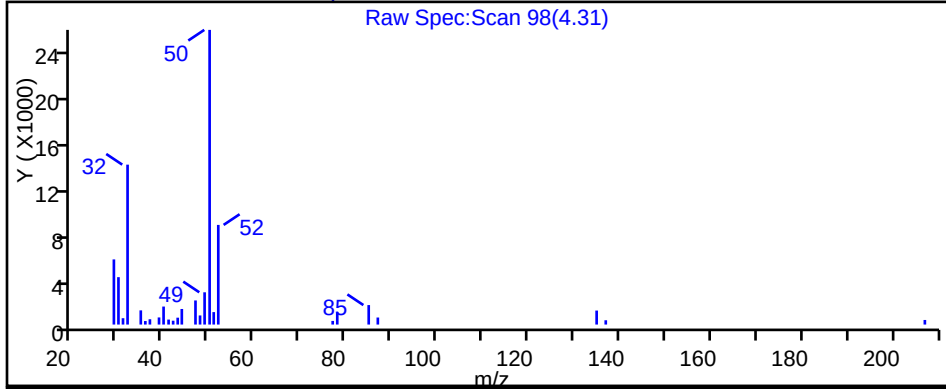
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P107.D

Injection Date: 04-Mar-2015 02:40:30

Instrument ID: MJ

Lims ID: 140-2797-A-3

Lab Sample ID: 140-2797-3

Client ID: H15-BA-2015

Operator ID: 403648

ALS Bottle#: 7

Worklist Smp#: 12

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

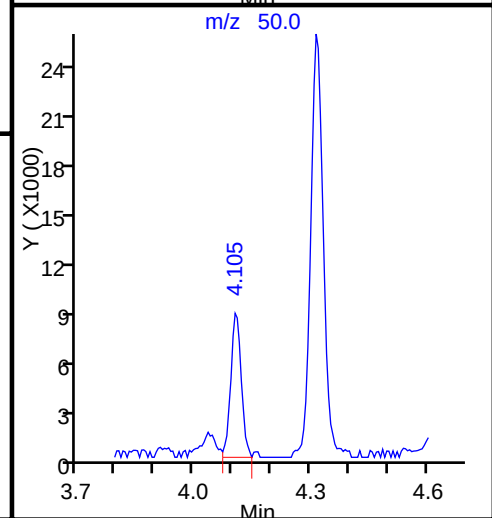
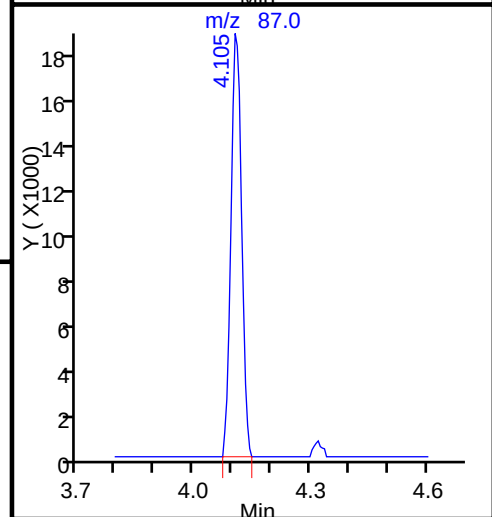
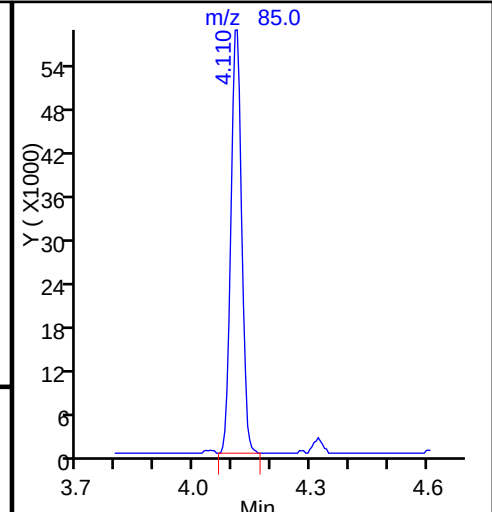
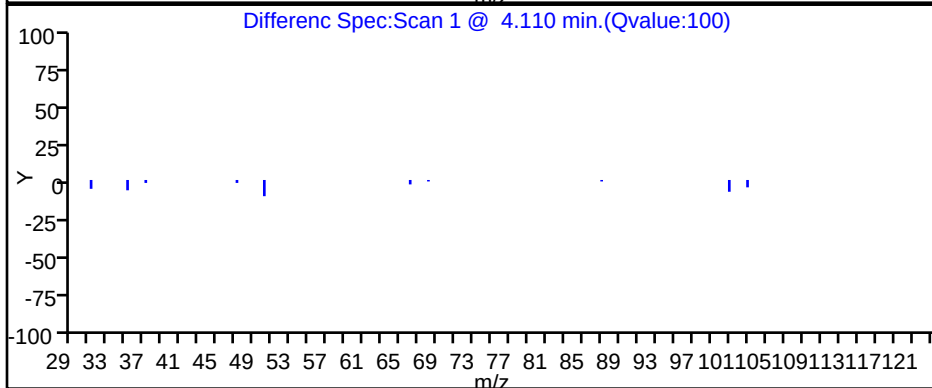
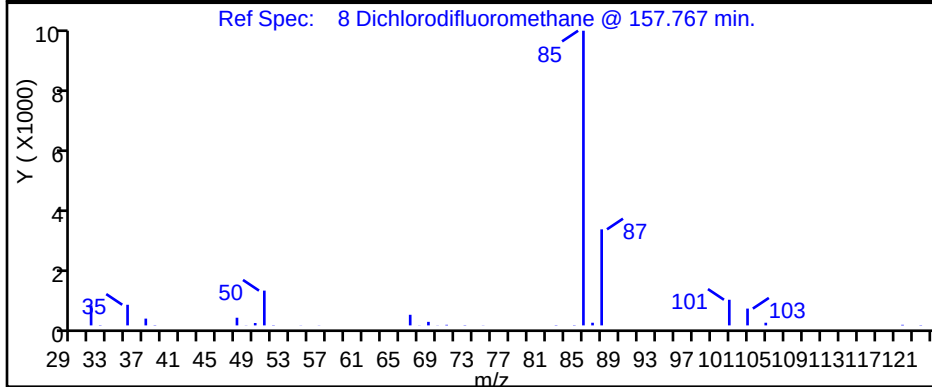
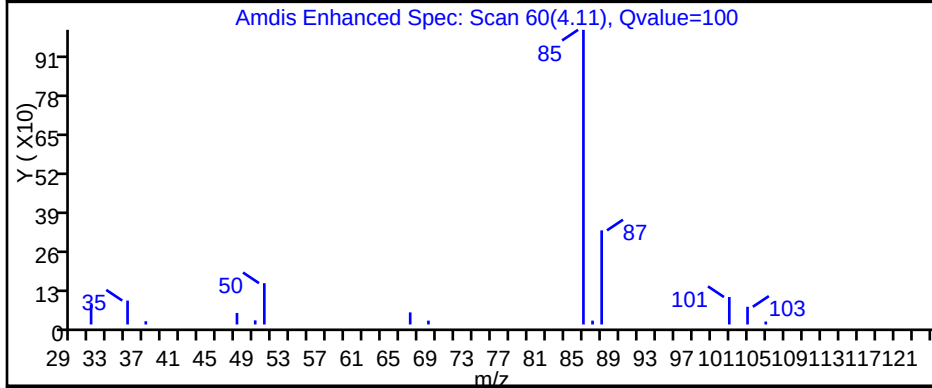
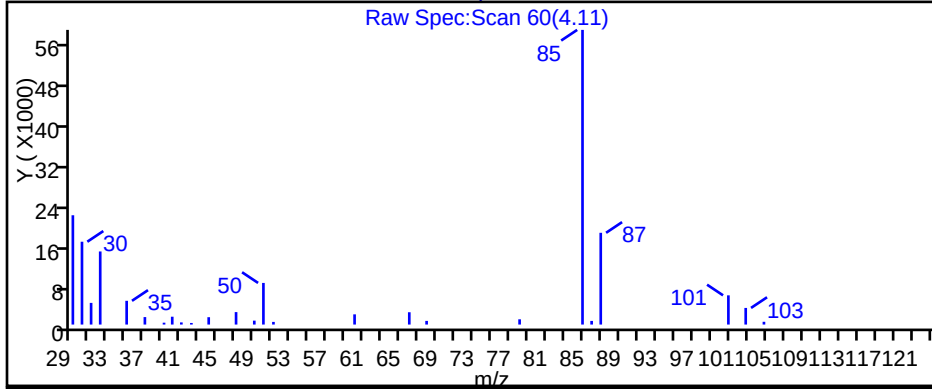
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P107.D

Injection Date: 04-Mar-2015 02:40:30

Instrument ID: MJ

Lims ID: 140-2797-A-3

Lab Sample ID: 140-2797-3

Client ID: H15-BA-2015

Operator ID: 403648

ALS Bottle#: 7

Worklist Smp#: 12

Purge Vol: 500.000 mL

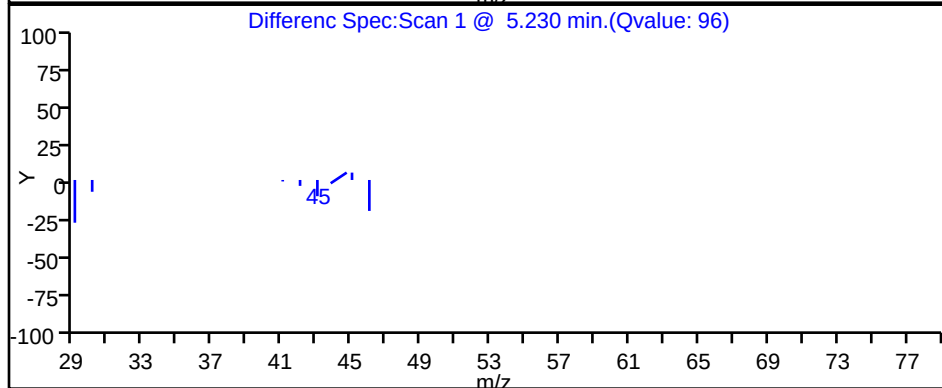
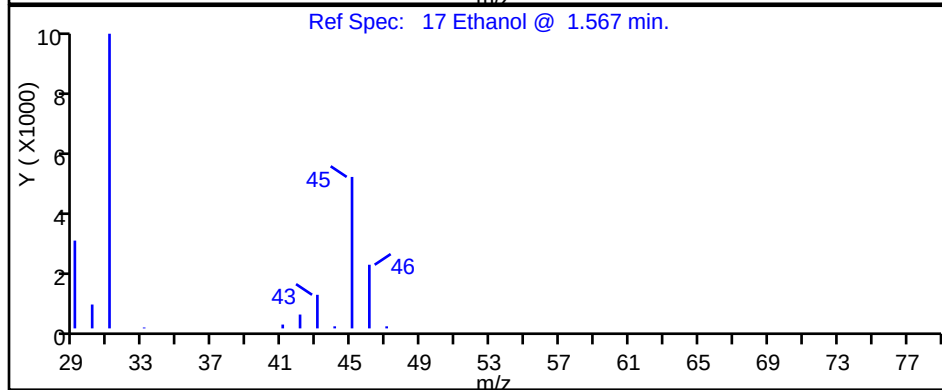
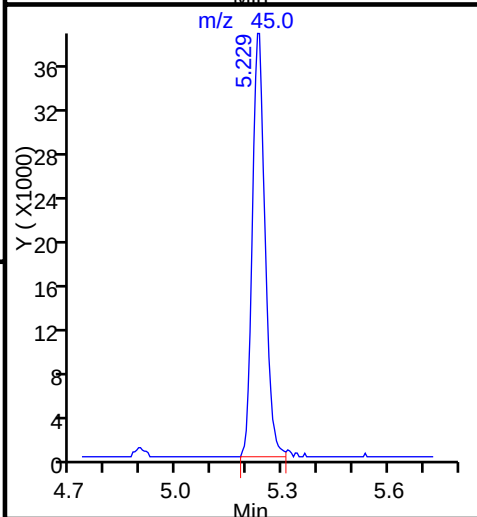
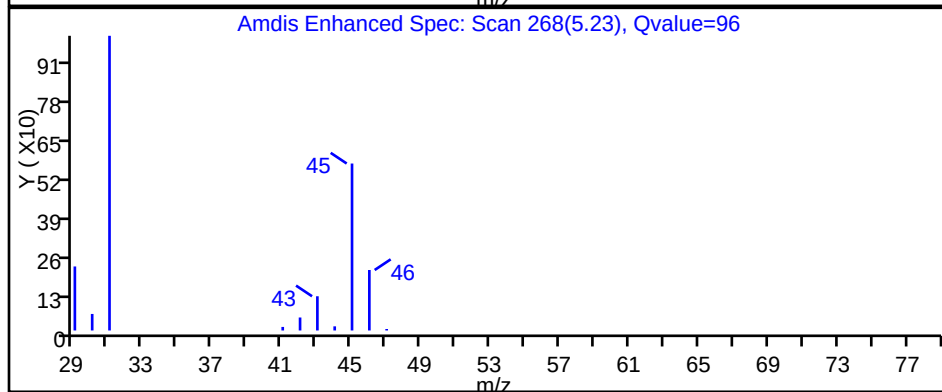
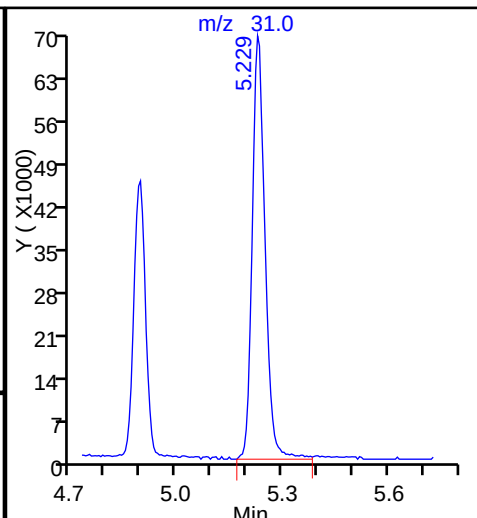
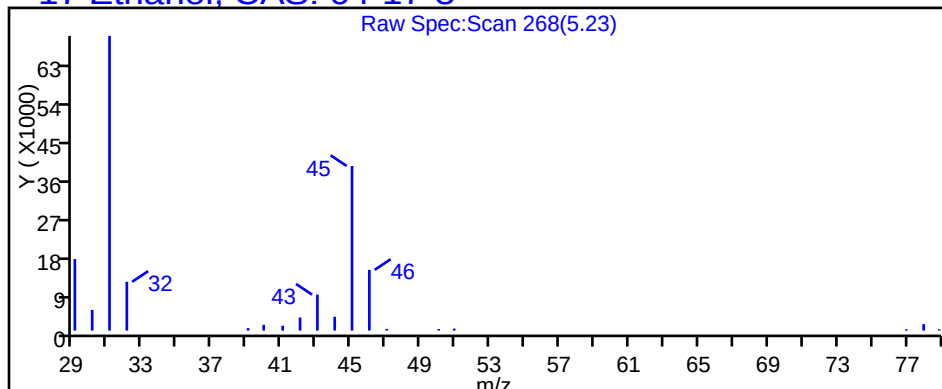
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P107.D

Injection Date: 04-Mar-2015 02:40:30

Instrument ID: MJ

Lims ID: 140-2797-A-3

Lab Sample ID: 140-2797-3

Client ID: H15-BA-2015

Operator ID: 403648

ALS Bottle#: 7

Worklist Smp#: 12

Purge Vol: 500.000 mL

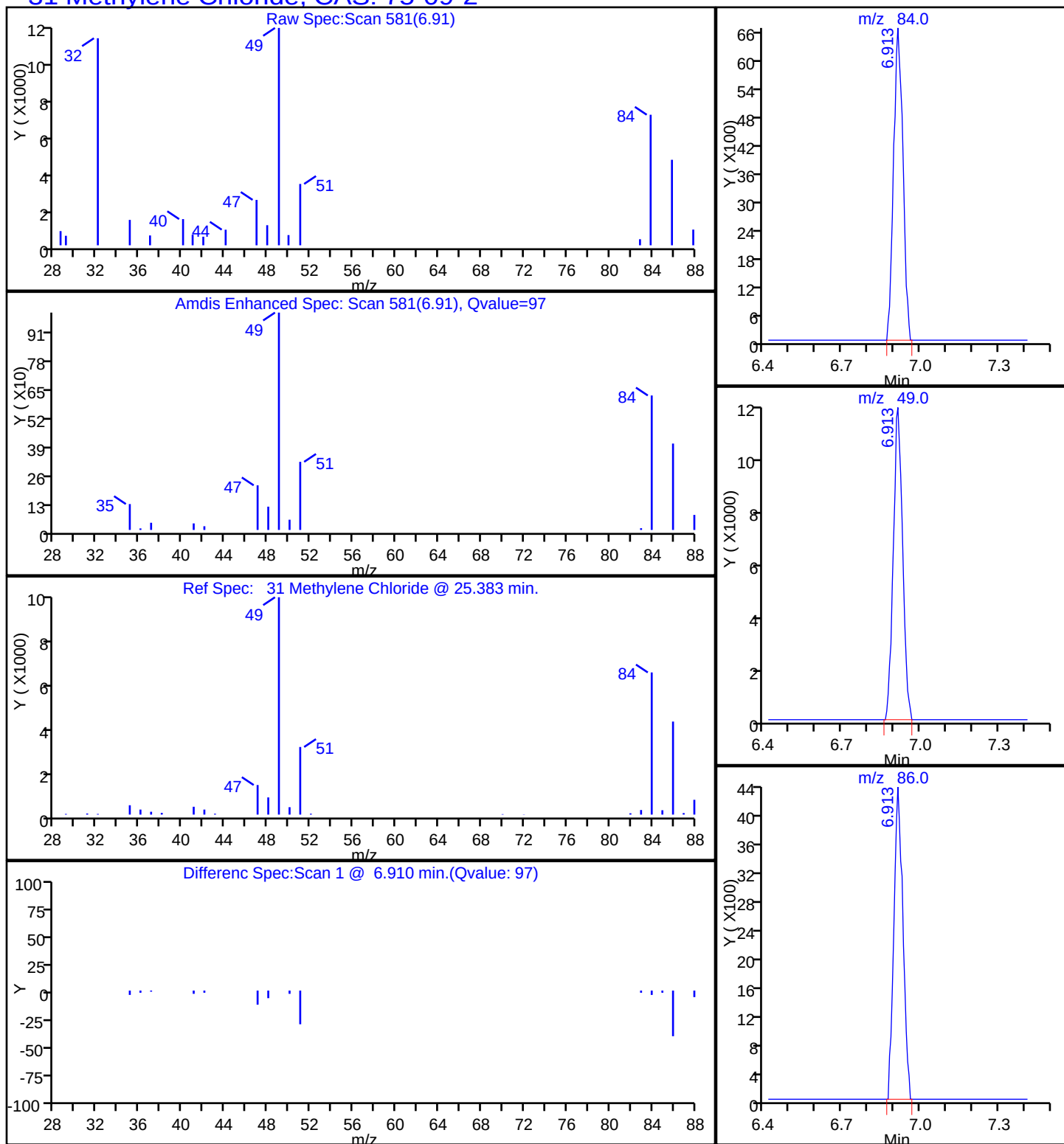
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P107.D

Injection Date: 04-Mar-2015 02:40:30

Instrument ID: MJ

Lims ID: 140-2797-A-3

Lab Sample ID: 140-2797-3

Client ID: H15-BA-2015

Operator ID: 403648

ALS Bottle#: 7

Worklist Smp#: 12

Purge Vol: 500.000 mL

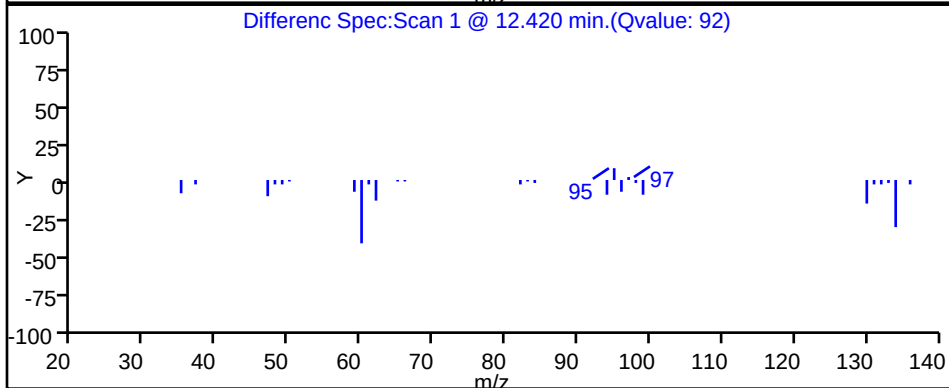
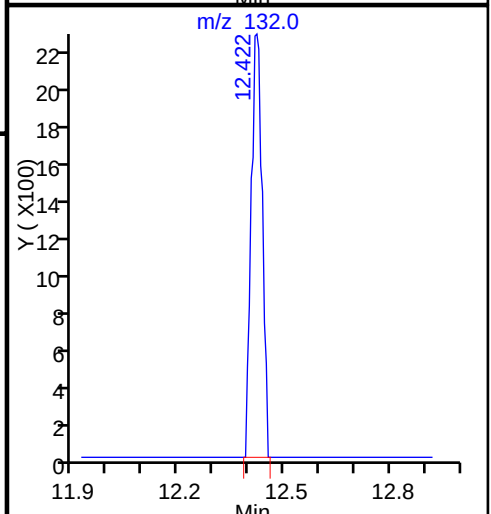
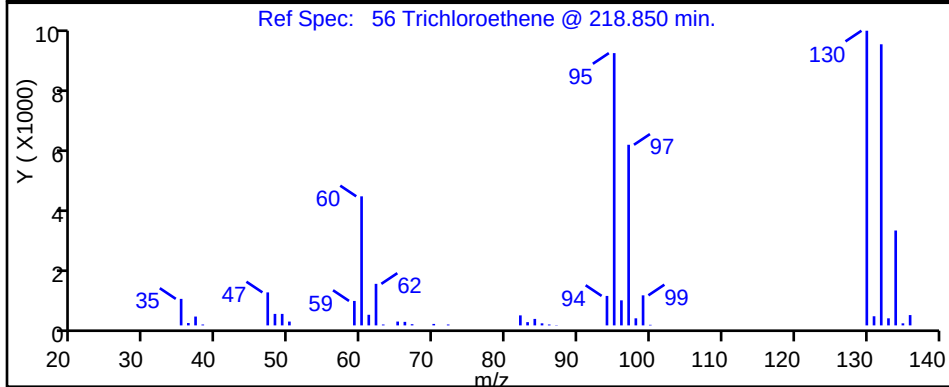
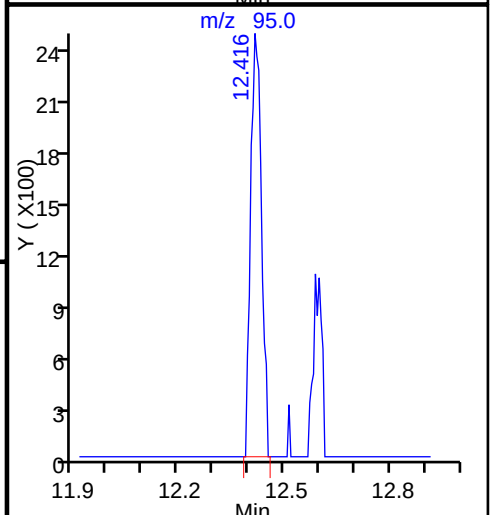
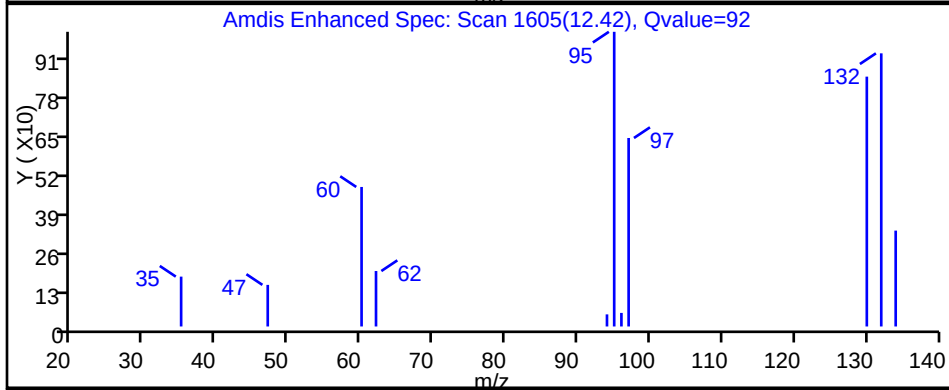
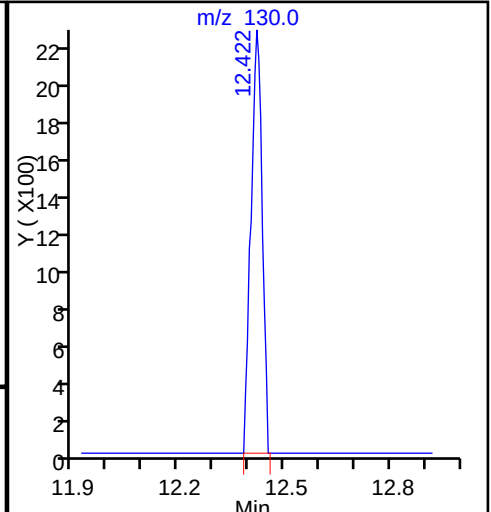
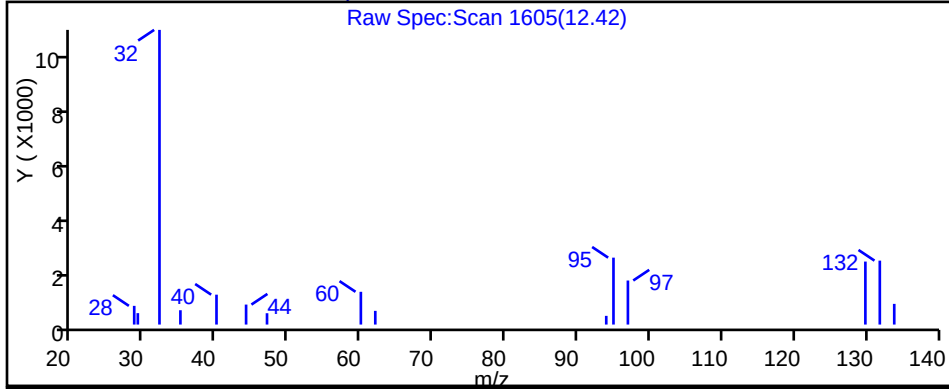
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

56 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P107.D

Injection Date: 04-Mar-2015 02:40:30

Instrument ID: MJ

Lims ID: 140-2797-A-3

Lab Sample ID: 140-2797-3

Client ID: H15-BA-2015

Operator ID: 403648

ALS Bottle#: 7

Worklist Smp#: 12

Purge Vol: 500.000 mL

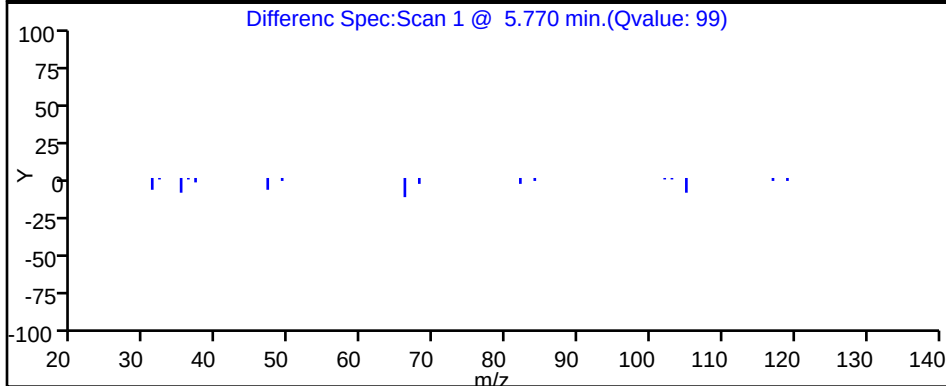
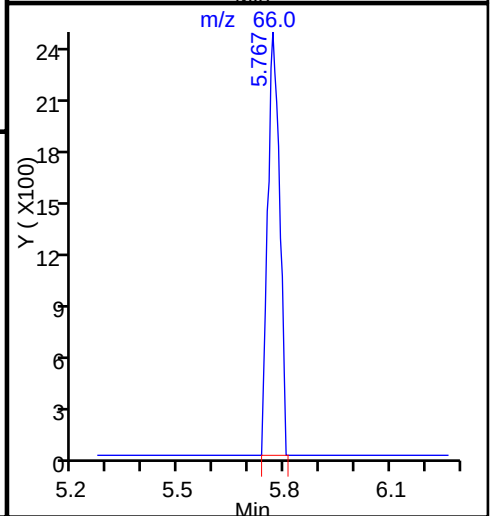
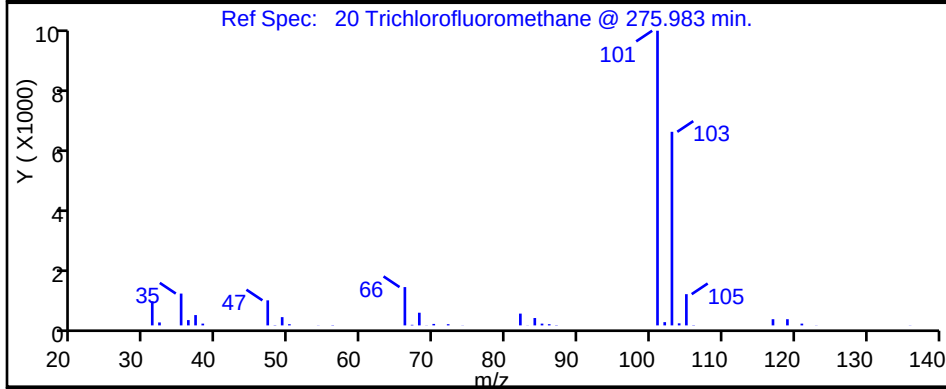
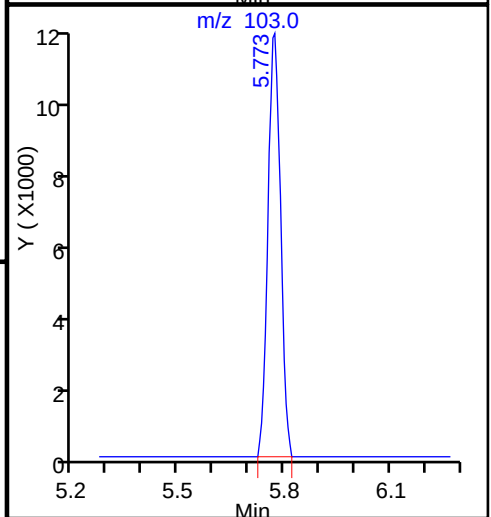
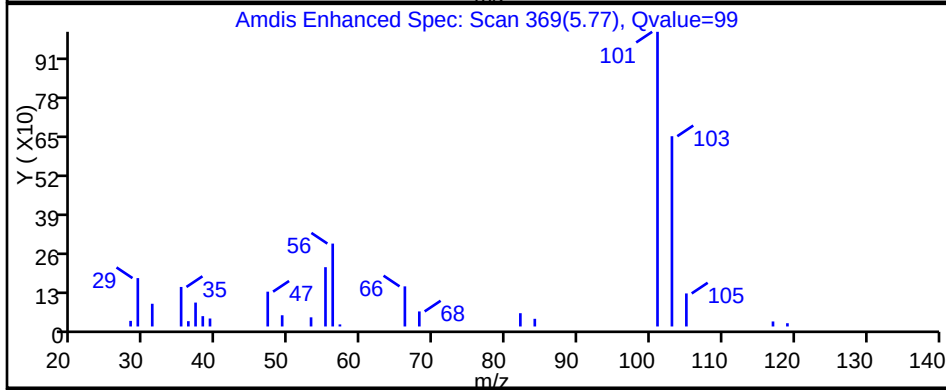
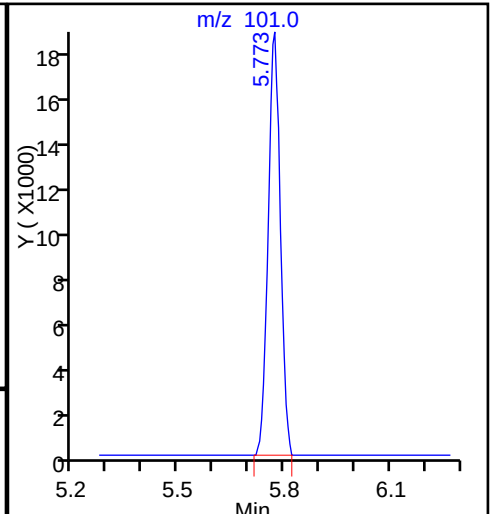
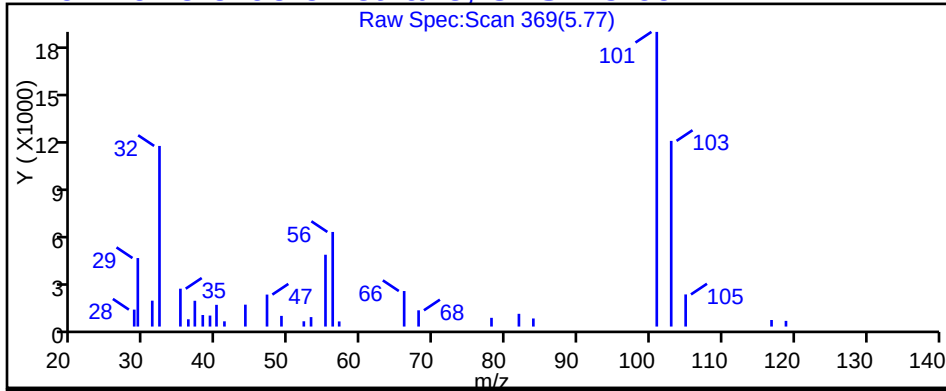
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: H15-SS-2015 Lab Sample ID: 140-2797-4

Matrix: Air Lab File ID: JC03P108.D

Analysis Method: TO 15 LL Date Collected: 02/24/2015 10:26

Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 03:36

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.: 2449 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	1.7		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		0.080	
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	0.16		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	1.0		0.040	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	5.1		0.080	
74-87-3	Chloromethane	50.49	0.23		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H15-SS-2015 Lab Sample ID: 140-2797-4
 Matrix: Air Lab File ID: JC03P108.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 10:26
 Sample wt/vol: 500(mL) Date Analyzed: 03/04/2015 03:36
 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.: 2449 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	0.40		0.080	
64-17-5	Ethanol	46.07	3.1		0.80	
100-41-4	Ethylbenzene	106.17	ND	*	0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	0.20		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	0.27		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.091		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	0.93		0.080	
108-88-3	Toluene	92.14	0.21		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	12		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.17		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: H15-SS-2015 Lab Sample ID: 140-2797-4

Matrix: Air Lab File ID: JC03P108.D

Analysis Method: TO 15 LL Date Collected: 02/24/2015 10:26

Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 03:36

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.: 2449 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	9.5		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		0.32	
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	0.51		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	6.3		0.25	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	25		0.39	
74-87-3	Chloromethane	50.49	0.48		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H15-SS-2015 Lab Sample ID: 140-2797-4
 Matrix: Air Lab File ID: JC03P108.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 10:26
 Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 03:36
 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.: 2449 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	2.0		0.40	
64-17-5	Ethanol	46.07	5.9		1.5	
100-41-4	Ethylbenzene	106.17	ND	*	0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	0.71		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	0.93		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	0.39		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	6.3		0.54	
108-88-3	Toluene	92.14	0.77		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	63		0.21	
75-69-4	Trichlorofluoromethane	137.37	0.94		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P108.D
 Lims ID: 140-2797-A-4 Lab Sample ID: 140-2797-4
 Client ID: H15-SS-2015
 Sample Type: Client
 Inject. Date: 04-Mar-2015 03:36:30 ALS Bottle#: 8 Worklist Smp#: 13
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2797-a-4
 Misc. Info.: J030315,TO15,,140-0001414-013
 Operator ID: 403648 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150228-1414.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 11:02:31 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK052

First Level Reviewer: tajh

Date: 04-Mar-2015 08:39:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.587	9.587	0.000	95	260682	4.00	
* 2 1,4-Difluorobenzene	114	11.728	11.728	0.000	96	1181391	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.365	16.370	-0.005	90	989460	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.979	17.979	0.000	88	611981	3.78	
8 Dichlorodifluoromethane	85	4.110	4.105	0.005	100	117854	0.4016	
9 Chloromethane	52	4.320	4.315	0.005	100	9724	0.2330	
17 Ethanol	31	5.246	5.240	0.006	97	112791	3.11	
20 Trichlorofluoromethane	101	5.784	5.778	0.006	100	43123	0.1678	
28 2-Methyl-2-propanol	59	6.660	6.633	0.027	89	5555	0.0361	
30 1,1,2-Trichloro-1,2,2-trif	101	6.736	6.730	0.006	92	10910	0.0631	
31 Methylene Chloride	84	6.924	6.924	0.000	97	22368	0.2676	
39 2-Butanone (MEK)	72	8.807	8.785	0.022	82	6891	0.2220	
40 Hexane	56	8.807	8.807	0.000	78	17466	0.2010	
43 Chloroform	83	9.592	9.598	-0.006	97	846950	5.15	
45 1,1,1-Trichloroethane	97	10.641	10.636	0.005	96	299485	1.74	
49 Cyclohexane	69	11.217	11.211	0.006	57	3873	0.0859	
48 Benzene	78	11.222	11.217	0.005	98	34731	0.1591	
50 Carbon tetrachloride	117	11.238	11.238	0.000	97	161060	1.00	
53 Isooctane	57	11.927	11.932	-0.005	92	10735	0.0247	
56 Trichloroethene	130	12.427	12.427	0.000	95	1106077	11.6	
62 4-Methyl-2-pentanone (MIBK	43	13.557	13.546	0.011	98	30112	0.1677	
65 Toluene	91	14.423	14.423	0.000	92	37070	0.2053	
73 Tetrachloroethene	129	15.547	15.547	0.000	95	73169	0.9310	
76 Ethylbenzene	91	16.693	16.693	0.000	95	8170	0.0387	
78 m-Xylene & p-Xylene	91	16.844	16.849	-0.005	97	15460	0.0909	
82 o-Xylene	91	17.376	17.371	0.005	95	7084	0.0382	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P108.D

Injection Date: 04-Mar-2015 03:36:30

Instrument ID: MJ

Operator ID: 403648

Lims ID: 140-2797-A-4

Lab Sample ID: 140-2797-4

Worklist Smp#: 13

Client ID: H15-SS-2015

Purge Vol: 500.000 mL

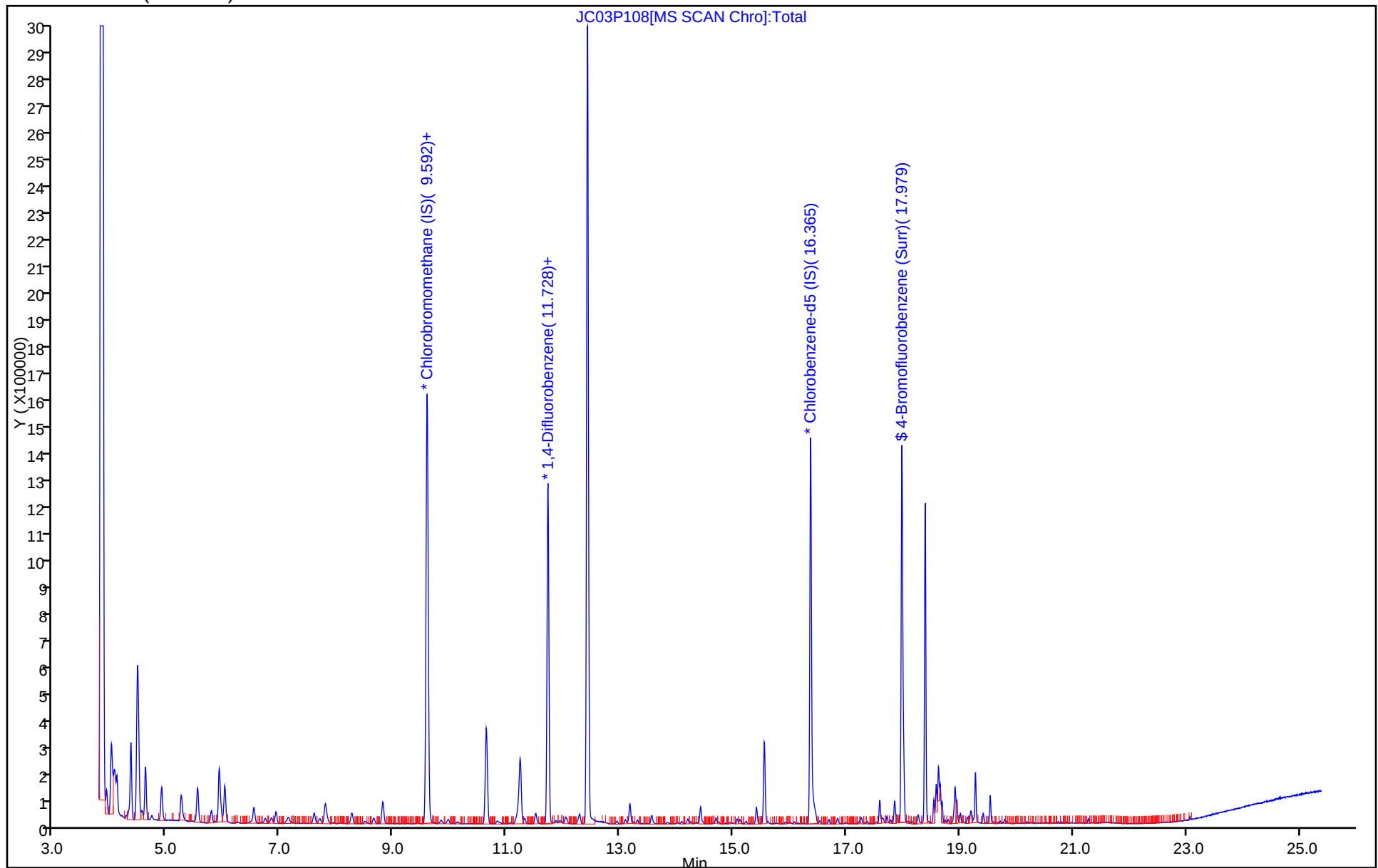
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P108.D

Injection Date: 04-Mar-2015 03:36:30

Instrument ID: MJ

Lims ID: 140-2797-A-4

Lab Sample ID: 140-2797-4

Client ID: H15-SS-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 13

Purge Vol: 500.000 mL

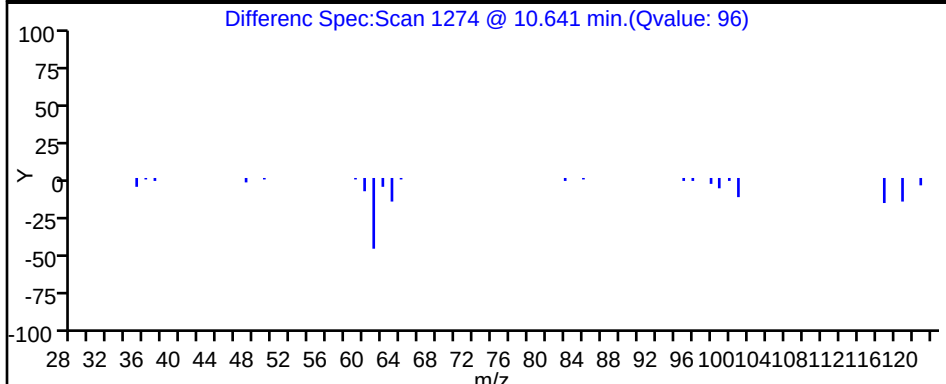
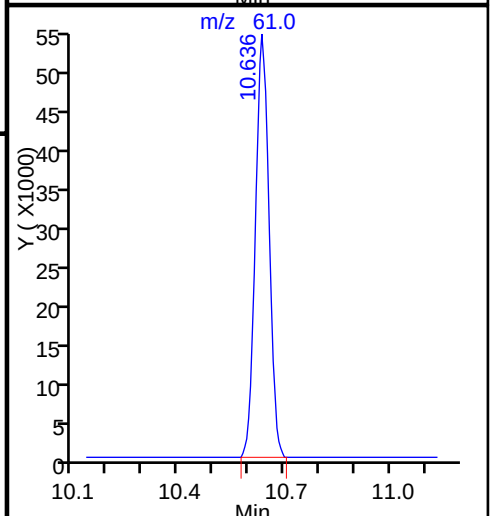
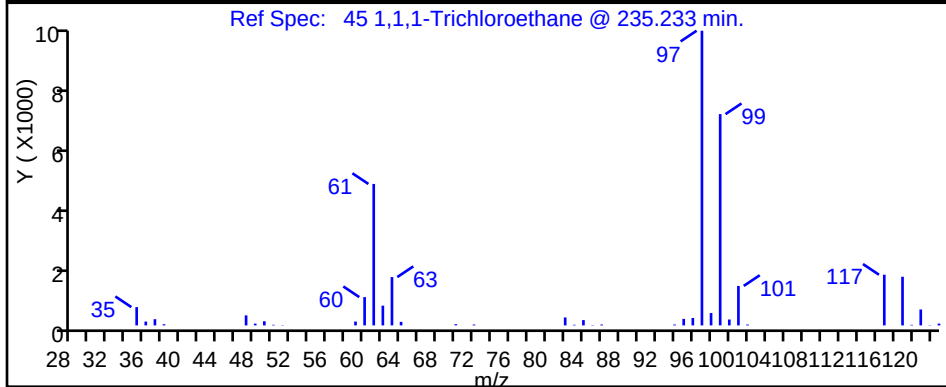
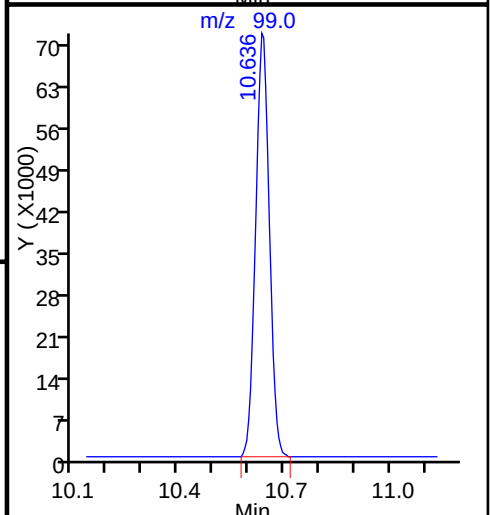
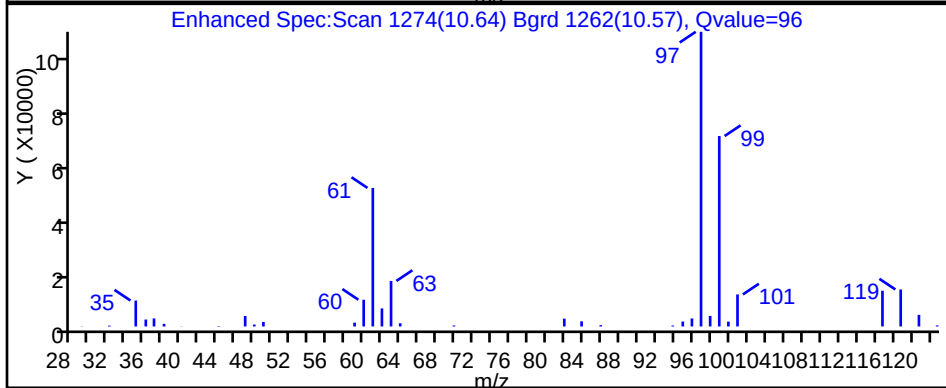
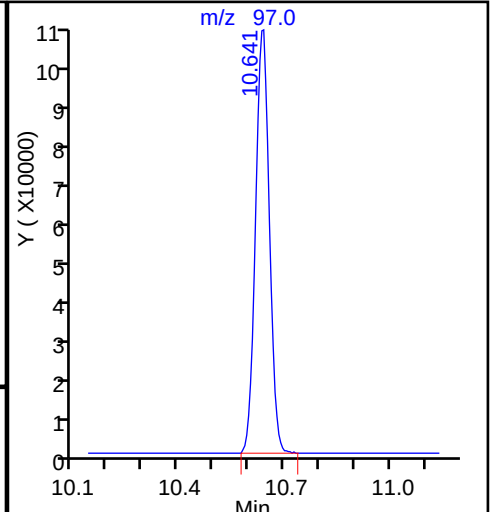
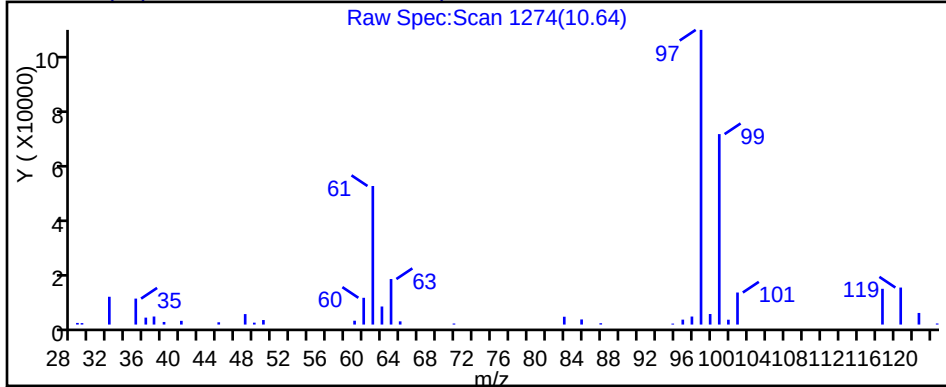
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

45 1,1,1-Trichloroethane, CAS: 71-55-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P108.D

Injection Date: 04-Mar-2015 03:36:30

Instrument ID: MJ

Lims ID: 140-2797-A-4

Lab Sample ID: 140-2797-4

Client ID: H15-SS-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 13

Purge Vol: 500.000 mL

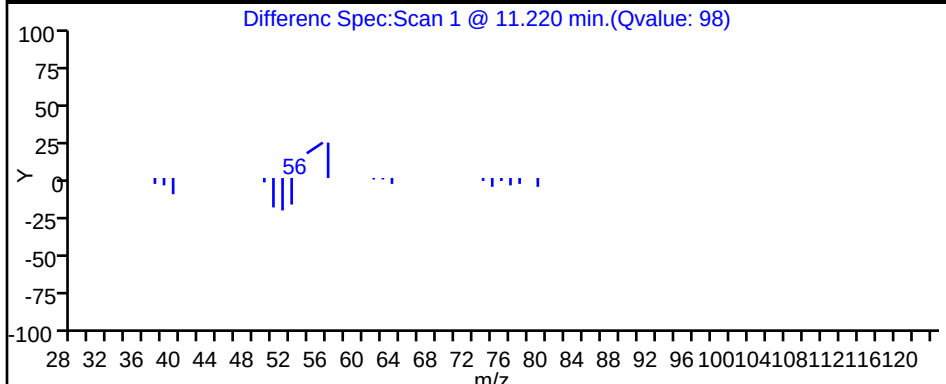
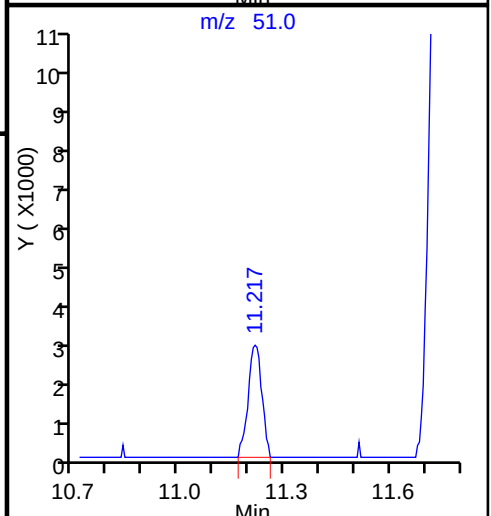
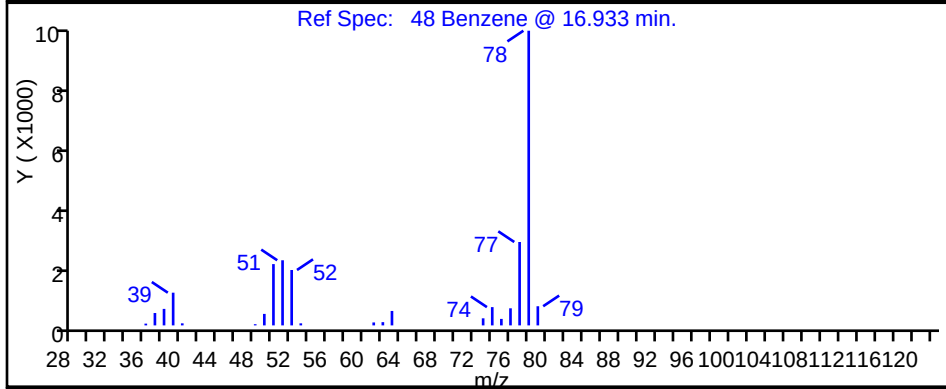
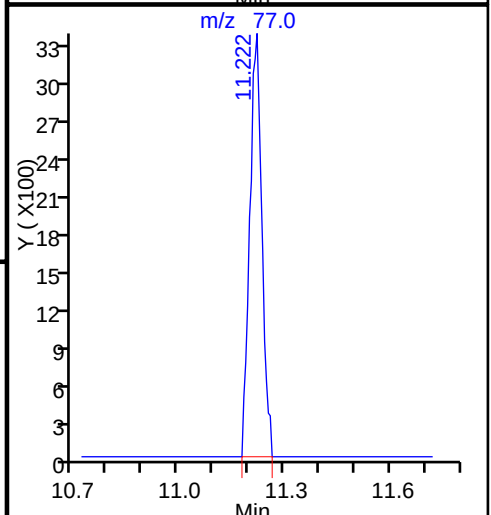
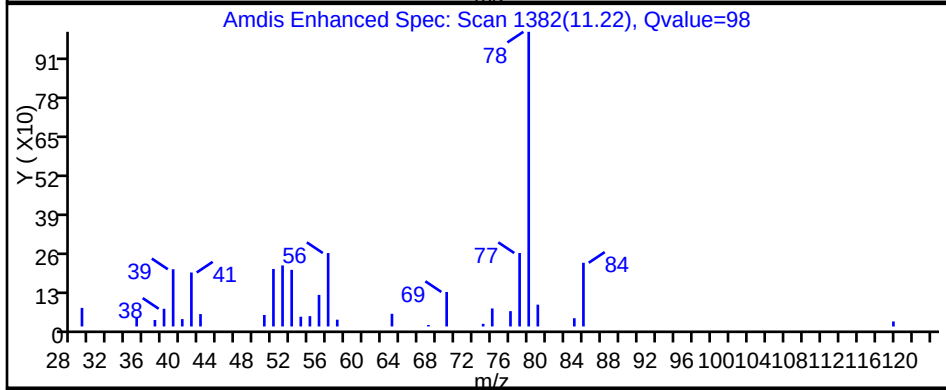
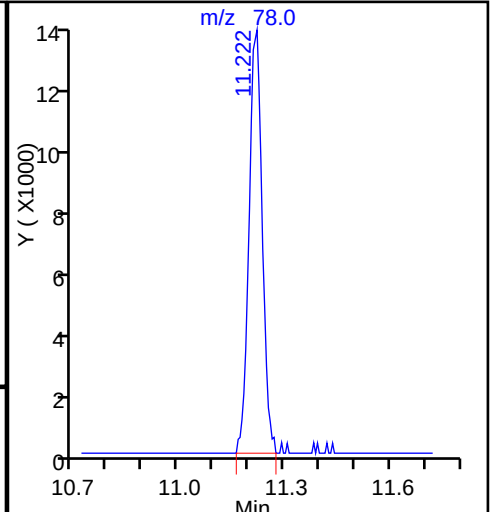
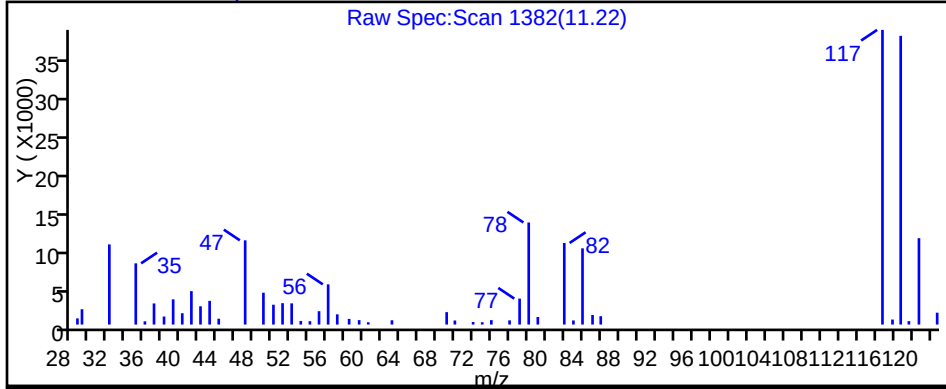
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P108.D

Injection Date: 04-Mar-2015 03:36:30

Instrument ID: MJ

Lims ID: 140-2797-A-4

Lab Sample ID: 140-2797-4

Client ID: H15-SS-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 13

Purge Vol: 500.000 mL

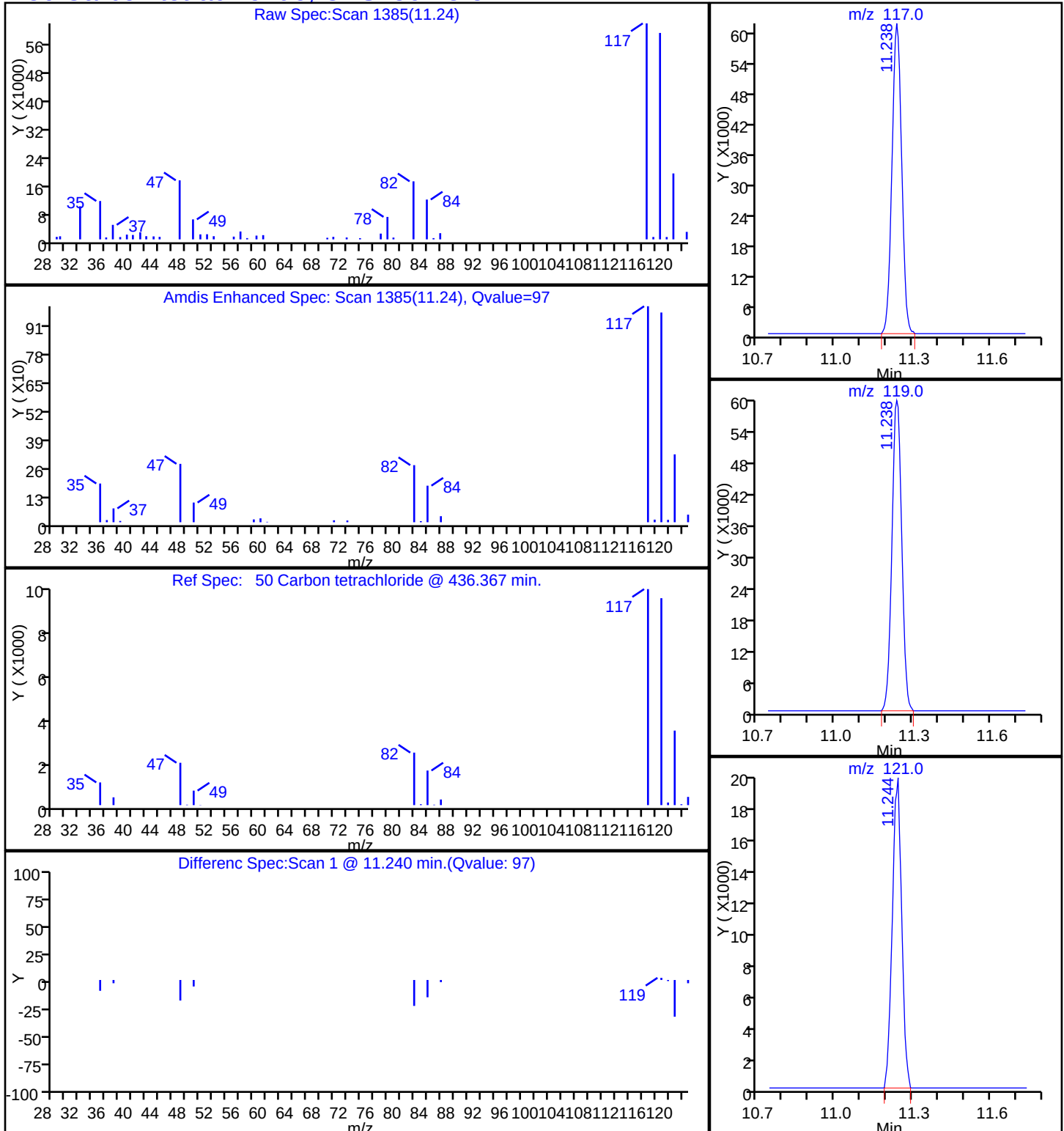
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P108.D

Injection Date: 04-Mar-2015 03:36:30

Instrument ID: MJ

Lims ID: 140-2797-A-4

Lab Sample ID: 140-2797-4

Client ID: H15-SS-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 13

Purge Vol: 500.000 mL

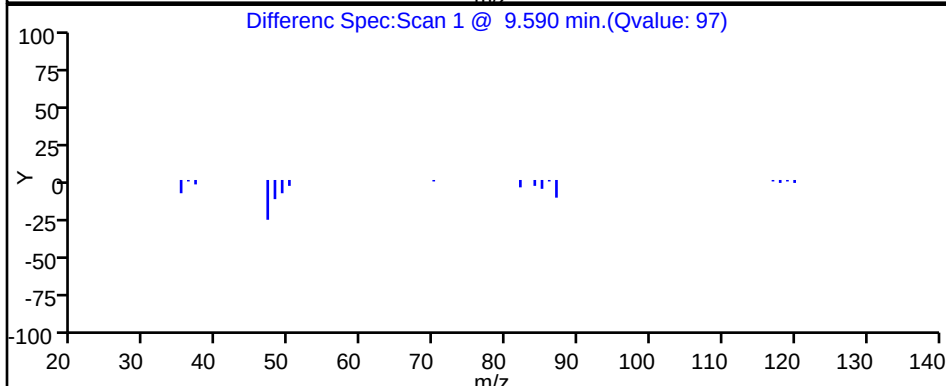
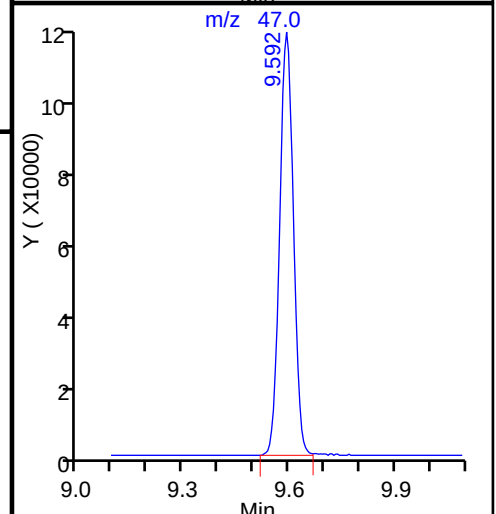
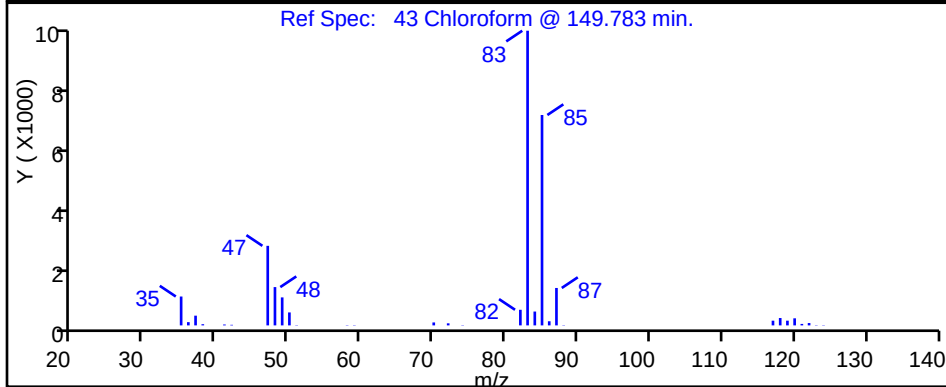
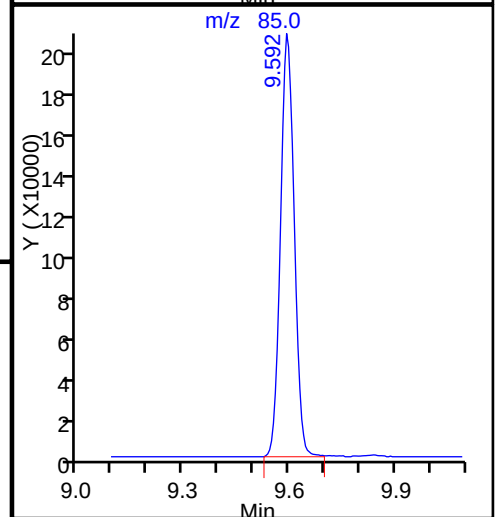
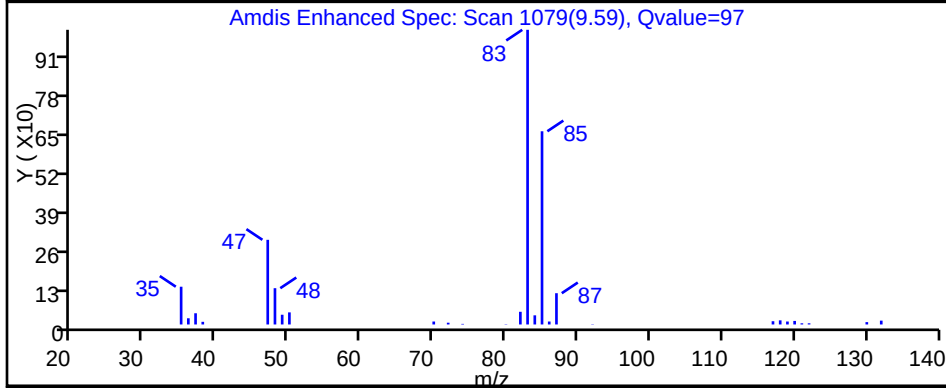
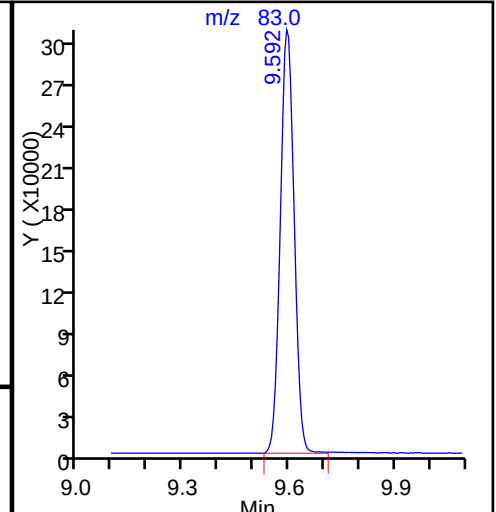
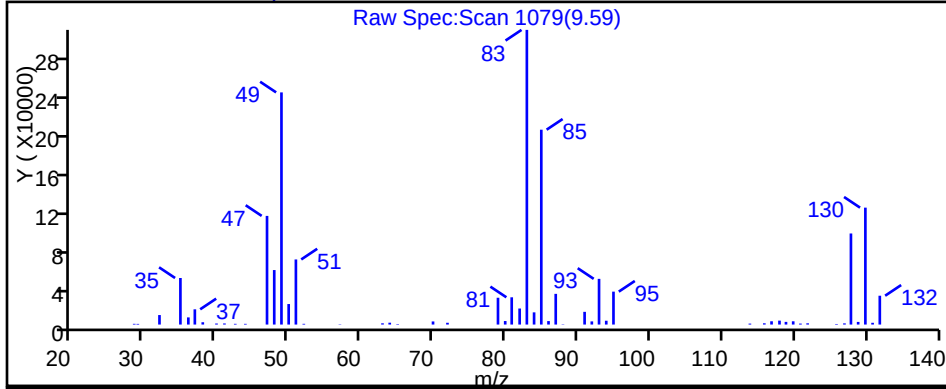
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

43 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P108.D

Injection Date: 04-Mar-2015 03:36:30

Instrument ID: MJ

Lims ID: 140-2797-A-4

Lab Sample ID: 140-2797-4

Client ID: H15-SS-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 13

Purge Vol: 500.000 mL

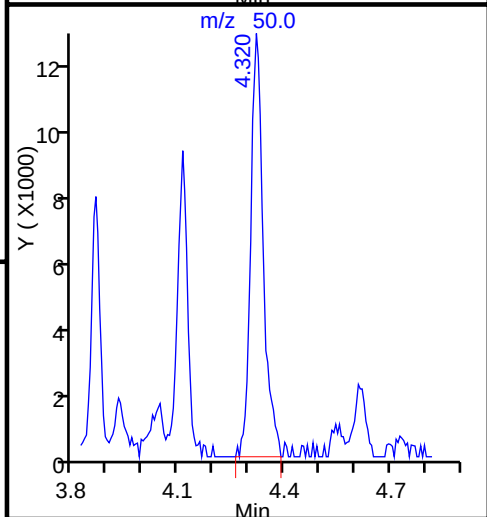
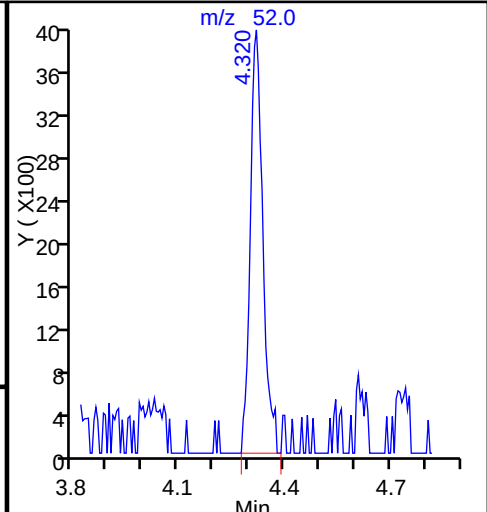
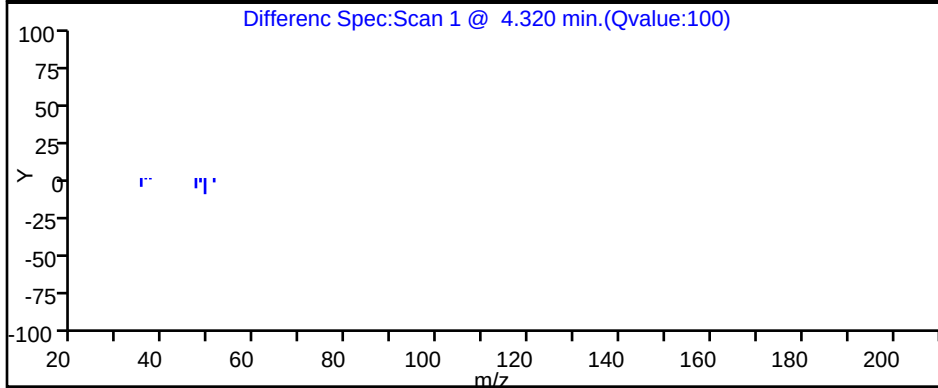
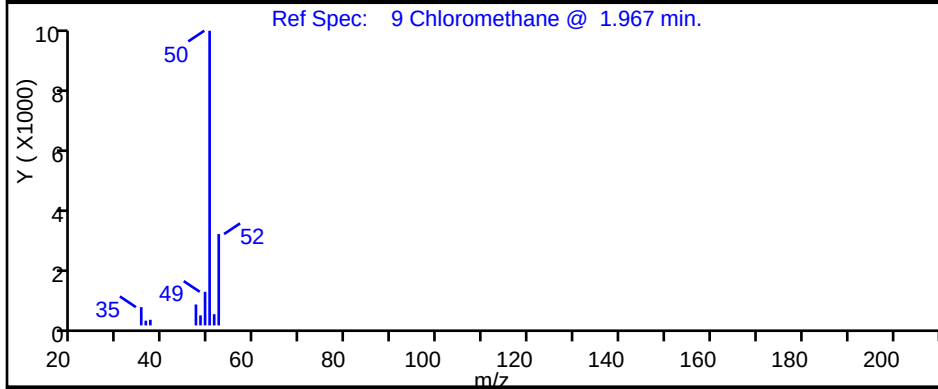
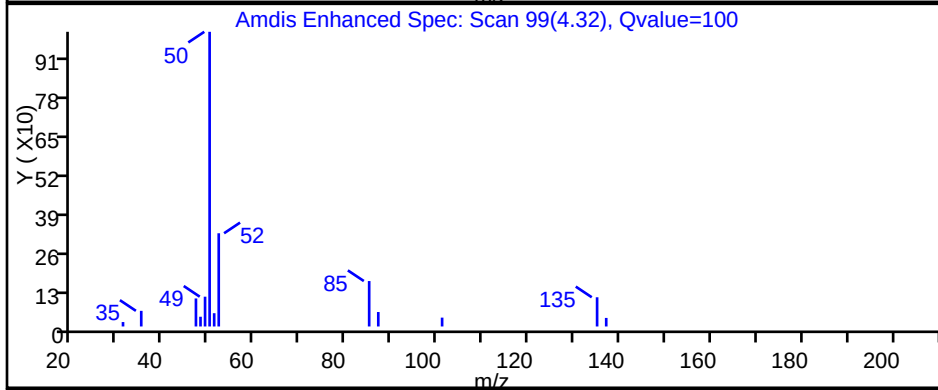
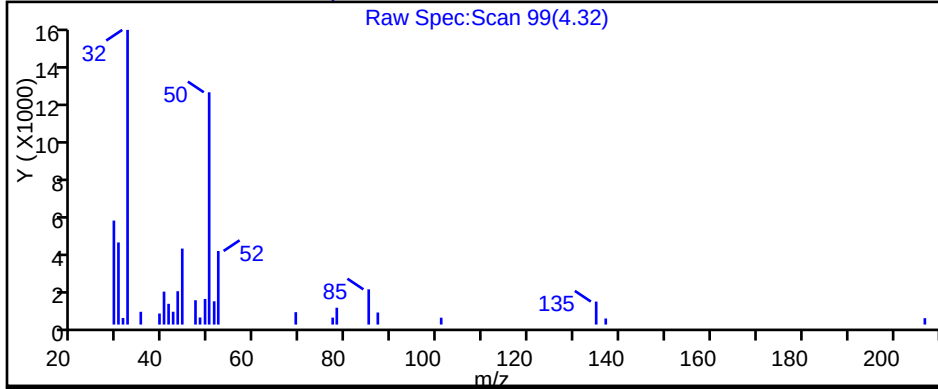
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P108.D

Injection Date: 04-Mar-2015 03:36:30

Instrument ID: MJ

Lims ID: 140-2797-A-4

Lab Sample ID: 140-2797-4

Client ID: H15-SS-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 13

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

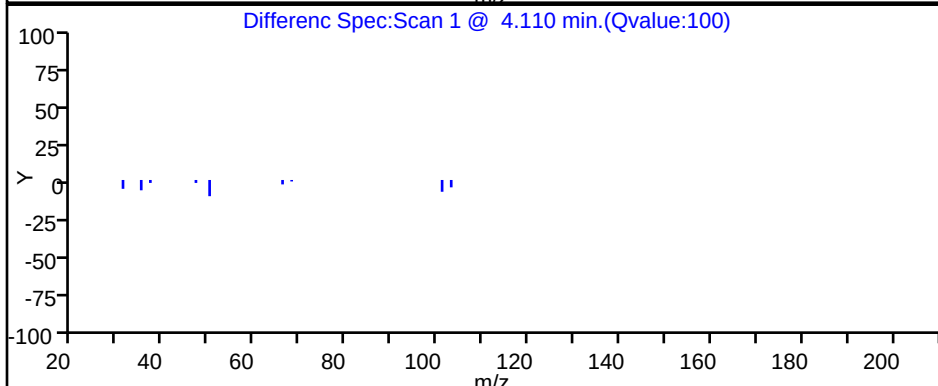
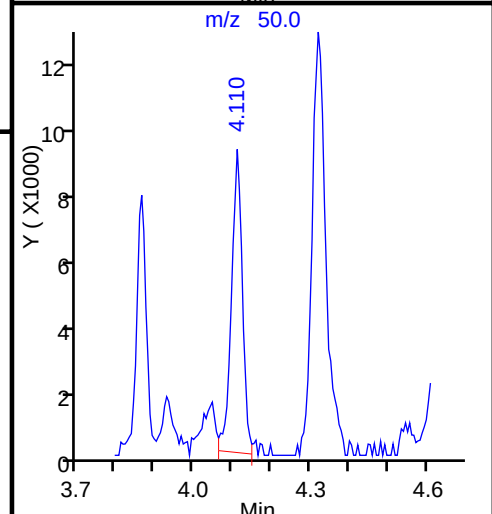
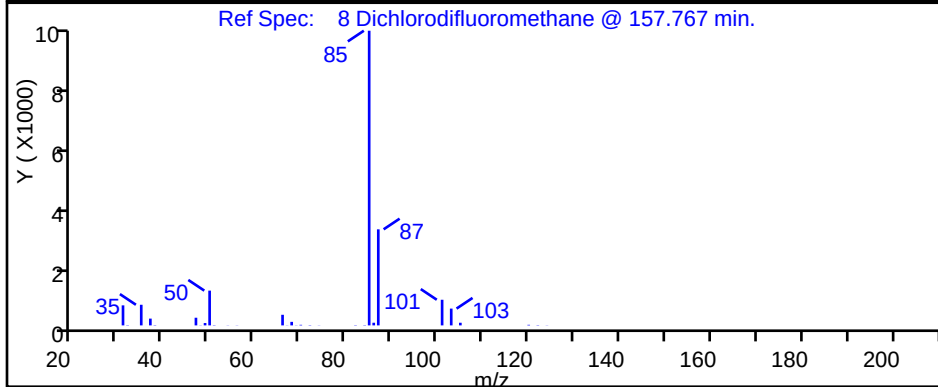
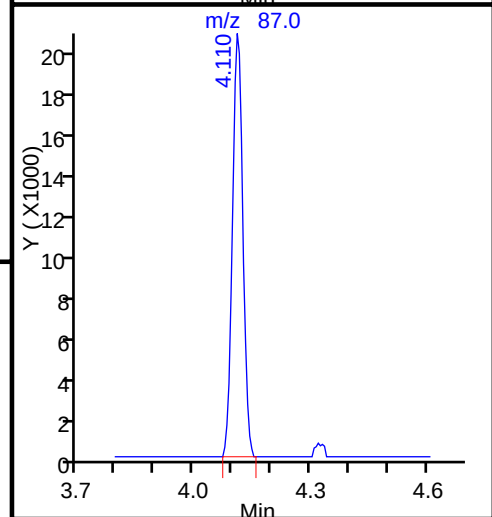
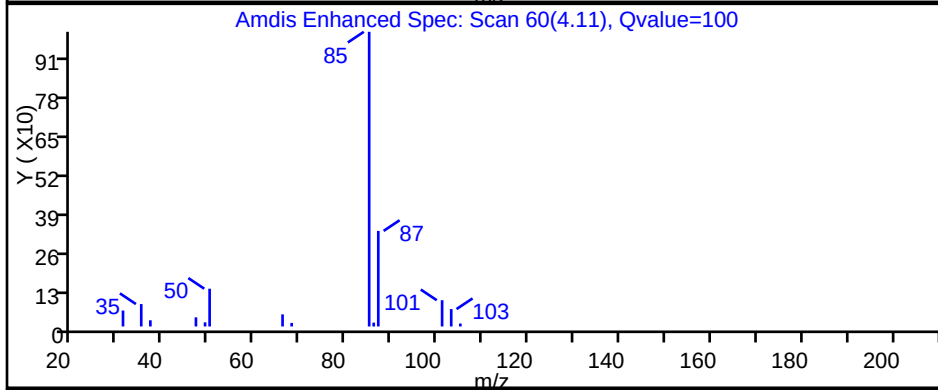
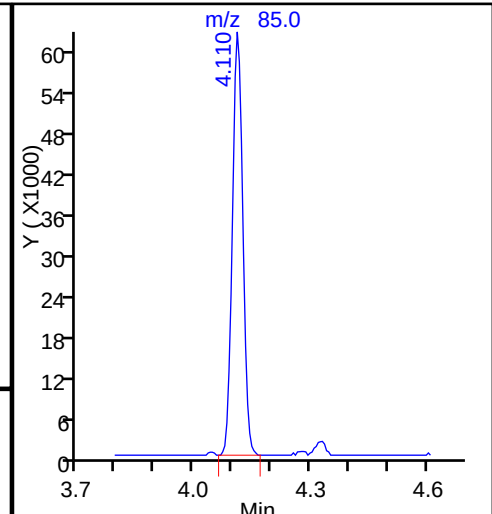
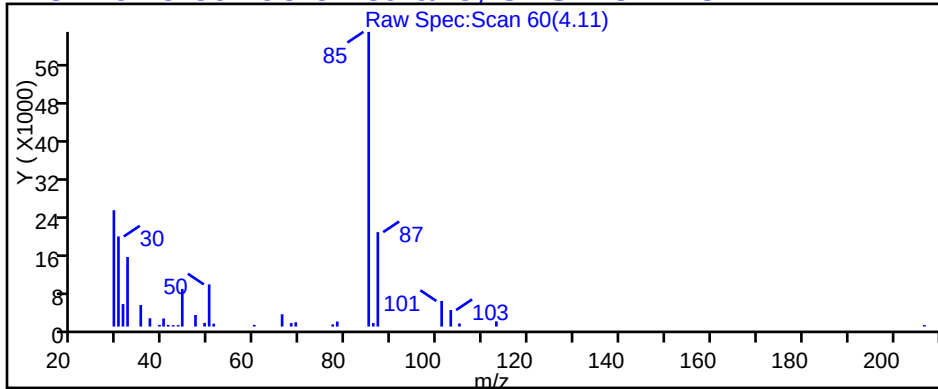
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P108.D

Injection Date: 04-Mar-2015 03:36:30

Instrument ID: MJ

Lims ID: 140-2797-A-4

Lab Sample ID: 140-2797-4

Client ID: H15-SS-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 13

Purge Vol: 500.000 mL

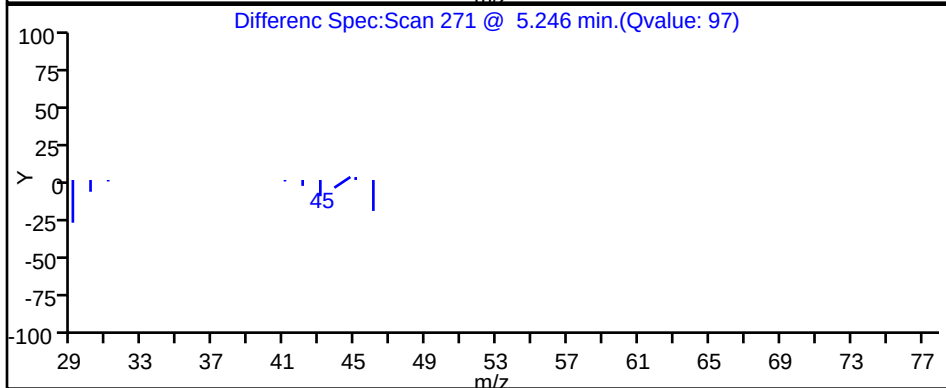
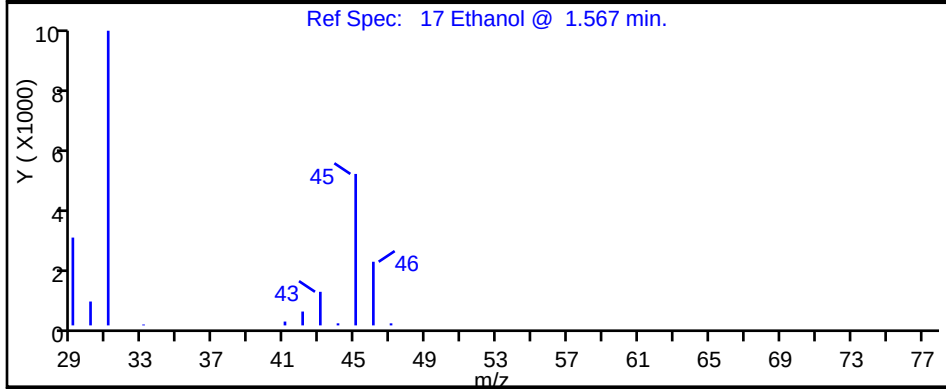
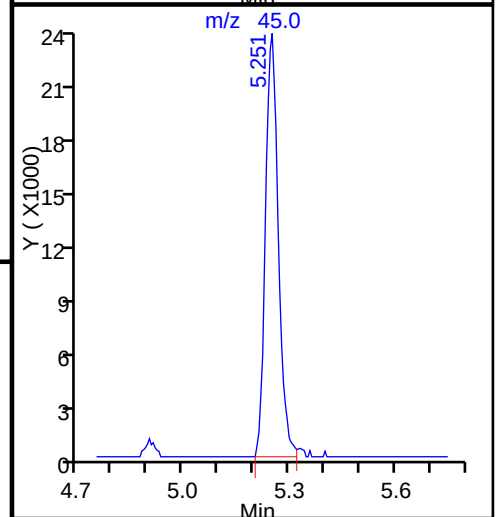
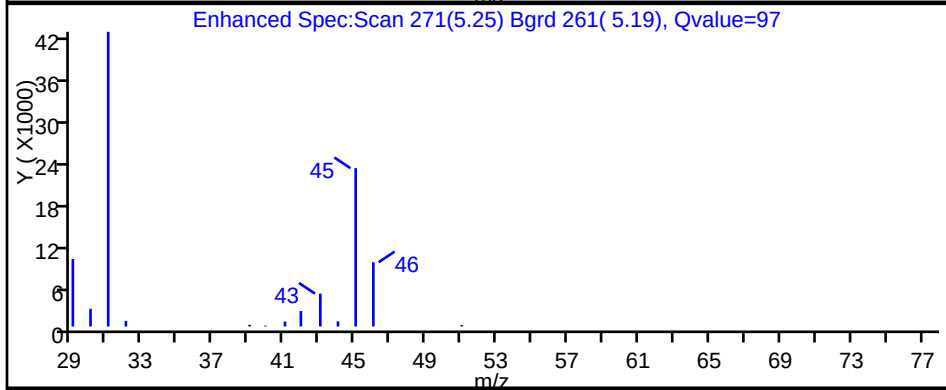
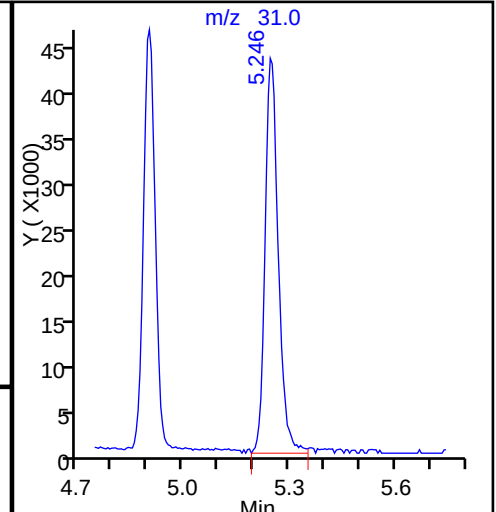
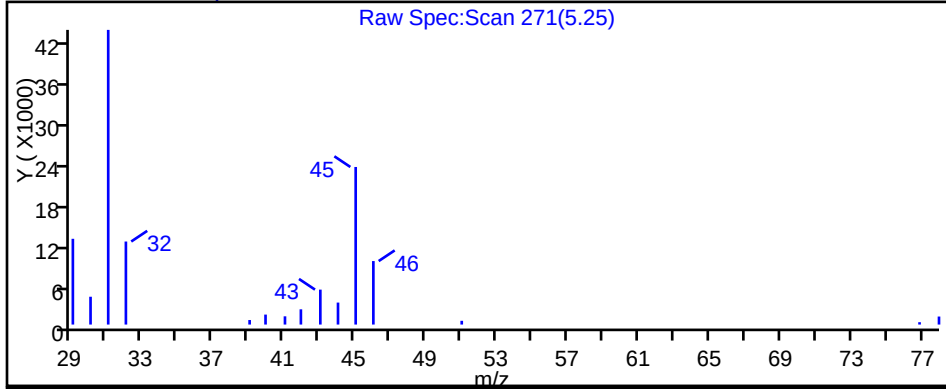
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P108.D

Injection Date: 04-Mar-2015 03:36:30

Instrument ID: MJ

Lims ID: 140-2797-A-4

Lab Sample ID: 140-2797-4

Client ID: H15-SS-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 13

Purge Vol: 500.000 mL

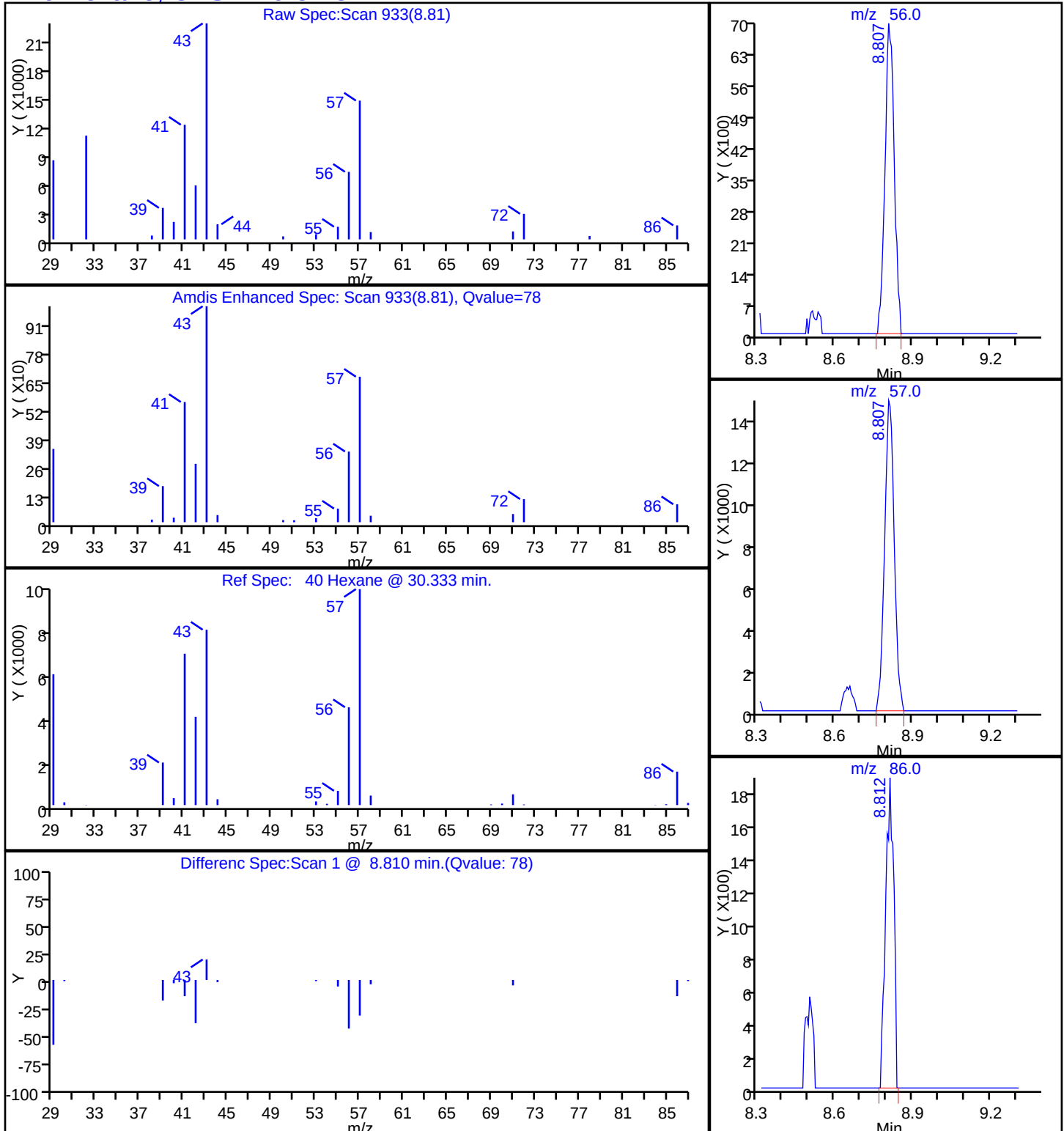
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

40 Hexane, CAS: 110-54-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P108.D

Injection Date: 04-Mar-2015 03:36:30

Instrument ID: MJ

Lims ID: 140-2797-A-4

Lab Sample ID: 140-2797-4

Client ID: H15-SS-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 13

Purge Vol: 500.000 mL

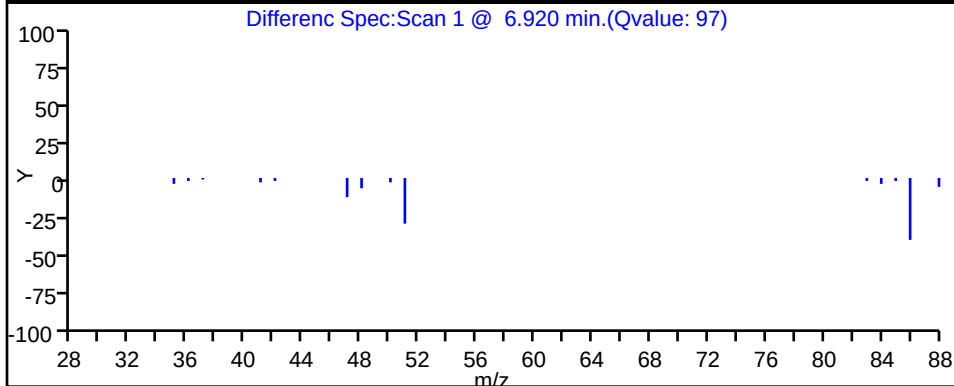
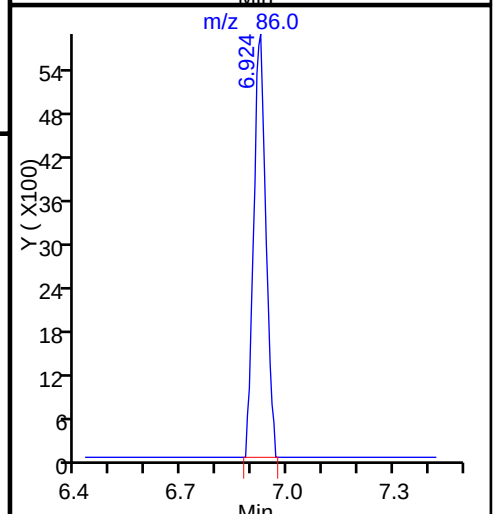
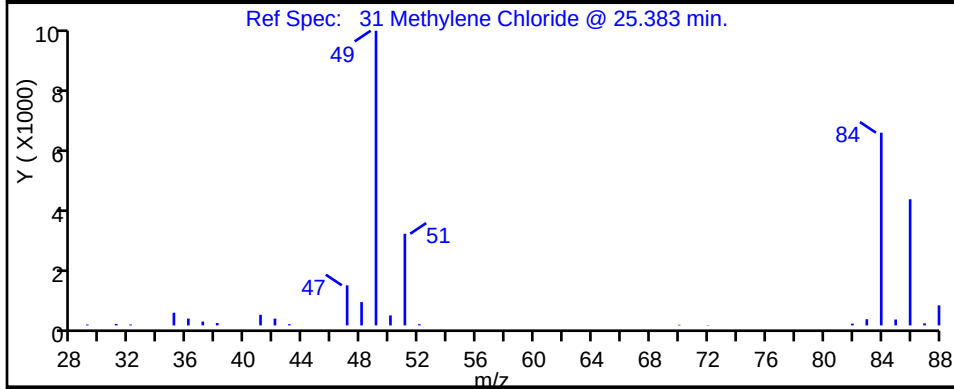
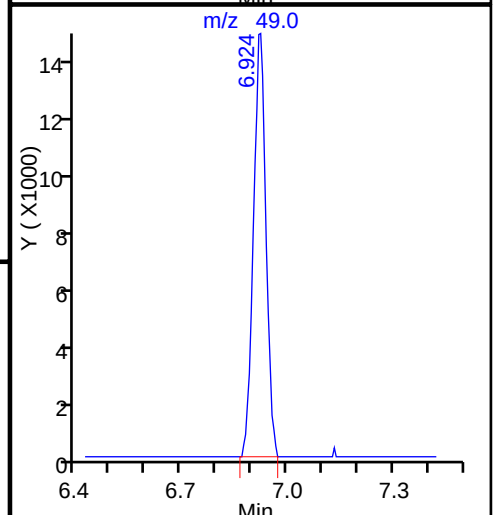
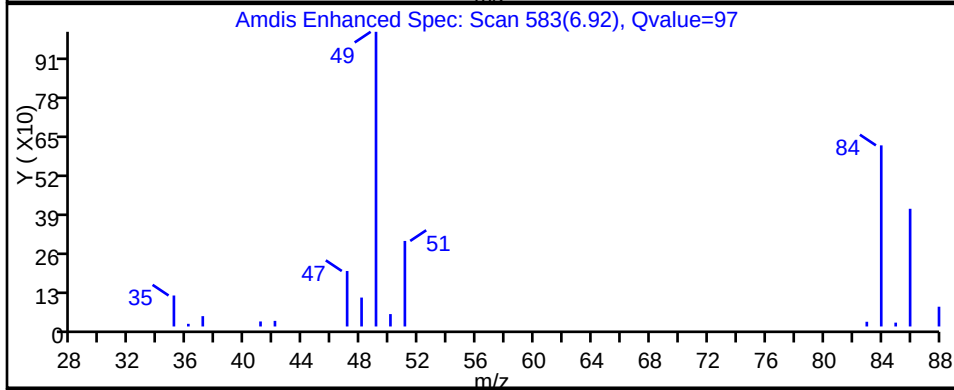
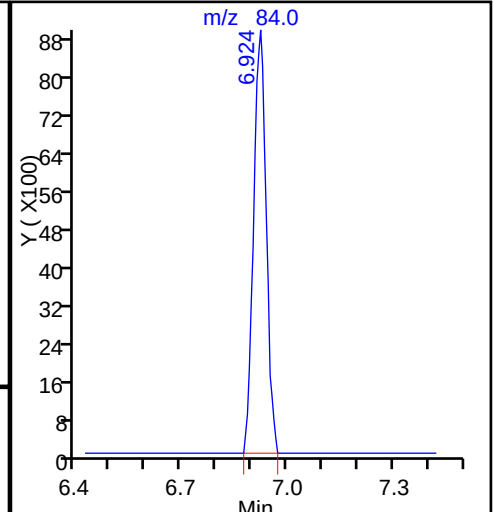
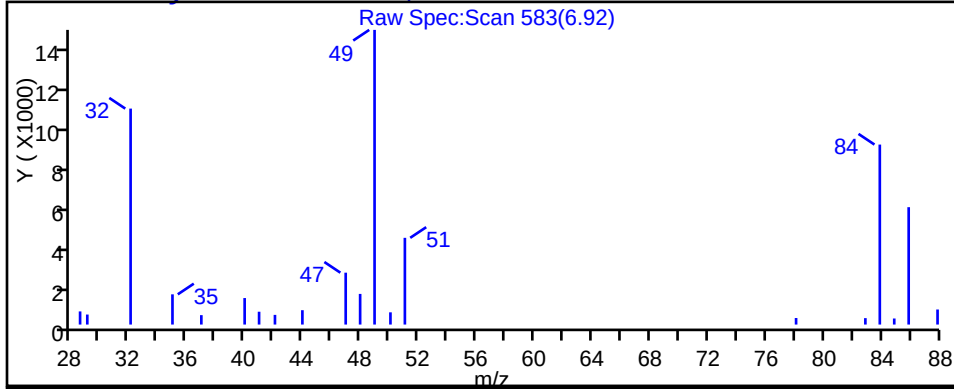
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P108.D

Injection Date: 04-Mar-2015 03:36:30

Instrument ID: MJ

Lims ID: 140-2797-A-4

Lab Sample ID: 140-2797-4

Client ID: H15-SS-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 13

Purge Vol: 500.000 mL

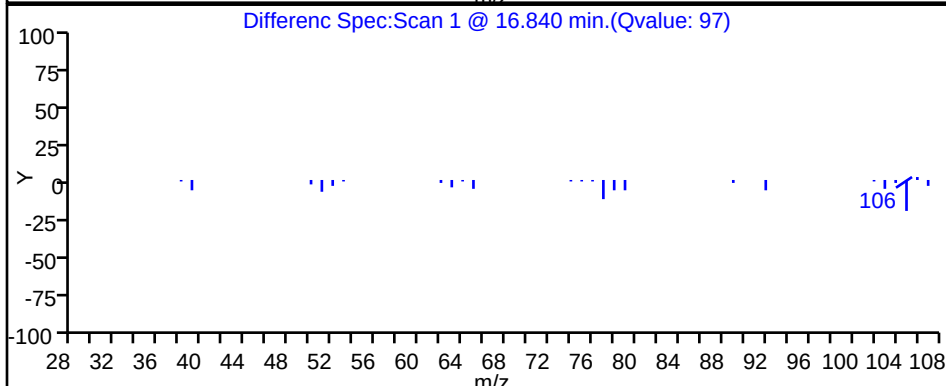
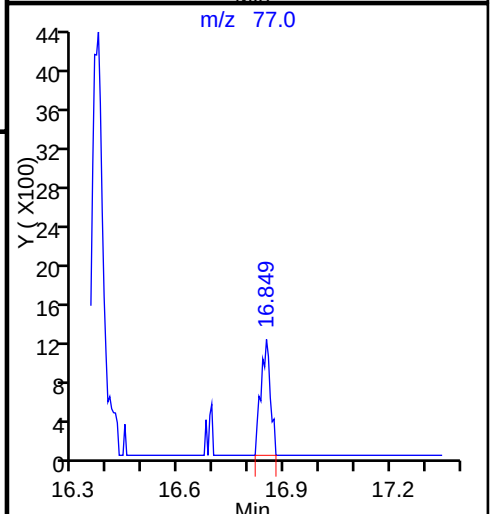
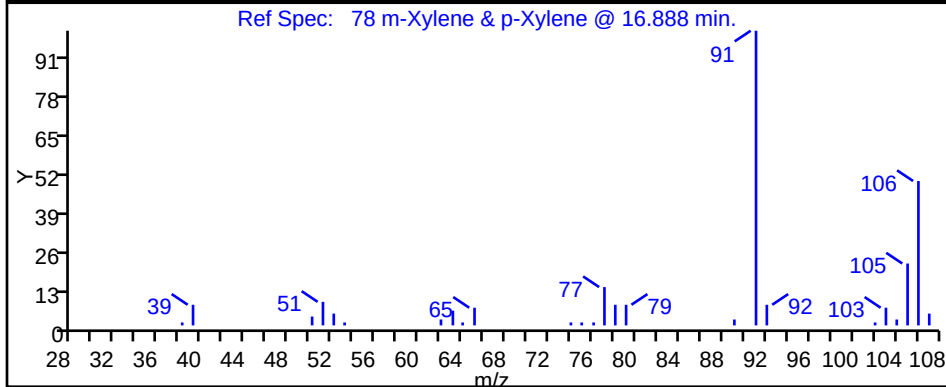
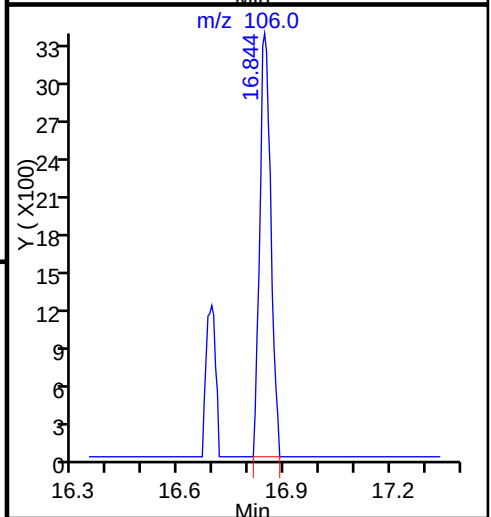
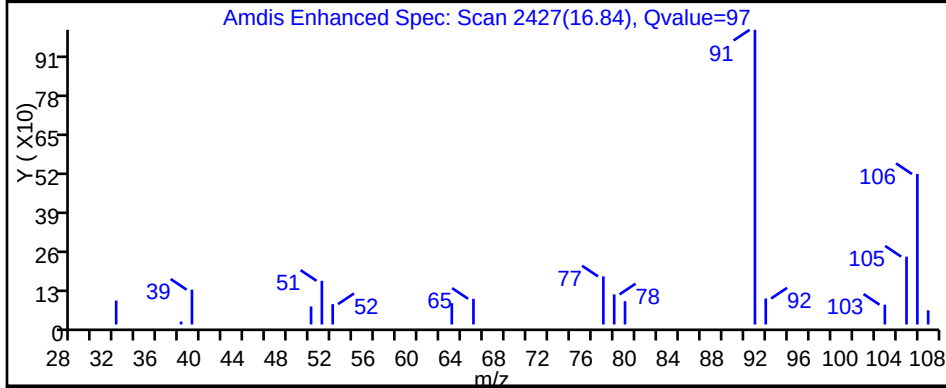
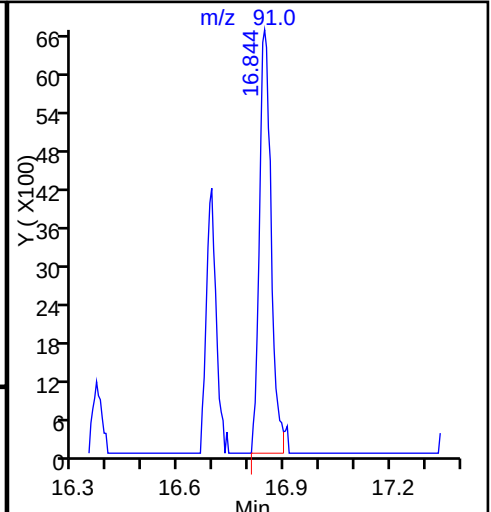
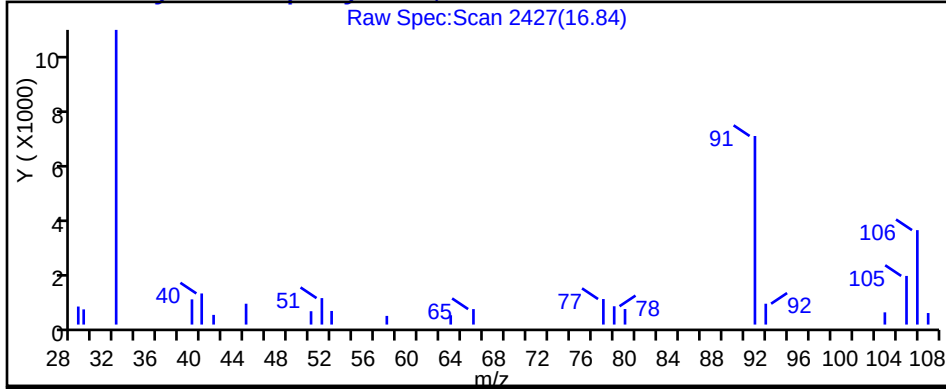
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P108.D

Injection Date: 04-Mar-2015 03:36:30

Instrument ID: MJ

Lims ID: 140-2797-A-4

Lab Sample ID: 140-2797-4

Client ID: H15-SS-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 13

Purge Vol: 500.000 mL

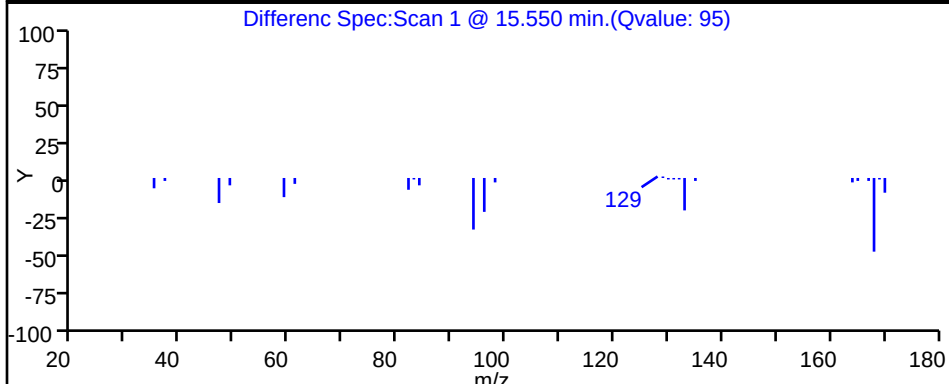
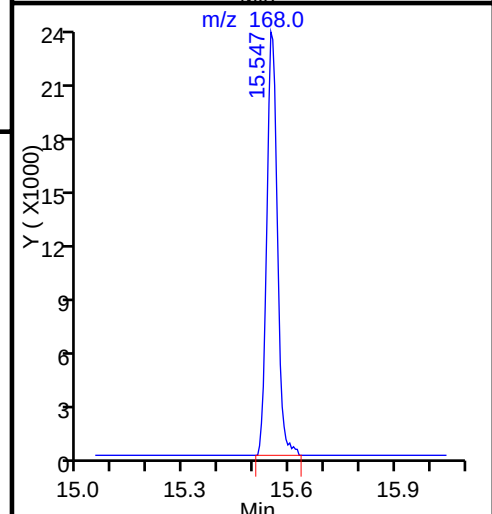
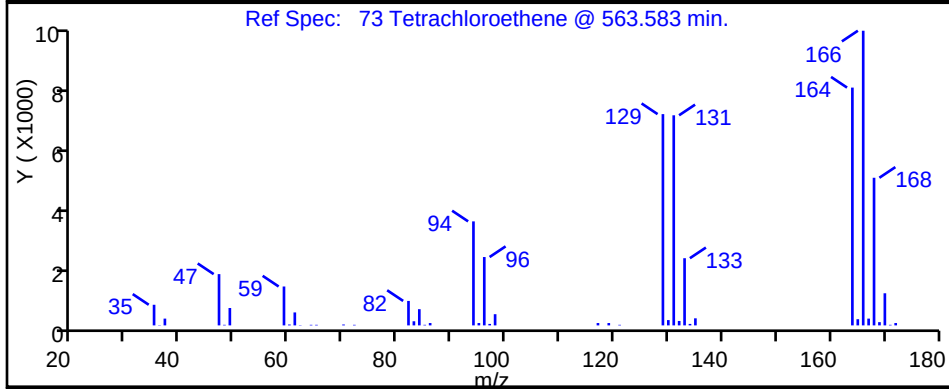
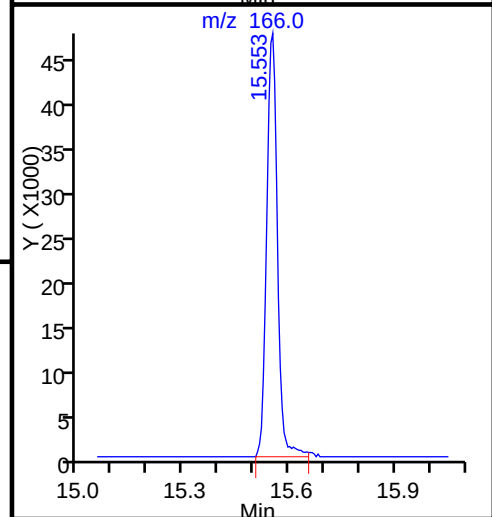
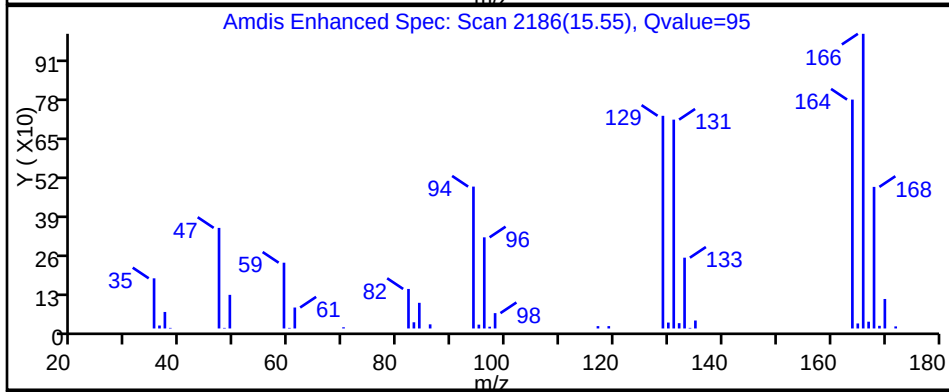
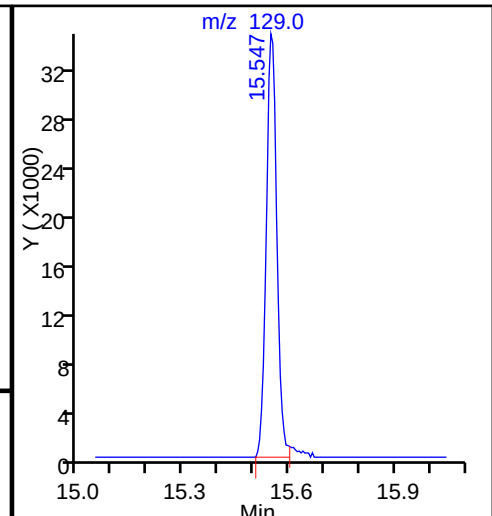
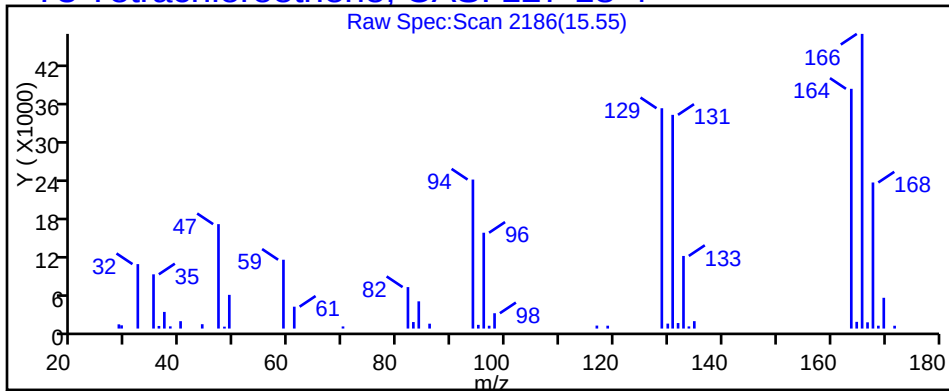
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

73 Tetrachloroethene, CAS: 127-18-4

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P108.D

Injection Date: 04-Mar-2015 03:36:30

Instrument ID: MJ

Lims ID: 140-2797-A-4

Lab Sample ID: 140-2797-4

Client ID: H15-SS-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 13

Purge Vol: 500.000 mL

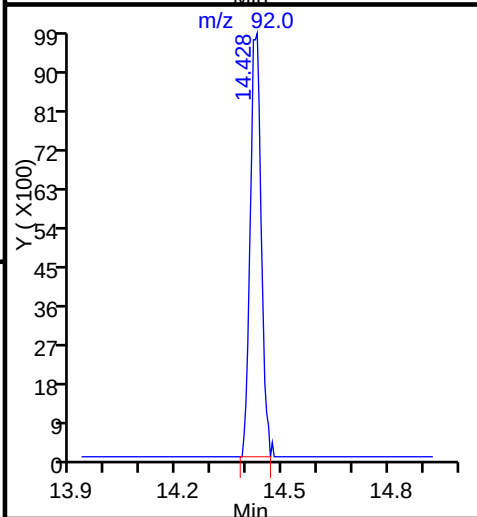
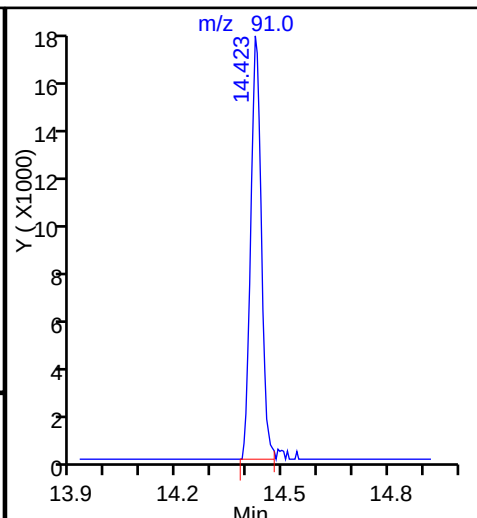
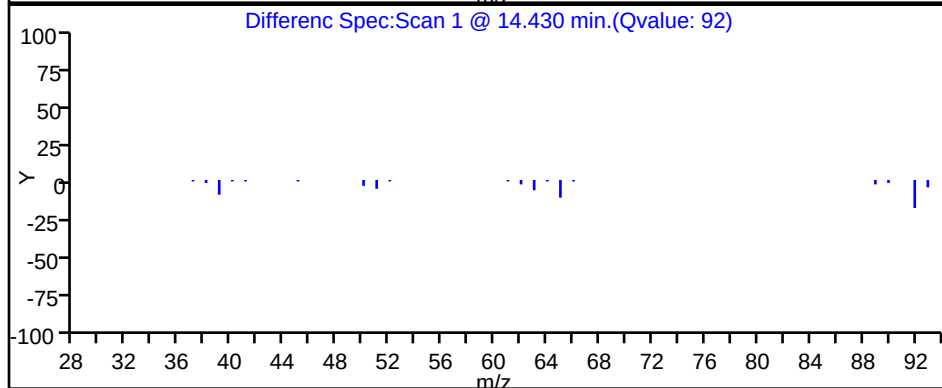
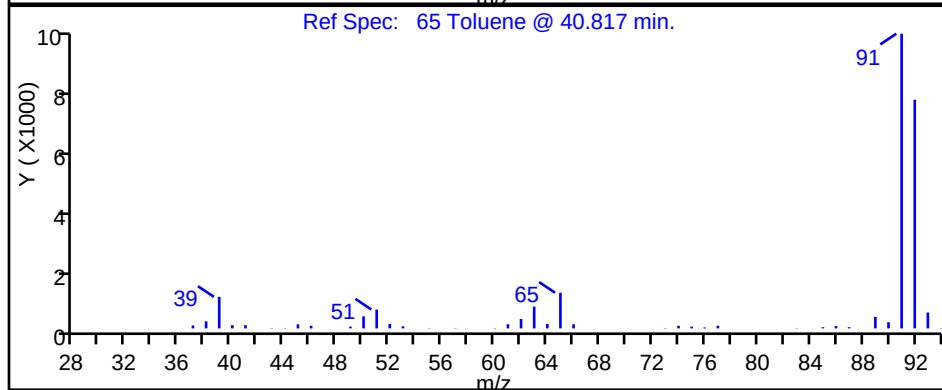
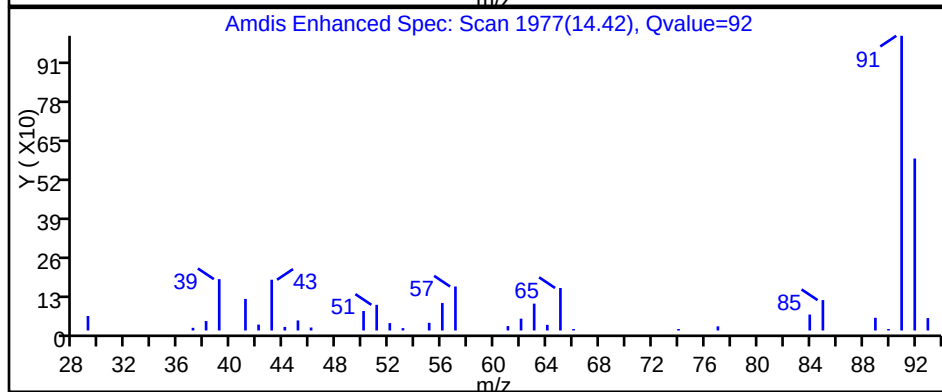
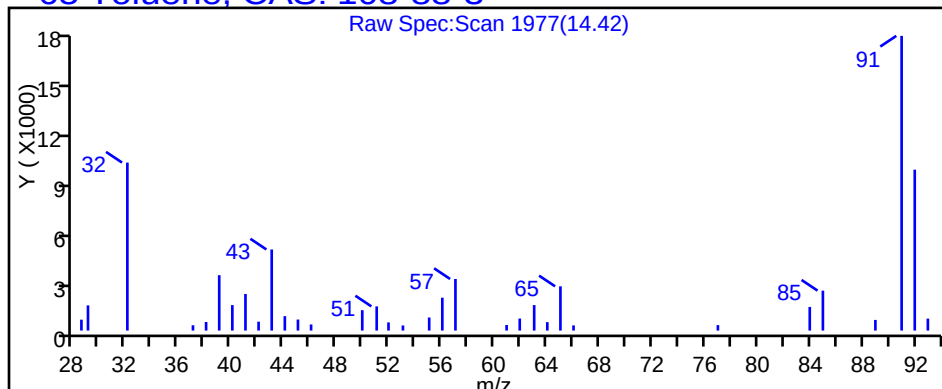
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P108.D

Injection Date: 04-Mar-2015 03:36:30

Instrument ID: MJ

Lims ID: 140-2797-A-4

Lab Sample ID: 140-2797-4

Client ID: H15-SS-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 13

Purge Vol: 500.000 mL

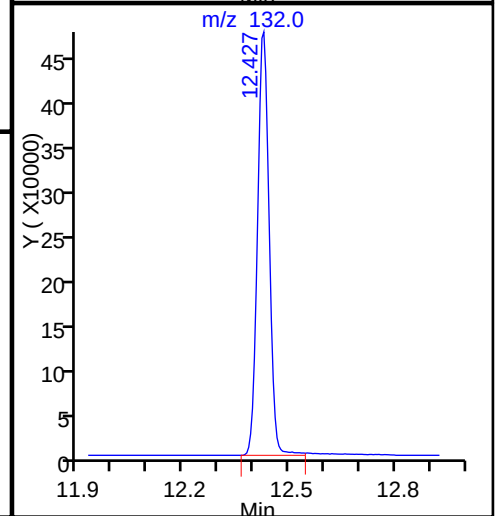
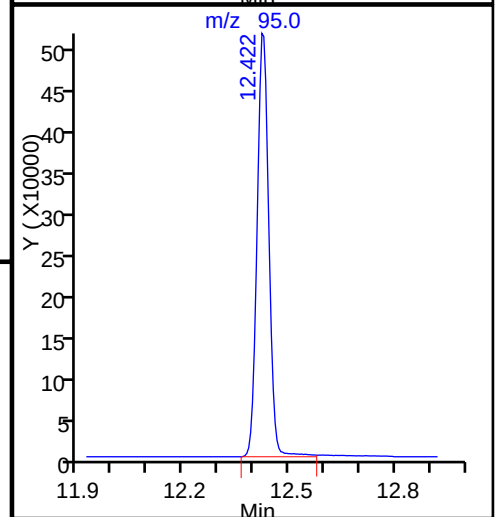
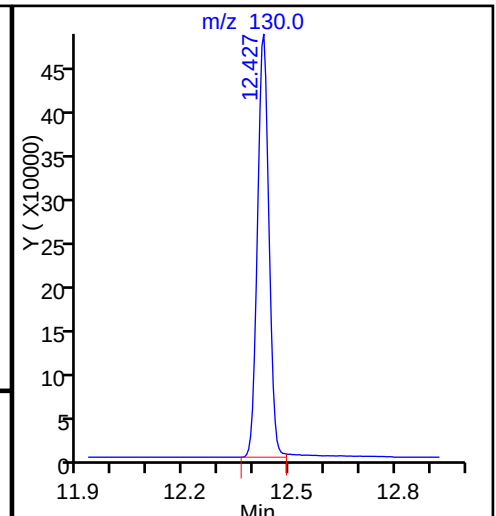
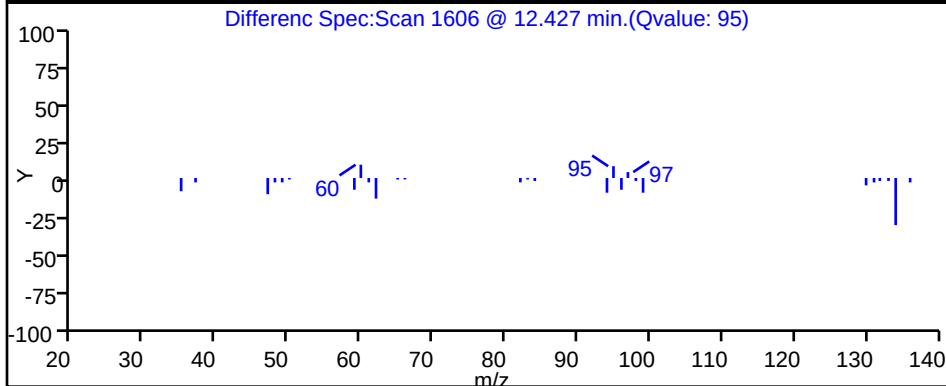
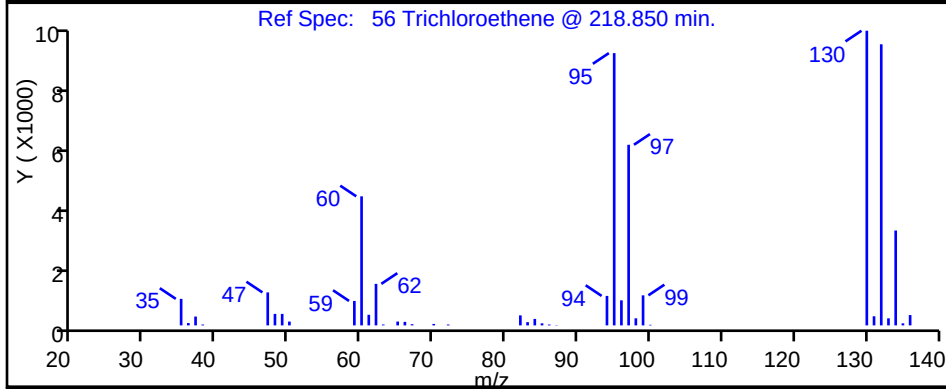
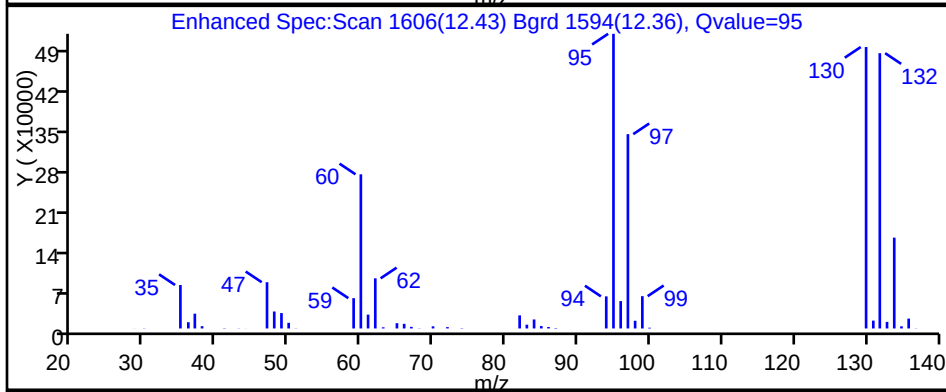
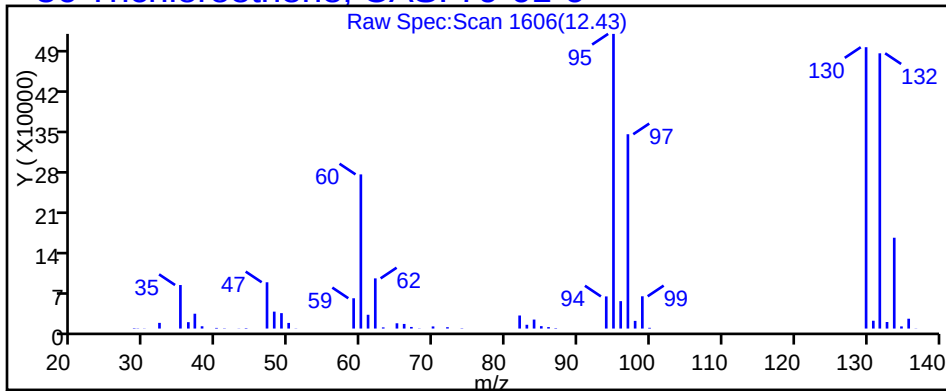
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

56 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P108.D

Injection Date: 04-Mar-2015 03:36:30

Instrument ID: MJ

Lims ID: 140-2797-A-4

Lab Sample ID: 140-2797-4

Client ID: H15-SS-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 13

Purge Vol: 500.000 mL

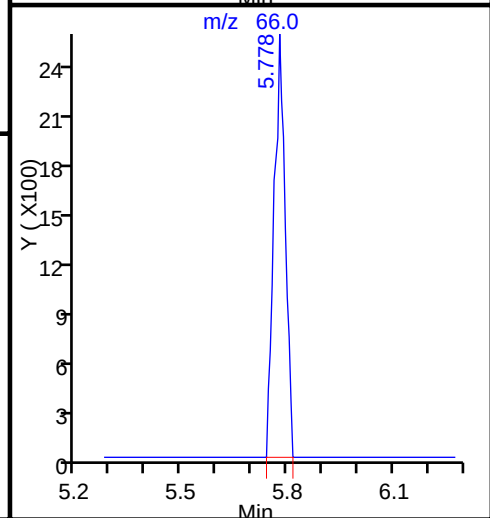
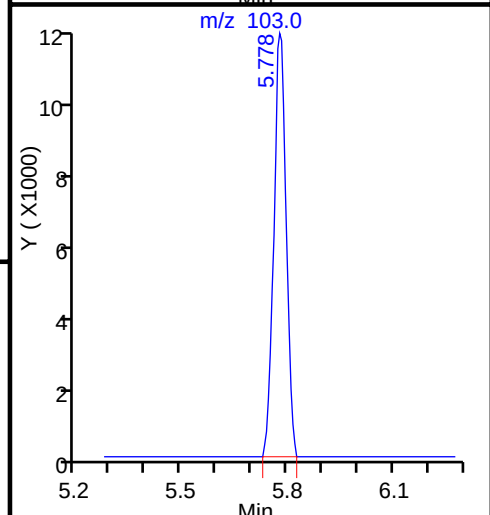
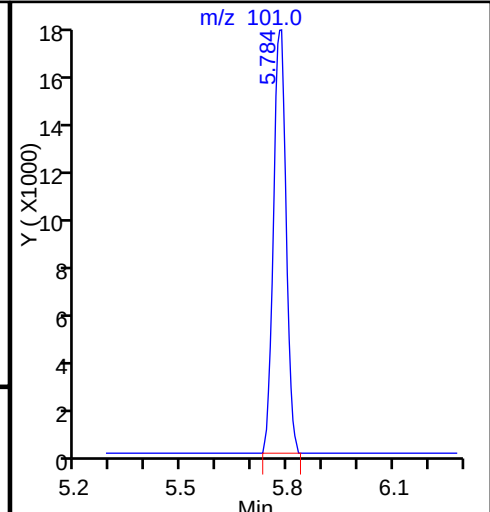
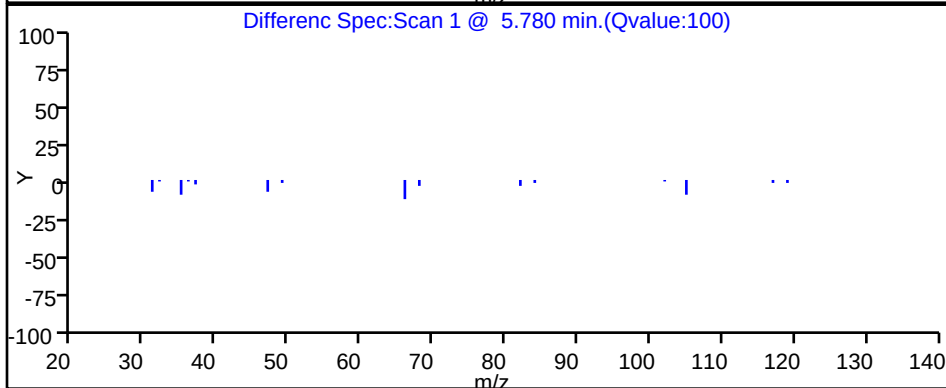
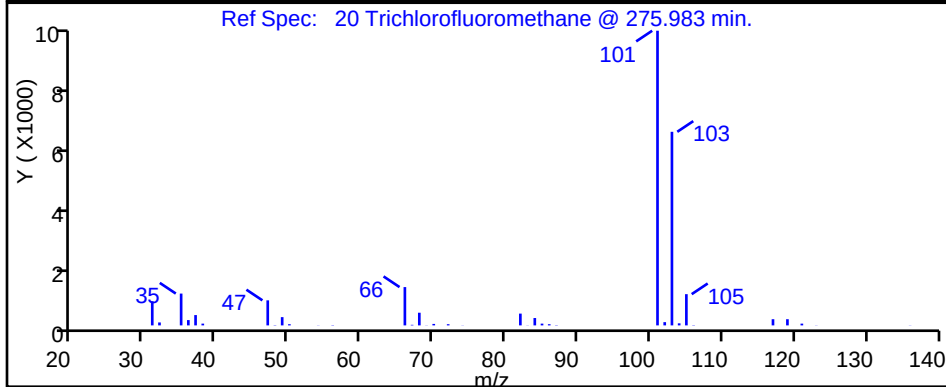
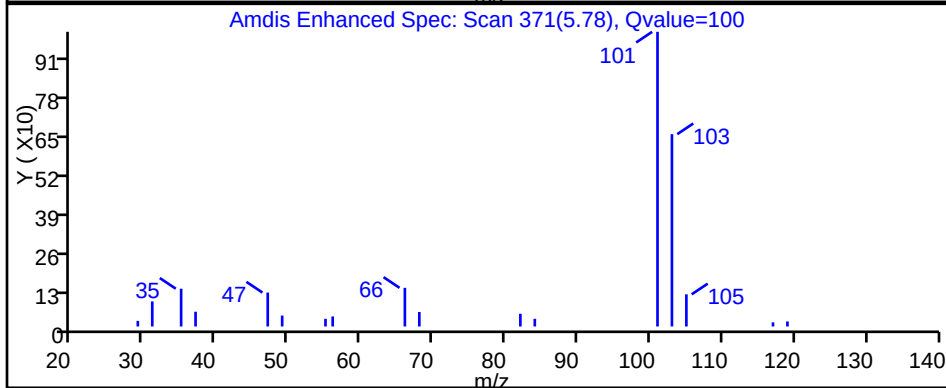
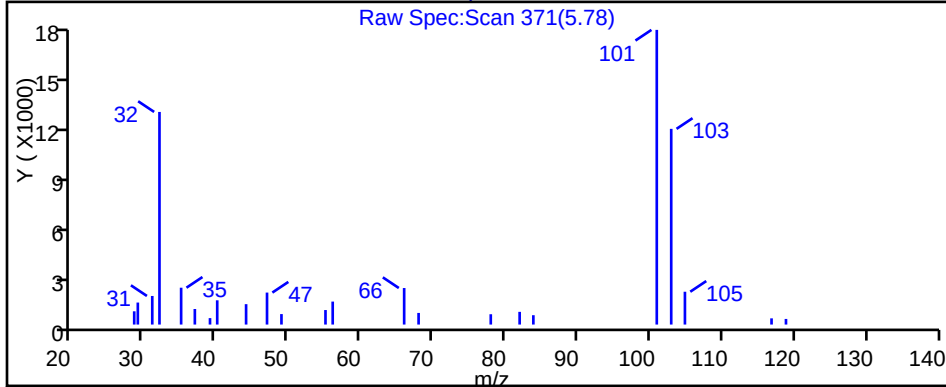
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Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: H16-BA-2015 Lab Sample ID: 140-2797-5

Matrix: Air Lab File ID: JC03P109.D

Analysis Method: TO 15 LL Date Collected: 02/24/2015 10:17

Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 04:30

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.: 2449 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		0.080	
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	0.58		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	0.33		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	0.079		0.040	
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	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H16-BA-2015 Lab Sample ID: 140-2797-5
 Matrix: Air Lab File ID: JC03P109.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 10:17
 Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 04:30
 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.: 2449 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	0.41		0.080	
64-17-5	Ethanol	46.07	6.8		0.80	
100-41-4	Ethylbenzene	106.17	0.20	*	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	0.23		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.36		0.080	
95-47-6	o-Xylene	106.17	0.12		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	0.96		0.080	
108-88-3	Toluene	92.14	1.0		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	0.13		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.19		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

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: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: H16-BA-2015 Lab Sample ID: 140-2797-5

Matrix: Air Lab File ID: JC03P109.D

Analysis Method: TO 15 LL Date Collected: 02/24/2015 10:17

Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 04:30

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.: 2449 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		0.32	
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	1.7		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	1.1		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	0.50		0.25	
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	0.90		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H16-BA-2015 Lab Sample ID: 140-2797-5
 Matrix: Air Lab File ID: JC03P109.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 10:17
 Sample wt/vol: 500(mL) Date Analyzed: 03/04/2015 04:30
 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.: 2449 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	2.0		0.40	
64-17-5	Ethanol	46.07	13		1.5	
100-41-4	Ethylbenzene	106.17	0.87	*	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	0.81		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	1.5		0.35	
95-47-6	o-Xylene	106.17	0.51		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	6.5		0.54	
108-88-3	Toluene	92.14	3.8		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	0.68		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.1		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

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

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P109.D
 Lims ID: 140-2797-A-5 Lab Sample ID: 140-2797-5
 Client ID: H16-BA-2015
 Sample Type: Client
 Inject. Date: 04-Mar-2015 04:30:30 ALS Bottle#: 9 Worklist Smp#: 14
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2797-a-5
 Misc. Info.: J030315,TO15,,140-0001414-014
 Operator ID: 403648 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150228-1414.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 11:02:31 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK052

First Level Reviewer: tajh

Date: 04-Mar-2015 08:39:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.587	9.587	0.000	97	254054	4.00	
* 2 1,4-Difluorobenzene	114	11.723	11.728	-0.005	96	1177095	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.365	16.370	-0.005	89	969928	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.979	17.979	0.000	88	546294	3.44	
8 Dichlorodifluoromethane	85	4.116	4.105	0.011	100	116485	0.4073	
9 Chloromethane	52	4.320	4.315	0.005	100	17812	0.4379	
17 Ethanol	31	5.251	5.240	0.011	96	240936	6.82	
20 Trichlorofluoromethane	101	5.778	5.778	0.000	99	47885	0.1912	
28 2-Methyl-2-propanol	59	6.671	6.633	0.038	90	5854	0.0390	
30 1,1,2-Trichloro-1,2,2-trif	101	6.736	6.730	0.006	91	10915	0.0648	
31 Methylene Chloride	84	6.924	6.924	0.000	98	18884	0.2318	
39 2-Butanone (MEK)	72	8.791	8.785	0.006	96	17668	0.5840	
40 Hexane	56	8.807	8.807	0.000	77	13749	0.1623	
43 Chloroform	83	9.592	9.598	-0.006	28	12527	0.0781	
45 1,1,1-Trichloroethane	97	10.647	10.636	0.011	63	2076	0.0123	
49 Cyclohexane	69	11.211	11.211	0.000	53	3845	0.0856	
48 Benzene	78	11.217	11.217	0.000	98	71688	0.3297	
50 Carbon tetrachloride	117	11.244	11.238	0.006	94	12639	0.0788	
53 Isooctane	57	11.927	11.932	-0.005	95	46058	0.1065	
56 Trichloroethene	130	12.427	12.427	0.000	94	11931	0.1260	
62 4-Methyl-2-pentanone (MIBK	43	13.562	13.546	0.016	96	12132	0.0678	
65 Toluene	91	14.423	14.423	0.000	93	180587	1.02	
73 Tetrachloroethene	129	15.547	15.547	0.000	94	73807	0.9580	
76 Ethylbenzene	91	16.688	16.693	-0.005	99	41549	0.2008	
78 m-Xylene & p-Xylene	91	16.844	16.849	-0.005	98	59288	0.3557	
82 o-Xylene	91	17.371	17.371	0.000	98	21481	0.1182	
97 1,4-Dichlorobenzene	146	19.447	19.442	0.005	88	3605	0.0346	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P109.D

Injection Date: 04-Mar-2015 04:30:30

Instrument ID: MJ

Operator ID: 403648

Lims ID: 140-2797-A-5

Lab Sample ID: 140-2797-5

Worklist Smp#: 14

Client ID: H16-BA-2015

Purge Vol: 500.000 mL

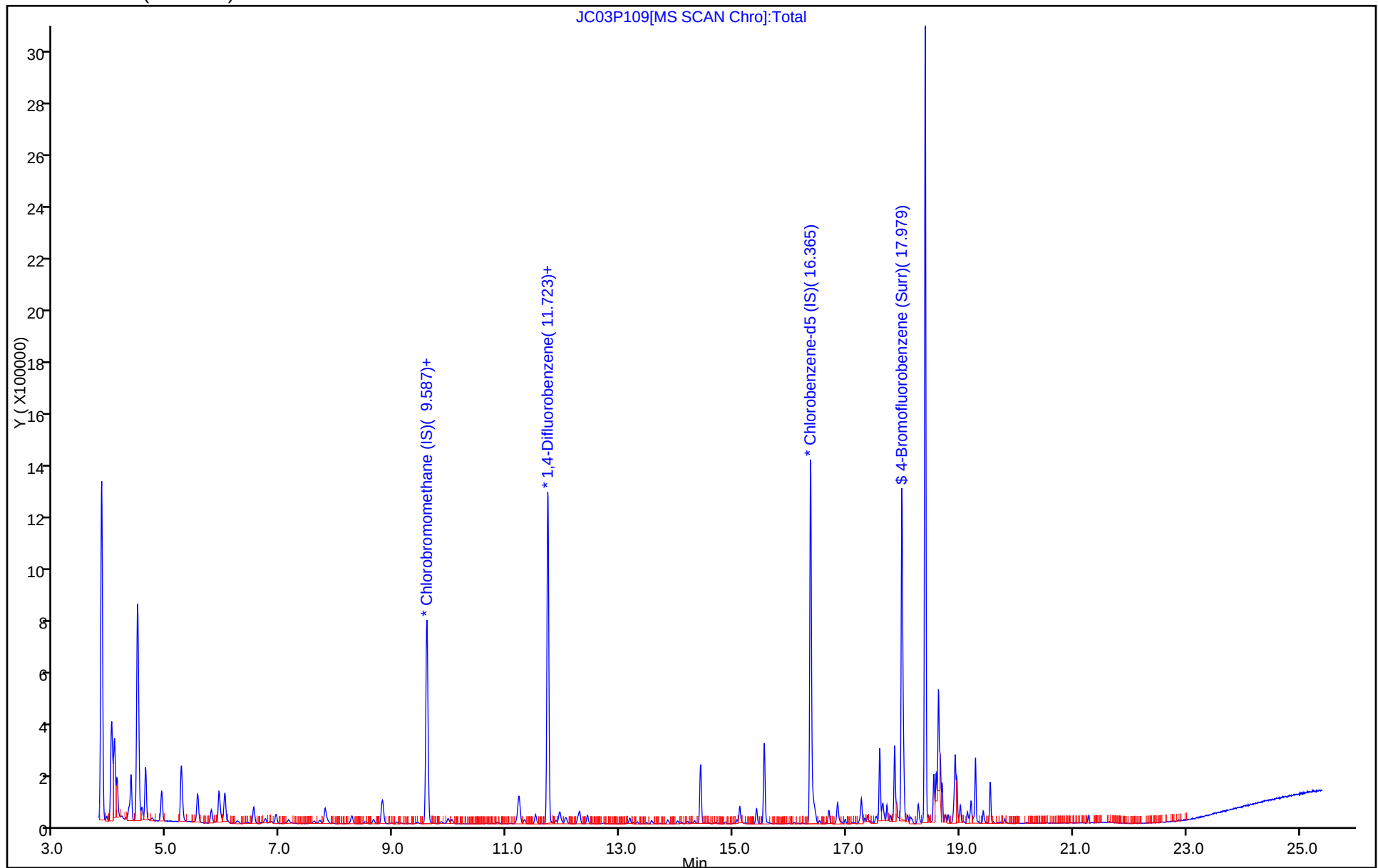
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P109.D

Injection Date: 04-Mar-2015 04:30:30

Instrument ID: MJ

Lims ID: 140-2797-A-5

Lab Sample ID: 140-2797-5

Client ID: H16-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 14

Purge Vol: 500.000 mL

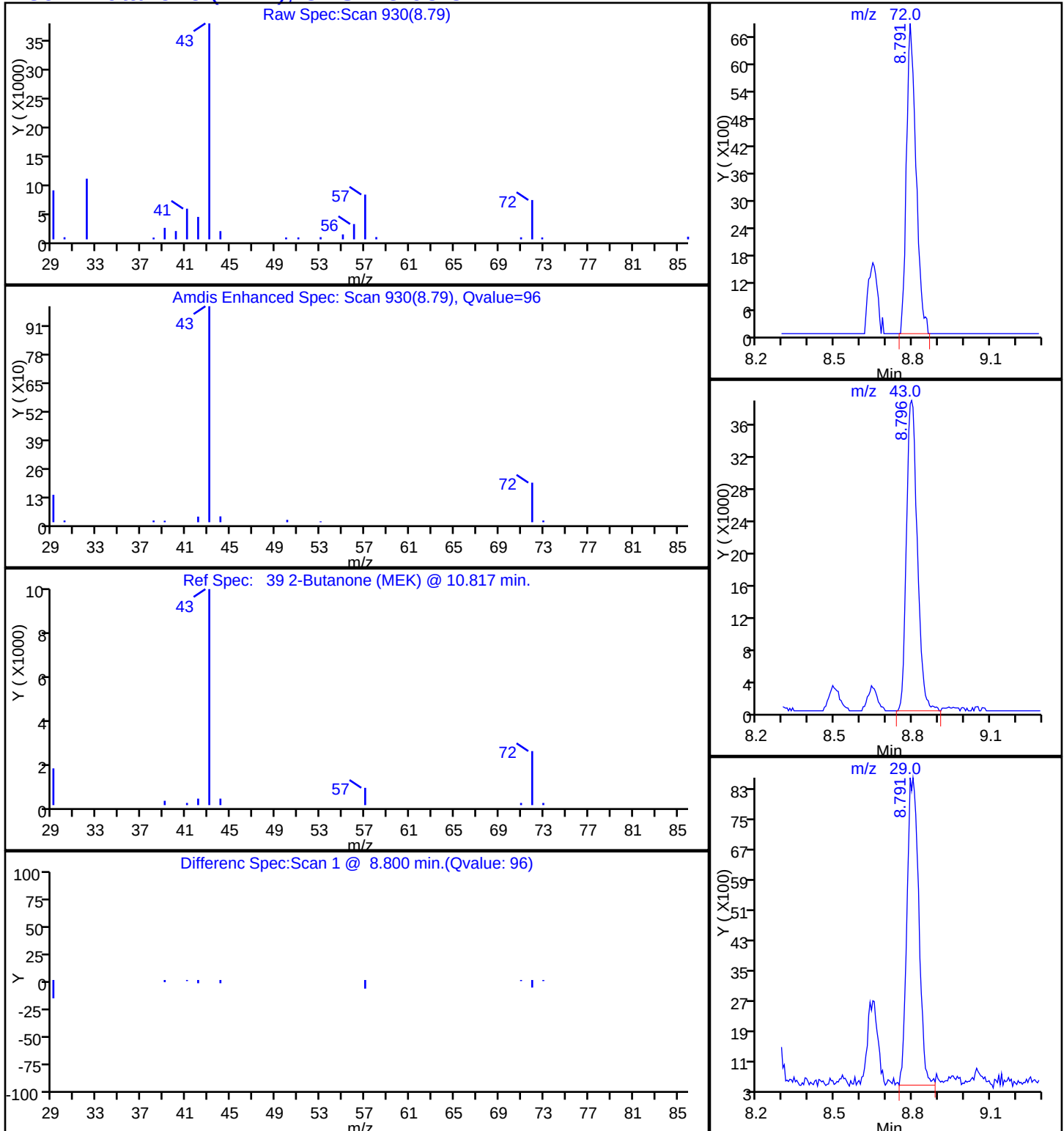
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P109.D

Injection Date: 04-Mar-2015 04:30:30

Instrument ID: MJ

Lims ID: 140-2797-A-5

Lab Sample ID: 140-2797-5

Client ID: H16-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 14

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

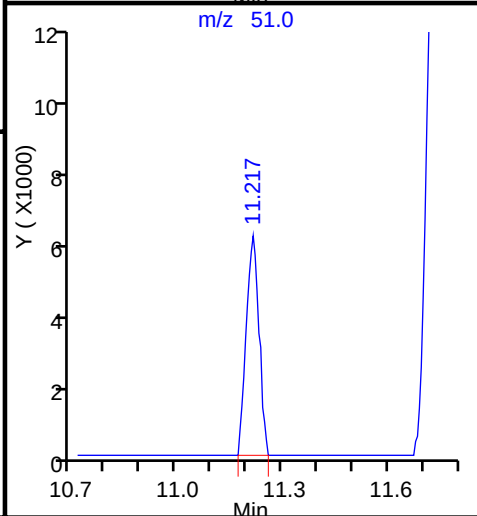
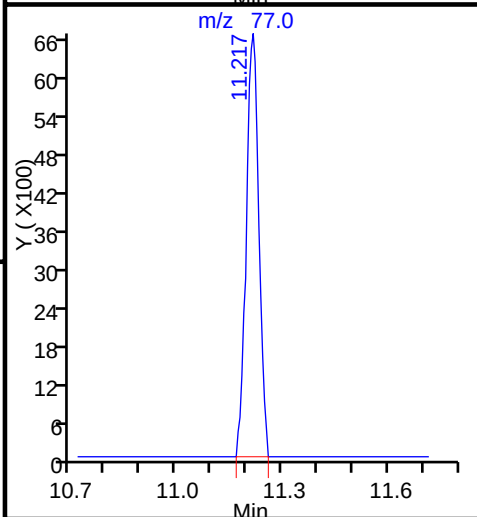
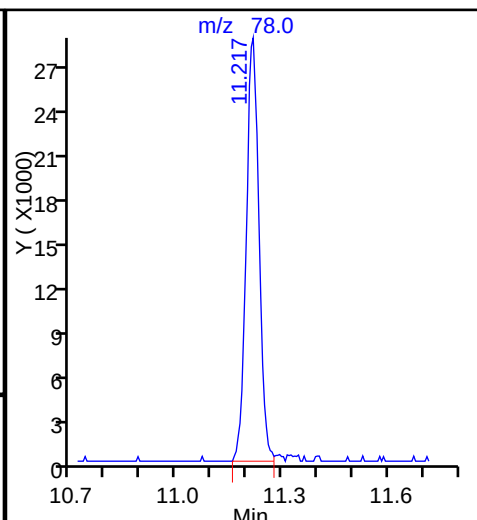
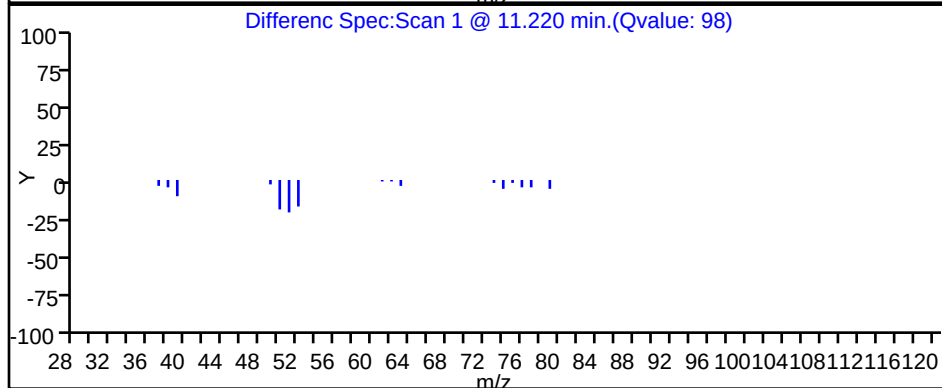
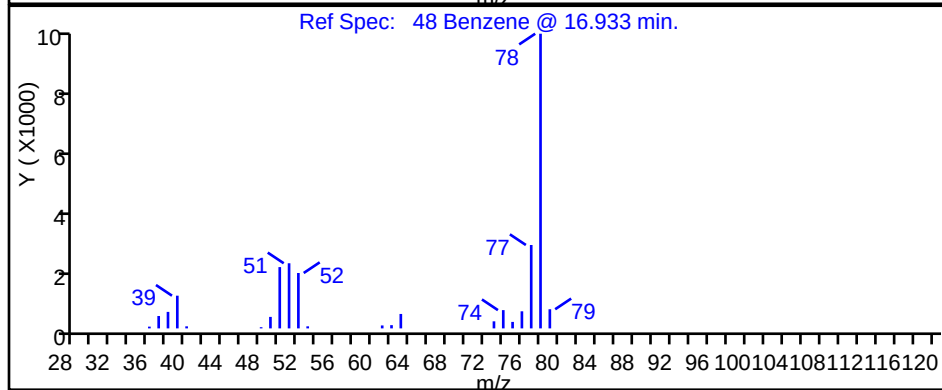
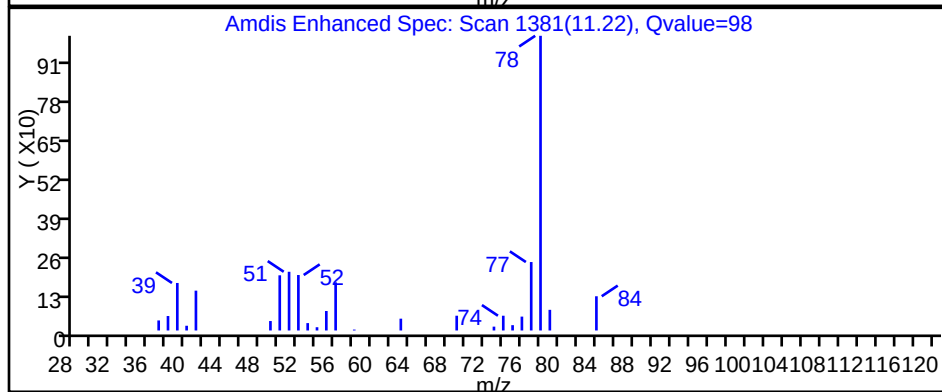
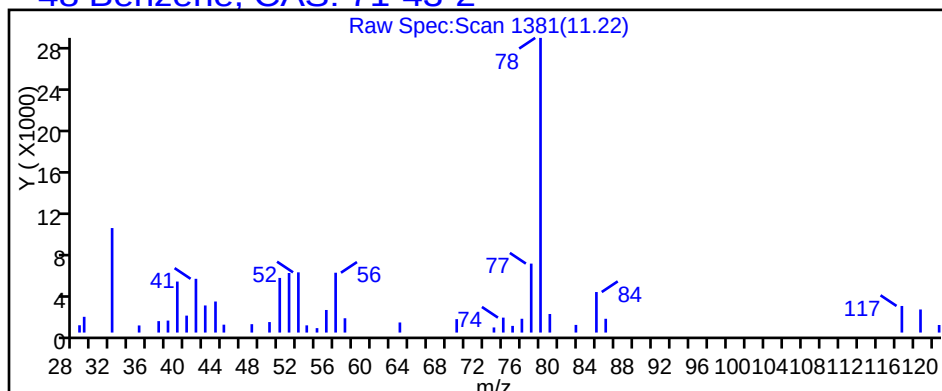
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P109.D

Injection Date: 04-Mar-2015 04:30:30

Instrument ID: MJ

Lims ID: 140-2797-A-5

Lab Sample ID: 140-2797-5

Client ID: H16-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 14

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

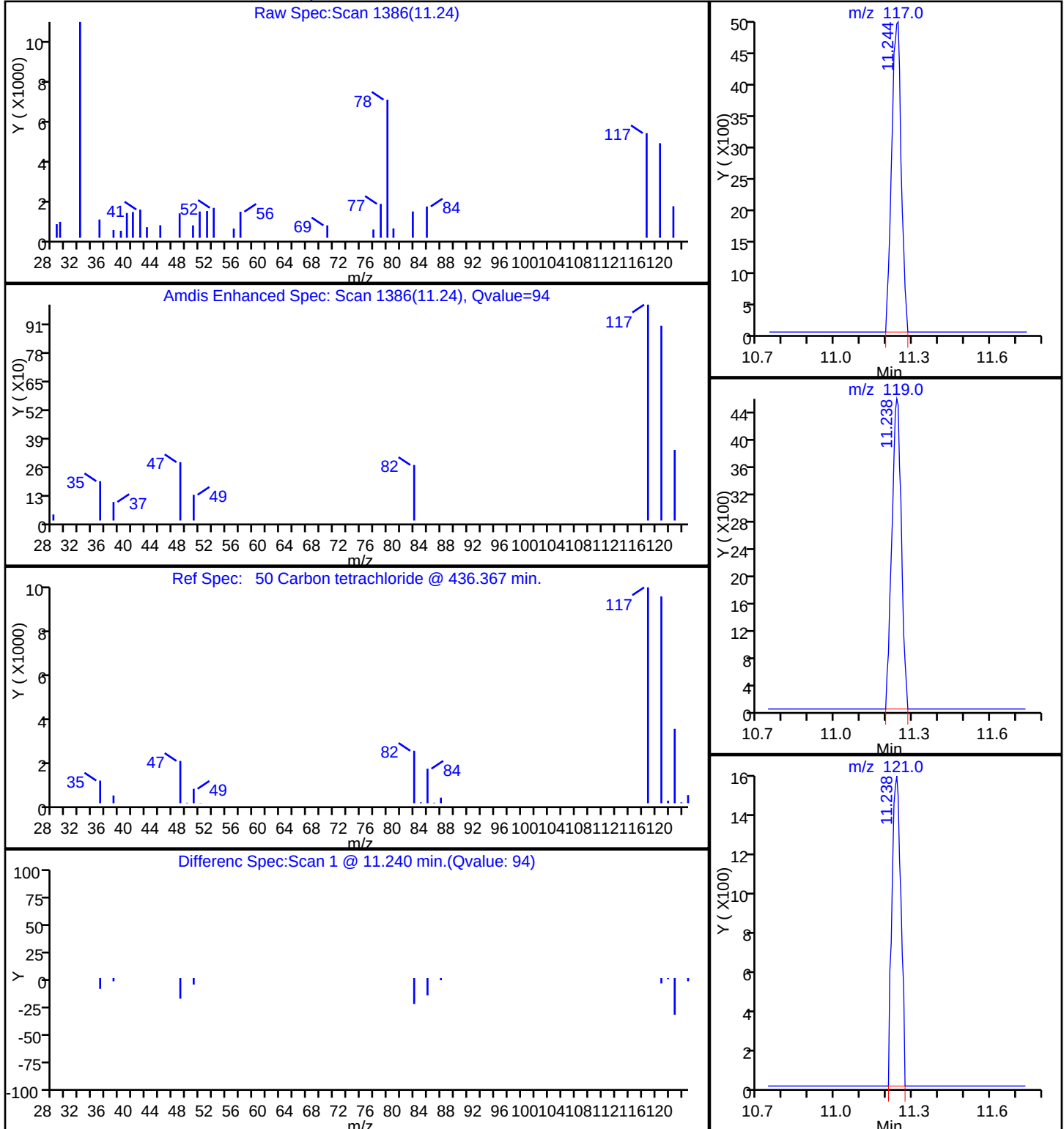
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P109.D

Injection Date: 04-Mar-2015 04:30:30

Instrument ID: MJ

Lims ID: 140-2797-A-5

Lab Sample ID: 140-2797-5

Client ID: H16-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 14

Purge Vol: 500.000 mL

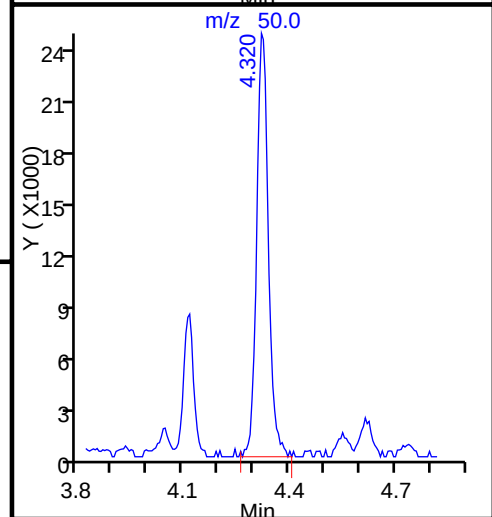
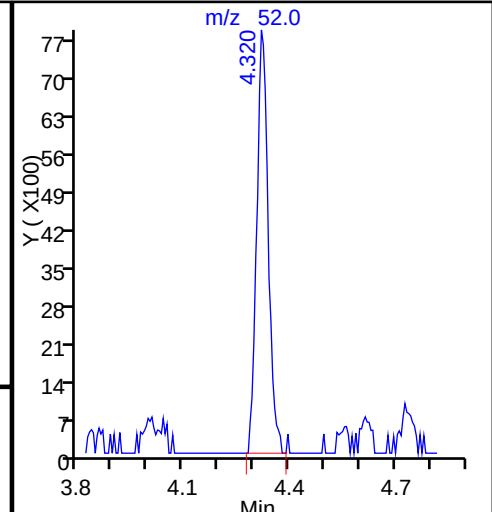
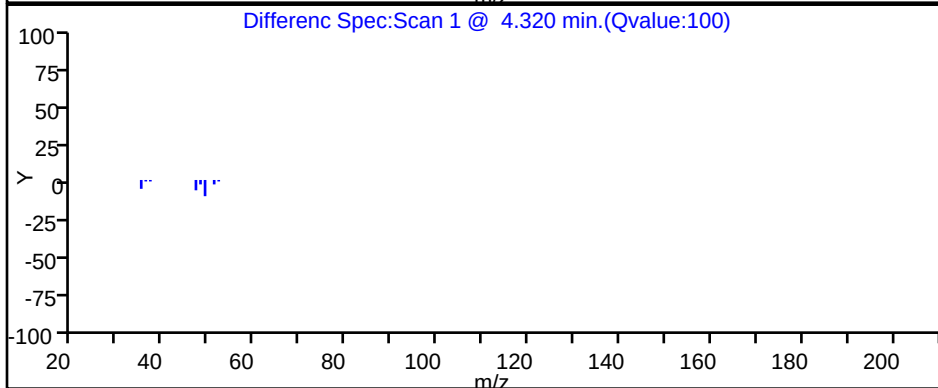
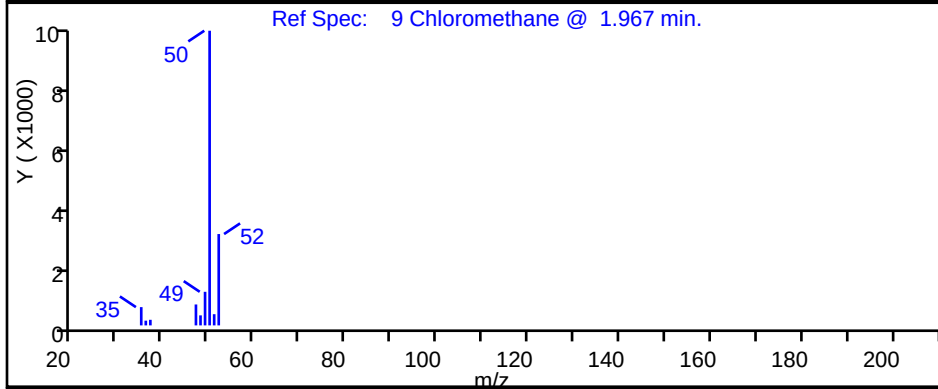
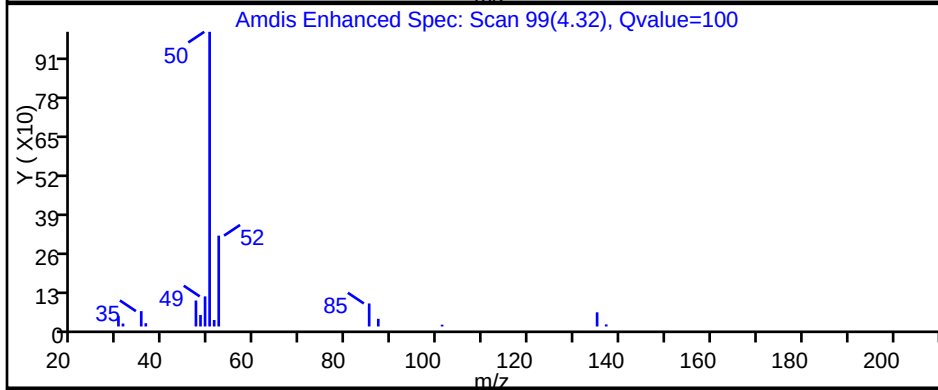
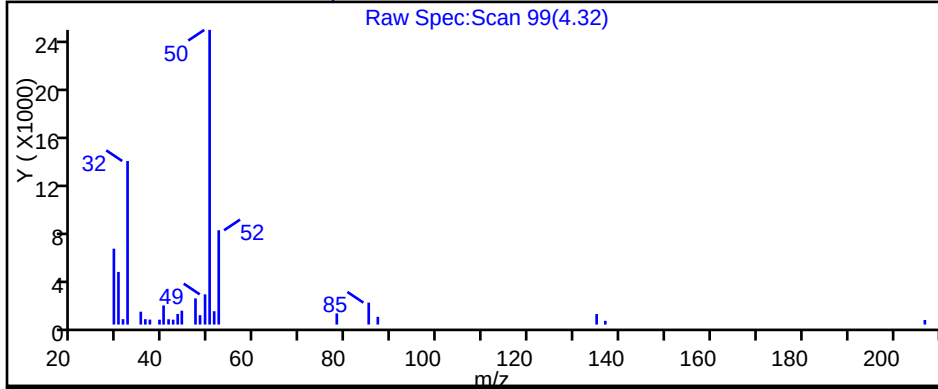
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P109.D

Injection Date: 04-Mar-2015 04:30:30

Instrument ID: MJ

Lims ID: 140-2797-A-5

Lab Sample ID: 140-2797-5

Client ID: H16-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 14

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

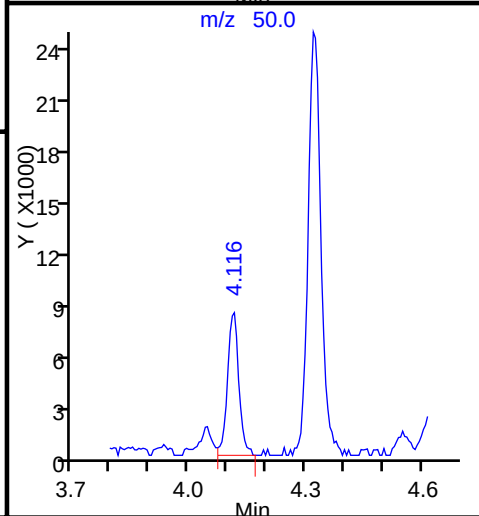
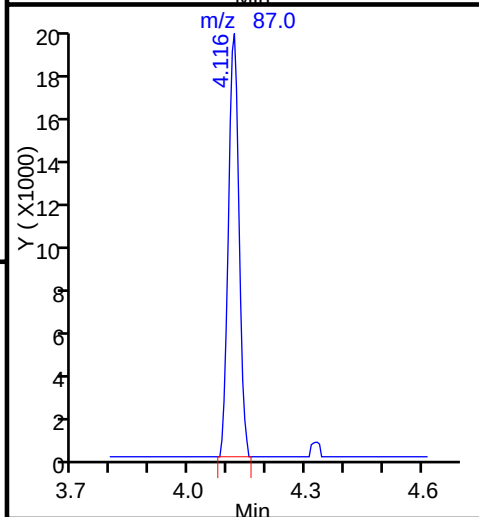
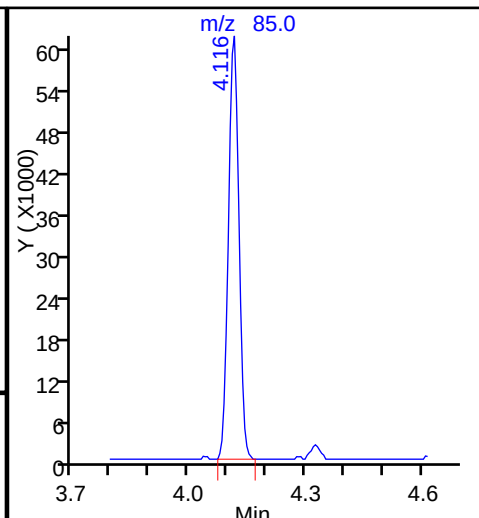
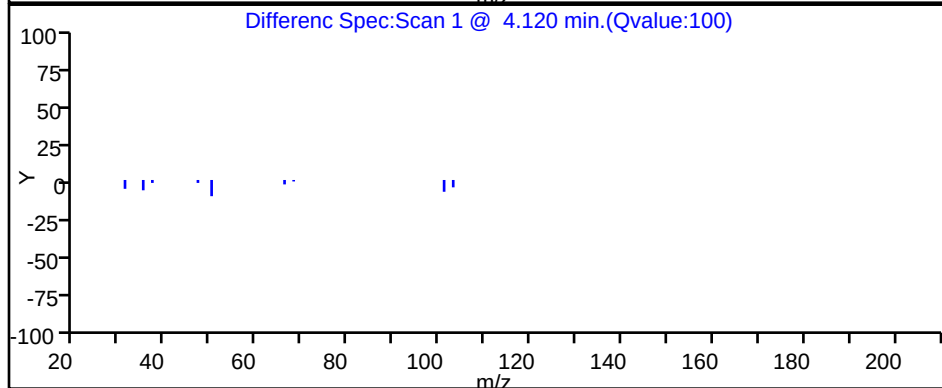
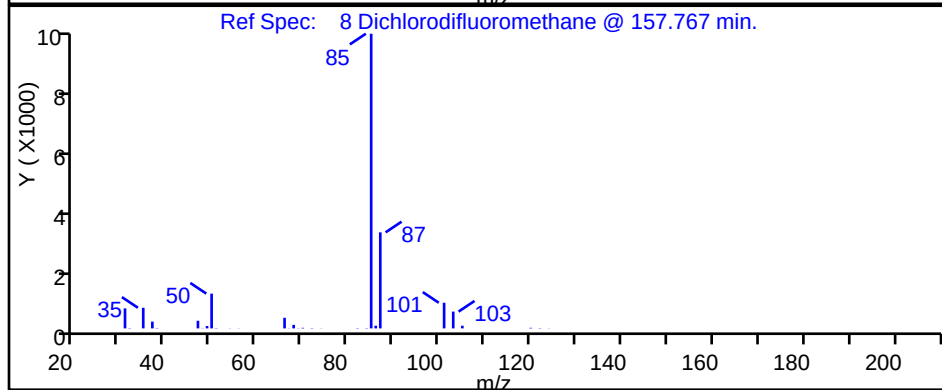
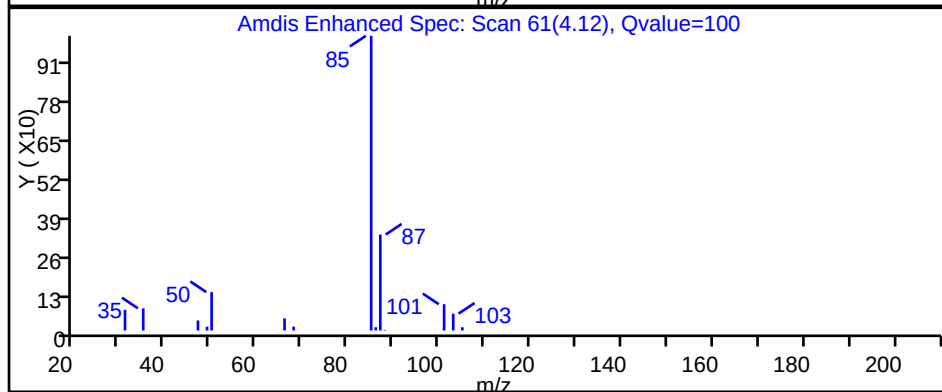
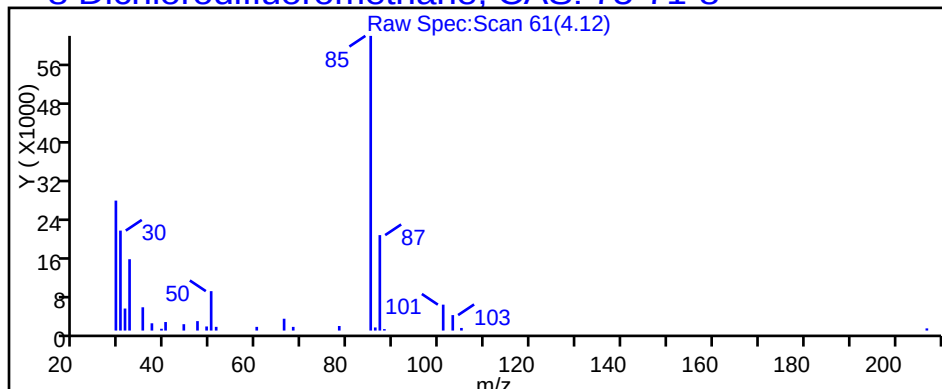
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P109.D

Injection Date: 04-Mar-2015 04:30:30

Instrument ID: MJ

Lims ID: 140-2797-A-5

Lab Sample ID: 140-2797-5

Client ID: H16-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 14

Purge Vol: 500.000 mL

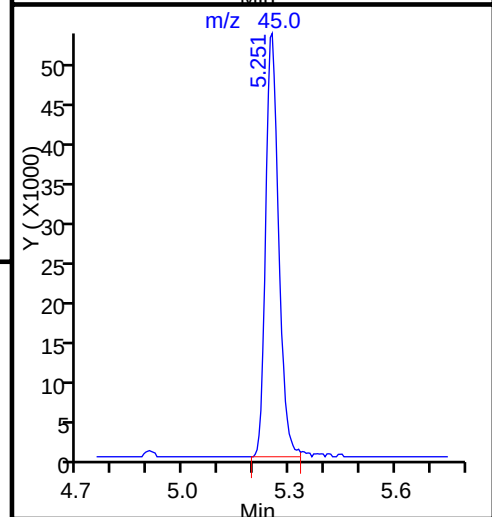
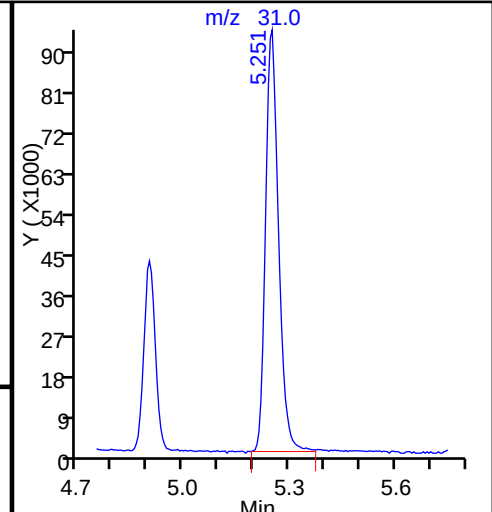
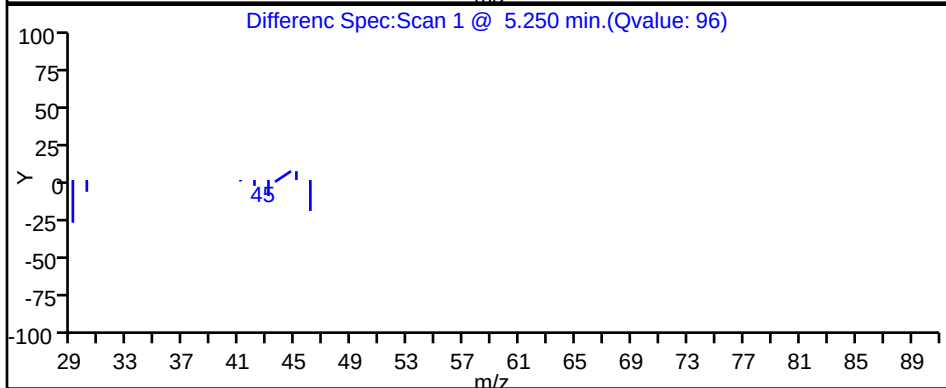
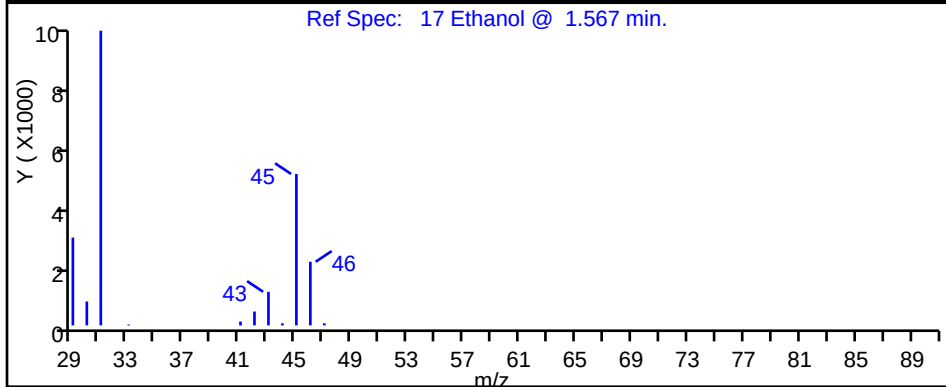
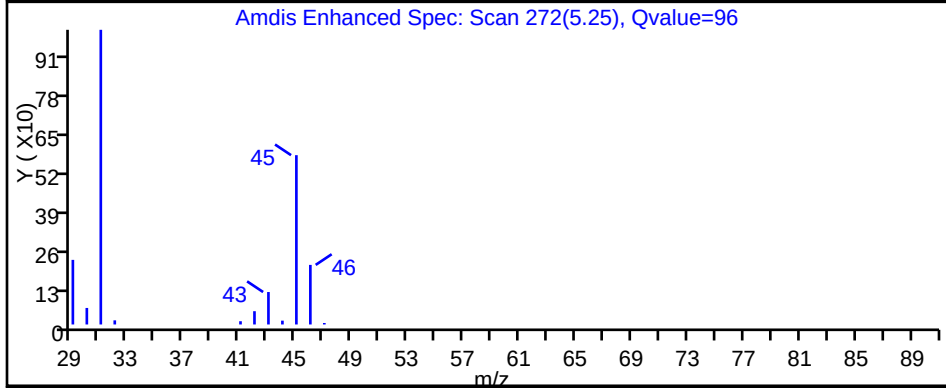
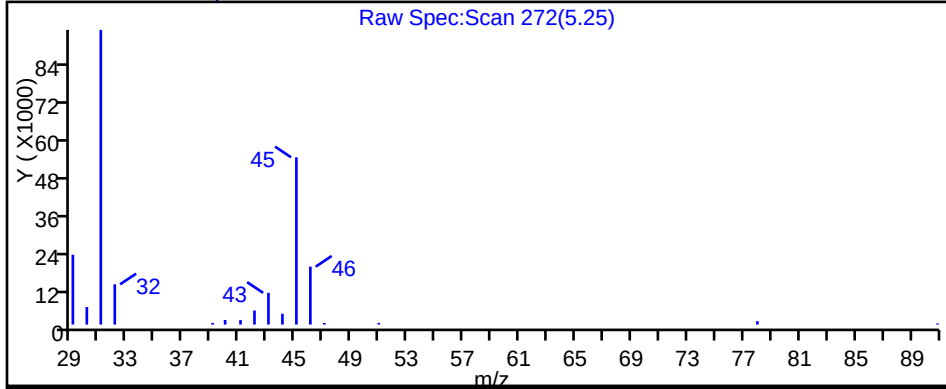
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P109.D

Injection Date: 04-Mar-2015 04:30:30

Instrument ID: MJ

Lims ID: 140-2797-A-5

Lab Sample ID: 140-2797-5

Client ID: H16-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 14

Purge Vol: 500.000 mL

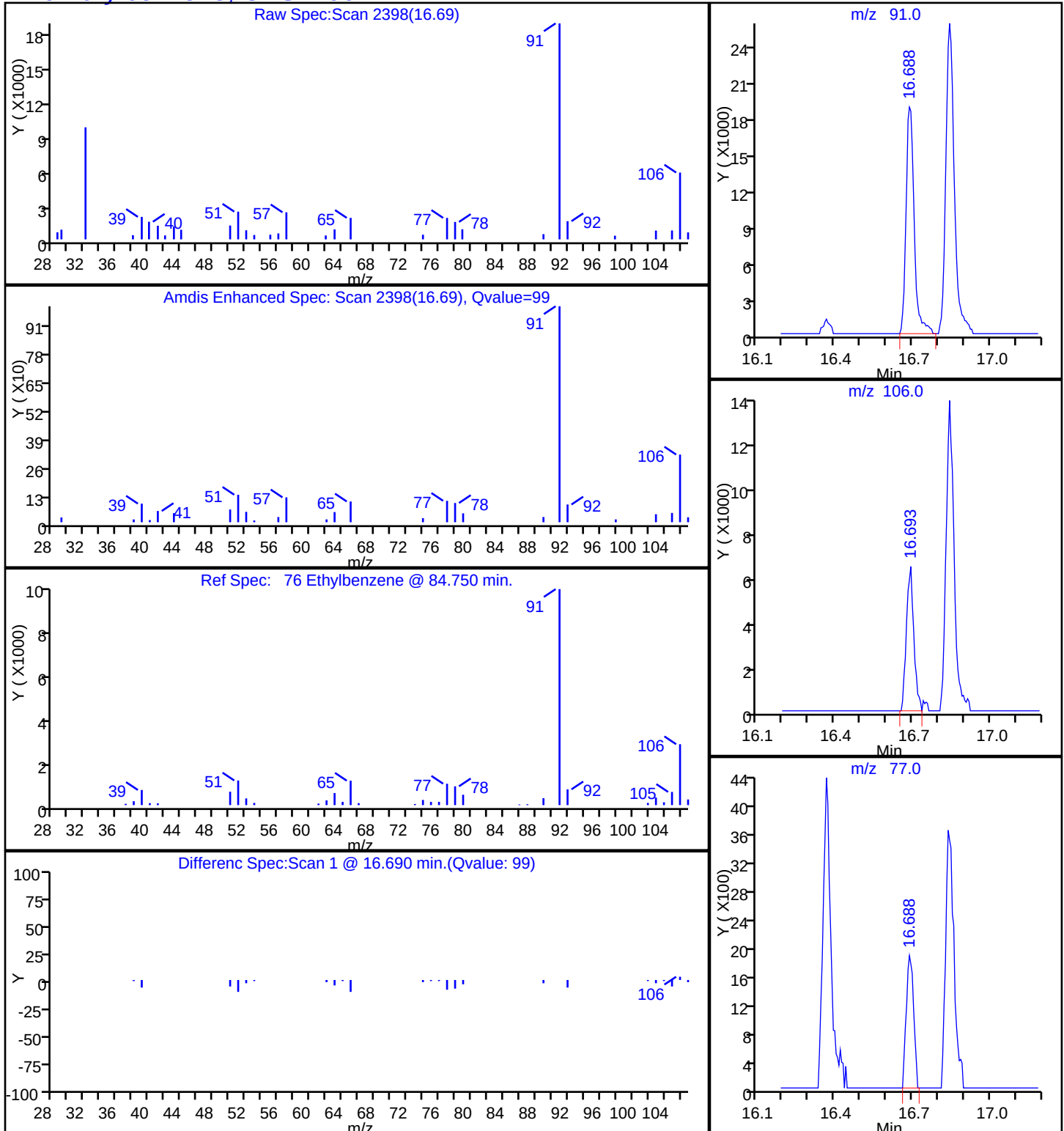
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

76 Ethylbenzene, CAS: 100-41-4

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P109.D

Injection Date: 04-Mar-2015 04:30:30

Instrument ID: MJ

Lims ID: 140-2797-A-5

Lab Sample ID: 140-2797-5

Client ID: H16-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 14

Purge Vol: 500.000 mL

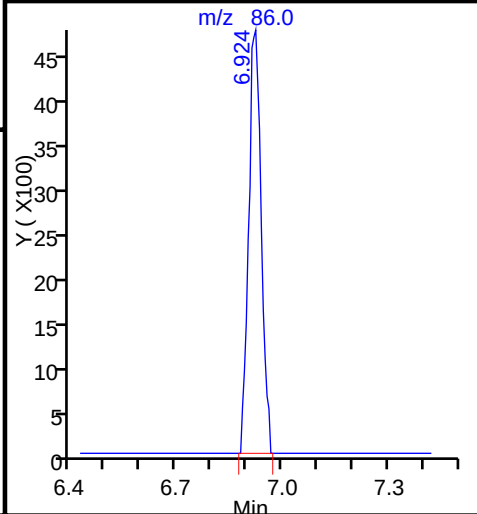
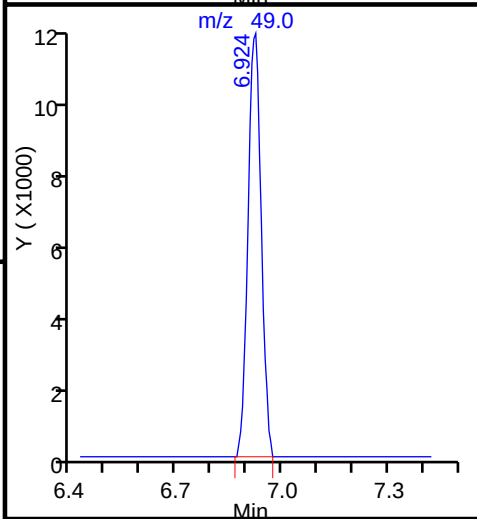
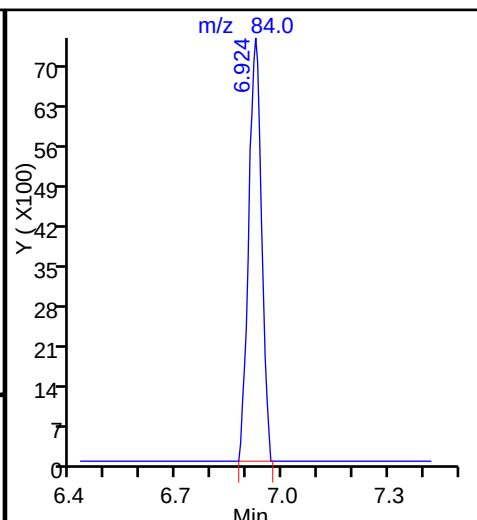
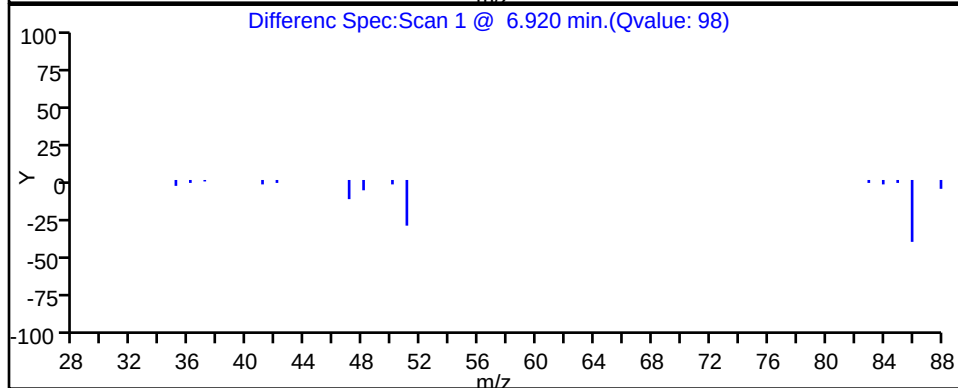
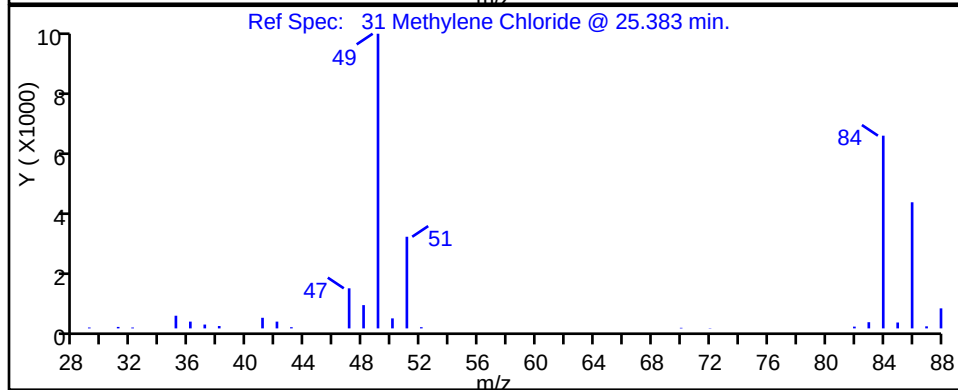
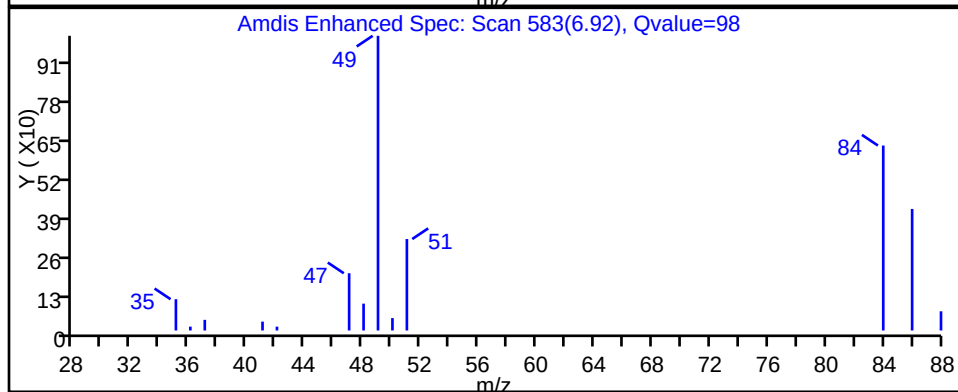
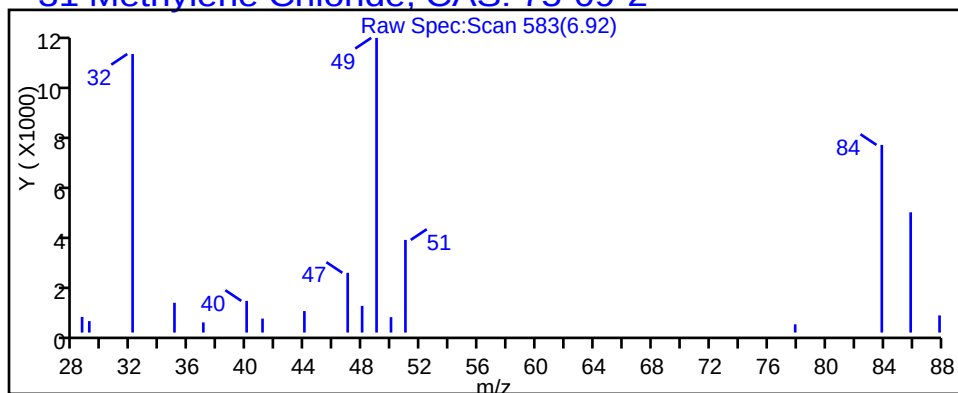
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P109.D

Injection Date: 04-Mar-2015 04:30:30

Instrument ID: MJ

Lims ID: 140-2797-A-5

Lab Sample ID: 140-2797-5

Client ID: H16-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 14

Purge Vol: 500.000 mL

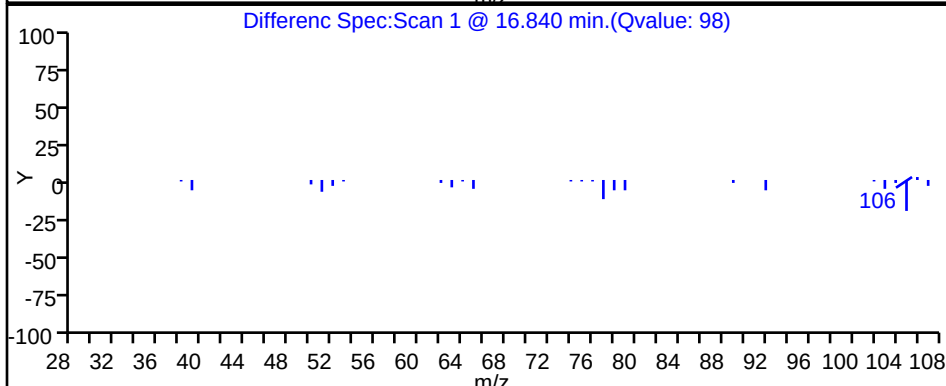
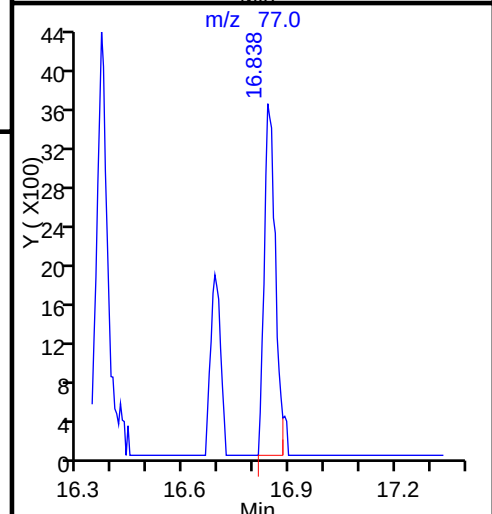
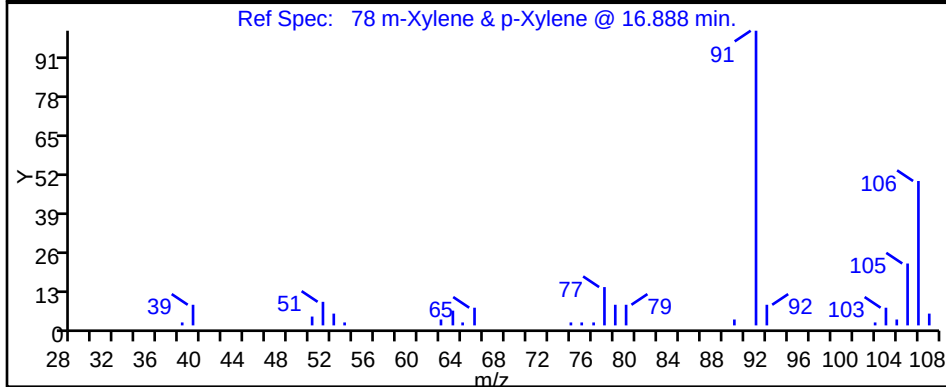
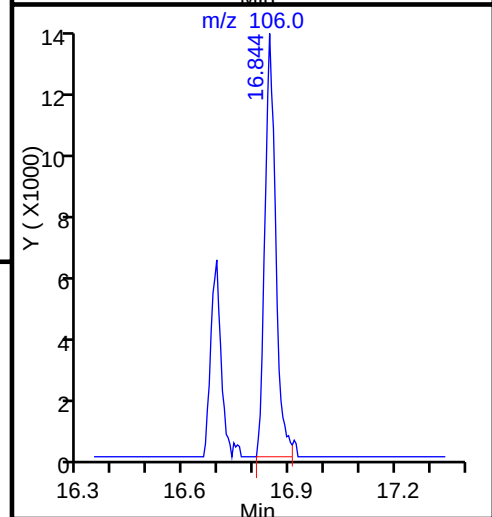
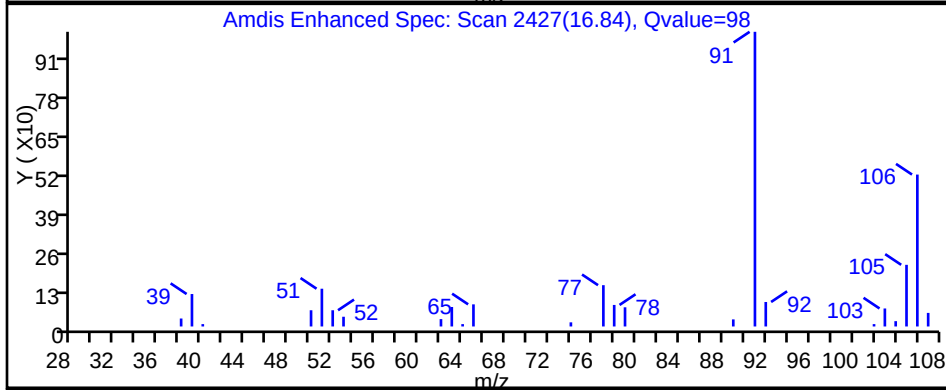
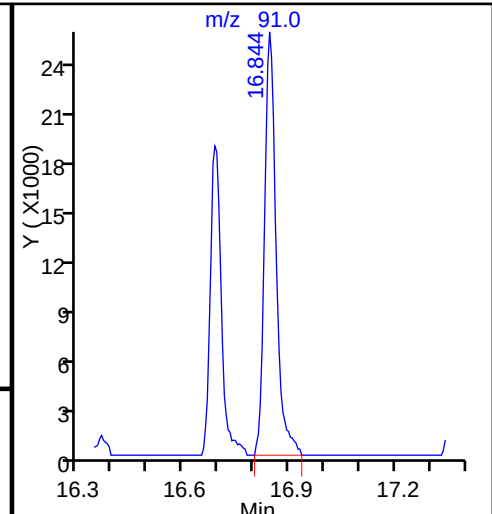
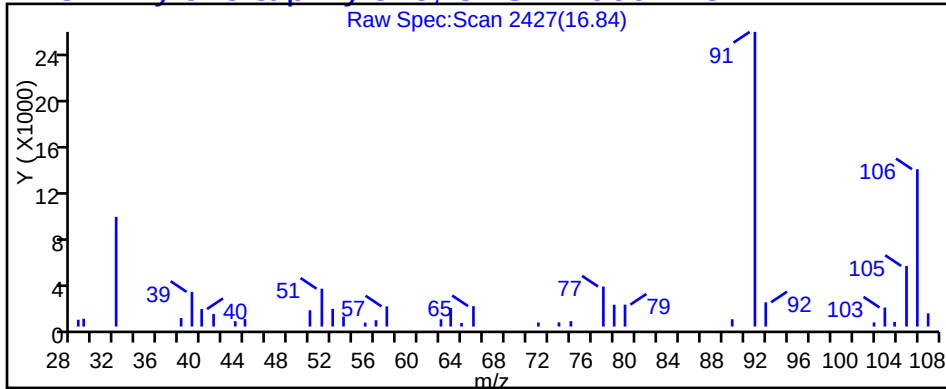
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P109.D

Injection Date: 04-Mar-2015 04:30:30

Instrument ID: MJ

Lims ID: 140-2797-A-5

Lab Sample ID: 140-2797-5

Client ID: H16-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 14

Purge Vol: 500.000 mL

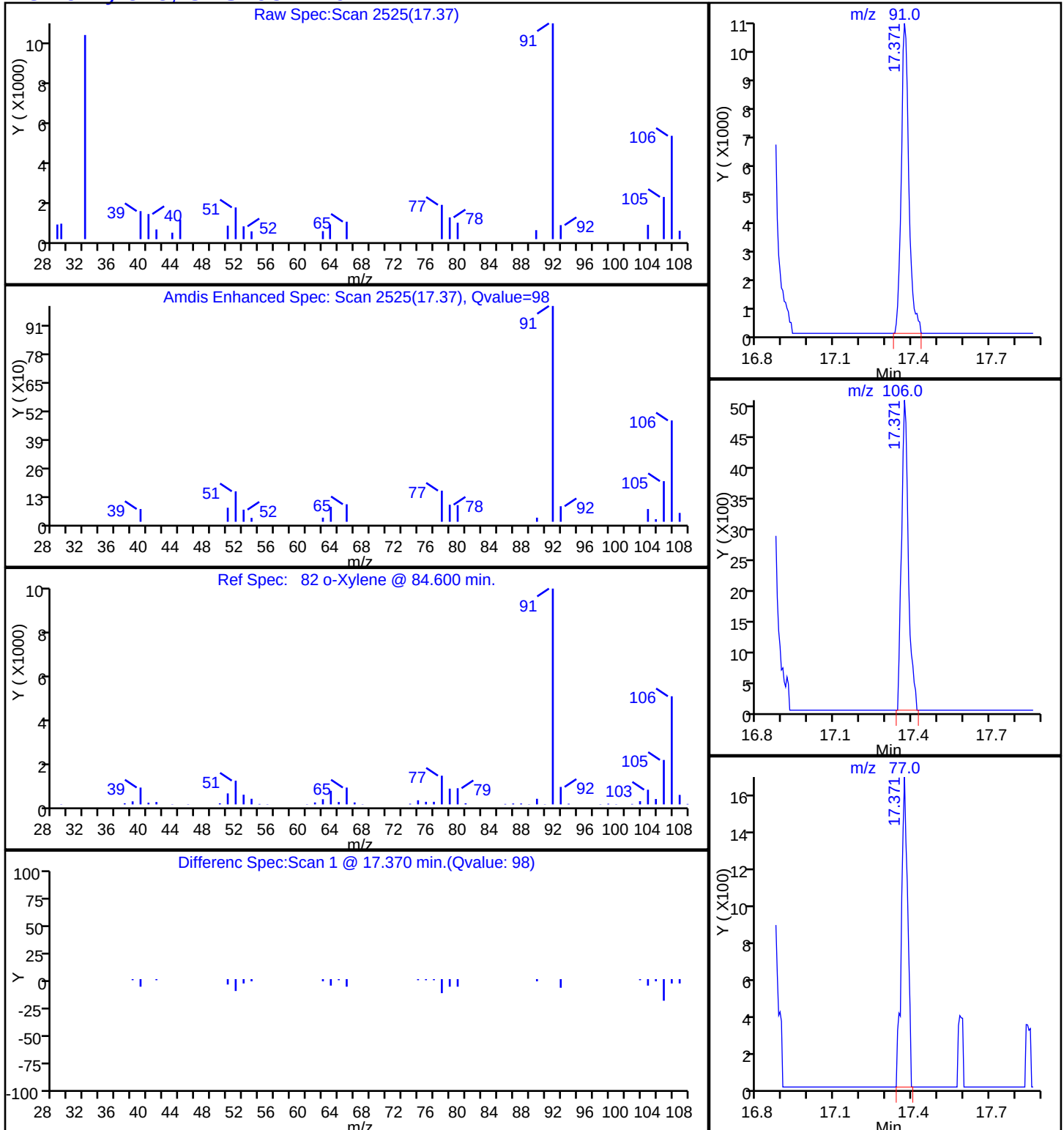
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P109.D

Injection Date: 04-Mar-2015 04:30:30

Instrument ID: MJ

Lims ID: 140-2797-A-5

Lab Sample ID: 140-2797-5

Client ID: H16-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 14

Purge Vol: 500.000 mL

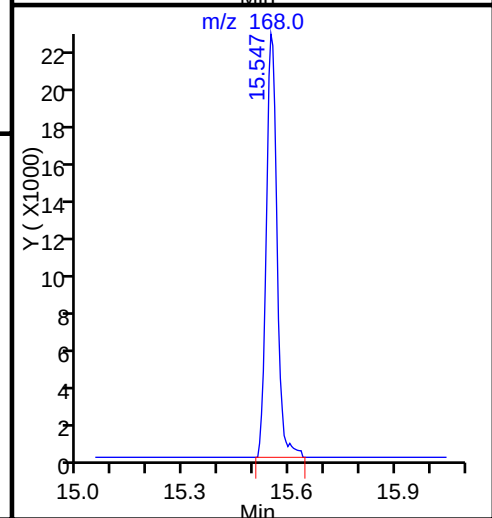
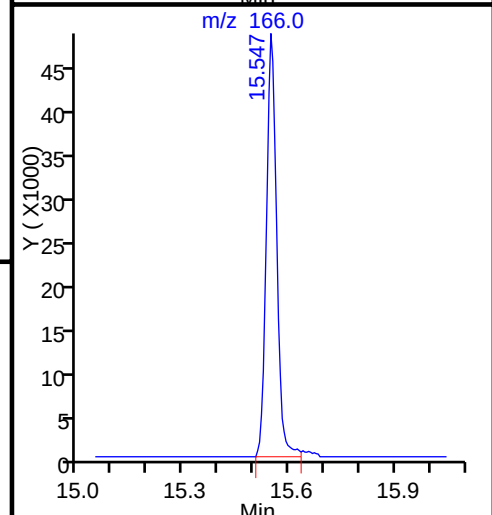
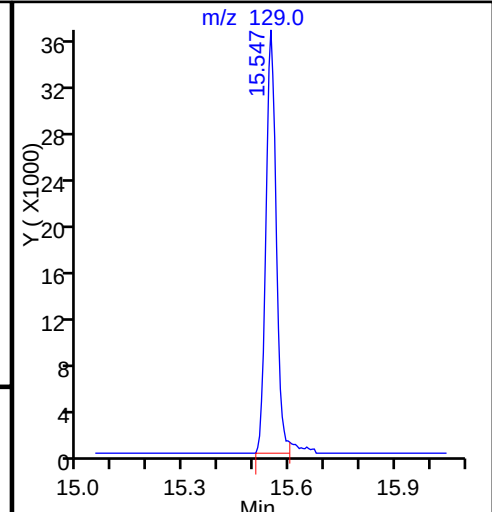
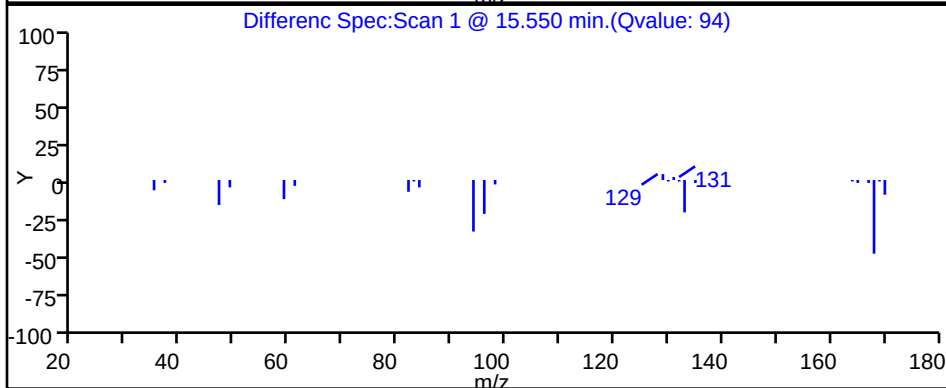
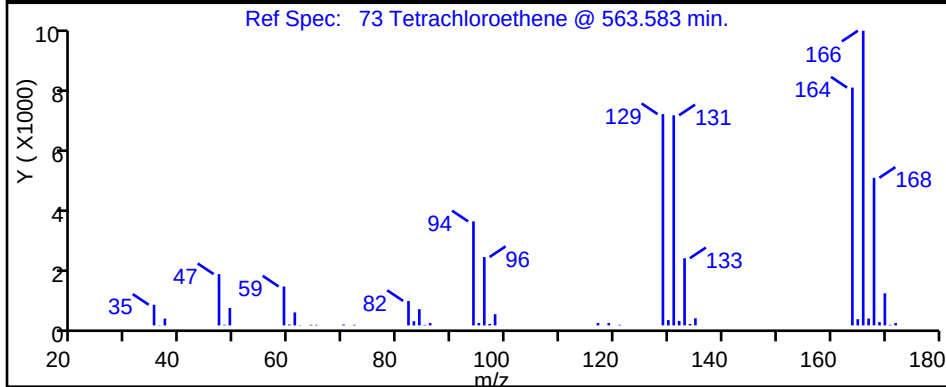
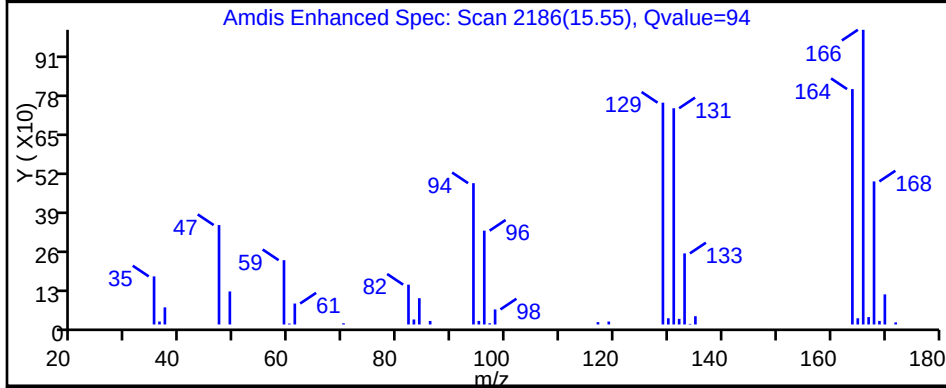
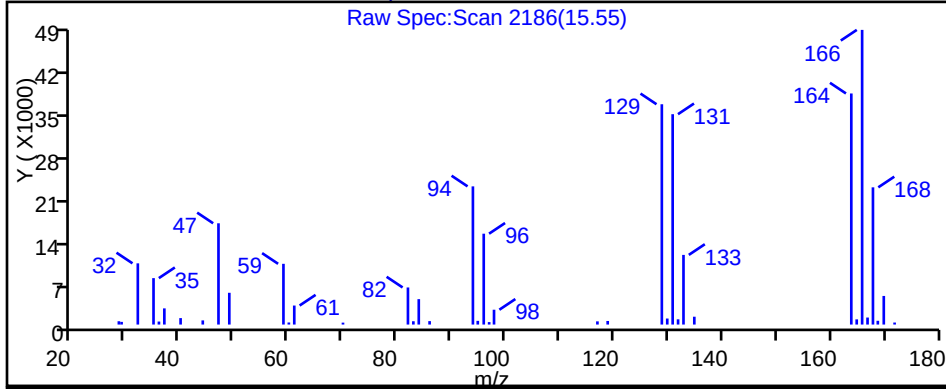
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

73 Tetrachloroethene, CAS: 127-18-4

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P109.D

Injection Date: 04-Mar-2015 04:30:30

Instrument ID: MJ

Lims ID: 140-2797-A-5

Lab Sample ID: 140-2797-5

Client ID: H16-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 14

Purge Vol: 500.000 mL

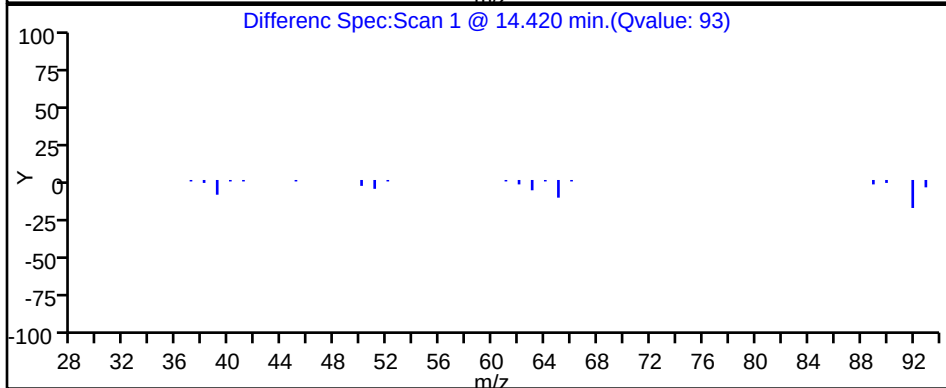
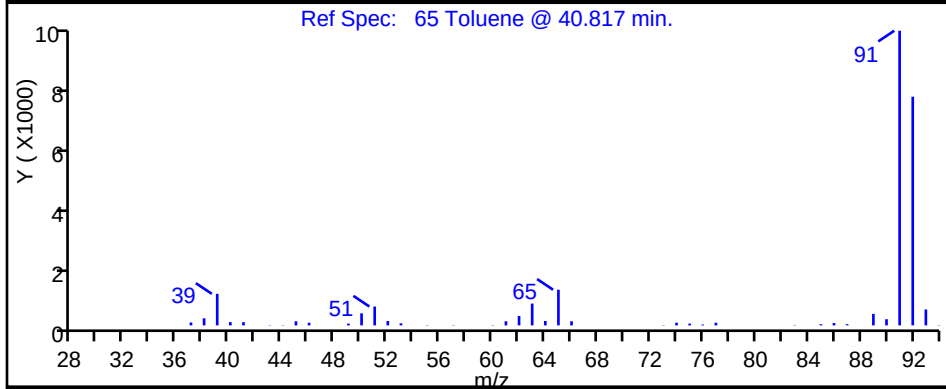
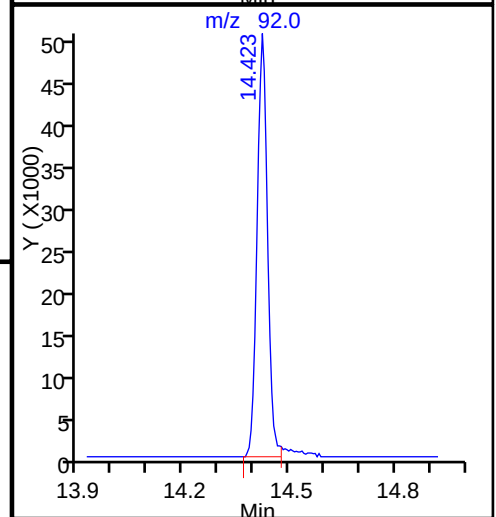
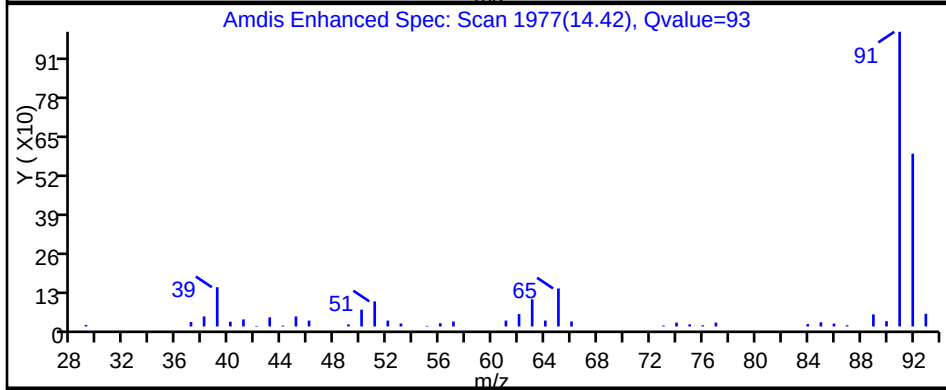
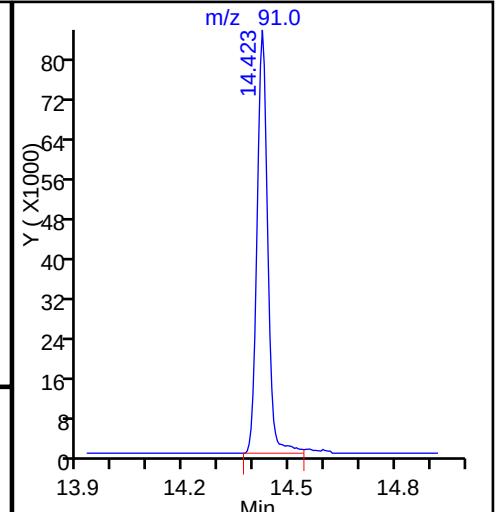
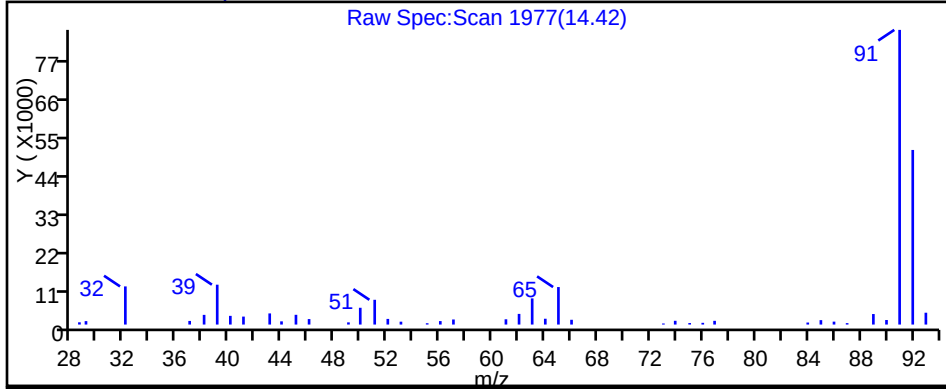
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P109.D

Injection Date: 04-Mar-2015 04:30:30

Instrument ID: MJ

Lims ID: 140-2797-A-5

Lab Sample ID: 140-2797-5

Client ID: H16-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 14

Purge Vol: 500.000 mL

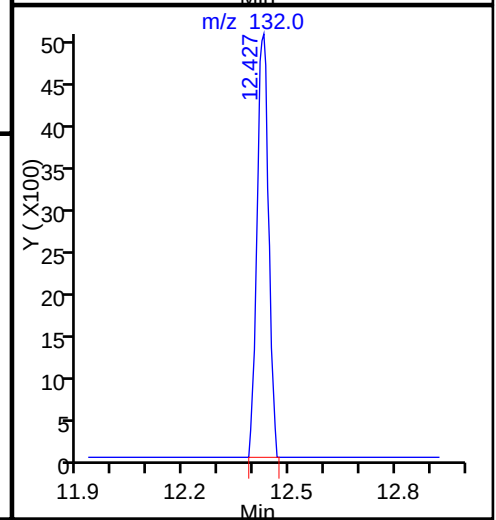
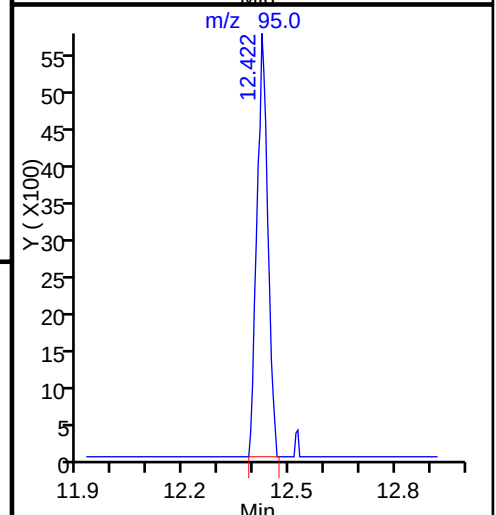
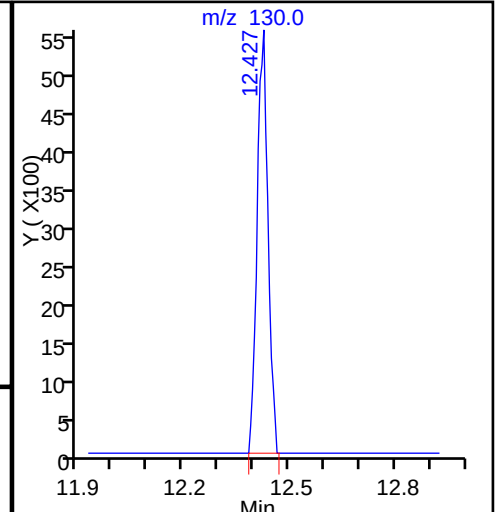
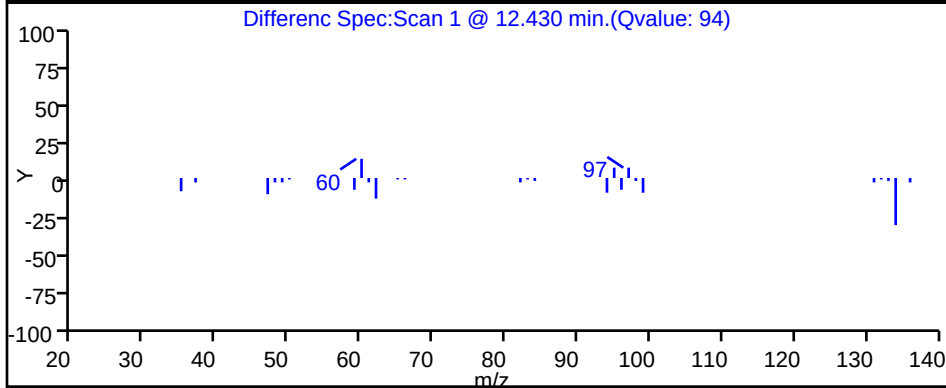
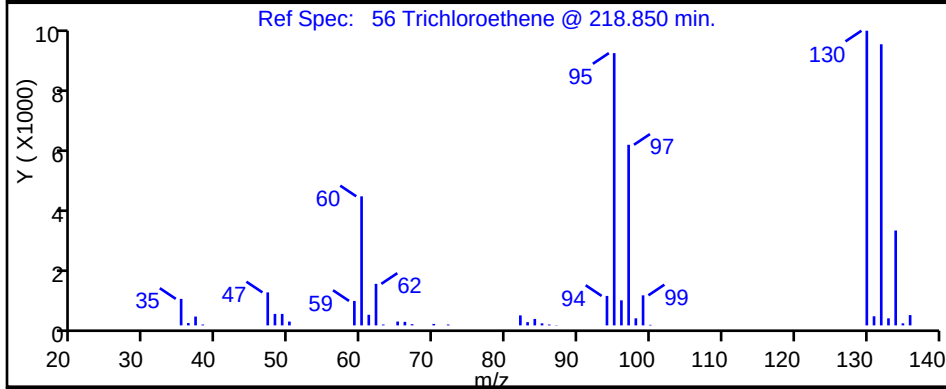
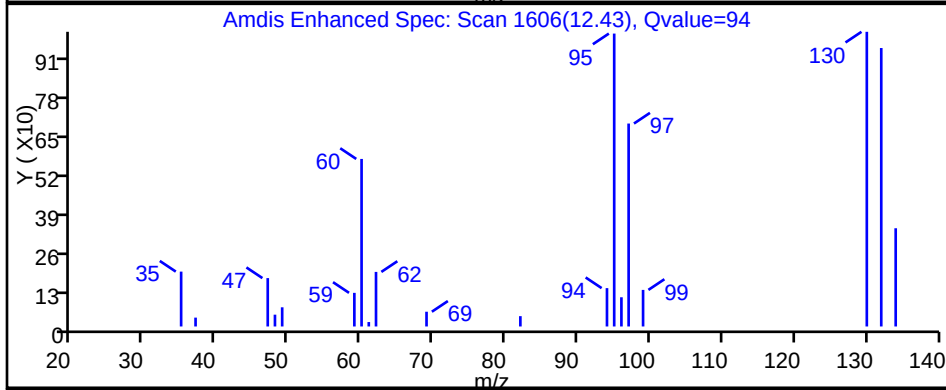
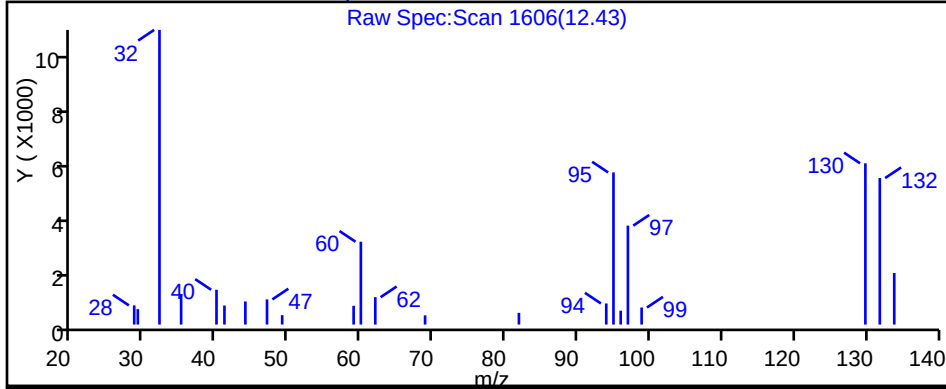
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

56 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P109.D

Injection Date: 04-Mar-2015 04:30:30

Instrument ID: MJ

Lims ID: 140-2797-A-5

Lab Sample ID: 140-2797-5

Client ID: H16-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 14

Purge Vol: 500.000 mL

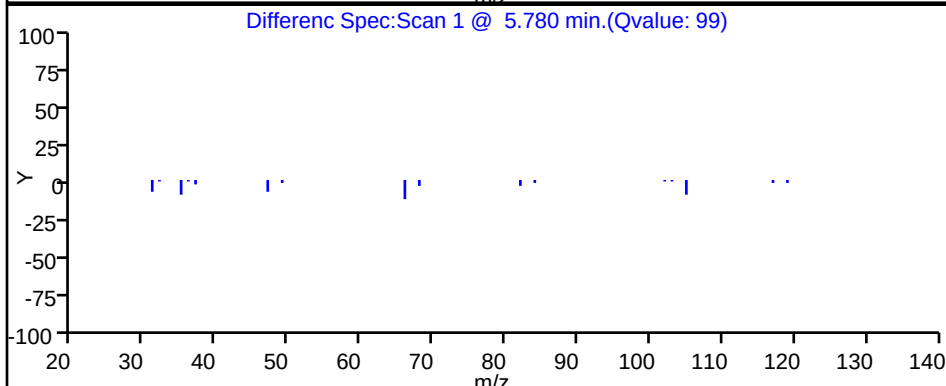
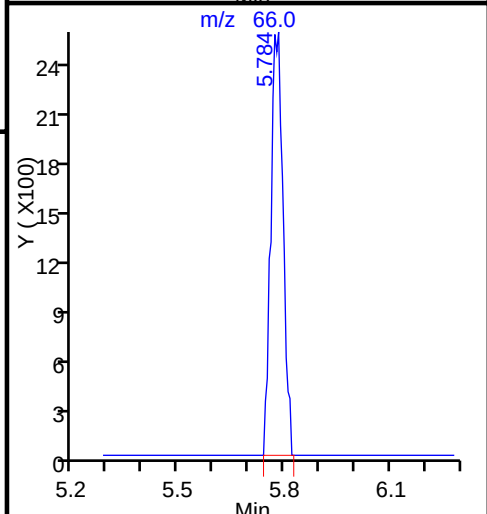
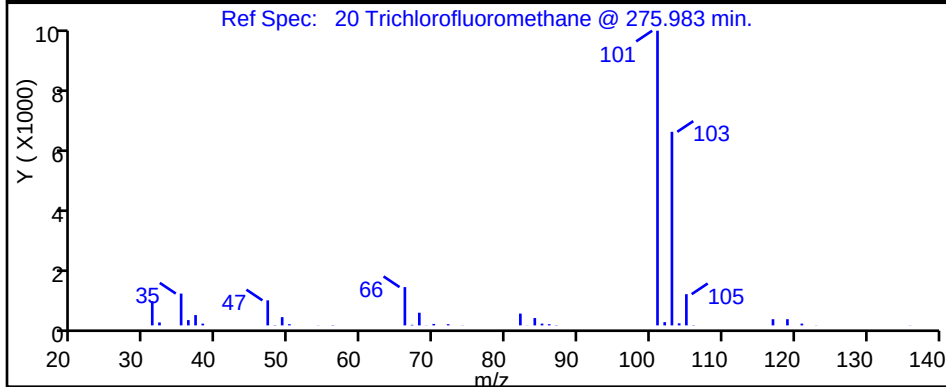
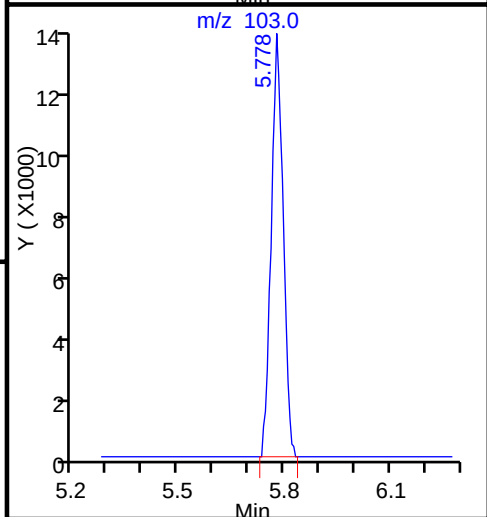
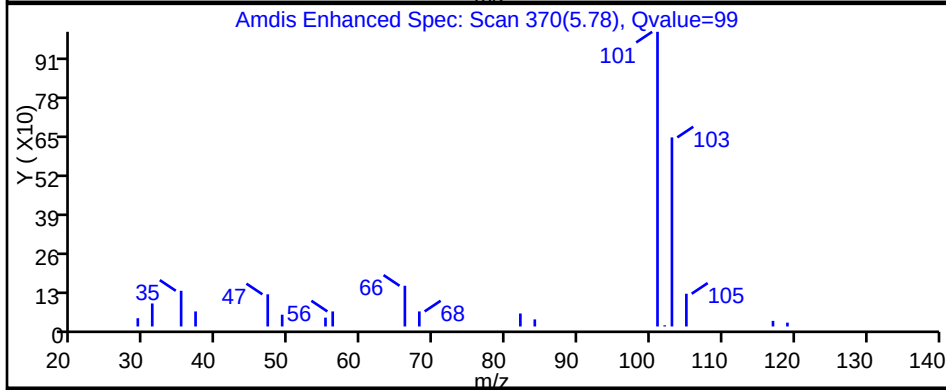
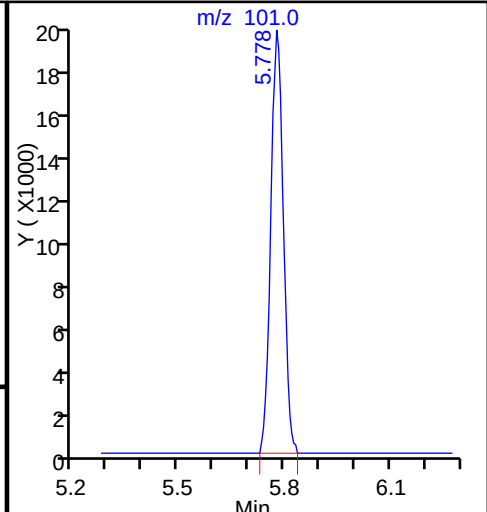
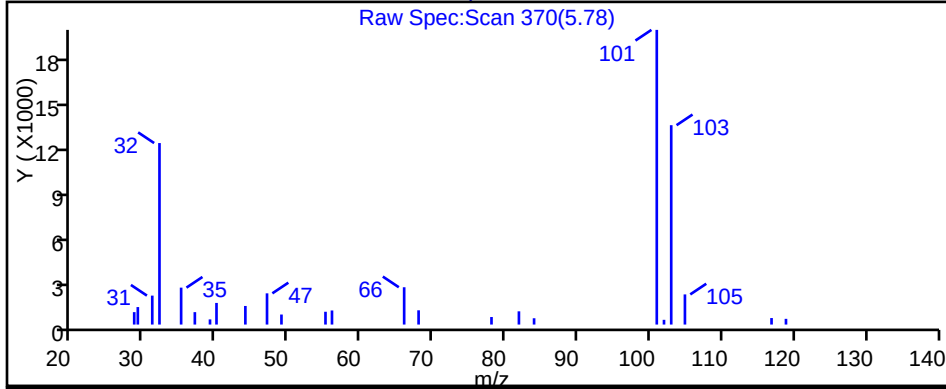
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H16-SS-2015 Lab Sample ID: 140-2797-6
 Matrix: Air Lab File ID: JC03P110.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 10:17
 Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 05:26
 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.: 2449 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	0.37		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		0.080	
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	0.45		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	0.60		0.20	
71-43-2	Benzene	78.11	0.24		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	0.25		0.040	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	1.9		0.080	
74-87-3	Chloromethane	50.49	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.080	
110-82-7	Cyclohexane	84.16	0.22		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H16-SS-2015 Lab Sample ID: 140-2797-6
 Matrix: Air Lab File ID: JC03P110.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 10:17
 Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 05:26
 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.: 2449 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	0.36		0.080	
64-17-5	Ethanol	46.07	3.0		0.80	
100-41-4	Ethylbenzene	106.17	ND	*	0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	0.47		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	0.37		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.31		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	0.37		0.080	
108-88-3	Toluene	92.14	0.54		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	7.6		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.16		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

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: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: H16-SS-2015 Lab Sample ID: 140-2797-6

Matrix: Air Lab File ID: JC03P110.D

Analysis Method: TO 15 LL Date Collected: 02/24/2015 10:17

Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 05:26

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.: 2449 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	2.0		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		0.32	
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	2.5		0.82	
71-43-2	Benzene	78.11	0.77		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	1.6		0.25	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	9.2		0.39	
74-87-3	Chloromethane	50.49	ND		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	0.75		0.69	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H16-SS-2015 Lab Sample ID: 140-2797-6
 Matrix: Air Lab File ID: JC03P110.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 10:17
 Sample wt/vol: 500(mL) Date Analyzed: 03/04/2015 05:26
 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.: 2449 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	1.8		0.40	
64-17-5	Ethanol	46.07	5.6		1.5	
100-41-4	Ethylbenzene	106.17	ND	*	0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	1.7		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	1.3		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	1.4		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	2.5		0.54	
108-88-3	Toluene	92.14	2.0		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	41		0.21	
75-69-4	Trichlorofluoromethane	137.37	0.91		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

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

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P110.D
 Lims ID: 140-2797-A-6 Lab Sample ID: 140-2797-6
 Client ID: H16-SS-2015
 Sample Type: Client
 Inject. Date: 04-Mar-2015 05:26:30 ALS Bottle#: 10 Worklist Smp#: 15
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2797-a-6
 Misc. Info.: J030315,TO15,,140-0001414-015
 Operator ID: 403648 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150228-1414.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 11:02:31 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK052

First Level Reviewer: tajh

Date: 04-Mar-2015 08:39:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.581	9.587	-0.006	95	278791	4.00	
* 2 1,4-Difluorobenzene	114	11.722	11.728	-0.006	96	1281754	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.365	16.370	-0.005	92	1083702	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.979	17.979	0.000	89	673275	3.80	
8 Dichlorodifluoromethane	85	4.100	4.105	-0.005	100	111996	0.3568	
9 Chloromethane	52	4.309	4.315	-0.006	99	8278	0.1855	
16 Chloroethane	64	5.143	5.138	0.005	69	960	0.0182	
17 Ethanol	31	5.229	5.240	-0.011	97	115602	2.98	
20 Trichlorofluoromethane	101	5.773	5.778	-0.005	99	44630	0.1624	
28 2-Methyl-2-propanol	59	6.633	6.633	0.000	93	12520	0.0761	
30 1,1,2-Trichloro-1,2,2-trif	101	6.719	6.730	-0.011	92	10795	0.0584	
31 Methylene Chloride	84	6.908	6.924	-0.016	96	32812	0.3671	
39 2-Butanone (MEK)	72	8.785	8.785	0.000	95	15089	0.4545	
40 Hexane	56	8.801	8.807	-0.006	87	43840	0.4716	
43 Chloroform	83	9.587	9.598	-0.011	97	332705	1.89	
45 1,1,1-Trichloroethane	97	10.630	10.636	-0.006	97	68336	0.3703	
49 Cyclohexane	69	11.211	11.211	0.000	64	10675	0.2182	
48 Benzene	78	11.211	11.217	-0.006	97	57051	0.2410	
50 Carbon tetrachloride	117	11.233	11.238	-0.005	95	44290	0.2535	
53 Isooctane	57	11.927	11.932	-0.005	89	24912	0.0529	
56 Trichloroethene	130	12.422	12.427	-0.005	95	788873	7.65	
62 4-Methyl-2-pentanone (MIBK	43	13.546	13.546	0.000	96	117626	0.6040	
65 Toluene	91	14.423	14.423	0.000	92	107118	0.5417	
73 Tetrachloroethene	129	15.547	15.547	0.000	94	31966	0.3714	
76 Ethylbenzene	91	16.688	16.693	-0.005	68	17175	0.0743	
78 m-Xylene & p-Xylene	91	16.844	16.849	-0.005	99	58351	0.3133	
82 o-Xylene	91	17.371	17.371	0.000	98	26399	0.1300	
89 1,3,5-Trimethylbenzene	120	18.662	18.662	0.000	92	8409	0.0690	
93 1,2,4-Trimethylbenzene	105	19.082	19.087	-0.005	98	27927	0.1276	
97 1,4-Dichlorobenzene	146	19.442	19.442	0.000	92	5627	0.0483	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P110.D

Injection Date: 04-Mar-2015 05:26:30

Instrument ID: MJ

Operator ID: 403648

Lims ID: 140-2797-A-6

Lab Sample ID: 140-2797-6

Worklist Smp#: 15

Client ID: H16-SS-2015

Purge Vol: 500.000 mL

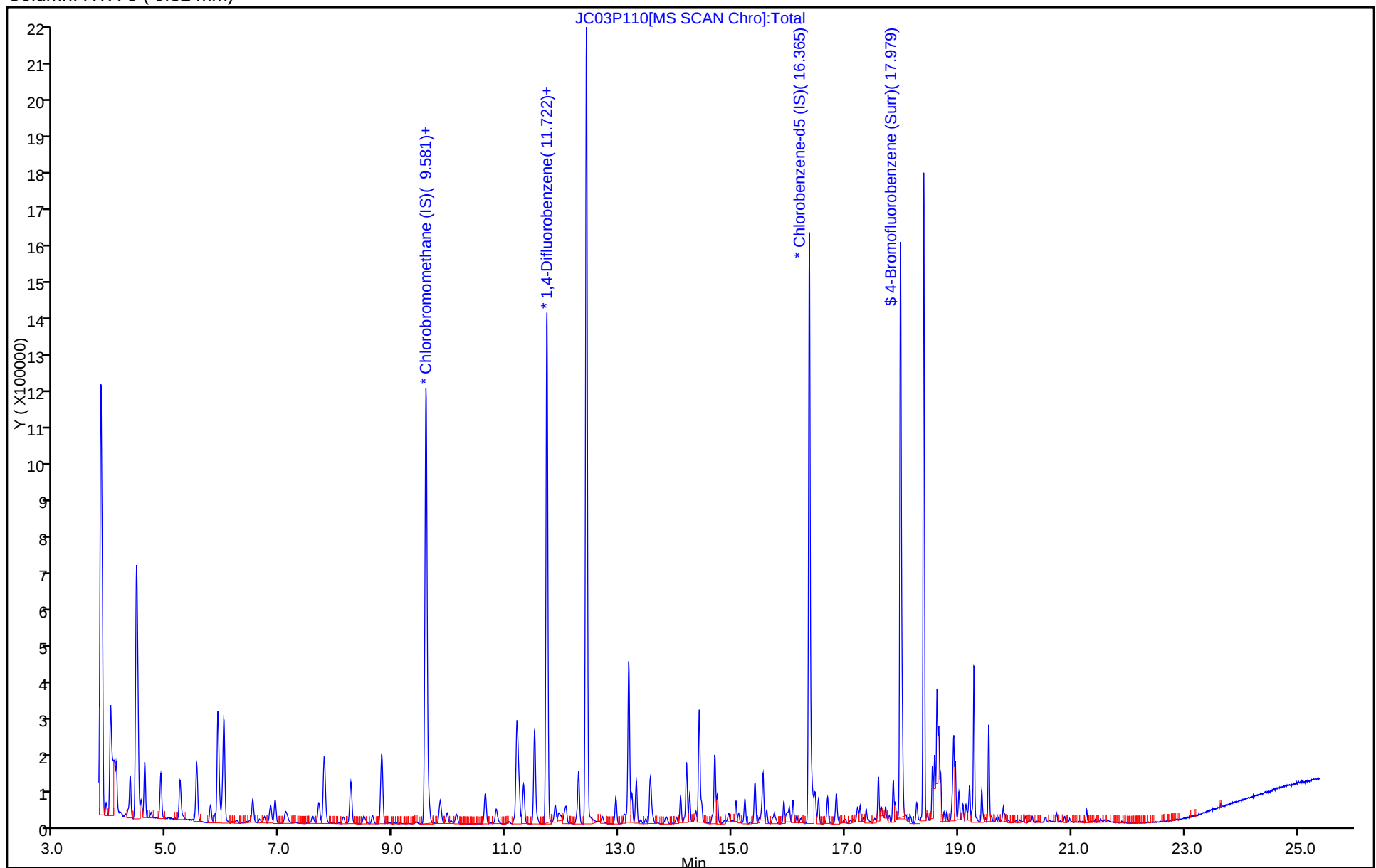
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P110.D

Injection Date: 04-Mar-2015 05:26:30

Instrument ID: MJ

Lims ID: 140-2797-A-6

Lab Sample ID: 140-2797-6

Client ID: H16-SS-2015

Operator ID: 403648

ALS Bottle#: 10

Worklist Smp#: 15

Purge Vol: 500.000 mL

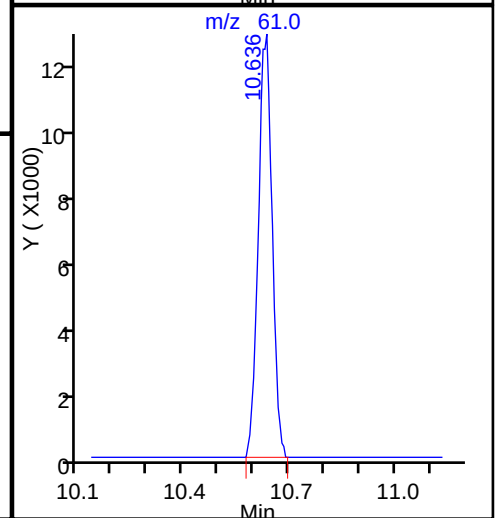
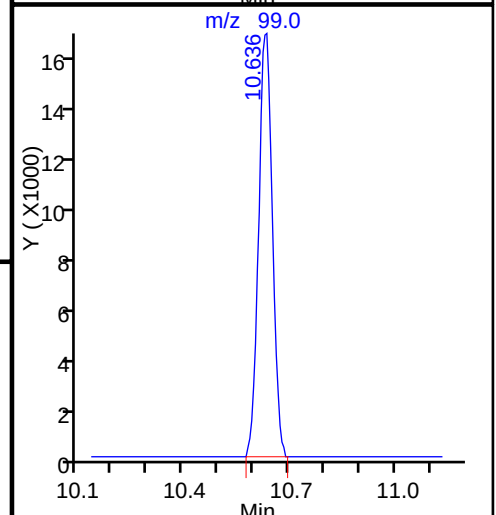
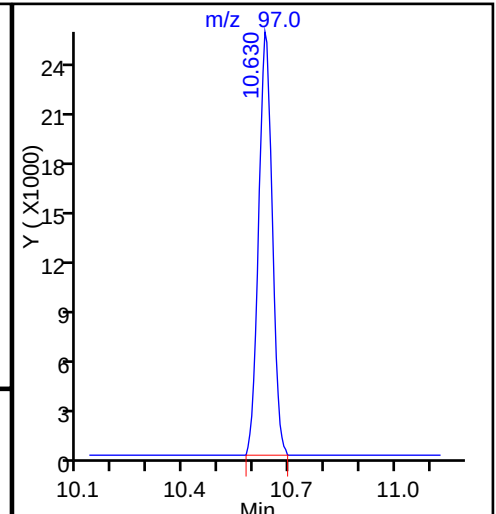
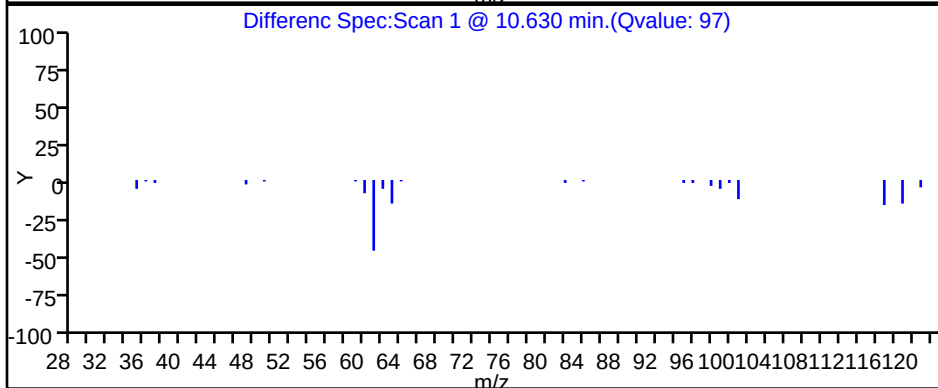
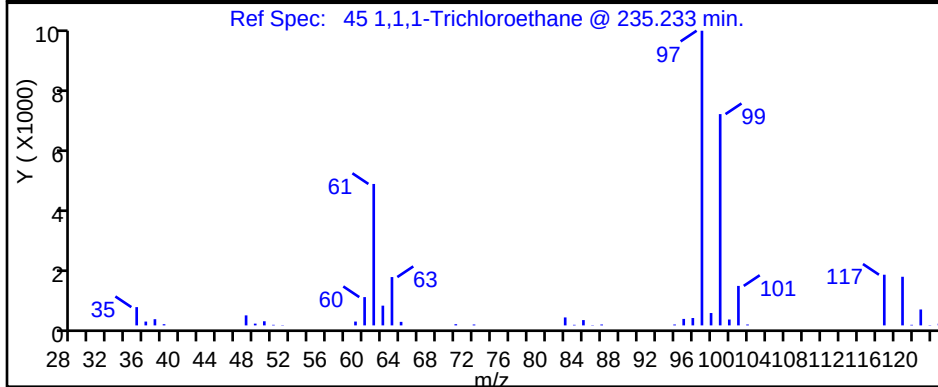
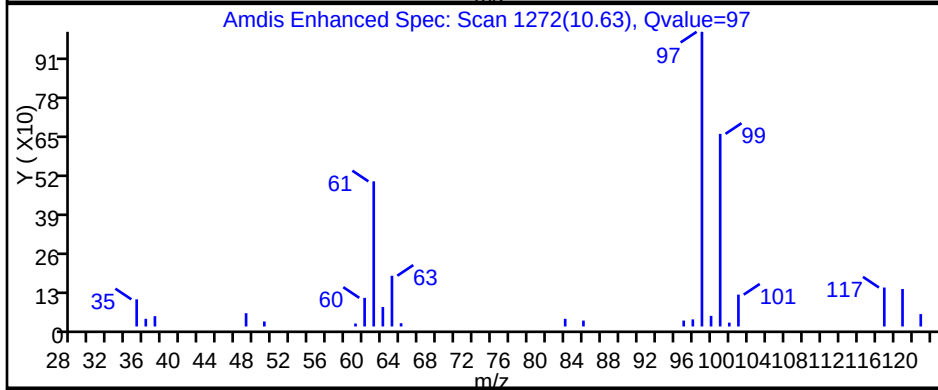
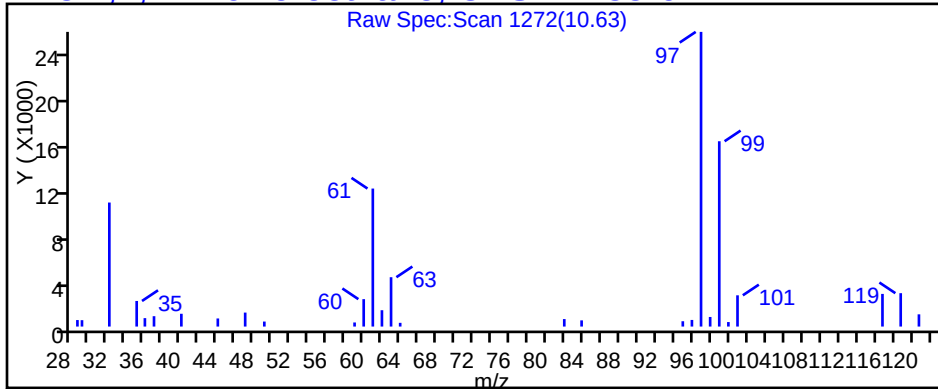
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

45 1,1,1-Trichloroethane, CAS: 71-55-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P110.D

Injection Date: 04-Mar-2015 05:26:30

Instrument ID: MJ

Lims ID: 140-2797-A-6

Lab Sample ID: 140-2797-6

Client ID: H16-SS-2015

Operator ID: 403648

ALS Bottle#: 10

Worklist Smp#: 15

Purge Vol: 500.000 mL

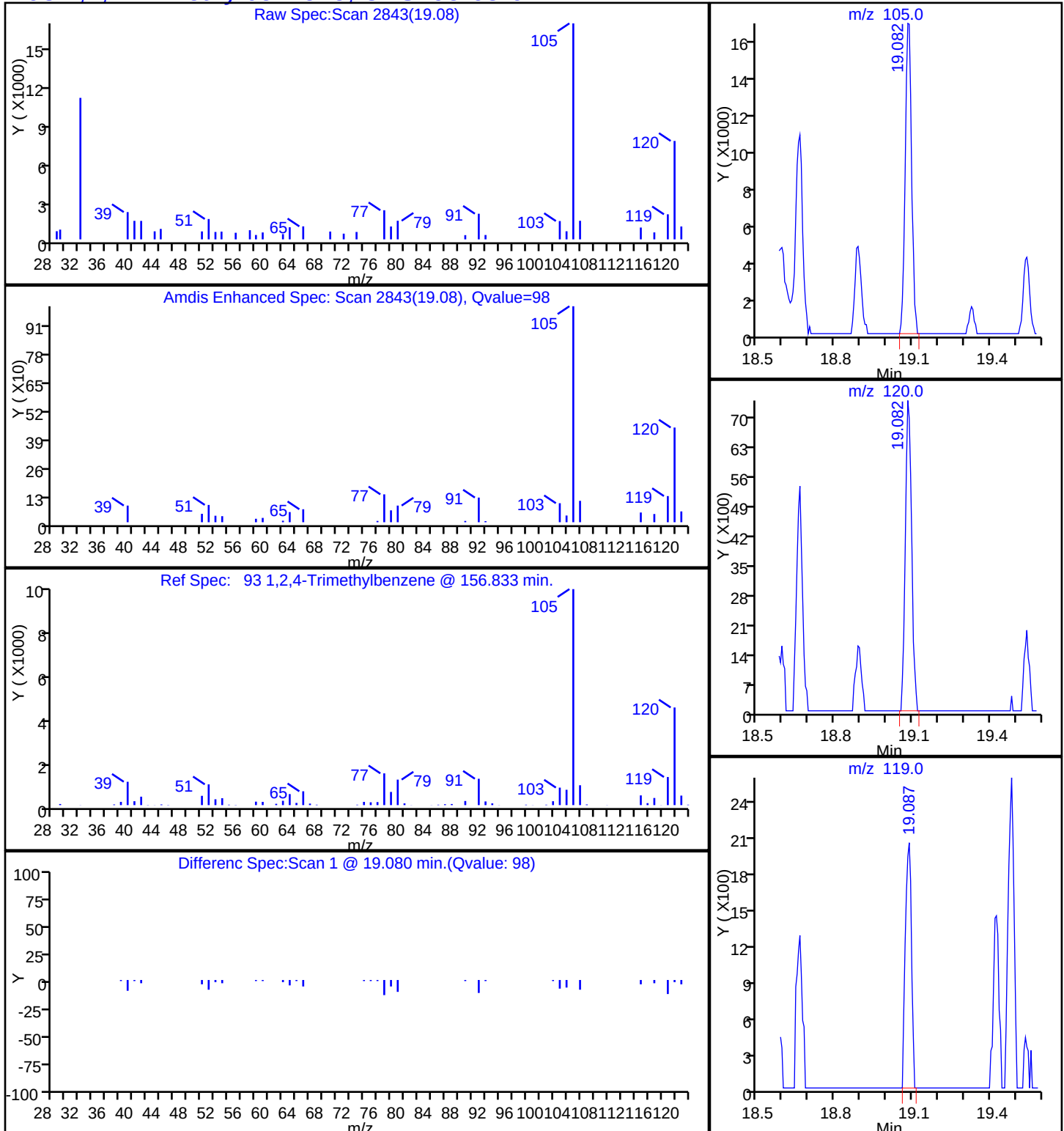
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

93 1,2,4-Trimethylbenzene, CAS: 95-63-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P110.D

Injection Date: 04-Mar-2015 05:26:30

Instrument ID: MJ

Lims ID: 140-2797-A-6

Lab Sample ID: 140-2797-6

Client ID: H16-SS-2015

Operator ID: 403648

ALS Bottle#: 10

Worklist Smp#: 15

Purge Vol: 500.000 mL

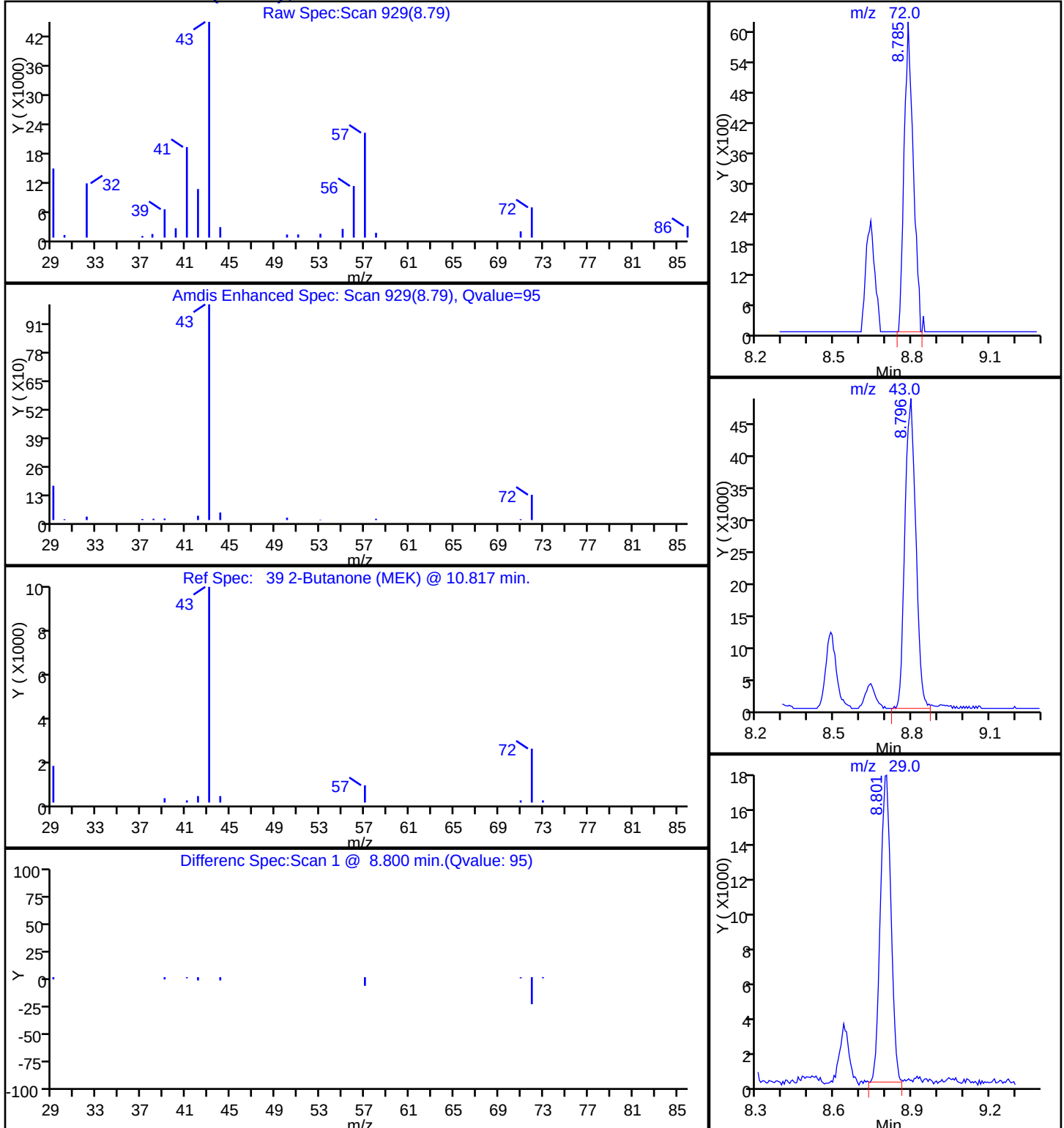
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P110.D

Injection Date: 04-Mar-2015 05:26:30

Instrument ID: MJ

Lims ID: 140-2797-A-6

Lab Sample ID: 140-2797-6

Client ID: H16-SS-2015

Operator ID: 403648

ALS Bottle#: 10

Worklist Smp#: 15

Purge Vol: 500.000 mL

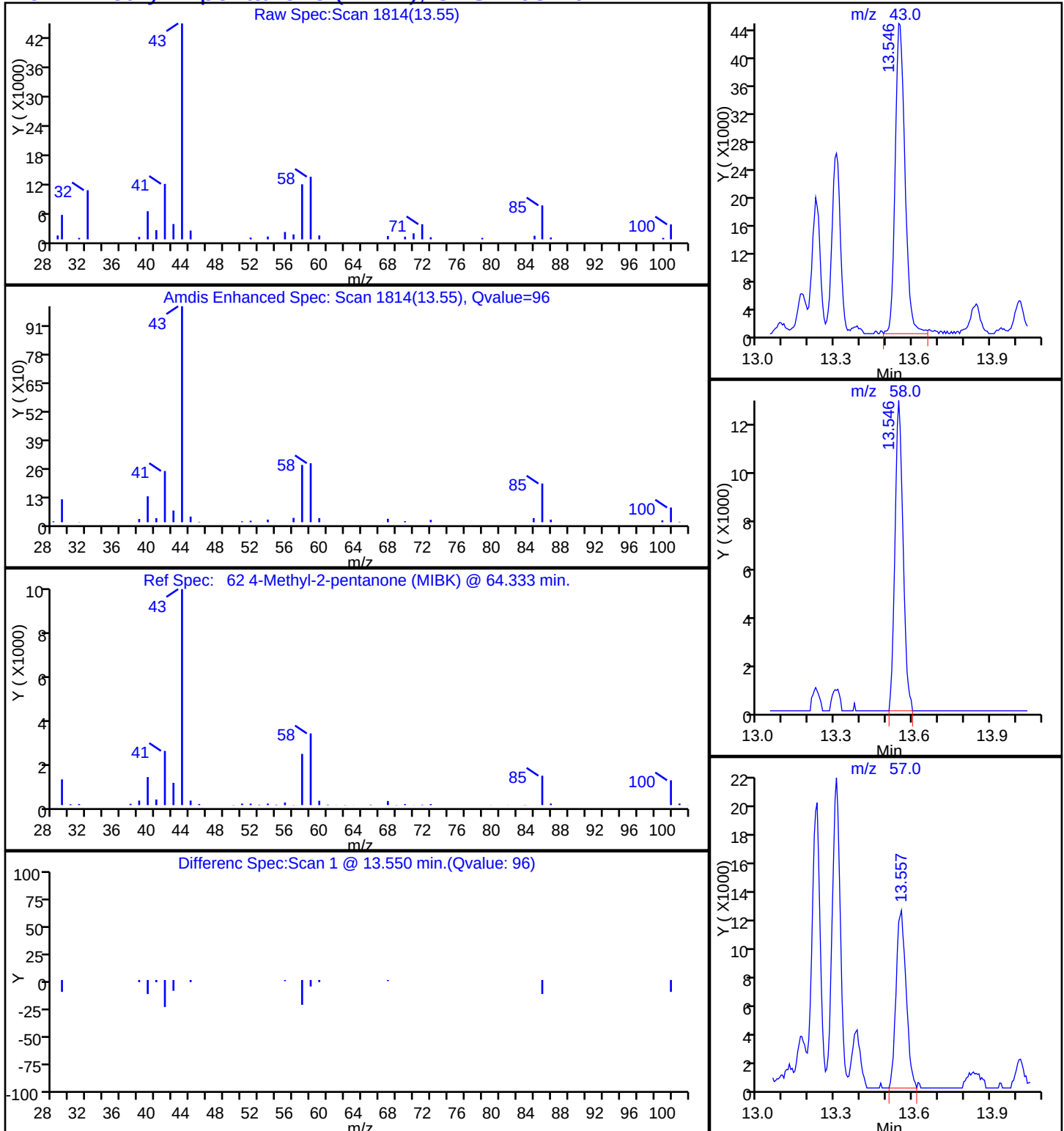
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

62 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P110.D

Injection Date: 04-Mar-2015 05:26:30

Instrument ID: MJ

Lims ID: 140-2797-A-6

Lab Sample ID: 140-2797-6

Client ID: H16-SS-2015

Operator ID: 403648

ALS Bottle#: 10

Worklist Smp#: 15

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

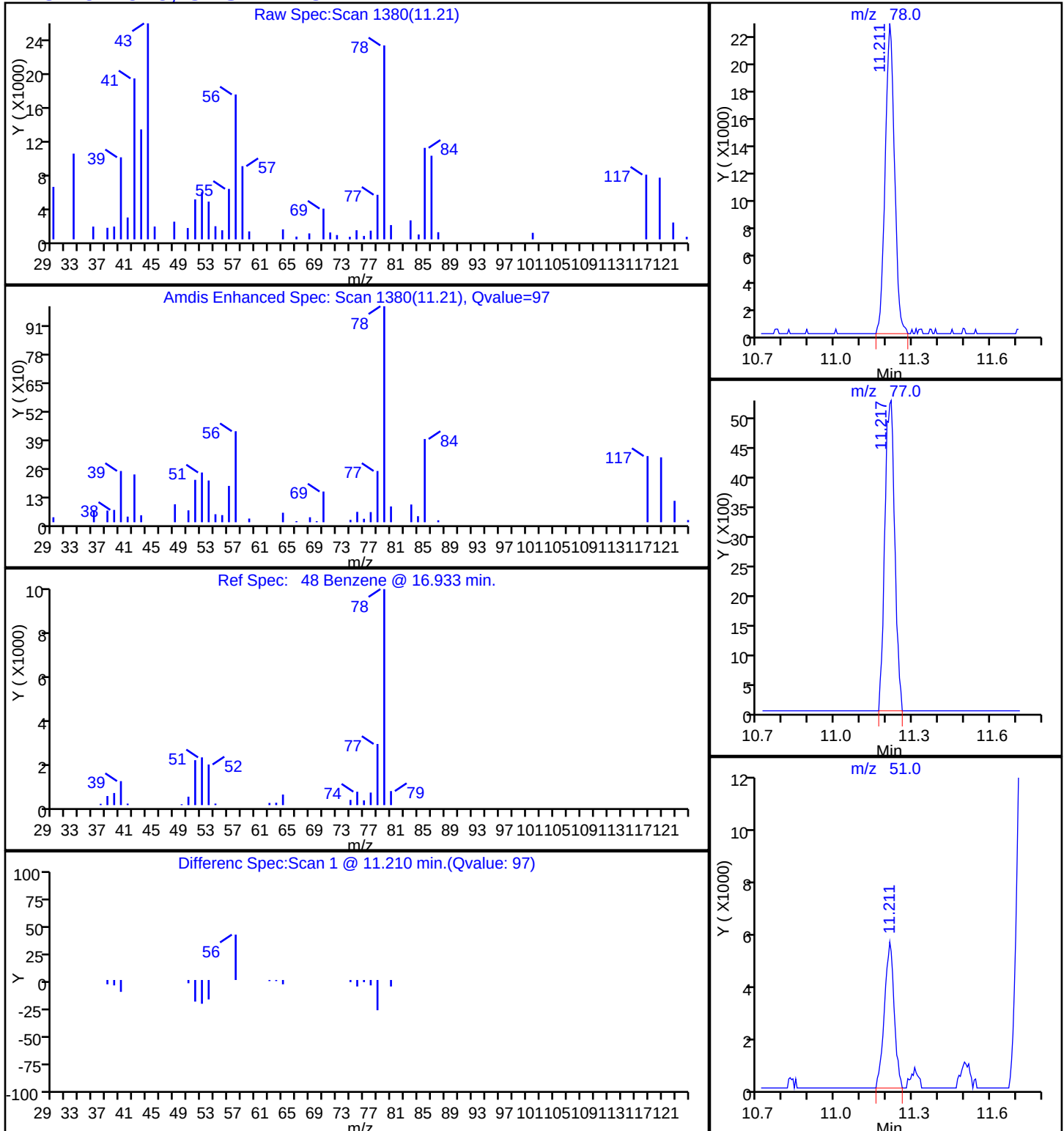
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P110.D

Injection Date: 04-Mar-2015 05:26:30

Instrument ID: MJ

Lims ID: 140-2797-A-6

Lab Sample ID: 140-2797-6

Client ID: H16-SS-2015

Operator ID: 403648

ALS Bottle#: 10

Worklist Smp#: 15

Purge Vol: 500.000 mL

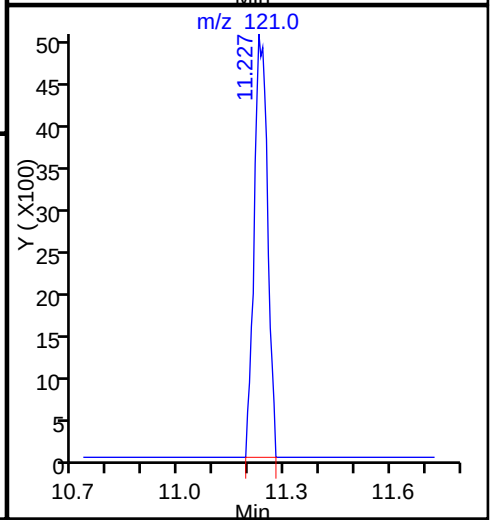
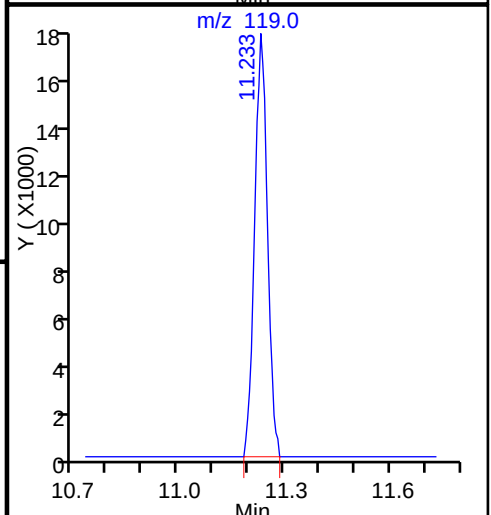
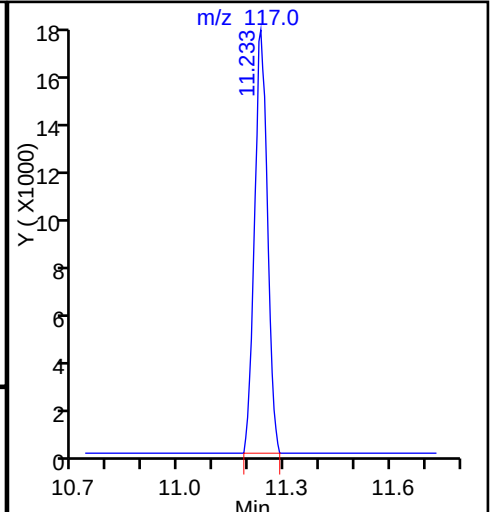
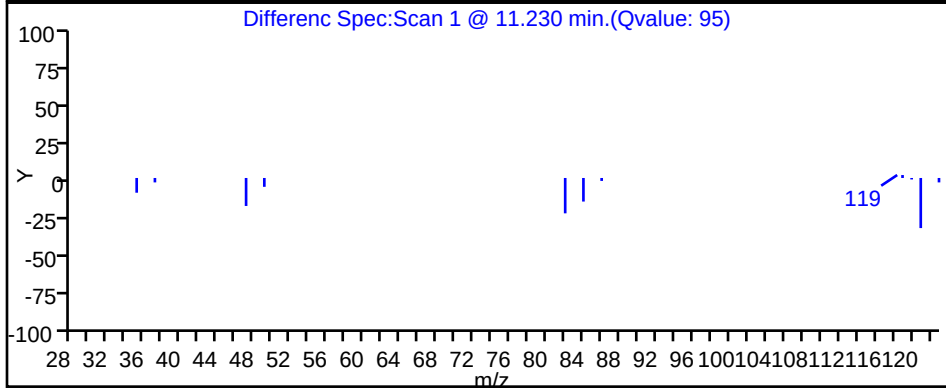
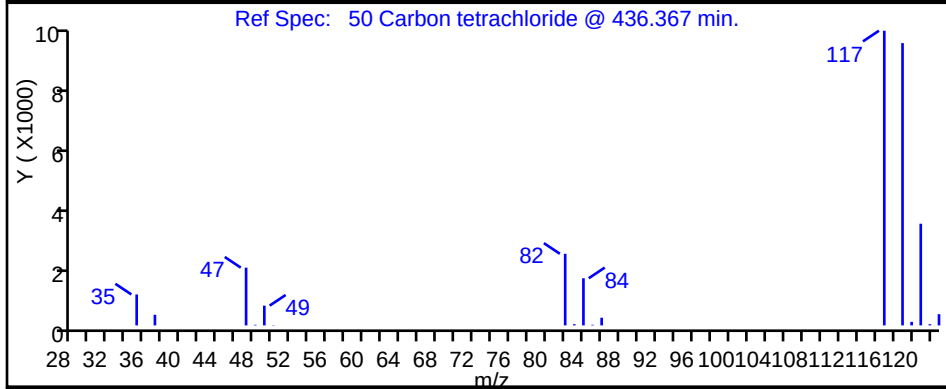
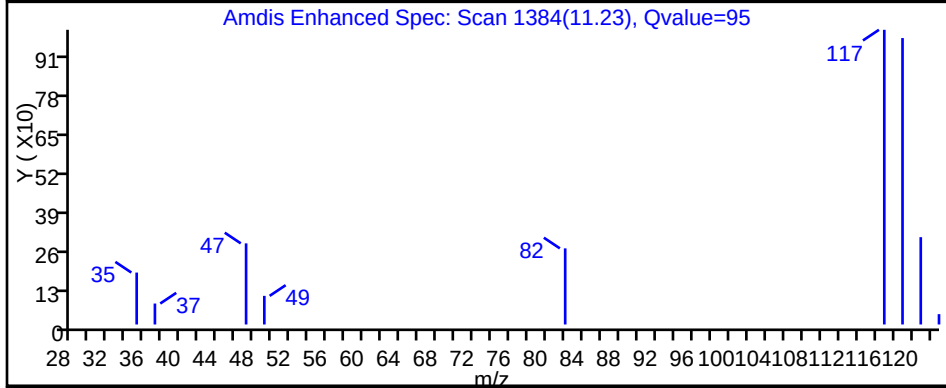
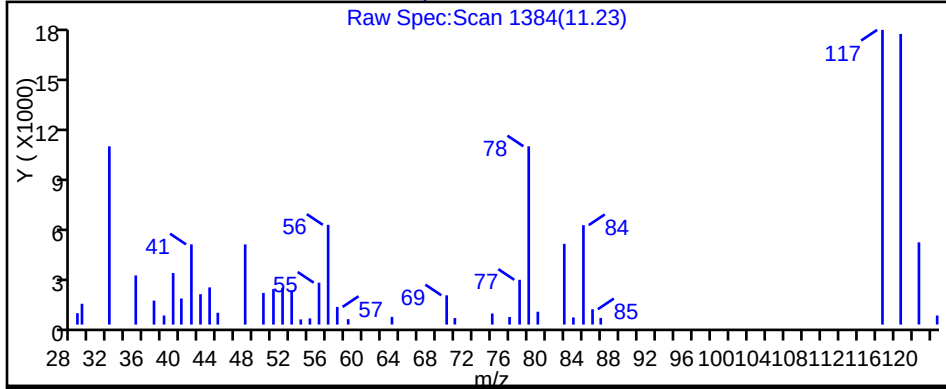
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P110.D

Injection Date: 04-Mar-2015 05:26:30

Instrument ID: MJ

Lims ID: 140-2797-A-6

Lab Sample ID: 140-2797-6

Client ID: H16-SS-2015

Operator ID: 403648

ALS Bottle#: 10

Worklist Smp#: 15

Purge Vol: 500.000 mL

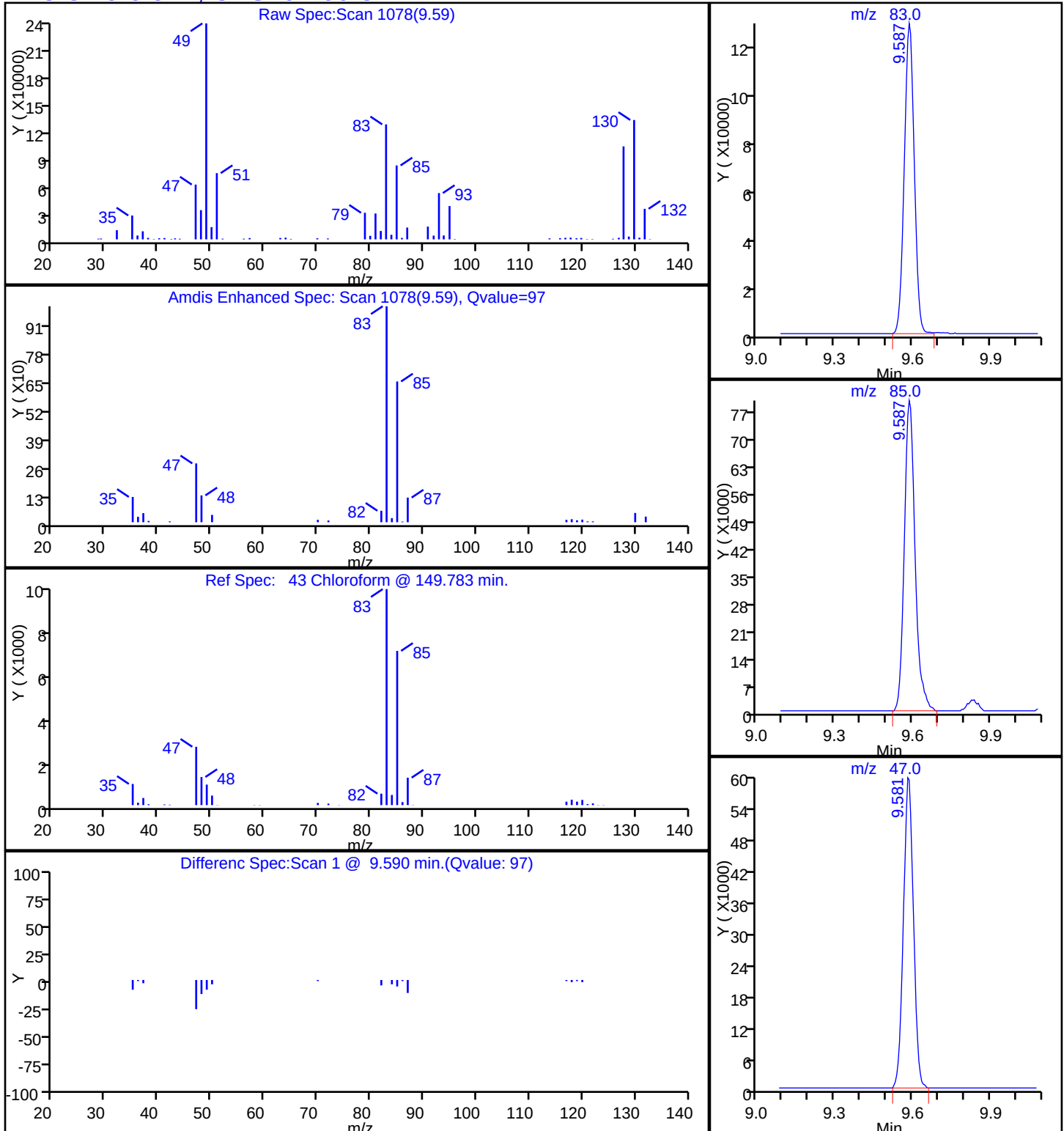
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

43 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P110.D

Injection Date: 04-Mar-2015 05:26:30

Instrument ID: MJ

Lims ID: 140-2797-A-6

Lab Sample ID: 140-2797-6

Client ID: H16-SS-2015

Operator ID: 403648

ALS Bottle#: 10

Worklist Smp#: 15

Purge Vol: 500.000 mL

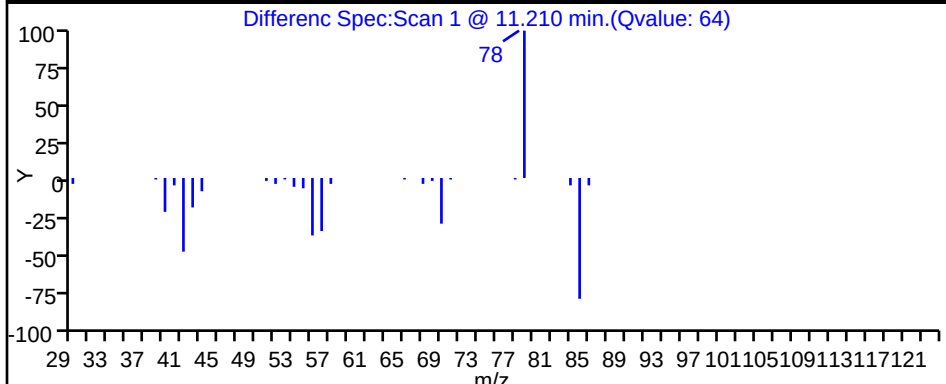
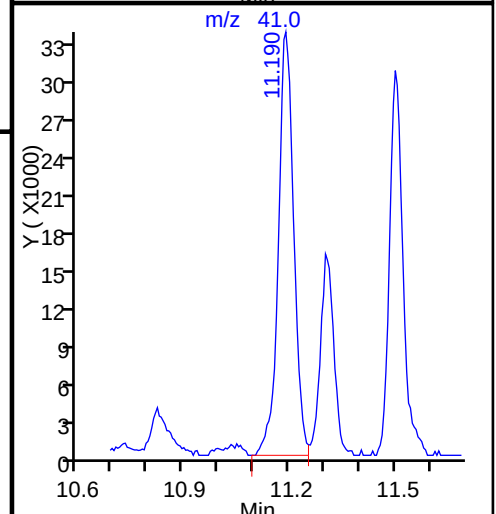
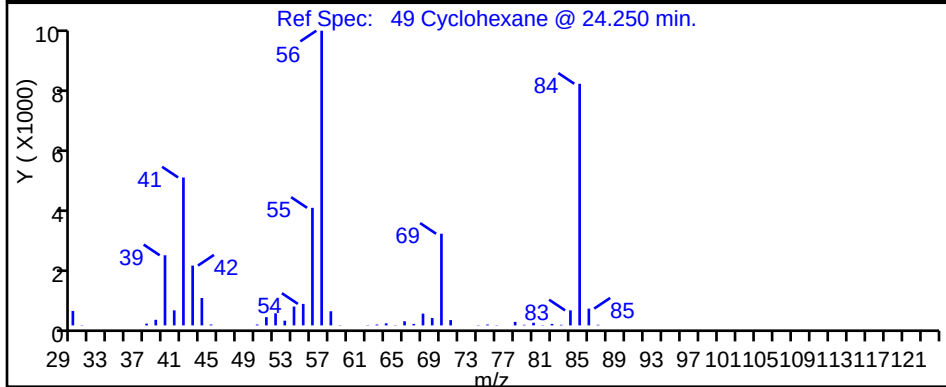
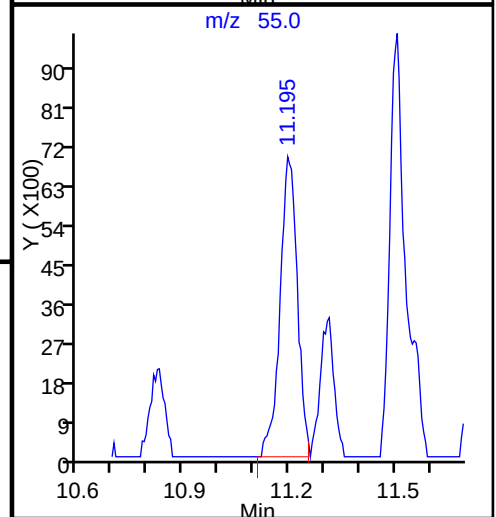
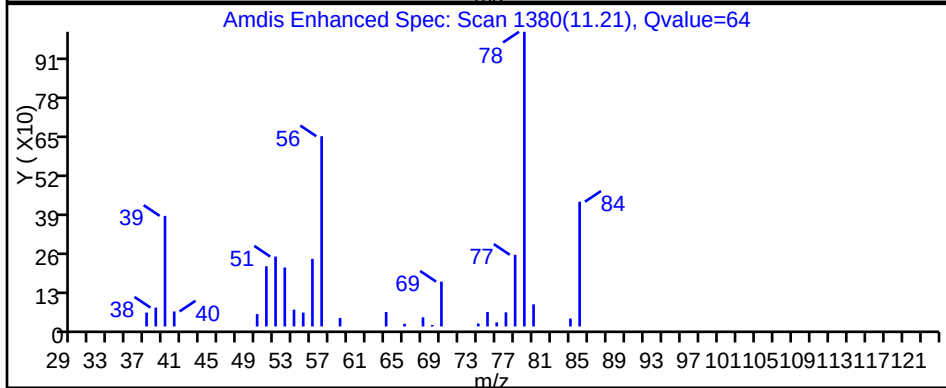
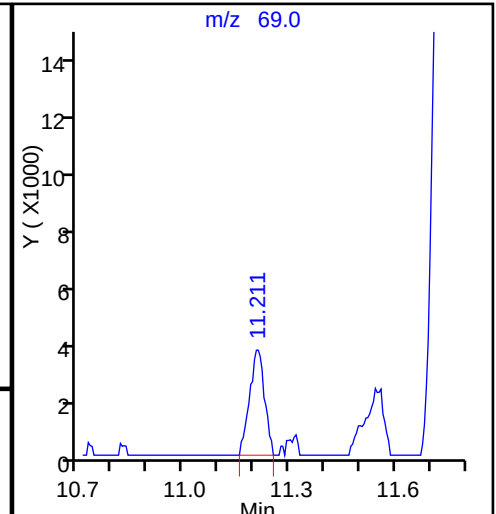
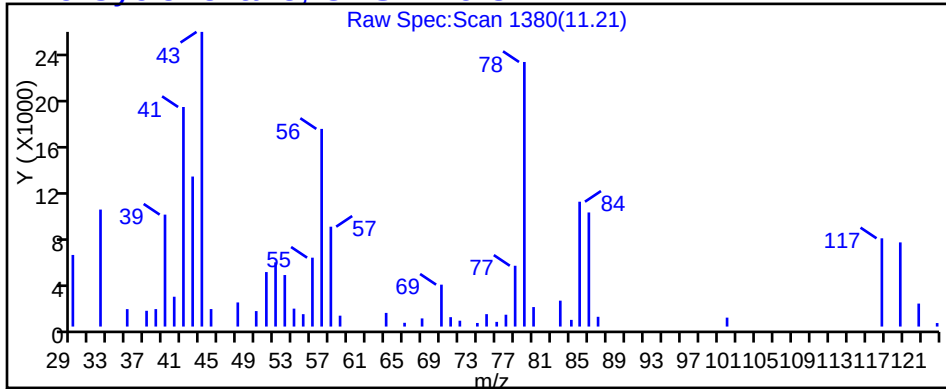
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Cyclohexane, CAS: 110-82-7

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P110.D

Injection Date: 04-Mar-2015 05:26:30

Instrument ID: MJ

Lims ID: 140-2797-A-6

Lab Sample ID: 140-2797-6

Client ID: H16-SS-2015

Operator ID: 403648

ALS Bottle#: 10

Worklist Smp#: 15

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

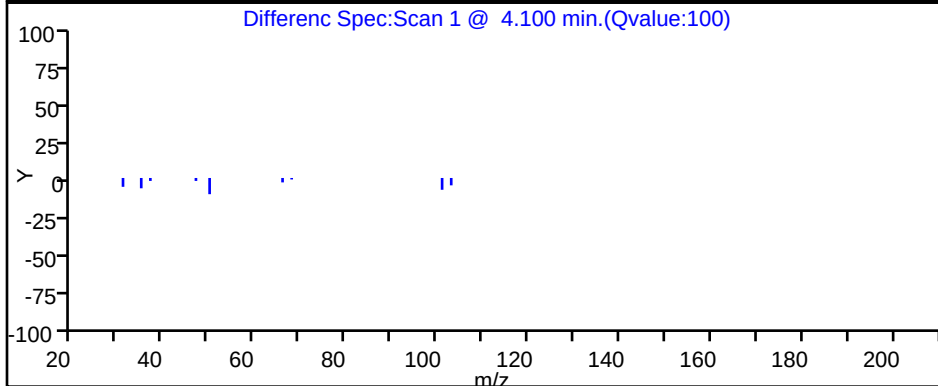
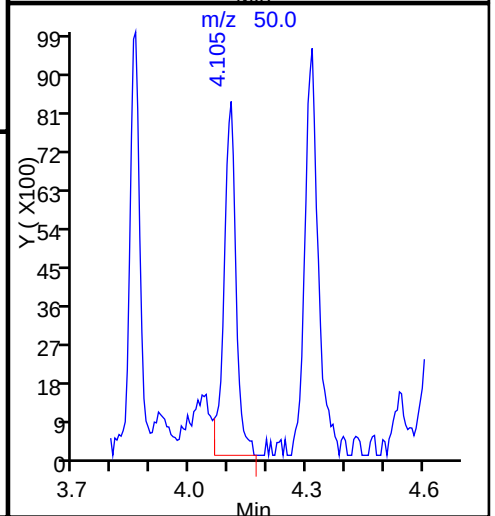
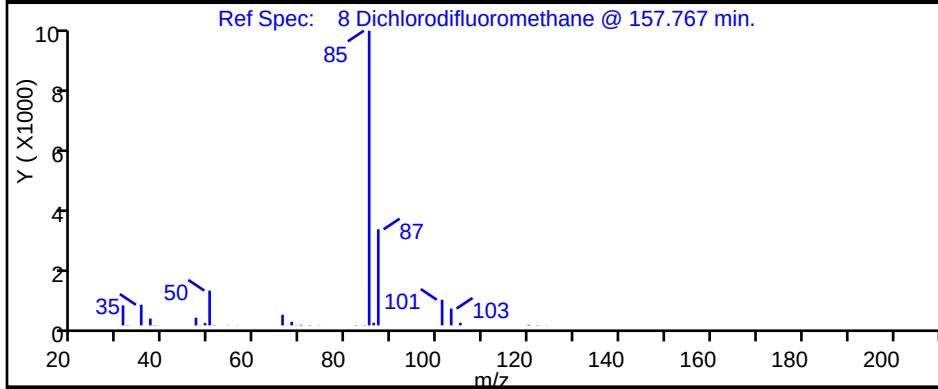
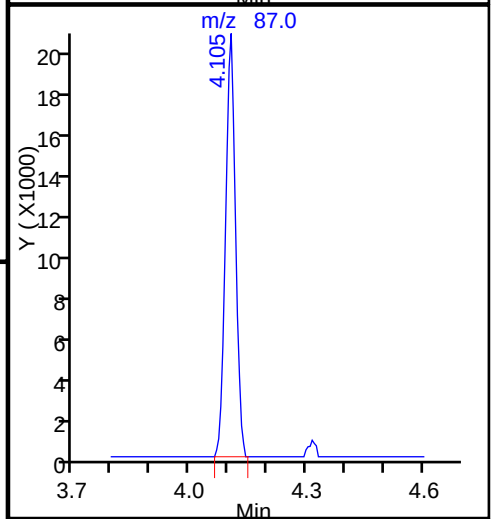
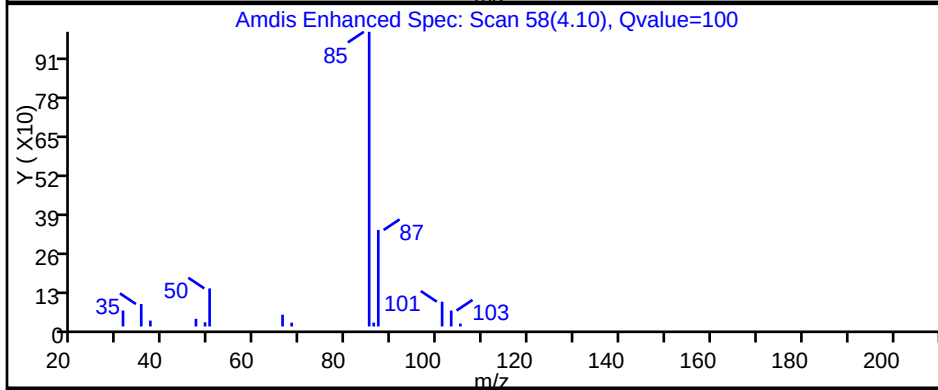
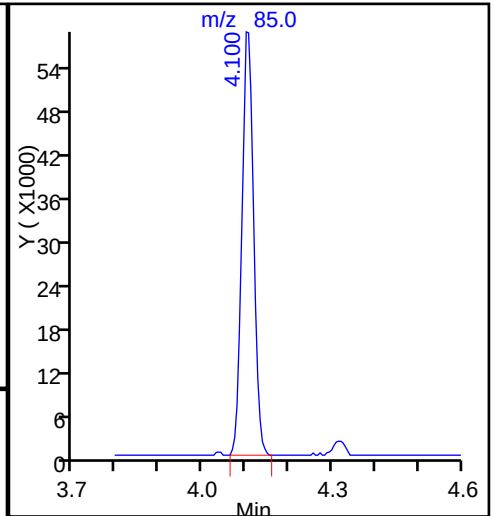
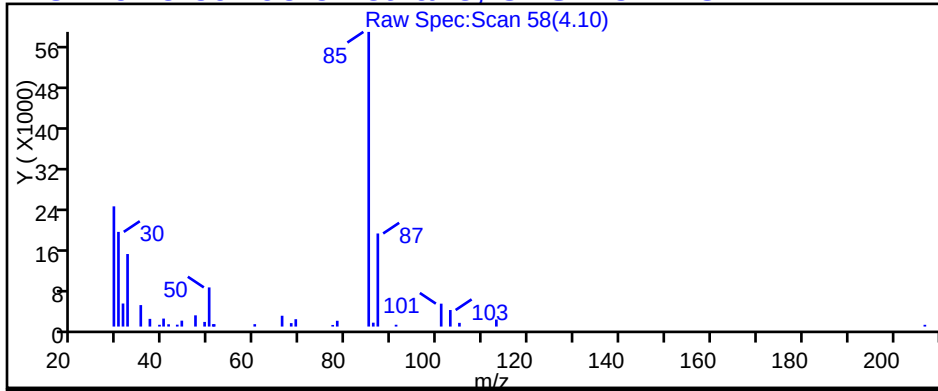
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P110.D

Injection Date: 04-Mar-2015 05:26:30

Instrument ID: MJ

Lims ID: 140-2797-A-6

Lab Sample ID: 140-2797-6

Client ID: H16-SS-2015

Operator ID: 403648

ALS Bottle#: 10

Worklist Smp#: 15

Purge Vol: 500.000 mL

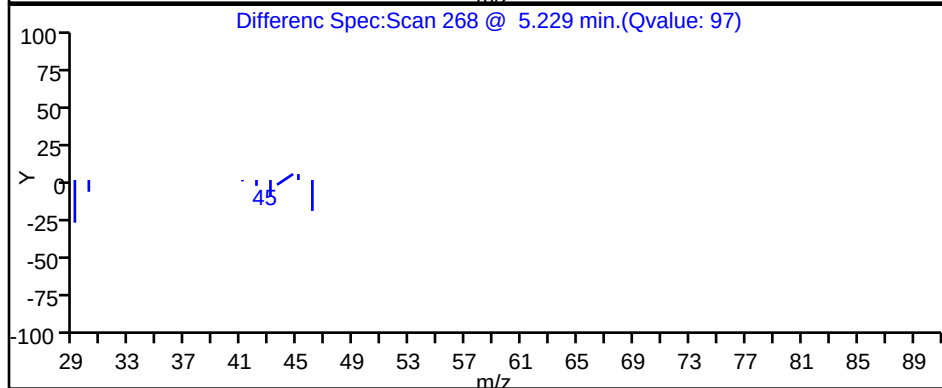
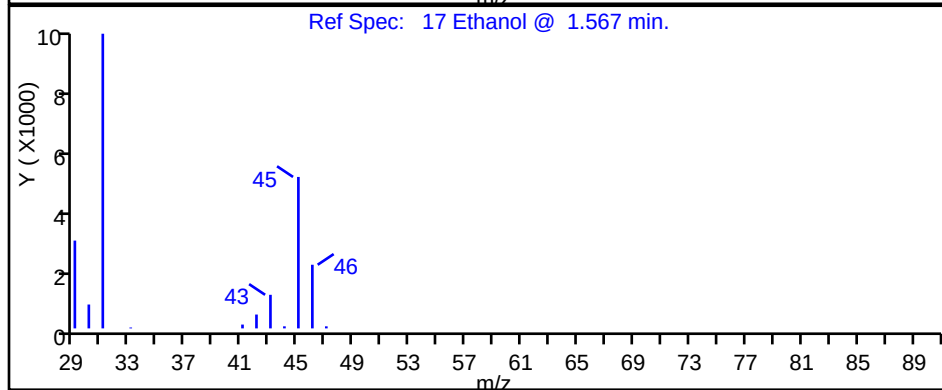
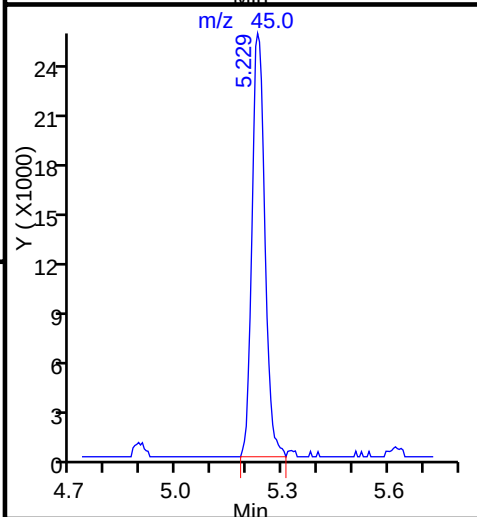
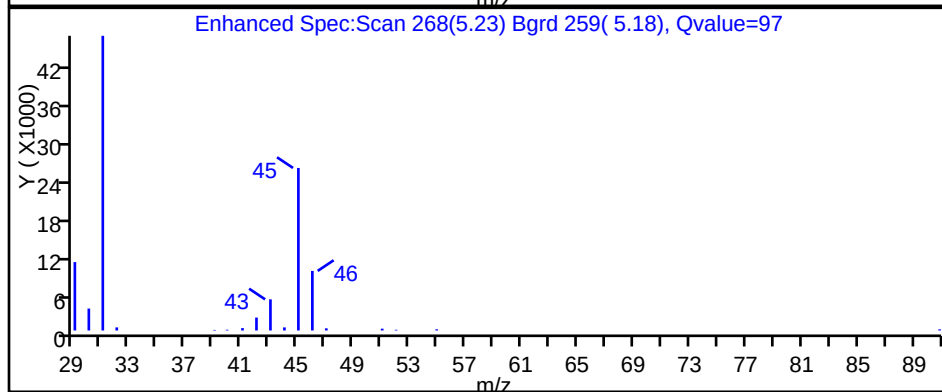
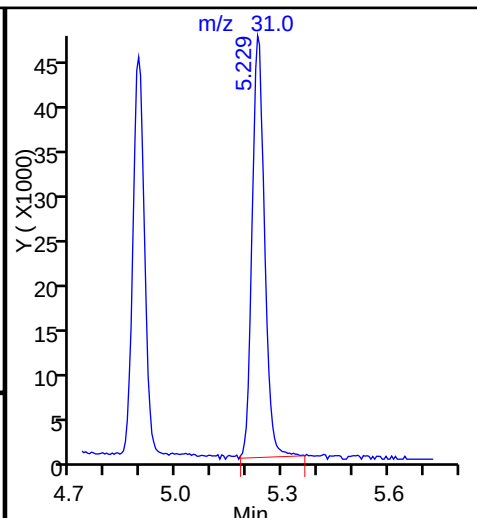
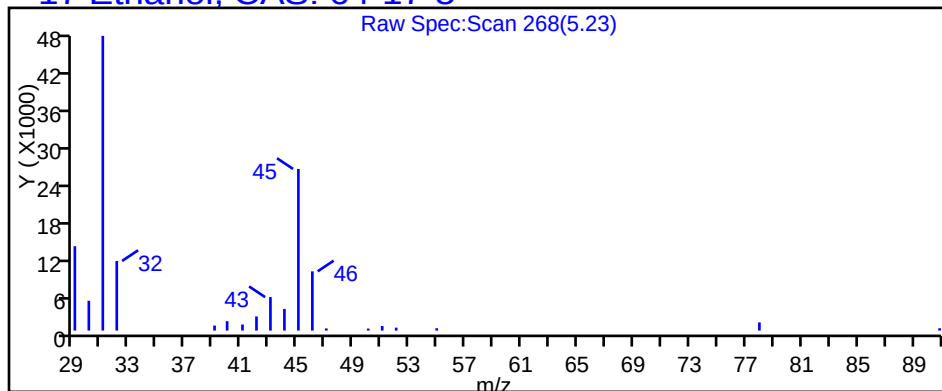
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P110.D

Injection Date: 04-Mar-2015 05:26:30

Instrument ID: MJ

Lims ID: 140-2797-A-6

Lab Sample ID: 140-2797-6

Client ID: H16-SS-2015

Operator ID: 403648

ALS Bottle#: 10

Worklist Smp#: 15

Purge Vol: 500.000 mL

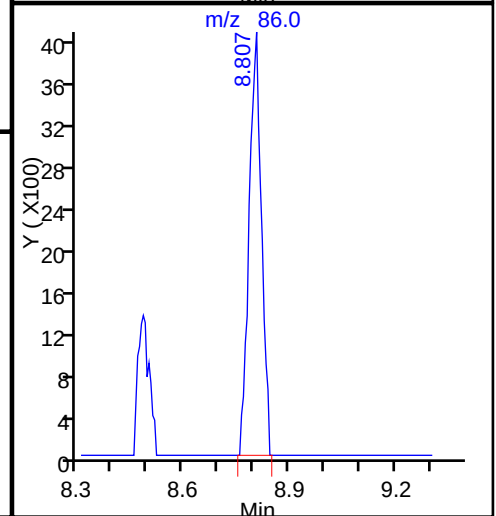
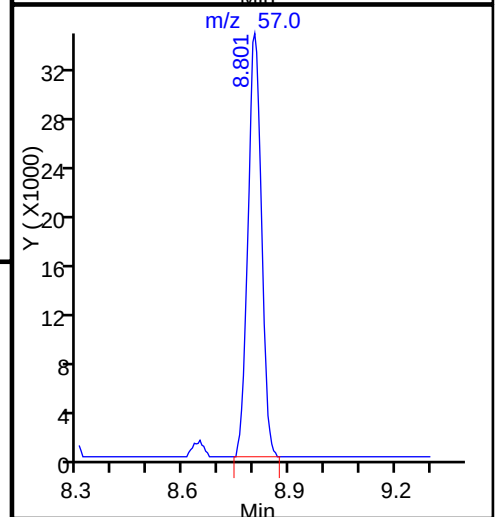
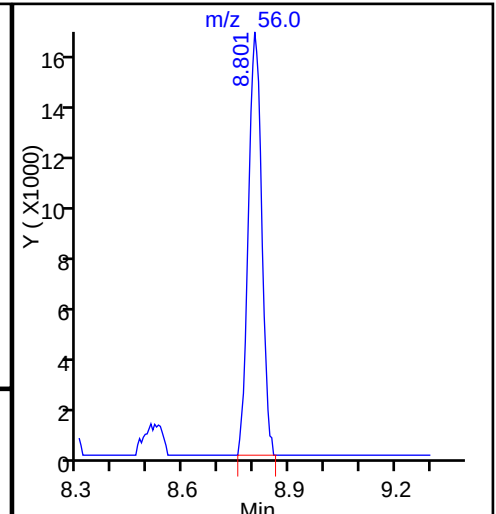
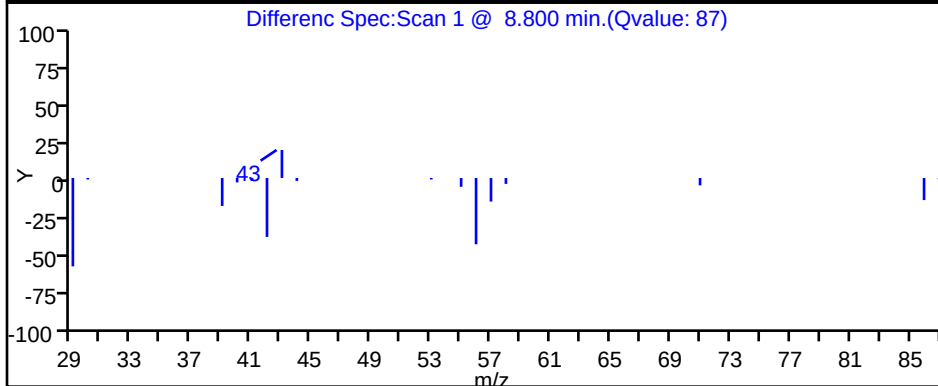
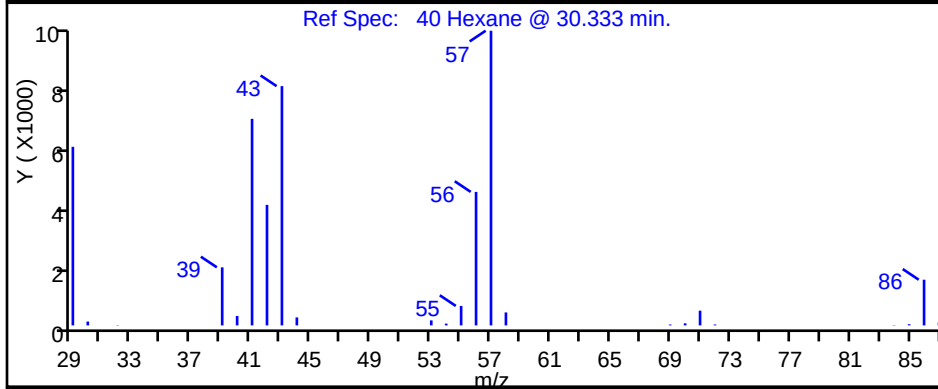
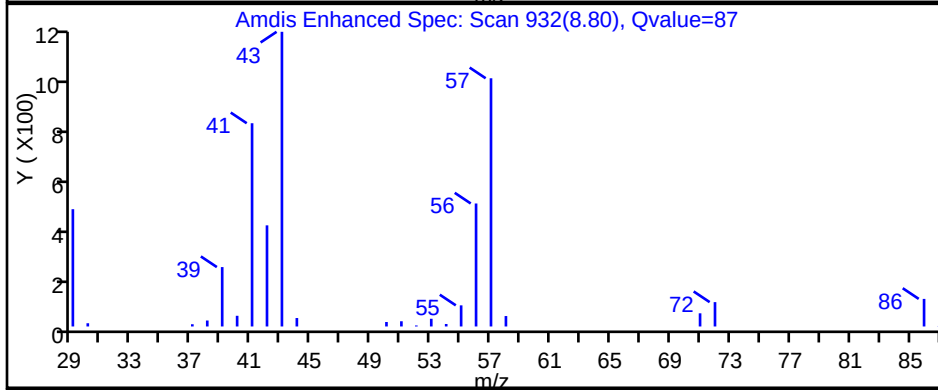
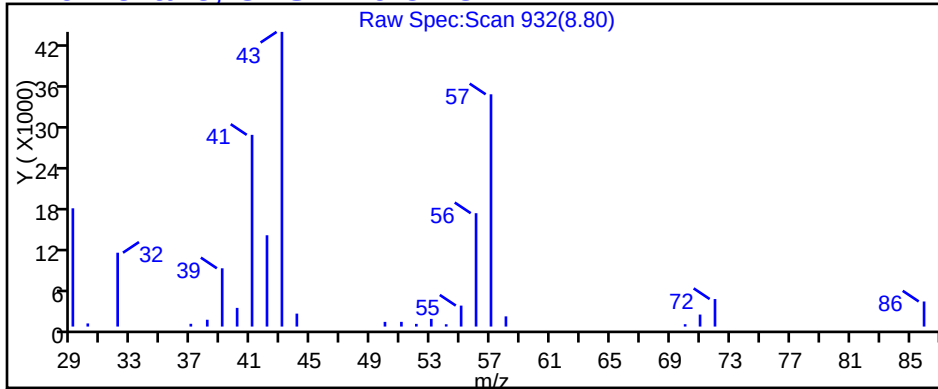
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

40 Hexane, CAS: 110-54-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P110.D

Injection Date: 04-Mar-2015 05:26:30

Instrument ID: MJ

Lims ID: 140-2797-A-6

Lab Sample ID: 140-2797-6

Client ID: H16-SS-2015

Operator ID: 403648

ALS Bottle#: 10

Worklist Smp#: 15

Purge Vol: 500.000 mL

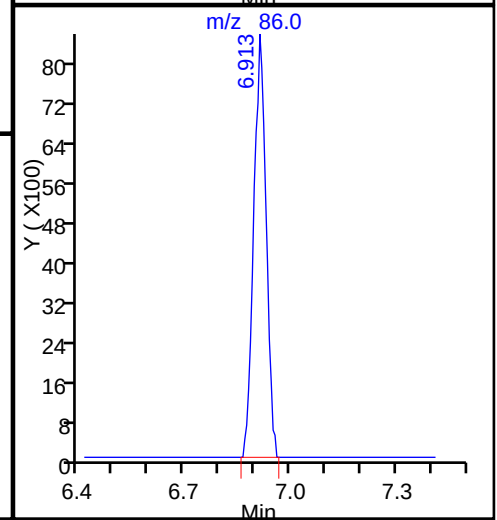
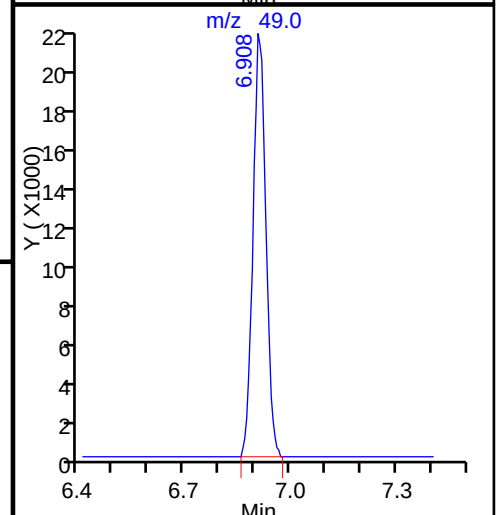
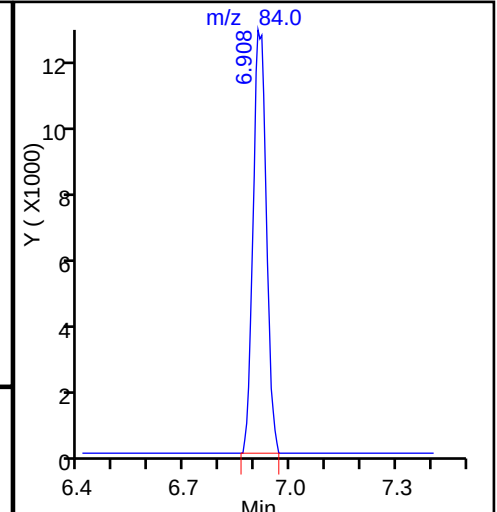
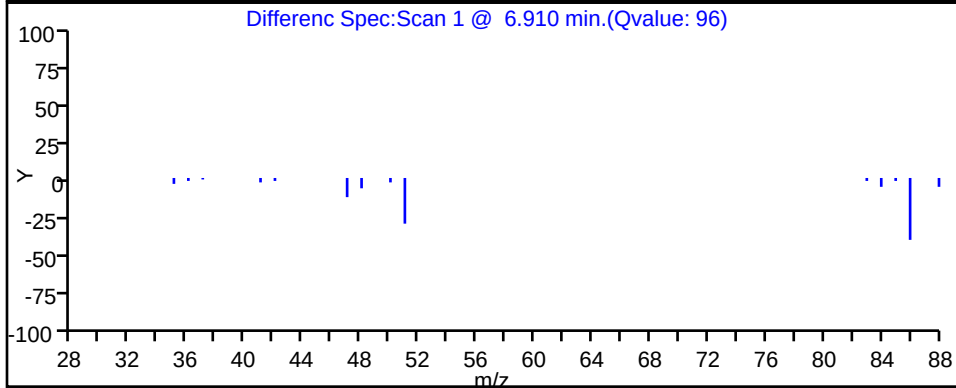
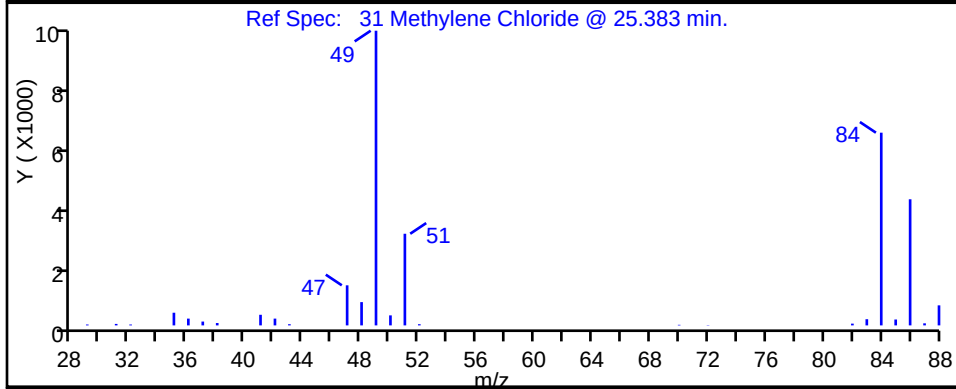
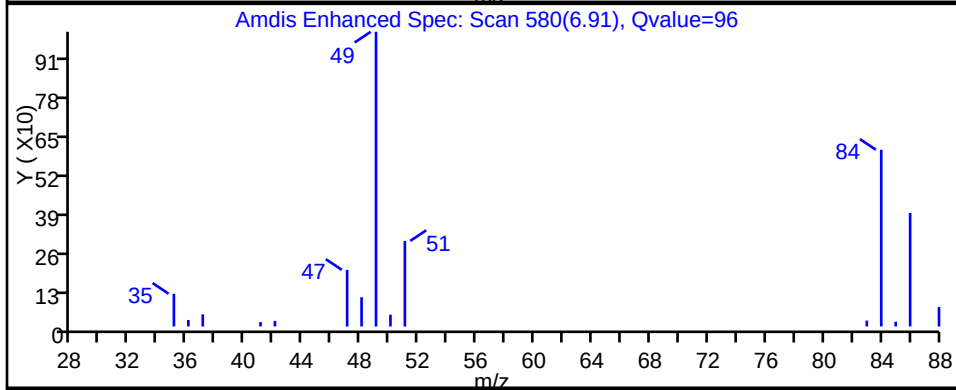
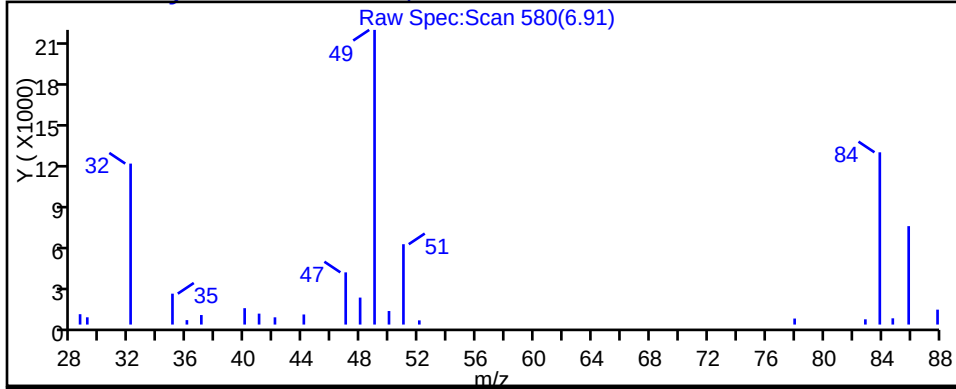
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P110.D

Injection Date: 04-Mar-2015 05:26:30

Instrument ID: MJ

Lims ID: 140-2797-A-6

Lab Sample ID: 140-2797-6

Client ID: H16-SS-2015

Operator ID: 403648

ALS Bottle#: 10

Worklist Smp#: 15

Purge Vol: 500.000 mL

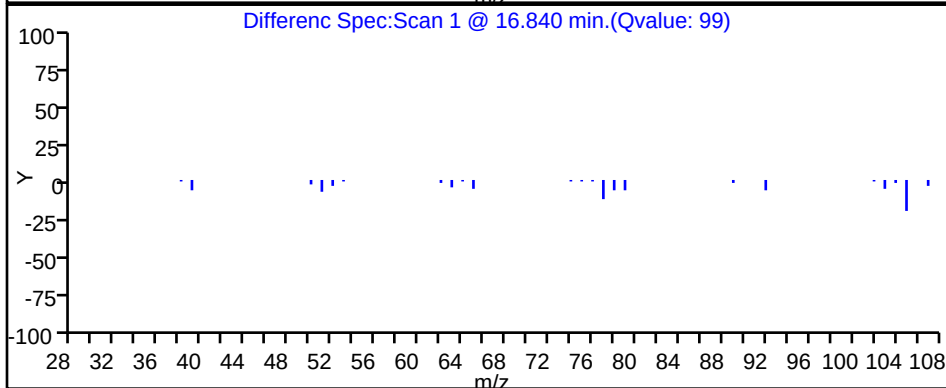
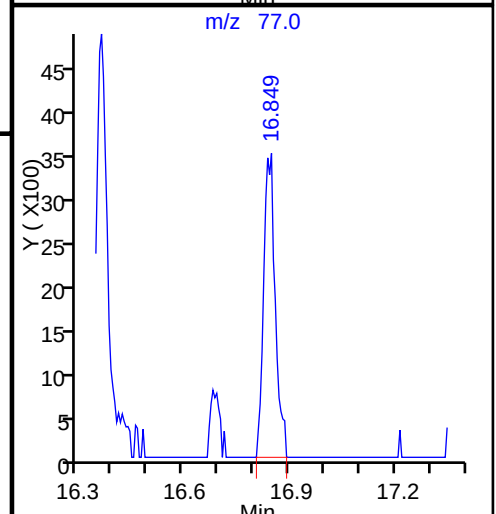
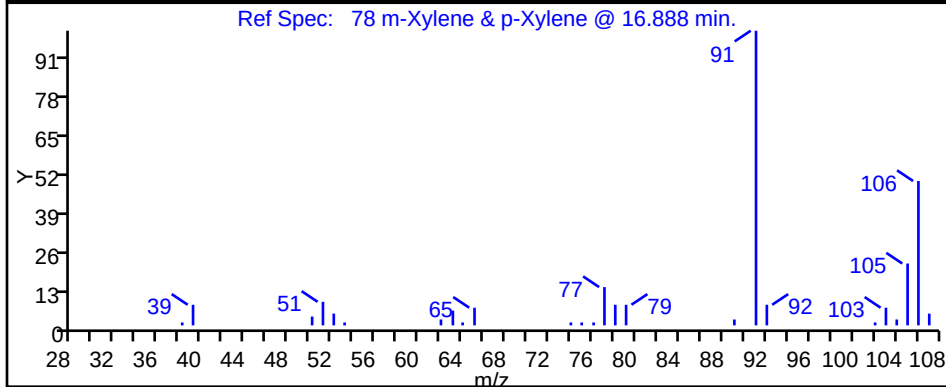
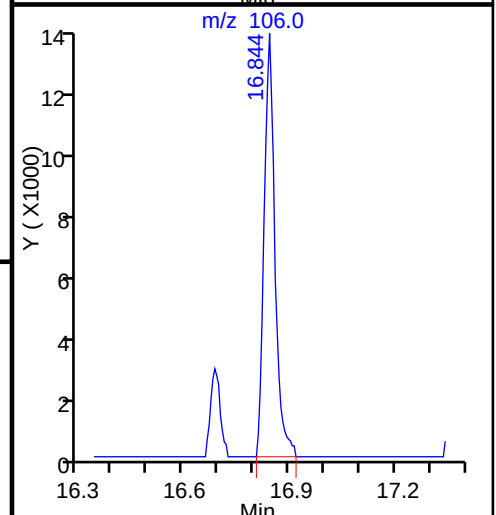
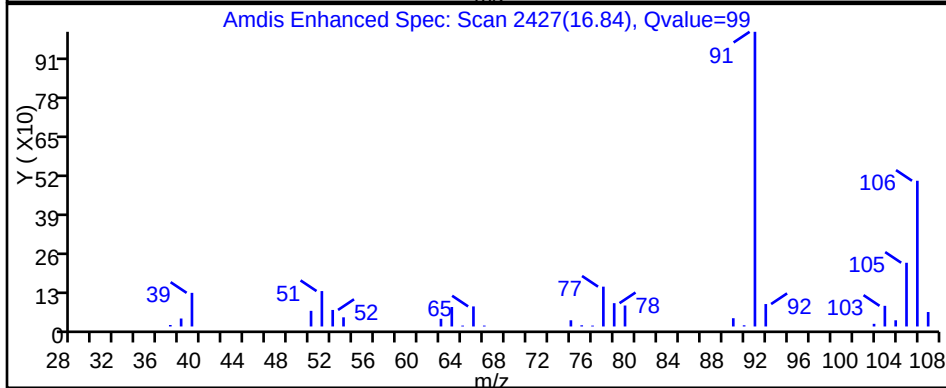
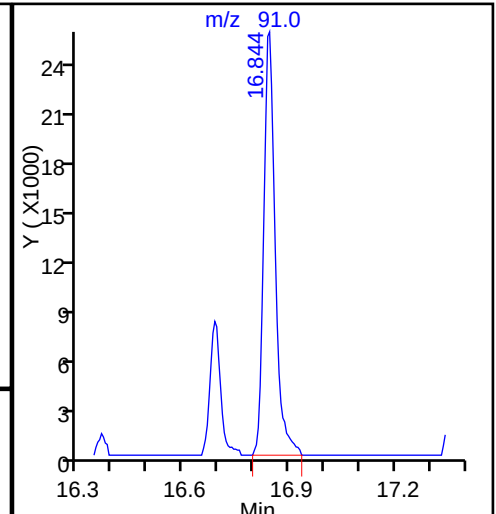
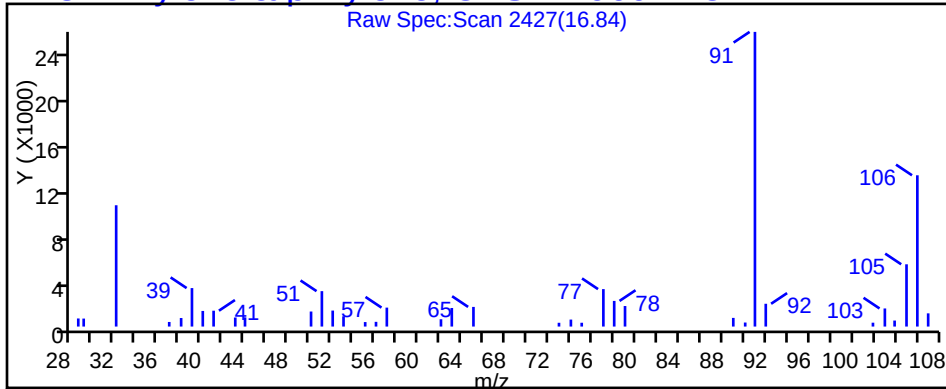
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P110.D

Injection Date: 04-Mar-2015 05:26:30

Instrument ID: MJ

Lims ID: 140-2797-A-6

Lab Sample ID: 140-2797-6

Client ID: H16-SS-2015

Operator ID: 403648

ALS Bottle#: 10

Worklist Smp#: 15

Purge Vol: 500.000 mL

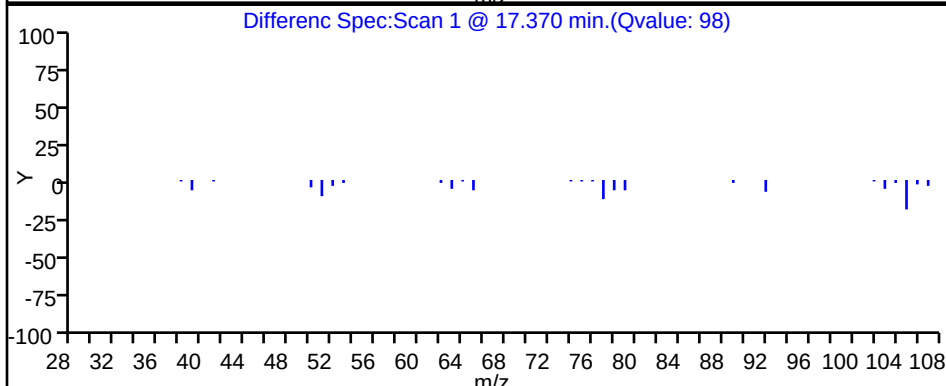
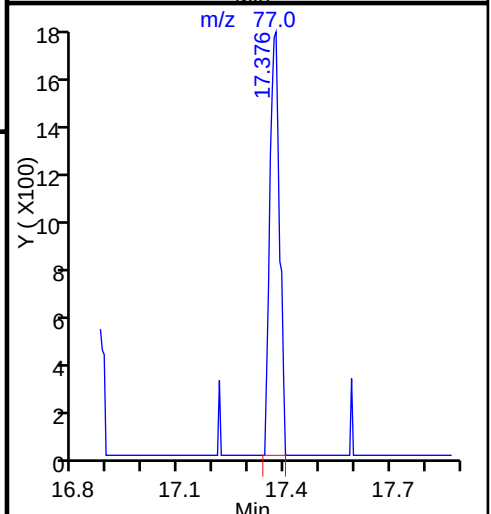
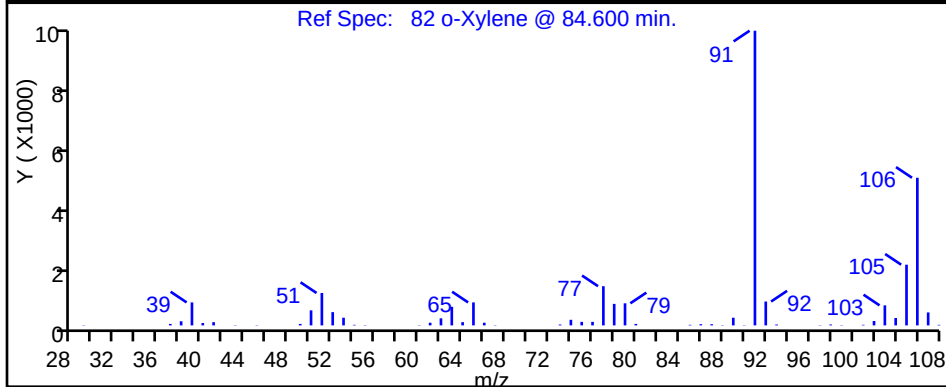
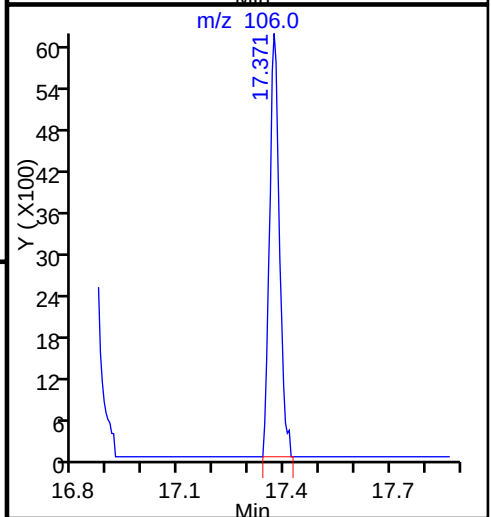
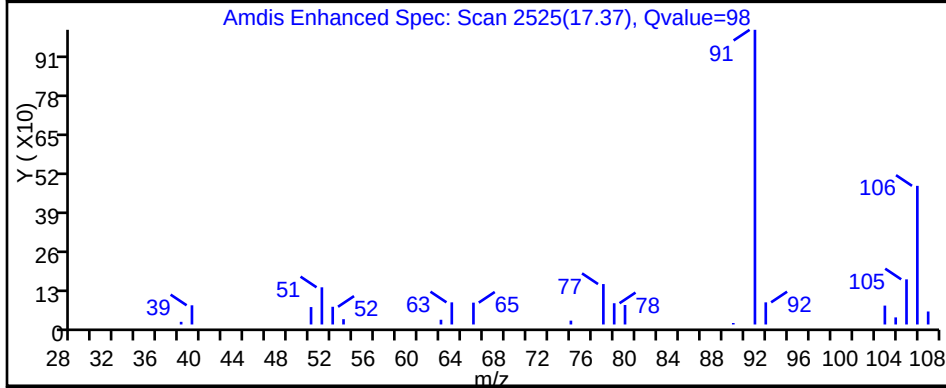
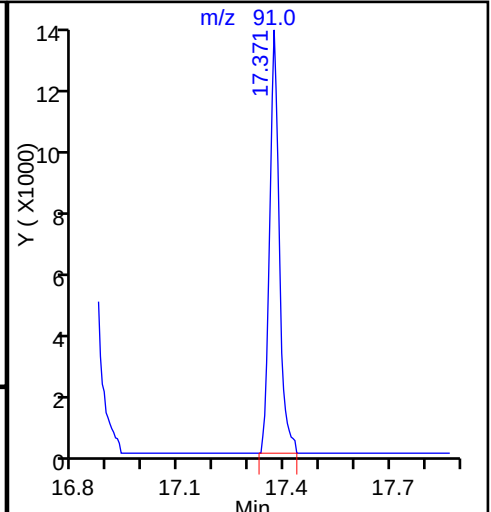
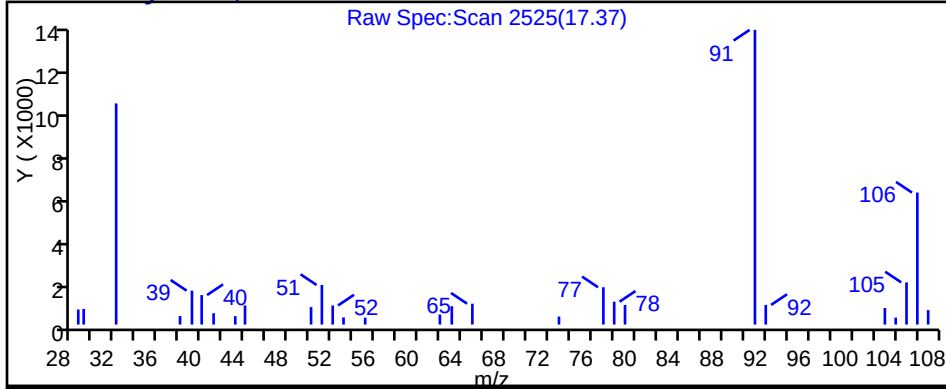
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P110.D

Injection Date: 04-Mar-2015 05:26:30

Instrument ID: MJ

Lims ID: 140-2797-A-6

Lab Sample ID: 140-2797-6

Client ID: H16-SS-2015

Operator ID: 403648

ALS Bottle#: 10

Worklist Smp#: 15

Purge Vol: 500.000 mL

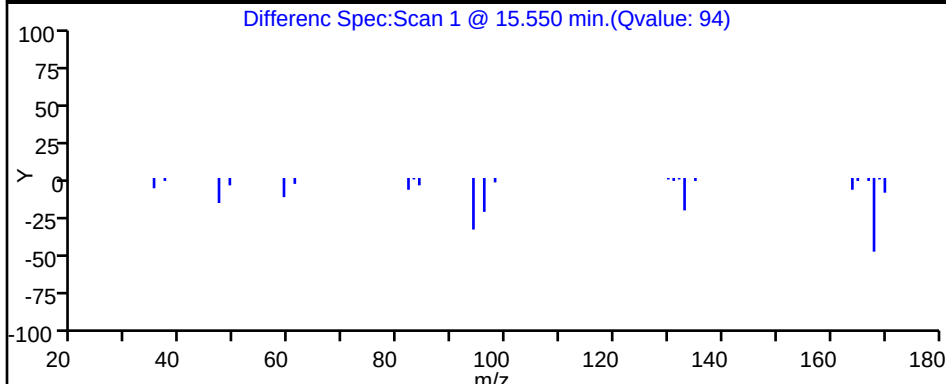
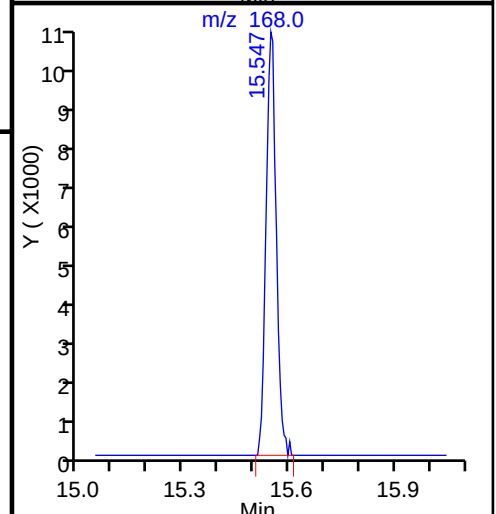
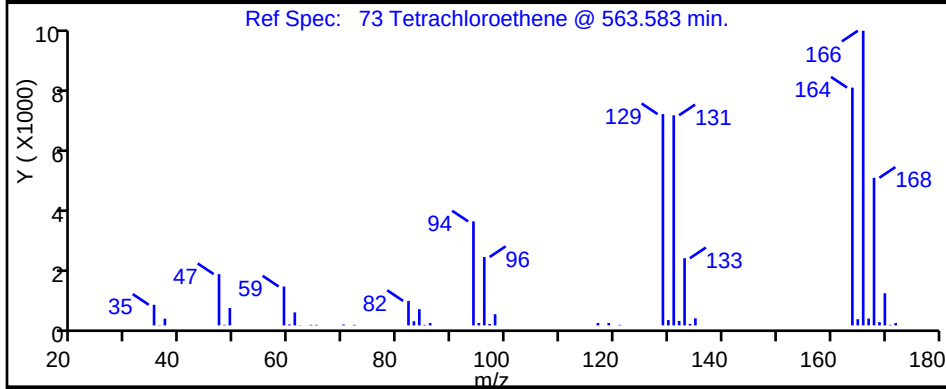
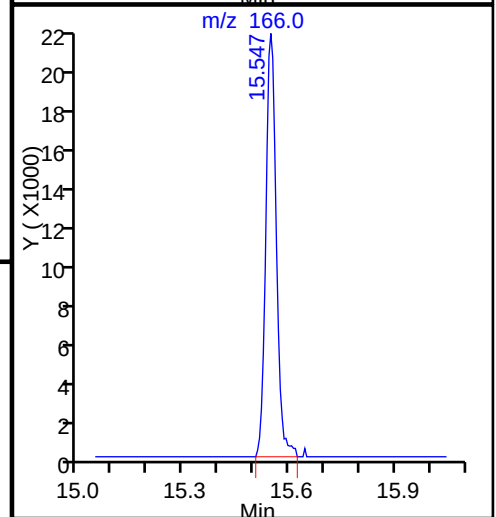
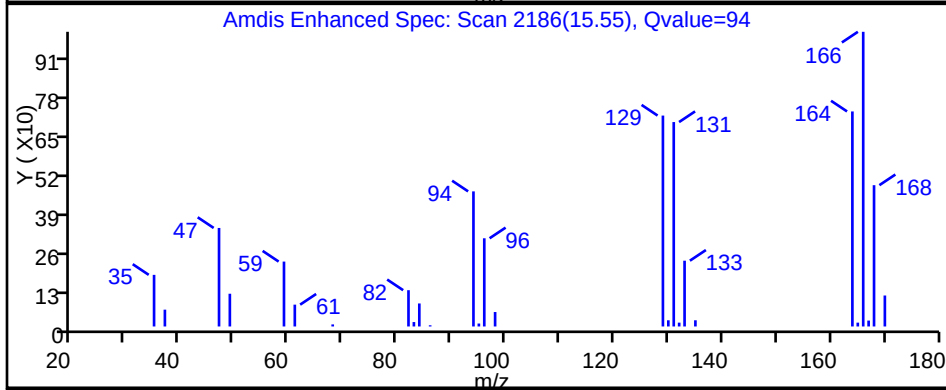
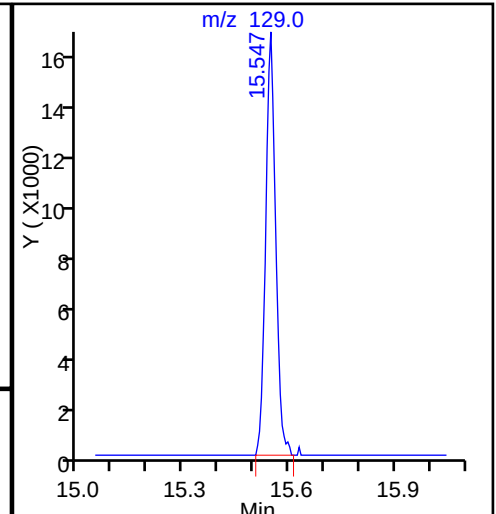
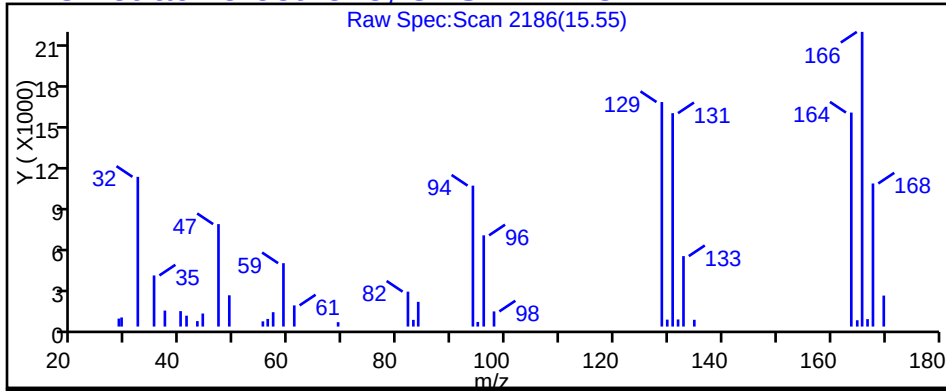
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

73 Tetrachloroethene, CAS: 127-18-4

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P110.D

Injection Date: 04-Mar-2015 05:26:30

Instrument ID: MJ

Lims ID: 140-2797-A-6

Lab Sample ID: 140-2797-6

Client ID: H16-SS-2015

Operator ID: 403648

ALS Bottle#: 10

Worklist Smp#: 15

Purge Vol: 500.000 mL

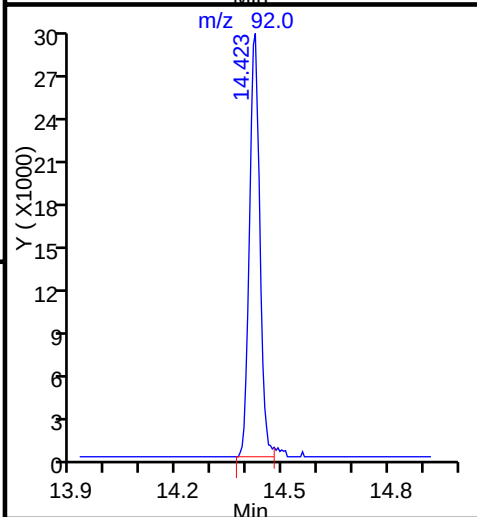
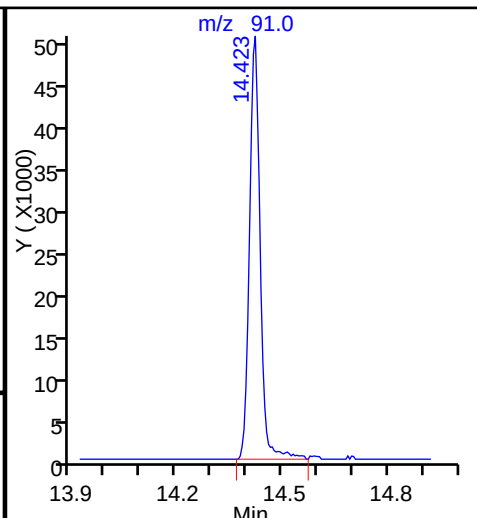
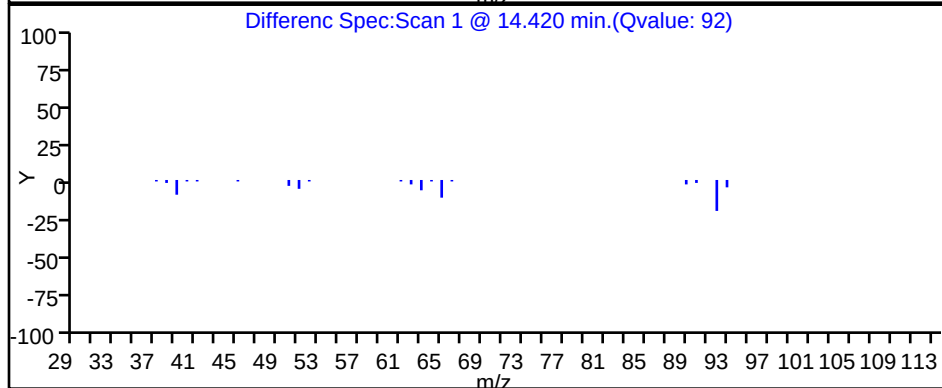
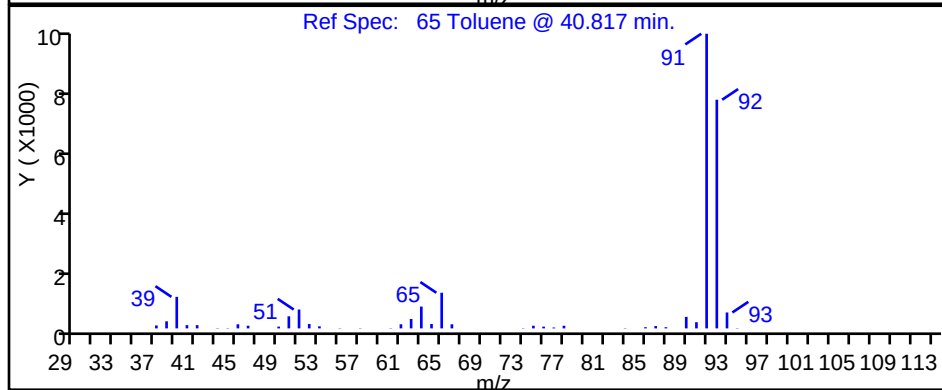
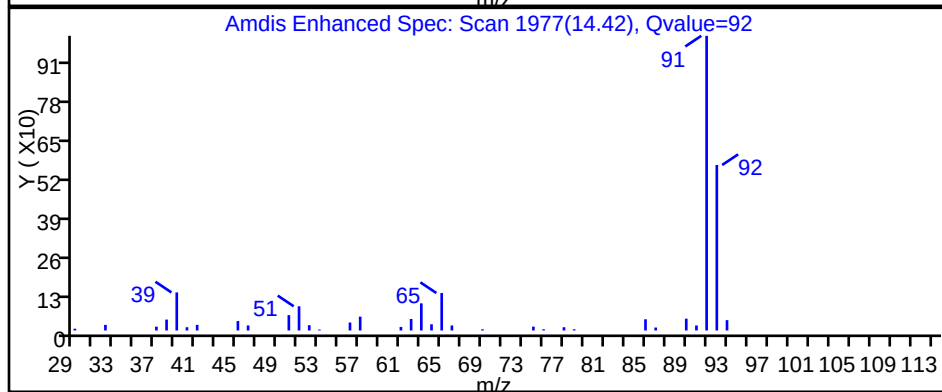
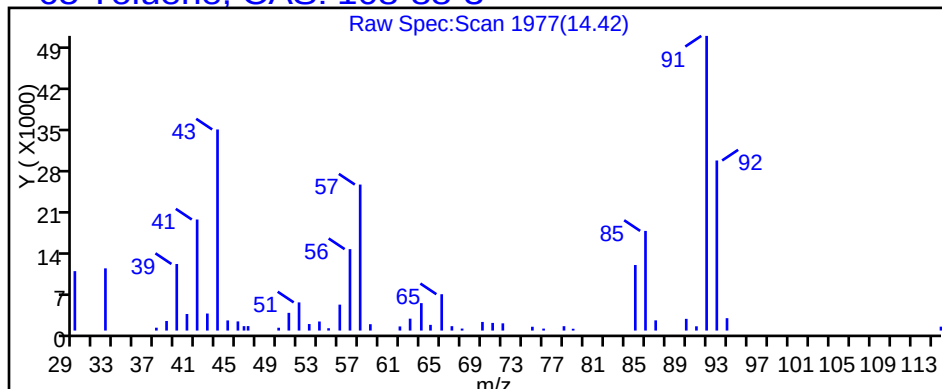
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P110.D

Injection Date: 04-Mar-2015 05:26:30

Instrument ID: MJ

Lims ID: 140-2797-A-6

Lab Sample ID: 140-2797-6

Client ID: H16-SS-2015

Operator ID: 403648

ALS Bottle#: 10

Worklist Smp#: 15

Purge Vol: 500.000 mL

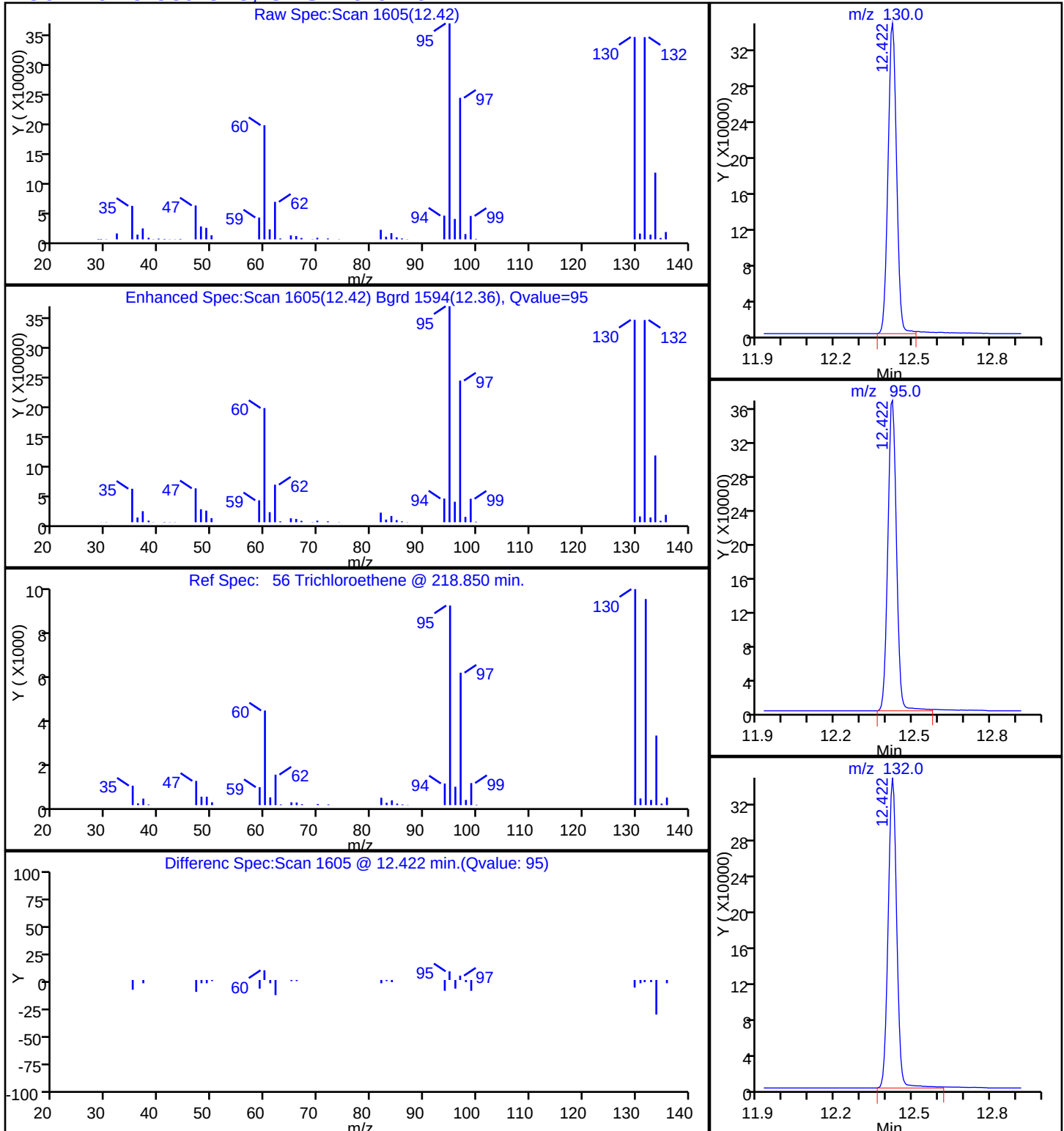
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

56 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P110.D

Injection Date: 04-Mar-2015 05:26:30

Instrument ID: MJ

Lims ID: 140-2797-A-6

Lab Sample ID: 140-2797-6

Client ID: H16-SS-2015

Operator ID: 403648

ALS Bottle#: 10

Worklist Smp#: 15

Purge Vol: 500.000 mL

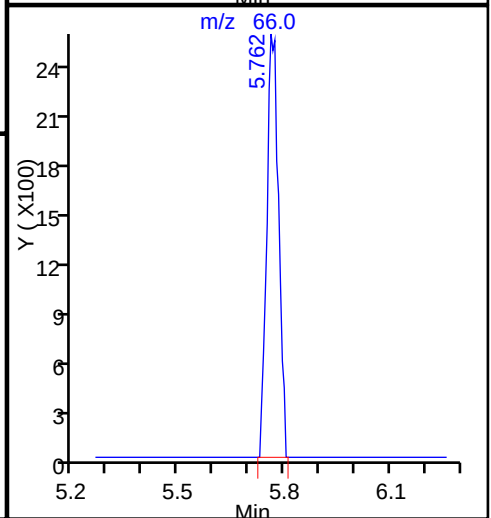
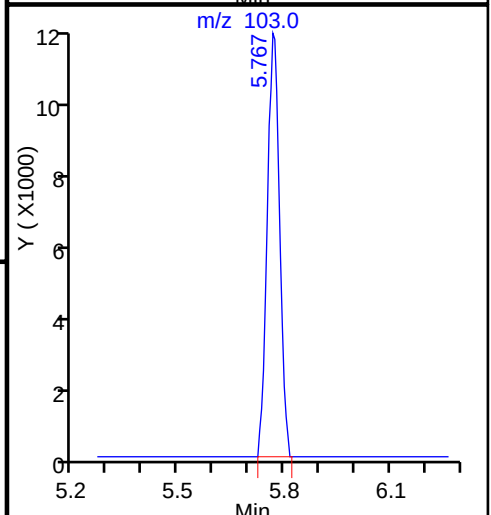
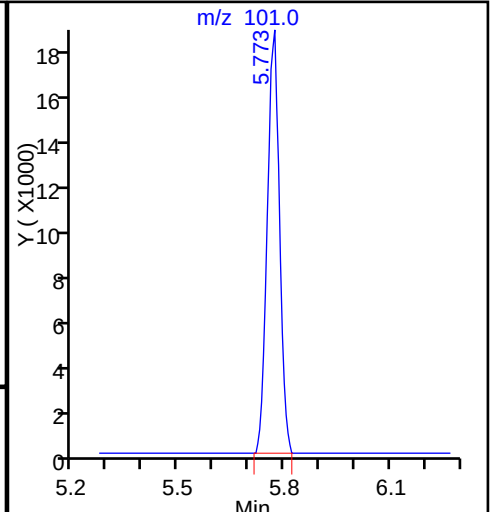
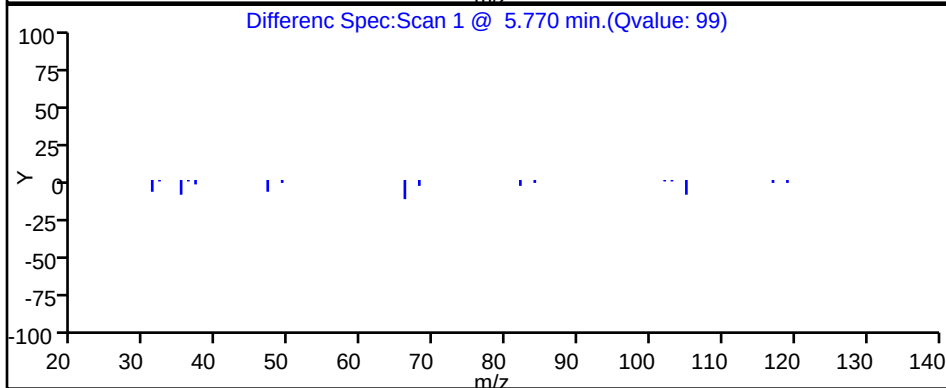
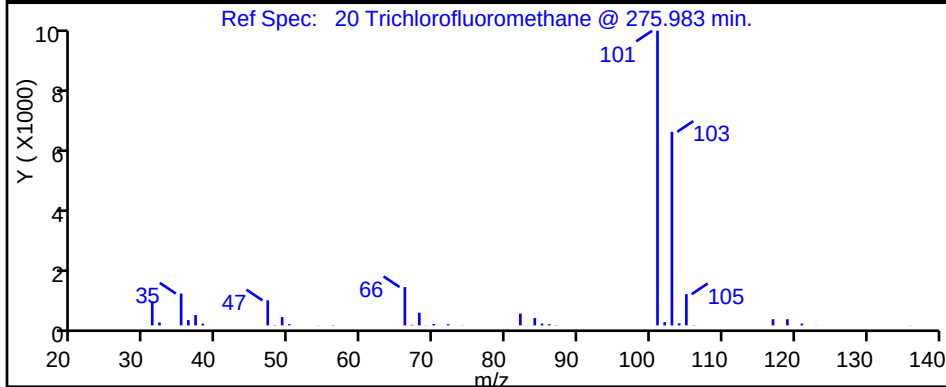
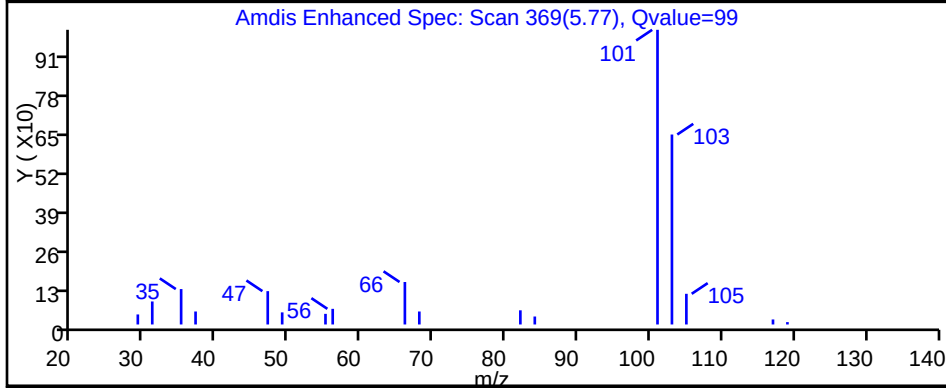
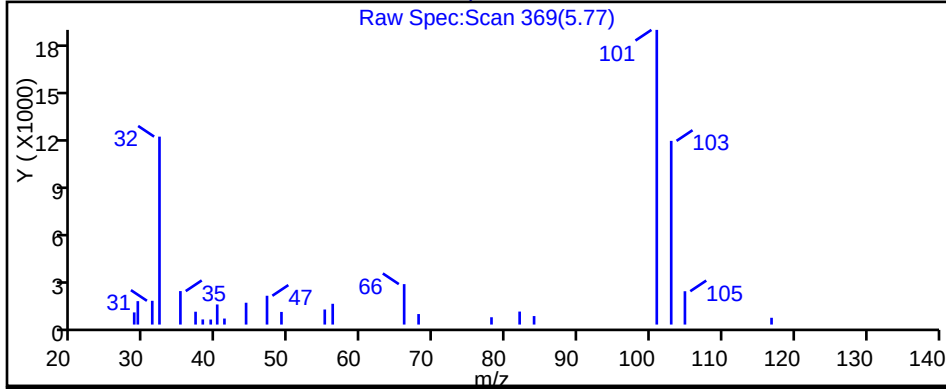
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: H25-BA-2015 Lab Sample ID: 140-2797-7

Matrix: Air Lab File ID: JC03P111.D

Analysis Method: TO 15 LL Date Collected: 02/24/2015 11:30

Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 06:22

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.: 2449 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		0.080	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.11		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	0.26		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	0.075		0.040	
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	0.41		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H25-BA-2015 Lab Sample ID: 140-2797-7
 Matrix: Air Lab File ID: JC03P111.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 11:30
 Sample wt/vol: 500(mL) Date Analyzed: 03/04/2015 06:22
 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.: 2449 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	0.40		0.080	
64-17-5	Ethanol	46.07	6.8		0.80	
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	0.64		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.21		0.080	
95-47-6	o-Xylene	106.17	0.087		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	0.39		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		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.19		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H25-BA-2015 Lab Sample ID: 140-2797-7
 Matrix: Air Lab File ID: JC03P111.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 11:30
 Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 06:22
 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.: 2449 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		0.32	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.55		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	0.84		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	0.47		0.25	
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	0.85		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H25-BA-2015 Lab Sample ID: 140-2797-7
 Matrix: Air Lab File ID: JC03P111.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 11:30
 Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 06:22
 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.: 2449 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	2.0		0.40	
64-17-5	Ethanol	46.07	13		1.5	
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	2.2		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	0.92		0.35	
95-47-6	o-Xylene	106.17	0.38		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	1.5		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	ND		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.1		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P111.D
 Lims ID: 140-2797-A-7 Lab Sample ID: 140-2797-7
 Client ID: H25-BA-2015
 Sample Type: Client
 Inject. Date: 04-Mar-2015 06:22:30 ALS Bottle#: 11 Worklist Smp#: 16
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2797-a-7
 Misc. Info.: J030315,TO15,,140-0001414-016
 Operator ID: 403648 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150228-1414.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 11:02:31 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK052

First Level Reviewer: tajh

Date: 04-Mar-2015 08:40:13

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.589	9.587	0.002	97	261938	4.00	
* 2 1,4-Difluorobenzene	114	11.725	11.728	-0.003	96	1224948	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.367	16.370	-0.003	89	1013000	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.976	17.979	-0.003	89	616436	3.72	
8 Dichlorodifluoromethane	85	4.113	4.105	0.008	100	117137	0.3972	
9 Chloromethane	52	4.323	4.315	0.008	100	17339	0.4135	
17 Ethanol	31	5.248	5.240	0.008	96	246479	6.77	
20 Trichlorofluoromethane	101	5.781	5.778	0.003	100	48856	0.1892	
28 2-Methyl-2-propanol	59	6.663	6.633	0.030	93	10040	0.0649	
30 1,1,2-Trichloro-1,2,2-trif	101	6.733	6.730	0.003	94	11323	0.0652	
31 Methylene Chloride	84	6.926	6.924	0.002	97	53353	0.6353	
39 2-Butanone (MEK)	72	8.788	8.785	0.003	95	13357	0.4282	
40 Hexane	56	8.804	8.807	-0.003	57	10273	0.1176	
43 Chloroform	83	9.600	9.598	0.002	27	3502	0.0212	
49 Cyclohexane	69	11.208	11.211	-0.003	38	975	0.0208	
48 Benzene	78	11.214	11.217	-0.003	98	59353	0.2623	
50 Carbon tetrachloride	117	11.235	11.238	-0.003	96	12452	0.0746	
53 Isooctane	57	11.935	11.932	0.003	97	20266	0.0450	
58 1,4-Dioxane	88	12.677	12.653	0.024	90	3171	0.0995	
62 4-Methyl-2-pentanone (MIBK	43	13.554	13.546	0.008	97	13947	0.0749	
65 Toluene	91	14.420	14.423	-0.003	93	71887	0.3889	
76 Ethylbenzene	91	16.690	16.693	-0.003	92	14887	0.0689	
78 m-Xylene & p-Xylene	91	16.846	16.849	-0.003	99	36701	0.2108	
82 o-Xylene	91	17.373	17.371	0.002	99	16473	0.0868	
89 1,3,5-Trimethylbenzene	120	18.664	18.662	0.002	58	3427	0.0301	
93 1,2,4-Trimethylbenzene	105	19.084	19.087	-0.003	98	22755	0.1112	
97 1,4-Dichlorobenzene	146	19.444	19.442	0.002	81	2806	0.0258	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P111.D

Injection Date: 04-Mar-2015 06:22:30

Instrument ID: MJ

Operator ID: 403648

Lims ID: 140-2797-A-7

Lab Sample ID: 140-2797-7

Worklist Smp#: 16

Client ID: H25-BA-2015

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

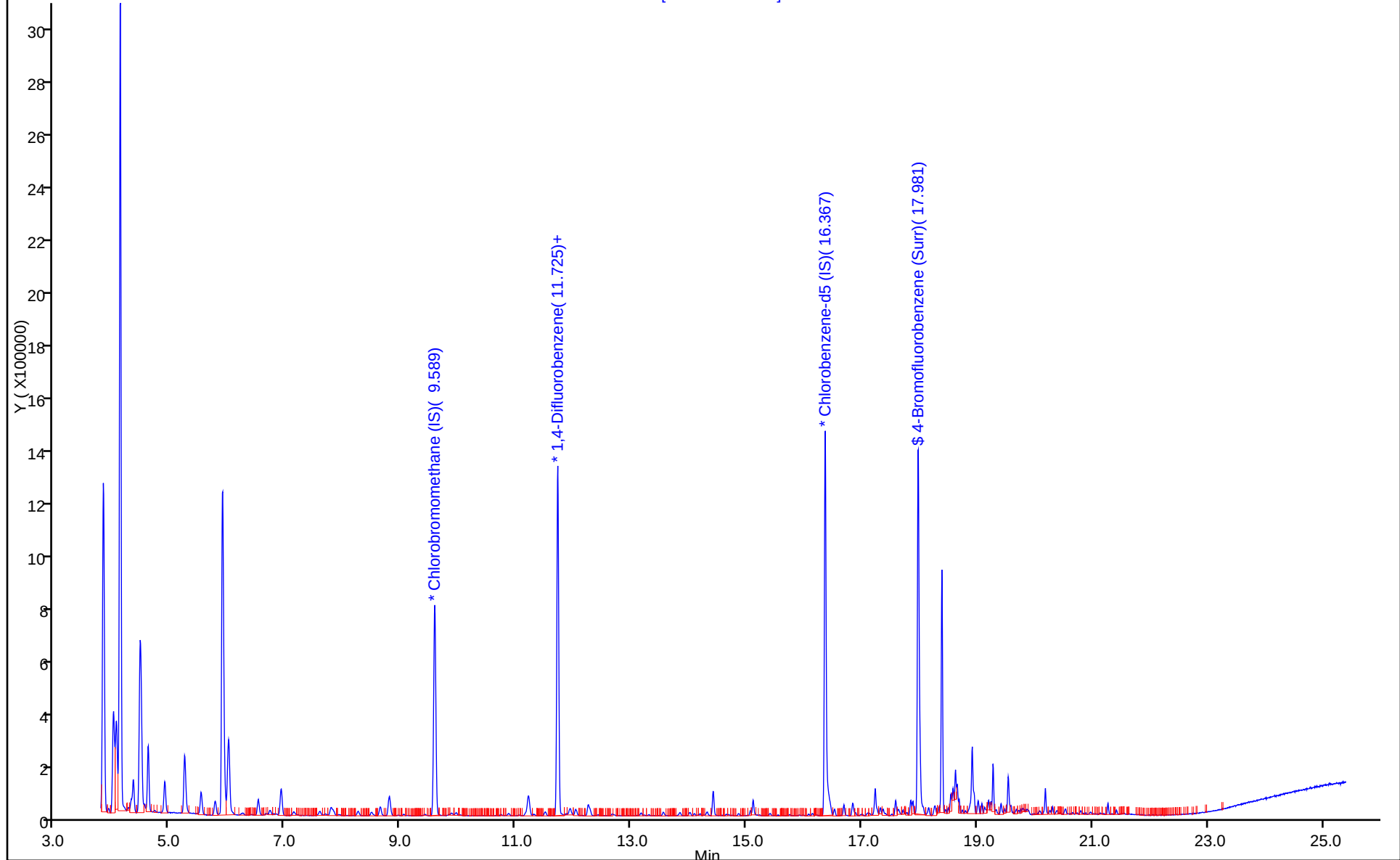
ALS Bottle#: 11

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

JC03P111[MS SCAN Chro]:Total



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P111.D

Injection Date: 04-Mar-2015 06:22:30

Instrument ID: MJ

Lims ID: 140-2797-A-7

Lab Sample ID: 140-2797-7

Client ID: H25-BA-2015

Operator ID: 403648

ALS Bottle#: 11

Worklist Smp#: 16

Purge Vol: 500.000 mL

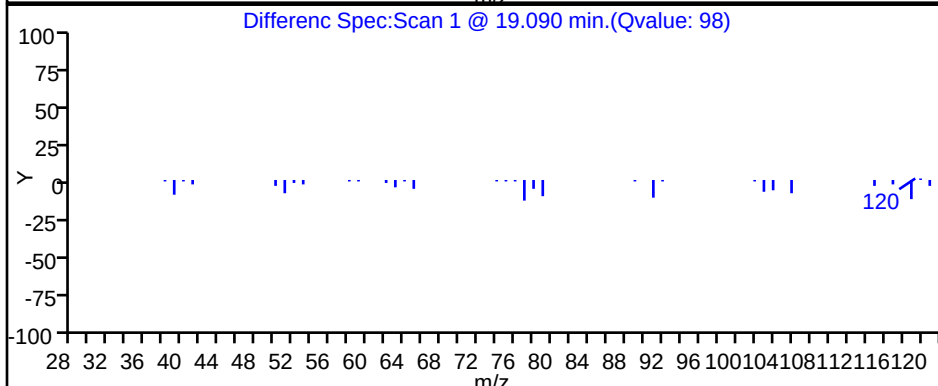
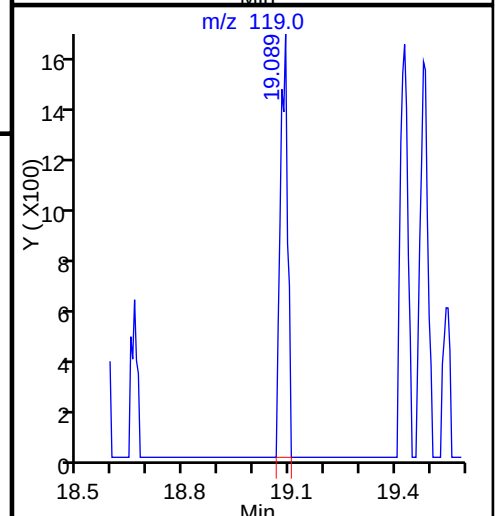
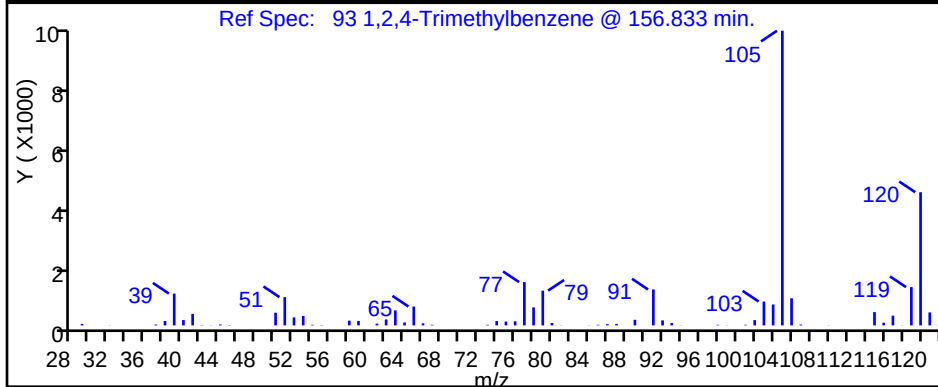
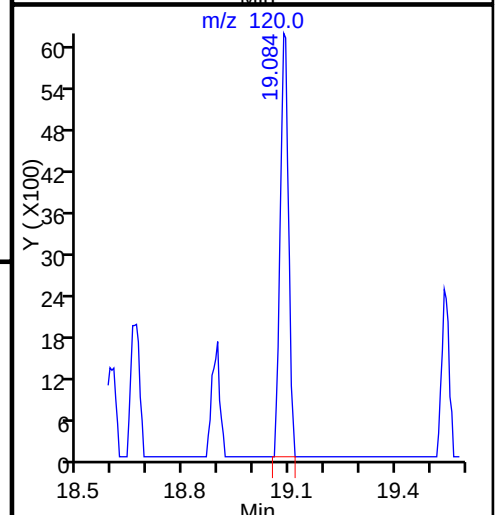
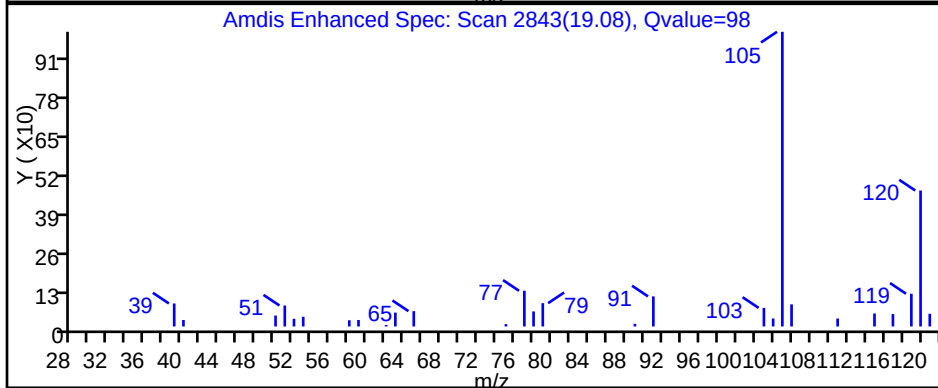
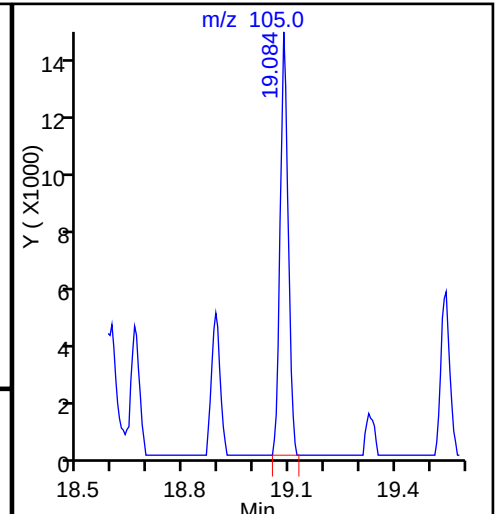
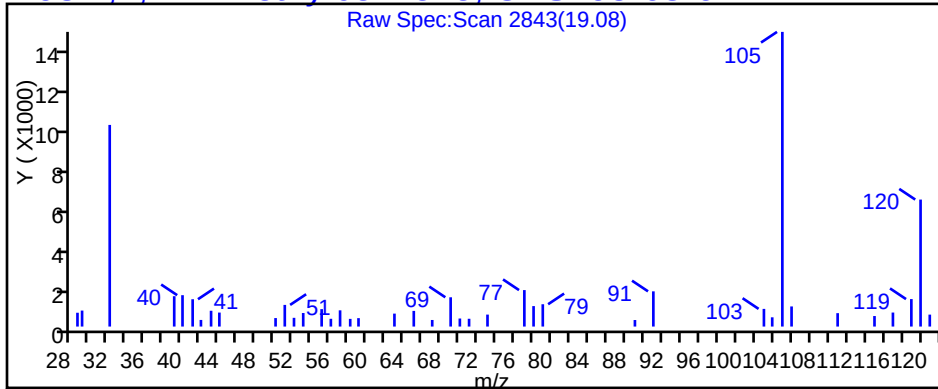
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

93 1,2,4-Trimethylbenzene, CAS: 95-63-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P111.D

Injection Date: 04-Mar-2015 06:22:30

Instrument ID: MJ

Lims ID: 140-2797-A-7

Lab Sample ID: 140-2797-7

Client ID: H25-BA-2015

Operator ID: 403648

ALS Bottle#: 11

Worklist Smp#: 16

Purge Vol: 500.000 mL

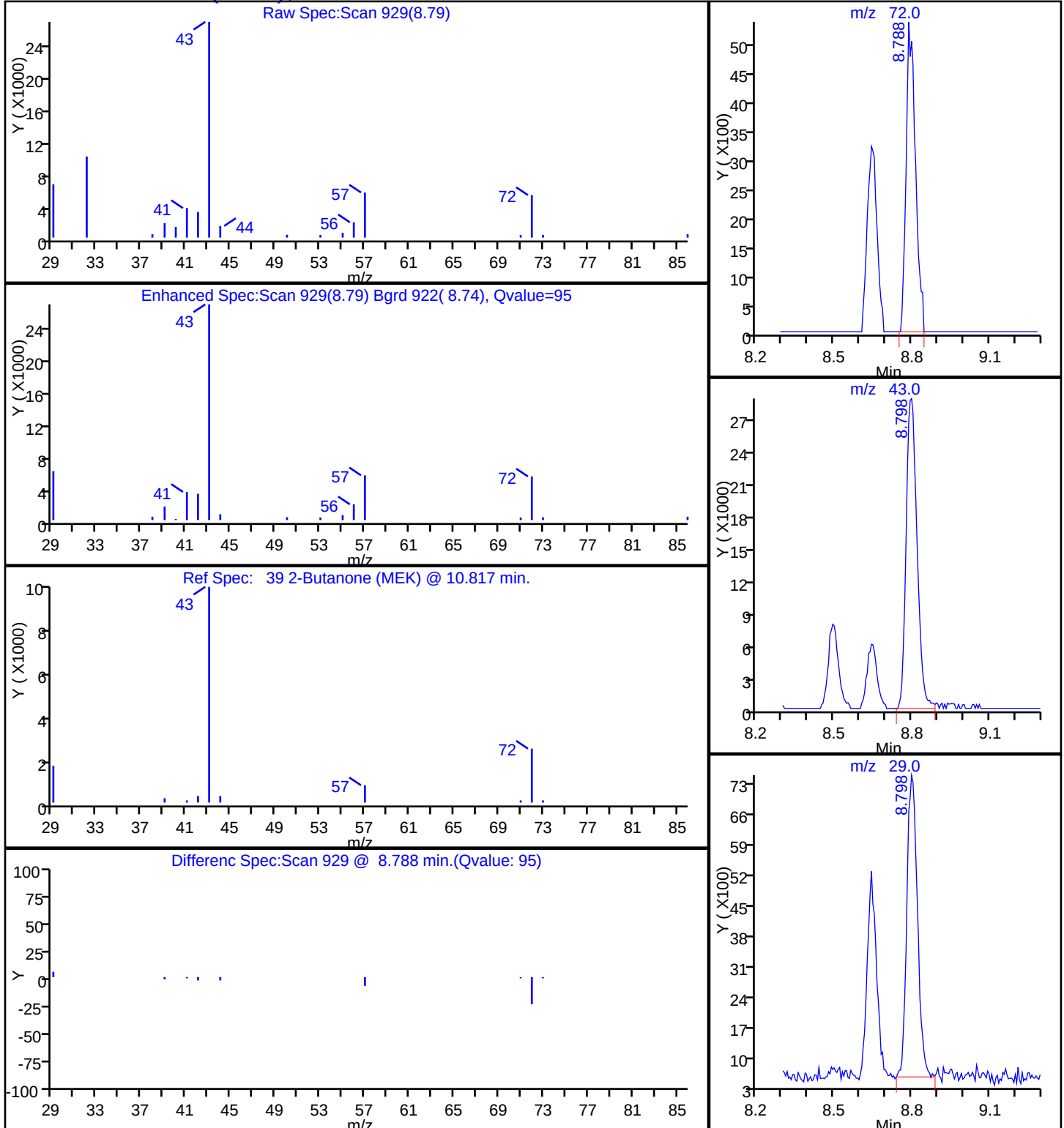
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P111.D

Injection Date: 04-Mar-2015 06:22:30

Instrument ID: MJ

Lims ID: 140-2797-A-7

Lab Sample ID: 140-2797-7

Client ID: H25-BA-2015

Operator ID: 403648

ALS Bottle#: 11

Worklist Smp#: 16

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

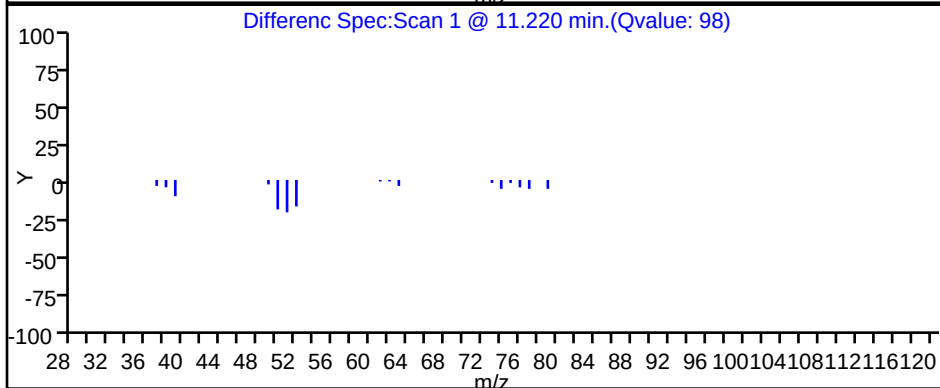
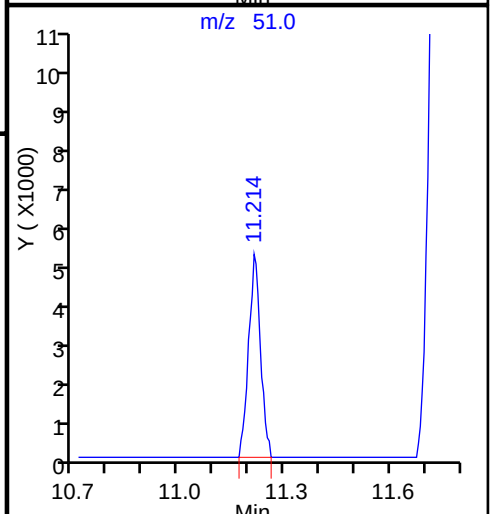
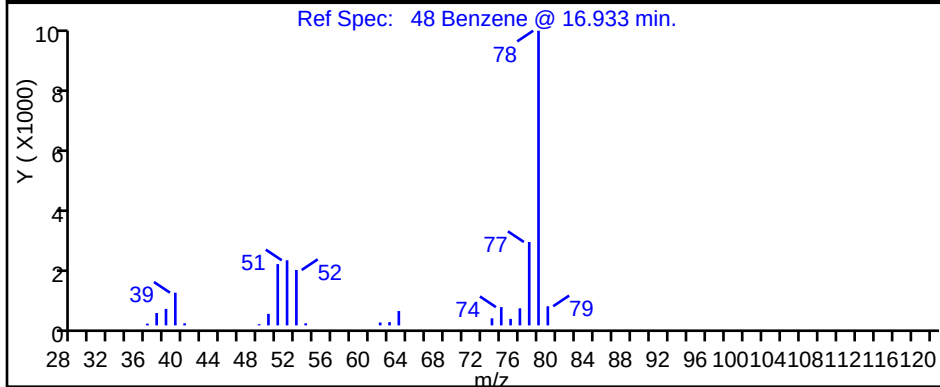
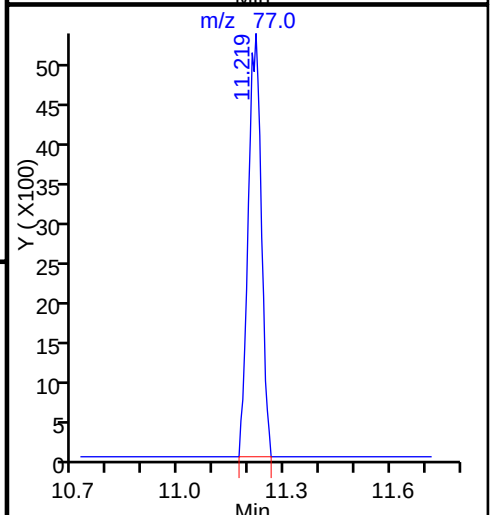
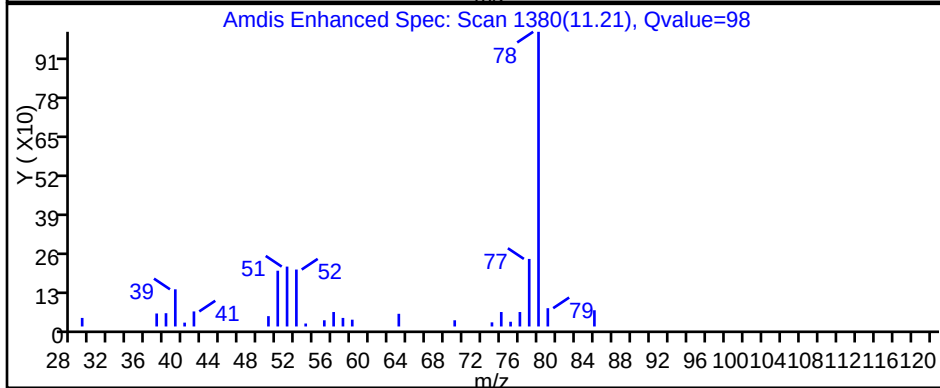
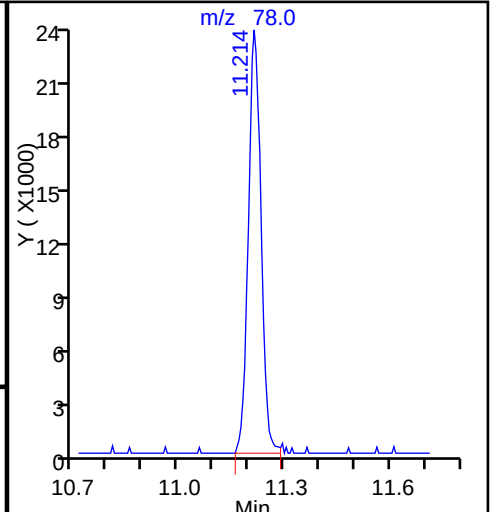
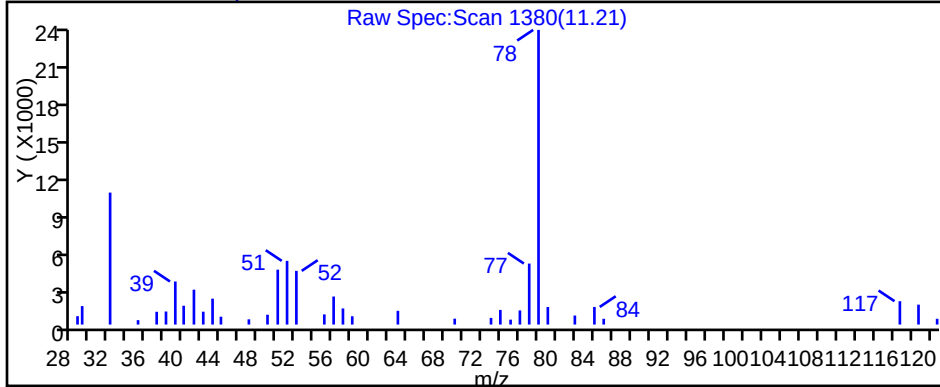
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P111.D

Injection Date: 04-Mar-2015 06:22:30

Instrument ID: MJ

Lims ID: 140-2797-A-7

Lab Sample ID: 140-2797-7

Client ID: H25-BA-2015

Operator ID: 403648

ALS Bottle#: 11

Worklist Smp#: 16

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

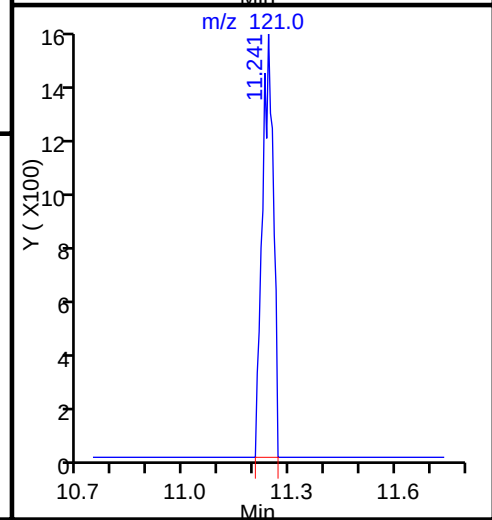
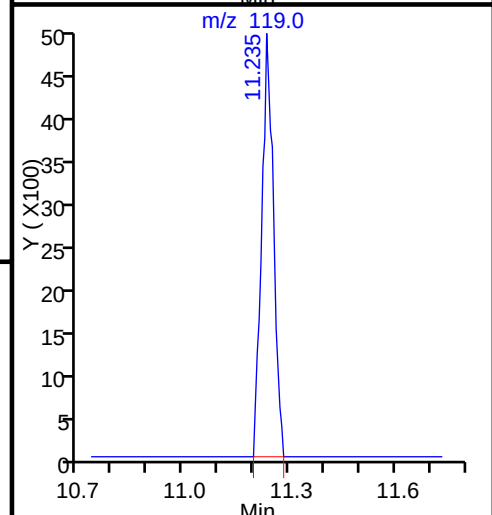
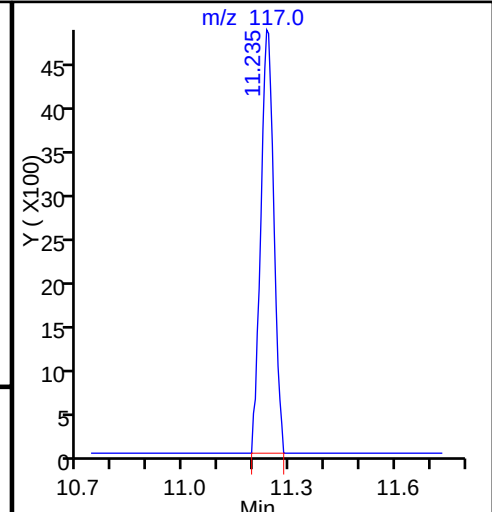
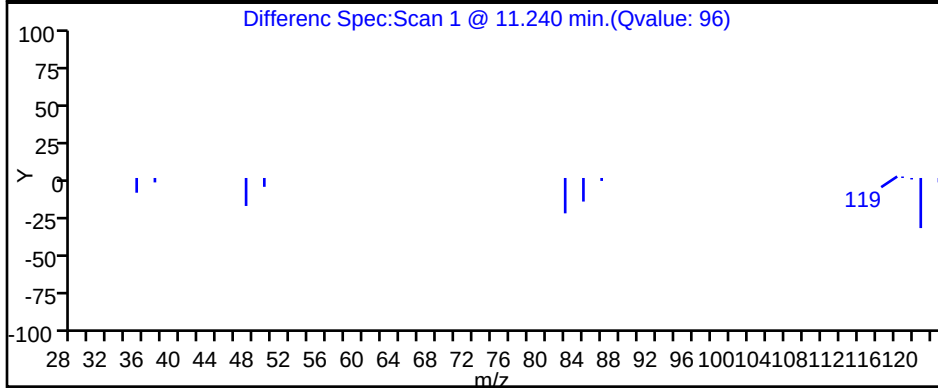
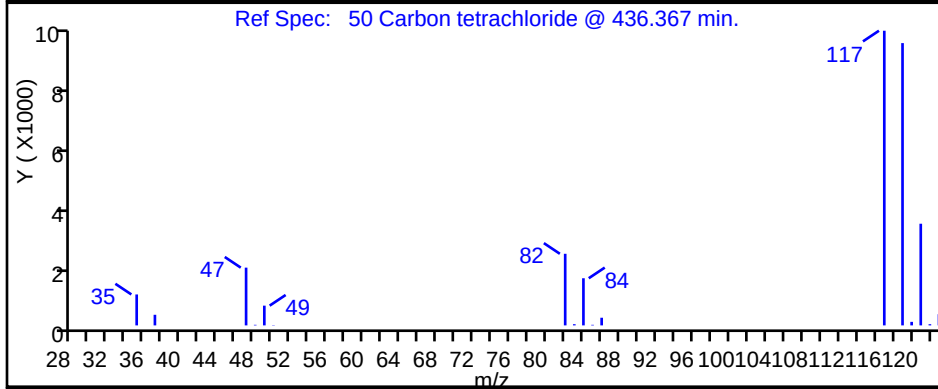
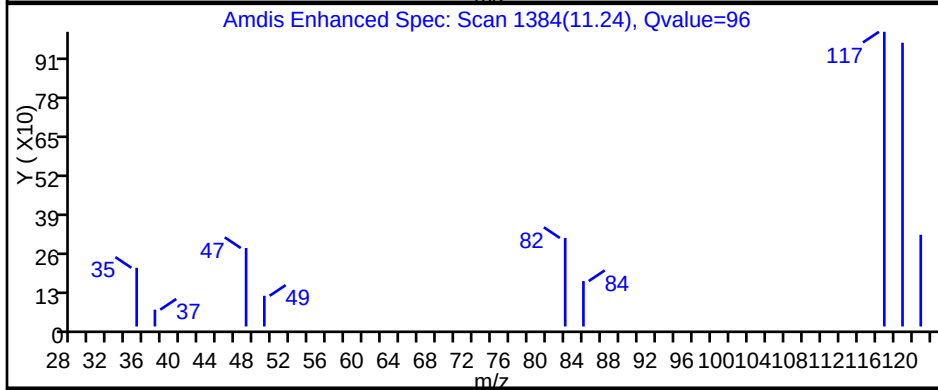
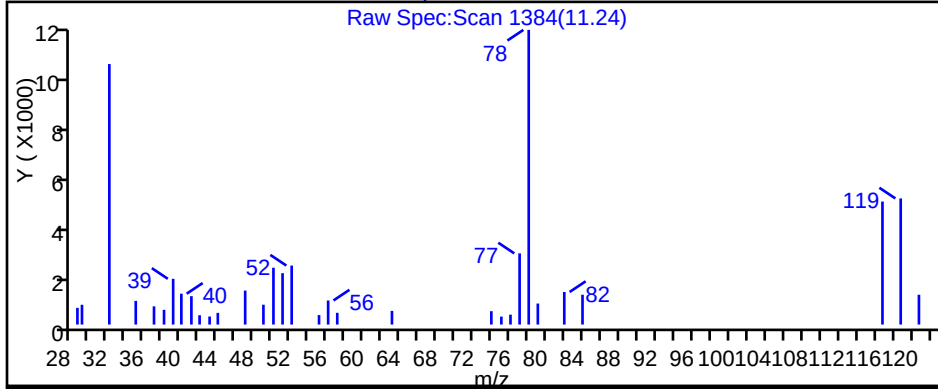
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P111.D

Injection Date: 04-Mar-2015 06:22:30

Instrument ID: MJ

Lims ID: 140-2797-A-7

Lab Sample ID: 140-2797-7

Client ID: H25-BA-2015

Operator ID: 403648

ALS Bottle#: 11

Worklist Smp#: 16

Purge Vol: 500.000 mL

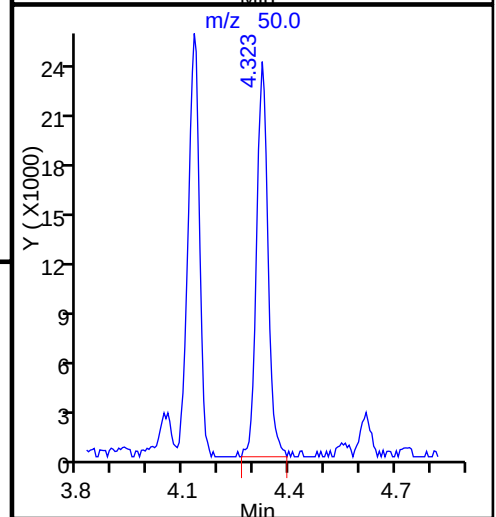
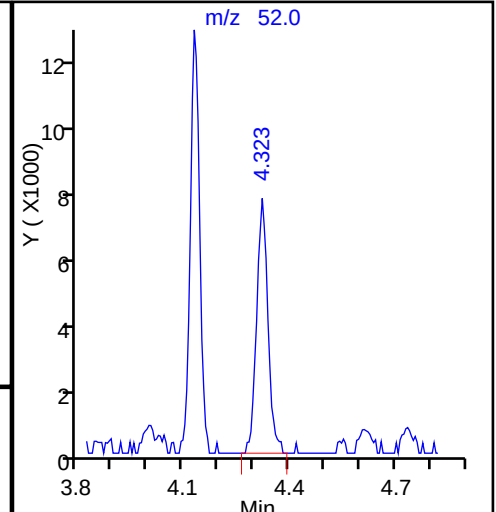
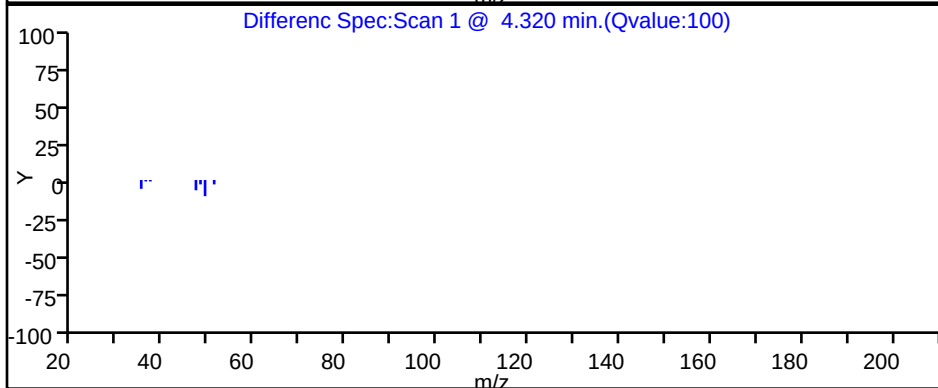
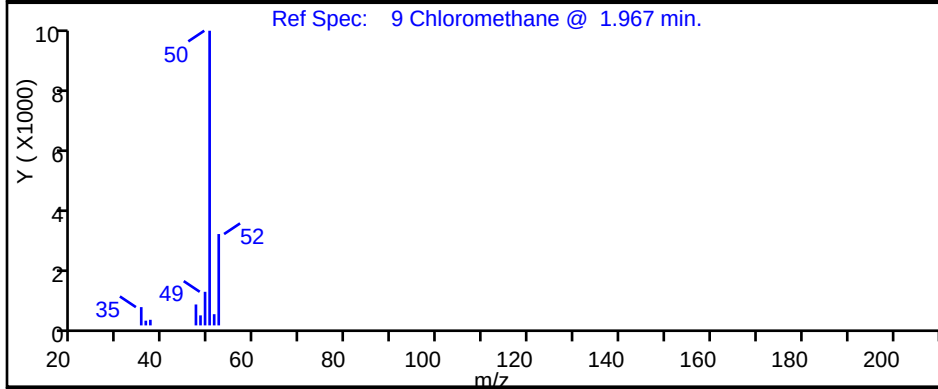
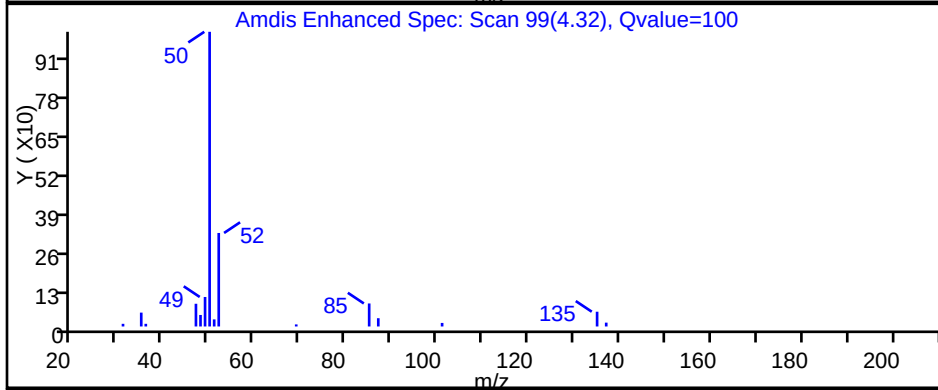
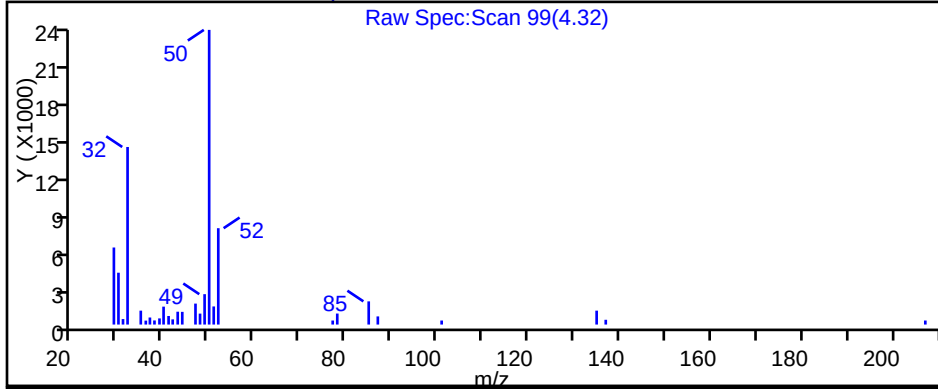
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P111.D

Injection Date: 04-Mar-2015 06:22:30

Instrument ID: MJ

Lims ID: 140-2797-A-7

Lab Sample ID: 140-2797-7

Client ID: H25-BA-2015

Operator ID: 403648

ALS Bottle#: 11

Worklist Smp#: 16

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

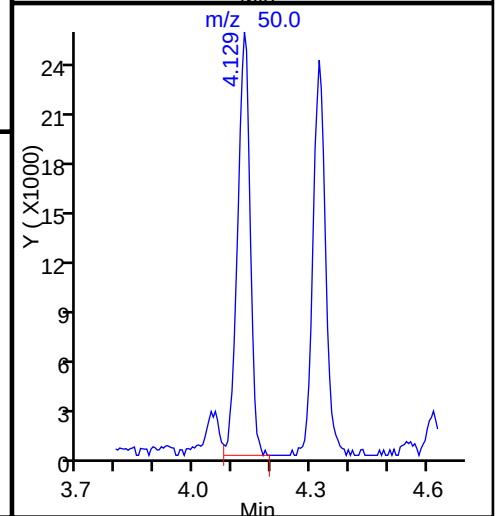
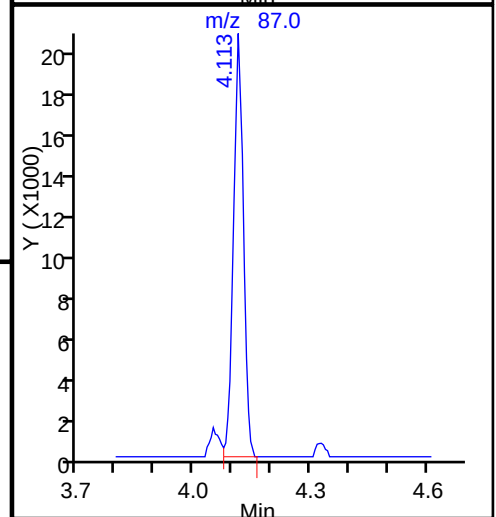
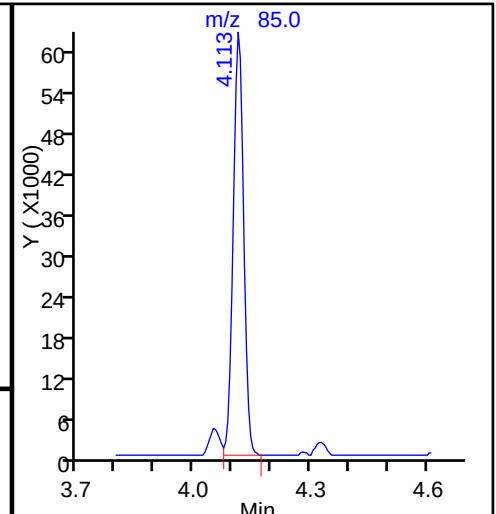
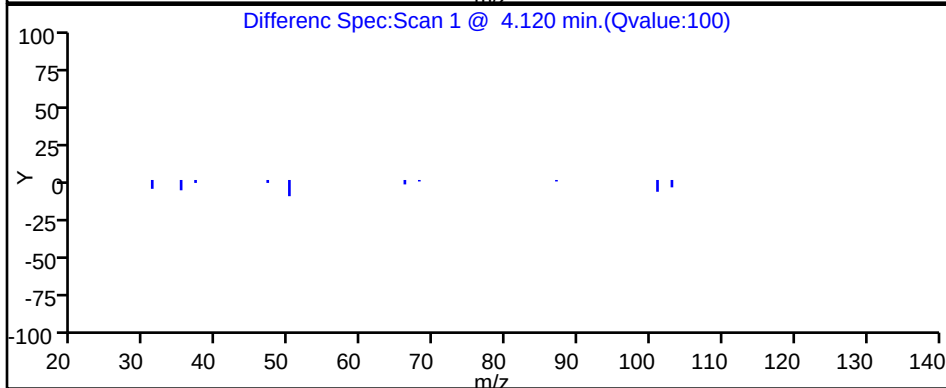
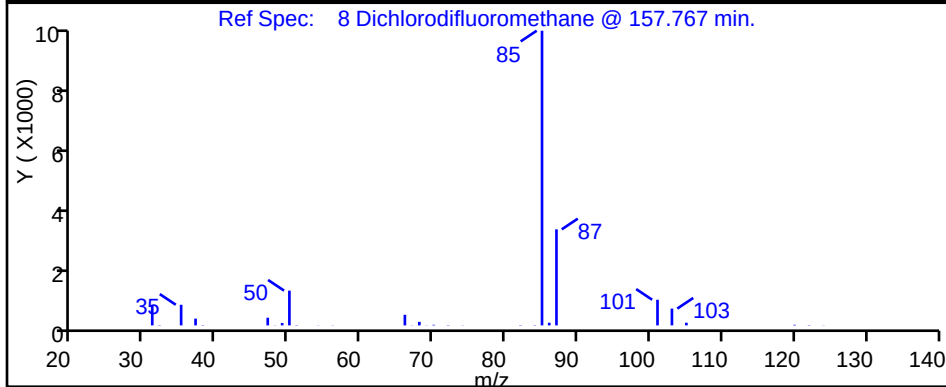
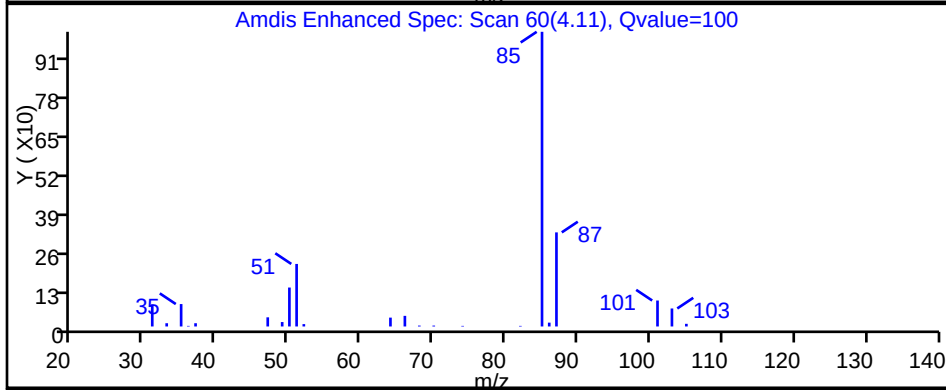
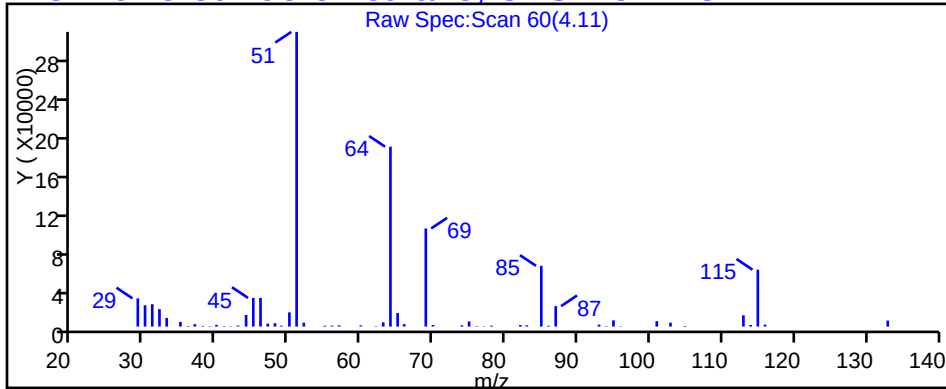
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P111.D

Injection Date: 04-Mar-2015 06:22:30

Instrument ID: MJ

Lims ID: 140-2797-A-7

Lab Sample ID: 140-2797-7

Client ID: H25-BA-2015

Operator ID: 403648

ALS Bottle#: 11

Worklist Smp#: 16

Purge Vol: 500.000 mL

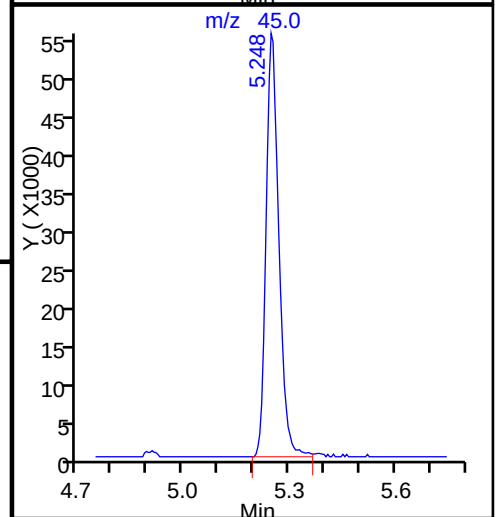
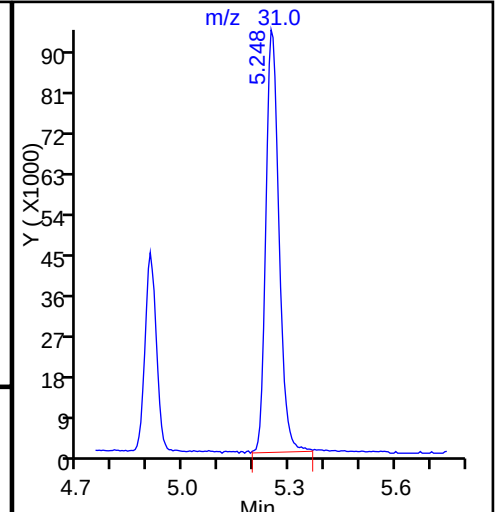
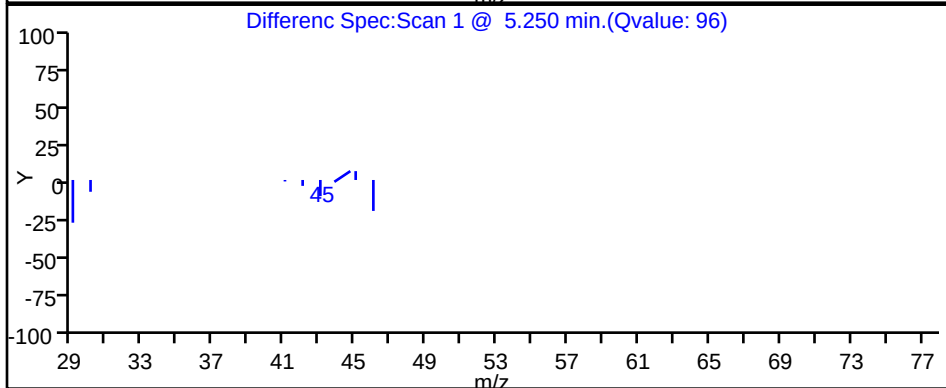
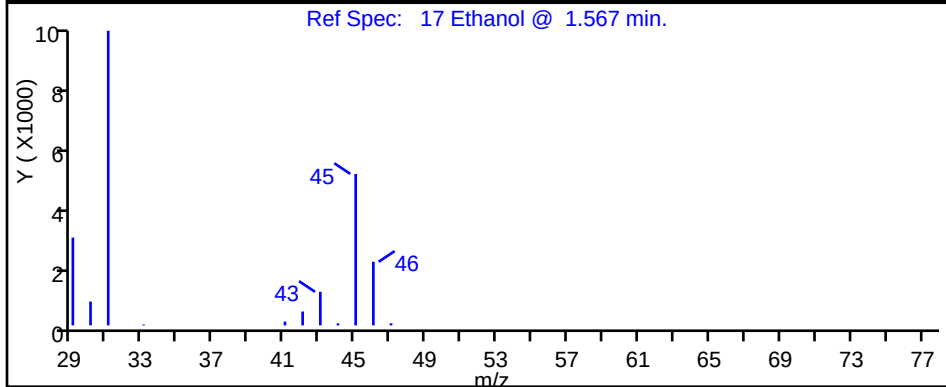
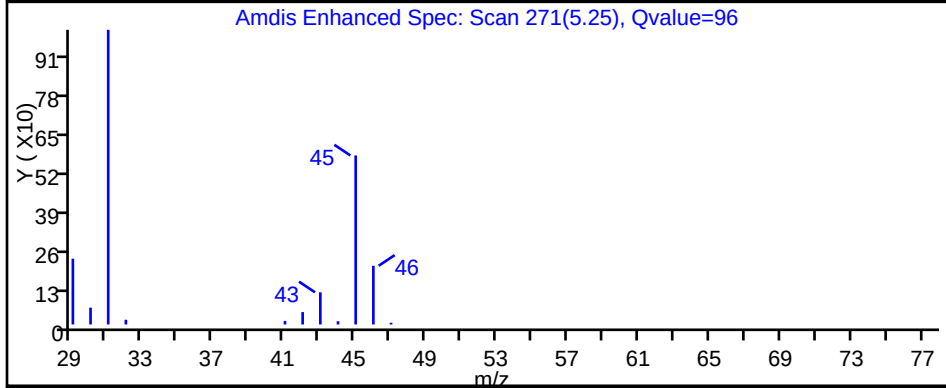
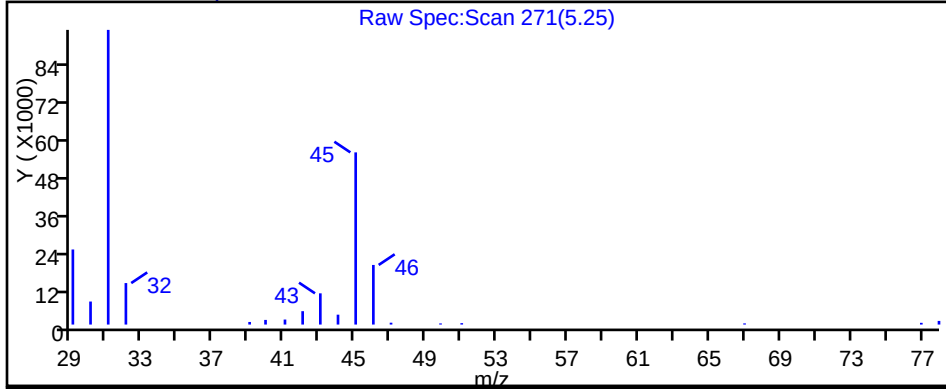
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P111.D

Injection Date: 04-Mar-2015 06:22:30

Instrument ID: MJ

Lims ID: 140-2797-A-7

Lab Sample ID: 140-2797-7

Client ID: H25-BA-2015

Operator ID: 403648

ALS Bottle#: 11

Worklist Smp#: 16

Purge Vol: 500.000 mL

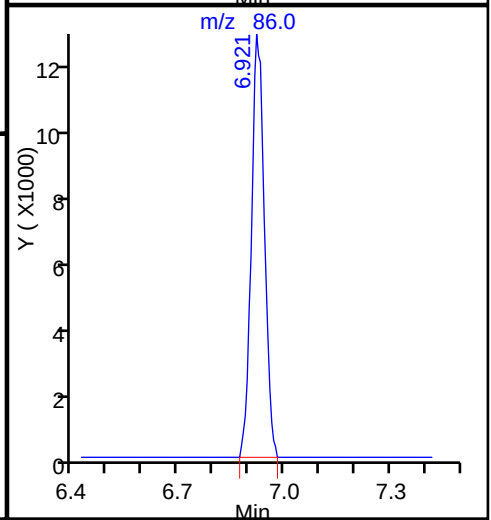
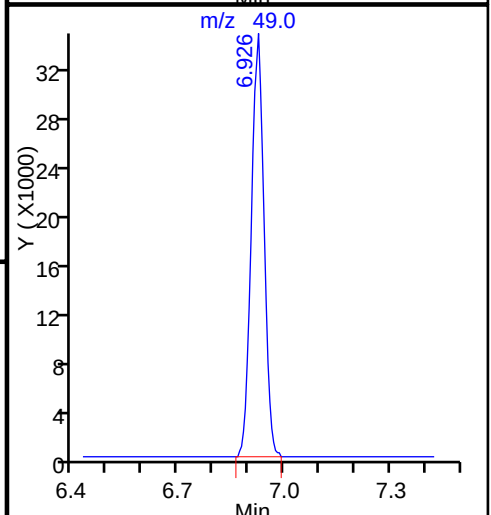
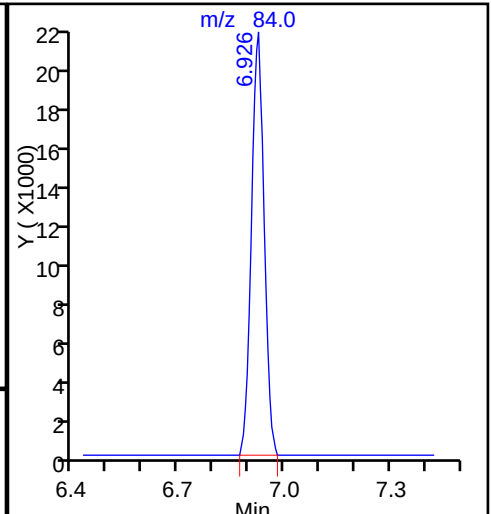
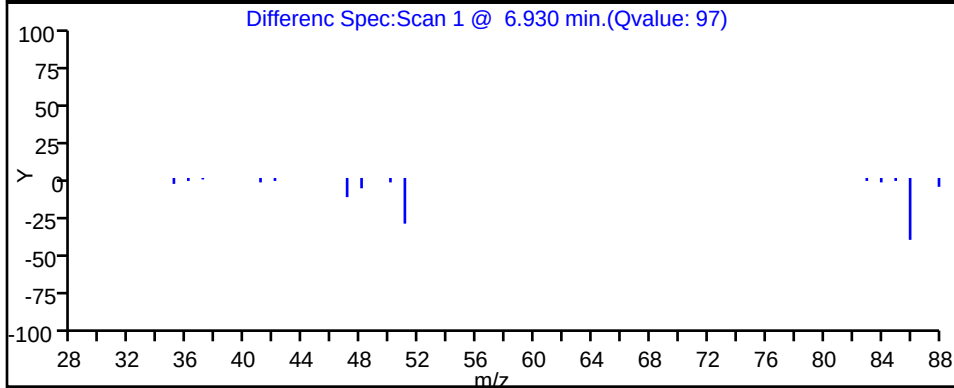
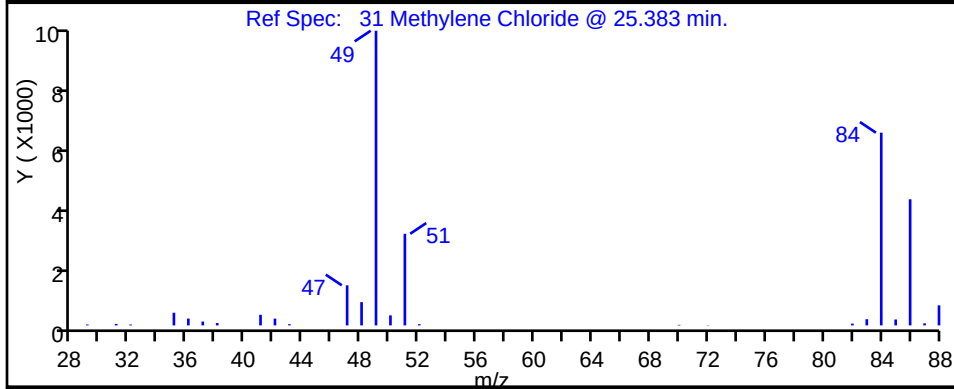
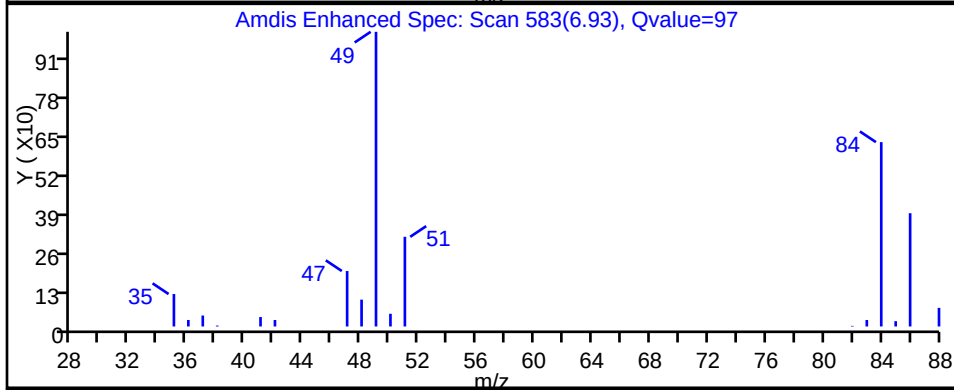
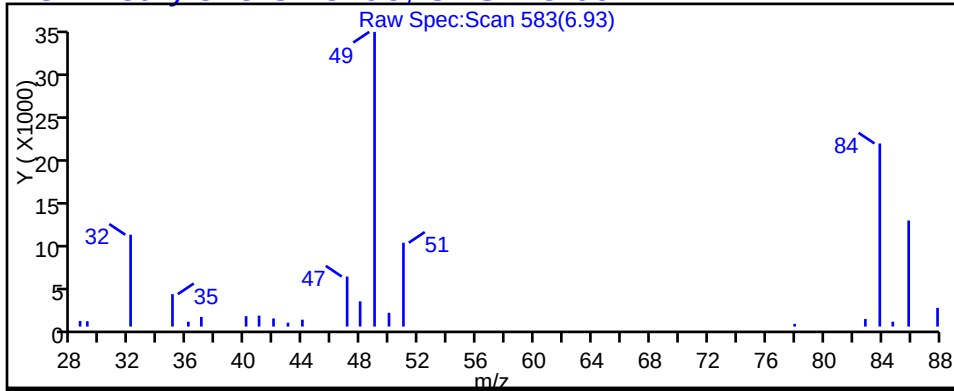
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P111.D

Injection Date: 04-Mar-2015 06:22:30

Instrument ID: MJ

Lims ID: 140-2797-A-7

Lab Sample ID: 140-2797-7

Client ID: H25-BA-2015

Operator ID: 403648

ALS Bottle#: 11

Worklist Smp#: 16

Purge Vol: 500.000 mL

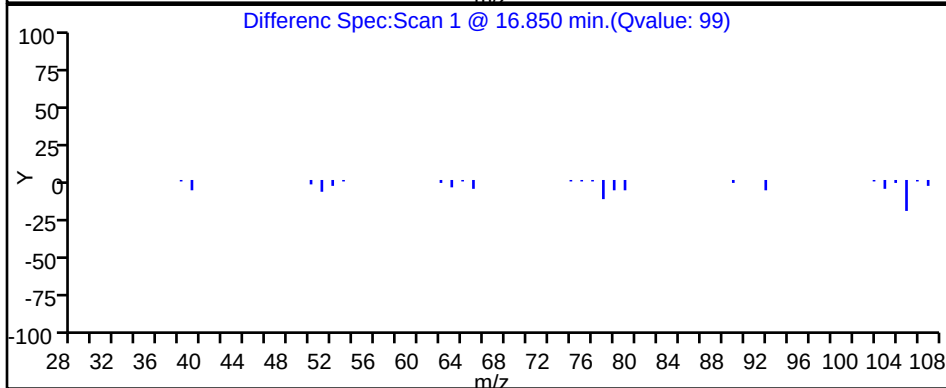
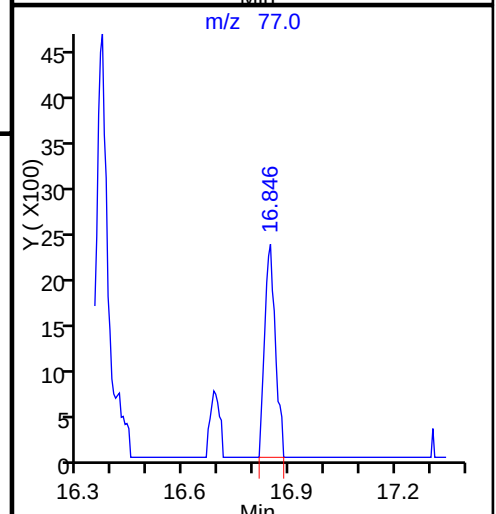
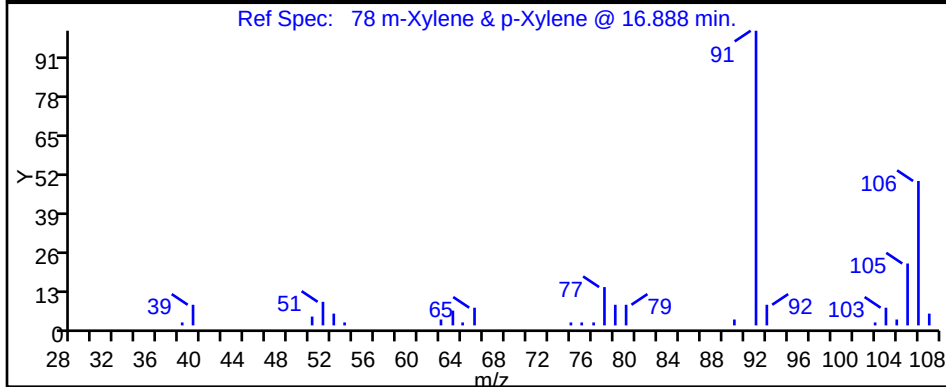
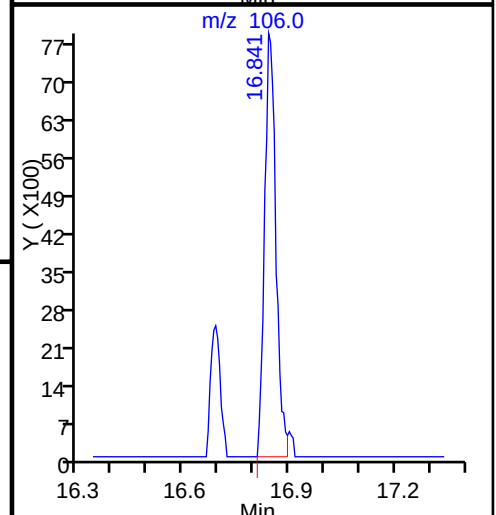
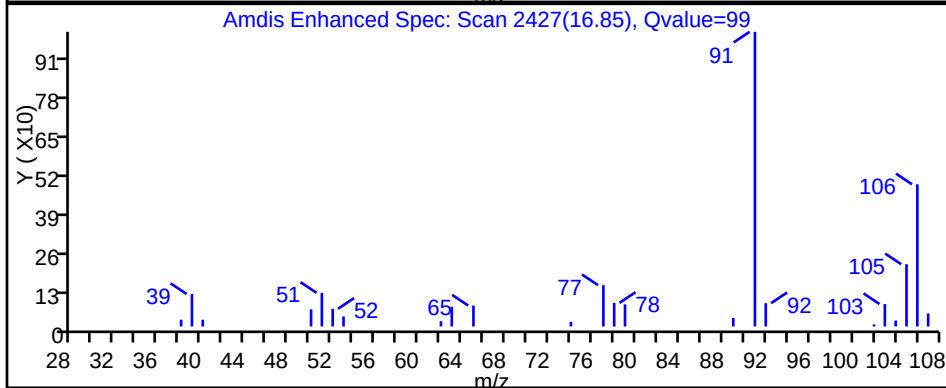
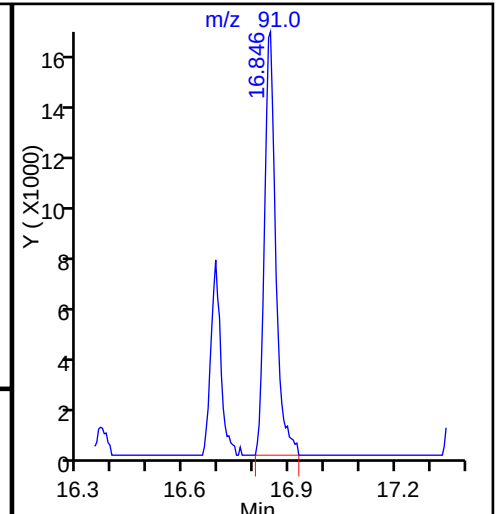
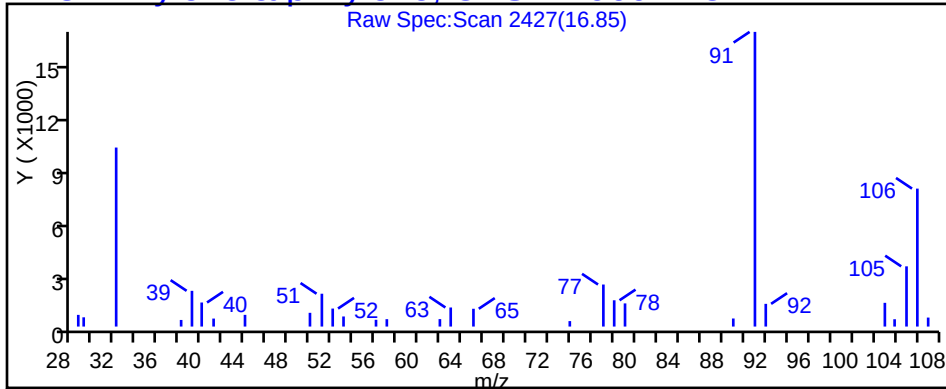
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P111.D

Injection Date: 04-Mar-2015 06:22:30

Instrument ID: MJ

Lims ID: 140-2797-A-7

Lab Sample ID: 140-2797-7

Client ID: H25-BA-2015

Operator ID: 403648

ALS Bottle#: 11

Worklist Smp#: 16

Purge Vol: 500.000 mL

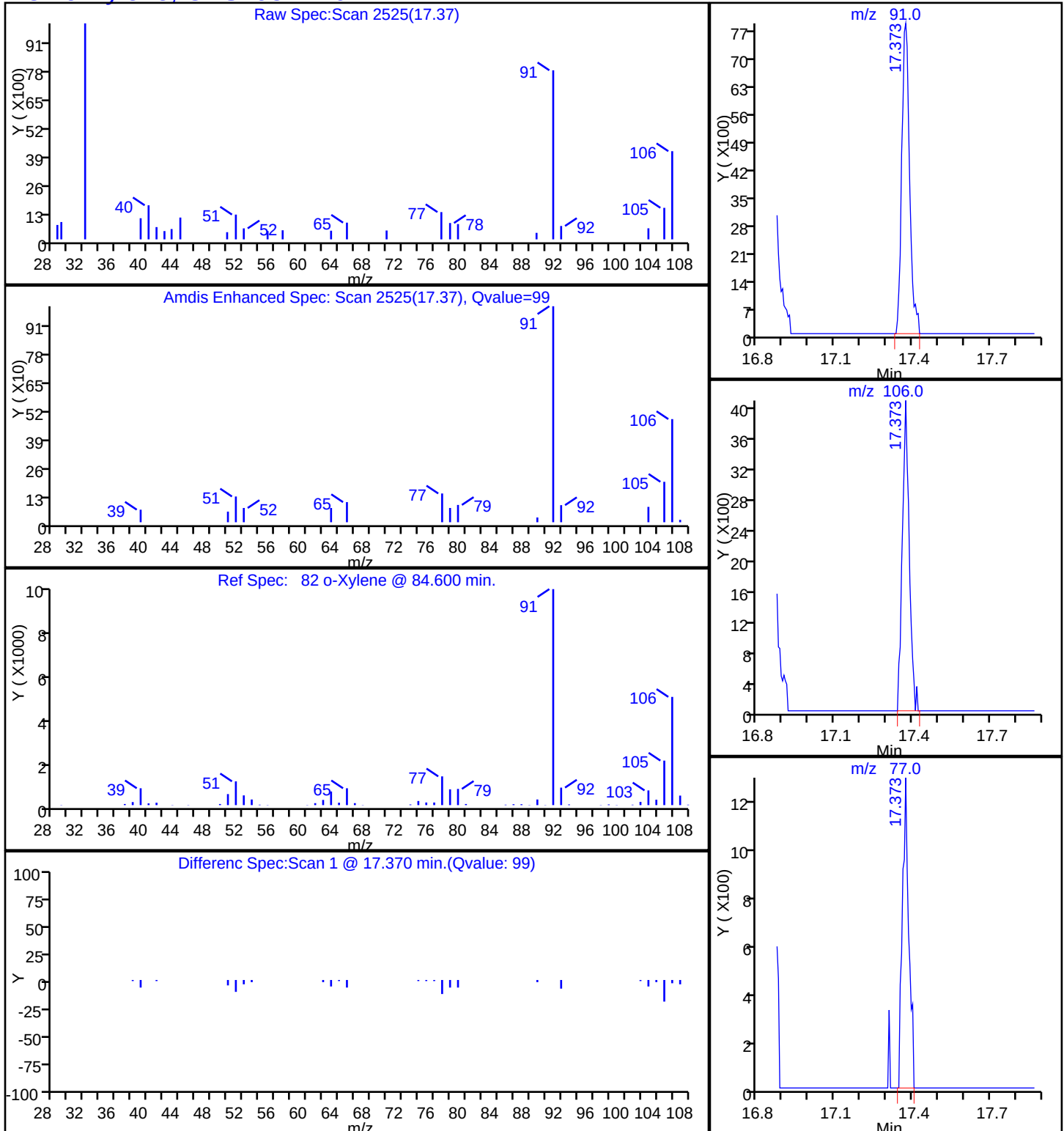
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P111.D

Injection Date: 04-Mar-2015 06:22:30

Instrument ID: MJ

Lims ID: 140-2797-A-7

Lab Sample ID: 140-2797-7

Client ID: H25-BA-2015

Operator ID: 403648

ALS Bottle#: 11

Worklist Smp#: 16

Purge Vol: 500.000 mL

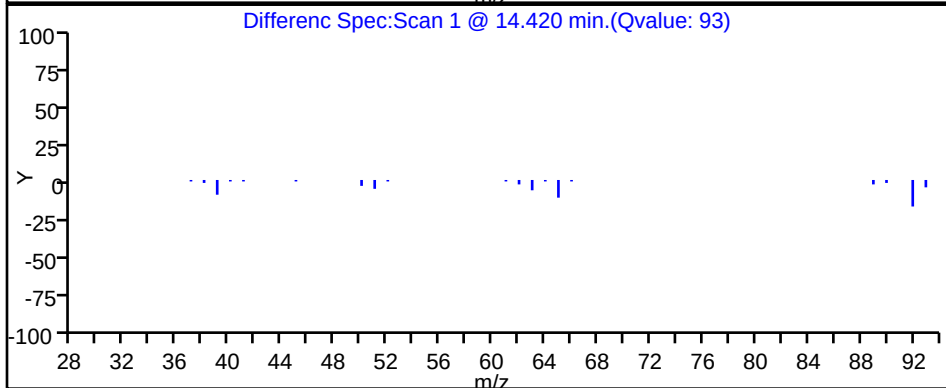
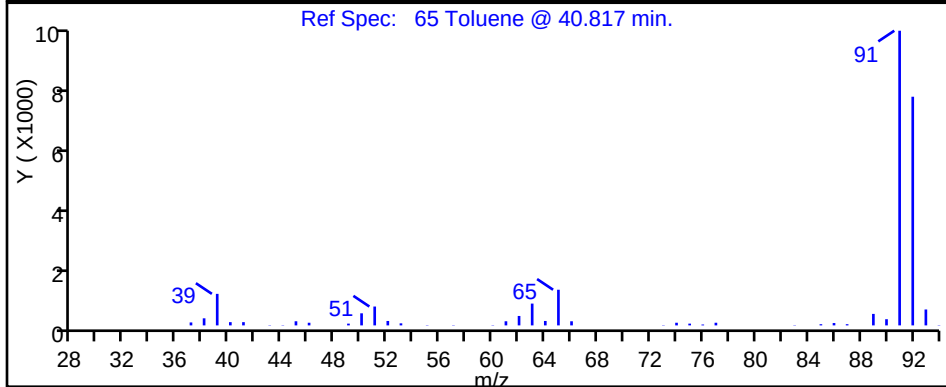
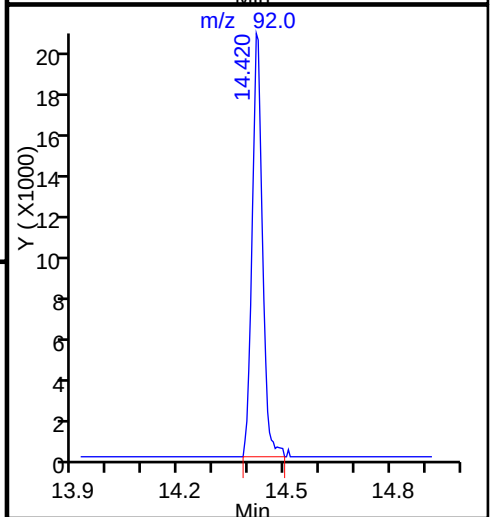
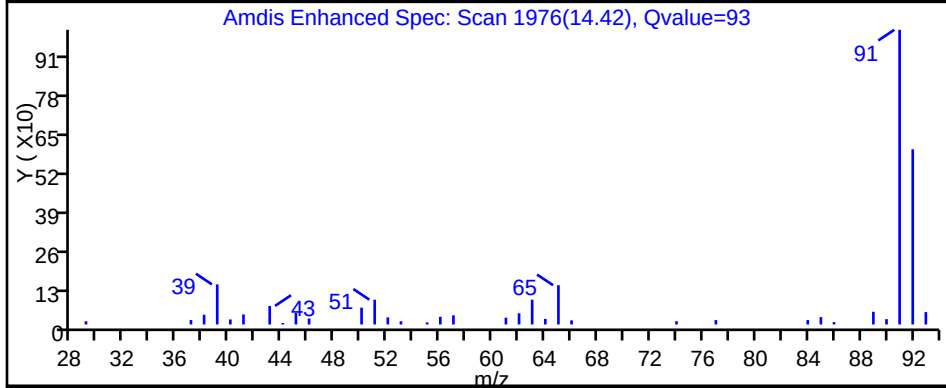
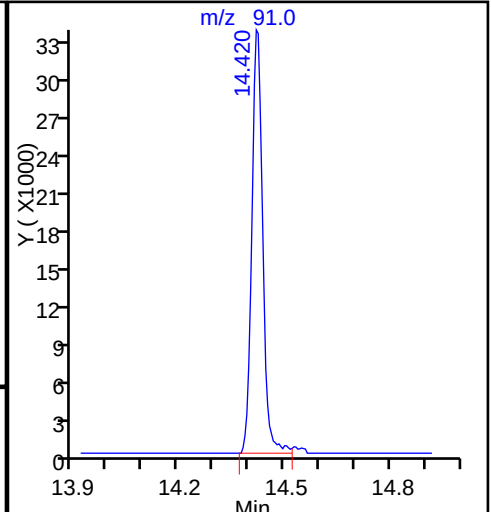
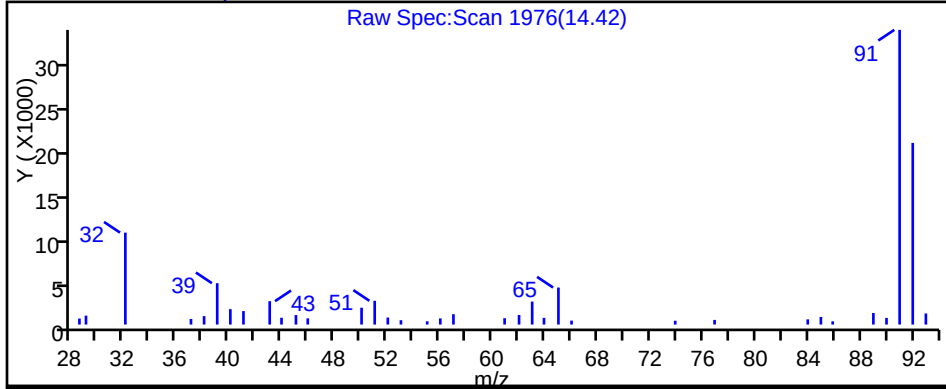
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P111.D

Injection Date: 04-Mar-2015 06:22:30

Instrument ID: MJ

Lims ID: 140-2797-A-7

Lab Sample ID: 140-2797-7

Client ID: H25-BA-2015

Operator ID: 403648

ALS Bottle#: 11

Worklist Smp#: 16

Purge Vol: 500.000 mL

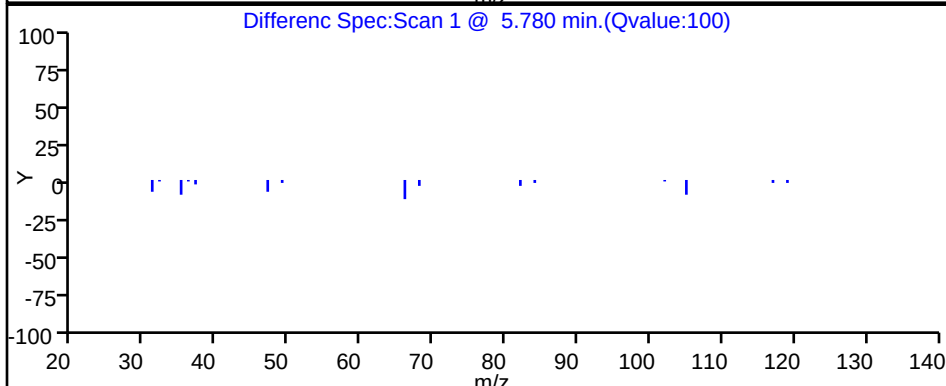
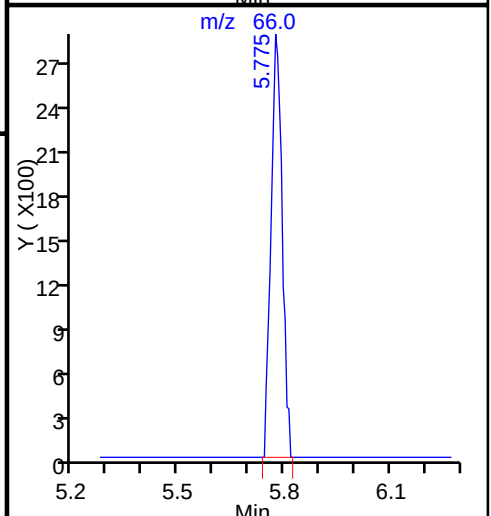
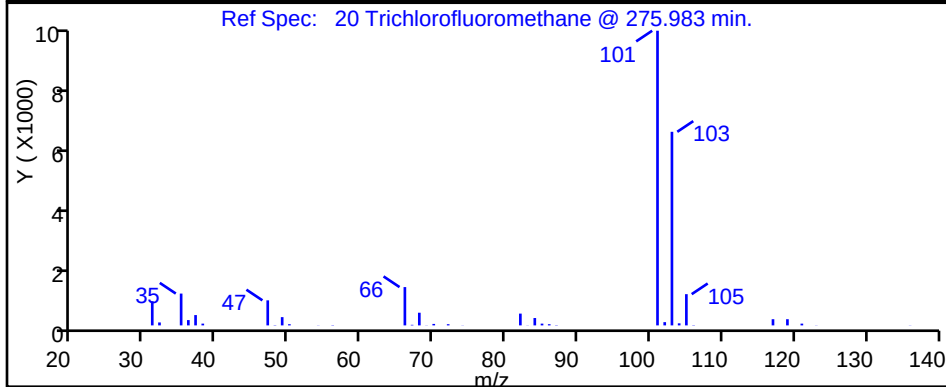
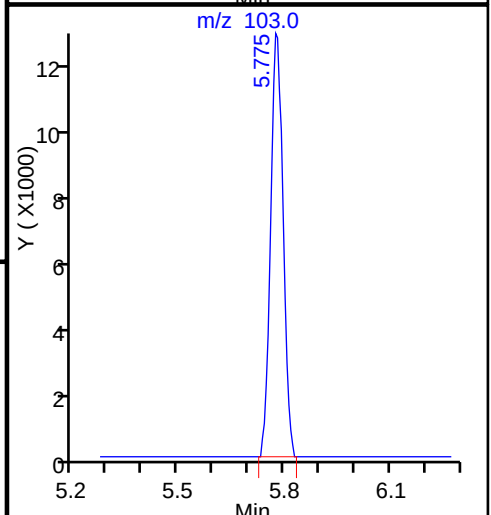
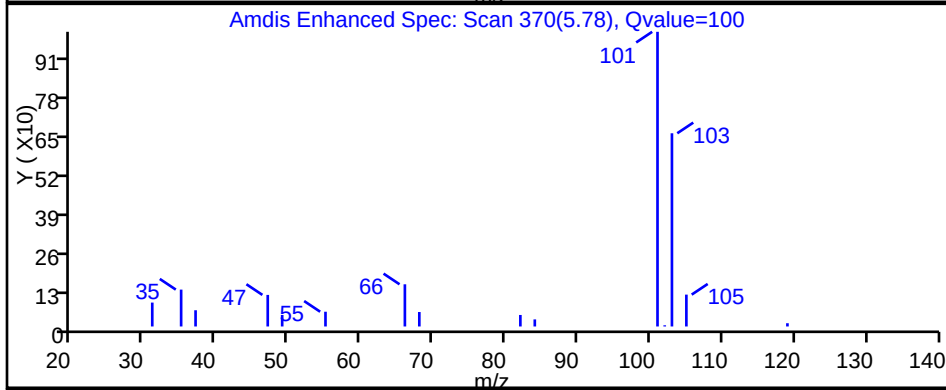
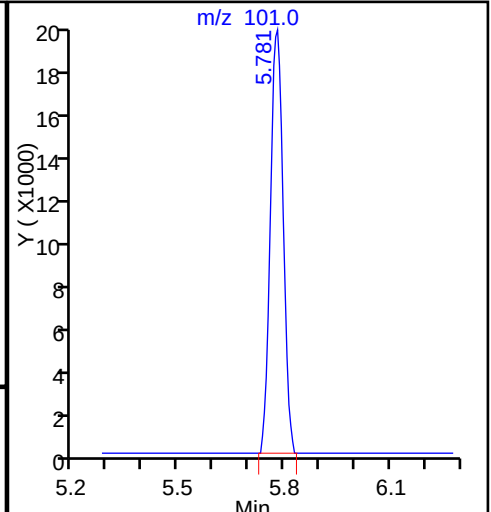
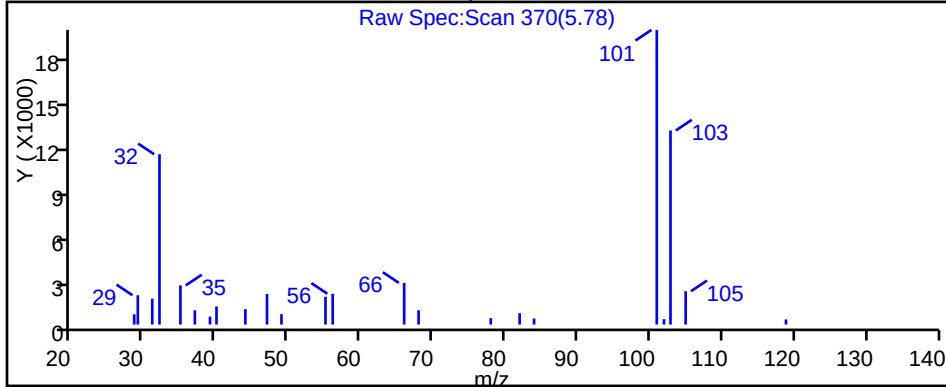
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: H26-BA-2015 Lab Sample ID: 140-2797-8

Matrix: Air Lab File ID: JC03P112.D

Analysis Method: TO 15 LL Date Collected: 02/24/2015 14:24

Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 07:17

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.: 2449 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		0.080	
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	2.1		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	0.26		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	0.077		0.040	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	0.19		0.080	
74-87-3	Chloromethane	50.49	0.41		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H26-BA-2015 Lab Sample ID: 140-2797-8
 Matrix: Air Lab File ID: JC03P112.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 14:24
 Sample wt/vol: 500(mL) Date Analyzed: 03/04/2015 07:17
 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.: 2449 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	0.38		0.080	
64-17-5	Ethanol	46.07	7.6		0.80	
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	0.20		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.19		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	0.30		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		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.17		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: H26-BA-2015 Lab Sample ID: 140-2797-8

Matrix: Air Lab File ID: JC03P112.D

Analysis Method: TO 15 LL Date Collected: 02/24/2015 14:24

Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 07:17

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.: 2449 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		0.32	
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	6.2		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.82		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	0.49		0.25	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	0.90		0.39	
74-87-3	Chloromethane	50.49	0.85		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H26-BA-2015 Lab Sample ID: 140-2797-8
 Matrix: Air Lab File ID: JC03P112.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 14:24
 Sample wt/vol: 500(mL) Date Analyzed: 03/04/2015 07:17
 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.: 2449 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	1.9		0.40	
64-17-5	Ethanol	46.07	14		1.5	
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	0.69		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	0.84		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	1.1		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	ND		0.21	
75-69-4	Trichlorofluoromethane	137.37	0.95		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P112.D
 Lims ID: 140-2797-A-8 Lab Sample ID: 140-2797-8
 Client ID: H26-BA-2015
 Sample Type: Client
 Inject. Date: 04-Mar-2015 07:17:30 ALS Bottle#: 12 Worklist Smp#: 17
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2797-a-8
 Misc. Info.: J030315,TO15,,140-0001414-017
 Operator ID: 403648 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150228-1414.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 11:02:31 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK052

First Level Reviewer: tajh

Date: 04-Mar-2015 08:40:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.592	9.587	0.005	97	280064	4.00	
* 2 1,4-Difluorobenzene	114	11.723	11.728	-0.005	96	1247521	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.365	16.370	-0.005	91	1070452	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.979	17.979	0.000	90	647470	3.70	
8 Dichlorodifluoromethane	85	4.116	4.105	0.011	100	118643	0.3763	
9 Chloromethane	52	4.326	4.315	0.011	99	18547	0.4137	
16 Chloroethane	64	5.138	5.138	0.000	0	812	0.0153	
17 Ethanol	31	5.246	5.240	0.006	97	294867	7.57	
20 Trichlorofluoromethane	101	5.778	5.778	0.000	99	46705	0.1692	
28 2-Methyl-2-propanol	59	6.650	6.633	0.017	96	20116	0.1216	
30 1,1,2-Trichloro-1,2,2-trif	101	6.736	6.730	0.006	93	11062	0.0595	
31 Methylene Chloride	84	6.924	6.924	0.000	97	17863	0.1989	
39 2-Butanone (MEK)	72	8.780	8.785	-0.005	98	70500	2.11	
40 Hexane	56	8.802	8.807	-0.005	72	15425	0.1652	
43 Chloroform	83	9.592	9.598	-0.006	30	32719	0.1851	
49 Cyclohexane	69	11.217	11.211	0.006	54	3070	0.0645	
48 Benzene	78	11.217	11.217	0.000	97	59103	0.2565	
50 Carbon tetrachloride	117	11.239	11.238	0.000	97	13176	0.0775	
53 Isooctane	57	11.932	11.932	0.000	86	22725	0.0496	
62 4-Methyl-2-pentanone (MIBK	43	13.552	13.546	0.006	95	34340	0.1812	
65 Toluene	91	14.423	14.423	0.000	93	58476	0.2994	
76 Ethylbenzene	91	16.688	16.693	-0.005	96	14405	0.0631	
78 m-Xylene & p-Xylene	91	16.844	16.849	-0.005	99	35453	0.1927	
82 o-Xylene	91	17.376	17.371	0.005	97	12334	0.0615	
93 1,2,4-Trimethylbenzene	105	19.087	19.087	0.000	97	6715	0.0311	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P112.D

Injection Date: 04-Mar-2015 07:17:30

Instrument ID: MJ

Operator ID: 403648

Lims ID: 140-2797-A-8

Lab Sample ID: 140-2797-8

Worklist Smp#: 17

Client ID: H26-BA-2015

Purge Vol: 500.000 mL

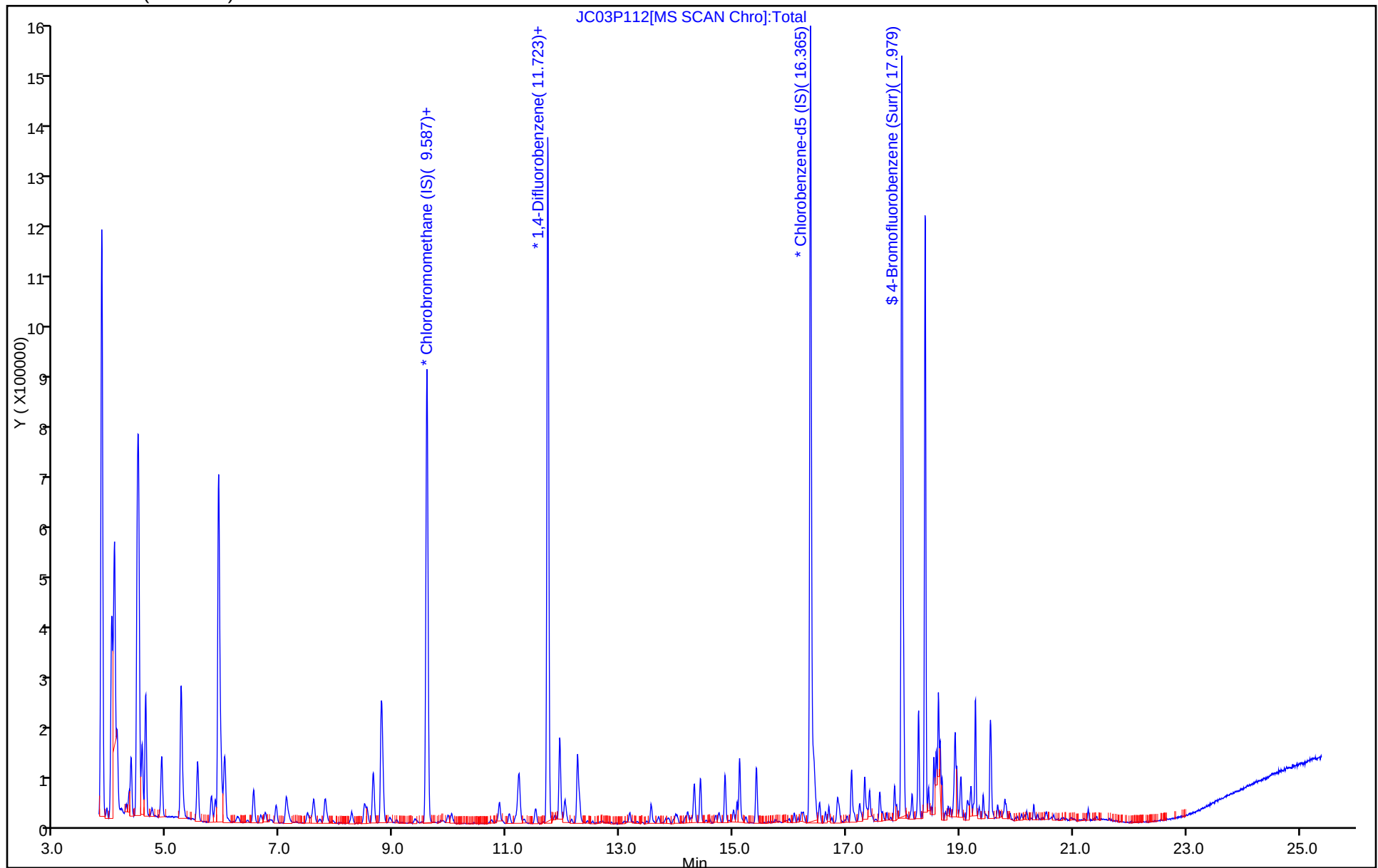
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P112.D

Injection Date: 04-Mar-2015 07:17:30

Instrument ID: MJ

Lims ID: 140-2797-A-8

Lab Sample ID: 140-2797-8

Client ID: H26-BA-2015

Operator ID: 403648

ALS Bottle#: 12

Worklist Smp#: 17

Purge Vol: 500.000 mL

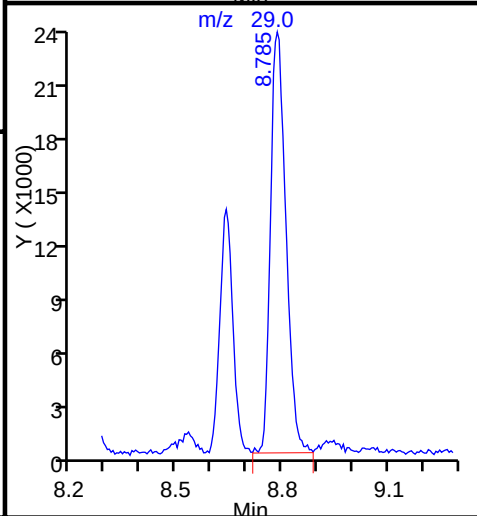
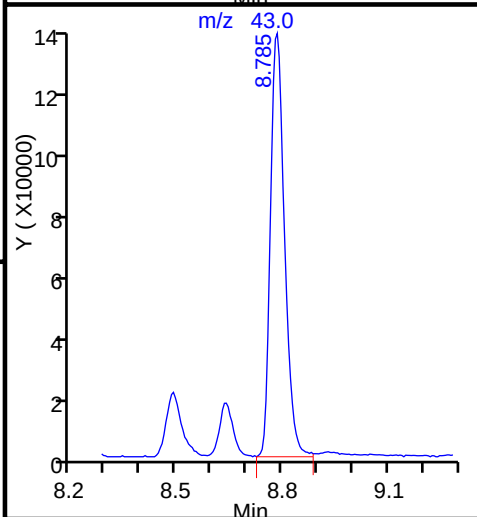
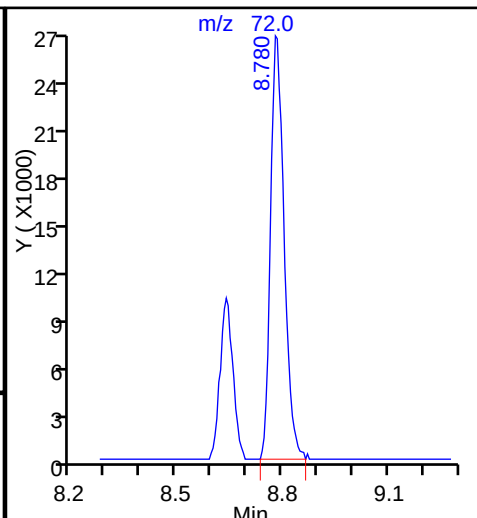
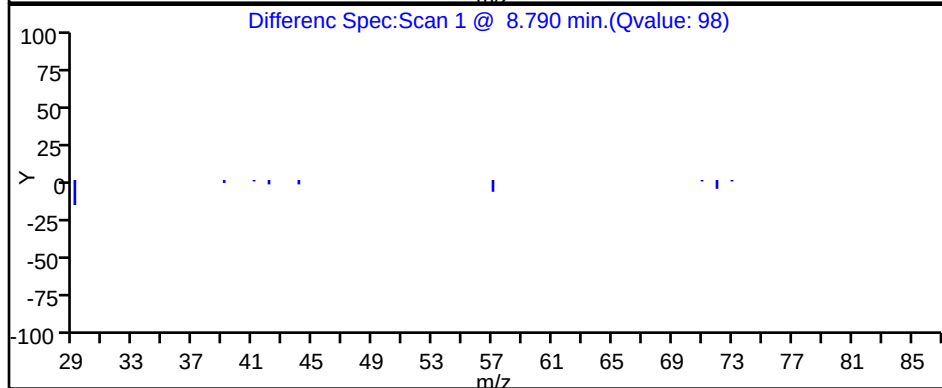
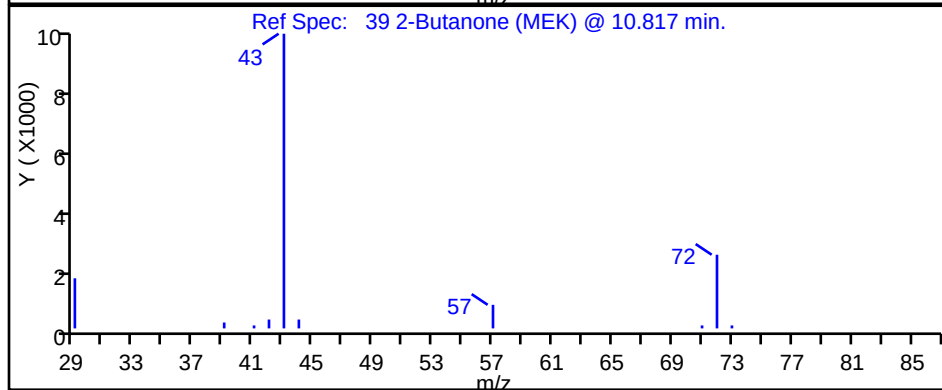
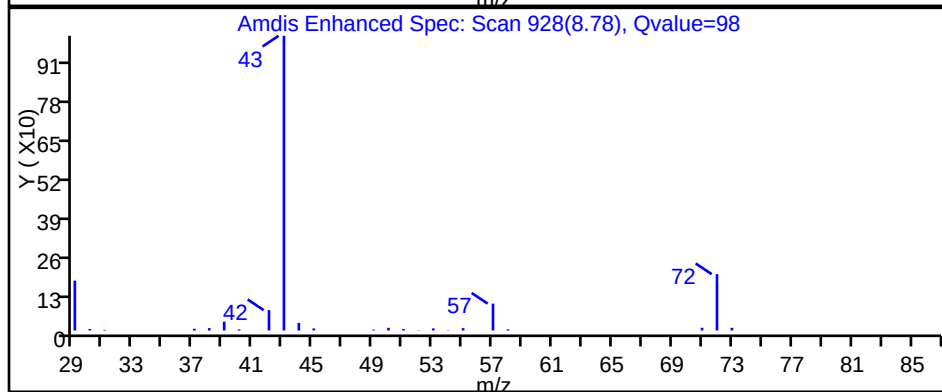
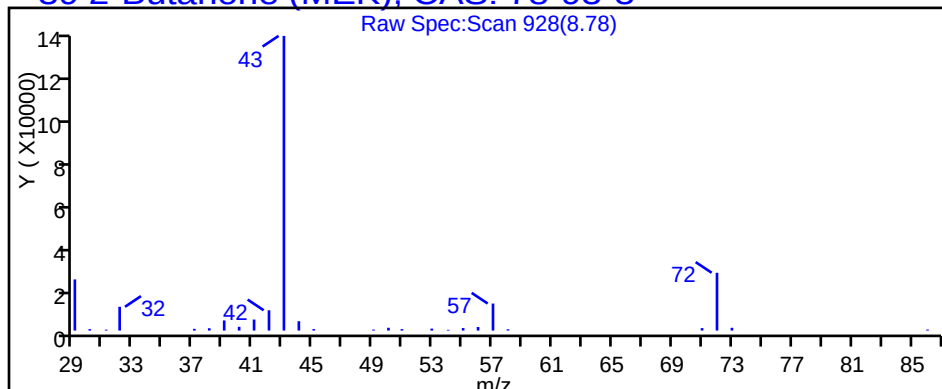
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P112.D

Injection Date: 04-Mar-2015 07:17:30

Instrument ID: MJ

Lims ID: 140-2797-A-8

Lab Sample ID: 140-2797-8

Client ID: H26-BA-2015

Operator ID: 403648

ALS Bottle#: 12

Worklist Smp#: 17

Purge Vol: 500.000 mL

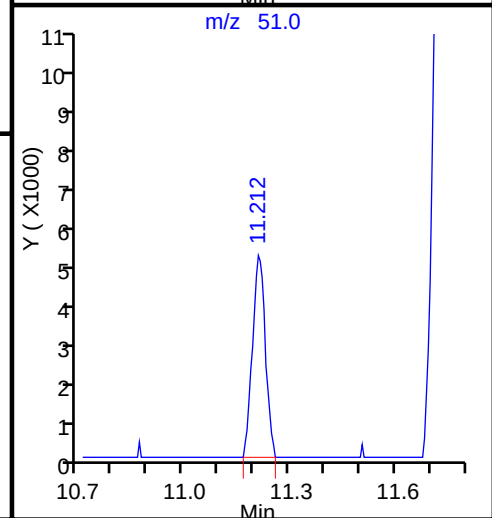
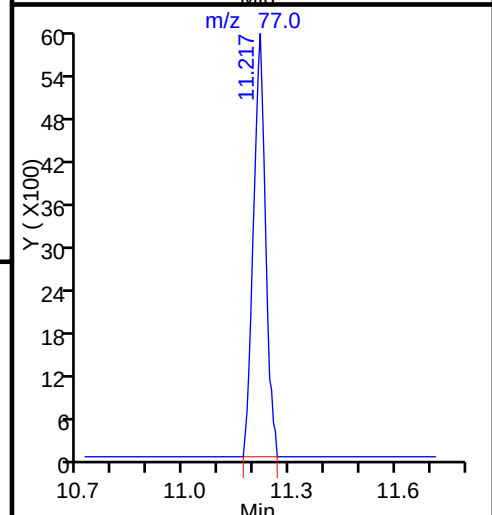
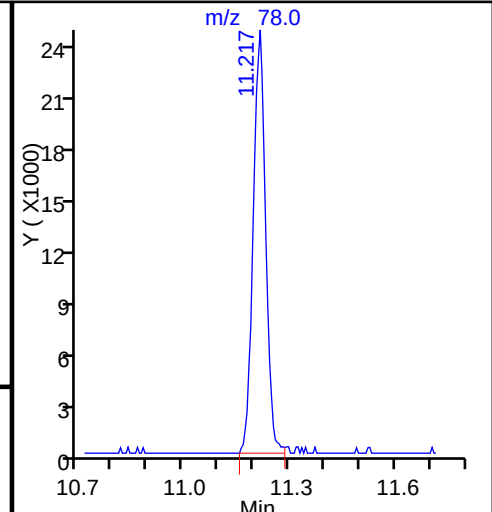
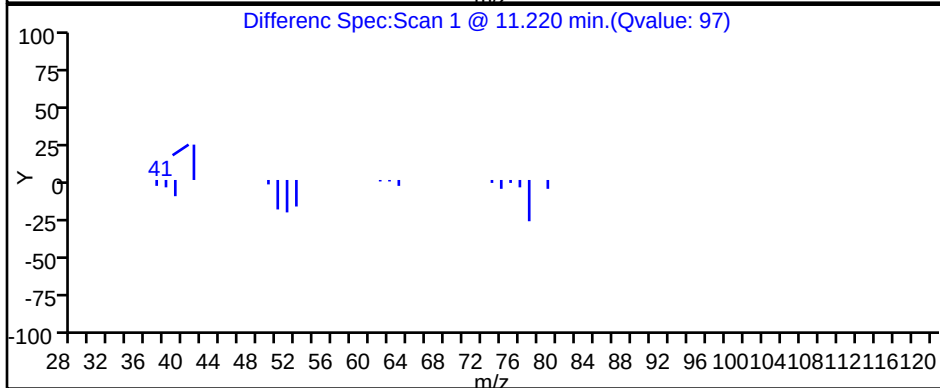
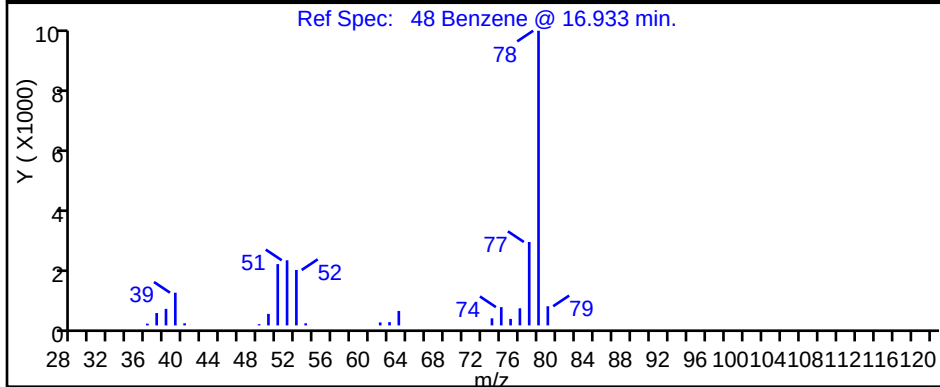
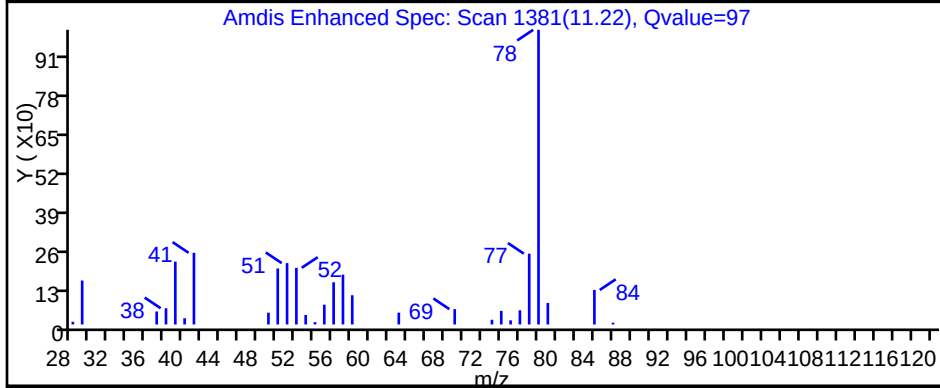
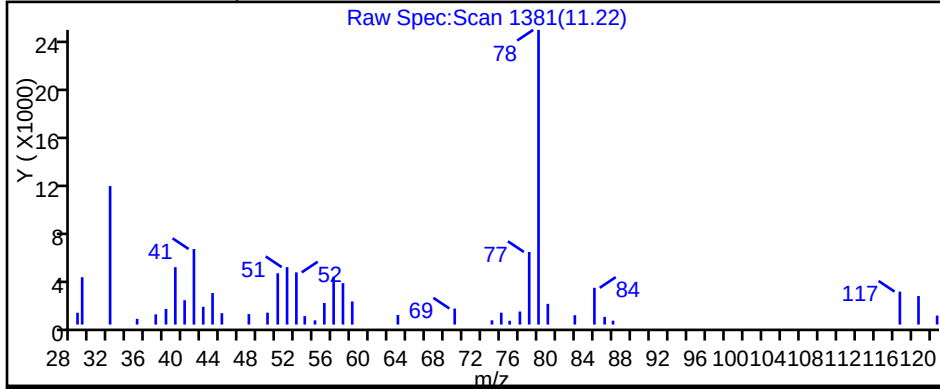
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P112.D

Injection Date: 04-Mar-2015 07:17:30

Instrument ID: MJ

Lims ID: 140-2797-A-8

Lab Sample ID: 140-2797-8

Client ID: H26-BA-2015

Operator ID: 403648

ALS Bottle#: 12

Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

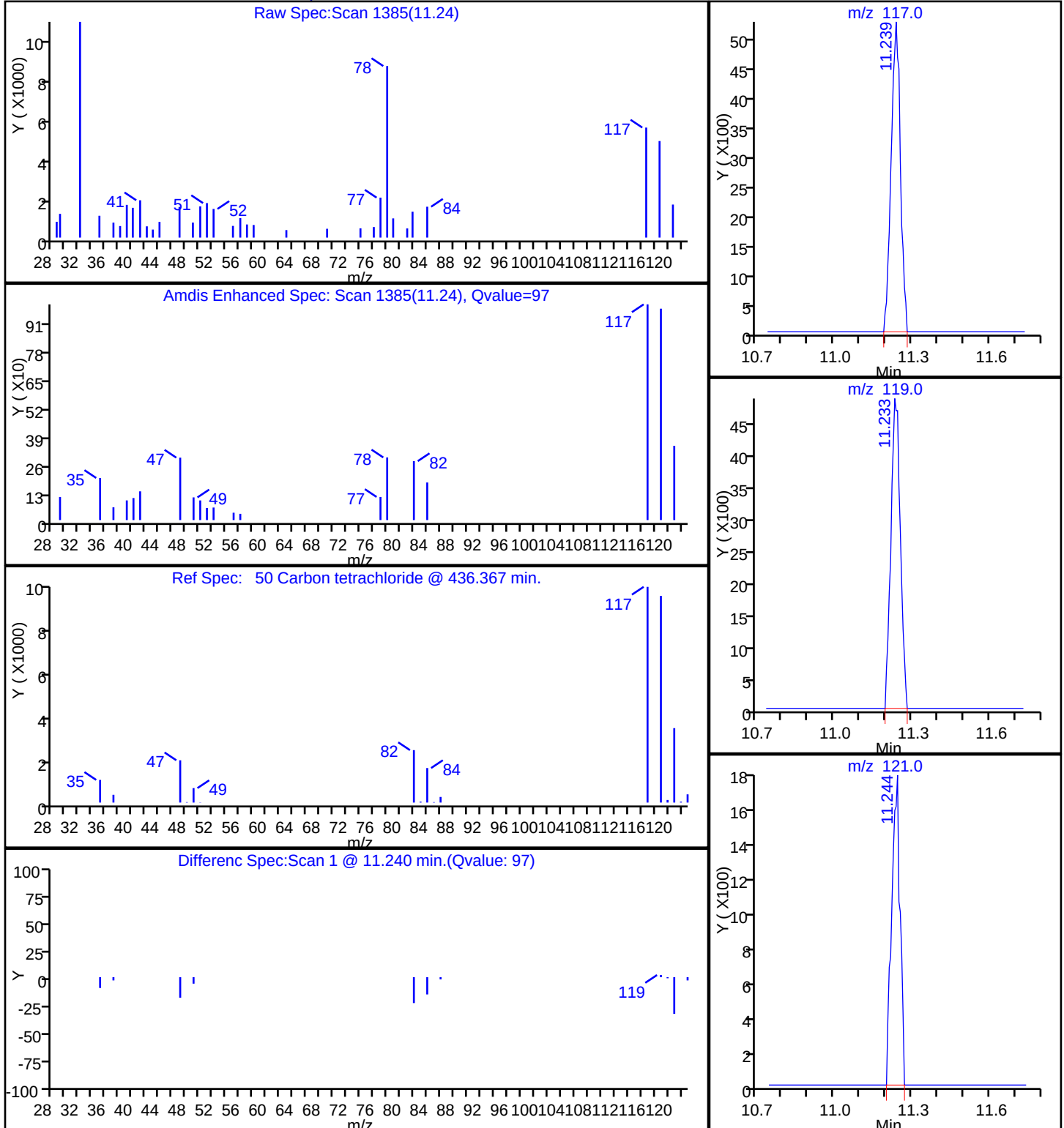
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P112.D

Injection Date: 04-Mar-2015 07:17:30

Instrument ID: MJ

Lims ID: 140-2797-A-8

Lab Sample ID: 140-2797-8

Client ID: H26-BA-2015

Operator ID: 403648

ALS Bottle#: 12

Worklist Smp#: 17

Purge Vol: 500.000 mL

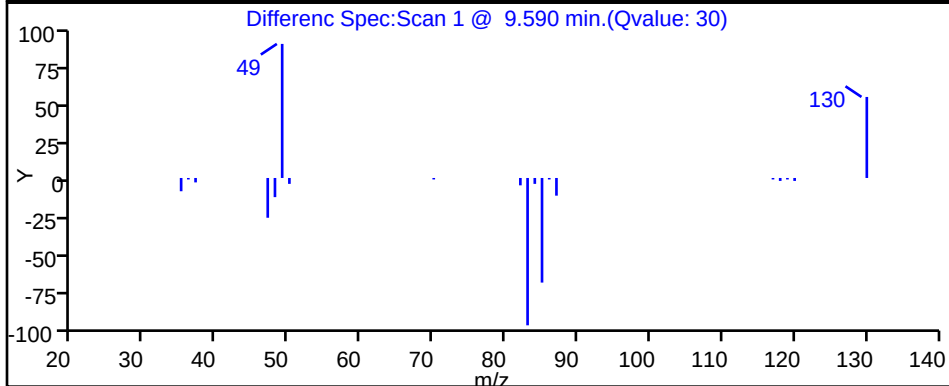
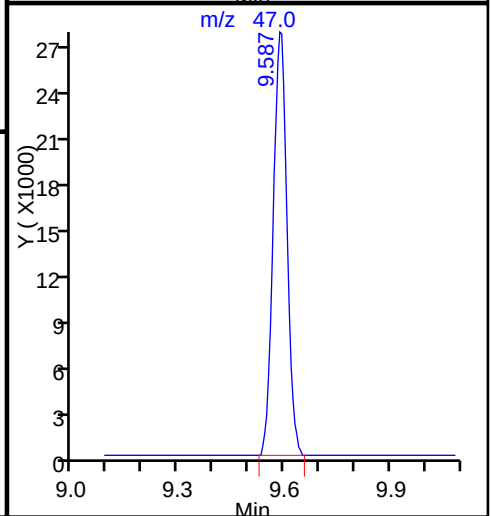
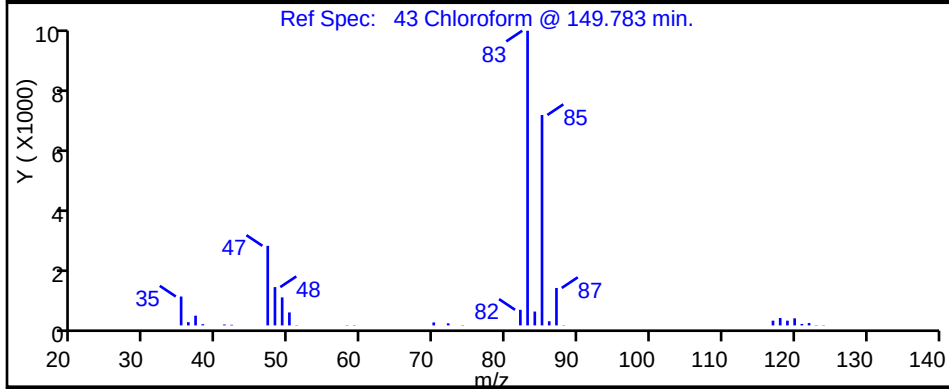
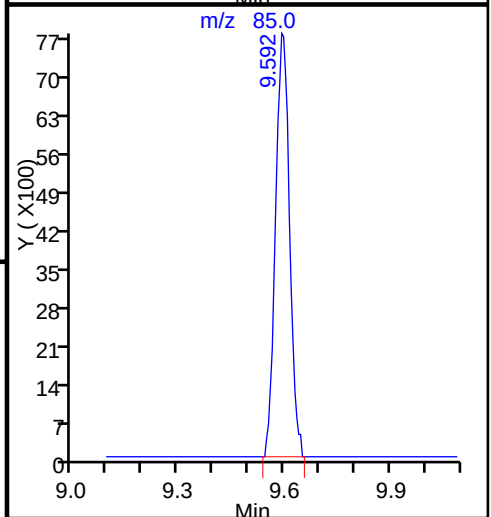
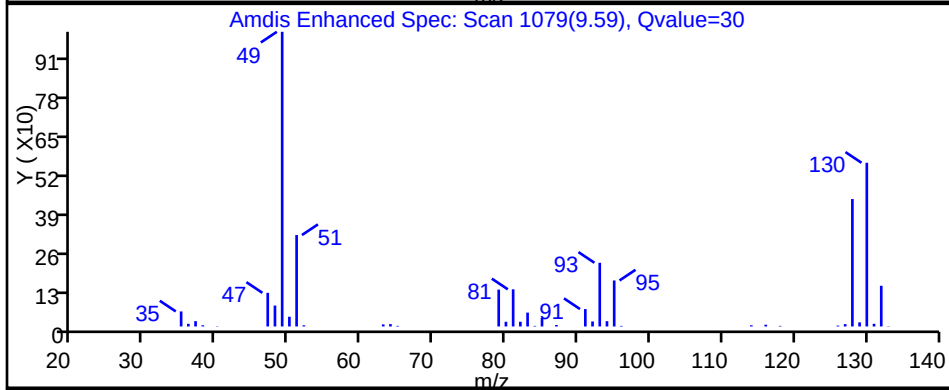
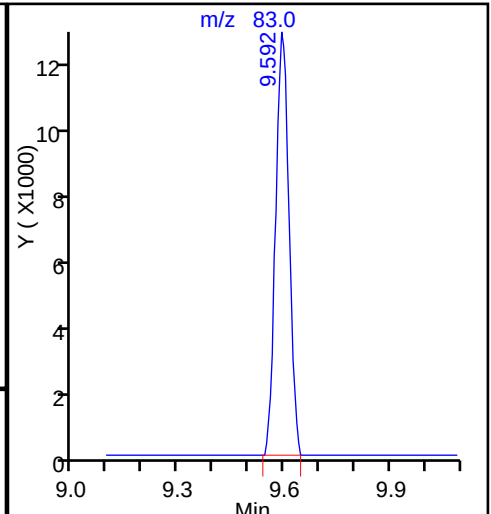
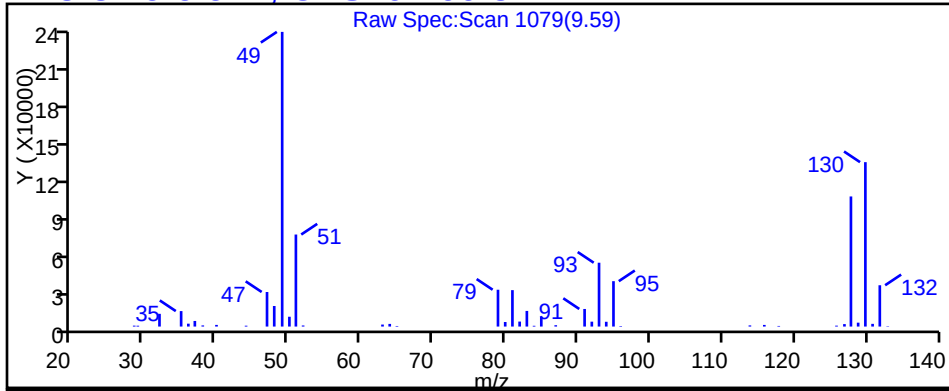
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

43 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P112.D

Injection Date: 04-Mar-2015 07:17:30

Instrument ID: MJ

Lims ID: 140-2797-A-8

Lab Sample ID: 140-2797-8

Client ID: H26-BA-2015

Operator ID: 403648

ALS Bottle#: 12

Worklist Smp#: 17

Purge Vol: 500.000 mL

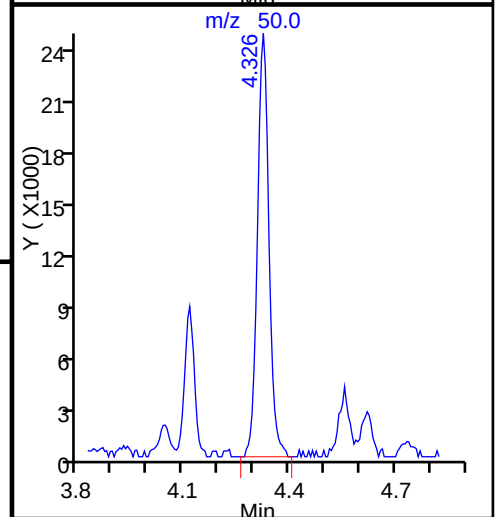
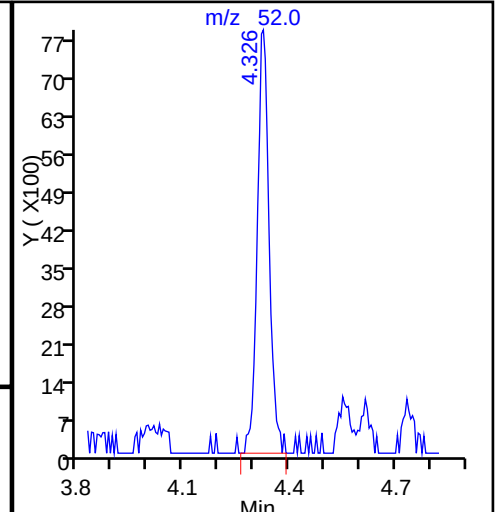
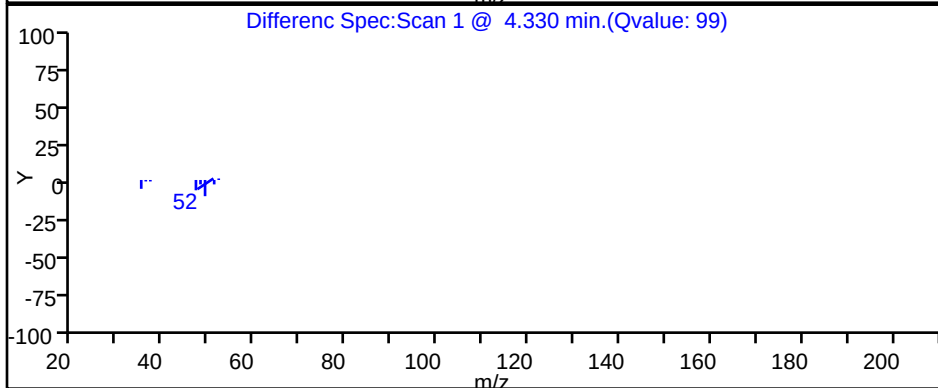
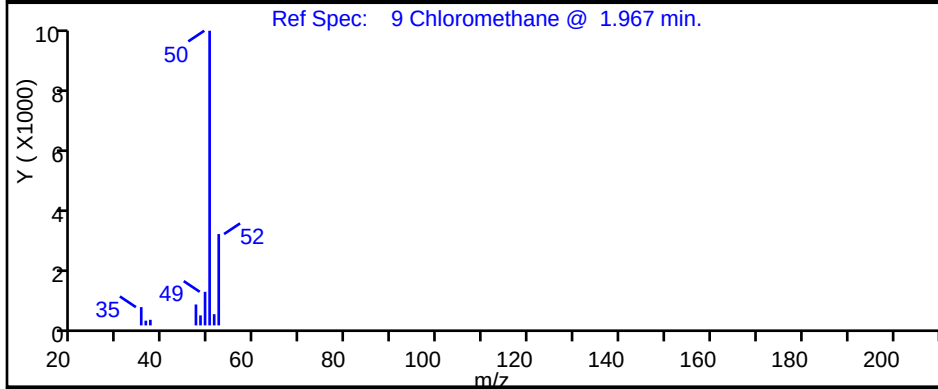
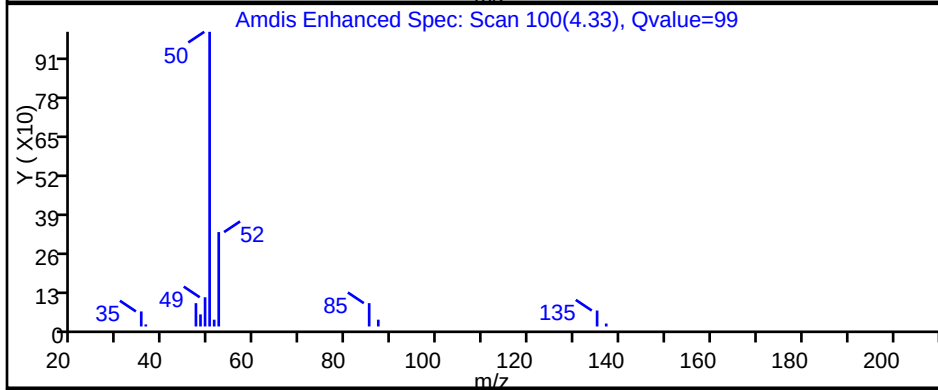
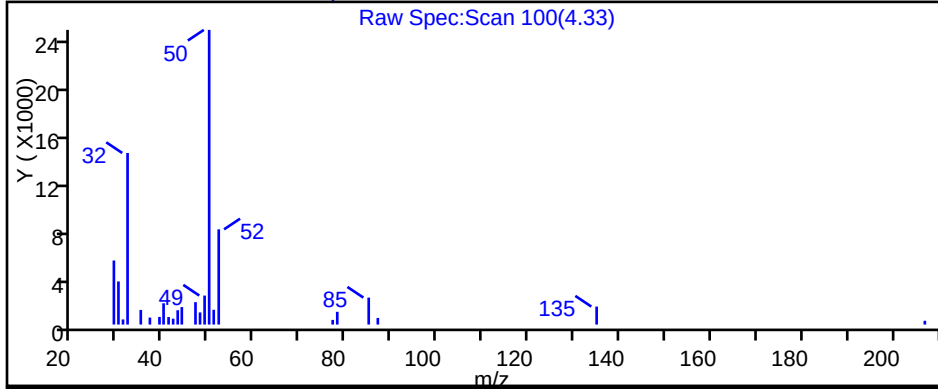
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P112.D

Injection Date: 04-Mar-2015 07:17:30

Instrument ID: MJ

Lims ID: 140-2797-A-8

Lab Sample ID: 140-2797-8

Client ID: H26-BA-2015

Operator ID: 403648

ALS Bottle#: 12

Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

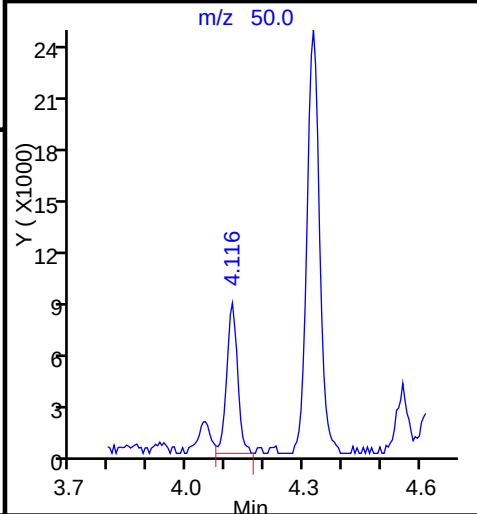
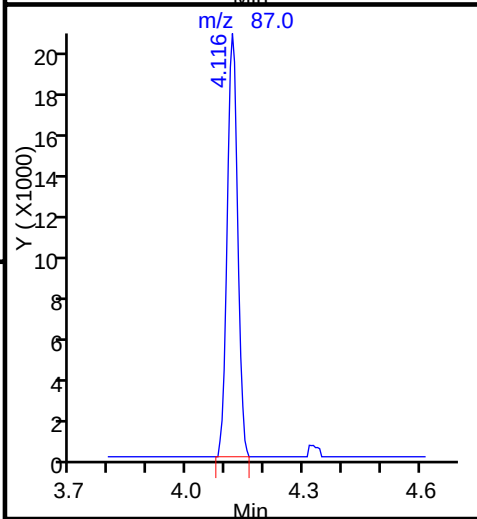
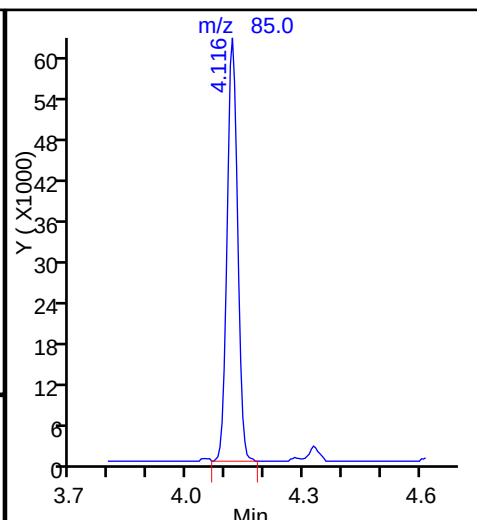
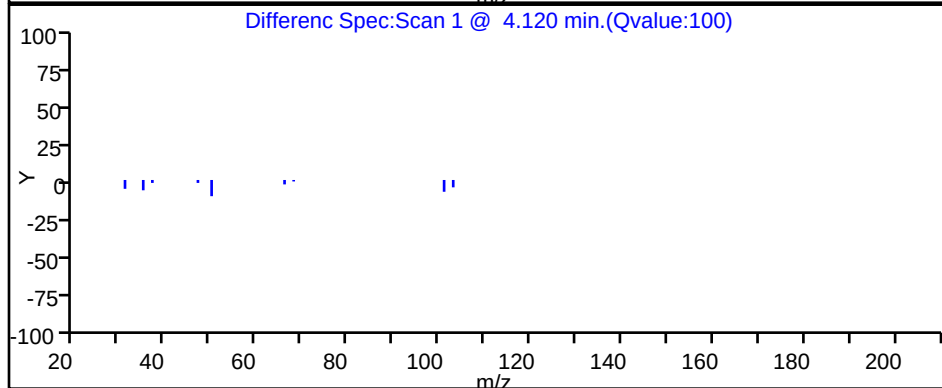
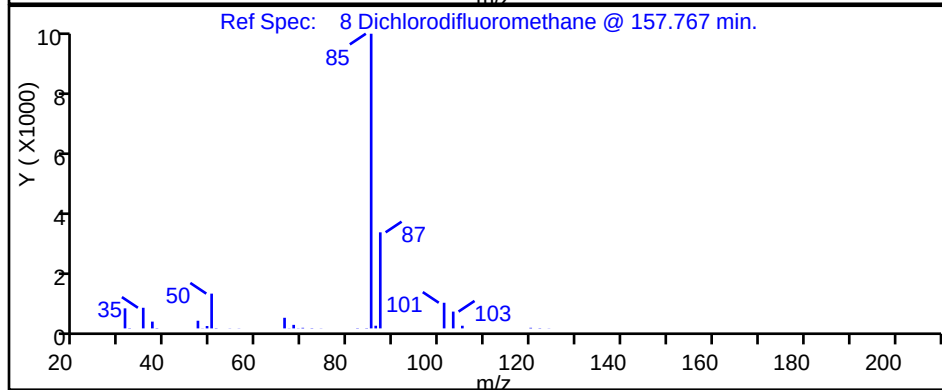
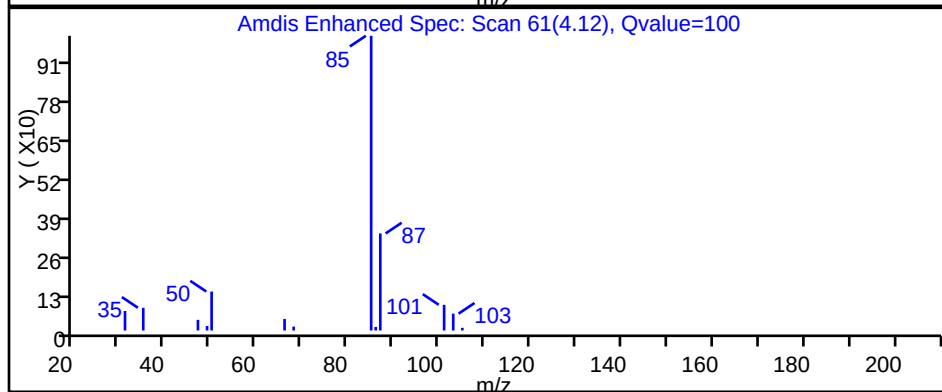
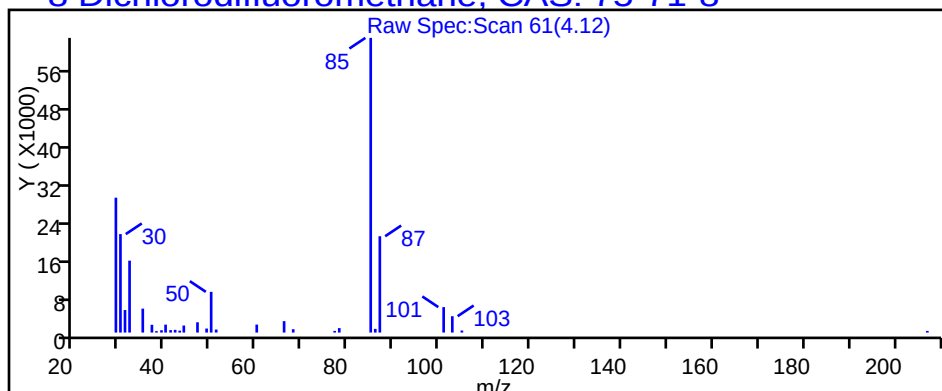
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P112.D

Injection Date: 04-Mar-2015 07:17:30

Instrument ID: MJ

Lims ID: 140-2797-A-8

Lab Sample ID: 140-2797-8

Client ID: H26-BA-2015

Operator ID: 403648

ALS Bottle#: 12

Worklist Smp#: 17

Purge Vol: 500.000 mL

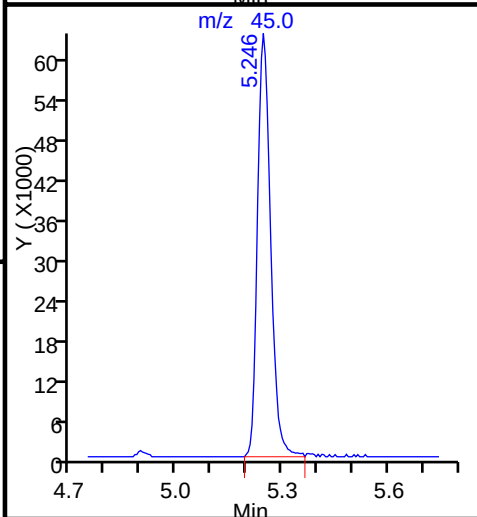
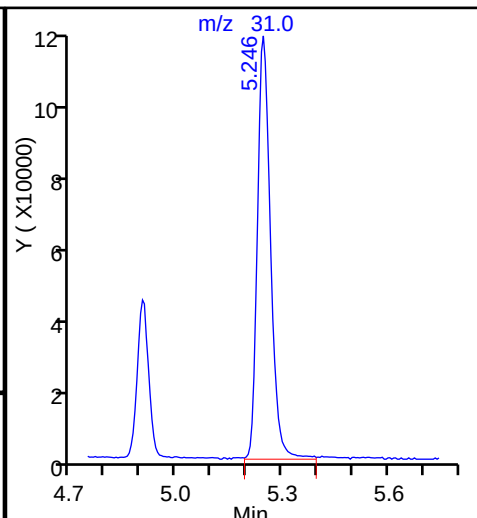
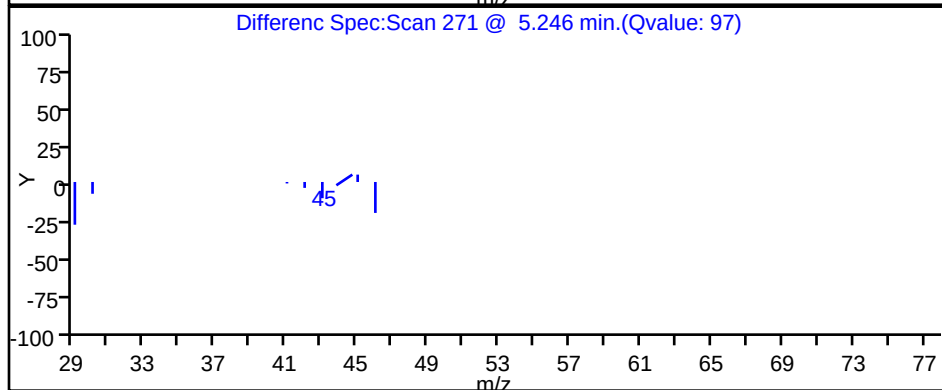
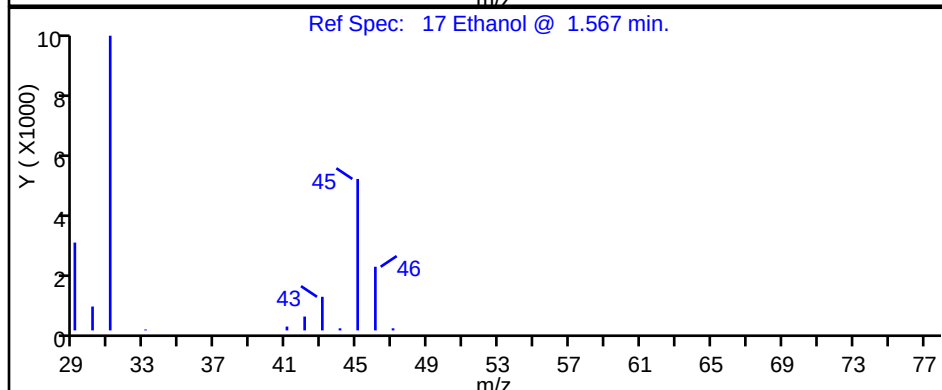
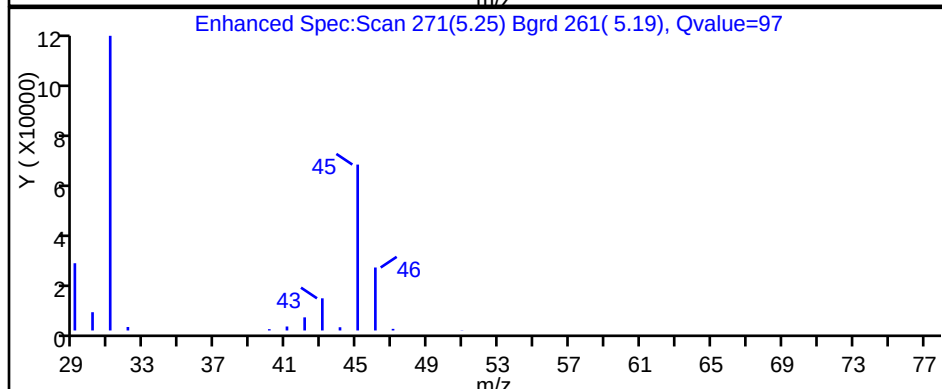
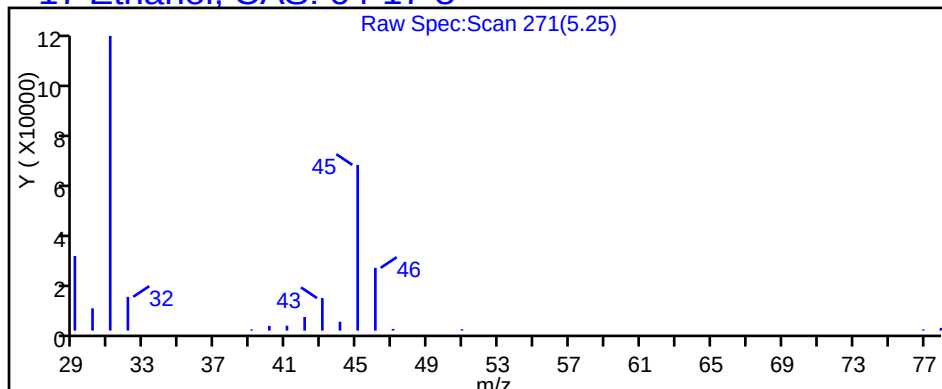
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

Detector MS SCAN

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P112.D

Injection Date: 04-Mar-2015 07:17:30

Instrument ID: MJ

Lims ID: 140-2797-A-8

Lab Sample ID: 140-2797-8

Client ID: H26-BA-2015

Operator ID: 403648

ALS Bottle#: 12

Worklist Smp#: 17

Purge Vol: 500.000 mL

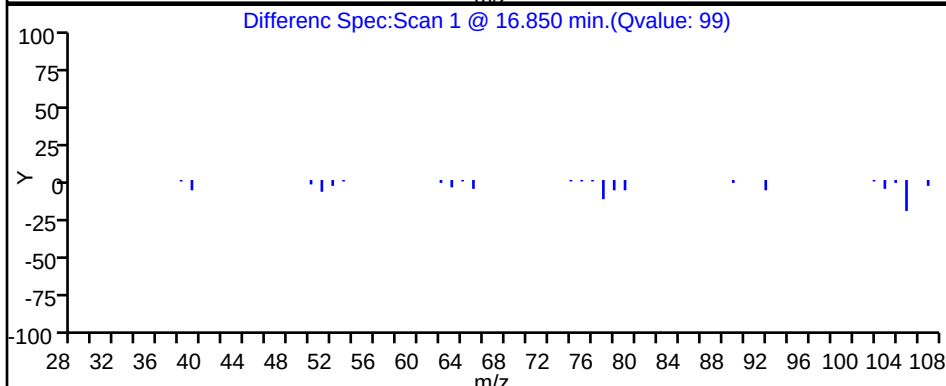
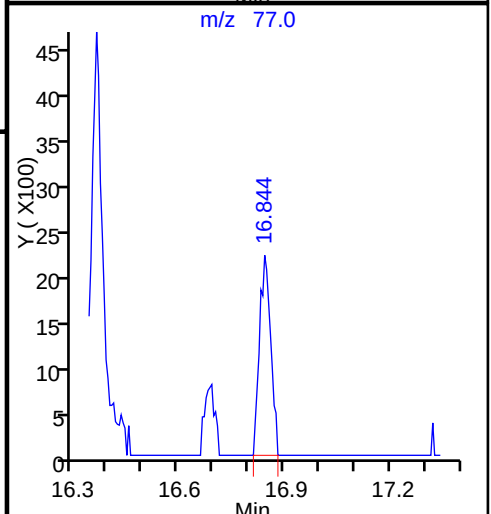
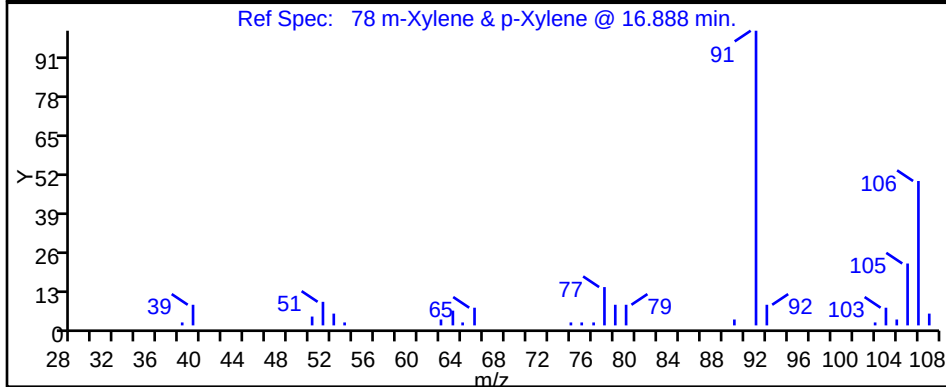
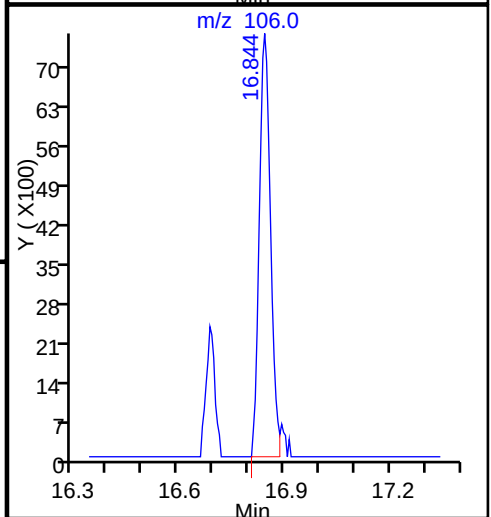
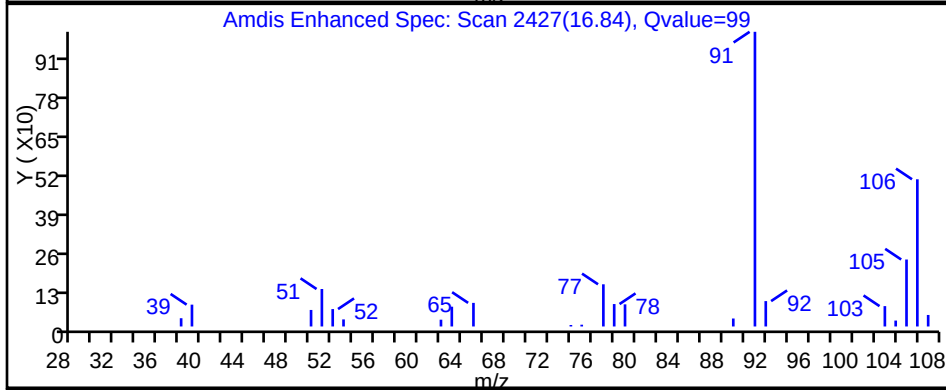
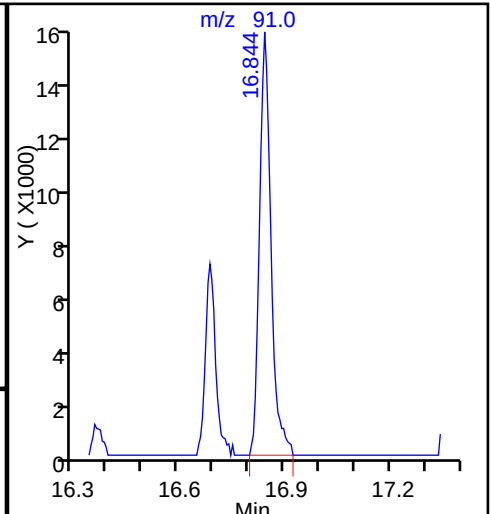
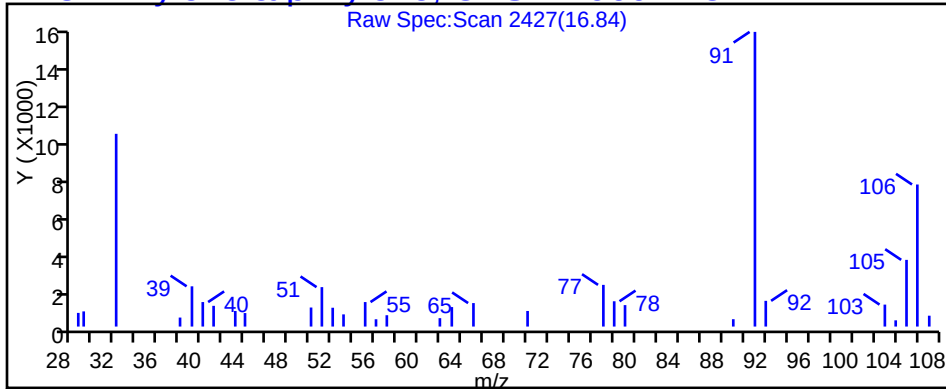
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P112.D

Injection Date: 04-Mar-2015 07:17:30

Instrument ID: MJ

Lims ID: 140-2797-A-8

Lab Sample ID: 140-2797-8

Client ID: H26-BA-2015

Operator ID: 403648

ALS Bottle#: 12

Worklist Smp#: 17

Purge Vol: 500.000 mL

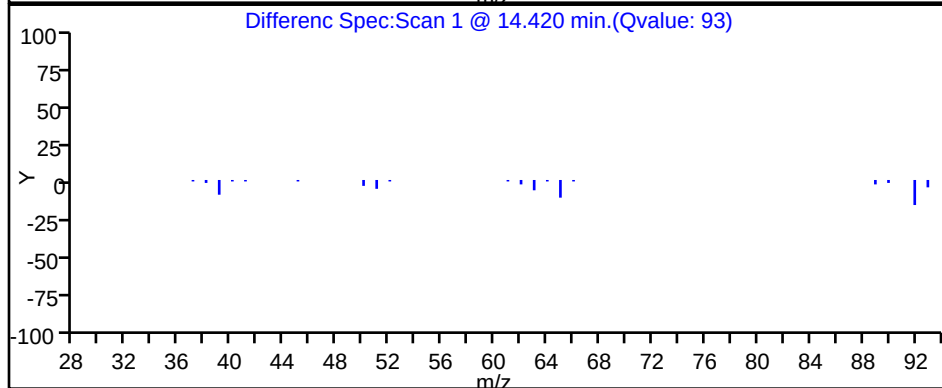
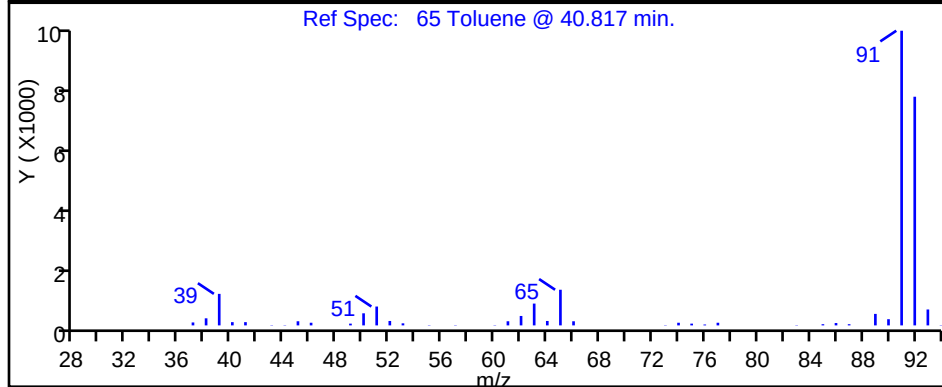
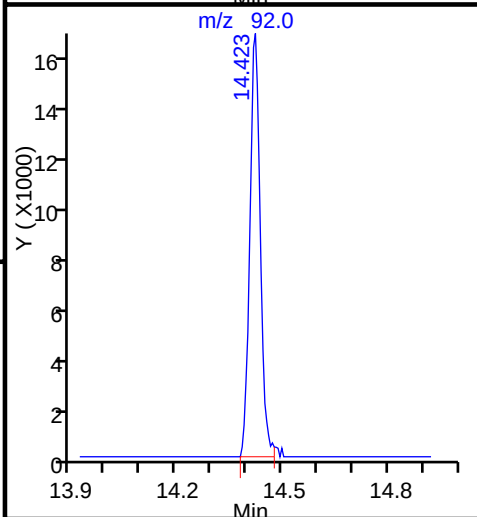
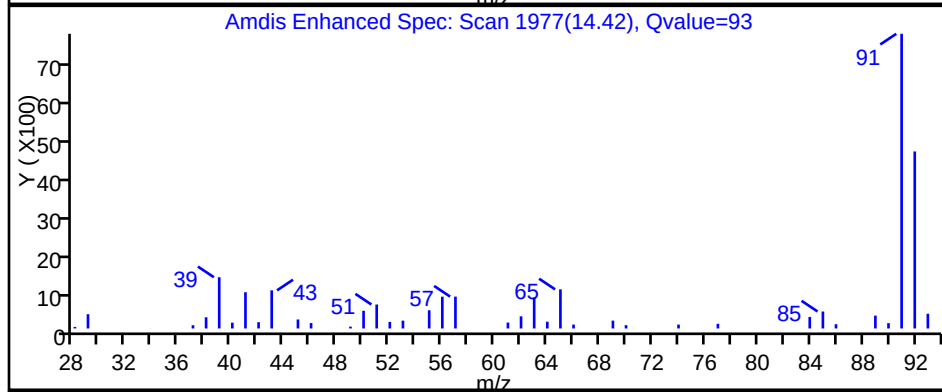
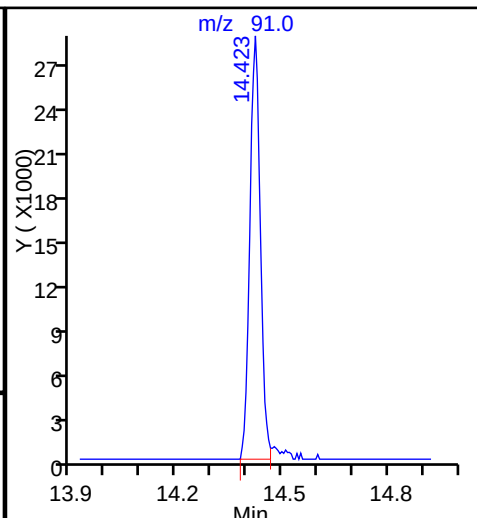
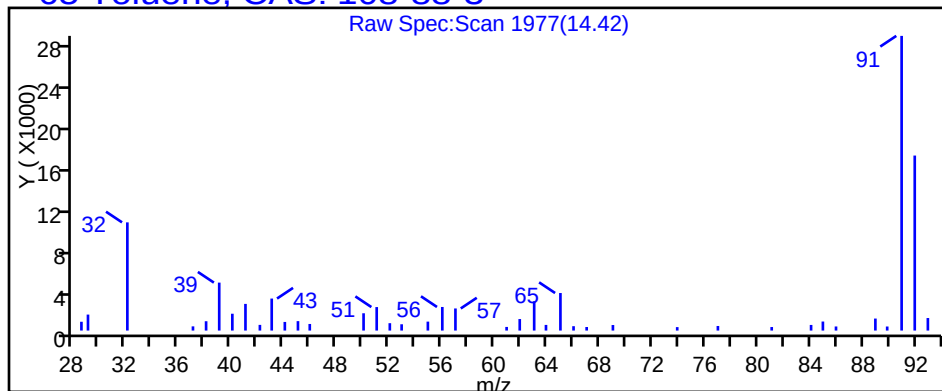
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P112.D

Injection Date: 04-Mar-2015 07:17:30

Instrument ID: MJ

Lims ID: 140-2797-A-8

Lab Sample ID: 140-2797-8

Client ID: H26-BA-2015

Operator ID: 403648

ALS Bottle#: 12

Worklist Smp#: 17

Purge Vol: 500.000 mL

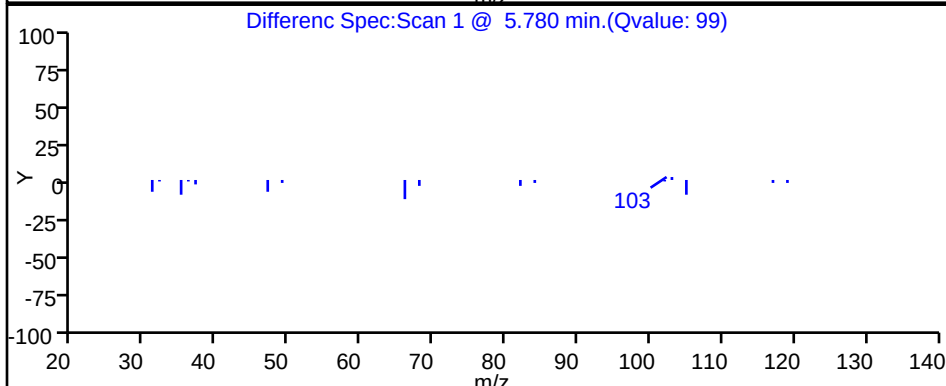
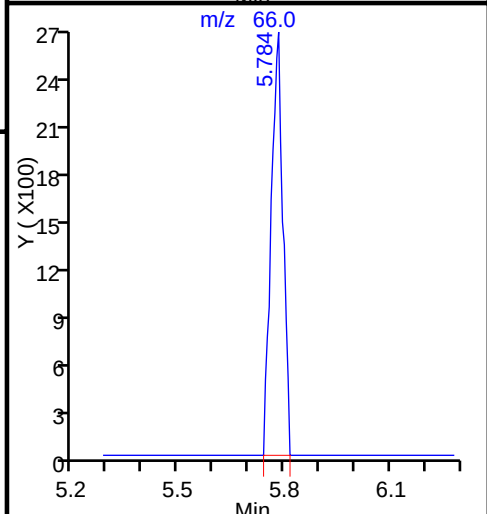
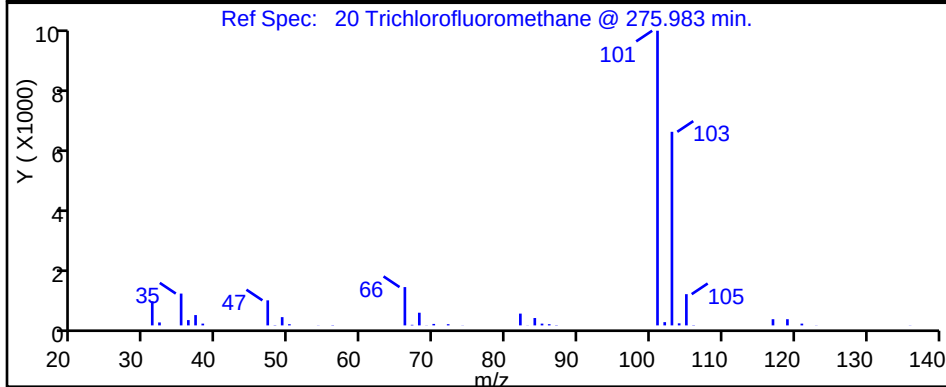
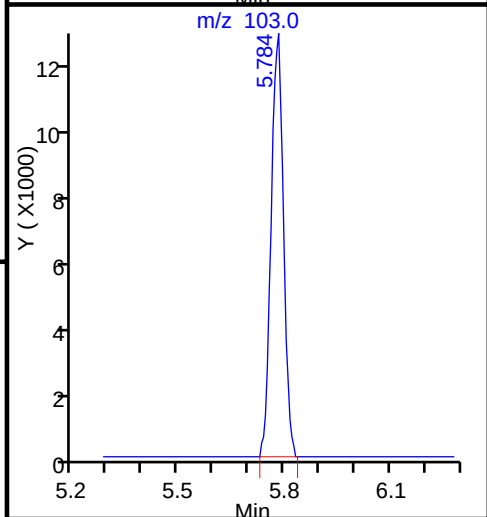
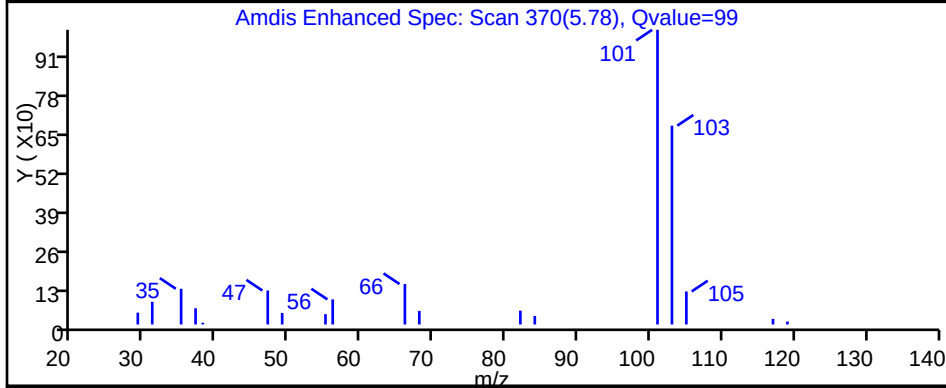
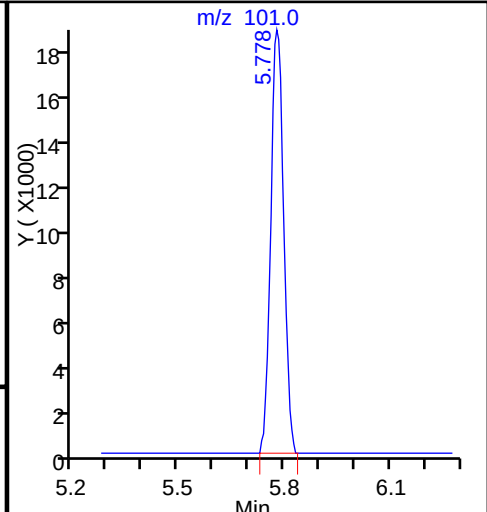
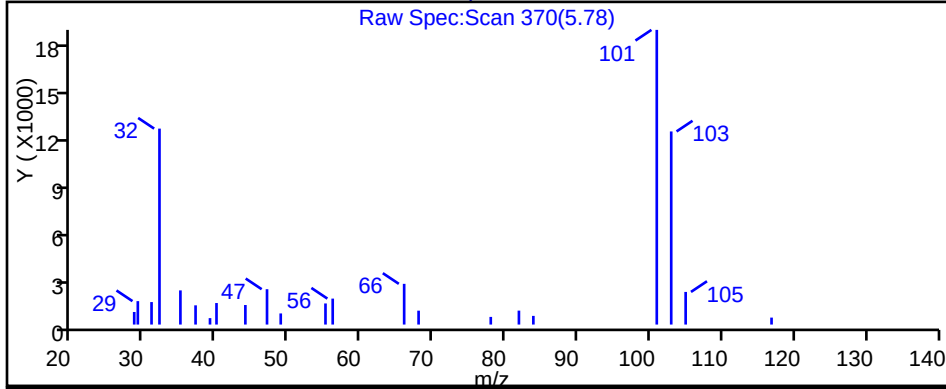
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: H26-SS-2015 Lab Sample ID: 140-2797-9

Matrix: Air Lab File ID: JC03P113.D

Analysis Method: TO 15 LL Date Collected: 02/24/2015 14:24

Sample wt/vol: 500(mL) Date Analyzed: 03/04/2015 08:12

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.: 2449 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		0.080	
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	0.51		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	0.18		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	0.056		0.040	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	1.2		0.080	
74-87-3	Chloromethane	50.49	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H26-SS-2015 Lab Sample ID: 140-2797-9
 Matrix: Air Lab File ID: JC03P113.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 14:24
 Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 08:12
 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.: 2449 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	0.31		0.080	
64-17-5	Ethanol	46.07	3.2		0.80	
100-41-4	Ethylbenzene	106.17	ND	*	0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	0.58		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	0.26		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.26		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	0.80		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	0.13		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.13		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

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: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: H26-SS-2015 Lab Sample ID: 140-2797-9

Matrix: Air Lab File ID: JC03P113.D

Analysis Method: TO 15 LL Date Collected: 02/24/2015 14:24

Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 08:12

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.: 2449 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		0.32	
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	1.5		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.57		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	0.35		0.25	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	5.6		0.39	
74-87-3	Chloromethane	50.49	ND		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H26-SS-2015 Lab Sample ID: 140-2797-9
 Matrix: Air Lab File ID: JC03P113.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 14:24
 Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 08:12
 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.: 2449 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	1.6		0.40	
64-17-5	Ethanol	46.07	6.0		1.5	
100-41-4	Ethylbenzene	106.17	ND	*	0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	2.0		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	0.91		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	1.1		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	3.0		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	0.72		0.21	
75-69-4	Trichlorofluoromethane	137.37	0.73		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

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

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P113.D
 Lims ID: 140-2797-A-9 Lab Sample ID: 140-2797-9
 Client ID: H26-SS-2015
 Sample Type: Client
 Inject. Date: 04-Mar-2015 08:12:30 ALS Bottle#: 13 Worklist Smp#: 18
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2797-a-9
 Misc. Info.: J030315,TO15,,140-0001414-018
 Operator ID: 403648 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150228-1414.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 11:02:31 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK052

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.588	9.587	0.001	96	303757	4.00	
* 2 1,4-Difluorobenzene	114	11.724	11.728	-0.004	96	1415263	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.366	16.370	-0.004	89	1231980	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.980	17.979	0.001	89	770893	3.82	
8 Dichlorodifluoromethane	85	4.117	4.105	0.012	100	107487	0.3143	
17 Ethanol	31	5.252	5.240	0.012	96	133877	3.17	
20 Trichlorofluoromethane	101	5.779	5.778	0.001	99	39040	0.1304	
28 2-Methyl-2-propanol	59	6.656	6.633	0.023	96	12825	0.0715	
30 1,1,2-Trichloro-1,2,2-trif	101	6.737	6.730	0.007	96	9372	0.0465	
31 Methylene Chloride	84	6.925	6.924	0.001	97	25627	0.2631	
39 2-Butanone (MEK)	72	8.797	8.785	0.012	95	18575	0.5136	
40 Hexane	56	8.813	8.807	0.006	89	58606	0.5787	
43 Chloroform	83	9.593	9.598	-0.005	97	221109	1.15	
45 1,1,1-Trichloroethane	97	10.637	10.636	0.001	95	15910	0.0791	
49 Cyclohexane	69	11.207	11.211	-0.004	57	4965	0.0919	
48 Benzene	78	11.218	11.217	0.001	97	46542	0.1780	
50 Carbon tetrachloride	117	11.240	11.238	0.002	94	10782	0.0559	
56 Trichloroethene	130	12.428	12.427	0.001	93	15161	0.1331	
59 Dichlorobromomethane	83	12.649	12.653	-0.004	94	7815	0.0417	
62 4-Methyl-2-pentanone (MIBK	43	13.558	13.546	0.012	97	21376	0.0994	
65 Toluene	91	14.424	14.423	0.001	93	179978	0.8007	
73 Tetrachloroethene	129	15.549	15.547	0.001	94	2415	0.0247	
76 Ethylbenzene	91	16.689	16.693	-0.004	96	13657	0.0520	
78 m-Xylene & p-Xylene	91	16.845	16.849	-0.004	98	54814	0.2589	
82 o-Xylene	91	17.378	17.371	0.007	97	16208	0.0702	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P113.D

Injection Date: 04-Mar-2015 08:12:30

Instrument ID: MJ

Operator ID: 403648

Lims ID: 140-2797-A-9

Lab Sample ID: 140-2797-9

Worklist Smp#: 18

Client ID: H26-SS-2015

Purge Vol: 500.000 mL

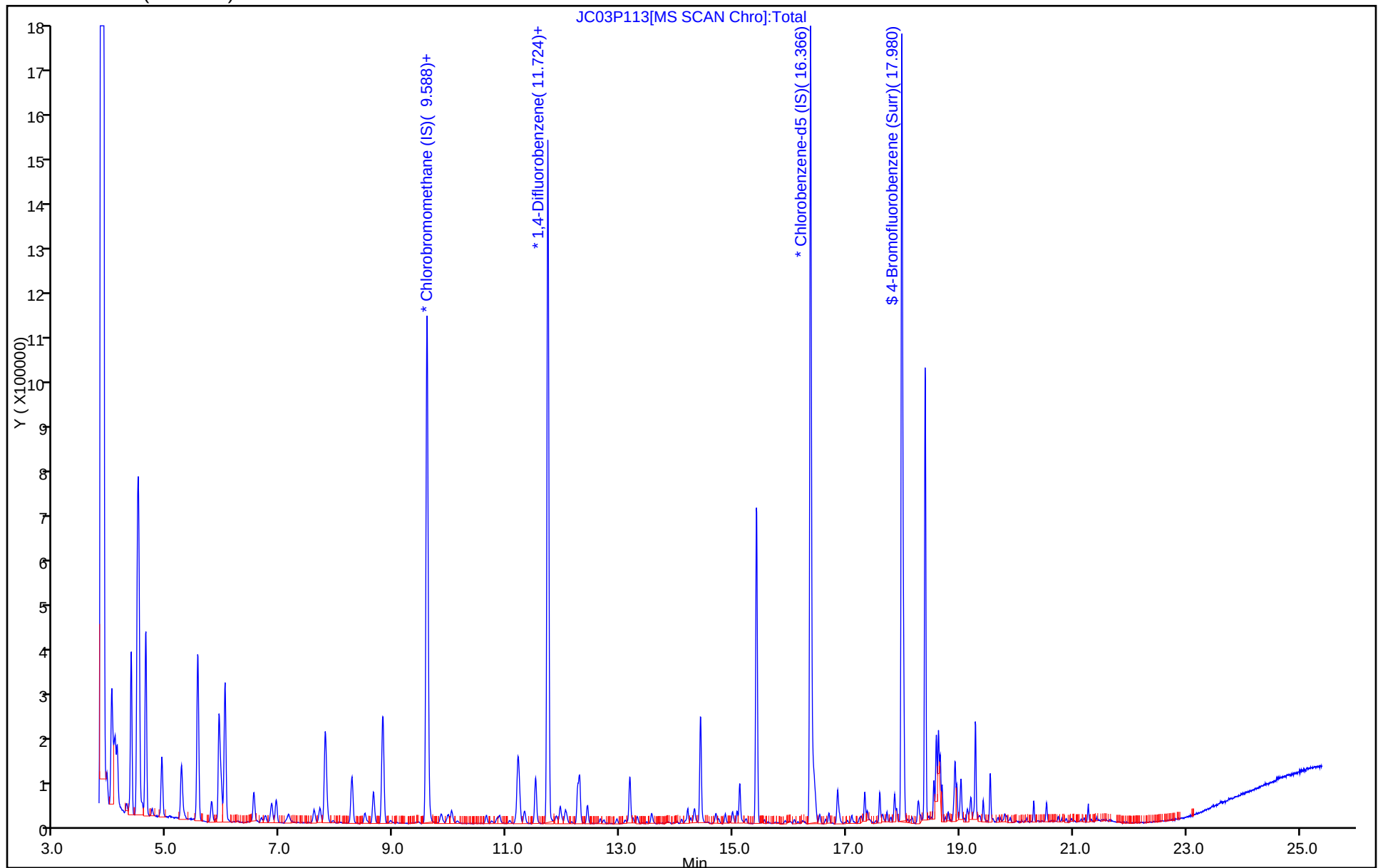
Dil. Factor: 1.0000

ALS Bottle#: 13

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P113.D

Injection Date: 04-Mar-2015 08:12:30

Instrument ID: MJ

Lims ID: 140-2797-A-9

Lab Sample ID: 140-2797-9

Client ID: H26-SS-2015

Operator ID: 403648

ALS Bottle#: 13

Worklist Smp#: 18

Purge Vol: 500.000 mL

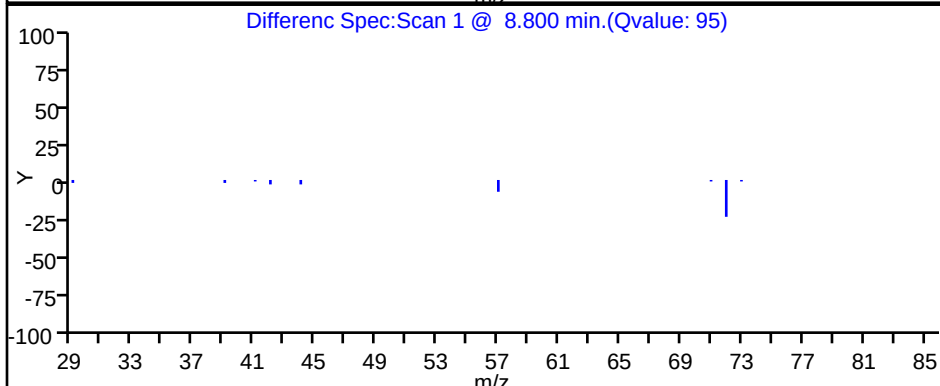
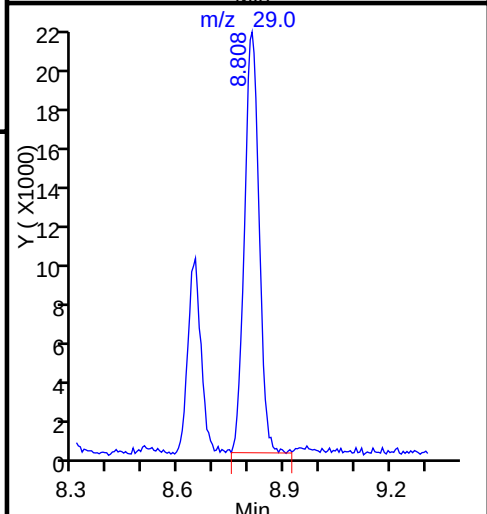
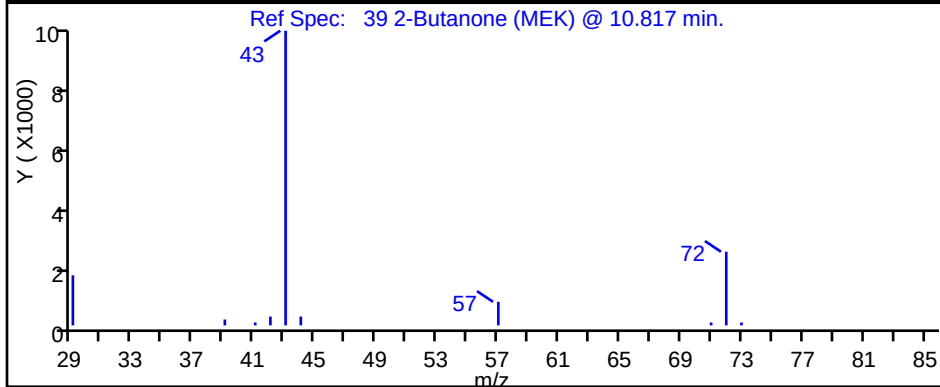
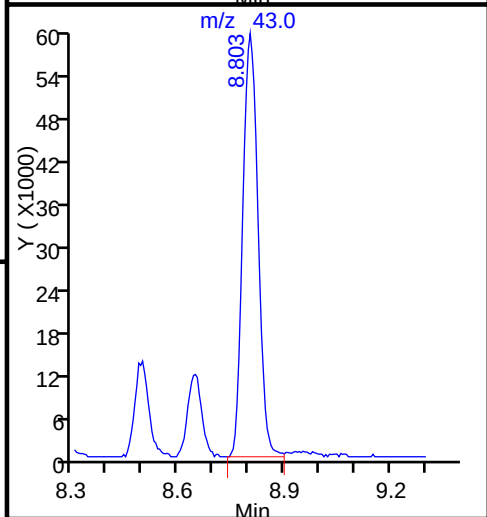
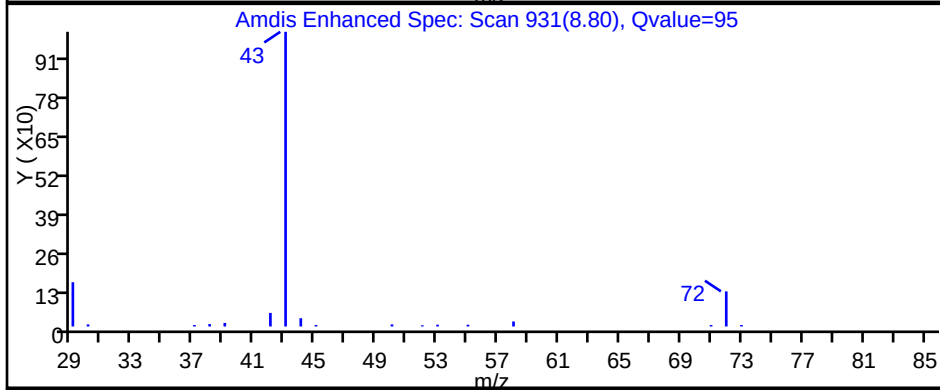
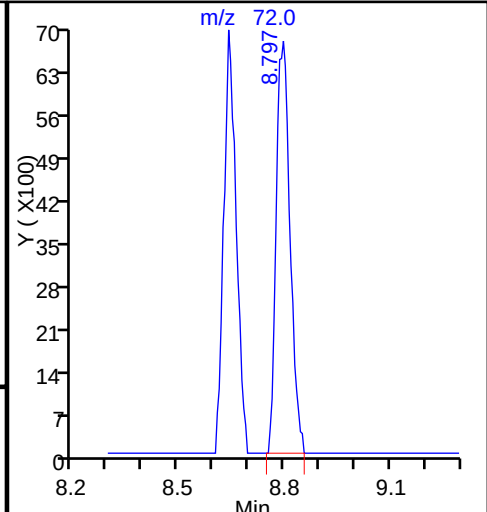
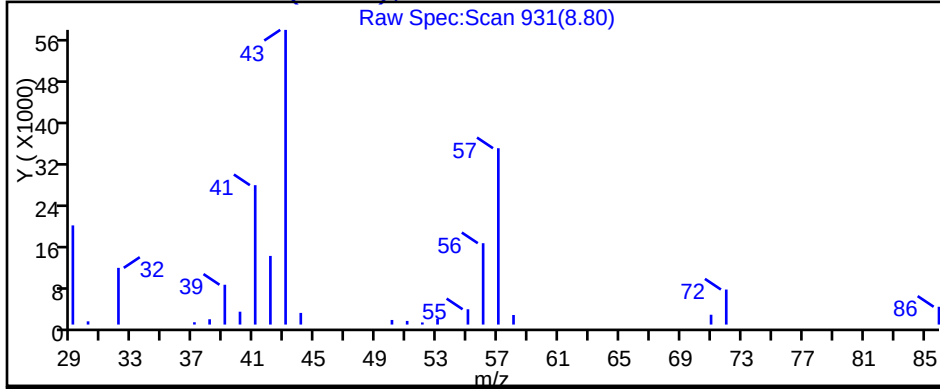
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P113.D

Injection Date: 04-Mar-2015 08:12:30

Instrument ID: MJ

Lims ID: 140-2797-A-9

Lab Sample ID: 140-2797-9

Client ID: H26-SS-2015

Operator ID: 403648

ALS Bottle#: 13

Worklist Smp#: 18

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

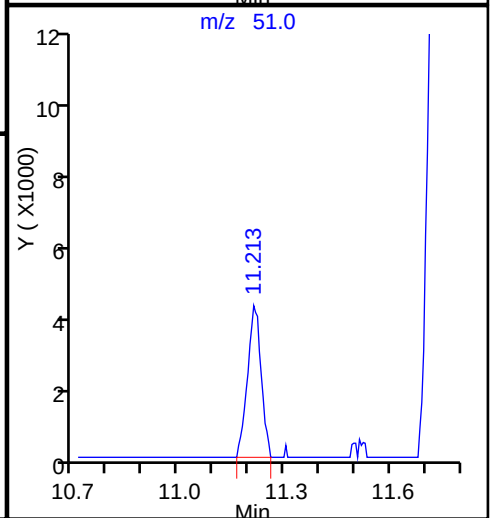
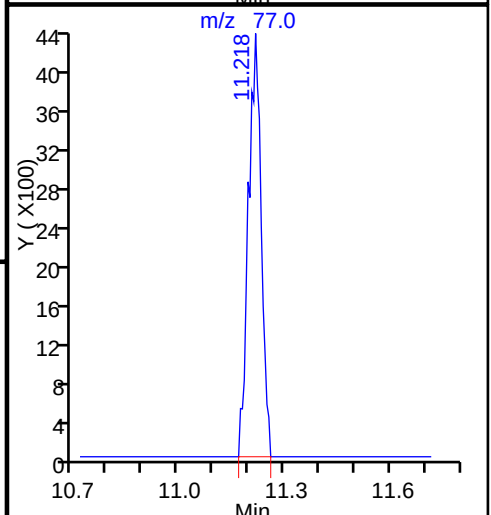
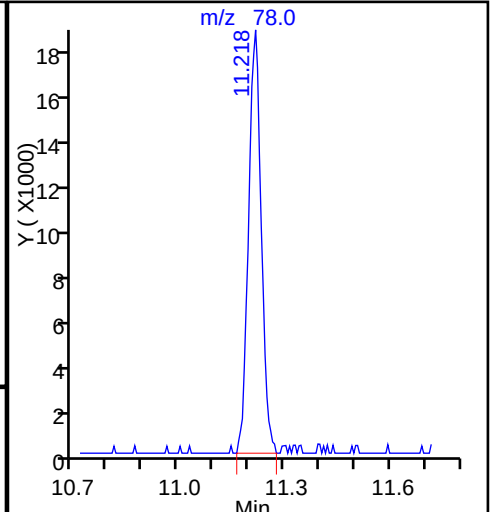
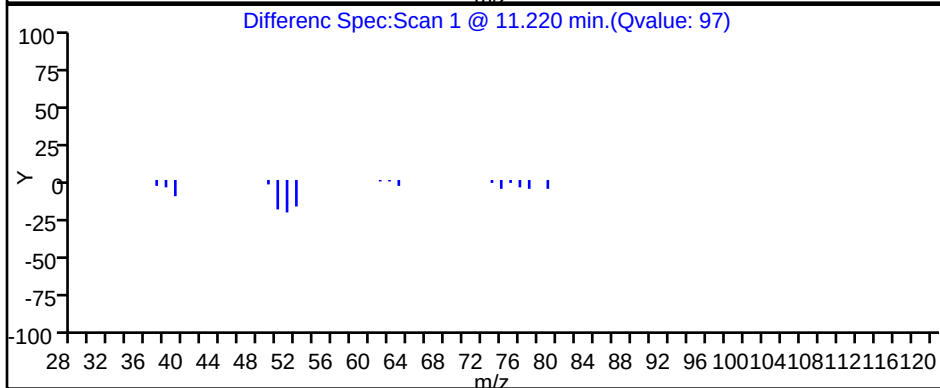
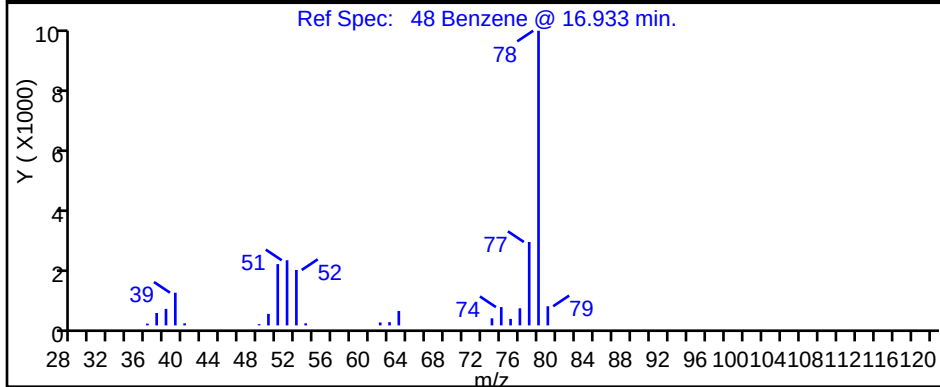
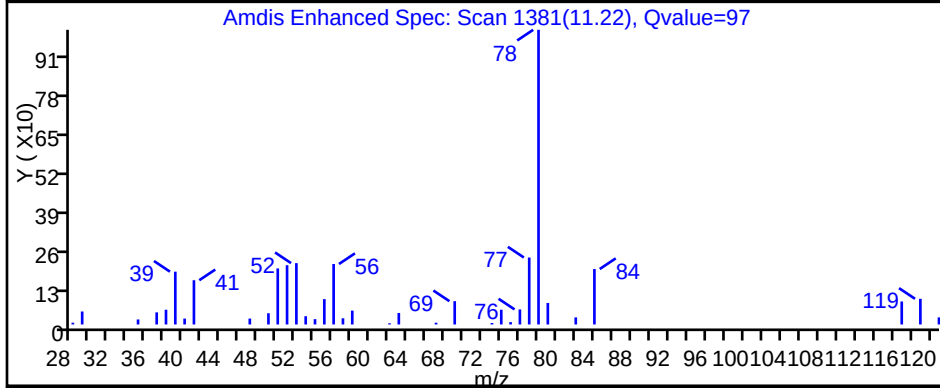
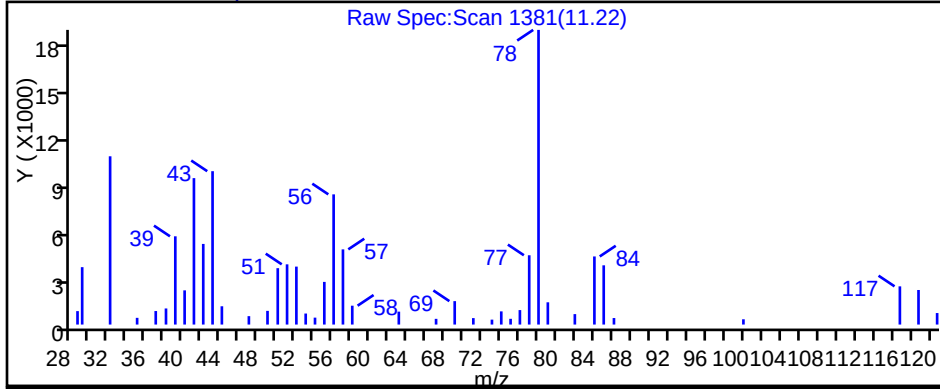
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P113.D

Injection Date: 04-Mar-2015 08:12:30

Instrument ID: MJ

Lims ID: 140-2797-A-9

Lab Sample ID: 140-2797-9

Client ID: H26-SS-2015

Operator ID: 403648

ALS Bottle#: 13

Worklist Smp#: 18

Purge Vol: 500.000 mL

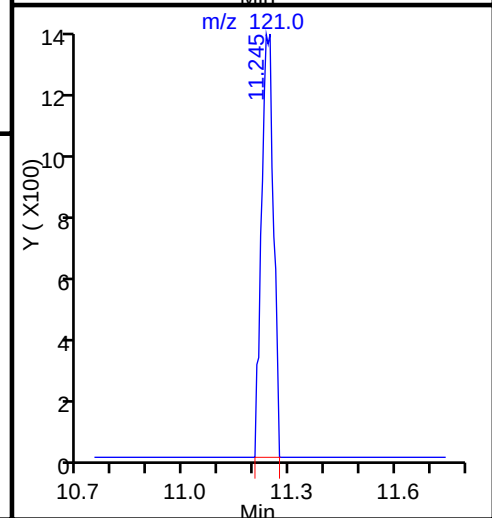
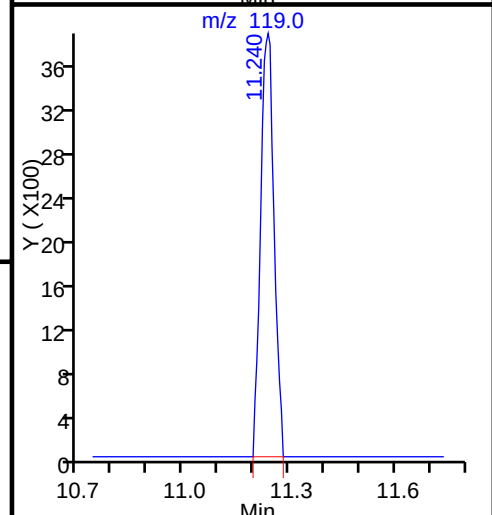
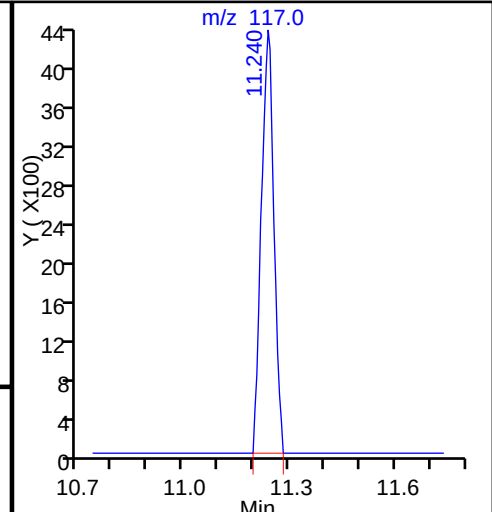
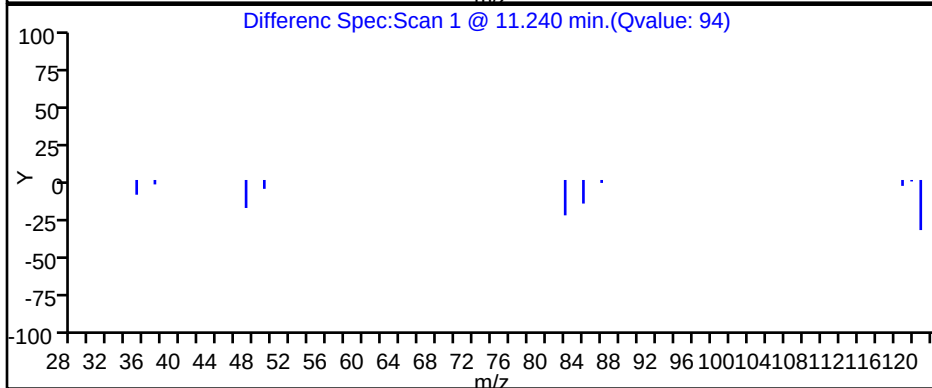
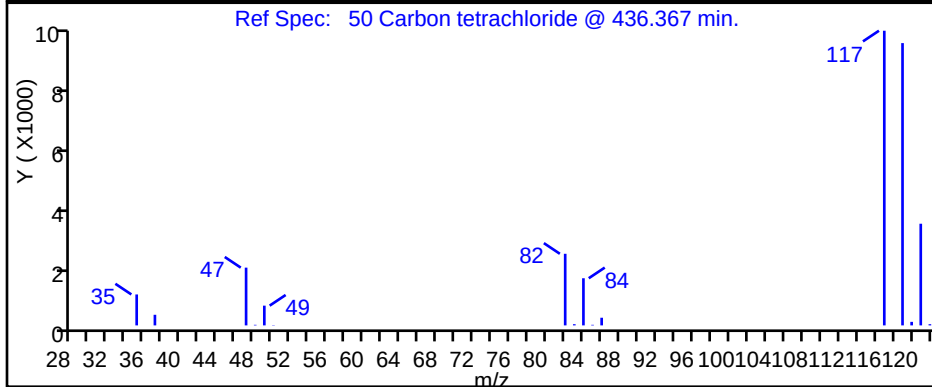
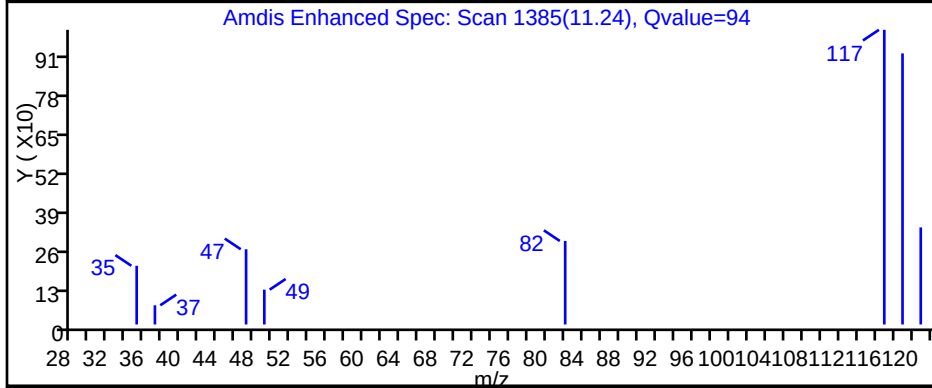
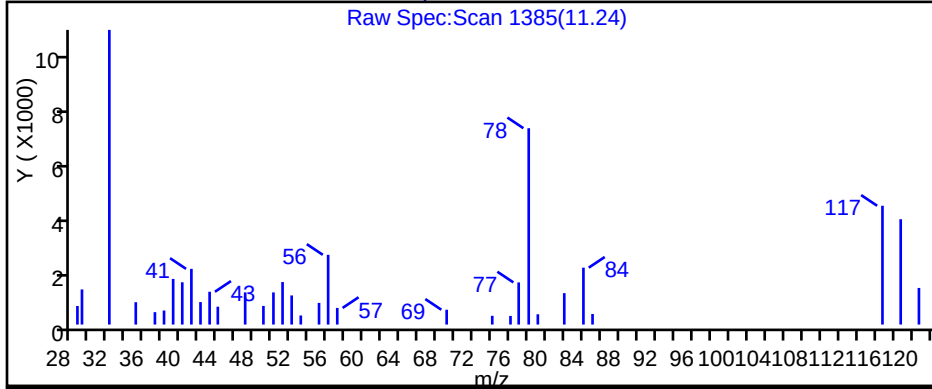
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P113.D

Injection Date: 04-Mar-2015 08:12:30

Instrument ID: MJ

Lims ID: 140-2797-A-9

Lab Sample ID: 140-2797-9

Client ID: H26-SS-2015

Operator ID: 403648

ALS Bottle#: 13

Worklist Smp#: 18

Purge Vol: 500.000 mL

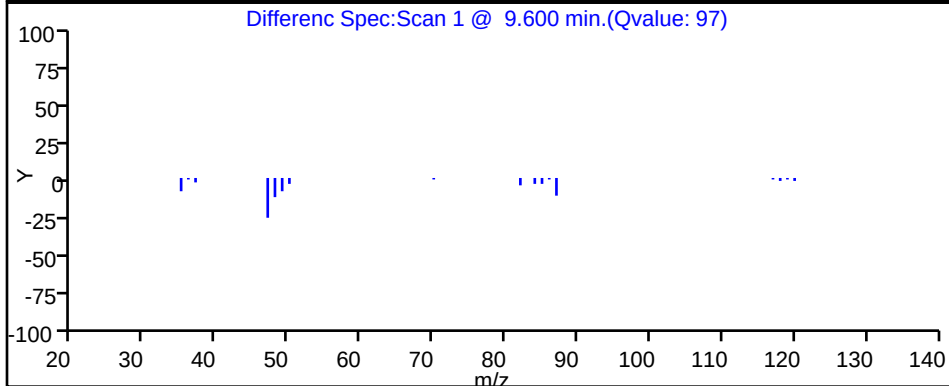
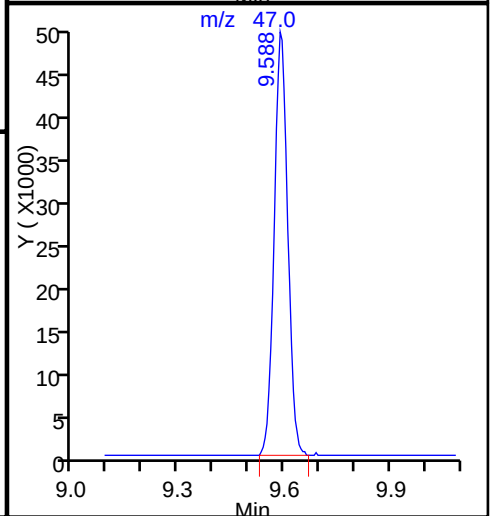
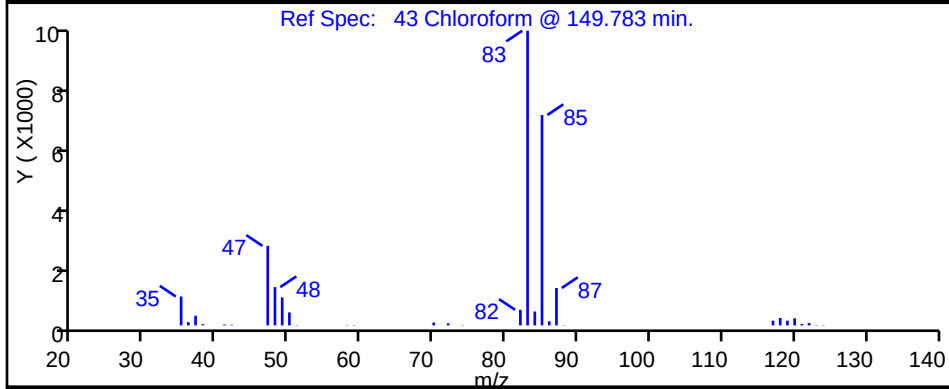
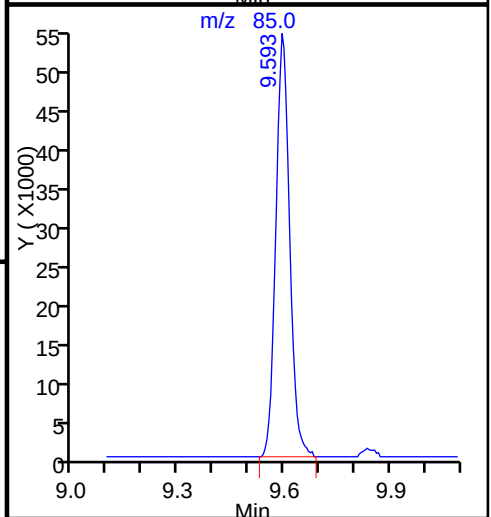
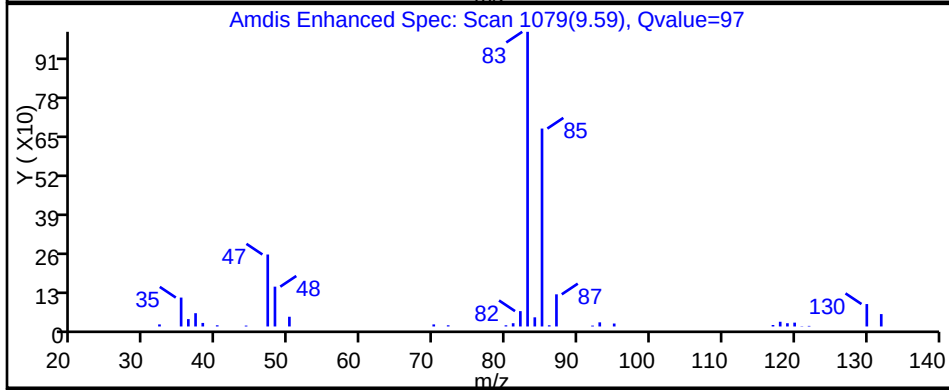
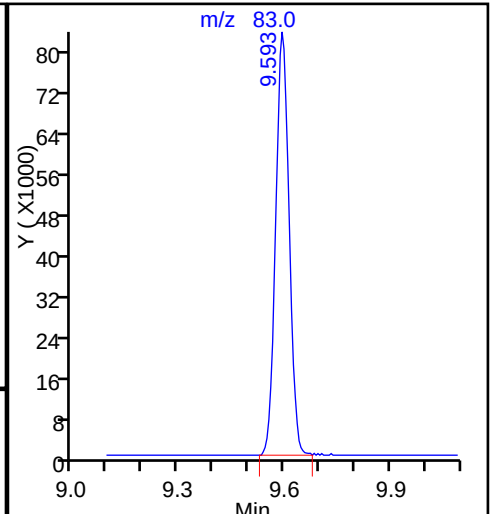
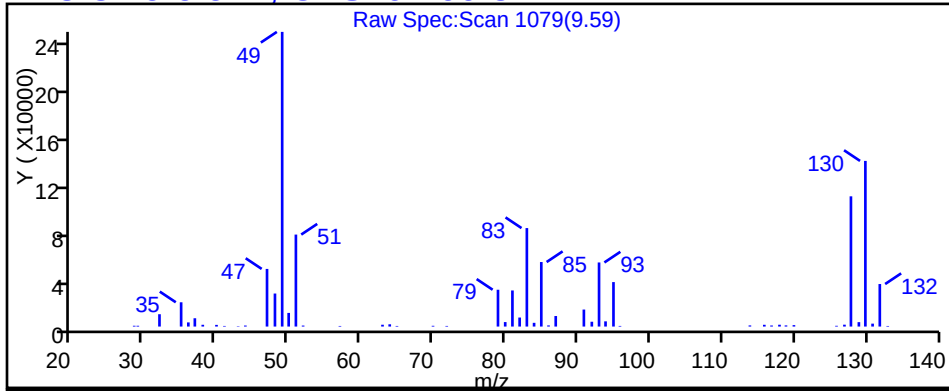
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

43 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P113.D

Injection Date: 04-Mar-2015 08:12:30

Instrument ID: MJ

Lims ID: 140-2797-A-9

Lab Sample ID: 140-2797-9

Client ID: H26-SS-2015

Operator ID: 403648

ALS Bottle#: 13

Worklist Smp#: 18

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

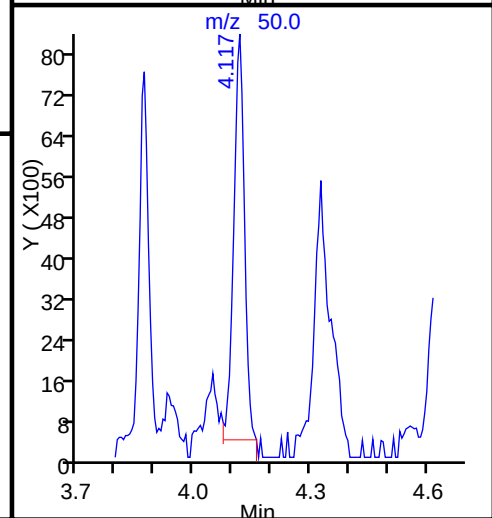
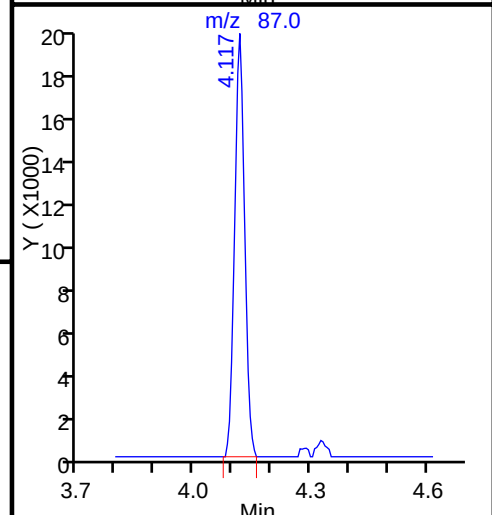
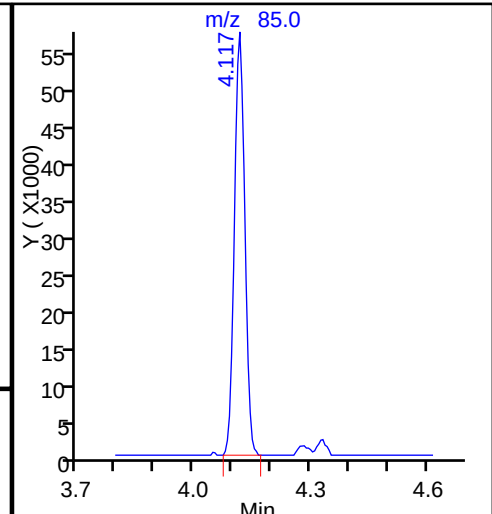
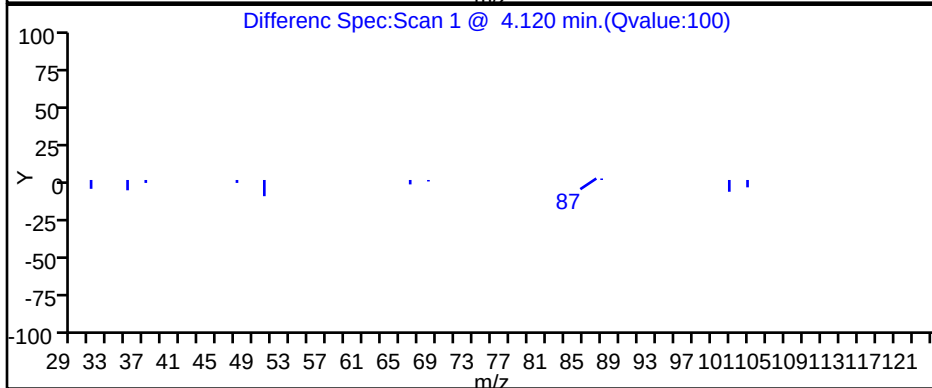
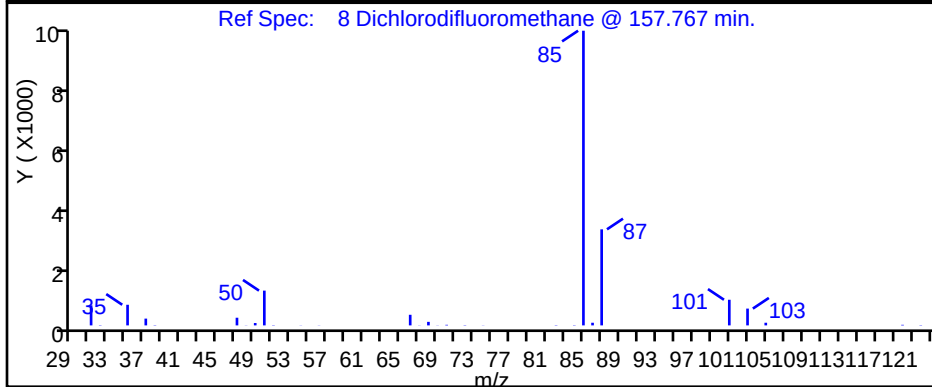
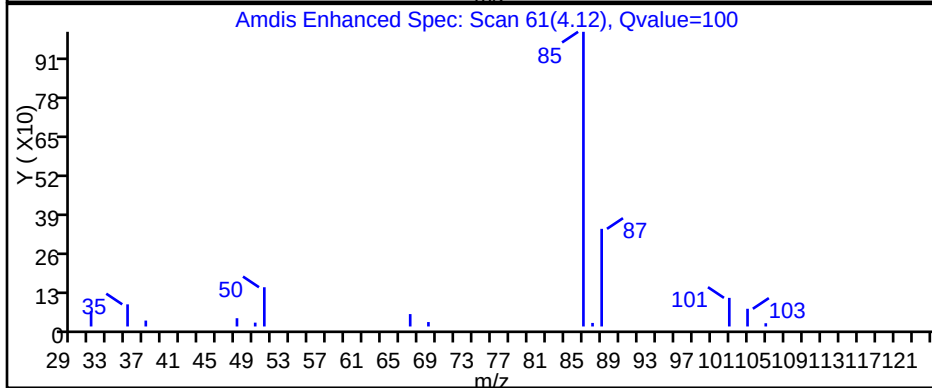
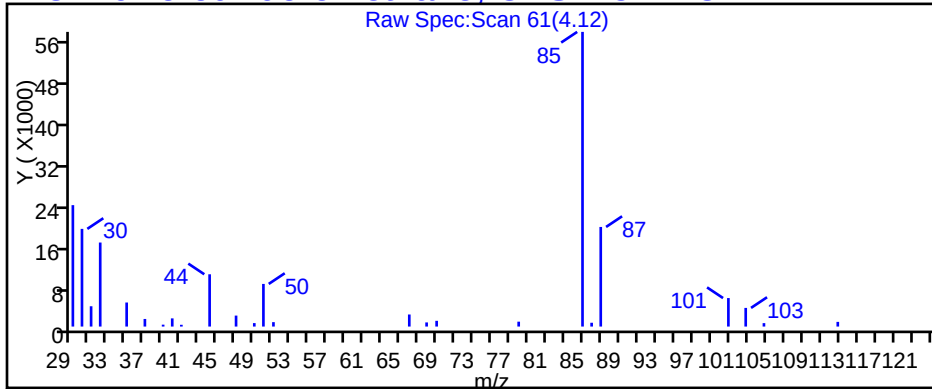
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P113.D

Injection Date: 04-Mar-2015 08:12:30

Instrument ID: MJ

Lims ID: 140-2797-A-9

Lab Sample ID: 140-2797-9

Client ID: H26-SS-2015

Operator ID: 403648

ALS Bottle#: 13

Worklist Smp#: 18

Purge Vol: 500.000 mL

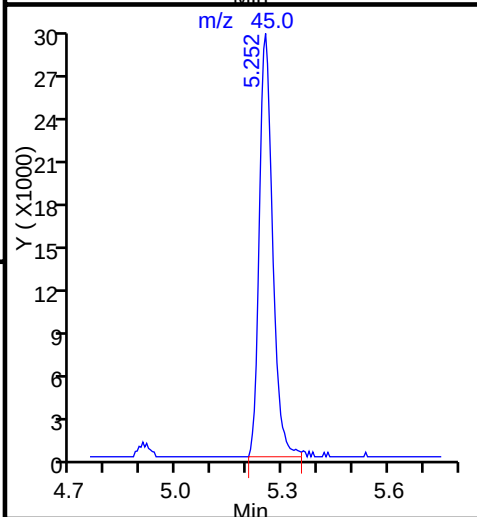
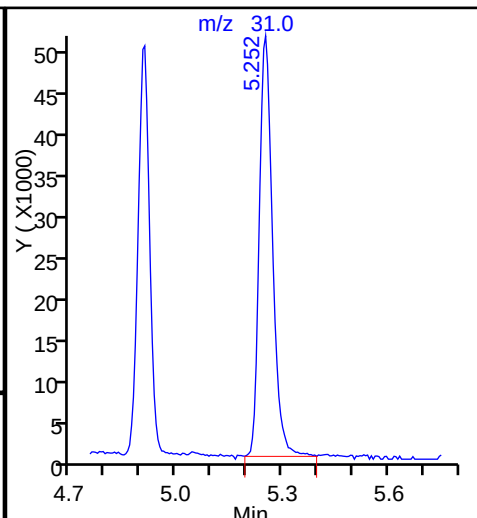
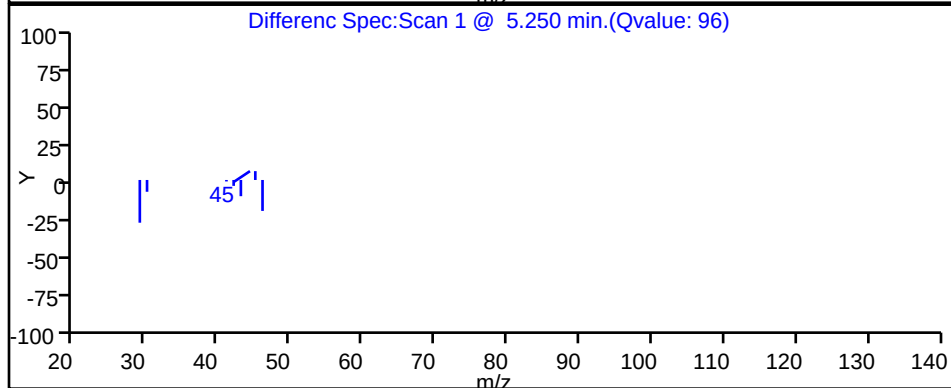
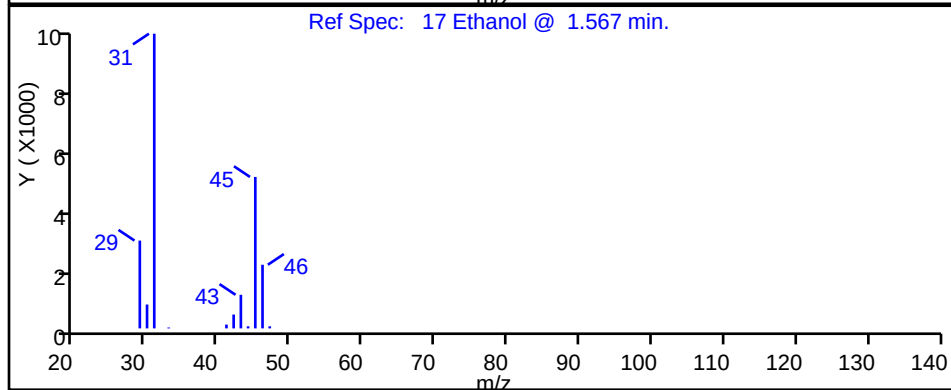
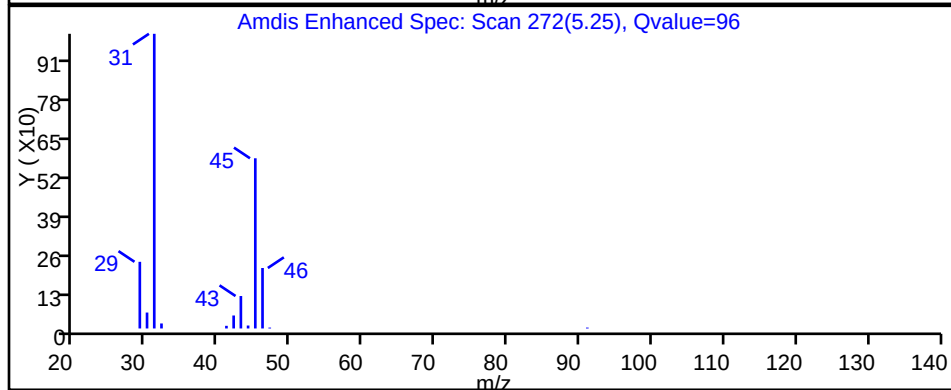
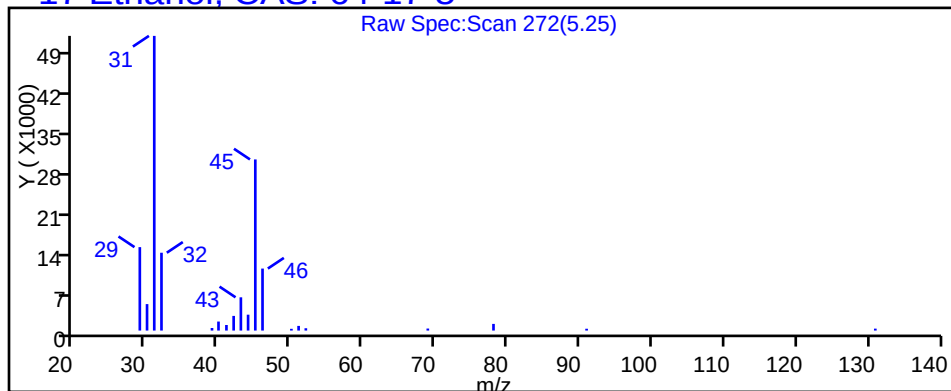
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P113.D

Injection Date: 04-Mar-2015 08:12:30

Instrument ID: MJ

Lims ID: 140-2797-A-9

Lab Sample ID: 140-2797-9

Client ID: H26-SS-2015

Operator ID: 403648

ALS Bottle#: 13

Worklist Smp#: 18

Purge Vol: 500.000 mL

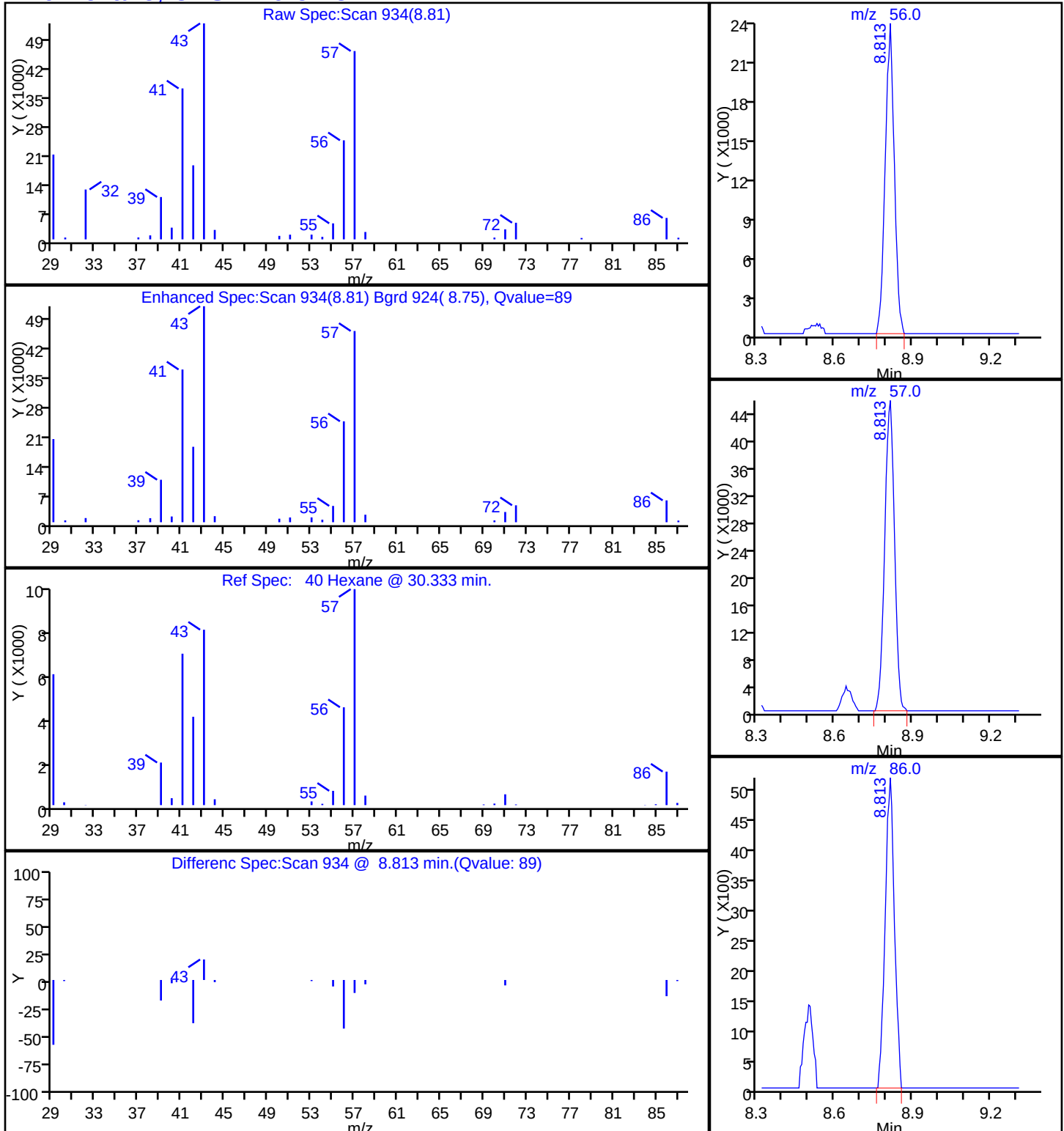
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

40 Hexane, CAS: 110-54-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P113.D

Injection Date: 04-Mar-2015 08:12:30

Instrument ID: MJ

Lims ID: 140-2797-A-9

Lab Sample ID: 140-2797-9

Client ID: H26-SS-2015

Operator ID: 403648

ALS Bottle#: 13

Worklist Smp#: 18

Purge Vol: 500.000 mL

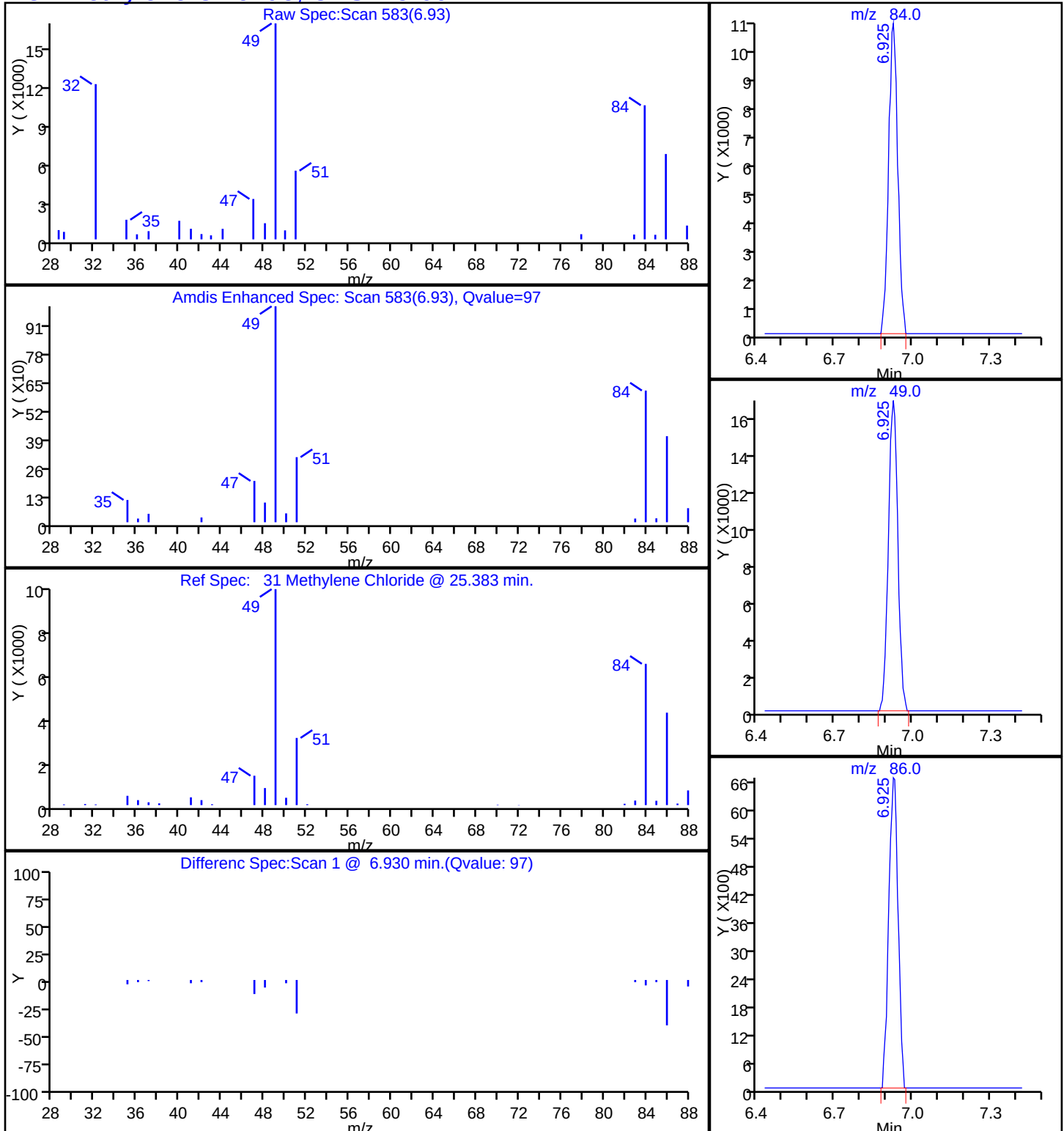
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P113.D

Injection Date: 04-Mar-2015 08:12:30

Instrument ID: MJ

Lims ID: 140-2797-A-9

Lab Sample ID: 140-2797-9

Client ID: H26-SS-2015

Operator ID: 403648

ALS Bottle#: 13

Worklist Smp#: 18

Purge Vol: 500.000 mL

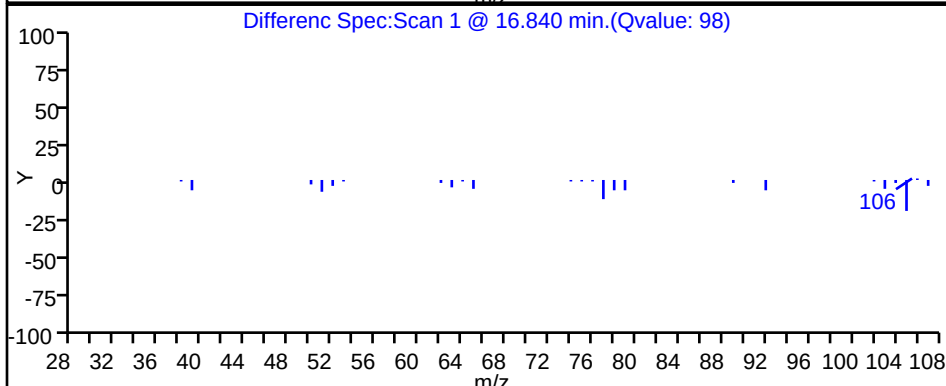
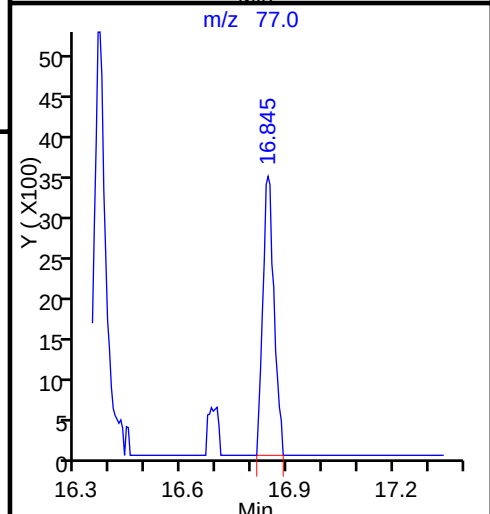
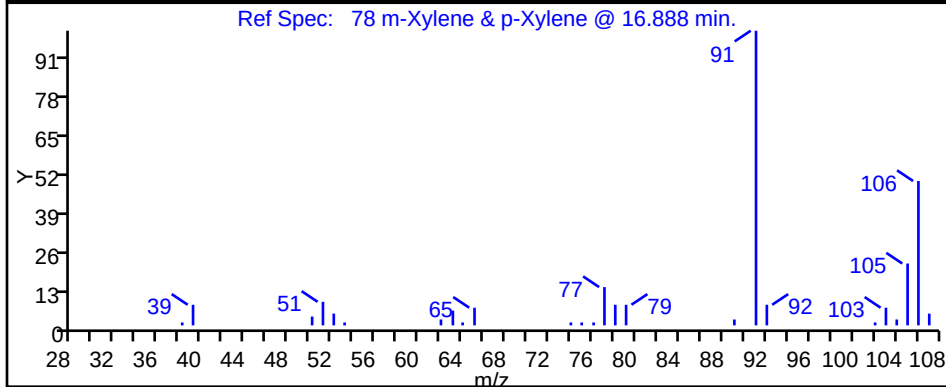
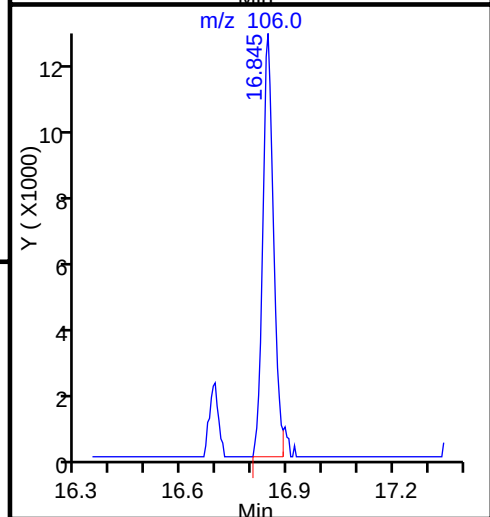
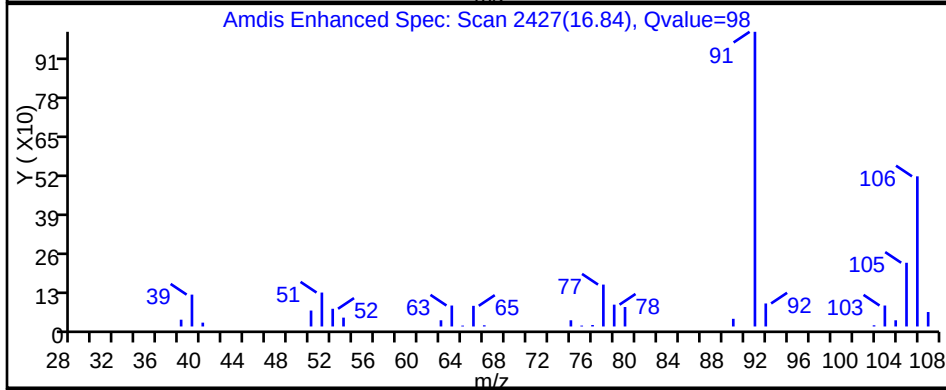
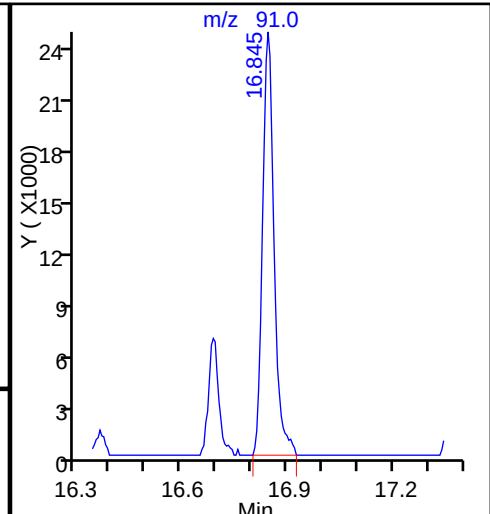
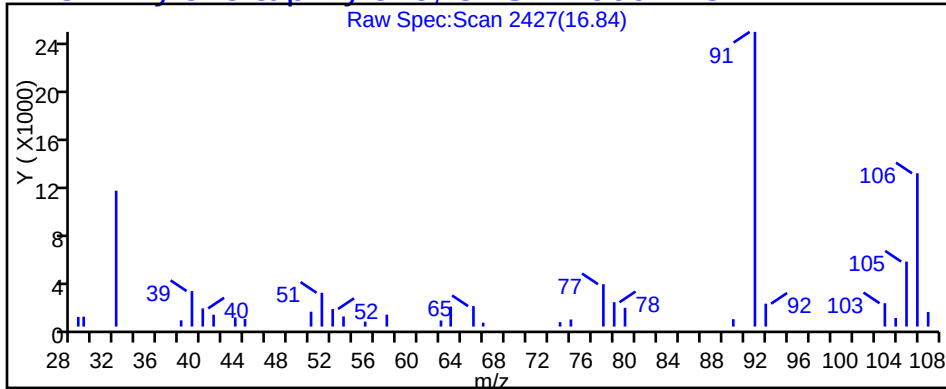
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P113.D

Injection Date: 04-Mar-2015 08:12:30

Instrument ID: MJ

Lims ID: 140-2797-A-9

Lab Sample ID: 140-2797-9

Client ID: H26-SS-2015

Operator ID: 403648

ALS Bottle#: 13

Worklist Smp#: 18

Purge Vol: 500.000 mL

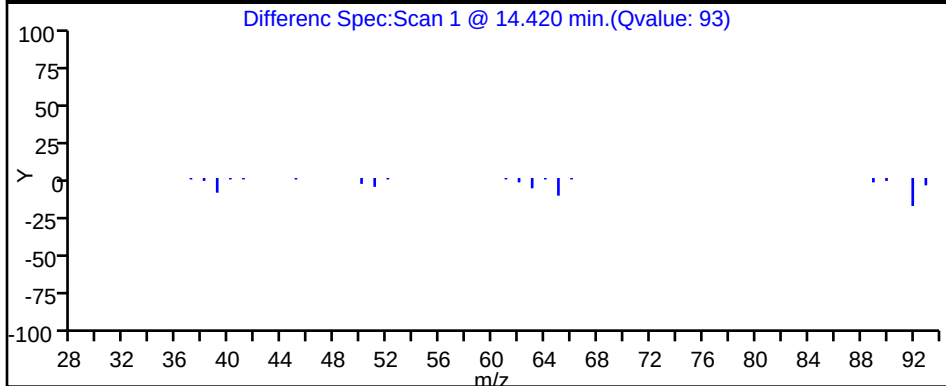
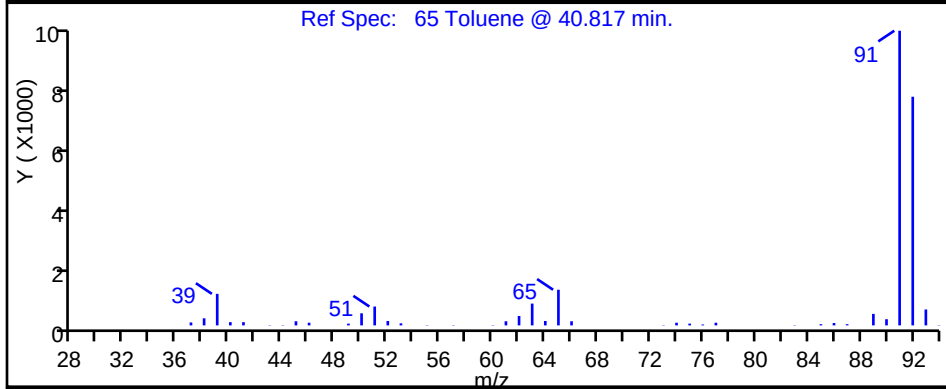
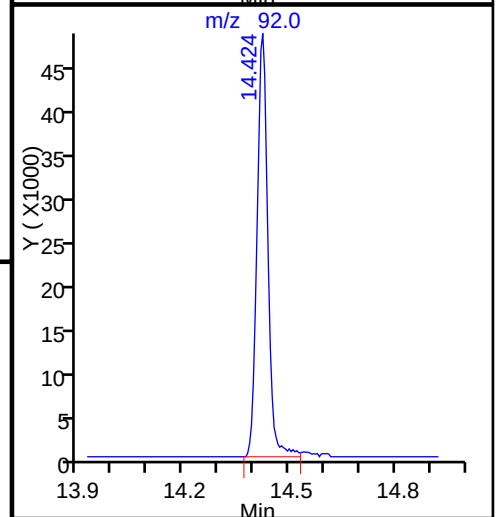
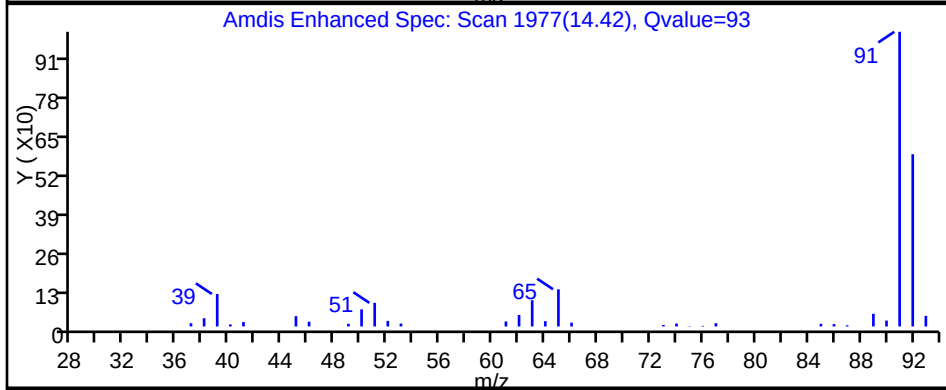
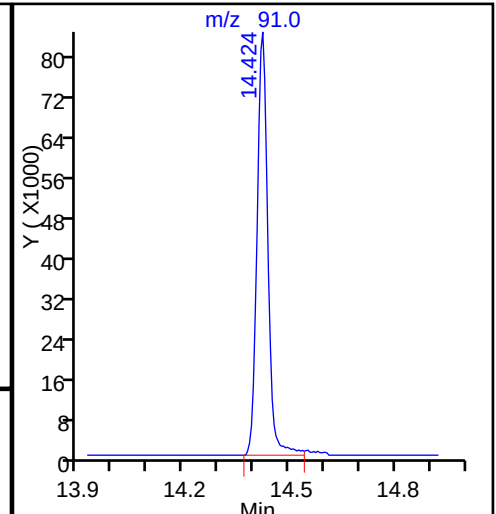
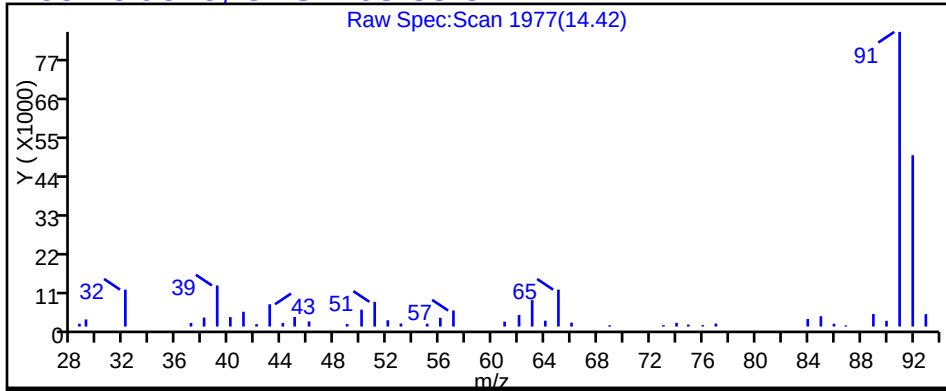
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P113.D

Injection Date: 04-Mar-2015 08:12:30

Instrument ID: MJ

Lims ID: 140-2797-A-9

Lab Sample ID: 140-2797-9

Client ID: H26-SS-2015

Operator ID: 403648

ALS Bottle#: 13

Worklist Smp#: 18

Purge Vol: 500.000 mL

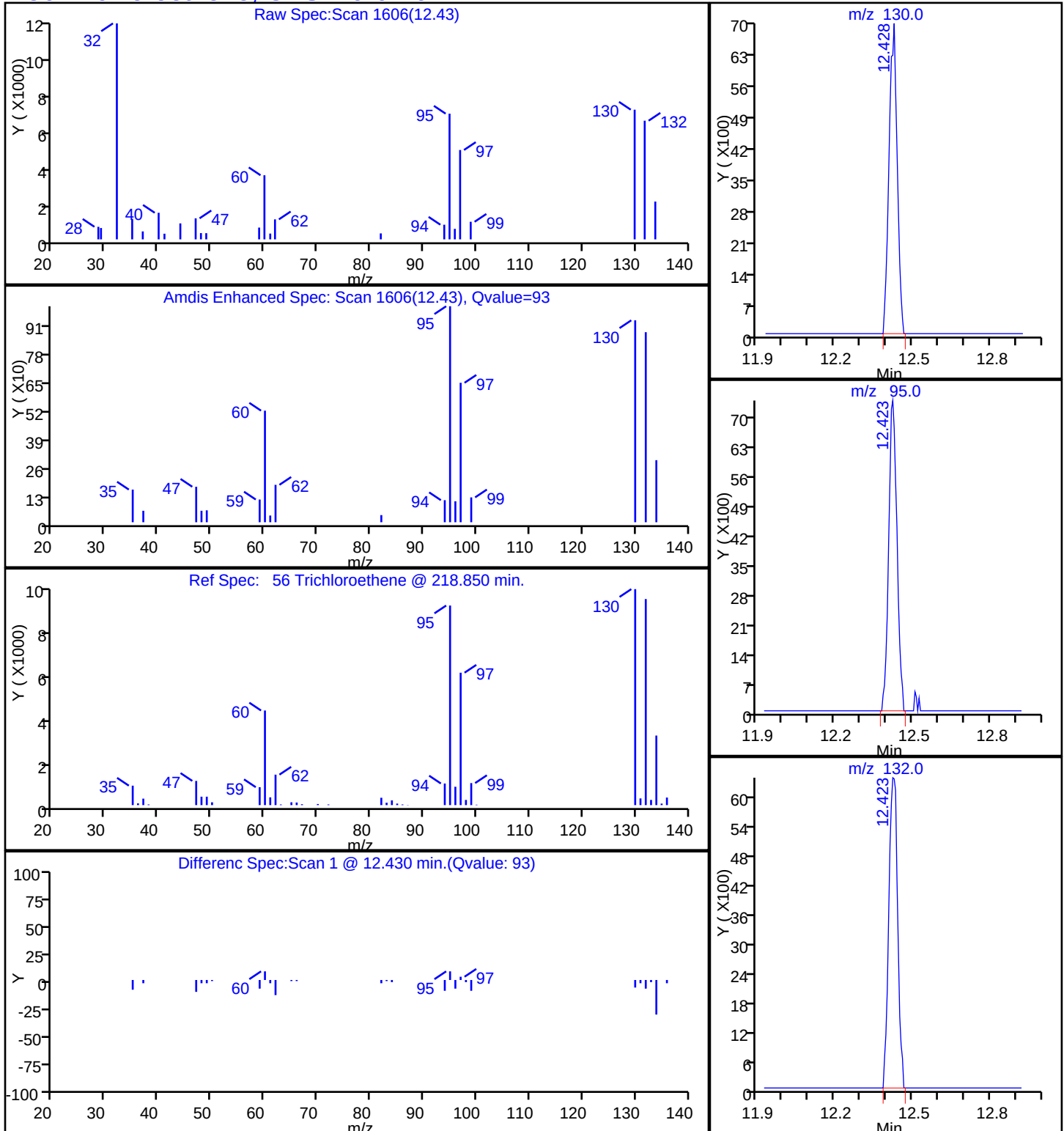
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

56 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P113.D

Injection Date: 04-Mar-2015 08:12:30

Instrument ID: MJ

Lims ID: 140-2797-A-9

Lab Sample ID: 140-2797-9

Client ID: H26-SS-2015

Operator ID: 403648

ALS Bottle#: 13

Worklist Smp#: 18

Purge Vol: 500.000 mL

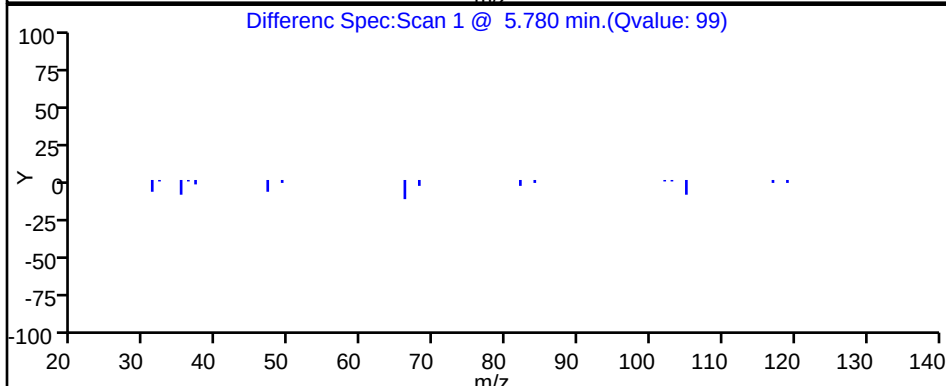
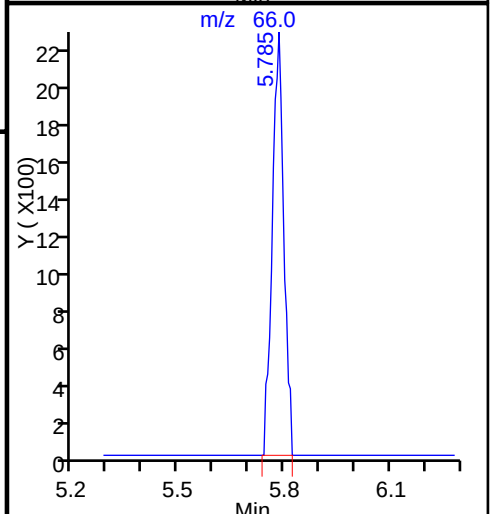
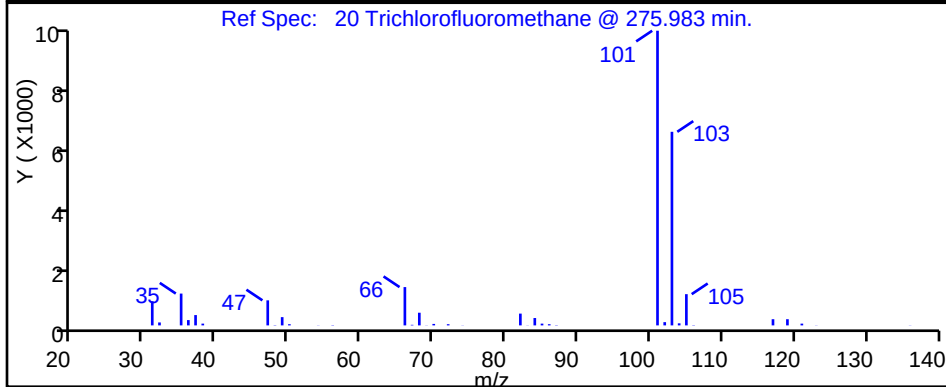
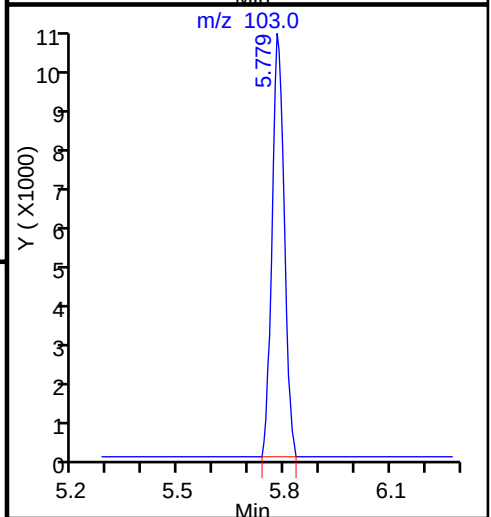
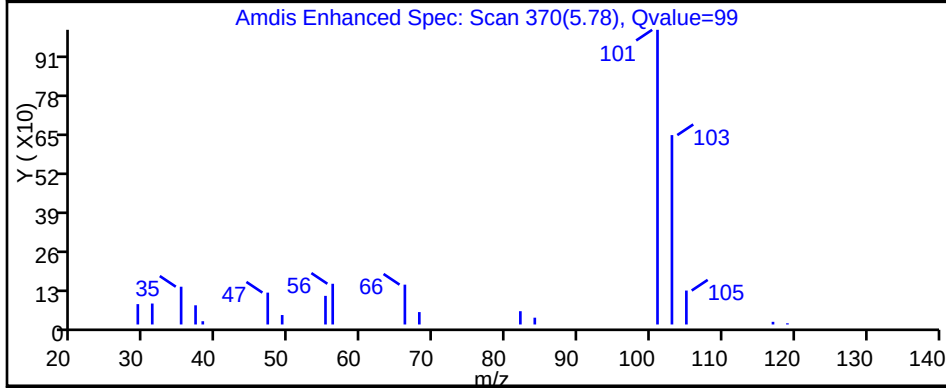
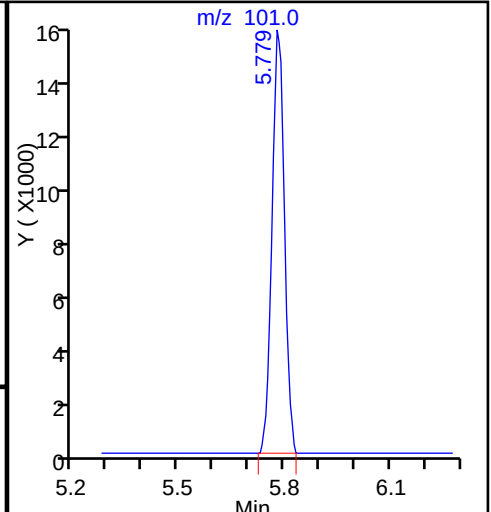
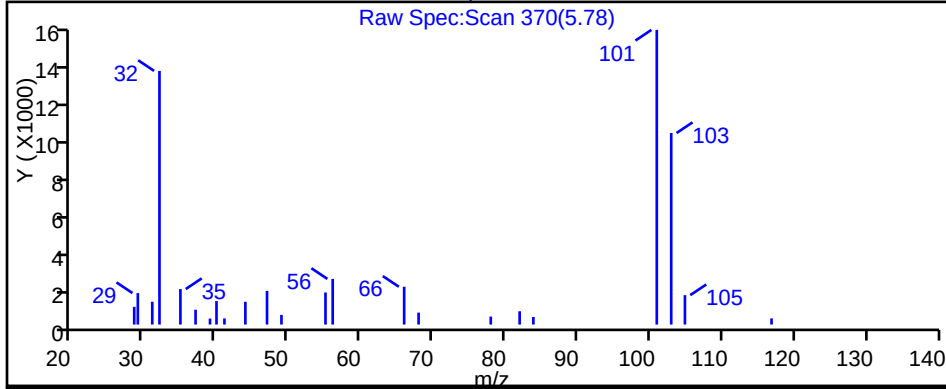
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: H26-CS-2015 Lab Sample ID: 140-2797-10

Matrix: Air Lab File ID: JC03P114.D

Analysis Method: TO 15 LL Date Collected: 02/24/2015 14:22

Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 09:06

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.: 2449 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		0.080	
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	0.64		0.20	
71-43-2	Benzene	78.11	0.23		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		0.040	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	0.080		0.080	
74-87-3	Chloromethane	50.49	0.43		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H26-CS-2015 Lab Sample ID: 140-2797-10
 Matrix: Air Lab File ID: JC03P114.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 14:22
 Sample wt/vol: 500(mL) Date Analyzed: 03/04/2015 09:06
 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.: 2449 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	0.39		0.080	
64-17-5	Ethanol	46.07	9.2		0.80	
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	0.36		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.20		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	0.38		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		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.17		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

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: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: H26-CS-2015 Lab Sample ID: 140-2797-10

Matrix: Air Lab File ID: JC03P114.D

Analysis Method: TO 15 LL Date Collected: 02/24/2015 14:22

Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 09:06

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.: 2449 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		0.32	
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	2.6		0.82	
71-43-2	Benzene	78.11	0.74		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	0.41		0.25	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	0.39		0.39	
74-87-3	Chloromethane	50.49	0.90		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H26-CS-2015 Lab Sample ID: 140-2797-10
 Matrix: Air Lab File ID: JC03P114.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 14:22
 Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 09:06
 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.: 2449 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	1.9		0.40	
64-17-5	Ethanol	46.07	17		1.5	
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	1.2		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	0.86		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	1.4		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		0.21	
75-69-4	Trichlorofluoromethane	137.37	0.97		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

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

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P114.D
 Lims ID: 140-2797-A-10 Lab Sample ID: 140-2797-10
 Client ID: H26-CS-2015
 Sample Type: Client
 Inject. Date: 04-Mar-2015 09:06:30 ALS Bottle#: 14 Worklist Smp#: 19
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2797-a-10
 Misc. Info.: J030315,TO15,,140-0001414-019
 Operator ID: 403648 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150228-1414.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 11:02:31 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK052

First Level Reviewer: tajh

Date: 04-Mar-2015 09:54:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.581	9.587	-0.006	97	280888	4.00	
* 2 1,4-Difluorobenzene	114	11.723	11.728	-0.006	96	1361857	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.365	16.370	-0.005	90	1159623	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.979	17.979	0.000	89	683502	3.60	
8 Dichlorodifluoromethane	85	4.100	4.105	-0.005	100	123299	0.3899	
9 Chloromethane	52	4.310	4.315	-0.005	99	19545	0.4346	
17 Ethanol	31	5.229	5.240	-0.011	96	358041	9.16	
20 Trichlorofluoromethane	101	5.773	5.778	-0.005	99	47863	0.1729	
28 2-Methyl-2-propanol	59	6.650	6.633	0.017	75	4811	0.0290	
30 1,1,2-Trichloro-1,2,2-trif	101	6.725	6.730	-0.005	94	11139	0.0598	
31 Methylene Chloride	84	6.913	6.924	-0.011	97	32235	0.3579	
39 2-Butanone (MEK)	72	8.785	8.785	0.000	97	8897	0.2660	
40 Hexane	56	8.801	8.807	-0.006	74	9623	0.1028	
43 Chloroform	83	9.581	9.598	-0.017	36	14144	0.0798	
49 Cyclohexane	69	11.217	11.211	0.006	44	1410	0.0271	
48 Benzene	78	11.211	11.217	-0.006	98	58589	0.2329	
50 Carbon tetrachloride	117	11.238	11.238	0.000	96	12194	0.0657	
53 Isooctane	57	11.927	11.932	-0.005	95	21233	0.0425	
62 4-Methyl-2-pentanone (MIBK	43	13.546	13.546	0.000	98	132435	0.6400	
65 Toluene	91	14.423	14.423	0.000	93	79760	0.3770	
76 Ethylbenzene	91	16.688	16.693	-0.005	97	18246	0.0738	
78 m-Xylene & p-Xylene	91	16.844	16.849	-0.005	99	39608	0.1987	
82 o-Xylene	91	17.371	17.371	0.000	98	14967	0.0689	
93 1,2,4-Trimethylbenzene	105	19.087	19.087	0.000	93	6056	0.0259	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P114.D

Injection Date: 04-Mar-2015 09:06:30

Instrument ID: MJ

Operator ID: 403648

Lims ID: 140-2797-A-10

Lab Sample ID: 140-2797-10

Worklist Smp#: 19

Client ID: H26-CS-2015

Purge Vol: 500.000 mL

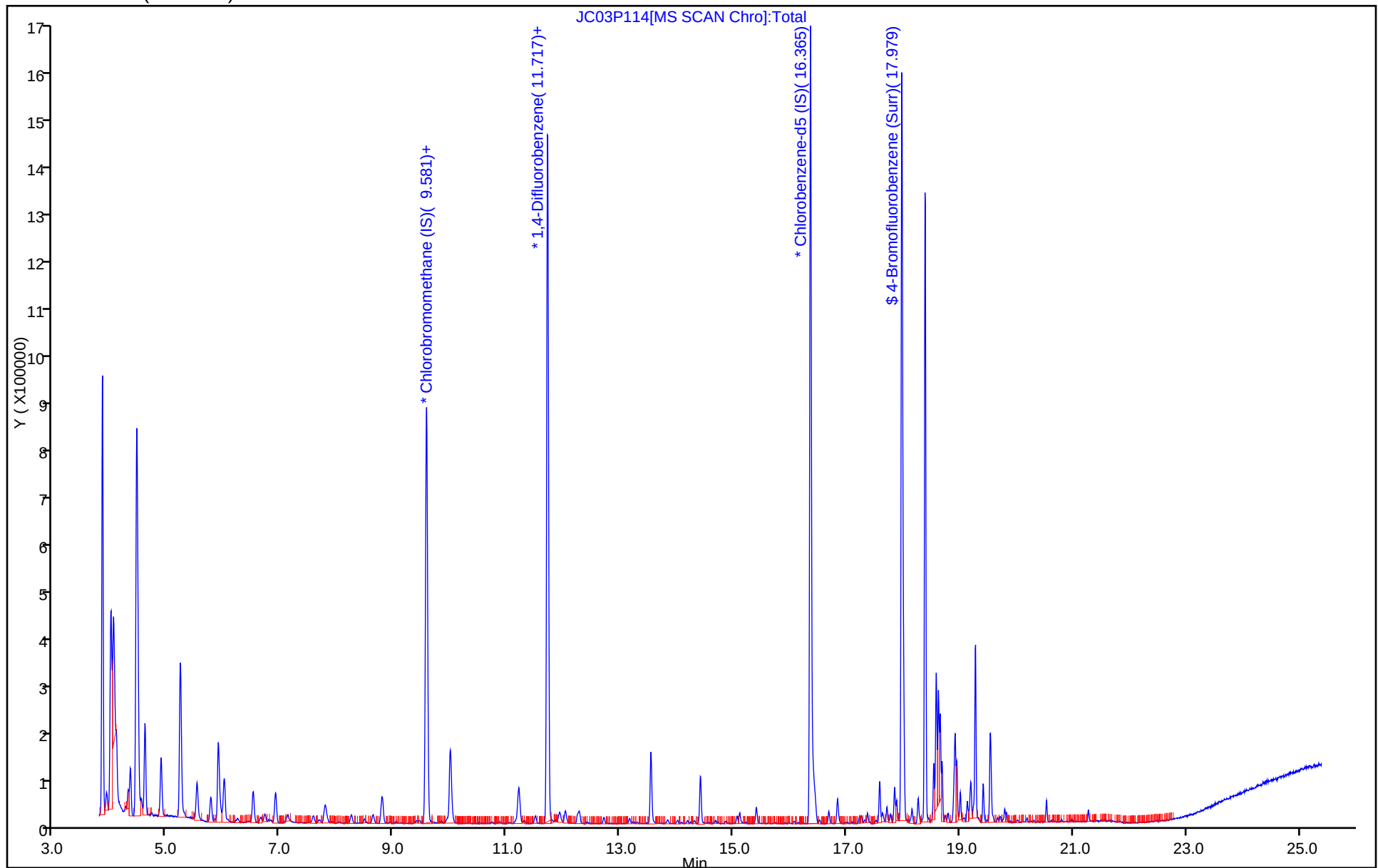
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P114.D

Injection Date: 04-Mar-2015 09:06:30

Instrument ID: MJ

Lims ID: 140-2797-A-10

Lab Sample ID: 140-2797-10

Client ID: H26-CS-2015

Operator ID: 403648

ALS Bottle#: 14

Worklist Smp#: 19

Purge Vol: 500.000 mL

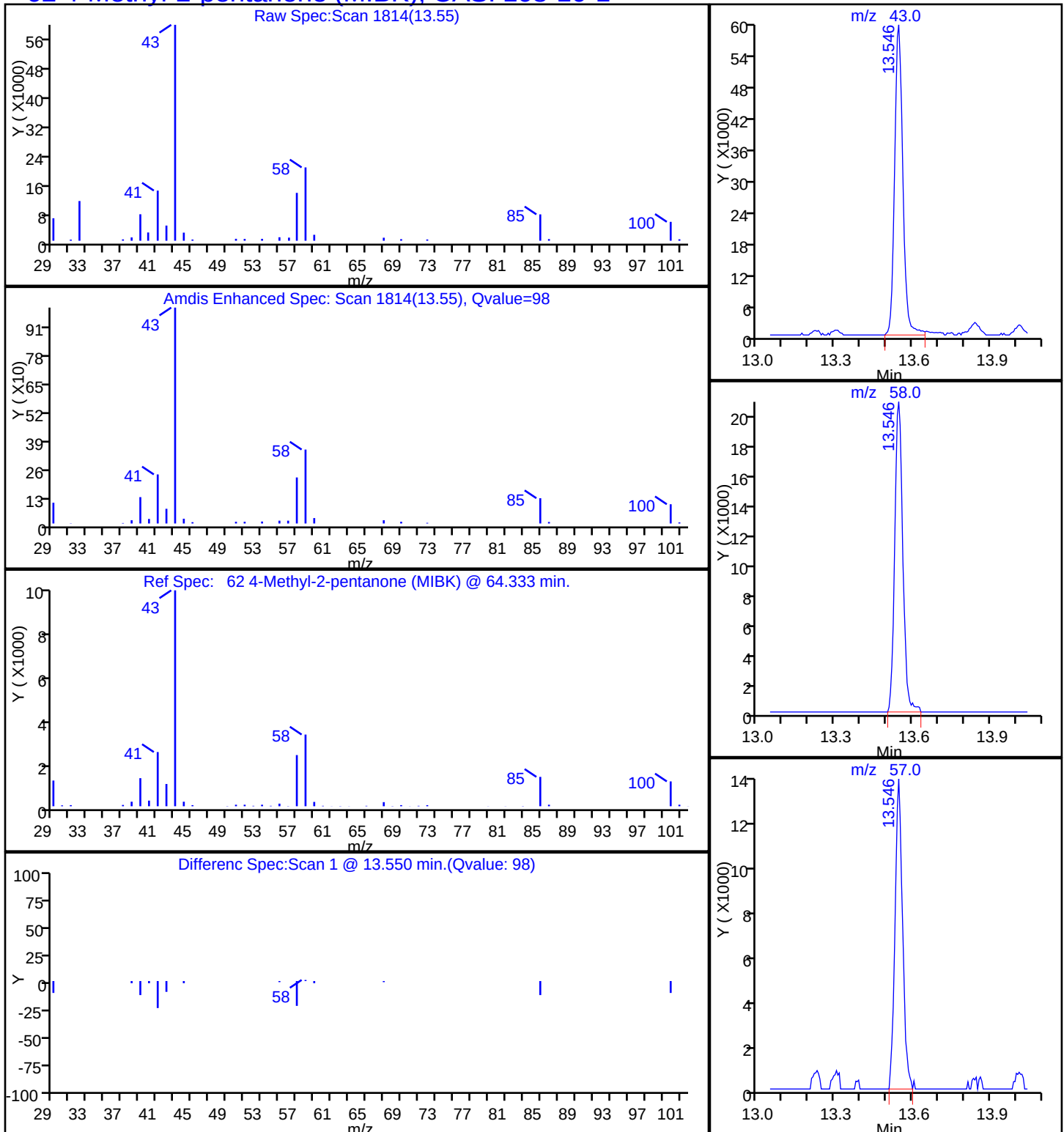
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

62 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P114.D

Injection Date: 04-Mar-2015 09:06:30

Instrument ID: MJ

Lims ID: 140-2797-A-10

Lab Sample ID: 140-2797-10

Client ID: H26-CS-2015

Operator ID: 403648

ALS Bottle#: 14

Worklist Smp#: 19

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

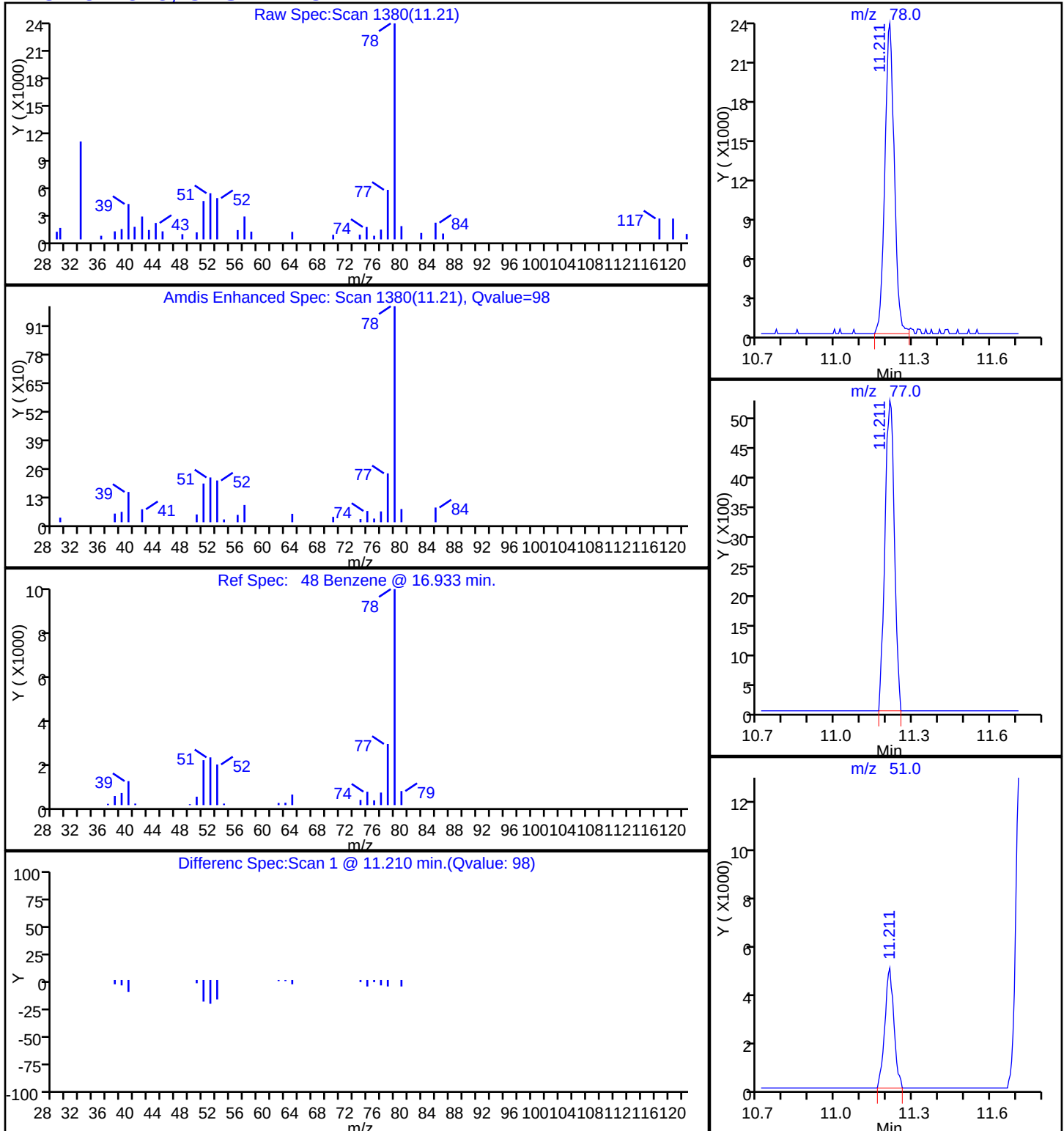
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P114.D

Injection Date: 04-Mar-2015 09:06:30

Instrument ID: MJ

Lims ID: 140-2797-A-10

Lab Sample ID: 140-2797-10

Client ID: H26-CS-2015

Operator ID: 403648

ALS Bottle#: 14

Worklist Smp#: 19

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

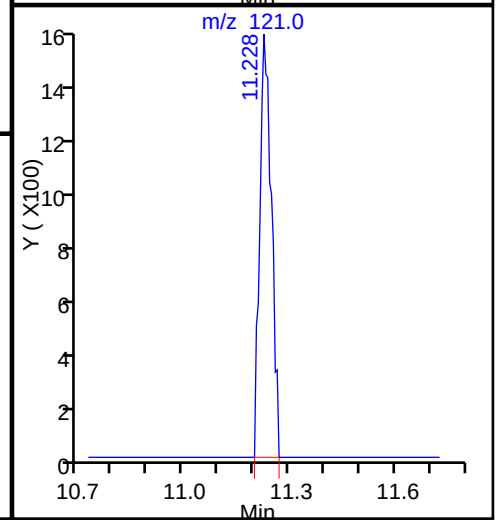
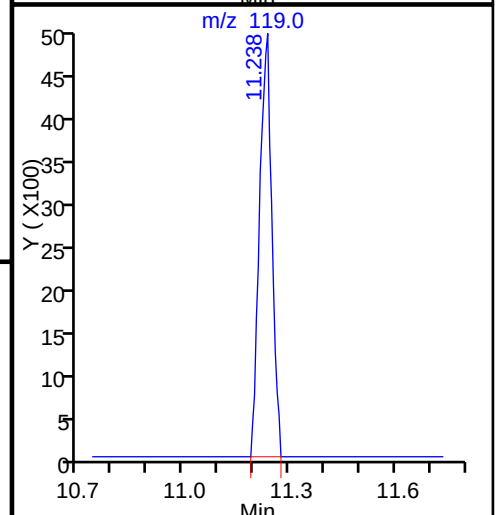
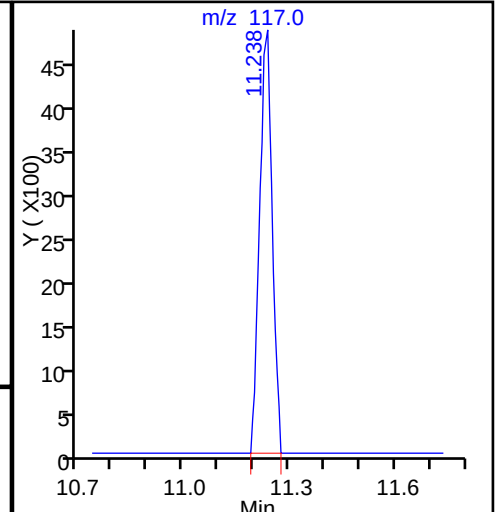
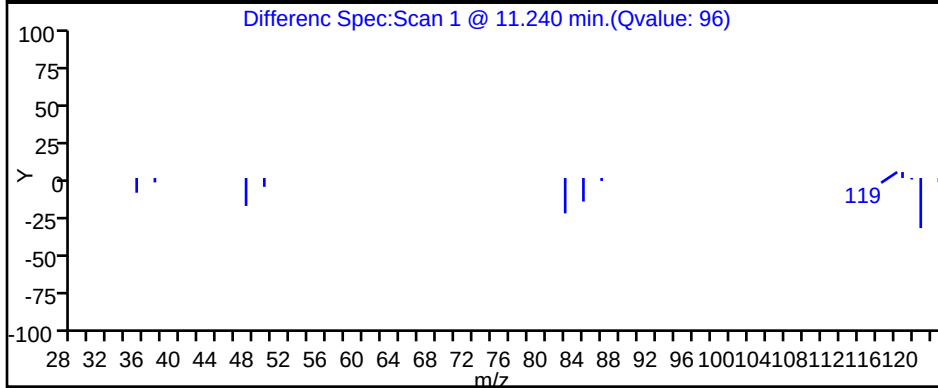
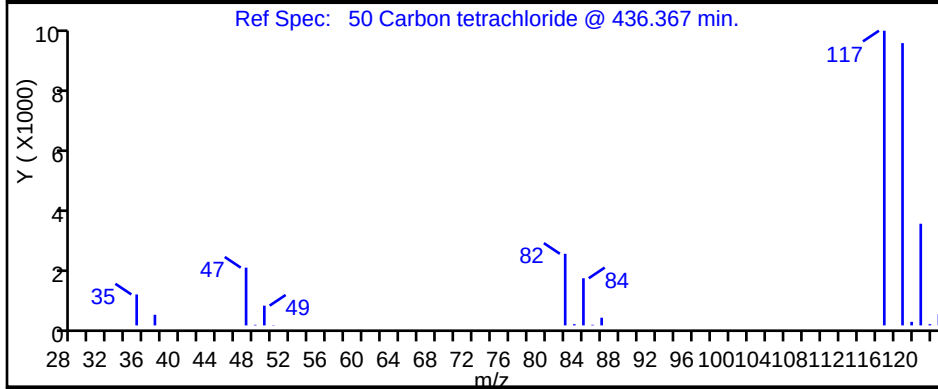
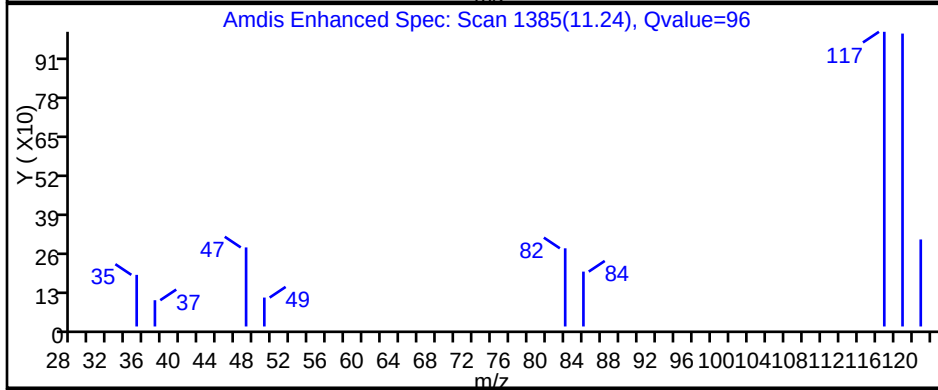
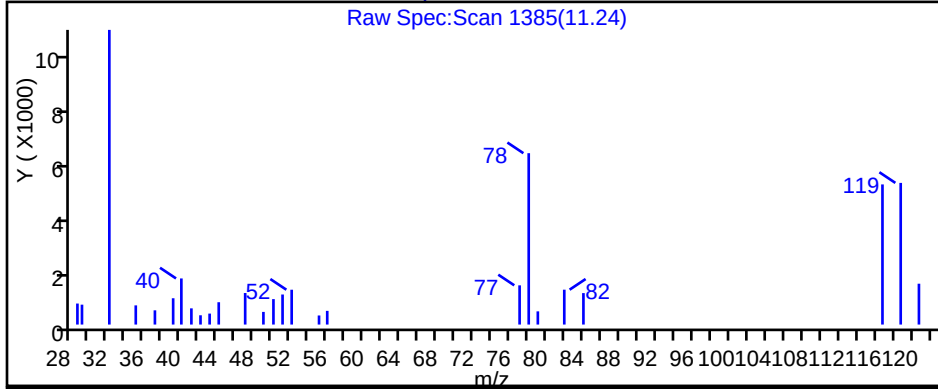
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P114.D

Injection Date: 04-Mar-2015 09:06:30

Instrument ID: MJ

Lims ID: 140-2797-A-10

Lab Sample ID: 140-2797-10

Client ID: H26-CS-2015

Operator ID: 403648

ALS Bottle#: 14

Worklist Smp#: 19

Purge Vol: 500.000 mL

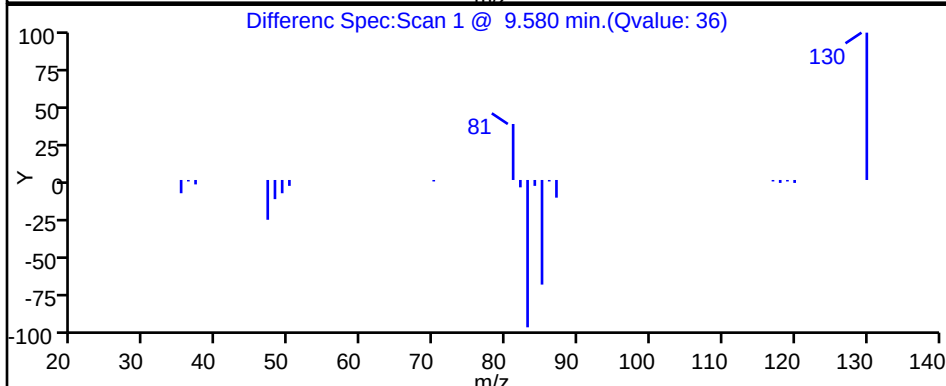
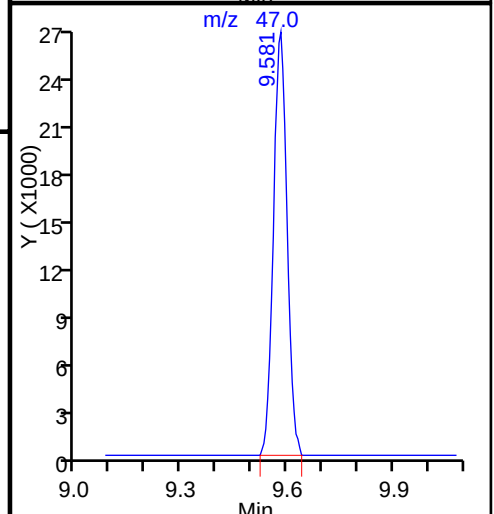
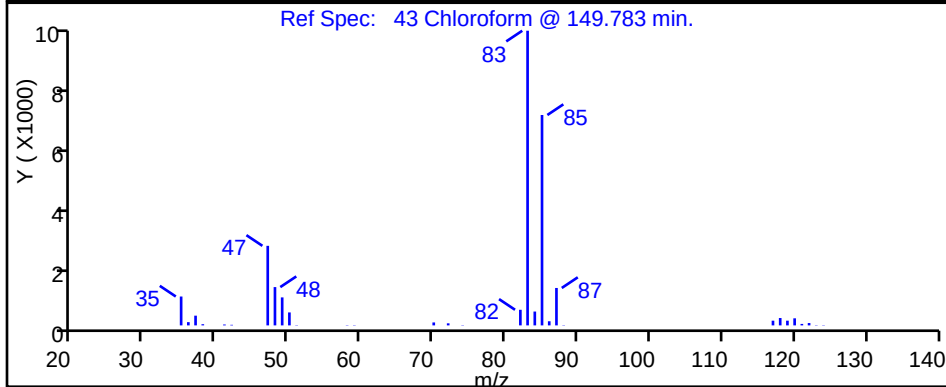
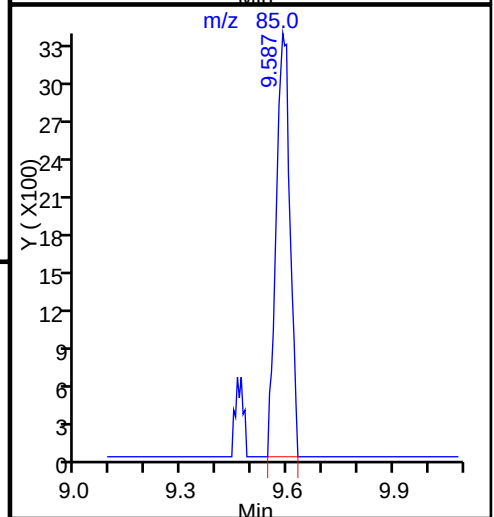
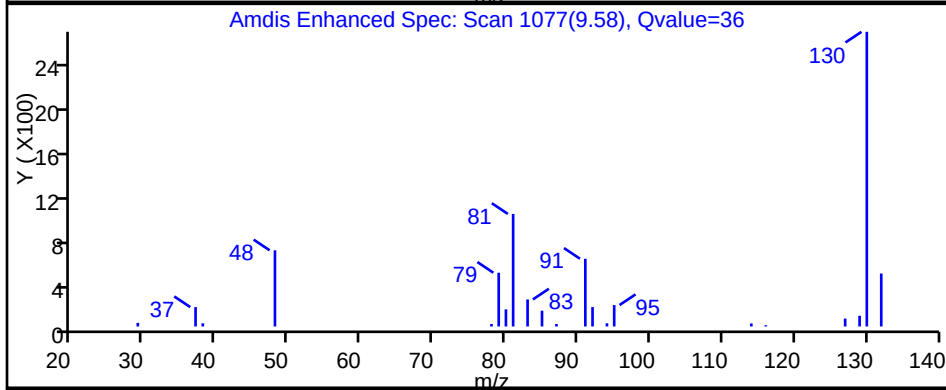
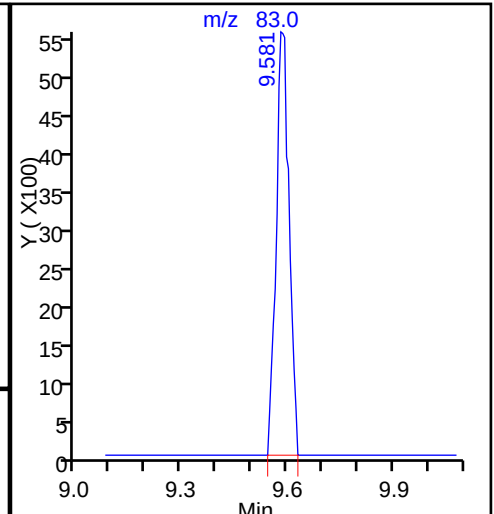
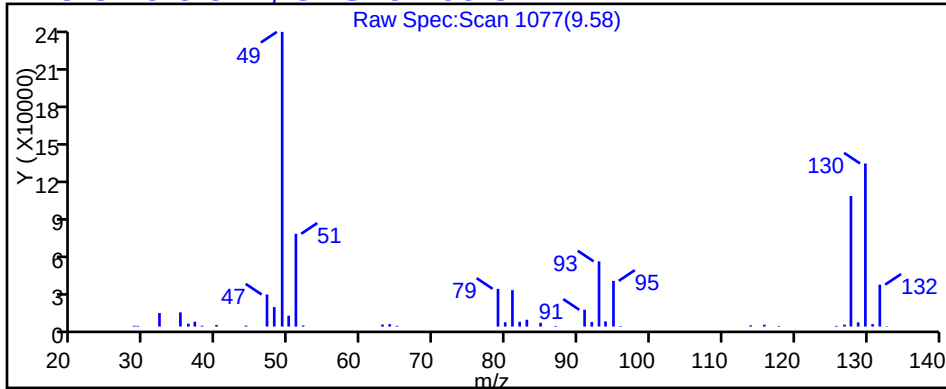
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

43 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P114.D

Injection Date: 04-Mar-2015 09:06:30

Instrument ID: MJ

Lims ID: 140-2797-A-10

Lab Sample ID: 140-2797-10

Client ID: H26-CS-2015

Operator ID: 403648

ALS Bottle#: 14

Worklist Smp#: 19

Purge Vol: 500.000 mL

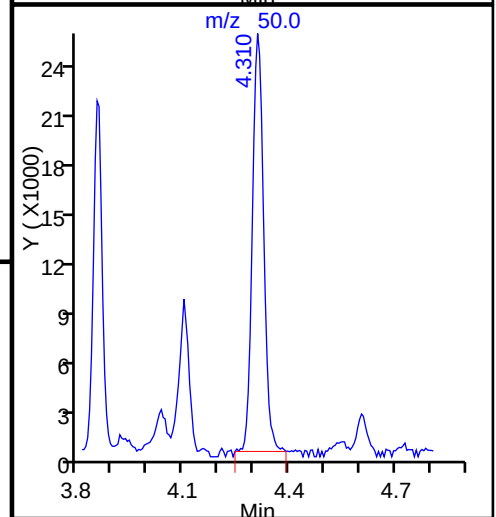
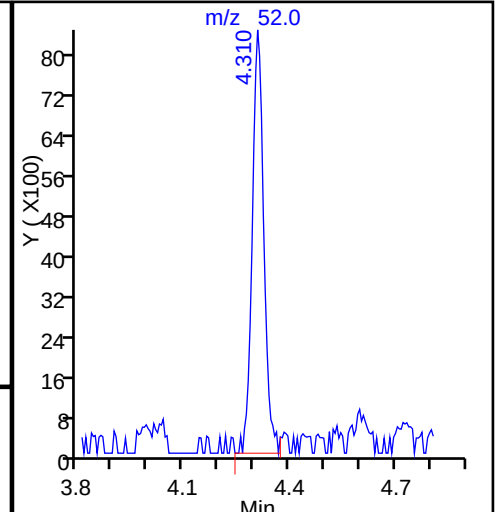
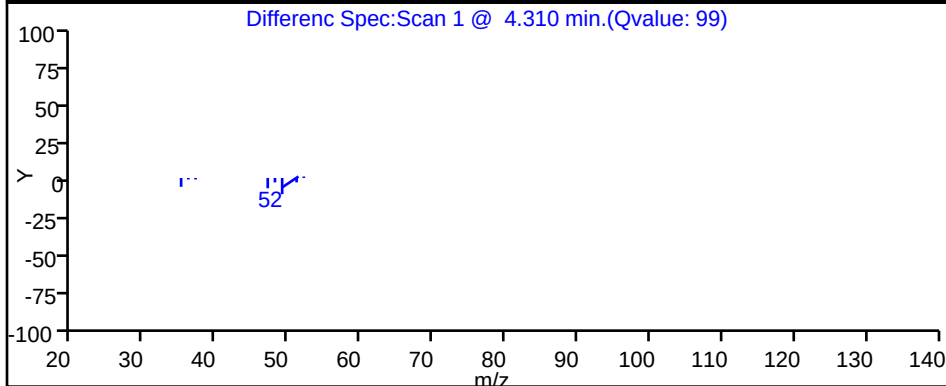
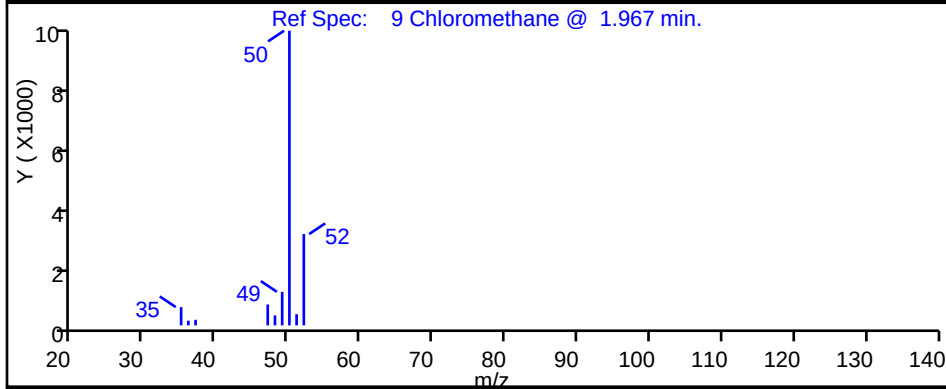
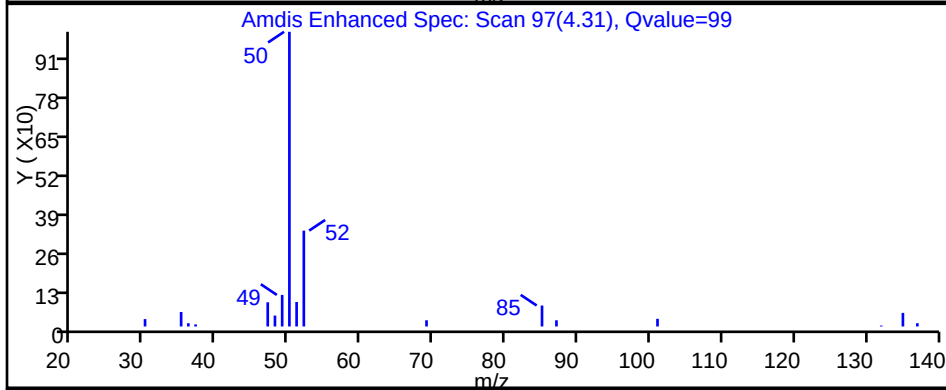
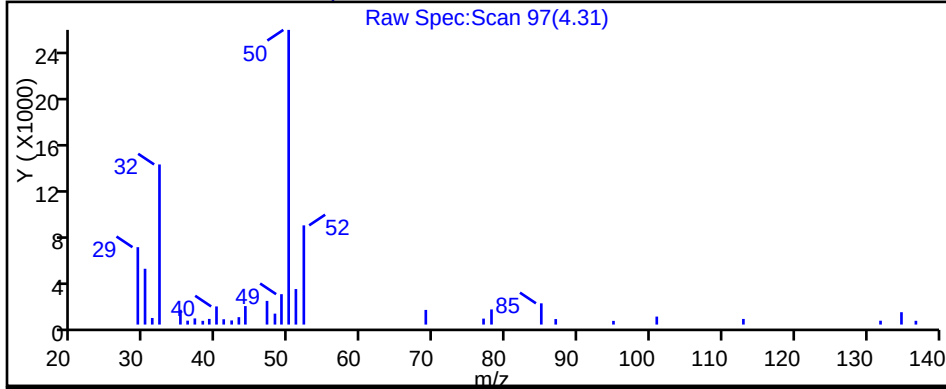
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P114.D

Injection Date: 04-Mar-2015 09:06:30

Instrument ID: MJ

Lims ID: 140-2797-A-10

Lab Sample ID: 140-2797-10

Client ID: H26-CS-2015

Operator ID: 403648

ALS Bottle#: 14

Worklist Smp#: 19

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

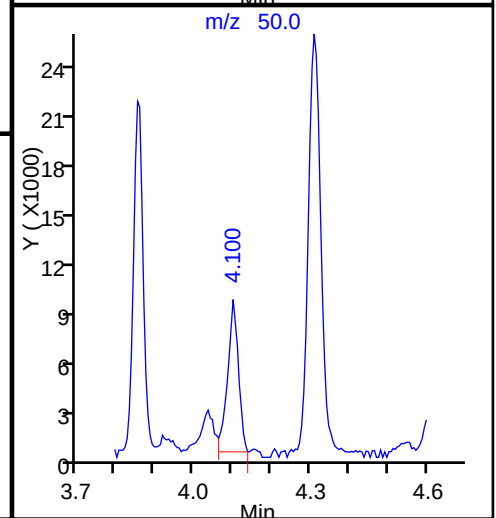
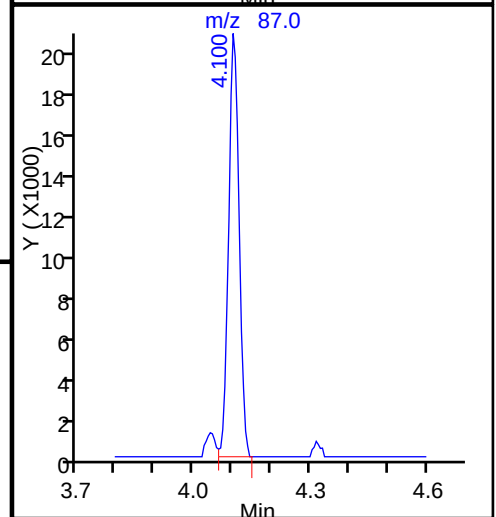
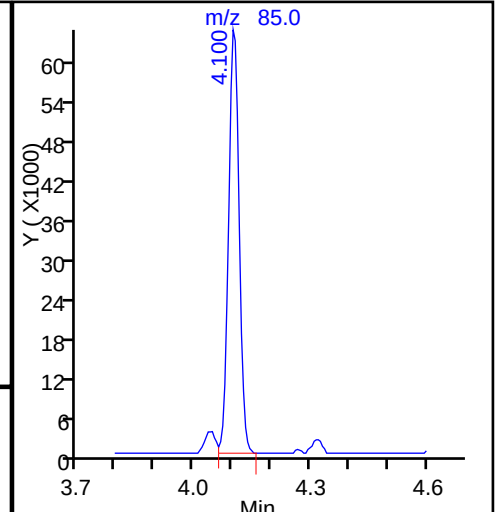
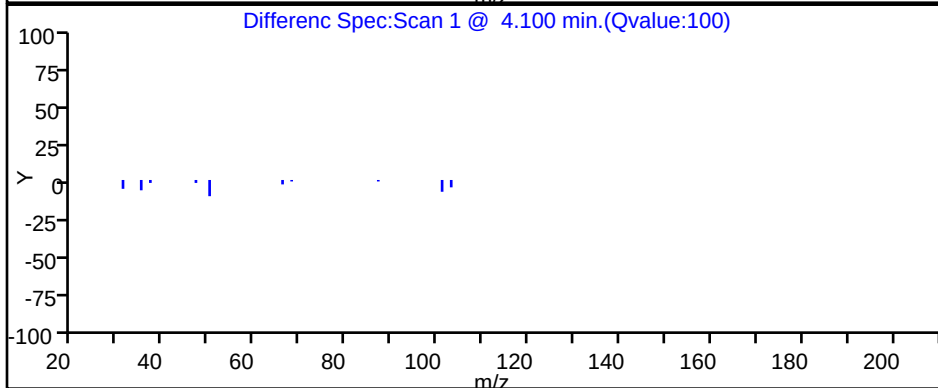
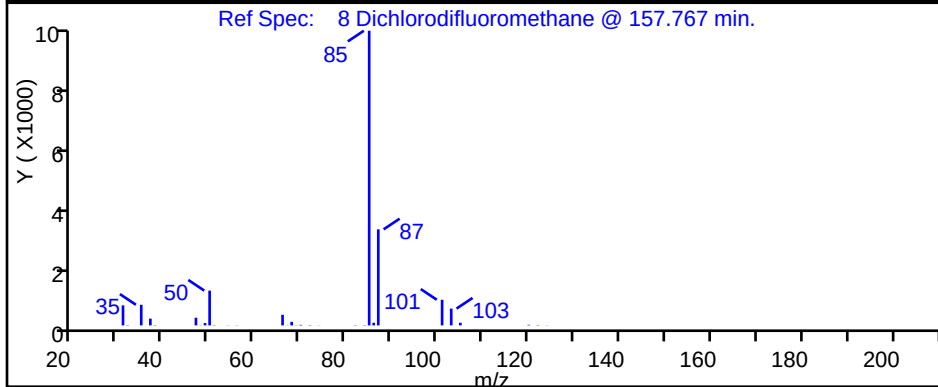
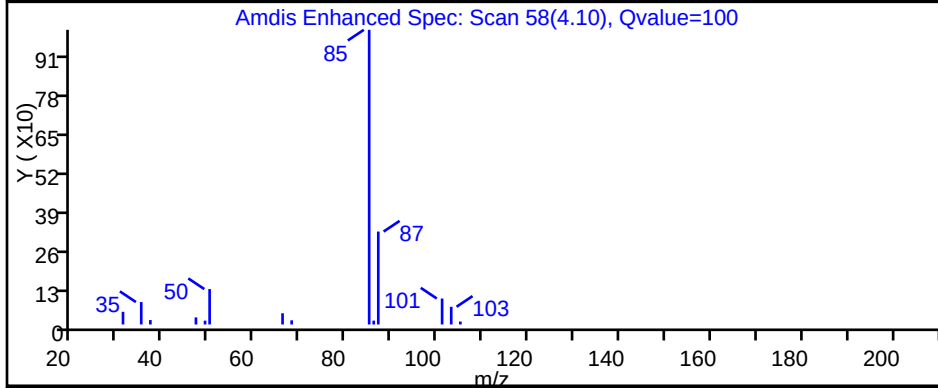
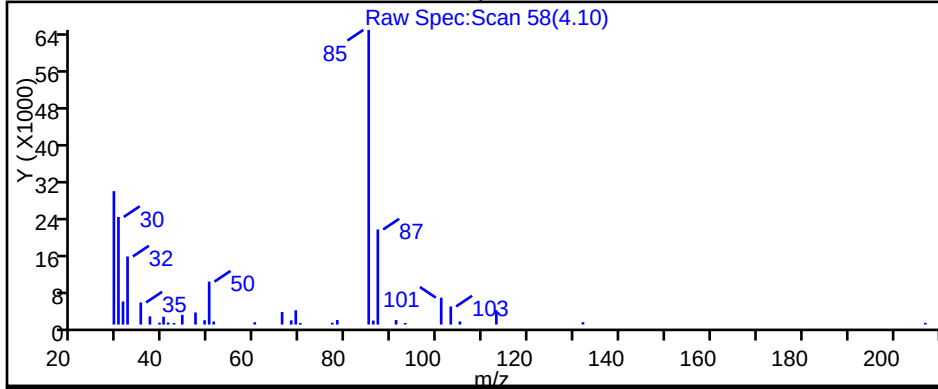
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P114.D

Injection Date: 04-Mar-2015 09:06:30

Instrument ID: MJ

Lims ID: 140-2797-A-10

Lab Sample ID: 140-2797-10

Client ID: H26-CS-2015

Operator ID: 403648

ALS Bottle#: 14

Worklist Smp#: 19

Purge Vol: 500.000 mL

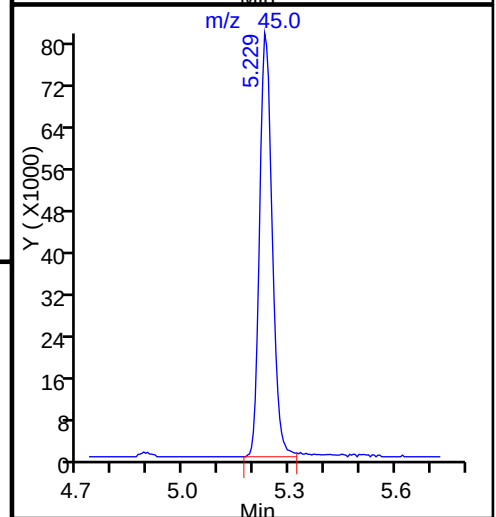
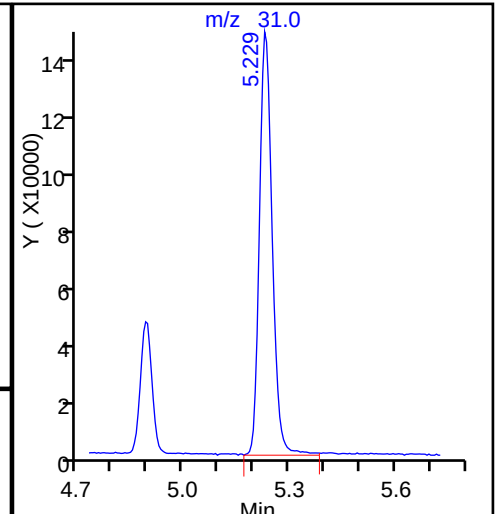
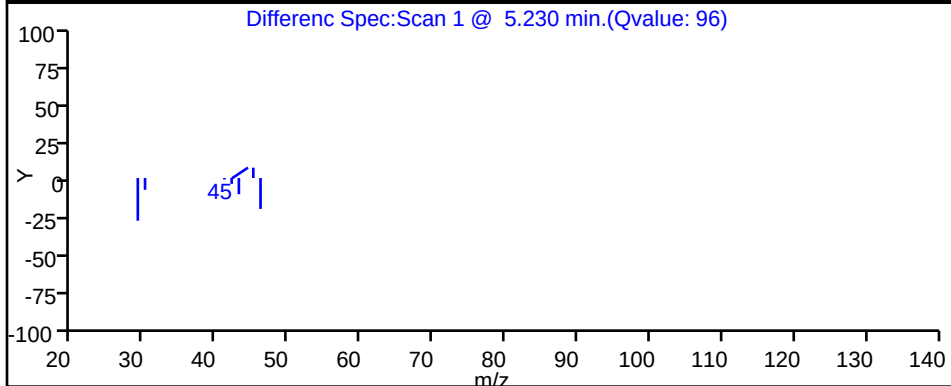
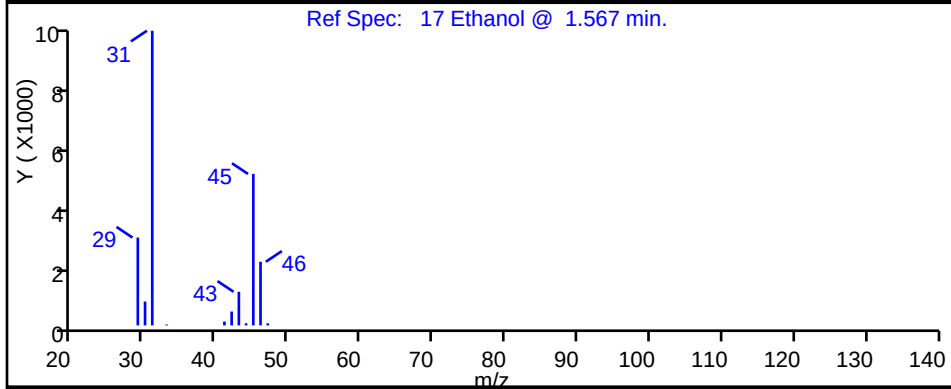
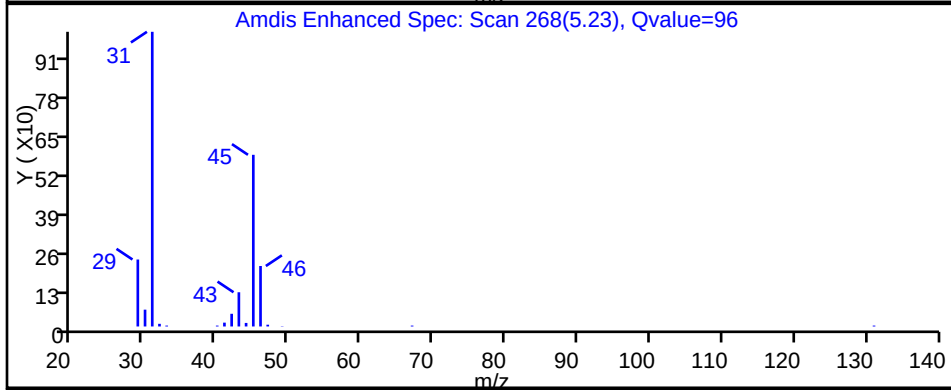
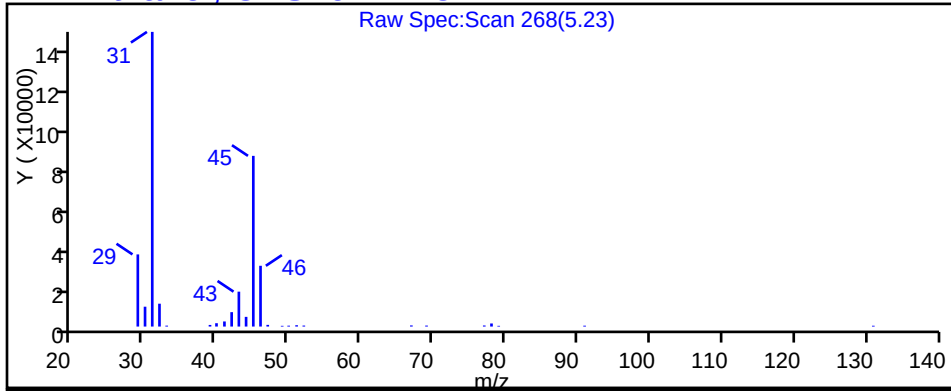
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P114.D

Injection Date: 04-Mar-2015 09:06:30

Instrument ID: MJ

Lims ID: 140-2797-A-10

Lab Sample ID: 140-2797-10

Client ID: H26-CS-2015

Operator ID: 403648

ALS Bottle#: 14

Worklist Smp#: 19

Purge Vol: 500.000 mL

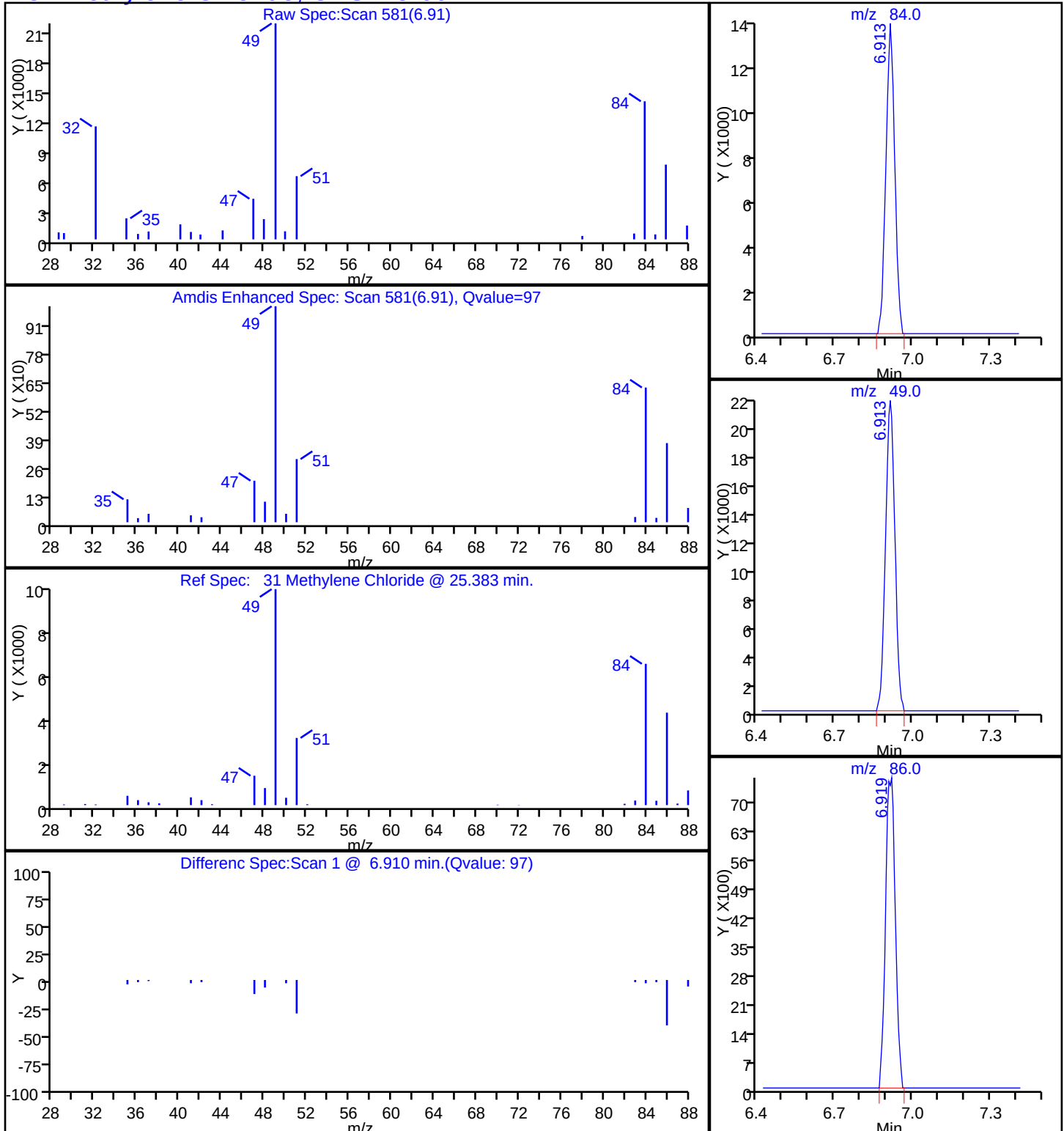
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P114.D

Injection Date: 04-Mar-2015 09:06:30

Instrument ID: MJ

Lims ID: 140-2797-A-10

Lab Sample ID: 140-2797-10

Client ID: H26-CS-2015

Operator ID: 403648

ALS Bottle#: 14

Worklist Smp#: 19

Purge Vol: 500.000 mL

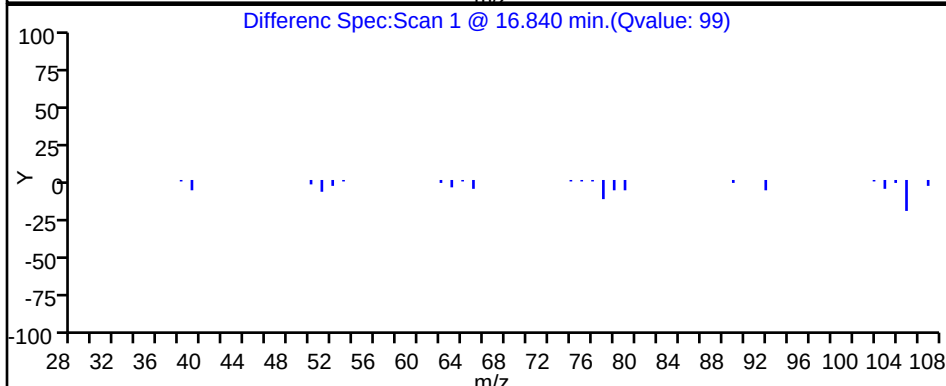
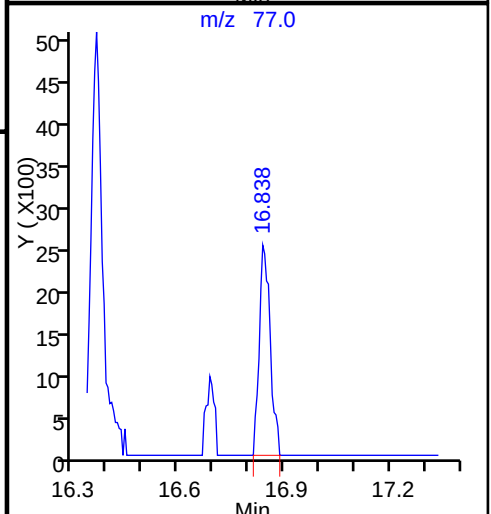
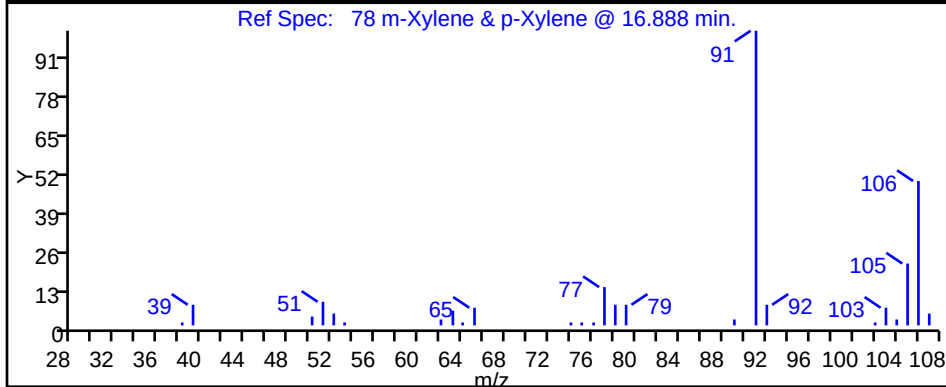
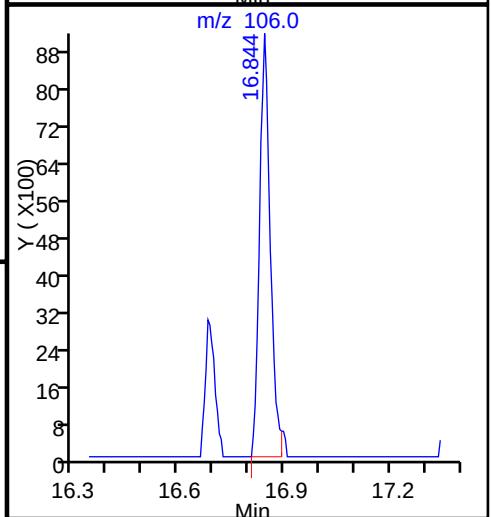
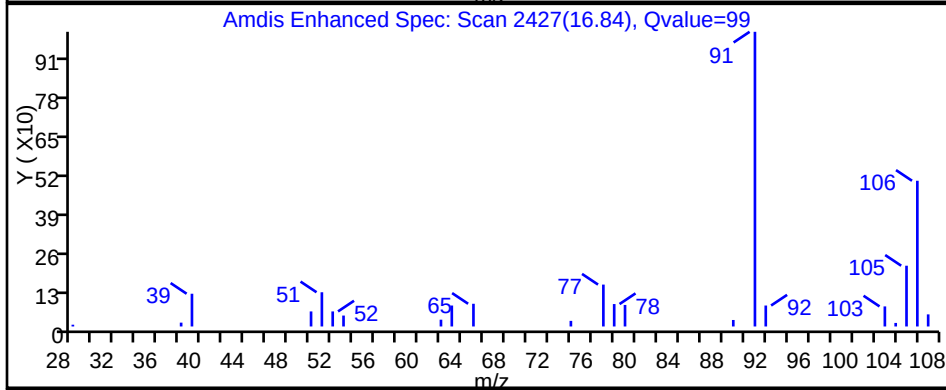
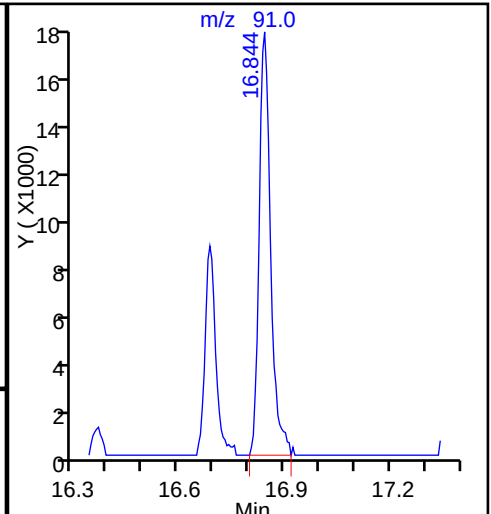
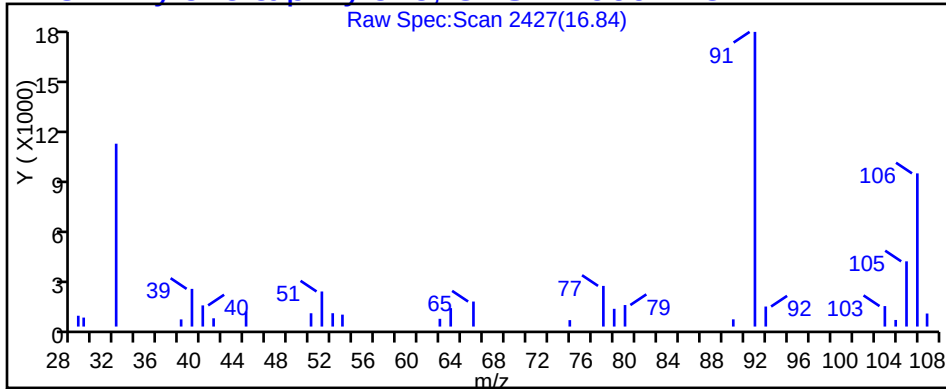
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P114.D

Injection Date: 04-Mar-2015 09:06:30

Instrument ID: MJ

Lims ID: 140-2797-A-10

Lab Sample ID: 140-2797-10

Client ID: H26-CS-2015

Operator ID: 403648

ALS Bottle#: 14

Worklist Smp#: 19

Purge Vol: 500.000 mL

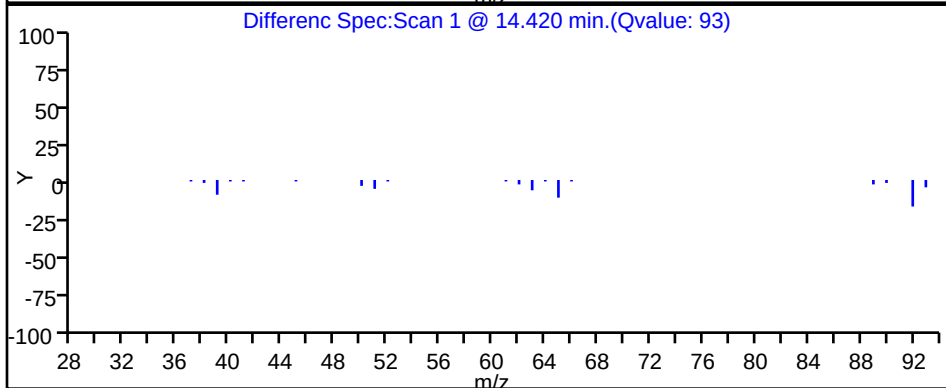
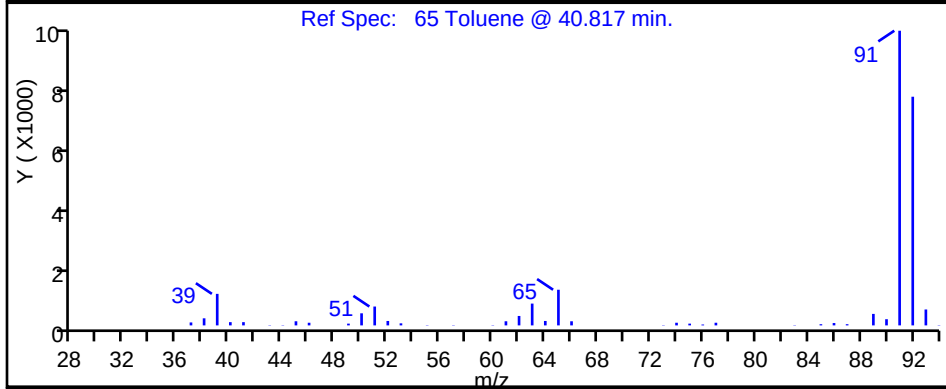
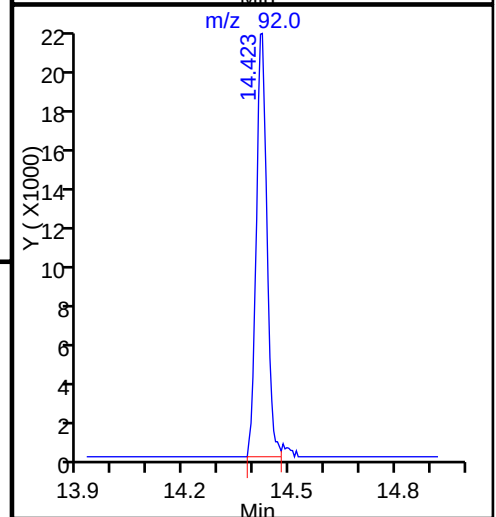
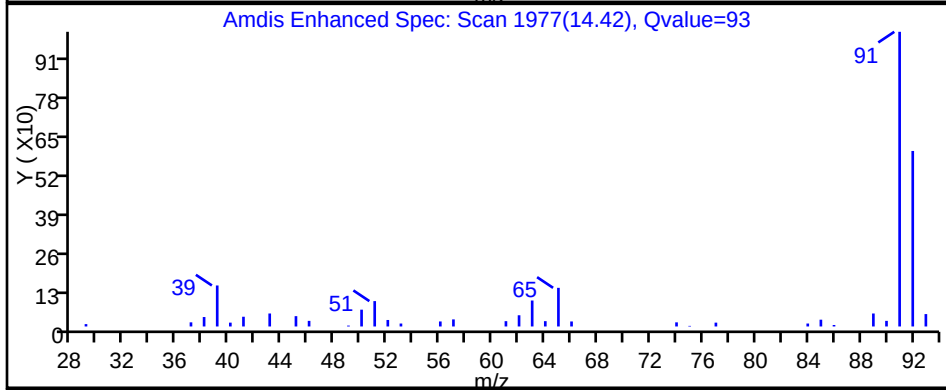
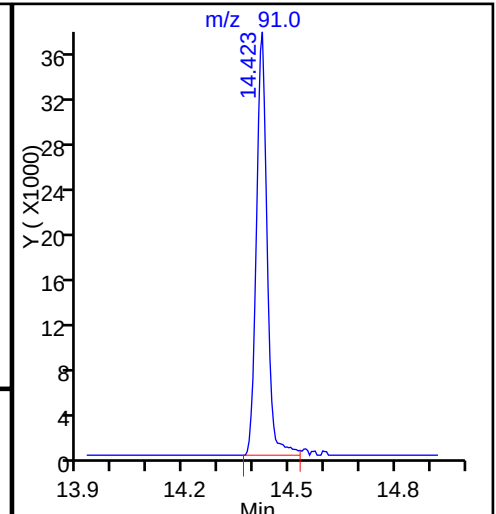
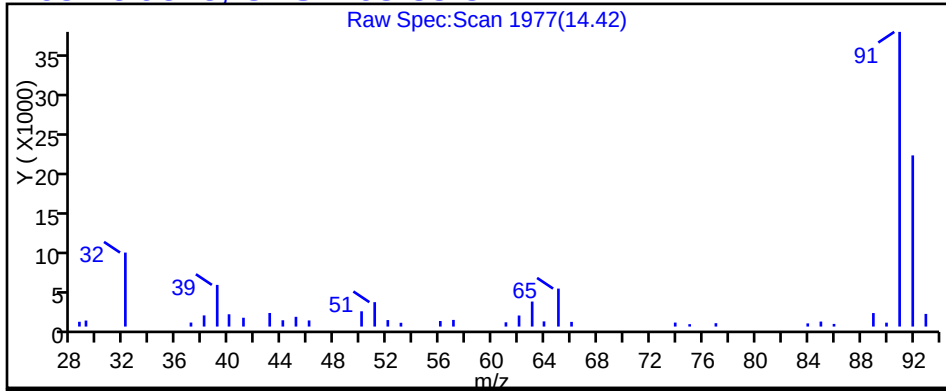
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JC03P114.D

Injection Date: 04-Mar-2015 09:06:30

Instrument ID: MJ

Lims ID: 140-2797-A-10

Lab Sample ID: 140-2797-10

Client ID: H26-CS-2015

Operator ID: 403648

ALS Bottle#: 14

Worklist Smp#: 19

Purge Vol: 500.000 mL

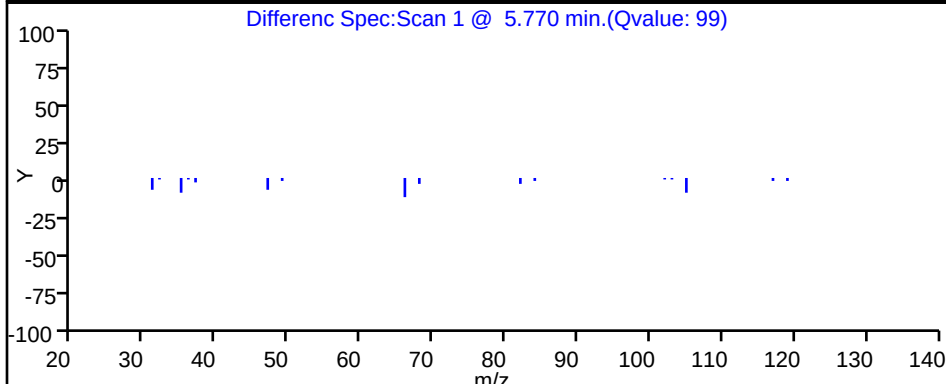
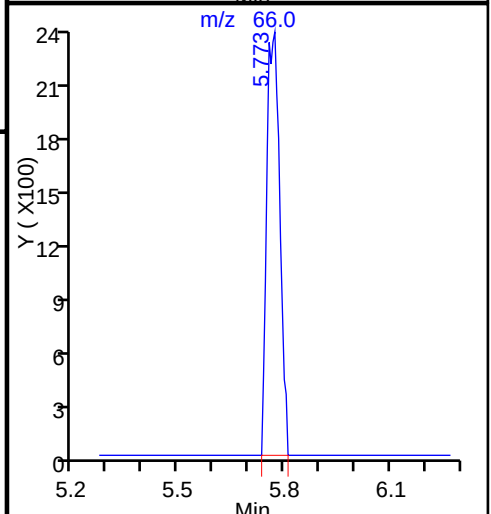
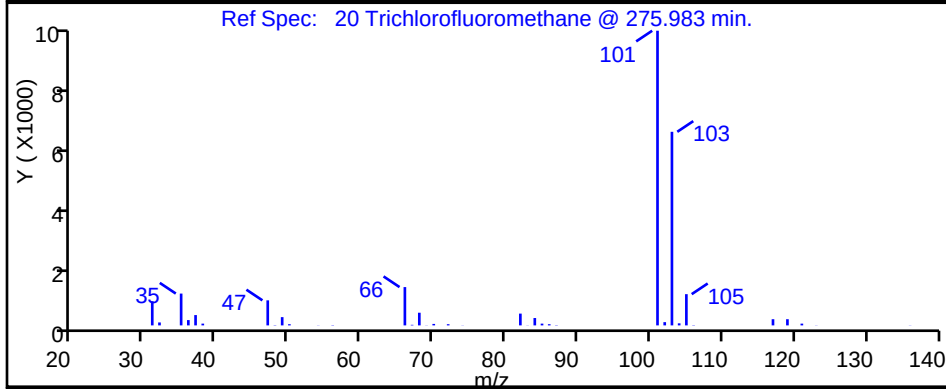
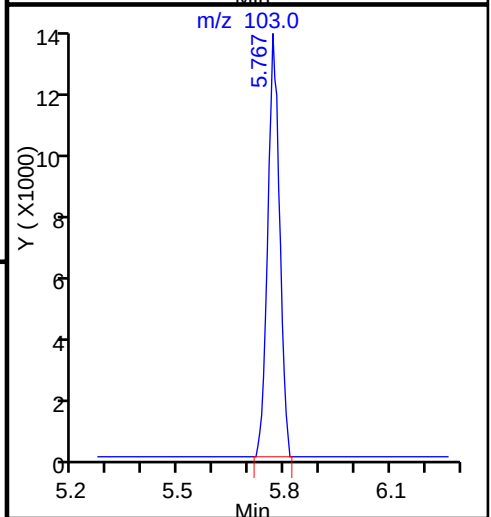
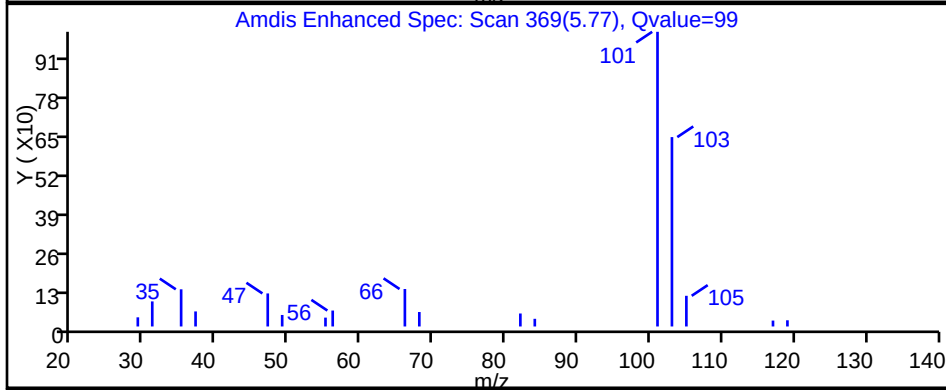
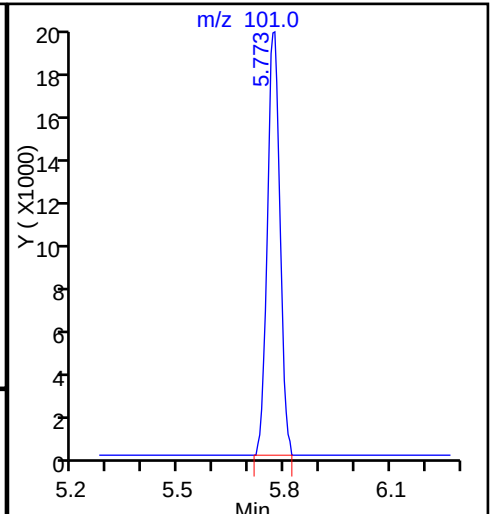
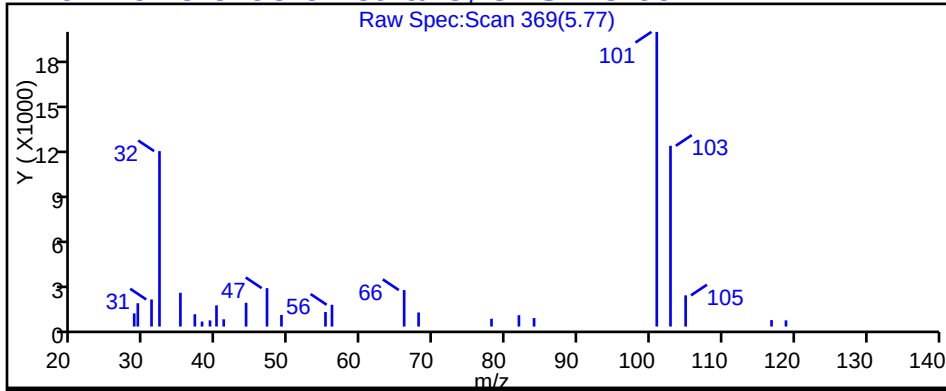
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: DI-OA-2015 Lab Sample ID: 140-2797-11

Matrix: Air Lab File ID: JC04P108.D

Analysis Method: TO 15 LL Date Collected: 02/24/2015 14:30

Sample wt/vol: 500(mL) Date Analyzed: 03/05/2015 06:27

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.: 2450 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		0.080	
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	0.35		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	0.31		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	0.076		0.040	
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	0.43		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: DI-OA-2015 Lab Sample ID: 140-2797-11
 Matrix: Air Lab File ID: JC04P108.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 14:30
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 06:27
 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.: 2450 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	0.37		0.080	
64-17-5	Ethanol	46.07	3.4		0.80	
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	0.16		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	0.29		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		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.18		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	80		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: DI-OA-2015 Lab Sample ID: 140-2797-11

Matrix: Air Lab File ID: JC04P108.D

Analysis Method: TO 15 LL Date Collected: 02/24/2015 14:30

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 06:27

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.: 2450 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		0.32	
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	1.0		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.98		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	0.48		0.25	
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	0.89		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: DI-OA-2015 Lab Sample ID: 140-2797-11
 Matrix: Air Lab File ID: JC04P108.D
 Analysis Method: TO 15 LL Date Collected: 02/24/2015 14:30
 Sample wt/vol: 500(mL) Date Analyzed: 03/05/2015 06:27
 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.: 2450 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	1.8		0.40	
64-17-5	Ethanol	46.07	6.5		1.5	
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	0.71		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	1.1		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	ND		0.21	
75-69-4	Trichlorofluoromethane	137.37	0.99		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	80		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P108.D
 Lims ID: 140-2797-A-11 Lab Sample ID: 140-2797-11
 Client ID: DI-OA-2015
 Sample Type: Client
 Inject. Date: 05-Mar-2015 06:27:30 ALS Bottle#: 8 Worklist Smp#: 17
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2797-a-11
 Misc. Info.: J030415,TO15,,140-0001415-017
 Operator ID: 403648 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150228-1415.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 05-Mar-2015 13:01:05 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK036

First Level Reviewer: tajh

Date: 05-Mar-2015 08:27:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.587	9.586	0.001	97	299881	4.00	
* 2 1,4-Difluorobenzene	114	11.723	11.722	0.001	96	1393461	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.365	16.365	0.000	93	1159958	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.979	17.978	0.001	89	608897	3.21	
8 Dichlorodifluoromethane	85	4.116	4.105	0.011	100	125803	0.3726	
9 Chloromethane	52	4.321	4.315	0.006	100	20624	0.4296	
17 Ethanol	31	5.246	5.229	0.017	96	143892	3.45	
20 Trichlorofluoromethane	101	5.779	5.772	0.007	100	52028	0.1760	
28 2-Methyl-2-propanol	59	6.666	6.622	0.044	90	5604	0.0316	
30 1,1,2-Trichloro-1,2,2-trif	101	6.736	6.725	0.011	94	12779	0.0642	
31 Methylene Chloride	84	6.924	6.918	0.006	98	12604	0.1311	
39 2-Butanone (MEK)	72	8.791	8.780	0.011	97	12457	0.3489	
40 Hexane	56	8.802	8.801	0.001	79	9401	0.0940	
43 Chloroform	83	9.598	9.592	0.006	27	3336	0.0176	
49 Cyclohexane	69	11.212	11.211	0.001	47	1415	0.0266	
48 Benzene	78	11.217	11.211	0.006	98	79311	0.3081	
50 Carbon tetrachloride	117	11.233	11.233	0.000	97	14502	0.0763	
53 Isooctane	57	11.927	11.927	0.001	95	26317	0.0514	
62 4-Methyl-2-pentanone (MIBK	43	13.552	13.540	0.012	97	33598	0.1587	
65 Toluene	91	14.423	14.423	0.000	92	61938	0.2926	
76 Ethylbenzene	91	16.688	16.687	0.001	96	14065	0.0568	
78 m-Xylene & p-Xylene	91	16.844	16.843	0.001	97	32411	0.1626	
82 o-Xylene	91	17.371	17.371	0.000	98	13312	0.0612	
93 1,2,4-Trimethylbenzene	105	19.082	19.081	0.001	97	9667	0.0413	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P108.D

Injection Date: 05-Mar-2015 06:27:30

Instrument ID: MJ

Operator ID: 403648

Lims ID: 140-2797-A-11

Lab Sample ID: 140-2797-11

Worklist Smp#: 17

Client ID: DI-OA-2015

Purge Vol: 500.000 mL

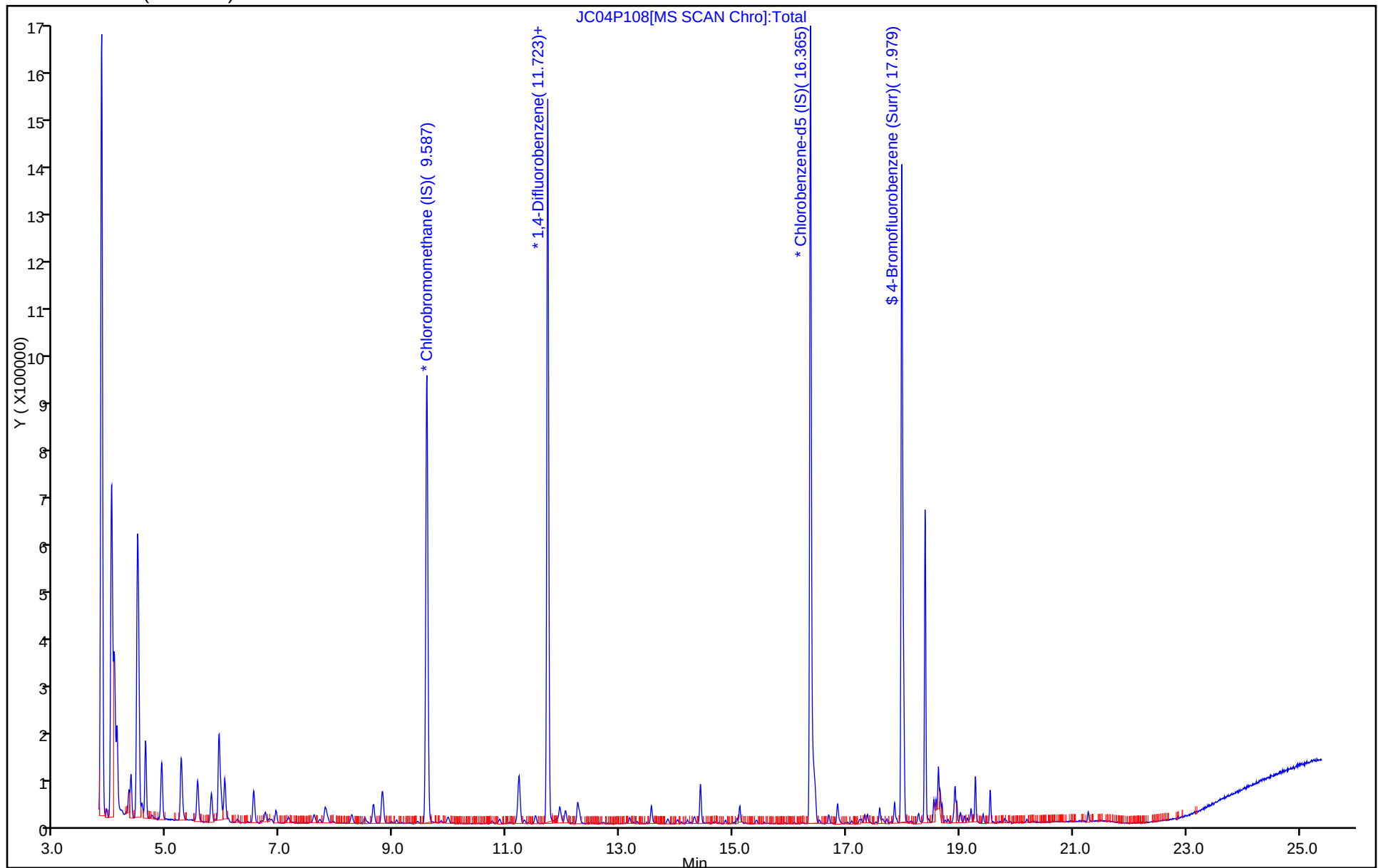
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P108.D

Injection Date: 05-Mar-2015 06:27:30

Instrument ID: MJ

Lims ID: 140-2797-A-11

Lab Sample ID: 140-2797-11

Client ID: DI-OA-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 17

Purge Vol: 500.000 mL

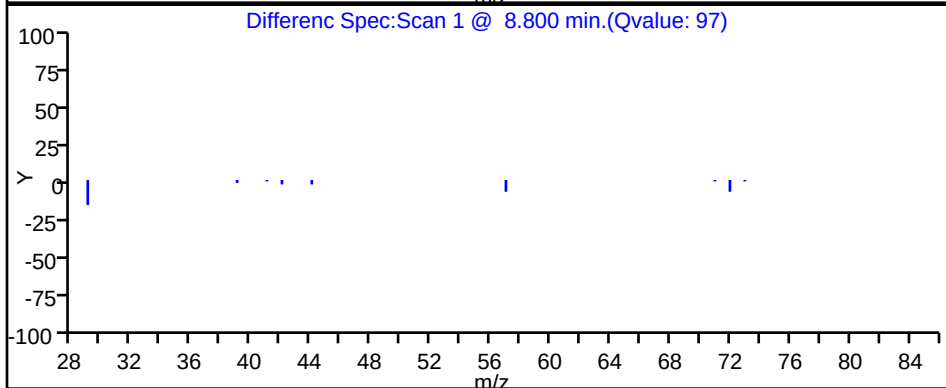
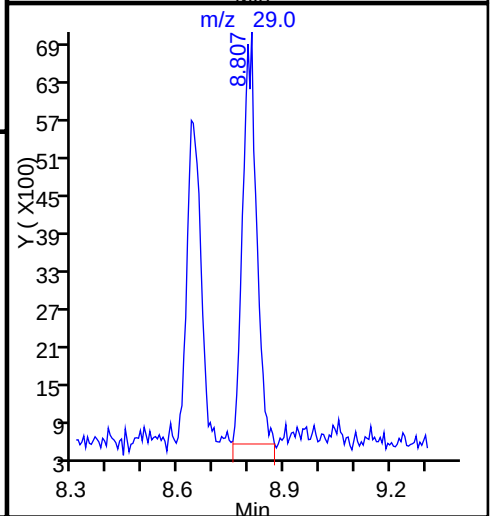
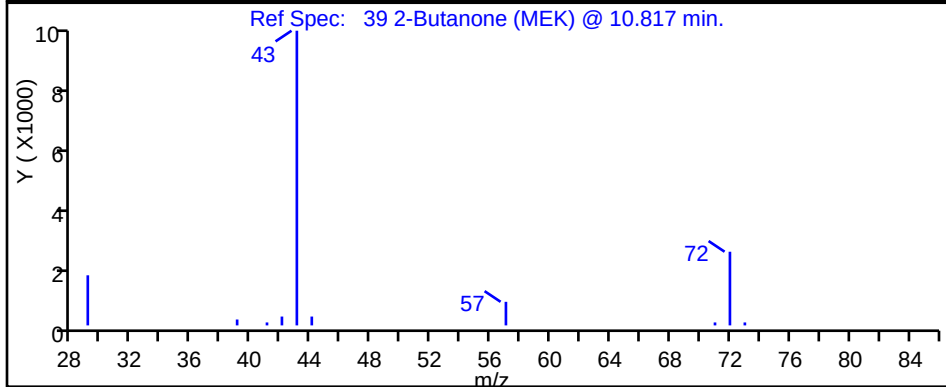
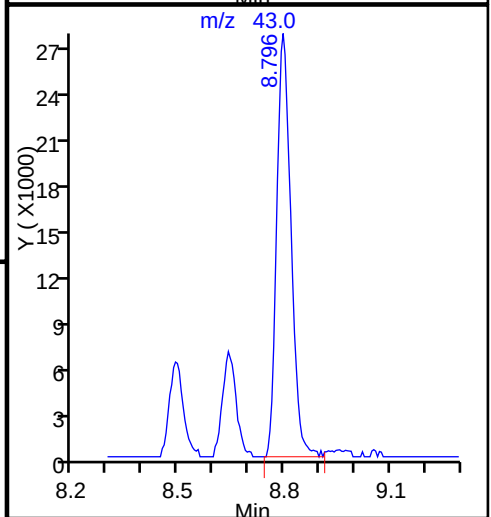
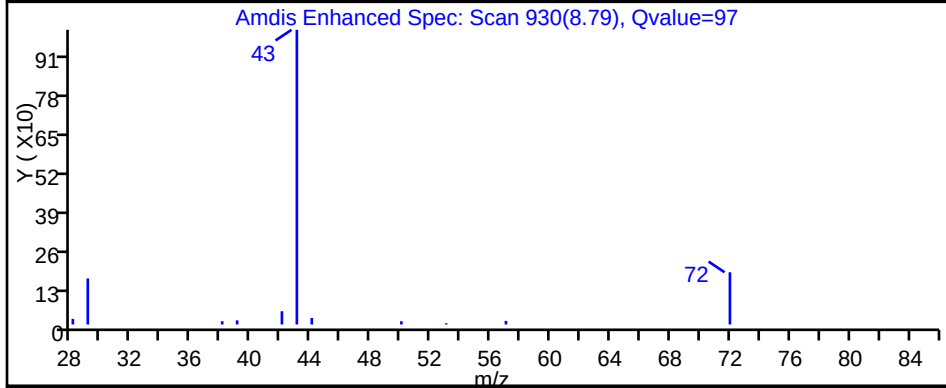
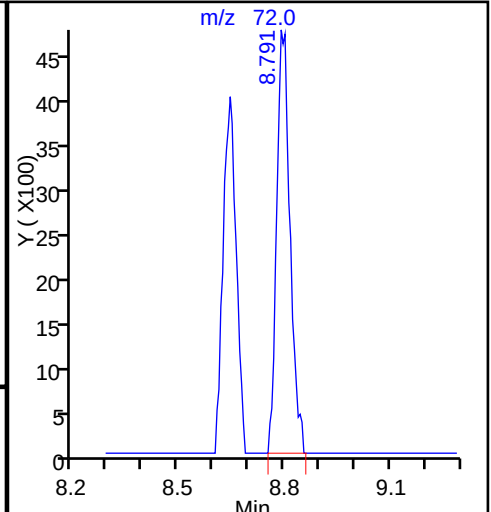
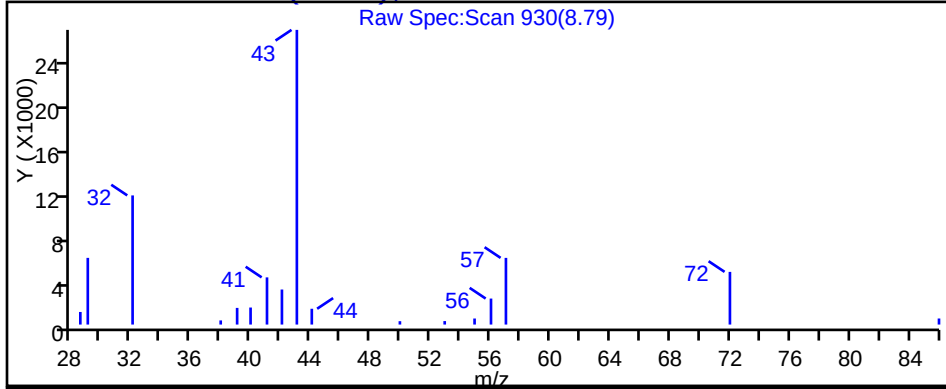
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P108.D

Injection Date: 05-Mar-2015 06:27:30

Instrument ID: MJ

Lims ID: 140-2797-A-11

Lab Sample ID: 140-2797-11

Client ID: DI-OA-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 17

Purge Vol: 500.000 mL

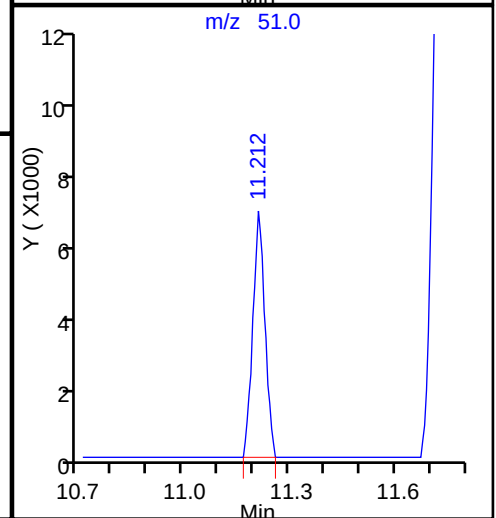
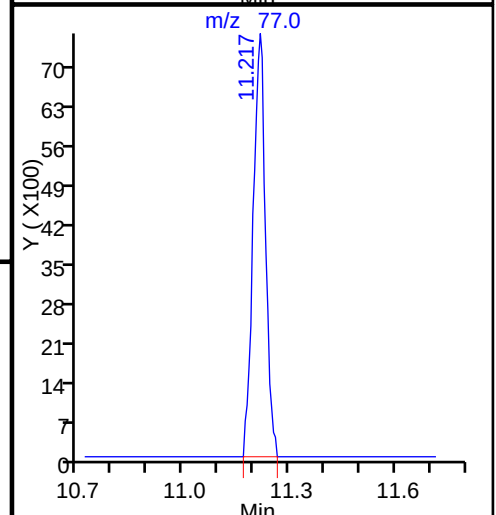
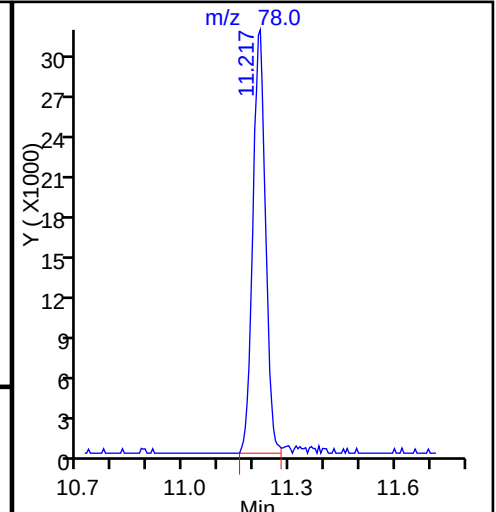
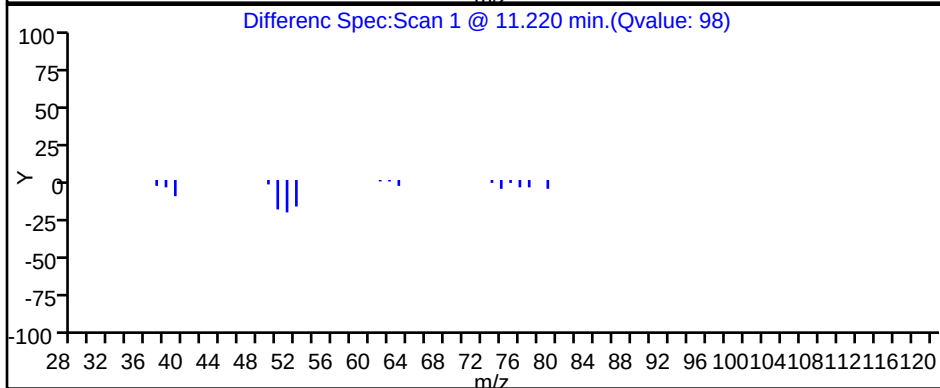
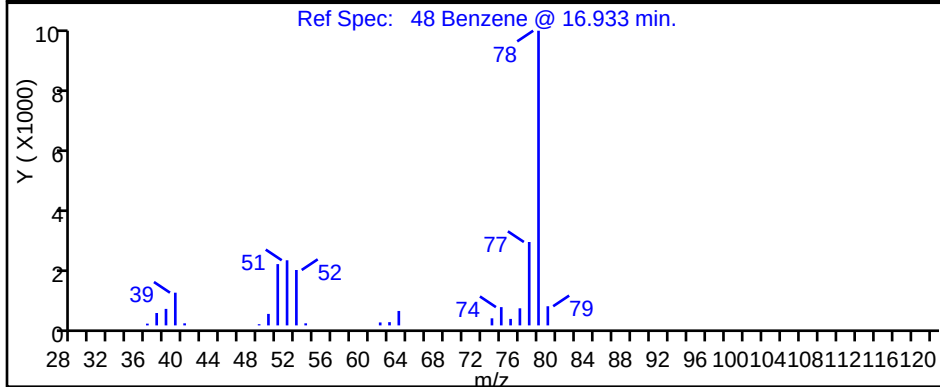
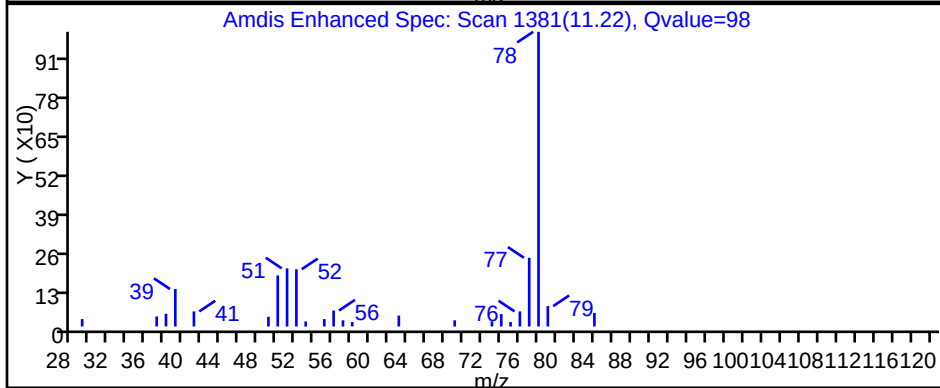
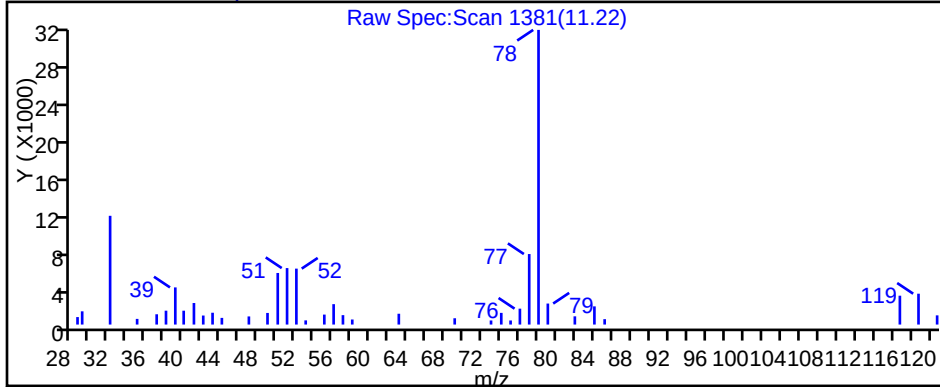
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P108.D

Injection Date: 05-Mar-2015 06:27:30

Instrument ID: MJ

Lims ID: 140-2797-A-11

Lab Sample ID: 140-2797-11

Client ID: DI-OA-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

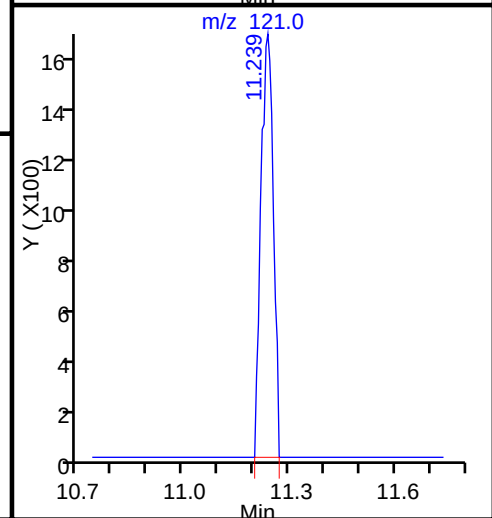
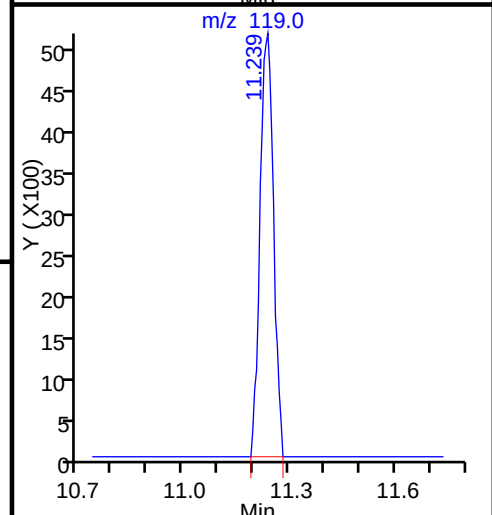
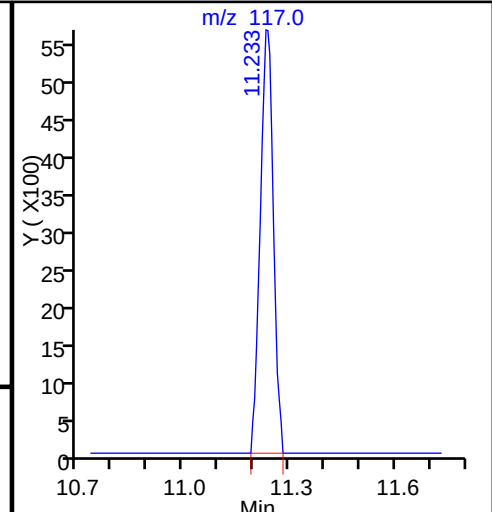
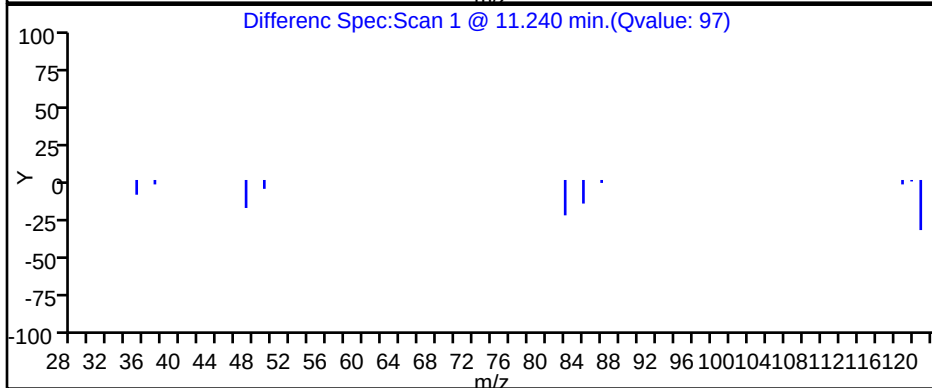
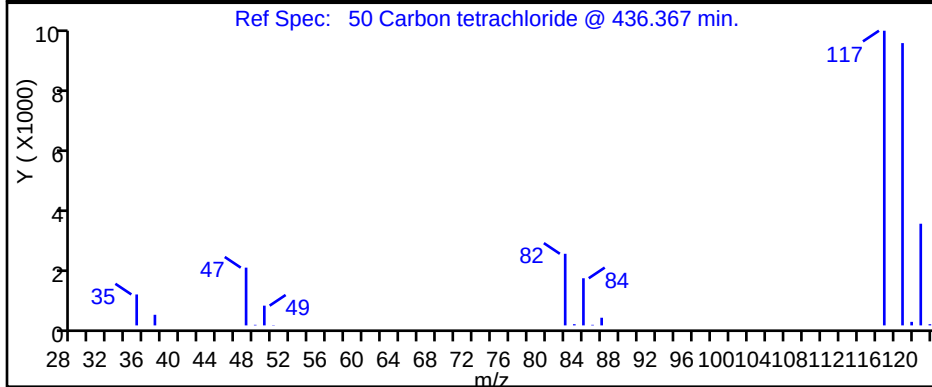
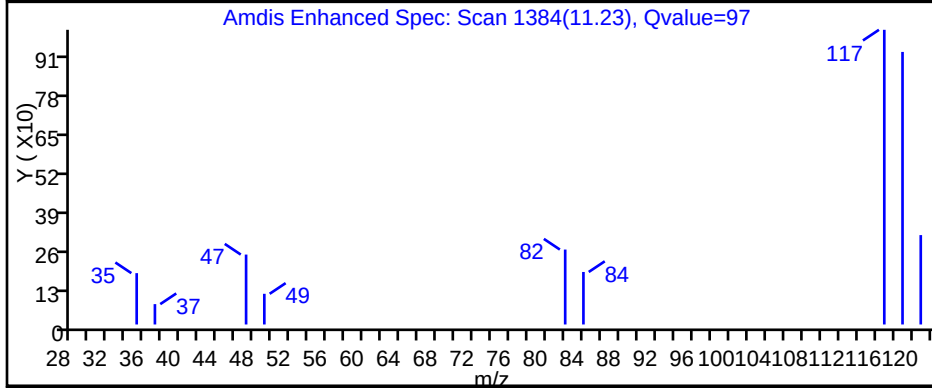
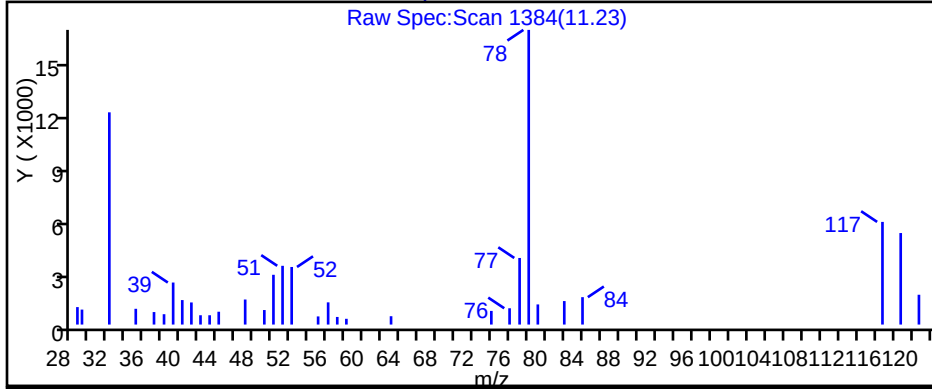
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P108.D

Injection Date: 05-Mar-2015 06:27:30

Instrument ID: MJ

Lims ID: 140-2797-A-11

Lab Sample ID: 140-2797-11

Client ID: DI-OA-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 17

Purge Vol: 500.000 mL

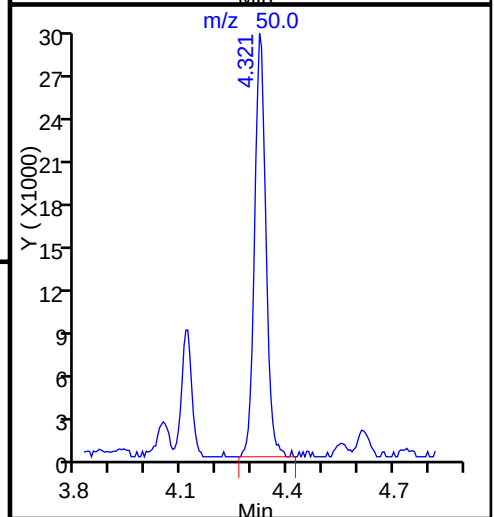
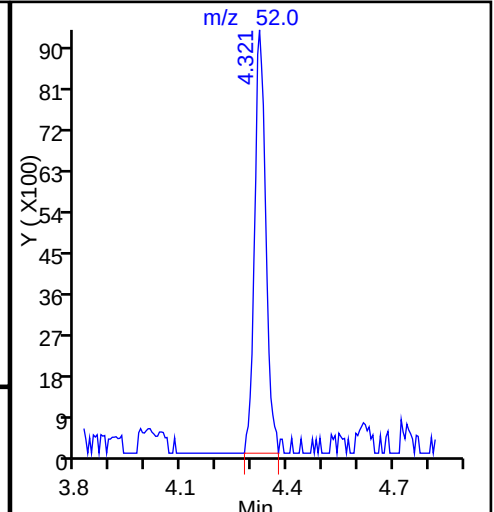
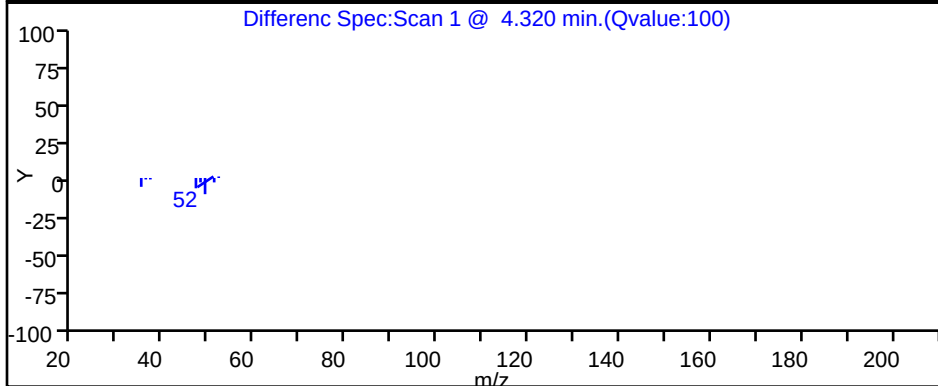
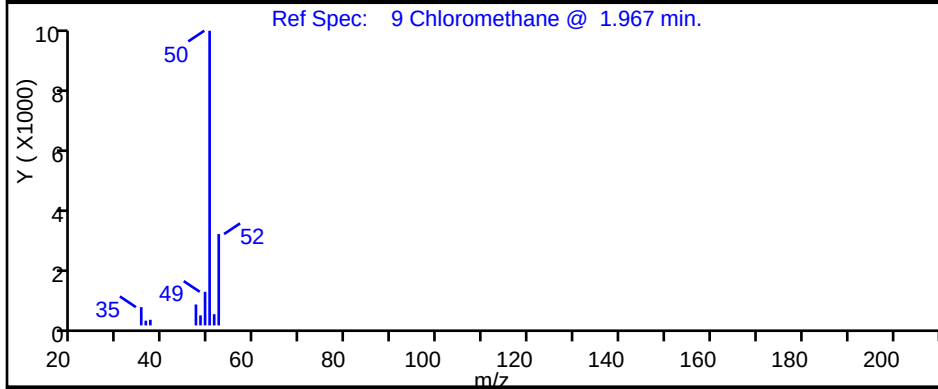
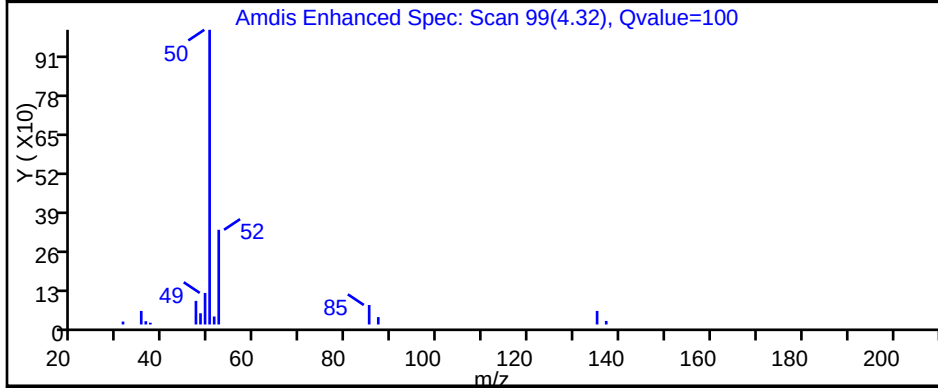
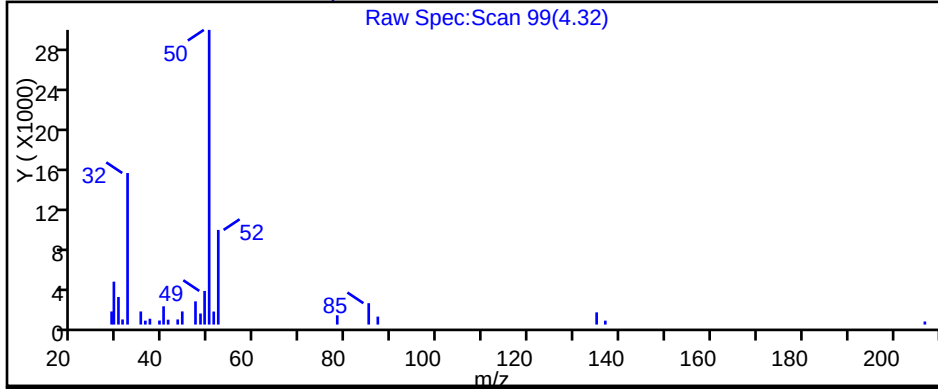
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P108.D

Injection Date: 05-Mar-2015 06:27:30

Instrument ID: MJ

Lims ID: 140-2797-A-11

Lab Sample ID: 140-2797-11

Client ID: DI-OA-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

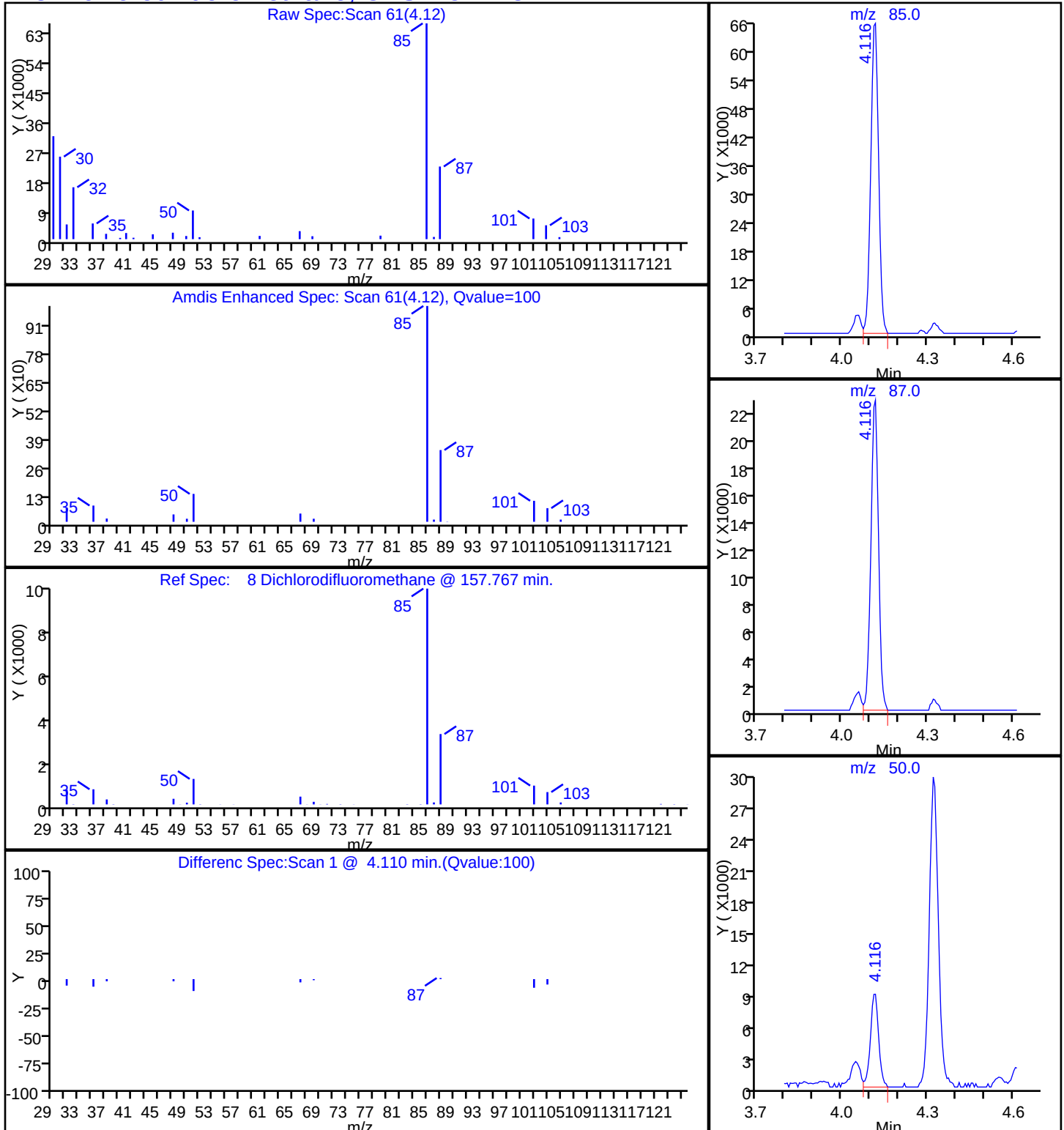
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P108.D

Injection Date: 05-Mar-2015 06:27:30

Instrument ID: MJ

Lims ID: 140-2797-A-11

Lab Sample ID: 140-2797-11

Client ID: DI-OA-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 17

Purge Vol: 500.000 mL

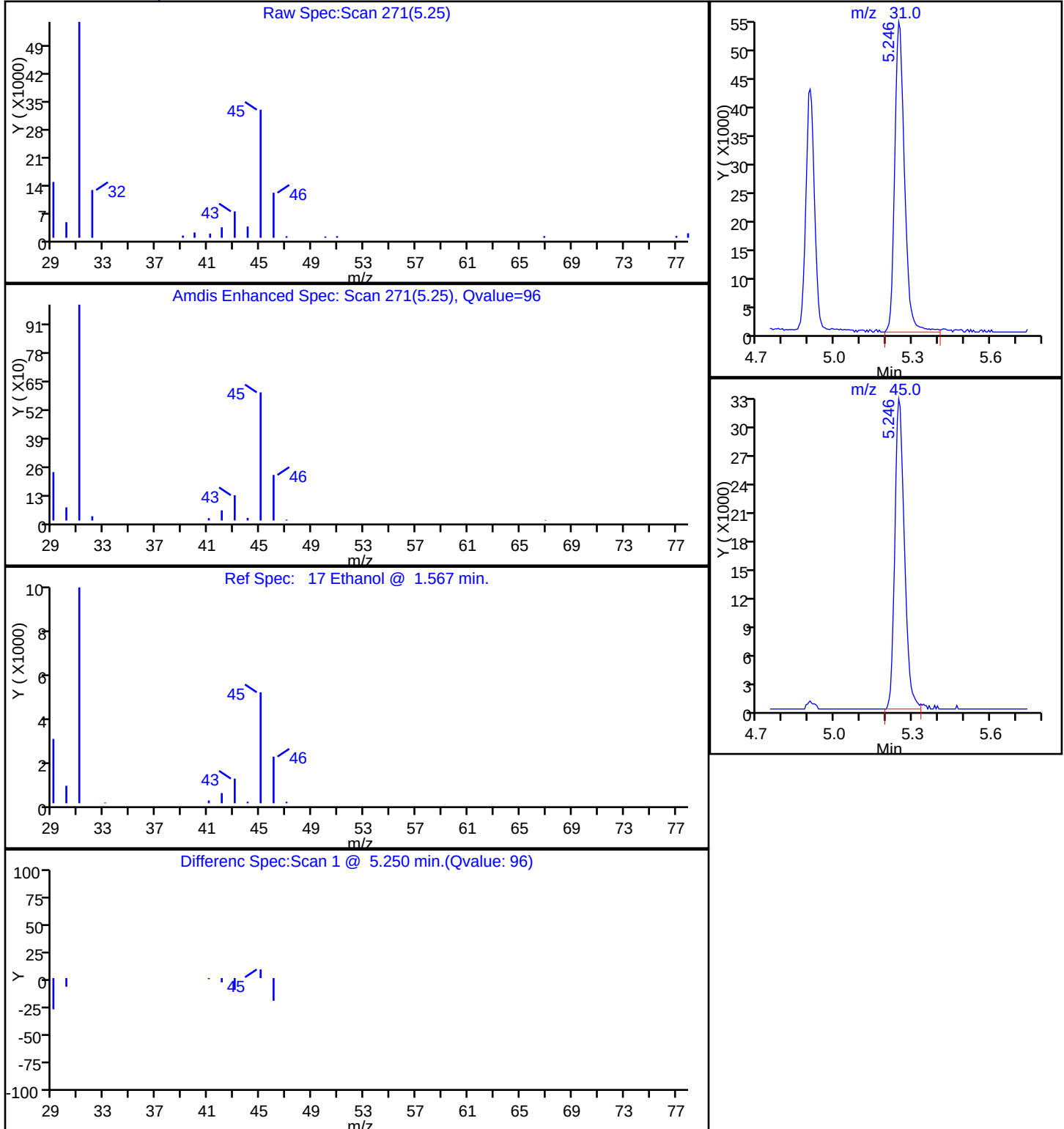
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P108.D

Injection Date: 05-Mar-2015 06:27:30

Instrument ID: MJ

Lims ID: 140-2797-A-11

Lab Sample ID: 140-2797-11

Client ID: DI-OA-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 17

Purge Vol: 500.000 mL

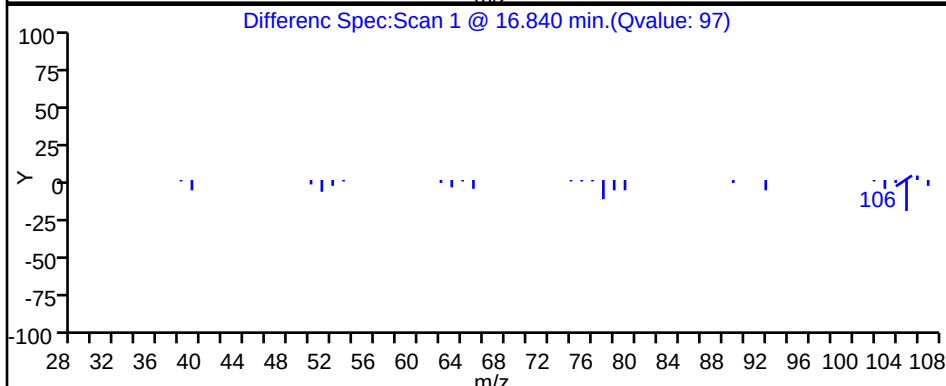
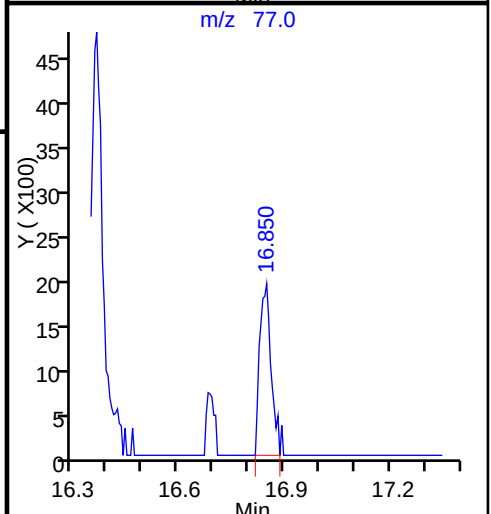
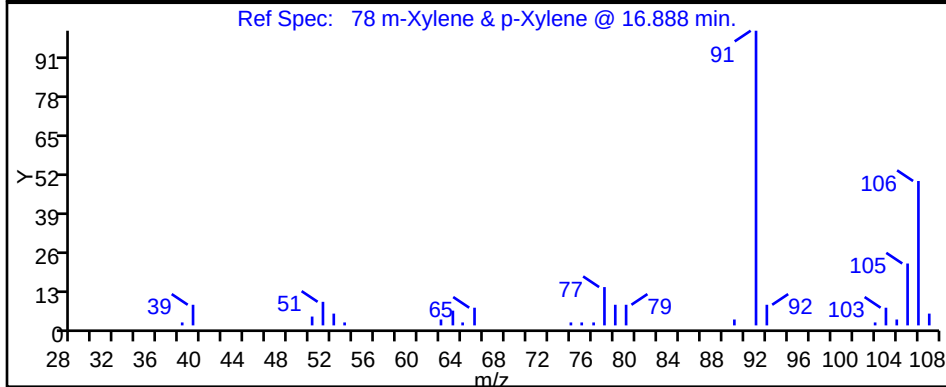
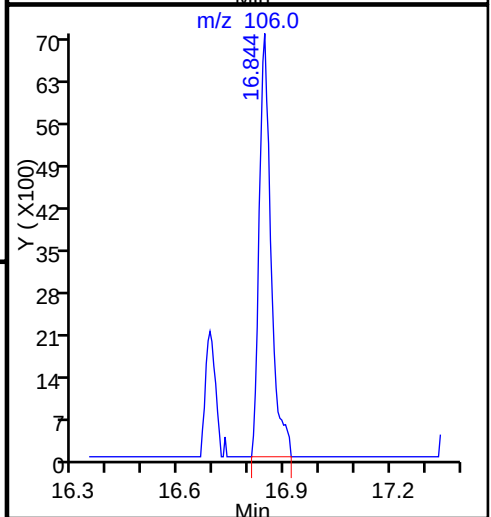
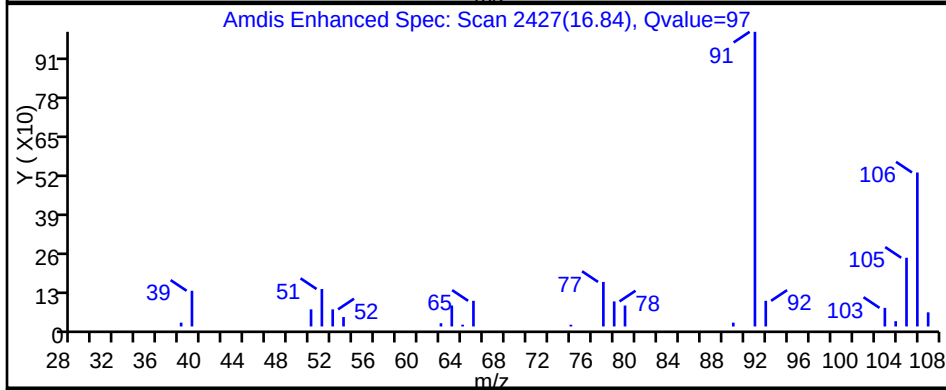
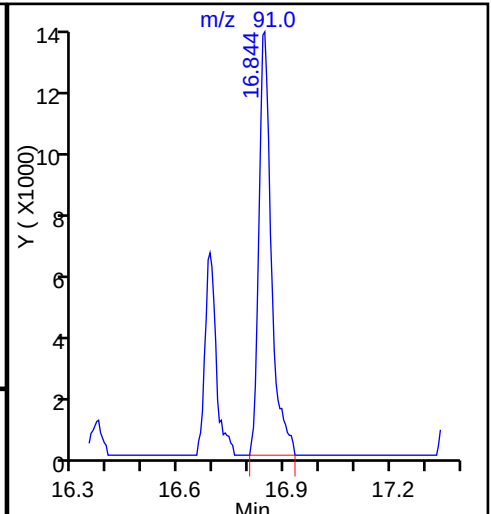
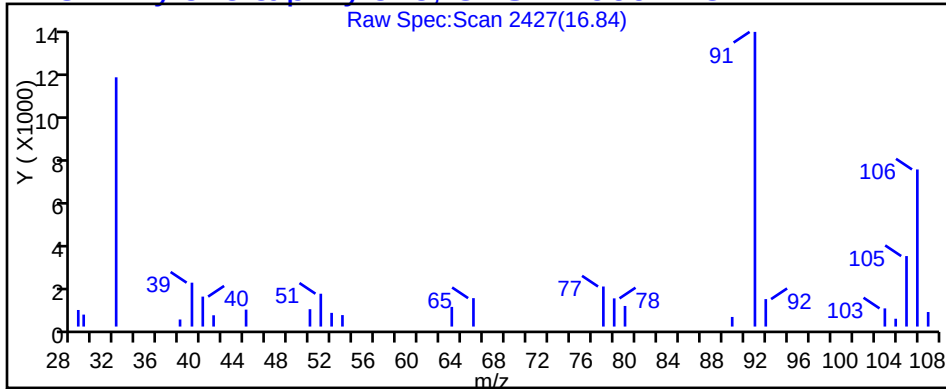
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P108.D

Injection Date: 05-Mar-2015 06:27:30

Instrument ID: MJ

Lims ID: 140-2797-A-11

Lab Sample ID: 140-2797-11

Client ID: DI-OA-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 17

Purge Vol: 500.000 mL

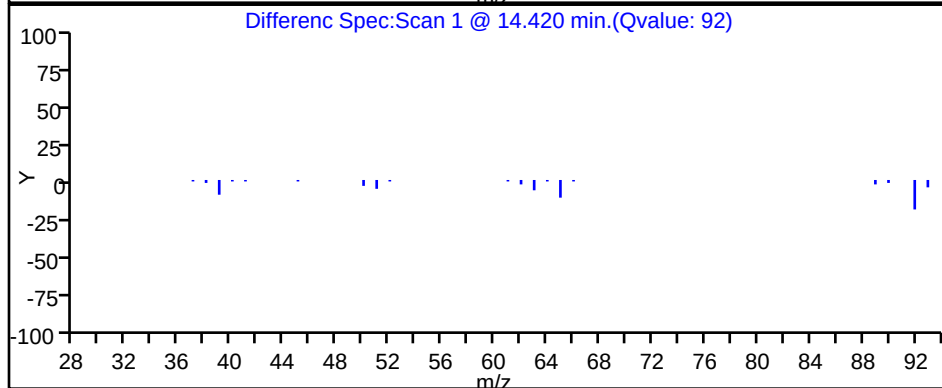
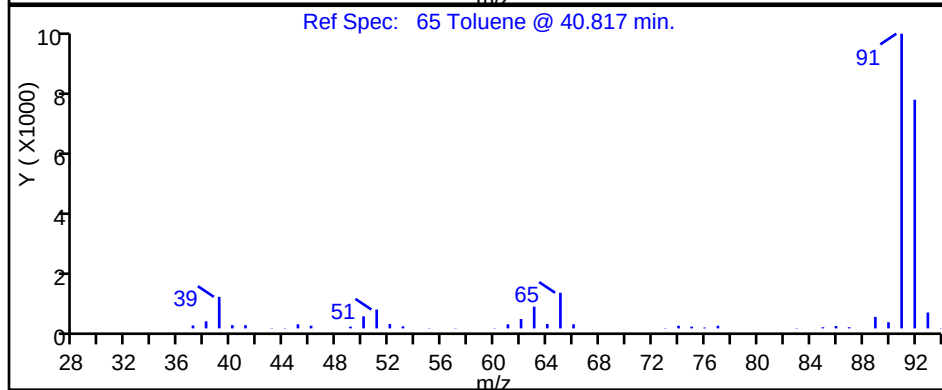
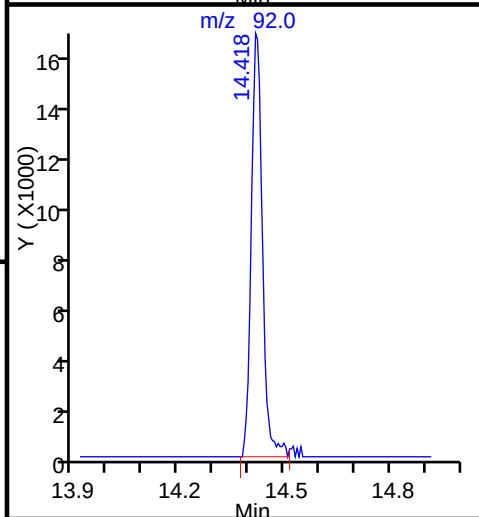
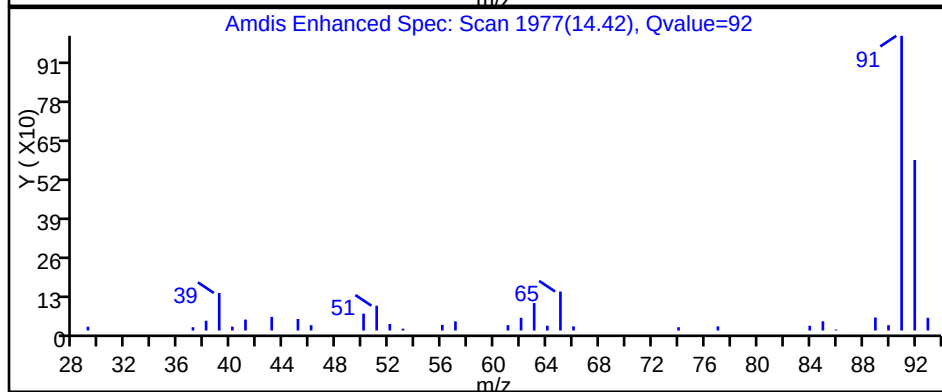
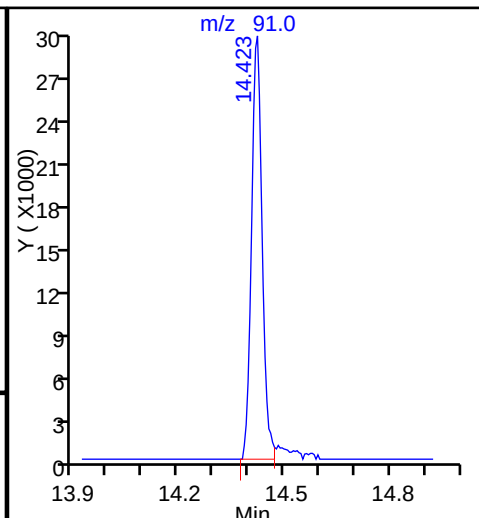
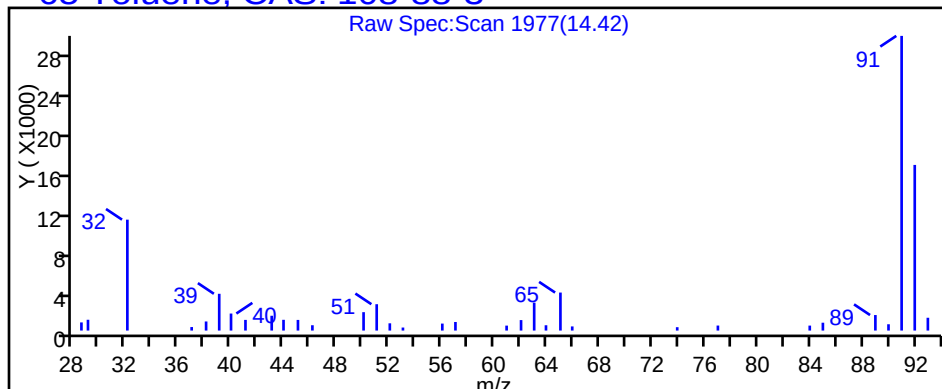
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P108.D

Injection Date: 05-Mar-2015 06:27:30

Instrument ID: MJ

Lims ID: 140-2797-A-11

Lab Sample ID: 140-2797-11

Client ID: DI-OA-2015

Operator ID: 403648

ALS Bottle#: 8

Worklist Smp#: 17

Purge Vol: 500.000 mL

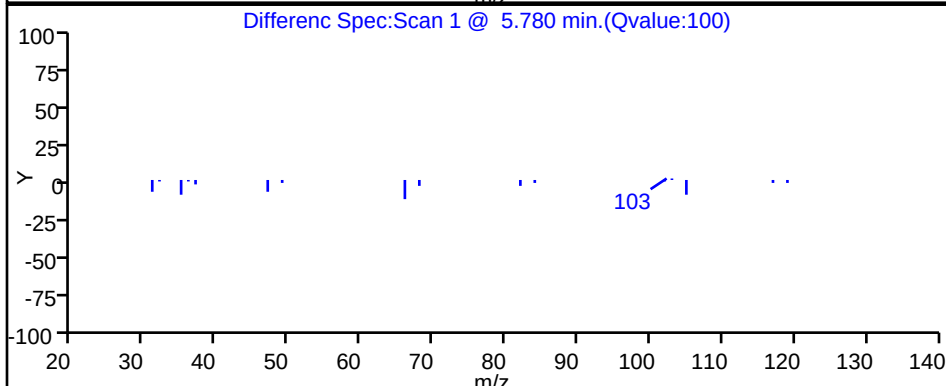
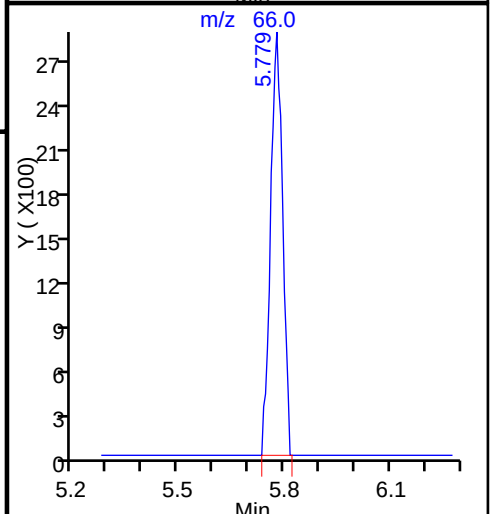
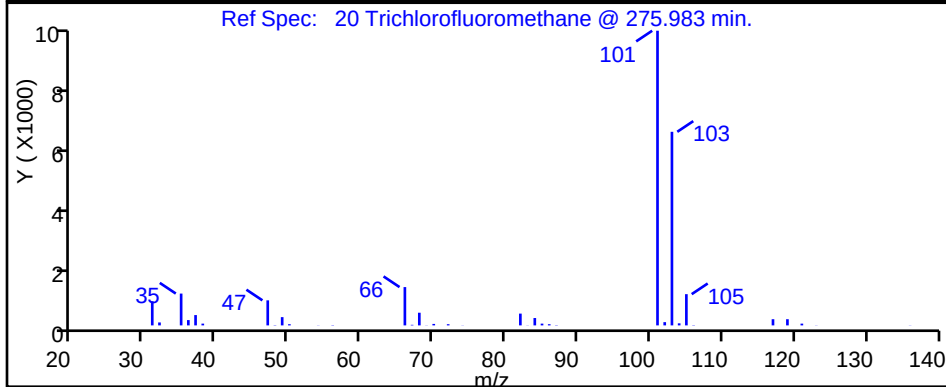
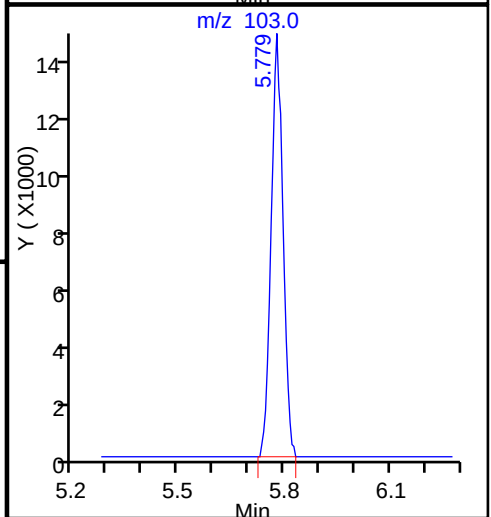
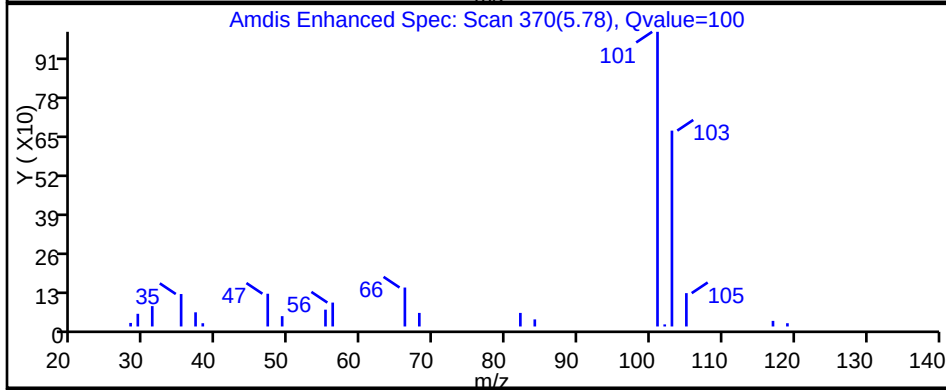
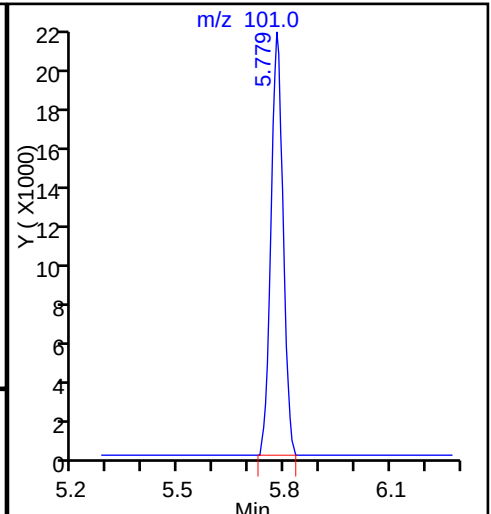
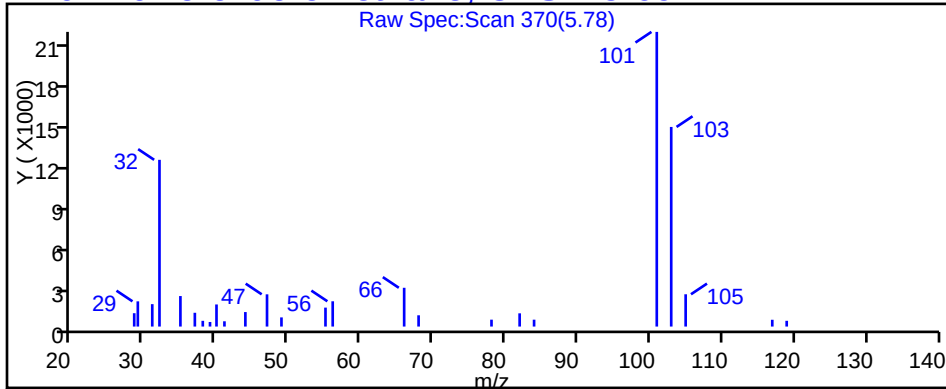
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: H27-BA-2015 Lab Sample ID: 140-2797-12

Matrix: Air Lab File ID: JC04P109.D

Analysis Method: TO 15 LL Date Collected: 02/25/2015 08:30

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 07:21

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.: 2450 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		0.080	
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	0.23		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	0.085		0.040	
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	0.52		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H27-BA-2015 Lab Sample ID: 140-2797-12
 Matrix: Air Lab File ID: JC04P109.D
 Analysis Method: TO 15 LL Date Collected: 02/25/2015 08:30
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 07:21
 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.: 2450 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	0.41		0.080	
64-17-5	Ethanol	46.07	47		0.80	
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	0.12		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	0.23		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		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.18		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: H27-BA-2015 Lab Sample ID: 140-2797-12

Matrix: Air Lab File ID: JC04P109.D

Analysis Method: TO 15 LL Date Collected: 02/25/2015 08:30

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 07:21

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.: 2450 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		0.32	
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	0.74		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	0.53		0.25	
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	1.1		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: H27-BA-2015 Lab Sample ID: 140-2797-12
 Matrix: Air Lab File ID: JC04P109.D
 Analysis Method: TO 15 LL Date Collected: 02/25/2015 08:30
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 07:21
 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.: 2450 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	2.0		0.40	
64-17-5	Ethanol	46.07	89		1.5	
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	0.54		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	0.88		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		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.0		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P109.D
 Lims ID: 140-2797-A-12 Lab Sample ID: 140-2797-12
 Client ID: H27-BA-2015
 Sample Type: Client
 Inject. Date: 05-Mar-2015 07:21:30 ALS Bottle#: 9 Worklist Smp#: 18
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2797-a-12
 Misc. Info.: J030415,TO15,,140-0001415-018
 Operator ID: 403648 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150228-1415.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 05-Mar-2015 13:01:05 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK036

First Level Reviewer: tajh

Date: 05-Mar-2015 11:03:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.583	9.586	-0.003	97	271253	4.00	
* 2 1,4-Difluorobenzene	114	11.718	11.722	-0.004	96	1256504	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.366	16.365	0.001	90	1033438	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.975	17.978	-0.003	91	629265	3.72	
8 Dichlorodifluoromethane	85	4.112	4.105	0.007	100	124300	0.4070	
9 Chloromethane	52	4.322	4.315	0.007	100	22464	0.5173	
16 Chloroethane	64	5.139	5.138	0.001	21	779	0.0152	
17 Ethanol	31	5.236	5.229	0.007	96	1774160	47.0	
20 Trichlorofluoromethane	101	5.774	5.772	0.002	99	48742	0.1823	
28 2-Methyl-2-propanol	59	6.656	6.622	0.034	94	7653	0.0478	
30 1,1,2-Trichloro-1,2,2-trif	101	6.721	6.725	-0.004	94	12384	0.0688	
31 Methylene Chloride	84	6.914	6.918	-0.004	97	13052	0.1501	
39 2-Butanone (MEK)	72	8.792	8.780	0.012	95	5949	0.1842	
40 Hexane	56	8.803	8.801	0.002	69	7731	0.0855	
43 Chloroform	83	9.588	9.592	-0.004	28	13163	0.0769	
46 1,2-Dichloroethane	62	10.734	10.738	-0.004	90	2027	0.0194	
49 Cyclohexane	69	11.202	11.211	-0.009	50	1806	0.0376	
48 Benzene	78	11.207	11.211	-0.004	98	53739	0.2315	
50 Carbon tetrachloride	117	11.234	11.233	0.001	96	14529	0.0848	
53 Isooctane	57	11.923	11.927	-0.003	95	17184	0.0372	
62 4-Methyl-2-pentanone (MIBK	43	13.553	13.540	0.013	98	28621	0.1499	
65 Toluene	91	14.424	14.423	0.001	93	44121	0.2340	
76 Ethylbenzene	91	16.689	16.687	0.002	96	9958	0.0452	
78 m-Xylene & p-Xylene	91	16.845	16.843	0.002	97	22096	0.1244	
82 o-Xylene	91	17.367	17.371	-0.004	97	8664	0.0447	
93 1,2,4-Trimethylbenzene	105	19.088	19.081	0.007	97	5638	0.0270	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P109.D

Injection Date: 05-Mar-2015 07:21:30

Instrument ID: MJ

Operator ID: 403648

Lims ID: 140-2797-A-12

Lab Sample ID: 140-2797-12

Worklist Smp#: 18

Client ID: H27-BA-2015

Purge Vol: 500.000 mL

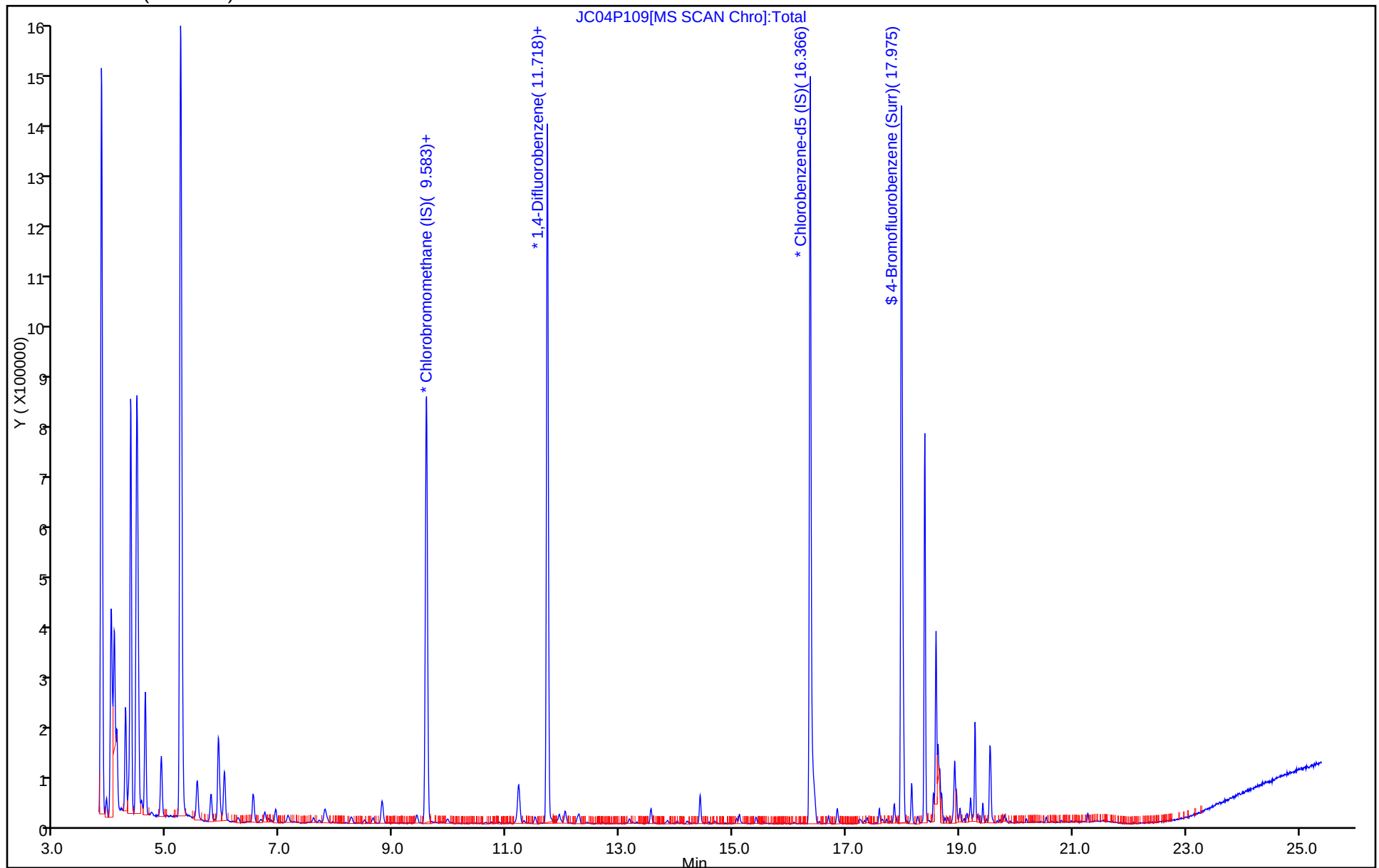
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P109.D

Injection Date: 05-Mar-2015 07:21:30

Instrument ID: MJ

Lims ID: 140-2797-A-12

Lab Sample ID: 140-2797-12

Client ID: H27-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 18

Purge Vol: 500.000 mL

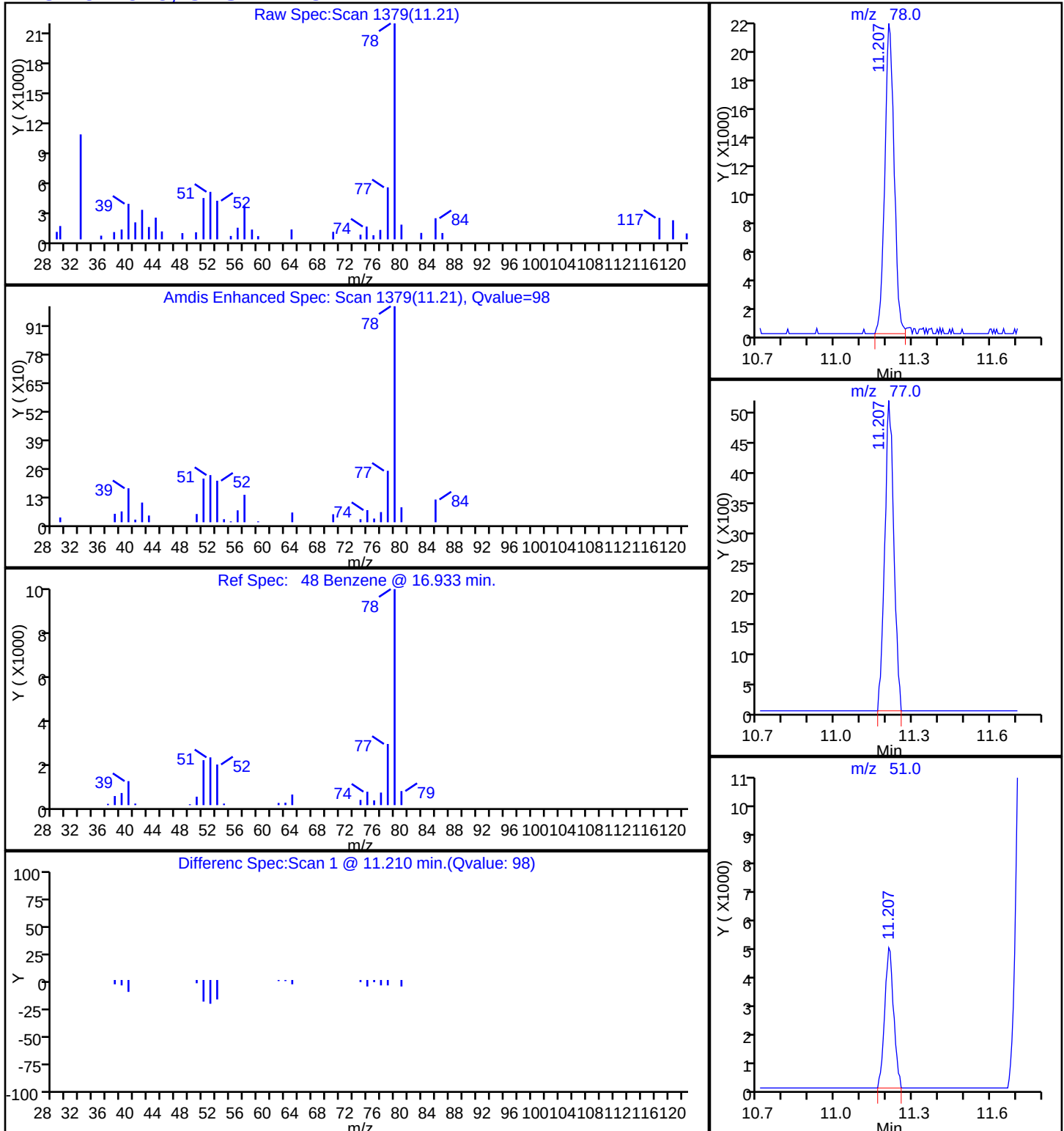
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P109.D

Injection Date: 05-Mar-2015 07:21:30

Instrument ID: MJ

Lims ID: 140-2797-A-12

Lab Sample ID: 140-2797-12

Client ID: H27-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 18

Purge Vol: 500.000 mL

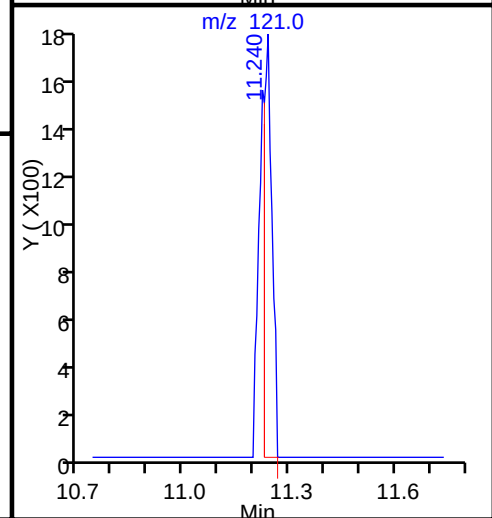
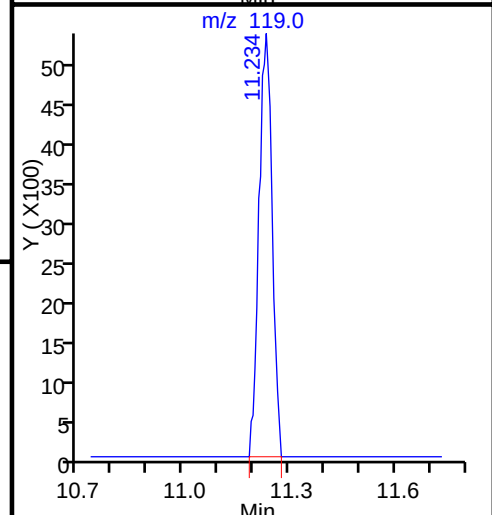
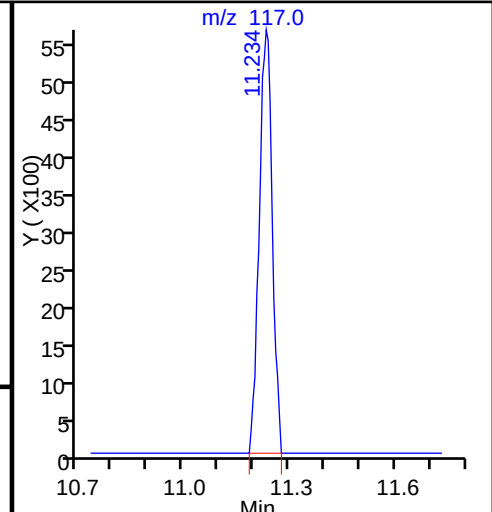
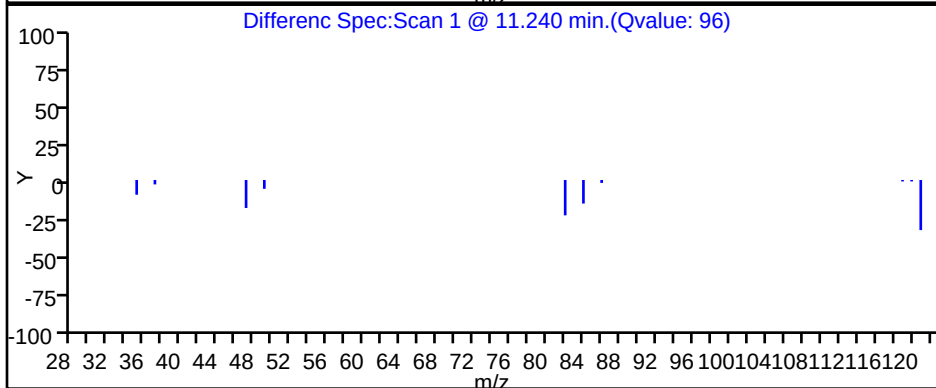
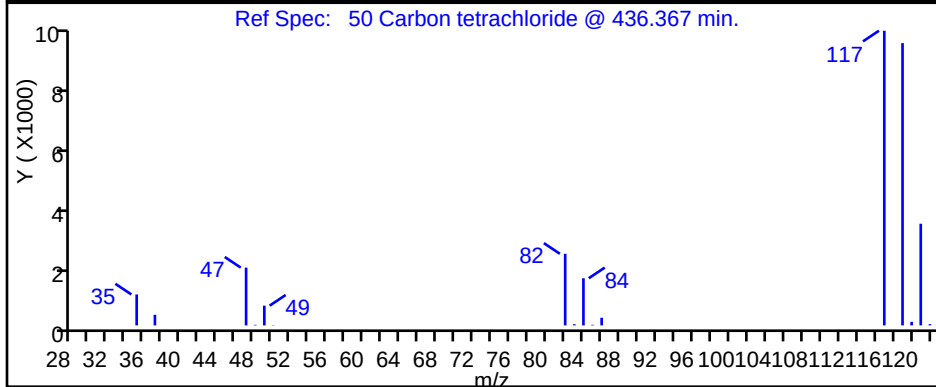
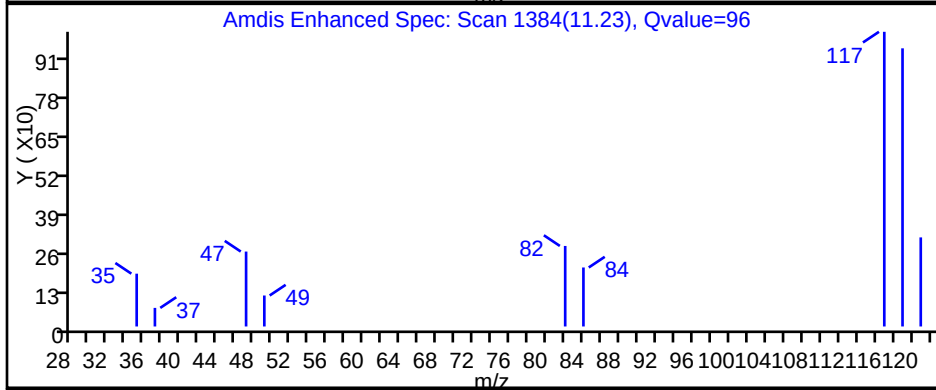
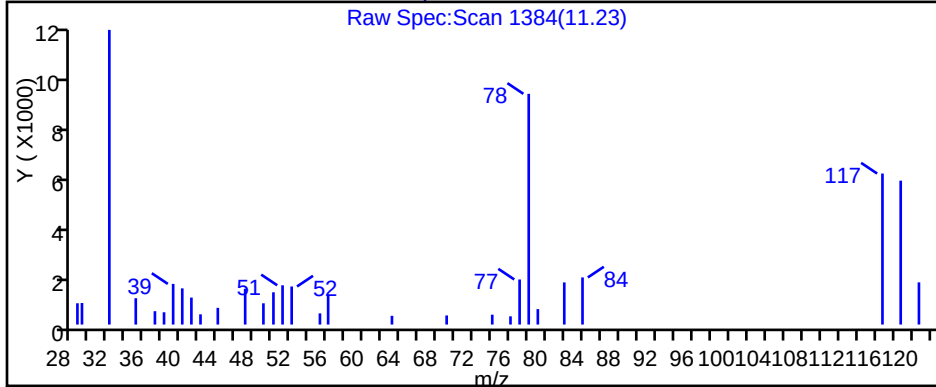
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P109.D

Injection Date: 05-Mar-2015 07:21:30

Instrument ID: MJ

Lims ID: 140-2797-A-12

Lab Sample ID: 140-2797-12

Client ID: H27-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 18

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

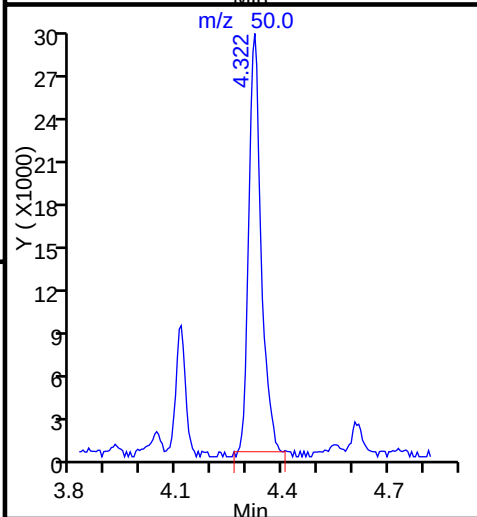
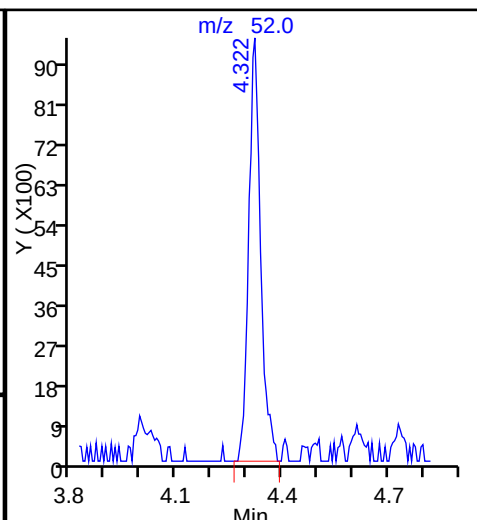
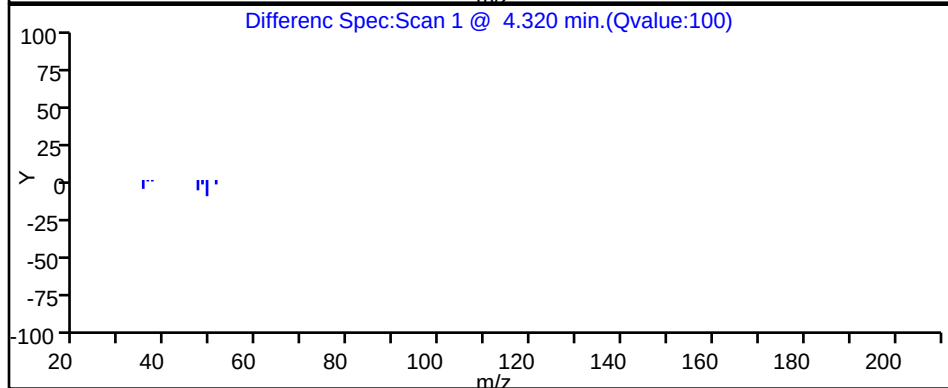
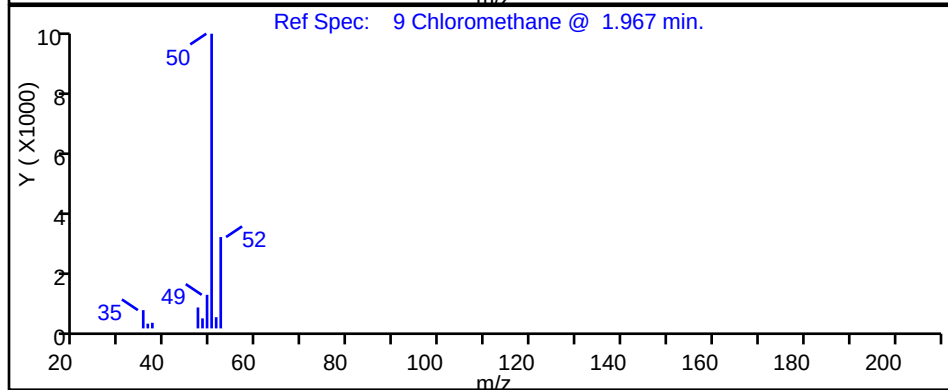
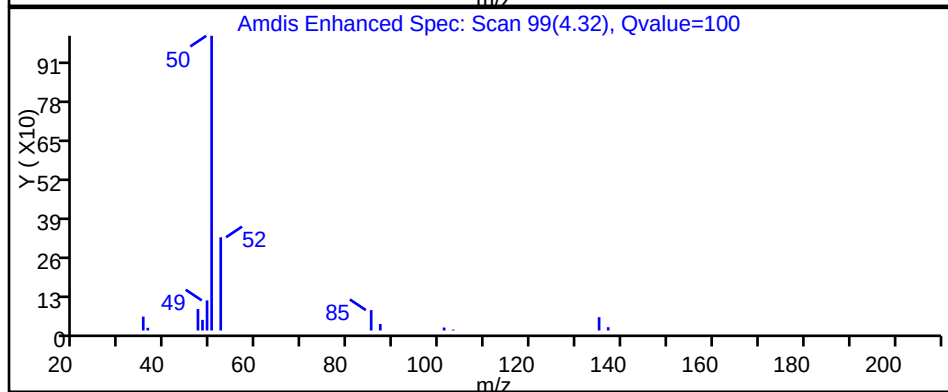
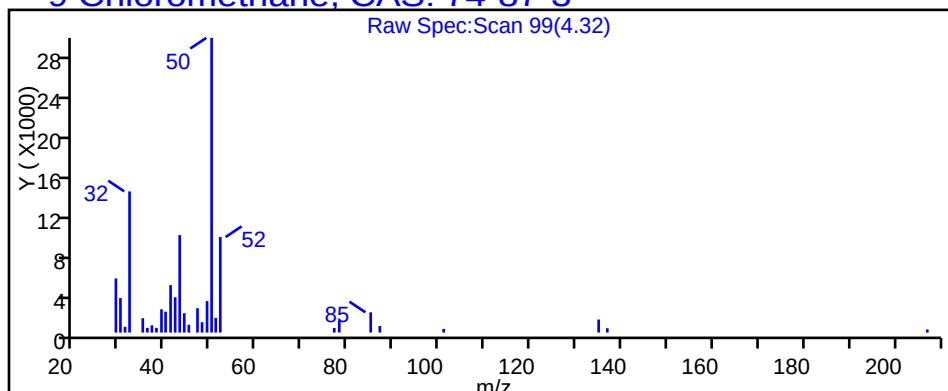
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P109.D

Injection Date: 05-Mar-2015 07:21:30

Instrument ID: MJ

Lims ID: 140-2797-A-12

Lab Sample ID: 140-2797-12

Client ID: H27-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 18

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

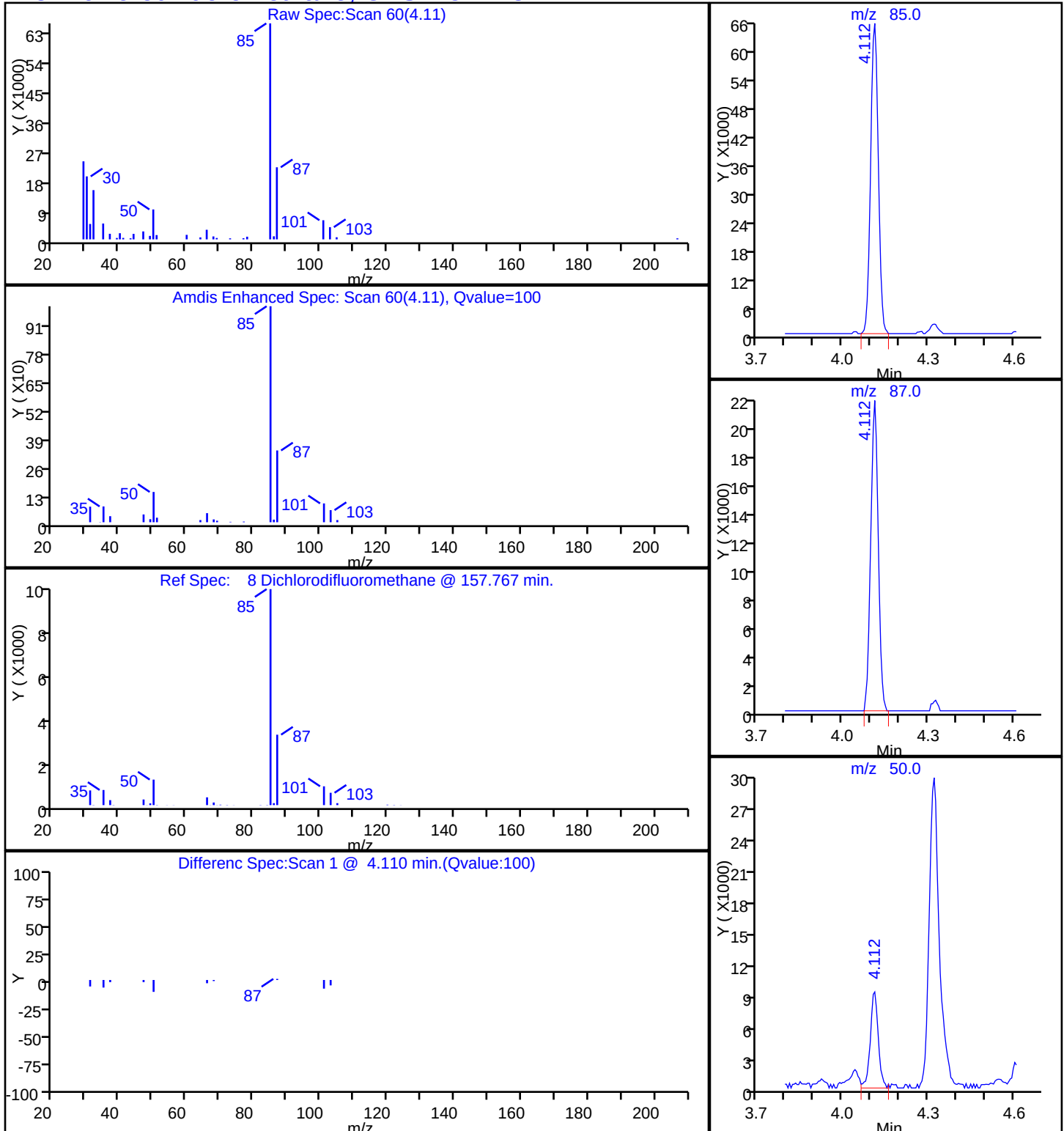
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P109.D

Injection Date: 05-Mar-2015 07:21:30

Instrument ID: MJ

Lims ID: 140-2797-A-12

Lab Sample ID: 140-2797-12

Client ID: H27-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 18

Purge Vol: 500.000 mL

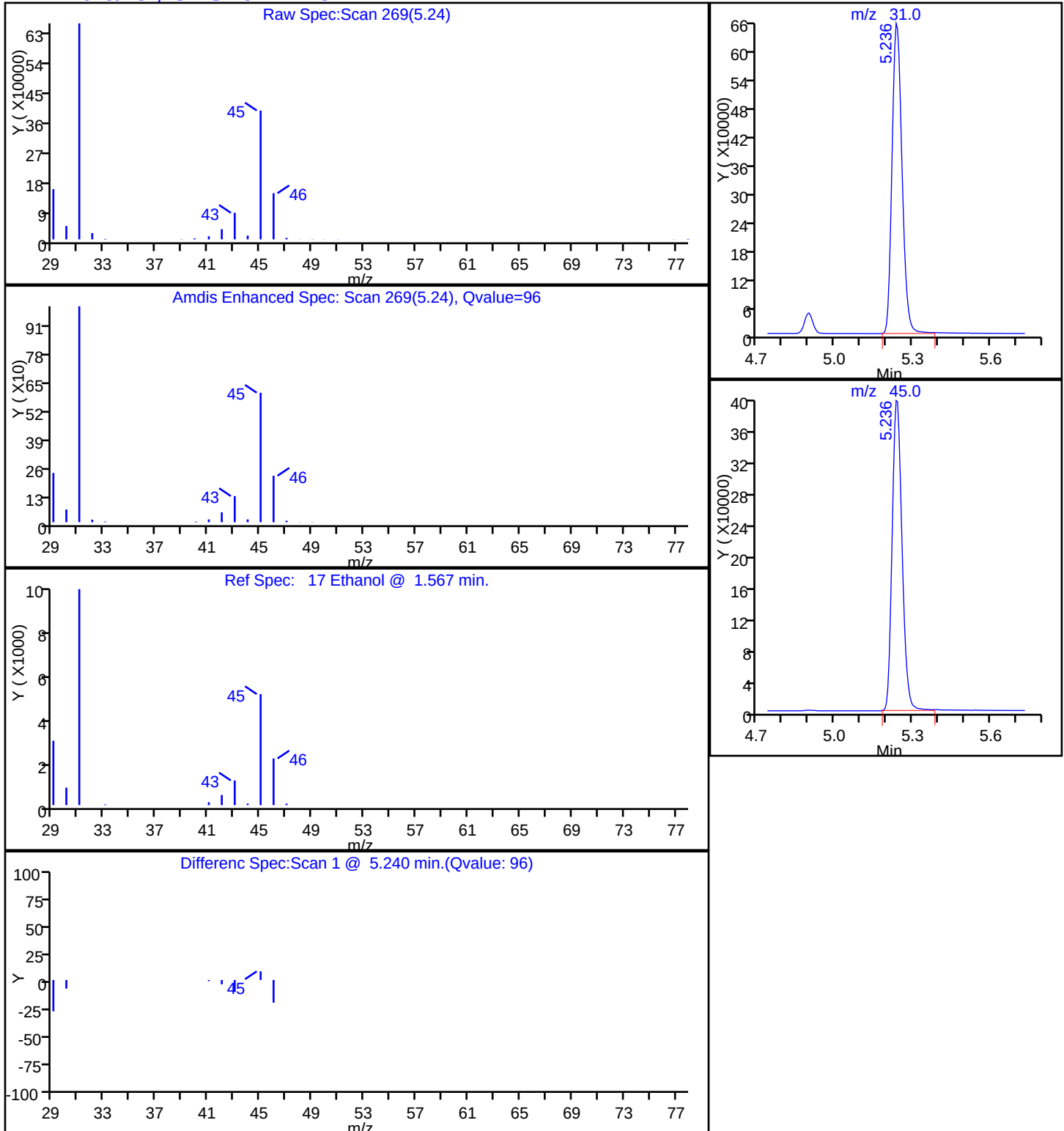
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P109.D

Injection Date: 05-Mar-2015 07:21:30

Instrument ID: MJ

Lims ID: 140-2797-A-12

Lab Sample ID: 140-2797-12

Client ID: H27-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 18

Purge Vol: 500.000 mL

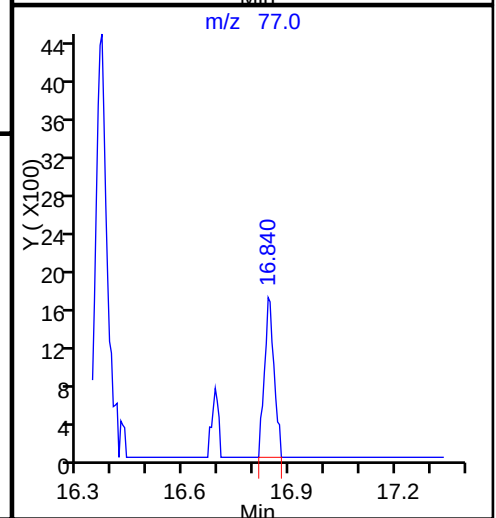
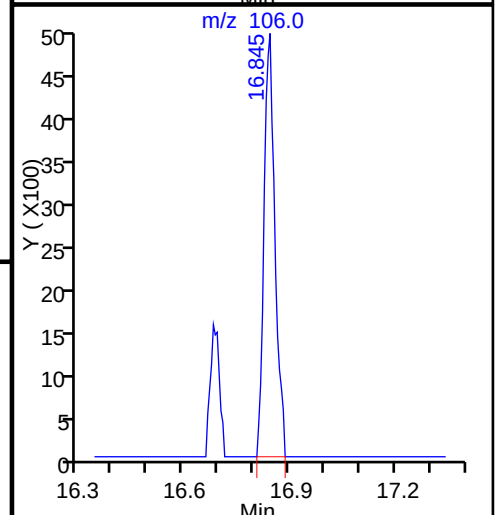
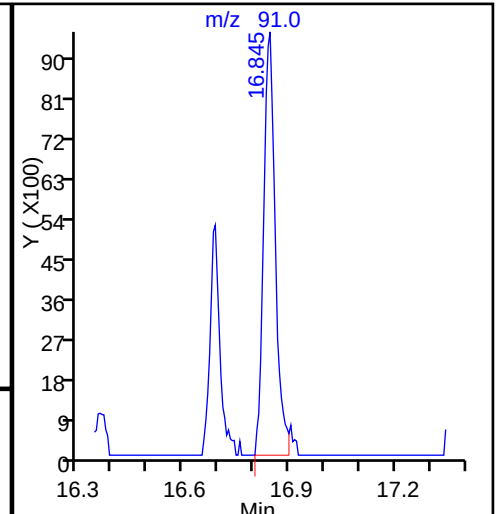
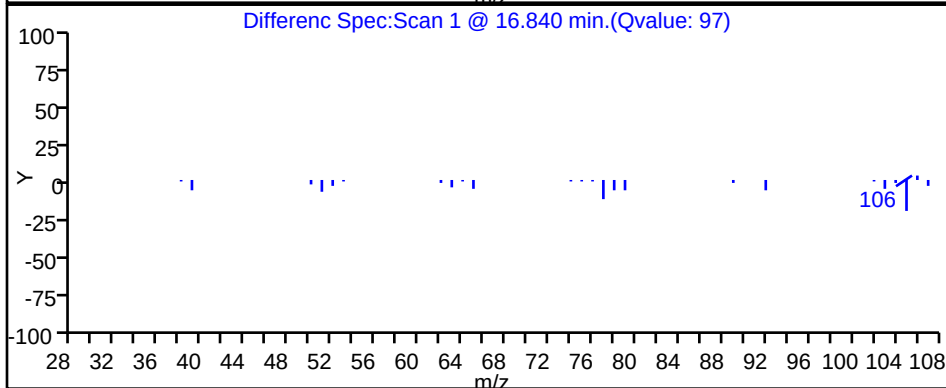
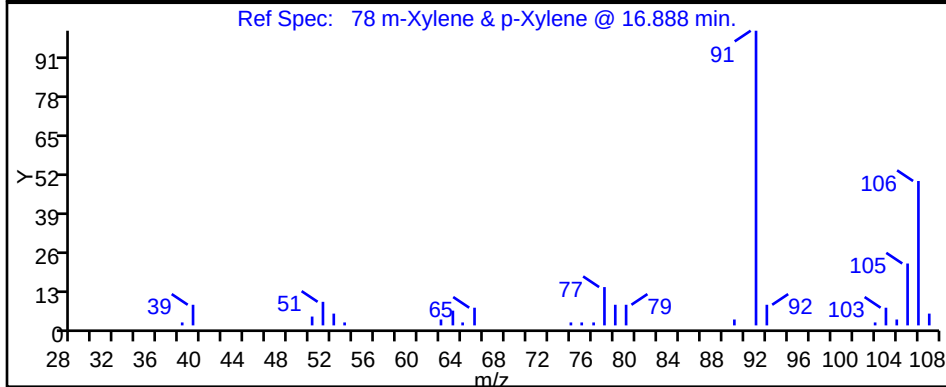
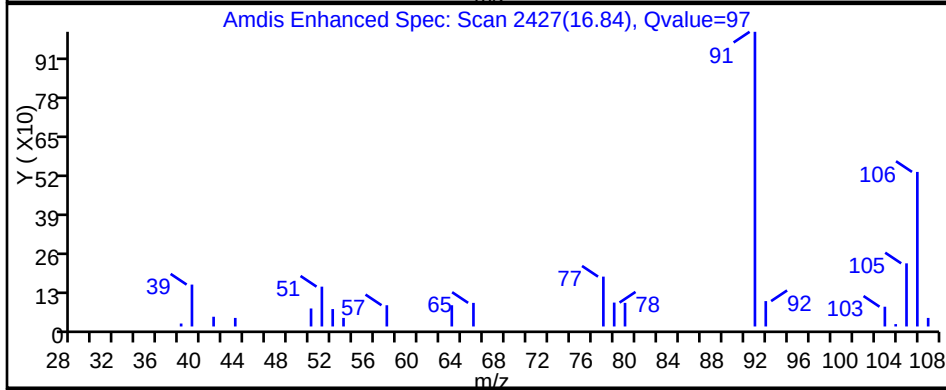
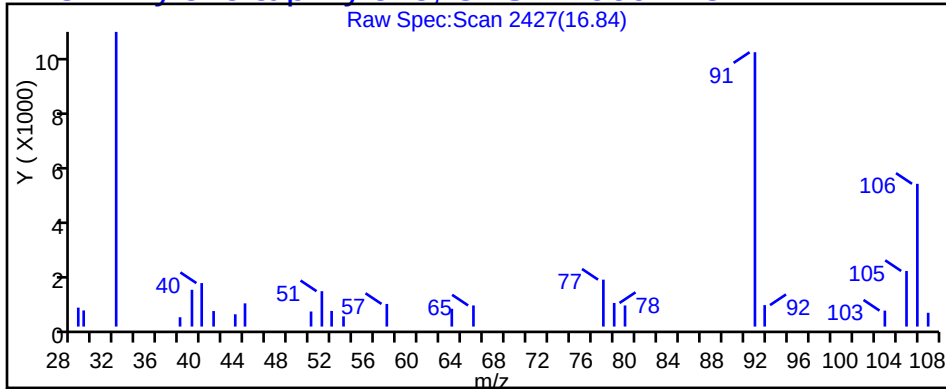
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P109.D

Injection Date: 05-Mar-2015 07:21:30

Instrument ID: MJ

Lims ID: 140-2797-A-12

Lab Sample ID: 140-2797-12

Client ID: H27-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 18

Purge Vol: 500.000 mL

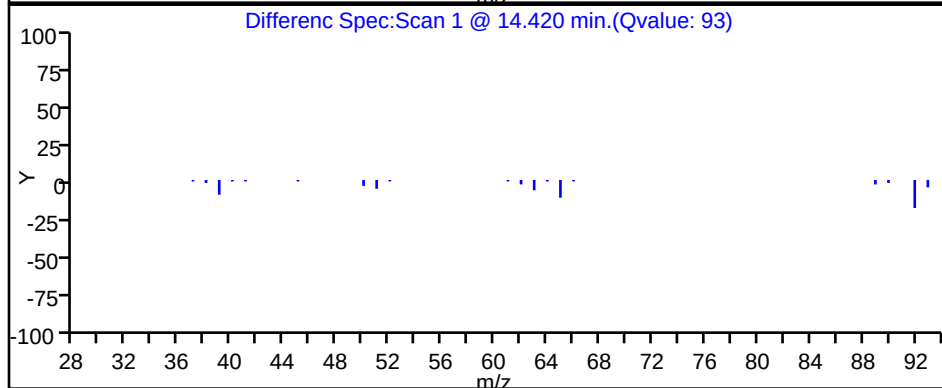
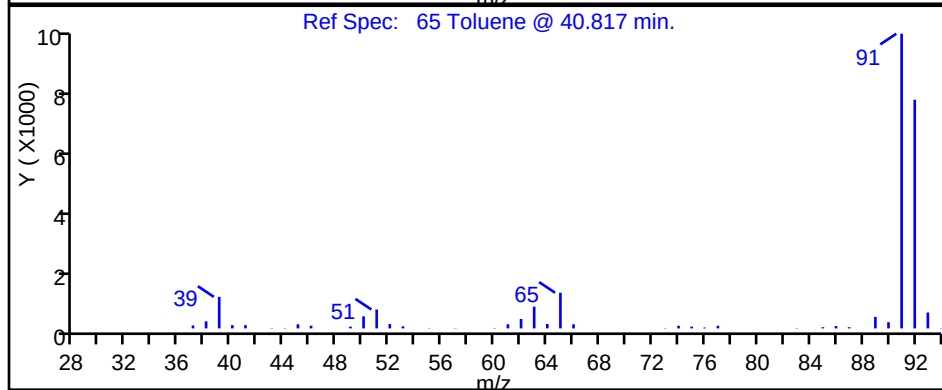
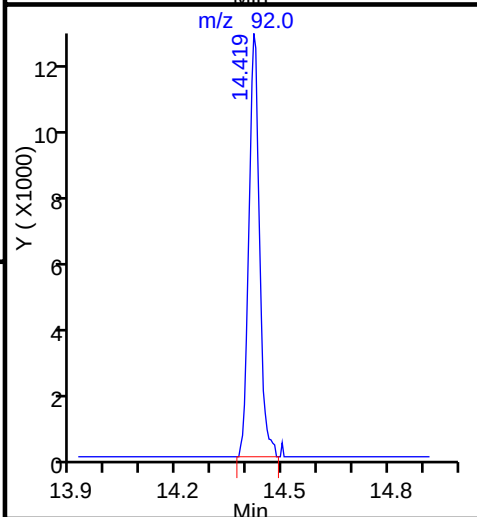
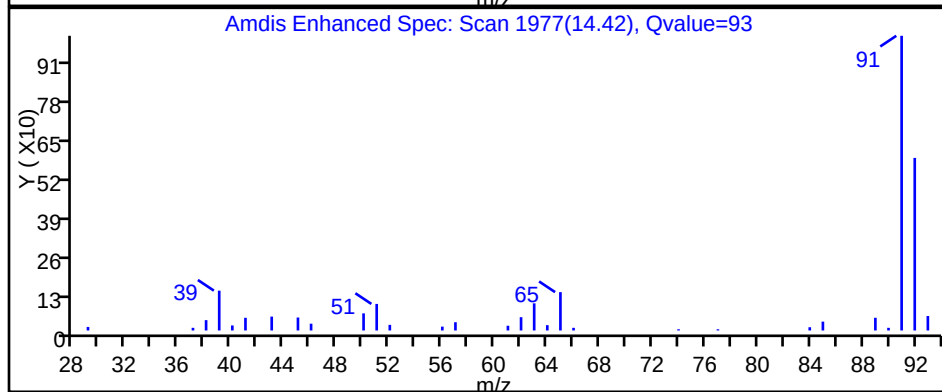
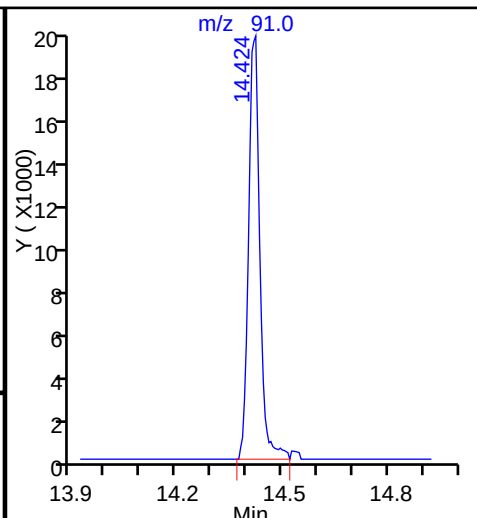
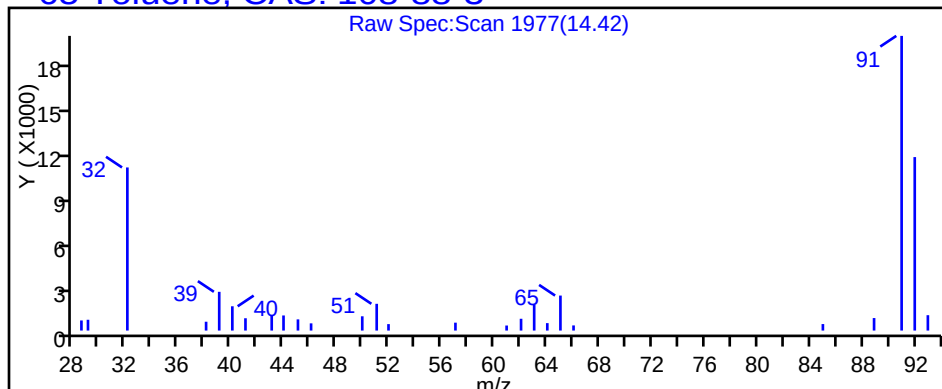
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04P109.D

Injection Date: 05-Mar-2015 07:21:30

Instrument ID: MJ

Lims ID: 140-2797-A-12

Lab Sample ID: 140-2797-12

Client ID: H27-BA-2015

Operator ID: 403648

ALS Bottle#: 9

Worklist Smp#: 18

Purge Vol: 500.000 mL

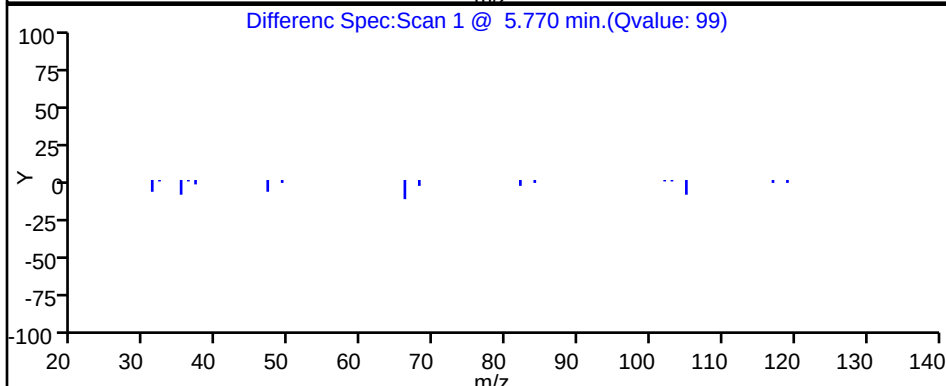
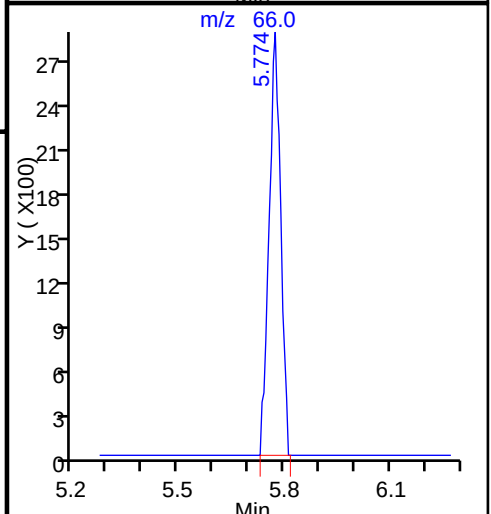
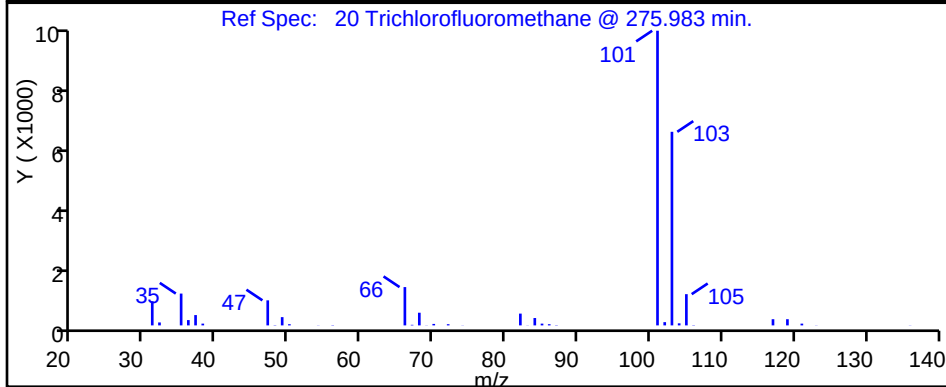
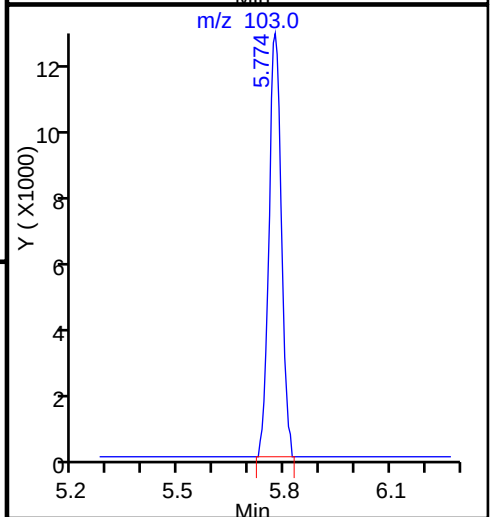
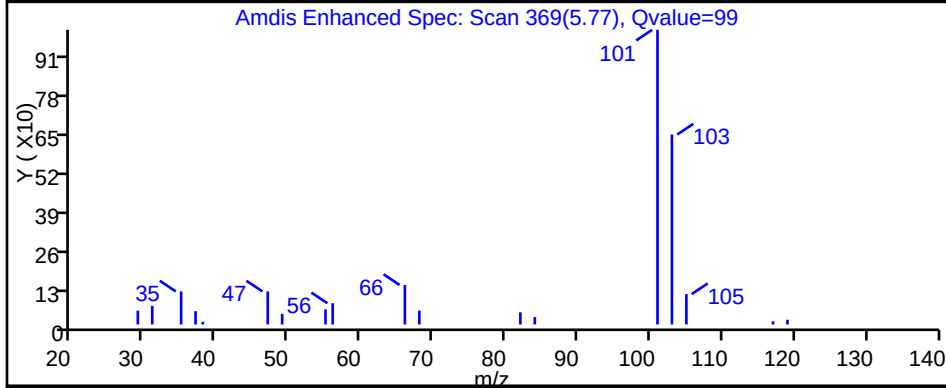
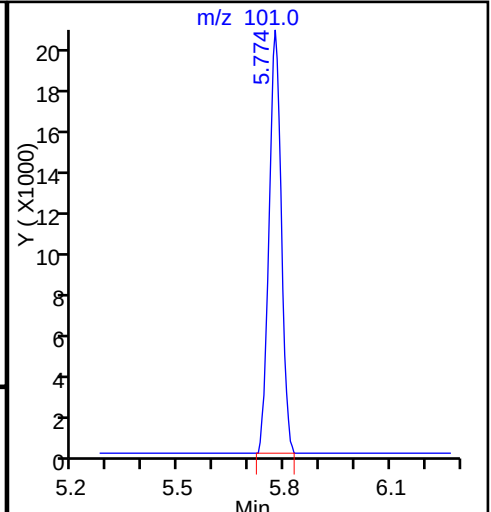
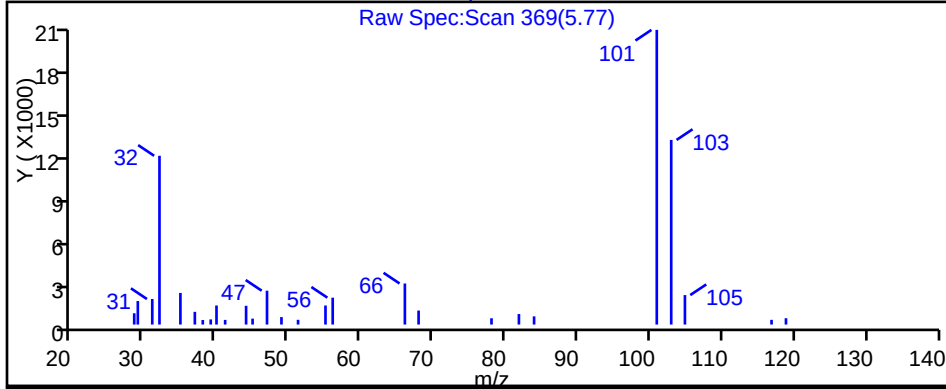
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-2321/2	JB02icL1.D
Level 2	IC 140-2321/3	JB02icL2.D
Level 3	IC 140-2321/4	JB02icL3.D
Level 4	IC 140-2321/5	JB02icL4.D
Level 5	IC 140-2321/6	JB02icL5.D
Level 6	ICIS 140-2321/7	JB02icisL6.D
Level 7	IC 140-2321/8	JB02icL7.D
Level 8	IC 140-2321/9	JB02icL8.D
Level 9	IC 140-2321/10	JB02icL9.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		B	M1	M2								
Chlorodifluoromethane	0.5243 0.5074	0.5056 0.4593	0.5587 0.4251	0.5376 0.4051	0.4290	Ave		0.4836				11.0		30.0			
Propene	++++ 1.9305	++++ 1.7278	2.6500 1.4831	2.3779 1.3899	1.7224	Ave		1.8974				24.0		30.0			
Dichlorodifluoromethane	4.3761 4.9268	4.4552 4.4440	5.4408 3.8344	5.2354 3.5735	4.2420	Ave		4.5031				14.0		30.0			
Chloromethane	++++ 0.6435	0.7604 0.5662	0.8499 0.5014	0.7603 0.4740	0.5673	Ave		0.6404				21.0		30.0			
1,2-Dichlorotetrafluoroethane	3.0110 3.1885	2.7926 2.9178	3.4973 2.5426	3.4455 2.4272	2.7262	Ave		2.9499				13.0		30.0			
Acetaldehyde	++++ 0.6363	++++ 0.6066	++++ 0.4618	0.6281 0.4769	0.5036	Ave		0.5522				14.0		40.0			
Vinyl chloride	1.6533 1.8524	1.6870 1.6815	2.1350 1.4865	2.0298 1.4320	1.5948	Ave		1.7280				14.0		30.0			
Butane	3.4524 3.0477	3.1166 2.7386	3.7554 2.3773	3.6208 2.2441	2.8289	Ave		3.0202				17.0		30.0			
1,3-Butadiene	1.3538 1.4646	1.3696 1.3357	1.6337 1.1927	1.6105 1.1434	1.2448	Ave		1.3721				13.0		30.0			
Bromomethane	1.4748 1.5482	1.4677 1.4179	1.7746 1.2597	1.6883 1.2484	1.3184	Ave		1.4665				12.0		30.0			
Chloroethane	++++ 0.7992	0.7497 0.7350	0.9047 0.6439	0.8899 0.6500	0.6825	Ave		0.7569				13.0		30.0			
Ethanol	0.7444 0.5569	0.6543 0.4849	0.7755 0.3551	0.6050 0.3762	0.4550	Ave		0.5564				27.0		40.0			
Vinyl bromide	1.2910 1.3661	1.2431 1.2470	1.5591 1.1074	1.4832 1.1182	1.1524	Ave		1.2853				12.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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		B	M1	M2								
2-Methylbutane	2.3786 2.0309	2.2951 1.8129	2.5629 1.5671	2.2838 1.5510	1.7810	Ave		2.0293				18.0		30.0			
Trichlorofluoromethane	3.8673 4.3355	3.6687 3.9321	4.7942 3.4025	4.5771 3.2452	3.6665	Ave		3.9432				13.0		30.0			
Acrolein	++++ 0.4123	0.7471 0.4023	0.6333 0.3578	0.4065 0.4123	0.2756	Ave		0.4559				34.0	*	30.0			
Acetonitrile	++++ 0.5424	++++ 0.5067	++++ 0.4255	0.5608 0.4753	0.3714	Ave		0.4803				15.0		30.0			
Acetone	++++ 0.6063	++++ 0.5591	++++ 0.3215	0.7238 0.3527	0.5250	Ave		0.5147				30.0		30.0			
Isopropyl alcohol	2.3452 2.2040	2.2001 1.9124	2.9011 1.4759	2.3123 1.5184	1.7996	Ave		2.0743				22.0		30.0			
Pentane	++++ 0.2623	++++ 0.2404	0.2736 0.2066	0.2784 0.2056	0.2221	Ave		0.2413				13.0		30.0			
Ethyl ether	1.7604 1.3538	1.2649 1.3839	2.2065 1.1640	1.3509 1.1643	1.0137	Ave		1.4069				26.0		30.0			
1,1-Dichloroethene	1.3535 1.3583	1.2093 1.2534	1.4887 1.0812	1.4470 1.0869	1.1609	Ave		1.2710				12.0		30.0			
t-Butyl alcohol	2.5127 2.5200	2.3075 2.2044	3.2268 1.8596	2.6255 2.0223	1.9794	Ave		2.3620				18.0		30.0			
Acrylonitrile	++++ 0.8108	++++ 0.7684	++++ 0.6686	0.7404 0.7466	0.5346	Ave		0.7116				14.0		30.0			
1,1,2-Trichlorotrifluoroethane	2.6911 2.8661	2.5842 2.6225	3.3066 2.1244	3.0115 2.1944	2.4801	Ave		2.6534				14.0		30.0			
Methylene Chloride	++++ 1.3165	++++ 1.1899	1.8234 0.9269	1.5652 0.9603	1.1954	Ave		1.2825				25.0		30.0			
3-Chloropropene	1.8617 1.4551	1.5399 1.2890	1.7766 0.8904	1.5378 0.9185	1.2619	Ave		1.3923				24.0		30.0			
Carbon disulfide	4.3271 4.9049	4.2436 4.4640	5.3952 3.8581	5.2244 3.7103	4.2017	Ave		4.4810				13.0		30.0			
trans-1,2-Dichloroethene	1.5396 1.5712	1.3565 1.4532	1.8068 1.1245	1.6997 1.1346	1.3559	Ave		1.4491				16.0		30.0			
2-Methylpentane	4.2310 4.0376	3.9523 3.6489	4.7714 2.8450	4.2823 2.8962	3.4995	Ave		3.7960				17.0		40.0			
Methyl tert-butyl ether	2.9264 2.6079	2.1657 2.3422	3.8047 1.7889	2.5834 1.8837	1.8516	Ave		2.4394				26.0		30.0			
1,1-Dichloroethane	2.5766 2.5826	2.5074 2.3510	3.1909 1.9361	2.5750 1.9941	2.2228	Ave		2.4374				15.0		30.0			
Vinyl acetate	3.3201 2.5854	2.4571 2.4719	3.7017 2.0444	2.2760 2.2037	1.7012	Ave		2.5291				25.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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		B	M1	M2								
2-Butanone	++++ 0.5204	++++ 0.4865	0.7393 0.3325	0.5022 0.3597	0.3933	Ave		0.4763				29.0		30.0			
C6 Range	++++ 16.042	18.364 14.648	20.636 11.077	16.637 11.551	13.625	Ave		15.323				21.0		30.0			
Hexane	1.5356 1.3905	1.4153 1.2602	1.7430 0.9927	1.4356 1.0481	1.1817	Ave		1.3336				18.0		30.0			
Isopropyl ether	5.1498 4.3593	4.0570 3.8439	6.1395 2.9121	4.2492 2.9599	3.0621	Ave		4.0814				26.0		30.0			
cis-1,2-Dichloroethene	1.3583 1.3102	1.2285 1.1969	1.6735 0.9871	1.3337 1.0178	1.1229	Ave		1.2477				17.0		30.0			
Ethyl acetate	2.9875 2.4041	2.2052 2.2566	3.4518 1.7354	2.2777 1.8650	1.7501	Ave		2.3259				25.0		30.0			
Chloroform	2.8119 2.5325	2.6956 2.3108	3.5396 1.9599	2.6497 2.0032	2.2226	Ave		2.5251				19.0		30.0			
Tert-butyl ethyl ether	3.5384 3.3791	2.7158 2.9372	4.6223 2.2978	3.3126 2.3708	2.3675	Ave		3.0602				25.0		30.0			
Tetrahydrofuran	1.6295 1.3056	1.2434 1.2120	1.8503 0.9678	1.2605 1.0798	0.9334	Ave		1.2758				23.0		30.0			
1,1,1-Trichloroethane	2.6493 2.7517	2.8852 2.5406	3.6052 2.0466	2.8209 2.0637	2.4637	Ave		2.6474				18.0		30.0			
1,2-Dichloroethane	0.3577 0.3122	0.3421 0.3221	0.4581 0.2817	0.3516 0.2804	0.2930	Ave		0.3332				17.0		30.0			
1-Butanol	++++ 0.1389	0.1129 0.1168	0.1537 0.0977	0.1406 0.1088	0.0990	Ave		0.1210				17.0		30.0			
Cyclohexane	++++ 0.1603	0.1562 0.1417	0.2050 0.1131	0.1988 0.1082	0.1383	Ave		0.1527				23.0		30.0			
Benzene	0.9693 0.6664	0.8337 0.6681	0.9942 0.5878	0.7486 0.5572	0.6247	Ave		0.7389				22.0		30.0			
Carbon tetrachloride	0.5700 0.6410	0.5724 0.5714	0.6376 0.4548	0.5791 0.4457	0.4353	Ave		0.5452				15.0		30.0			
2,3-Dimethylpentane	++++ 0.1920	0.2105 0.1657	0.2586 0.1461	0.2251 0.1470	0.1604	Ave		0.1882				22.0		40.0			
Thiophene	0.4666 0.4028	0.4433 0.3971	0.5620 0.3475	0.4336 0.3498	0.3633	Ave		0.4185				16.0		40.0			
Tert-amyl methyl ether	0.7637 0.6415	0.6096 0.5465	0.9683 0.4617	0.7079 0.4615	0.4796	Ave		0.6267				27.0		30.0			
2,2,4-Trimethylpentane	1.7630 1.4707	1.5496 1.2703	2.0972 1.1182	1.6700 1.0641	1.2189	Ave		1.4691				23.0		30.0			
Heptane	0.2997 0.2761	0.2846 0.2393	0.3852 0.2127	0.3097 0.2127	0.2181	Ave		0.2709				21.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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		B	M1	M2								
1,2-Dichloropropane	0.3035 0.2511	0.2453 0.2602	0.3737 0.2298	0.2773 0.2314	0.2022	Ave		0.2638				19.0		30.0			
Trichloroethene	0.3572 0.3309	0.3295 0.2850	0.4573 0.2484	0.3715 0.2469	0.2701	Ave		0.3218				21.0		30.0			
Dibromomethane	0.3577 0.3119	0.3284 0.2867	0.3993 0.2506	0.3364 0.2538	0.2608	Ave		0.3095				17.0		30.0			
Bromodichloromethane	0.5625 0.5567	0.5427 0.5093	0.6991 0.4527	0.5568 0.4460	0.4390	Ave		0.5294				15.0		30.0			
1,4-Dioxane	++++ 0.1095	0.1026 0.0956	0.1528 0.0800	0.1273 0.0858	0.0790	Ave		0.1041				25.0		30.0			
Methyl methacrylate	++++ 0.3106	0.3133 0.2871	0.4659 0.2335	0.3039 0.2466	0.2036	Ave		0.2956				27.0		30.0			
Methylcyclohexane	++++ 0.6170	0.6344 0.5408	0.8623 0.4610	0.7117 0.4466	0.5275	Ave		0.6002				23.0		40.0			
4-Methyl-2-pentanone (MIBK)	++++ 0.6581	++++ 0.5679	0.8674 0.4851	0.7160 0.5139	0.4462	Ave		0.6078				25.0		30.0			
cis-1,3-Dichloropropene	0.3994 0.3334	0.3136 0.3424	0.4593 0.3071	0.3515 0.3128	0.2548	Ave		0.3416				17.0		30.0			
trans-1,3-Dichloropropene	0.3795 0.3211	0.2988 0.3303	0.4774 0.2837	0.3485 0.2920	0.2397	Ave		0.3301				21.0		30.0			
Toluene	++++ 0.6849	0.7583 0.6912	1.1806 0.6042	0.7960 0.5830	0.5406	Ave		0.7298				28.0		30.0			
Toluene Range	++++ 1.6808	1.8023 1.7137	2.9360 1.4871	1.9295 1.4667	1.3269	Ave		1.7929				28.0		30.0			
1,1,2-Trichloroethane	0.2958 0.2227	0.2388 0.2285	0.3716 0.2025	0.2615 0.1984	0.1857	Ave		0.2451				24.0		30.0			
2-Methylthiophene	0.8034 0.5823	0.6216 0.6044	0.9191 0.5286	0.6593 0.5252	0.4680	Ave		0.6347				23.0		40.0			
3-Methylthiophene	0.7821 0.5671	0.6110 0.5914	0.9371 0.5213	0.6240 0.5152	0.4380	Ave		0.6208				24.0		40.0			
2-Hexanone	0.2956 0.3194	0.2317 0.2814	0.4124 0.2397	0.3474 0.2620	0.2327	Ave		0.2914				21.0		30.0			
Octane	0.3170 0.2647	0.2788 0.2526	0.3701 0.2275	0.2882 0.2194	0.2261	Ave		0.2716				18.0		30.0			
C8 Range	++++ 2.9369	3.3126 2.7627	4.2308 2.3477	3.2085 2.2222	2.5120	Ave		2.9417				22.0		30.0			
Dibromochloromethane	0.5229 0.4696	0.4598 0.4936	0.6958 0.4422	0.5110 0.4363	0.4005	Ave		0.4924				17.0		30.0			
1,2-Dibromoethane	++++ 0.3925	0.3869 0.3983	0.6112 0.3542	0.4517 0.3619	0.3107	Ave		0.4084				22.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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		B	M1	M2								
Tetrachloroethene	0.3617 0.2985	0.3387 0.2776	0.4748 0.2456	0.3549 0.2431	0.2646	Ave		0.3177				23.0		30.0			
2,3-Dimethylheptane	++++ 0.8589	1.1183 0.8783	1.4020 0.7603	1.0349 0.6705	0.8143	Ave		0.9422				25.0		40.0			
Chlorobenzene	0.7249 0.5322	0.5833 0.5382	0.8412 0.4786	0.6334 0.4729	0.4319	Ave		0.5818				23.0		30.0			
Ethylbenzene	++++ 0.8541	0.8314 0.7894	1.4041 0.6872	0.9664 0.6782	0.6158	Ave		0.8533				29.0		30.0			
2-Ethylthiophene	++++ 0.6494	0.6367 0.6289	1.0484 0.5474	0.7312 0.5506	0.4724	Ave		0.6581				27.0		40.0			
m-Xylene & p-Xylene	0.9079 0.6667	0.6428 0.6026	1.1125 0.5128	0.7617 0.4959	0.4839	Ave		0.6874				31.0	*	30.0			
Nonane	0.6565 0.5452	0.5366 0.5731	0.7977 0.5151	0.6025 0.4878	0.4524	Ave		0.5741				18.0		30.0			
Styrene	0.5391 0.4949	0.4315 0.4675	0.7174 0.4199	0.5319 0.4219	0.3356	Ave		0.4844				22.0		30.0			
Bromoform	0.4289 0.4316	0.3585 0.4440	0.5964 0.3965	0.4571 0.4129	0.3187	Ave		0.4272				18.0		30.0			
o-Xylene	0.9383 0.7222	0.7357 0.6457	1.2026 0.5623	0.8525 0.5608	0.5278	Ave		0.7498				29.0		30.0			
1,1,2,2-Tetrachloroethane	0.6766 0.5981	0.5147 0.5414	0.8780 0.4847	0.6688 0.4935	0.4324	Ave		0.5876				23.0		30.0			
1,2,3-Trichloropropane	++++ 0.1388	0.1127 0.1289	0.2053 0.1174	0.1542 0.1249	0.1011	Ave		0.1354				24.0		30.0			
Isopropylbenzene	++++ 0.9985	0.9683 0.8961	1.5890 0.7771	1.1198 0.7607	0.7235	Ave		0.9791				29.0		30.0			
Propylbenzene	0.2923 0.2720	0.2183 0.2449	0.4121 0.2189	0.2825 0.2332	0.1829	Ave		0.2619				25.0		30.0			
2-Chlorotoluene	0.3072 0.2530	0.2467 0.2439	0.3855 0.2168	0.2913 0.2242	0.1895	Ave		0.2620				22.0		30.0			
4-Ethyltoluene	1.1760 0.9847	0.8038 0.8744	1.4041 0.7753	1.0397 0.7831	0.6697	Ave		0.9456				25.0		30.0			
1,3,5-Trimethylbenzene	0.5198 0.4638	0.3945 0.4044	0.6996 0.3614	0.5033 0.3757	0.3264	Ave		0.4499				25.0		30.0			
Alpha Methyl Styrene	++++ 0.3845	0.2761 0.3583	0.5186 0.3428	0.3876 0.3673	0.2447	Ave		0.3600				23.0		30.0			
Decane	0.7727 0.6485	0.5646 0.6240	0.9785 0.5592	0.7469 0.5315	0.4581	Ave		0.6538				24.0		30.0			
tert-Butylbenzene	1.1439 0.9015	0.7627 0.7792	1.3543 0.6820	0.9781 0.6993	0.6460	Ave		0.8830				27.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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		B	M1	M2								
1,2,4-Trimethylbenzene	0.9507 0.8422	0.6828 0.7331	1.2561 0.6510	0.9099 0.6581	0.5891	Ave		0.8081				26.0		30.0			
sec-Butylbenzene	1.4119 1.2301	1.0289 1.0744	1.8542 0.9460	1.3193 0.9320	0.8702	Ave		1.1852				26.0		30.0			
1,3-Dichlorobenzene	0.5141 0.4656	0.4434 0.4322	0.6621 0.4054	0.5035 0.4400	0.3148	Ave		0.4646				20.0		30.0			
Benzyl chloride	0.5272 0.5890	0.4703 0.5424	0.7808 0.4798	0.5913 0.5385	0.3609	Ave		0.5422				21.0		30.0			
1,4-Dichlorobenzene	0.4959 0.4253	0.4014 0.3963	0.6051 0.3801	0.4672 0.4193	0.2787	Ave		0.4299				21.0		30.0			
4-Isopropyltoluene	1.0824 0.9693	0.7915 0.8646	1.4670 0.7687	1.0860 0.7723	0.6776	Ave		0.9422				26.0		30.0			
1,2,3-Trimethylbenzene	0.7985 0.6647	0.5470 0.5754	0.9894 0.5173	0.7312 0.5324	0.4768	Ave		0.6481				26.0		40.0			
Butylcyclohexane	0.8027 0.6911	0.6532 0.6647	0.9997 0.5961	0.7615 0.5626	0.5434	Ave		0.6972				20.0		40.0			
Indane	++++ 0.7644	0.6617 0.6699	1.0980 0.6081	0.8361 0.6172	0.5323	Ave		0.7235				25.0		40.0			
1,2-Dichlorobenzene	0.4905 0.4711	0.4214 0.4273	0.6572 0.3982	0.5242 0.4240	0.3200	Ave		0.4593				21.0		30.0			
Butylbenzene	0.9251 0.8969	0.7339 0.8046	1.3062 0.7260	0.9749 0.7362	0.5863	Ave		0.8544				24.0		30.0			
Indene	0.5239 0.5158	0.4169 0.4695	0.6511 0.4506	0.5115 0.4795	0.3203	Ave		0.4821				19.0		40.0			
Undecane	0.7233 0.7297	0.5962 0.6359	1.0321 0.5603	0.8163 0.5768	0.4903	Ave		0.6845				24.0		30.0			
1,2-Dimethyl-4-Ethylbenzene	0.7969 0.7077	0.5999 0.6439	1.0155 0.5832	0.8033 0.6141	0.4710	Ave		0.6928				23.0		40.0			
1,2-Dibromo-3-Chloropropane	++++ 0.2085	0.1529 0.1928	0.2495 0.1751	0.2070 0.2095	0.1330	Ave		0.1910				19.0		30.0			
1,2,4,5-Tetramethylbenzene	0.9858 0.8596	0.7733 0.7787	1.2736 0.6984	1.0065 0.7284	0.5908	Ave		0.8550				24.0		40.0			
1,2,3,5-Tetramethylbenzene	0.6442 0.5257	0.4793 0.4781	0.8007 0.4332	0.6242 0.4609	0.3690	Ave		0.5350				25.0		40.0			
1,2,3,4-Tetramethylbenzene	0.7749 0.6877	0.6207 0.6290	1.0255 0.5651	0.8226 0.6068	0.4897	Ave		0.6913				23.0		40.0			
Dodecane	0.6611 0.6364	0.5506 0.5409	0.8564 0.4909	0.7330 0.5388	0.4730	Ave		0.6090				21.0		30.0			
1,2,4-Trichlorobenzene	++++ 0.1969	0.1532 0.1880	0.2028 0.1916	0.1730 0.2560	0.1197	Ave		0.1851				21.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Naphthalene	+++++	0.3432	0.4802	0.4235	0.2894	Ave		0.4137				17.0		30.0			
	0.4501	0.4199	0.4086	0.4944													
Benzo(b)thiophene	+++++	0.1967	0.2099	0.1932	0.1350	Ave		0.2045				19.0		40.0			
	0.2117	0.2076	0.2038	0.2785													
Hexachlorobutadiene	0.3986	0.3385	0.5172	0.4120	0.2522	Ave		0.3552				22.0		30.0			
	0.3351	0.3107	0.2982	0.3338													
1,2,3-Trichlorobenzene	+++++	0.1417	0.1877	0.1647	0.1151	Ave		0.1634				17.0		30.0			
	0.1692	0.1601	0.1586	0.2099													
2-Methylnaphthalene	+++++	+++++	0.0488	0.0457	0.0307	Ave		0.0432				20.0		40.0			
	0.0375	0.0416	0.0399	0.0579													
1-Methylnaphthalene	+++++	+++++	0.0511	0.0470	0.0338	Ave		0.0458				22.0		40.0			
	0.0382	0.0392	0.0481	0.0634													
4-Bromofluorobenzene (Surr)	0.5054	0.6446	0.6105	0.6934	0.6598	Ave		0.6548				10.0		30.0			
	0.6612	0.6826	0.7207	0.7149													

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-2321/2	JB02icL1.D
Level 2	IC 140-2321/3	JB02icL2.D
Level 3	IC 140-2321/4	JB02icL3.D
Level 4	IC 140-2321/5	JB02icL4.D
Level 5	IC 140-2321/6	JB02icL5.D
Level 6	ICIS 140-2321/7	JB02icisL6.D
Level 7	IC 140-2321/8	JB02icL7.D
Level 8	IC 140-2321/9	JB02icL8.D
Level 9	IC 140-2321/10	JB02icL9.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 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Chlorodifluoromethane	CBM	Ave	1854 73369	3424 139030	8860 246192	14782 456091	32955	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Propene	CBM	Ave	++++ 279142	++++ 523001	42023 858998	65383 1565043	132305	++++ 2.00	++++ 4.00	0.200 8.00	0.400 16.0	1.00
Dichlorodifluoromethane	CBM	Ave	15474 712382	30170 1345206	86277 2220880	143956 4023663	325851	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Chloromethane	CBM	Ave	++++ 93053	5149 171399	13477 290411	20905 533733	43576	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2-Dichlorotetrafluoroethane	CBM	Ave	10647 461044	18911 883226	55459 1472653	94740 2732986	209418	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Acetaldehyde	CBM	Ave	++++ 460018	++++ 918159	++++ 1337471	86354 2684944	193433	++++ 10.0	++++ 20.0	++++ 40.0	2.00 80.0	5.00
Vinyl chloride	CBM	Ave	5846 267849	11424 509003	33856 861009	55811 1612356	122506	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Butane	CBM	Ave	12208 440683	21105 828963	59552 1376936	99559 2526819	217307	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,3-Butadiene	CBM	Ave	4787 211780	9275 404323	25907 690799	44283 1287411	95618	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Bromomethane	CBM	Ave	5215 223862	9939 429197	28141 729644	46423 1405706	101275	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Chloroethane	CBM	Ave	++++ 115555	5077 222490	14347 372958	24468 731868	52424	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Ethanol	CBM	Ave	13161 402629	22153 733956	61484 1028478	83182 2118175	174738	0.199 10.0	0.399 20.0	1.00 40.0	2.00 80.0	5.00
Vinyl bromide	CBM	Ave	4565 197531	8418 377459	24723 641424	40783 1259030	88520	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
2-Methylbutane	CBM	Ave	8411 293654	15542 548772	40642 907660	62797 1746402	136811	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Trichlorofluoromethane	CBM	Ave	13675 626895	24844 1190242	76025 1970709	125854 3654003	281649	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Acrolein	CBM	Ave	++++ 59615	5059 121783	10043 207242	11176 464276	21172	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Acetonitrile	CBM	Ave	++++ 78425	++++ 153373	++++ 246422	15421 535163	28527	++++ 2.00	++++ 4.00	++++ 8.00	0.400 16.0	1.00
Acetone	CBM	Ave	++++ 263015	++++ 507711	++++ 558708	59706 1191572	121002	++++ 6.00	++++ 12.0	++++ 24.0	1.20 48.0	3.00
Isopropyl alcohol	CBM	Ave	24880 956109	44699 1736744	138024 2564747	190752 5129253	414752	0.119 6.00	0.239 12.0	0.600 24.0	1.20 48.0	3.00
Pentane	CBM	Ave	++++ 37923	++++ 72775	4339 119661	7656 231477	17062	++++ 2.00	++++ 4.00	0.200 8.00	0.400 16.0	1.00
Ethyl ether	CBM	Ave	6225 195750	8566 418905	34989 674189	37146 1310999	77865	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,1-Dichloroethene	CBM	Ave	4786 196396	8189 379393	23607 626243	39787 1223778	89173	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
t-Butyl alcohol	CBM	Ave	8885 364383	15626 667284	51169 1077056	72191 2277047	152052	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Acrylonitrile	CBM	Ave	++++ 117234	++++ 232603	++++ 387279	20358 840602	41067	++++ 2.00	++++ 4.00	++++ 8.00	0.400 16.0	1.00
1,1,2-Trichlorotrifluoroethane	CBM	Ave	9516 414416	17500 793825	52435 1230455	82806 2470886	190514	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Methylene Chloride	CBM	Ave	++++ 190357	++++ 360167	28915 536859	43037 1081220	91824	++++ 2.00	++++ 4.00	0.200 8.00	0.400 16.0	1.00
3-Chloropropene	CBM	Ave	6583 210397	10428 390186	28172 515698	42284 1034161	96937	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Carbon disulfide	CBM	Ave	15301 709227	28737 1351244	85555 2234586	143653 4177657	322755	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
trans-1,2-Dichloroethene	CBM	Ave	5444 227185	9186 439892	28651 651321	46737 1277566	104152	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
2-Methylpentane	CBM	Ave	14961 583813	26764 1104518	75663 1647824	117748 3261067	268820	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Methyl tert-butyl ether	CBM	Ave	10348 377086	14666 708984	60333 1036143	71035 2121045	142235	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,1-Dichloroethane	CBM	Ave	9111 373428	16980 711643	50600 1121361	70804 2245258	170750	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Vinyl acetate	CBM	Ave	11740 373840	16639 748230	58700 1184112	62583 2481272	130681	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
2-Butanone	CBM	Ave	++++ 75250	++++ 147275	11724 192577	13810 405025	30213	++++ 2.00	++++ 4.00	0.200 8.00	0.400 16.0	1.00
C6 Range	CBM	Ave	++++ 2319650	124359 4434032	327237 6416009	457447 13006005	1046587	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Hexane	CBM	Ave	5430 201062	9584 381457	27640 574959	39474 1180131	90771	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Isopropyl ether	CBM	Ave	18210 630327	27473 1163550	97358 1686677	116839 3332719	235216	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
cis-1,2-Dichloroethene	CBM	Ave	4803 189453	8319 362314	26537 571755	36673 1146045	86254	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Ethyl acetate	CBM	Ave	10564 347626	14933 683079	54737 1005122	62629 2099963	134435	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Chloroform	CBM	Ave	9943 366179	18254 699491	56129 1135194	72858 2255531	170732	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Tert-butyl ethyl ether	CBM	Ave	12512 488593	18391 889084	73299 1330879	91084 2669450	181863	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Tetrahydrofuran	CBM	Ave	5762 188789	8420 366881	29342 560530	34658 1215789	71698	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,1,1-Trichloroethane	CBM	Ave	9368 397886	19538 769030	57170 1185383	77564 2323629	189252	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2-Dichloroethane	DFB	Ave	5830 208212	11019 470172	33204 749644	40539 1489491	108883	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1-Butanol	DFB	Ave	++++ 92621	3638 170470	11138 260136	16216 577894	36780	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Cyclohexane	DFB	Ave	++++ 106942	5033 206842	14857 301035	22926 574799	51385	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Benzene	DFB	Ave	15800 444457	26858 975273	72062 1564537	86310 2960278	232144	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Carbon tetrachloride	DFB	Ave	9291 427542	18438 834144	46211 1210447	66767 2367862	161764	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
2,3-Dimethylpentane	DFB	Ave	++++ 128091	6780 241958	18743 388956	25958 781028	59612	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Thiophene	DFB	Ave	7606 268671	14281 579718	40734 924914	49998 1858435	135004	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Tert-amyl methyl ether	CBZ	Ave	10469 423837	17350 759639	60937 1163690	76260 2393639	158012	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
2,2,4-Trimethylpentane	DFB	Ave	28736 980897	49918 1854422	152003 2976164	192544 5653514	452989	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Heptane	DFB	Ave	4885 184125	9169 349391	27922 566164	35713 1129883	81056	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2-Dichloropropane	DFB	Ave	4947 167458	7903 379911	27087 611640	31968 1229456	75149	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Trichloroethene	DFB	Ave	5822 220680	10613 416123	33142 661074	42837 1311549	100360	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Dibromomethane	DFB	Ave	5831 208058	10579 418582	28940 666985	38789 1348312	96908	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Bromodichloromethane	DFB	Ave	9169 371303	17484 743446	50671 1204865	64200 2369348	163139	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,4-Dioxane	DFB	Ave	++++ 73038	3304 139540	11078 212876	14676 455676	29376	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Methyl methacrylate	DFB	Ave	++++ 207175	10092 419174	33768 621512	35036 1310001	75660	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Methylcyclohexane	DFB	Ave	++++ 411526	20438 789531	62498 1227126	82063 2372870	196019	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
4-Methyl-2-pentanone (MIBK)	DFB	Ave	++++ 438930	++++ 829084	62867 1291012	82553 2730173	165821	++++ 2.00	++++ 4.00	0.200 8.00	0.400 16.0	1.00
cis-1,3-Dichloropropene	DFB	Ave	6510 222341	10101 499796	33291 817502	40533 1661597	94684	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
trans-1,3-Dichloropropene	CBZ	Ave	5202 212168	8505 459032	30041 715096	37546 1514639	78959	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Toluene	CBZ	Ave	++++ 452462	21582 960784	74297 1522934	85756 3023734	178095	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Toluene Range	CBZ	Ave	++++ 1110449	51296 2381997	184771 3748206	207864 7607152	437179	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,1,2-Trichloroethane	CBZ	Ave	4055 147163	6796 317612	23388 510378	28171 1028843	61191	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
2-Methylthiophene	CBZ	Ave	11014 384728	17692 840106	57843 1332270	71024 2724049	154183	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
3-Methylthiophene	CBZ	Ave	10722 374640	17391 821973	58976 1313774	67221 2672064	144312	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
2-Hexanone	CBZ	Ave	4052 210993	6594 391088	25954 604250	37426 1358936	76652	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Octane	CBZ	Ave	4346 174854	7934 351104	23293 573265	31044 1137688	74508	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
C8 Range	CBZ	Ave	++++ 1940288	94283 3839953	266259 5917096	345651 11525806	827615	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Dibromochloromethane	CBZ	Ave	7169 310253	13087 686011	43786 1114615	55052 2263093	131962	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2-Dibromoethane	CBZ	Ave	++++ 259344	11011 553685	38462 892760	48660 1876913	102354	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Tetrachloroethene	CBZ	Ave	4958 197241	9639 385841	29878 619114	38238 1260721	87178	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
2,3-Dimethylheptane	CBZ	Ave	++++ 567430	31829 1220814	88230 1916286	111490 3477383	268292	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Chlorobenzene	CBZ	Ave	9938 351581	16601 748137	52937 1206328	68232 2452735	142301	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Ethylbenzene	CBZ	Ave	++++ 564283	23663 1097171	88367 1731979	104105 3517516	202896	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
2-Ethylthiophene	CBZ	Ave	+++++ 429043	18121 874188	65978 1379714	78773 2855581	155636	+++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
m-Xylene & p-Xylene	CBZ	Ave	24892 880871	36589 1675287	140025 2584852	164123 5144380	318841	0.0794 4.00	0.160 8.00	0.400 16.0	0.800 32.0	2.00
Nonane	CBZ	Ave	9000 360199	15272 796594	50203 1298235	64902 2529868	149048	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Styrene	CBZ	Ave	7391 326941	12280 649833	45149 1058356	57296 2188134	110576	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Bromoform	CBZ	Ave	5880 285129	10205 617093	37533 999215	49248 2141767	105000	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
o-Xylene	CBZ	Ave	12863 477117	20939 897431	75681 1417298	91841 2908413	173902	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,1,2,2-Tetrachloroethane	CBZ	Ave	9275 395176	14649 752518	55254 1221582	72048 2559502	142468	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2,3-Trichloropropane	CBZ	Ave	+++++ 91715	3207 179115	12919 295930	16612 647877	33297	+++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Isopropylbenzene	CBZ	Ave	+++++ 659703	27559 1245518	99997 1958677	120638 3945641	238383	+++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Propylbenzene	CBZ	Ave	4007 179690	6212 340422	25935 551761	30429 1209554	60259	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
2-Chlorotoluene	CBZ	Ave	4211 167171	7022 339076	24262 546325	31380 1162874	62446	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
4-Ethyltoluene	CBZ	Ave	16121 650578	22877 1215330	88362 1954170	112001 4061702	220642	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,3,5-Trimethylbenzene	CBZ	Ave	7126 306387	11228 562124	44028 910938	54216 1948422	107543	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Alpha Methyl Styrene	CBZ	Ave	+++++ 254025	7857 498059	32639 863924	41756 1904974	80612	+++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Decane	CBZ	Ave	10593 428443	16071 867371	61578 1409402	80467 2756738	150935	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
tert-Butylbenzene	CBZ	Ave	15681 595558	21709 1083048	85228 1718951	105370 3627062	212848	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2,4-Trimethylbenzene	CBZ	Ave	13033 556397	19434 1018993	79047 1640694	98024 3413188	194096	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
sec-Butylbenzene	CBZ	Ave	19356 812671	29285 1493413	116691 2384356	142130 4833755	286712	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,3-Dichlorobenzene	CBZ	Ave	7048 307594	12621 600787	41670 1021760	54244 2282246	103715	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Benzyl chloride	CBZ	Ave	7227 389116	13385 753863	49141 1209361	63695 2793035	118897	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,4-Dichlorobenzene	CBZ	Ave	6798 280978	11424 550794	38079 958044	50329 2174777	91835	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
4-Isopropyltoluene	CBZ	Ave	14838 640395	22528 1201806	92324 1937413	116989 4005716	223257	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2,3-Trimethylbenzene	CBZ	Ave	10946 439173	15569 799833	62265 1303753	78769 2761285	157089	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Butylcyclohexane	CBZ	Ave	11004 456578	18591 923937	62915 1502351	82036 2918010	179037	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Indane	CBZ	Ave	++++ 505040	18833 931126	69100 1532701	90069 3201210	175381	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2-Dichlorobenzene	CBZ	Ave	6724 311215	11993 593910	41359 1003547	56467 2199254	105420	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Butylbenzene	CBZ	Ave	12682 592548	20887 1118397	82201 1829707	105027 3818089	193152	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Indene	CBZ	Ave	7182 340799	11866 652622	40978 1135584	55104 2486930	105535	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Undecane	CBZ	Ave	9915 482089	16970 883826	64951 1412079	87943 2991407	161550	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2-Dimethyl-4-Ethylbenzene	CBZ	Ave	10925 467559	17073 895008	63911 1469826	86542 3185170	155168	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2-Dibromo-3-Chloropropane	CBZ	Ave	++++ 137741	4351 267988	15699 441219	22303 1086555	43812	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2,4,5-Tetramethylbenzene	CBZ	Ave	13514 567879	22010 1082335	80151 1760180	108430 3777909	194644	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2,3,5-Tetramethylbenzene	CBZ	Ave	8831 347340	13642 664567	50389 1091723	67239 2390272	121580	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2,3,4-Tetramethylbenzene	CBZ	Ave	10623 454371	17666 874226	64538 1424220	88622 3147228	161331	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Dodecane	CBZ	Ave	9063 420435	15670 751872	53896 1237355	78965 2794574	155825	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2,4-Trichlorobenzene	CBZ	Ave	++++ 130070	4360 261358	12763 482865	18639 1327570	39424	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Naphthalene	CBZ	Ave	++++ 297395	9769 583681	30221 1029922	45619 2564117	95333	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Benzo(b)thiophene	CBZ	Ave	++++ 139849	5598 288619	13207 513760	20810 1444640	44465	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Hexachlorobutadiene	CBZ	Ave	5464 221411	9633 431913	32549 751618	44388 1731386	83096	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2,3-Trichlorobenzene	CBZ	Ave	++++ 111816	4033 222581	11814 399699	17743 1088532	37937	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
2-Methylnaphthalene	CBZ	Ave	++++ 77436	++++ 180845	9608 314249	15379 937834	31630	++++ 6.25	++++ 12.5	0.625 25.0	1.25 50.0	3.13
1-Methylnaphthalene	CBZ	Ave	++++ 78839	++++ 170215	10046 378573	15808 1028106	34839	++++ 6.25	++++ 12.5	0.625 25.0	1.25 50.0	3.13

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9		LVL 6	LVL 7	LVL 8	LVL 9	
4-Bromofluorobenzene (Surr)	CBZ	Ave	697988	919425	768365	746943	869463	4.00	4.00	4.00	4.00	4.00
			873686	948768	908244	926977		4.00	4.00	4.00	4.00	

Curve Type Legend:

Ave = Average ISTD

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL1.D
 Lims ID: IC L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 02-Feb-2015 12:48:30 ALS Bottle#: 9 Worklist Smp#: 2
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 022292,,1,1,,ICAL 0.04
 Misc. Info.: J020215I,TO15,,140-0001328-002
 Operator ID: 7126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub3
 Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Feb-2015 08:51:01 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: barlozhetskayaa

Date: 02-Feb-2015 18:42:01

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	9.593	9.593	0.000	98	356228	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.734	11.736	-0.002	96	1642054	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.382	16.380	0.002	89	1381044	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.990	17.991	-0.001	91	697988	4.00	3.09	
6 Chlorodifluoromethane	67	4.020	4.021	-0.001	62	1854	0.0397	0.0431	
7 Propene	41	4.047	4.036	0.011	76	18946	0.0397	0.1121	
8 Dichlorodifluoromethane	85	4.095	4.093	0.002	99	15474	0.0397	0.0386	
9 Chloromethane	52	4.299	4.302	-0.003	64	2912	0.0397	0.0511	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.310	4.307	0.003	91	10647	0.0397	0.0405	
11 Acetaldehyde	44	4.477	4.476	0.001	99	31878	0.1985	0.6482	
12 Vinyl chloride	62	4.499	4.497	0.001	95	5846	0.0397	0.0380	
13 Butane	43	4.601	4.597	0.004	84	12208	0.0397	0.0454	
14 Butadiene	54	4.601	4.598	0.003	58	4787	0.0397	0.0392	
15 Bromomethane	94	4.967	4.968	-0.001	95	5215	0.0397	0.0399	
16 Chloroethane	64	5.117	5.127	-0.010	67	2312	0.0397	0.0343	
17 Ethanol	31	5.225	5.223	0.002	94	13161	0.1985	0.2656	
18 Vinyl bromide	106	5.467	5.470	-0.003	96	4565	0.0397	0.0399	
19 2-Methylbutane	43	5.521	5.520	0.001	91	8411	0.0397	0.0465	
20 Trichlorofluoromethane	101	5.768	5.766	0.002	99	13675	0.0397	0.0389	
23 Acetone	58	5.908	5.899	0.009	99	17155	0.1191	0.3742	
24 Isopropyl alcohol	45	5.989	5.979	0.010	92	24880	0.1191	0.1347	
26 Ethyl ether	31	6.193	6.184	0.009	89	6225	0.0397	0.0497	
27 1,1-Dichloroethene	96	6.543	6.540	0.003	94	4786	0.0397	0.0423	
28 2-Methyl-2-propanol	59	6.640	6.627	0.013	94	8885	0.0397	0.0422	
29 Acrylonitrile	53	6.645	6.650	-0.005	84	3146	0.0397	0.0496	
30 1,1,2-Trichloro-1,2,2-trif	101	6.726	6.722	0.004	94	9516	0.0397	0.0403	
31 Methylene Chloride	84	6.914	6.915	-0.001	97	10797	0.0397	0.0945	
32 3-Chloro-1-propene	39	6.930	6.930	0.000	62	6583	0.0397	0.0531	
33 Carbon disulfide	76	7.102	7.098	0.004	97	15301	0.0397	0.0383	
34 trans-1,2-Dichloroethene	96	7.775	7.774	0.001	93	5444	0.0397	0.0422	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 2-Methylpentane	43	7.780	7.783	-0.003	95	14961	0.0397	0.0443	
36 Methyl tert-butyl ether	73	7.920	7.898	0.022	93	10348	0.0397	0.0476	
37 1,1-Dichloroethane	63	8.216	8.219	-0.003	97	9111	0.0397	0.0420	
38 Vinyl acetate	43	8.323	8.317	0.006	99	11740	0.0397	0.0521	
39 2-Butanone (MEK)	72	8.807	8.788	0.019	87	2666	0.0397	0.0629	
40 Hexane	56	8.813	8.811	0.002	67	5430	0.0397	0.0457	
139 Isopropyl ether	45	8.980	8.966	0.014	97	18210	0.0397	0.0501	
41 cis-1,2-Dichloroethene	96	9.243	9.246	-0.003	93	4803	0.0397	0.0432	
42 Ethyl acetate	43	9.426	9.417	0.009	97	10564	0.0397	0.0510	
43 Chloroform	83	9.593	9.599	-0.006	28	9943	0.0397	0.0442	
142 Tert-butyl ethyl ether	59	9.679	9.667	0.012	95	12512	0.0397	0.0459	
44 Tetrahydrofuran	42	10.039	10.018	0.021	92	5762	0.0397	0.0507	
45 1,1,1-Trichloroethane	97	10.636	10.643	-0.007	96	9368	0.0397	0.0397	
46 1,2-Dichloroethane	62	10.749	10.750	-0.001	93	5830	0.0397	0.0426	
47 n-Butanol	31	11.169	11.144	0.025	67	1883	0.0397	0.0379	
49 Cyclohexane	69	11.228	11.222	0.006	73	2720	0.0397	0.0434	
48 Benzene	78	11.228	11.226	0.002	96	15800	0.0397	0.0521	
50 Carbon tetrachloride	117	11.255	11.247	0.008	94	9291	0.0397	0.0415	
51 2,3-Dimethylpentane	71	11.314	11.320	-0.006	89	3241	0.0397	0.0420	
52 Thiophene	84	11.497	11.493	0.004	94	7606	0.0397	0.0443	
140 Tert-amyl methyl ether	73	11.669	11.660	0.009	91	10469	0.0397	0.0484	
53 Isooctane	57	11.944	11.939	0.005	97	28736	0.0397	0.0476	
54 n-Heptane	71	12.293	12.295	-0.002	91	4885	0.0397	0.0439	
55 1,2-Dichloropropane	63	12.401	12.405	-0.004	87	4947	0.0397	0.0457	
56 Trichloroethene	130	12.439	12.437	0.002	93	5822	0.0397	0.0441	
57 Dibromomethane	93	12.525	12.528	-0.003	97	5831	0.0397	0.0459	
59 Dichlorobromomethane	83	12.665	12.661	0.004	98	9169	0.0397	0.0422	
58 1,4-Dioxane	88	12.686	12.670	0.016	72	1549	0.0397	0.0363	
60 Methyl methacrylate	41	12.724	12.724	0.000	90	7090	0.0397	0.0584	
61 Methylcyclohexane	83	13.186	13.185	0.001	90	10925	0.0397	0.0443	
62 4-Methyl-2-pentanone (MIBK)	43	13.563	13.560	0.003	98	31322	0.0397	0.1255	
63 cis-1,3-Dichloropropene	75	13.633	13.630	0.003	94	6510	0.0397	0.0464	
64 trans-1,3-Dichloropropene	75	14.311	14.306	0.005	94	5202	0.0397	0.0456	
65 Toluene	91	14.434	14.436	-0.002	92	14623	0.0397	0.0580	
66 1,1,2-Trichloroethane	83	14.504	14.507	-0.003	93	4055	0.0397	0.0479	
67 2-Methylthiophene	97	14.590	14.588	0.002	96	11014	0.0397	0.0503	
68 3-Methylthiophene	97	14.784	14.786	-0.002	97	10722	0.0397	0.0500	
69 2-Hexanone	58	14.870	14.866	0.004	89	4052	0.0397	0.0403	
70 n-Octane	85	15.085	15.081	0.004	96	4346	0.0397	0.0463	
71 Chlorodibromomethane	129	15.209	15.209	0.000	96	7169	0.0397	0.0422	
72 Ethylene Dibromide	107	15.500	15.500	0.000	98	6280	0.0397	0.0445	
73 Tetrachloroethene	129	15.559	15.561	-0.002	91	4958	0.0397	0.0452	
74 2,3-Dimethylheptane	43	16.414	16.411	0.003	95	18232	0.0397	0.0560	
75 Chlorobenzene	112	16.425	16.429	-0.004	95	9938	0.0397	0.0495	
76 Ethylbenzene	91	16.705	16.703	0.002	98	17019	0.0397	0.0578	
77 2-Ethylthiophene	97	16.807	16.807	0.000	96	11193	0.0397	0.0493	
78 m-Xylene & p-Xylene	91	16.866	16.861	0.005	99	24892	0.0794	0.1049	
79 n-Nonane	57	17.248	17.245	0.003	93	9000	0.0397	0.0454	
80 Styrene	104	17.329	17.326	0.003	95	7391	0.0397	0.0442	
81 Bromoform	173	17.329	17.328	0.001	82	5880	0.0397	0.0399	
82 o-Xylene	91	17.382	17.386	-0.004	98	12863	0.0397	0.0497	
83 1,1,2,2-Tetrachloroethane	83	17.700	17.704	-0.004	96	9275	0.0397	0.0457	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 1,2,3-Trichloropropane	110	17.856	17.860	-0.004	95	1871	0.0397	0.0400	
85 Isopropylbenzene	105	17.958	17.953	0.005	96	18077	0.0397	0.0535	
86 N-Propylbenzene	120	18.464	18.463	0.001	98	4007	0.0397	0.0443	
87 2-Chlorotoluene	126	18.512	18.517	-0.005	96	4211	0.0397	0.0465	
88 4-Ethyltoluene	105	18.603	18.605	-0.002	98	16121	0.0397	0.0494	
89 1,3,5-Trimethylbenzene	120	18.673	18.673	0.000	91	7126	0.0397	0.0459	
90 Alpha Methyl Styrene	118	18.899	18.896	0.003	82	5213	0.0397	0.0419	
91 n-Decane	57	18.926	18.925	0.001	89	10593	0.0397	0.0469	
92 tert-Butylbenzene	119	19.082	19.083	-0.001	91	15681	0.0397	0.0514	
93 1,2,4-Trimethylbenzene	105	19.098	19.097	0.001	95	13033	0.0397	0.0467	
94 sec-Butylbenzene	105	19.340	19.341	-0.001	98	19356	0.0397	0.0473	
95 1,3-Dichlorobenzene	146	19.367	19.370	-0.003	94	7048	0.0397	0.0439	
96 Benzyl chloride	91	19.443	19.439	0.004	97	7227	0.0397	0.0386	
97 1,4-Dichlorobenzene	146	19.453	19.453	0.000	92	6798	0.0397	0.0458	
98 4-Isopropyltoluene	119	19.496	19.496	0.000	95	14838	0.0397	0.0456	
99 1,2,3-Trimethylbenzene	105	19.550	19.554	-0.004	96	10946	0.0397	0.0489	
100 Butylcyclohexane	83	19.599	19.597	0.002	88	11004	0.0397	0.0457	
101 2,3-Dihydroindene	117	19.798	19.799	-0.001	94	12364	0.0397	0.0495	
102 1,2-Dichlorobenzene	146	19.808	19.805	0.003	95	6724	0.0397	0.0424	
103 n-Butylbenzene	91	19.916	19.916	0.000	97	12682	0.0397	0.0430	
104 Indene	116	19.927	19.927	0.000	88	7182	0.0397	0.0431	
105 Undecane	57	20.196	20.195	0.001	95	9915	0.0397	0.0420	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.276	20.278	-0.002	97	10925	0.0397	0.0457	
141 1,2-Dibromo-3-Chloropropan	157	20.395	20.393	0.002	89	3205	0.0397	0.0486	
108 1,2,4,5-Tetramethylbenzene	119	20.669	20.668	0.001	95	13514	0.0397	0.0458	
107 1,2,3,5-Tetramethylbenzene	119	20.723	20.725	-0.002	94	8831	0.0397	0.0478	
109 1,2,3,4-Tetramethylbenzene	119	21.148	21.147	0.001	96	10623	0.0397	0.0445	
110 Dodecane	57	21.282	21.282	0.000	92	9063	0.0397	0.0431	
111 1,2,4-Trichlorobenzene	180	21.530	21.525	0.005	89	2367	0.0397	0.0370	
112 Naphthalene	128	21.659	21.655	0.004	97	5716	0.0397	0.0400	
113 Benzo(b)thiophene	134	21.740	21.741	-0.001	96	3811	0.0397	0.0540	
114 Hexachlorobutadiene	225	21.810	21.810	0.000	94	5464	0.0397	0.0446	
115 1,2,3-Trichlorobenzene	180	21.874	21.872	0.002	91	2345	0.0397	0.0416	
116 2-Methylnaphthalene	142	22.401	22.402	-0.001	97	4756	0.1241	0.3191	
117 1-Methylnaphthalene	142	22.530	22.528	0.002	96	4194	0.1241	0.2651	
A 118 C6 Range	1	8.807	(8.770-8.845)		0	69755	0.0397	0.0511	
A 122 Toluene Range	1	14.434	(14.404-14.464)		0	32005	0.0397	0.0517	
A 123 C8 Range	1	15.104	(15.056-15.152)		0	51311	0.0397	0.0505	
S 124 Xylenes, Total	100				0		0.1191	0.1546	
S 144 1,2-Dichloroethene, Total	1				0			0.0854	

Reagents:

MAic00.2_00010

Amount Added: 99.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL1.D

Injection Date: 02-Feb-2015 12:48:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: IC L1

Worklist Smp#: 2

Client ID:

Purge Vol: 500.000 mL

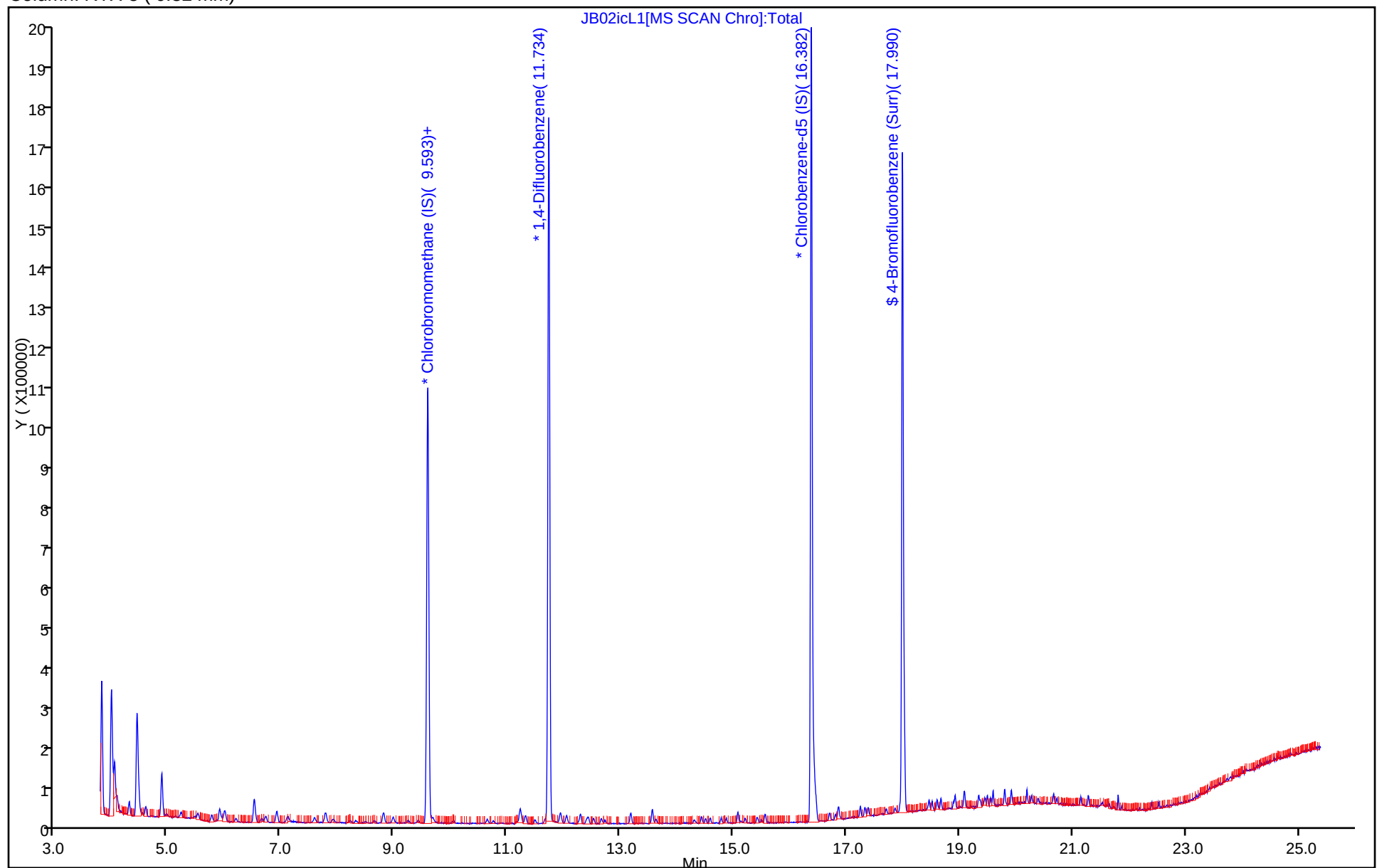
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL1.D

Injection Date: 02-Feb-2015 12:48:30

Instrument ID: MJ

Lims ID: IC L1

Client ID:

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 2

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

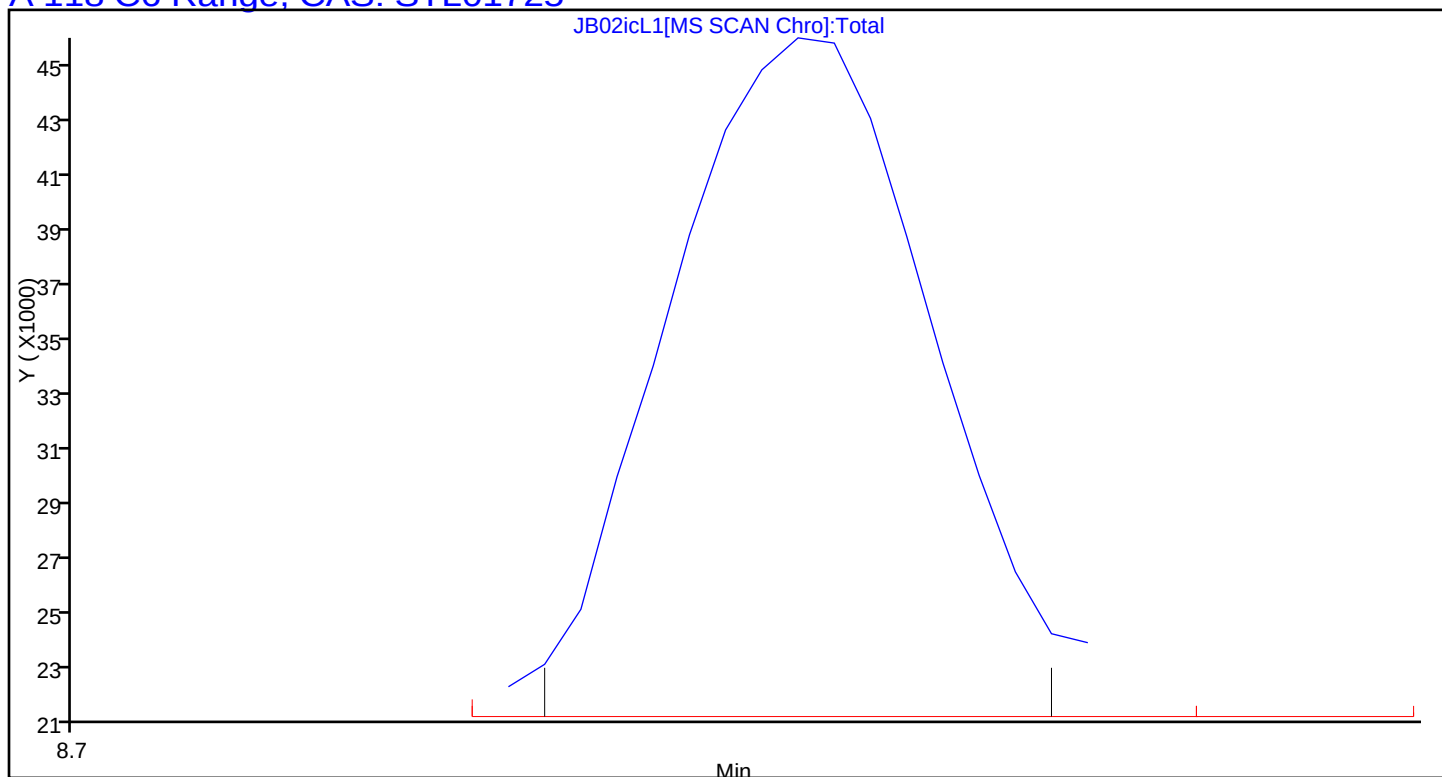
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL1.D

Injection Date: 02-Feb-2015 12:48:30

Instrument ID: MJ

Lims ID: IC L1

Client ID:

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 2

Purge Vol: 500.000 mL

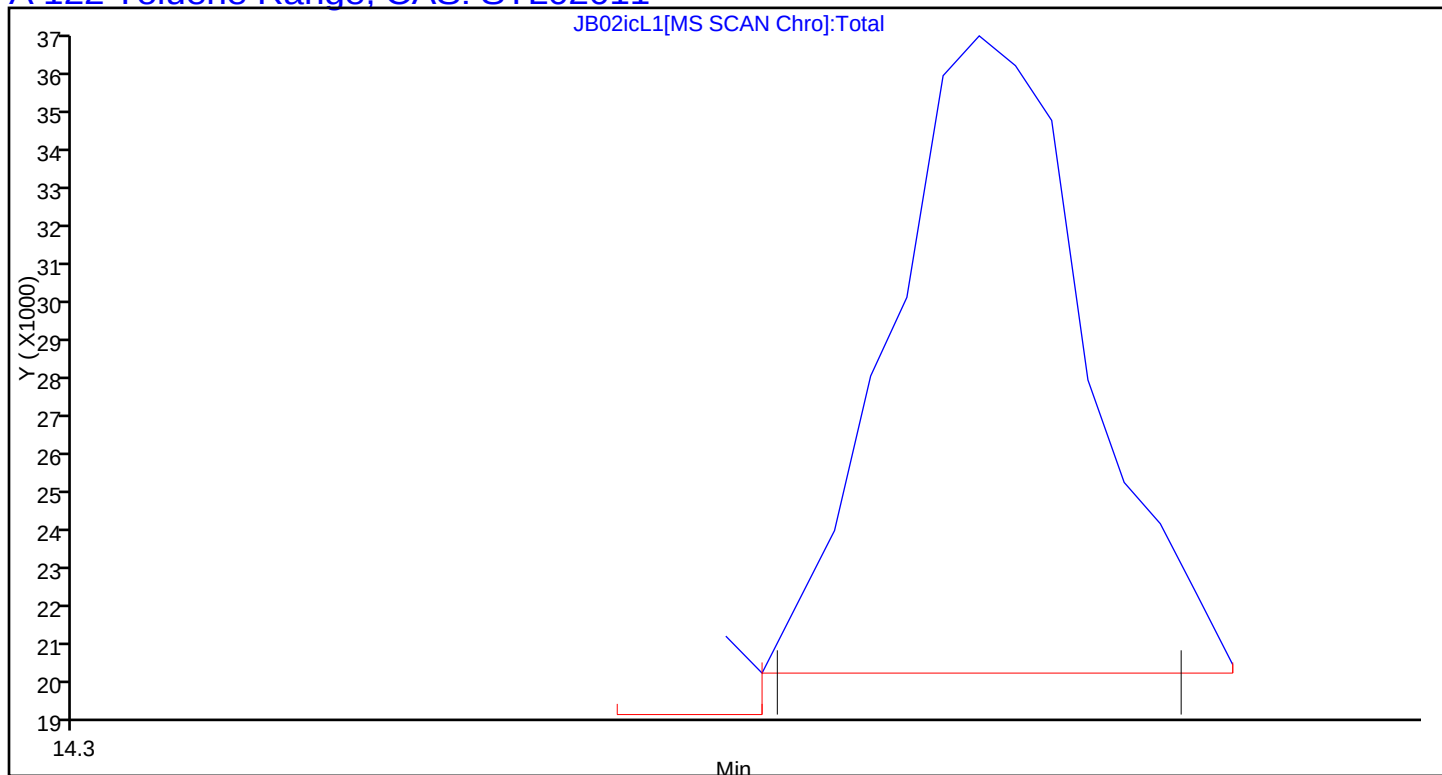
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Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL1.D

Injection Date: 02-Feb-2015 12:48:30

Instrument ID: MJ

Lims ID: IC L1

Client ID:

Operator ID: 7126

ALS Bottle#:

9

Worklist Smp#:

2

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MJ_TO15

Limit Group:

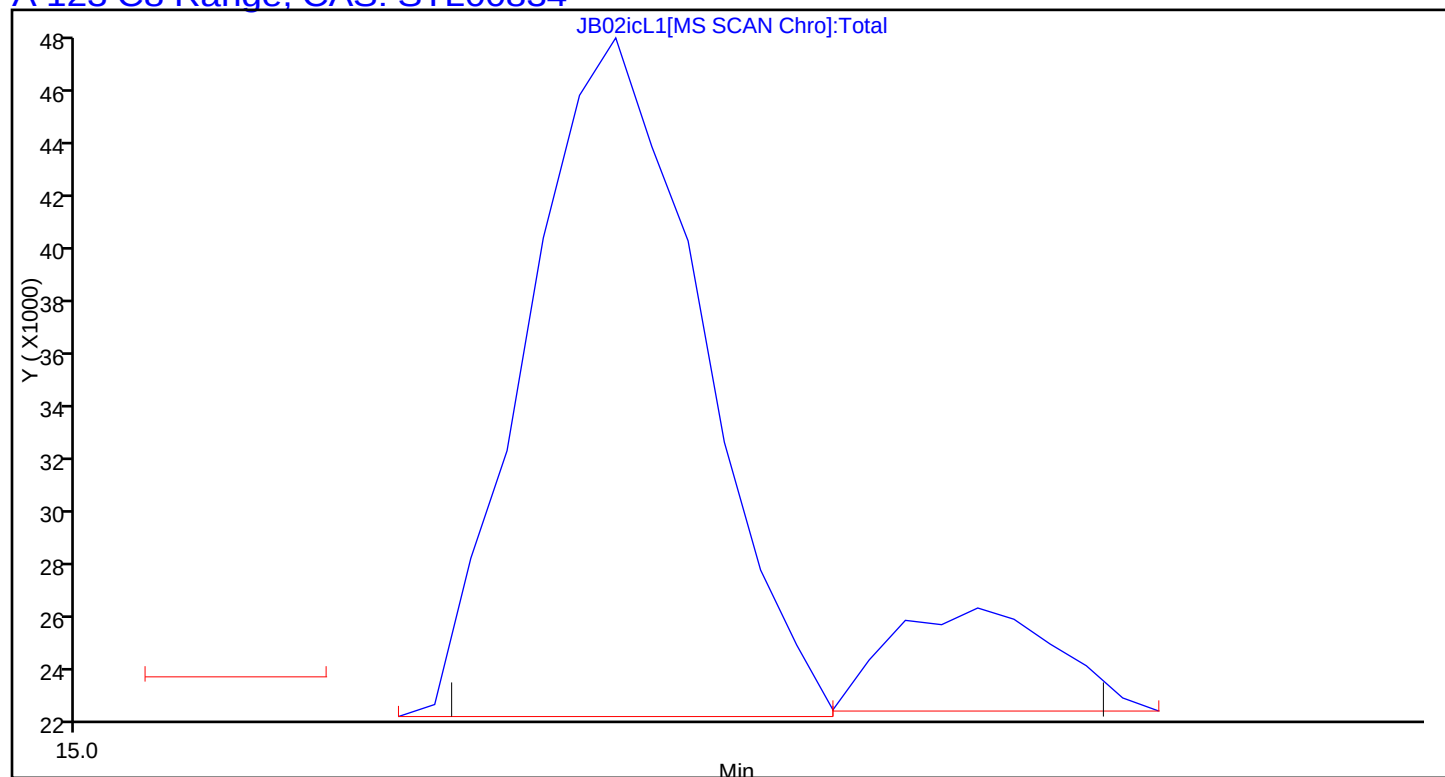
MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

A 123 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL2.D
 Lims ID: IC L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 02-Feb-2015 13:43:30 ALS Bottle#: 9 Worklist Smp#: 3
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 022292,,1,2,,ICAL 0.08
 Misc. Info.: J020215I,TO15,,140-0001328-003
 Operator ID: 7126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub3
 Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Feb-2015 08:51:05 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: tajh

Date: 03-Feb-2015 07:37:59

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	9.588	9.593	-0.005	98	339388	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.734	11.736	-0.002	96	1614490	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.377	16.380	-0.003	89	1426446	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.991	17.991	0.000	91	919425	4.00	3.94	
6 Chlorodifluoromethane	67	4.026	4.021	0.005	95	3424	0.0798	0.0835	
7 Propene	41	4.042	4.036	0.006	90	28773	0.0798	0.1787	
8 Dichlorodifluoromethane	85	4.090	4.093	-0.003	99	30170	0.0798	0.0790	
9 Chloromethane	52	4.305	4.302	0.003	61	5149	0.0798	0.0948	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.305	4.307	-0.002	93	18911	0.0798	0.0756	
11 Acetaldehyde	44	4.477	4.476	0.001	92	43139	0.3991	0.9207	
12 Vinyl chloride	62	4.494	4.497	-0.003	97	11424	0.0798	0.0779	
13 Butane	43	4.596	4.597	-0.001	88	21105	0.0798	0.0824	
14 Butadiene	54	4.601	4.598	0.003	60	9275	0.0798	0.0797	
15 Bromomethane	94	4.972	4.968	0.004	98	9939	0.0798	0.0799	
16 Chloroethane	64	5.123	5.127	-0.004	89	5077	0.0798	0.0791	
17 Ethanol	31	5.220	5.223	-0.003	97	22153	0.3991	0.4693	
18 Vinyl bromide	106	5.473	5.470	0.003	98	8418	0.0798	0.0772	
19 2-Methylbutane	43	5.521	5.520	0.001	91	15542	0.0798	0.0903	
20 Trichlorofluoromethane	101	5.763	5.766	-0.003	99	24844	0.0798	0.0743	
21 Acrolein	56	5.774	5.774	0.000	33	5059	0.0798	0.1308	
23 Acetone	58	5.903	5.899	0.004	99	25539	0.2395	0.5848	
24 Isopropyl alcohol	45	5.973	5.979	-0.006	92	44699	0.2395	0.2540	
26 Ethyl ether	31	6.193	6.184	0.009	93	8566	0.0798	0.0718	
27 1,1-Dichloroethene	96	6.543	6.540	0.003	96	8189	0.0798	0.0759	
28 2-Methyl-2-propanol	59	6.635	6.627	0.008	96	15626	0.0798	0.0780	
29 Acrylonitrile	53	6.651	6.650	0.001	93	4657	0.0798	0.0771	
30 1,1,2-Trichloro-1,2,2-trif	101	6.721	6.722	-0.001	94	17500	0.0798	0.0777	
31 Methylene Chloride	84	6.914	6.915	-0.001	97	13956	0.0798	0.1283	
32 3-Chloro-1-propene	39	6.925	6.930	-0.005	92	10428	0.0798	0.0883	
33 Carbon disulfide	76	7.092	7.098	-0.006	99	28737	0.0798	0.0756	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 trans-1,2-Dichloroethene	96	7.770	7.774	-0.004	94	9186	0.0798	0.0747	
35 2-Methylpentane	43	7.780	7.783	-0.003	96	26764	0.0798	0.0831	
36 Methyl tert-butyl ether	73	7.910	7.898	0.012	95	14666	0.0798	0.0709	
37 1,1-Dichloroethane	63	8.222	8.219	0.003	98	16980	0.0798	0.0821	
38 Vinyl acetate	43	8.318	8.317	0.001	100	16639	0.0798	0.0775	
39 2-Butanone (MEK)	72	8.792	8.788	0.004	96	4286	0.0798	0.1061	
40 Hexane	56	8.808	8.811	-0.003	74	9584	0.0798	0.0847	
139 Isopropyl ether	45	8.969	8.966	0.003	97	27473	0.0798	0.0793	
41 cis-1,2-Dichloroethene	96	9.244	9.246	-0.002	96	8319	0.0798	0.0786	
42 Ethyl acetate	43	9.416	9.417	-0.001	97	14933	0.0798	0.0757	
43 Chloroform	83	9.599	9.599	0.000	28	18254	0.0798	0.0852	
142 Tert-butyl ethyl ether	59	9.669	9.667	0.002	96	18391	0.0798	0.0708	
44 Tetrahydrofuran	42	10.040	10.018	0.022	94	8420	0.0798	0.0778	
45 1,1,1-Trichloroethane	97	10.642	10.643	-0.001	95	19538	0.0798	0.0870	
46 1,2-Dichloroethane	62	10.744	10.750	-0.006	95	11019	0.0798	0.0819	
47 n-Butanol	31	11.153	11.144	0.009	83	3638	0.0798	0.0745	
49 Cyclohexane	69	11.223	11.222	0.001	74	5033	0.0798	0.0817	
48 Benzene	78	11.223	11.226	-0.003	96	26858	0.0798	0.0901	
50 Carbon tetrachloride	117	11.239	11.247	-0.008	97	18438	0.0798	0.0838	
51 2,3-Dimethylpentane	71	11.315	11.320	-0.005	92	6780	0.0798	0.0893	
52 Thiophene	84	11.492	11.493	-0.001	97	14281	0.0798	0.0846	
140 Tert-amyl methyl ether	73	11.670	11.660	0.010	94	17350	0.0798	0.0776	
53 Isooctane	57	11.939	11.939	0.000	98	49918	0.0798	0.0842	
54 n-Heptane	71	12.288	12.295	-0.007	94	9169	0.0798	0.0839	
55 1,2-Dichloropropane	63	12.401	12.405	-0.004	90	7903	0.0798	0.0742	
56 Trichloroethene	130	12.434	12.437	-0.003	95	10613	0.0798	0.0817	
57 Dibromomethane	93	12.525	12.528	-0.003	96	10579	0.0798	0.0847	
59 Dichlorobromomethane	83	12.654	12.661	-0.007	97	17484	0.0798	0.0818	
58 1,4-Dioxane	88	12.681	12.670	0.011	83	3304	0.0798	0.0787	
60 Methyl methacrylate	41	12.724	12.724	0.000	92	10092	0.0798	0.0846	
61 Methylcyclohexane	83	13.181	13.185	-0.004	91	20438	0.0798	0.0844	
62 4-Methyl-2-pentanone (MIBK)	43	13.563	13.560	0.003	98	52619	0.0798	0.2145	
63 cis-1,3-Dichloropropene	75	13.628	13.630	-0.002	96	10101	0.0798	0.0733	
64 trans-1,3-Dichloropropene	75	14.306	14.306	0.000	98	8505	0.0798	0.0722	
65 Toluene	91	14.435	14.436	-0.001	92	21582	0.0798	0.0829	
66 1,1,2-Trichloroethane	83	14.505	14.507	-0.002	95	6796	0.0798	0.0778	
67 2-Methylthiophene	97	14.585	14.588	-0.003	97	17692	0.0798	0.0782	
68 3-Methylthiophene	97	14.779	14.786	-0.007	98	17391	0.0798	0.0786	
69 2-Hexanone	58	14.871	14.866	0.005	90	6594	0.0798	0.0635	
70 n-Octane	85	15.080	15.081	-0.001	97	7934	0.0798	0.0819	
71 Chlorodibromomethane	129	15.209	15.209	0.000	97	13087	0.0798	0.0745	
72 Ethylene Dibromide	107	15.500	15.500	0.000	99	11011	0.0798	0.0756	
73 Tetrachloroethene	129	15.559	15.561	-0.002	93	9639	0.0798	0.0851	
74 2,3-Dimethylheptane	43	16.409	16.411	-0.002	91	31829	0.0798	0.0947	
75 Chlorobenzene	112	16.431	16.429	0.002	95	16601	0.0798	0.0800	
76 Ethylbenzene	91	16.700	16.703	-0.003	98	23663	0.0798	0.0778	
77 2-Ethylthiophene	97	16.807	16.807	0.000	96	18121	0.0798	0.0772	
78 m-Xylene & p-Xylene	91	16.861	16.861	0.000	99	36589	0.1596	0.1493	
79 n-Nonane	57	17.243	17.245	-0.002	94	15272	0.0798	0.0746	
80 Styrene	104	17.324	17.326	-0.002	96	12280	0.0798	0.0711	
81 Bromoform	173	17.329	17.328	0.001	85	10205	0.0798	0.0670	
82 o-Xylene	91	17.388	17.386	0.002	99	20939	0.0798	0.0783	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
83 1,1,2,2-Tetrachloroethane	83	17.706	17.704	0.002	96	14649	0.0798	0.0699	
84 1,2,3-Trichloropropane	110	17.862	17.860	0.002	94	3207	0.0798	0.0664	
85 Isopropylbenzene	105	17.953	17.953	0.000	89	27559	0.0798	0.0789	
86 N-Propylbenzene	120	18.464	18.463	0.001	98	6212	0.0798	0.0665	
87 2-Chlorotoluene	126	18.518	18.517	0.001	97	7022	0.0798	0.0751	
88 4-Ethyltoluene	105	18.604	18.605	-0.001	98	22877	0.0798	0.0678	
89 1,3,5-Trimethylbenzene	120	18.674	18.673	0.001	92	11228	0.0798	0.0700	
90 Alpha Methyl Styrene	118	18.894	18.896	-0.002	84	7857	0.0798	0.0612	
91 n-Decane	57	18.921	18.925	-0.004	88	16071	0.0798	0.0689	
92 tert-Butylbenzene	119	19.083	19.083	0.000	90	21709	0.0798	0.0689	
93 1,2,4-Trimethylbenzene	105	19.093	19.097	-0.004	96	19434	0.0798	0.0674	
94 sec-Butylbenzene	105	19.341	19.341	0.000	98	29285	0.0798	0.0693	
95 1,3-Dichlorobenzene	146	19.373	19.370	0.003	97	12621	0.0798	0.0762	
96 Benzyl chloride	91	19.438	19.439	-0.001	97	13385	0.0798	0.0692	
97 1,4-Dichlorobenzene	146	19.454	19.453	0.001	91	11424	0.0798	0.0745	
98 4-Isopropyltoluene	119	19.497	19.496	0.001	96	22528	0.0798	0.0671	
99 1,2,3-Trimethylbenzene	105	19.551	19.554	-0.003	98	15569	0.0798	0.0674	
100 Butylcyclohexane	83	19.594	19.597	-0.003	89	18591	0.0798	0.0748	
101 2,3-Dihydroindene	117	19.804	19.799	0.005	93	18833	0.0798	0.0730	
102 1,2-Dichlorobenzene	146	19.804	19.805	-0.001	80	11993	0.0798	0.0732	
103 n-Butylbenzene	91	19.916	19.916	0.000	98	20887	0.0798	0.0685	
104 Indene	116	19.927	19.927	0.000	88	11866	0.0798	0.0690	
105 Undecane	57	20.196	20.195	0.001	95	16970	0.0798	0.0695	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.277	20.278	-0.001	98	17073	0.0798	0.0691	
141 1,2-Dibromo-3-Chloropropan	157	20.390	20.393	-0.003	90	4351	0.0798	0.0639	
108 1,2,4,5-Tetramethylbenzene	119	20.670	20.668	0.002	95	22010	0.0798	0.0722	
107 1,2,3,5-Tetramethylbenzene	119	20.723	20.725	-0.002	94	13642	0.0798	0.0715	
109 1,2,3,4-Tetramethylbenzene	119	21.148	21.147	0.001	97	17666	0.0798	0.0717	
110 Dodecane	57	21.283	21.282	0.001	94	15670	0.0798	0.0722	
111 1,2,4-Trichlorobenzene	180	21.520	21.525	-0.005	91	4360	0.0798	0.0660	
112 Naphthalene	128	21.654	21.655	-0.001	98	9769	0.0798	0.0662	
113 Benzo(b)thiophene	134	21.740	21.741	-0.001	98	5598	0.0798	0.0767	
114 Hexachlorobutadiene	225	21.810	21.810	0.000	96	9633	0.0798	0.0761	
115 1,2,3-Trichlorobenzene	180	21.875	21.872	0.003	92	4033	0.0798	0.0692	
116 2-Methylnaphthalene	142	22.402	22.402	0.000	98	9874	0.2494	0.6415	
117 1-Methylnaphthalene	142	22.526	22.528	-0.002	98	9802	0.2494	0.5999	
A 118 C6 Range	1	8.808	(8.754-8.862)		0	124359	0.0798	0.0957	
A 122 Toluene Range	1	14.435	(14.405-14.465)		0	51296	0.0798	0.0802	
A 123 C8 Range	1	15.104	(15.056-15.152)		0	94283	0.0798	0.0899	
S 124 Xylenes, Total	100				0		0.2394	0.2276	
S 144 1,2-Dichloroethene, Total	1				0			0.1533	

Reagents:

MAic00.2_00010

Amount Added: 199.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL2.D

Injection Date: 02-Feb-2015 13:43:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: IC L2

Worklist Smp#: 3

Client ID:

Purge Vol: 500.000 mL

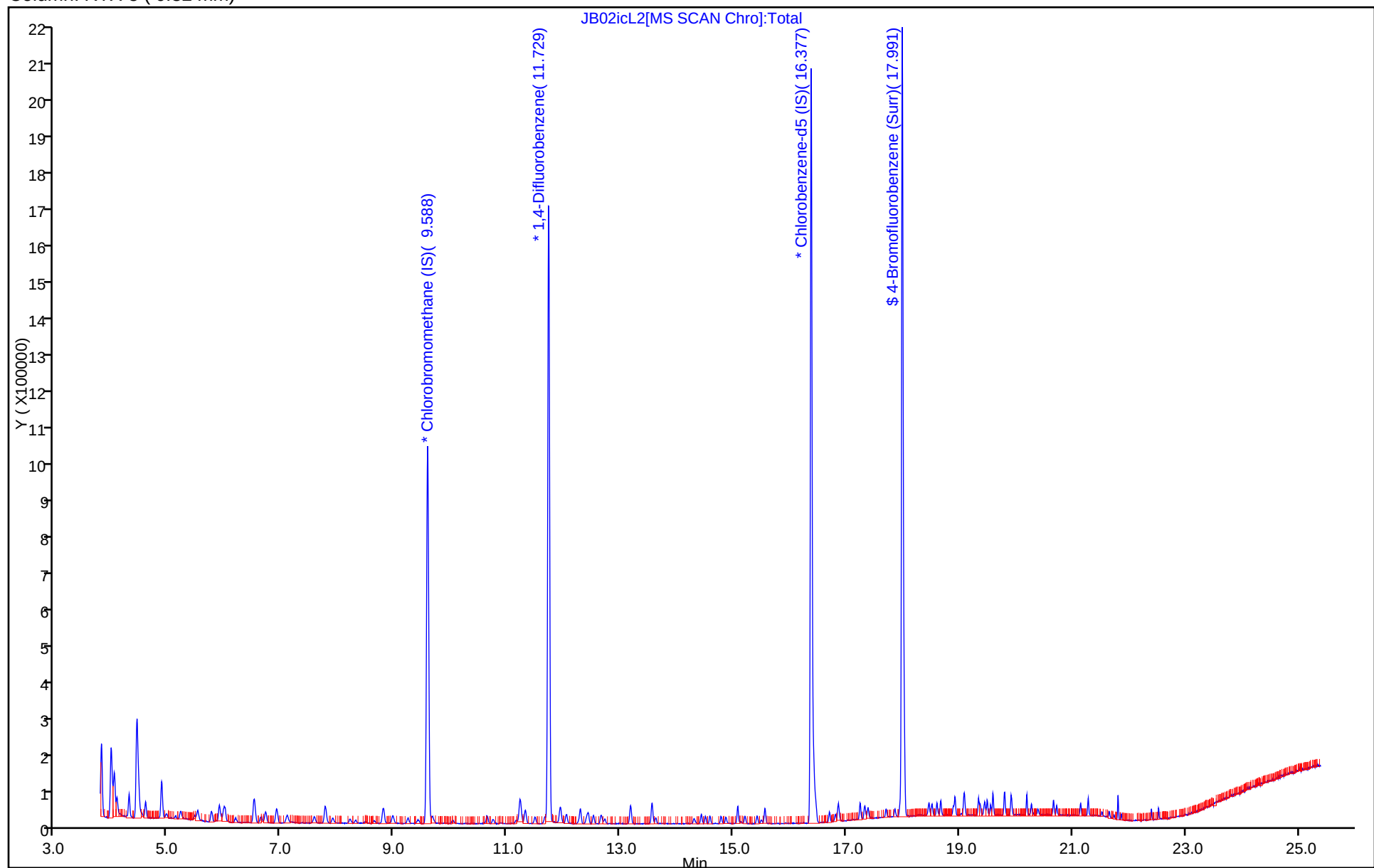
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL2.D

Injection Date: 02-Feb-2015 13:43:30

Instrument ID: MJ

Lims ID: IC L2

Client ID:

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 3

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

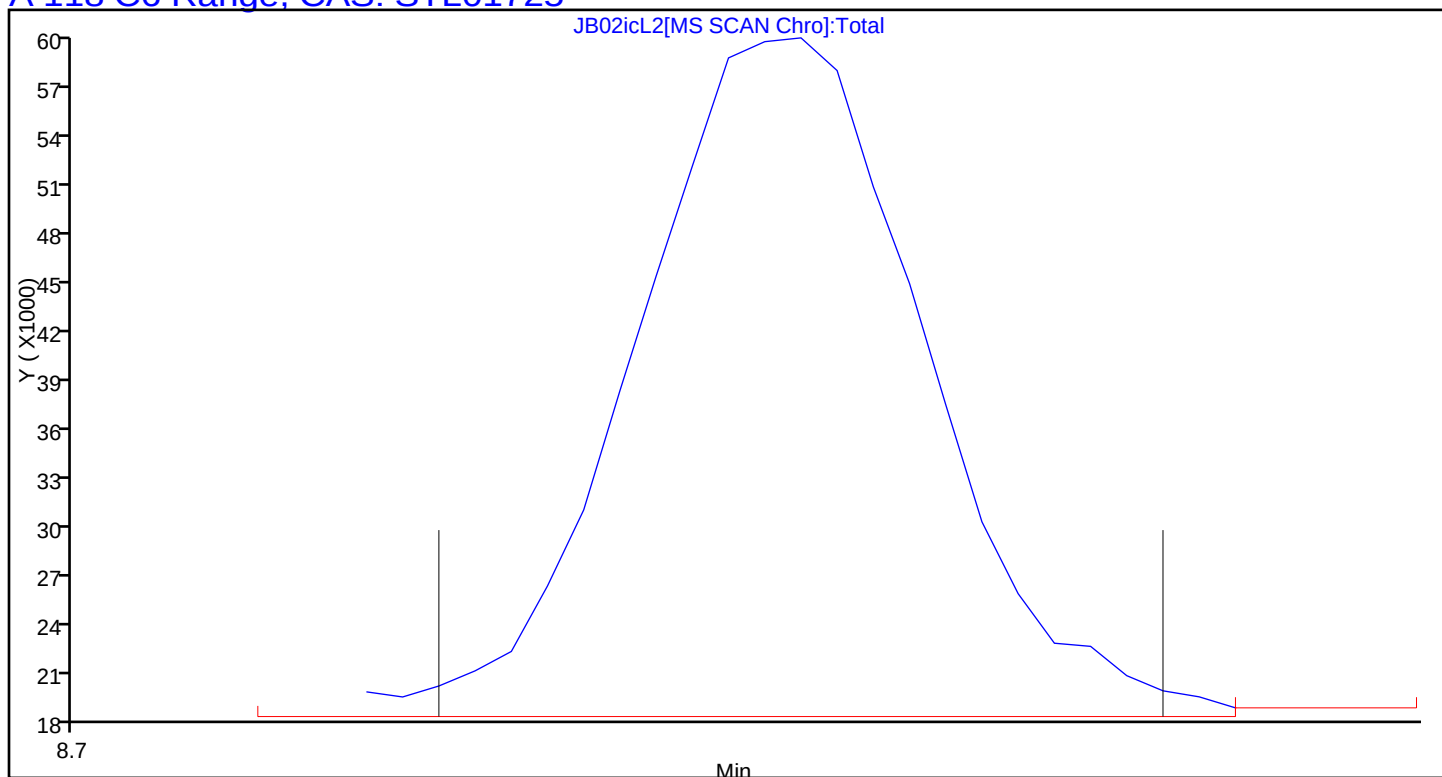
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL2.D

Injection Date: 02-Feb-2015 13:43:30

Instrument ID: MJ

Lims ID: IC L2

Client ID:

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 3

Purge Vol: 500.000 mL

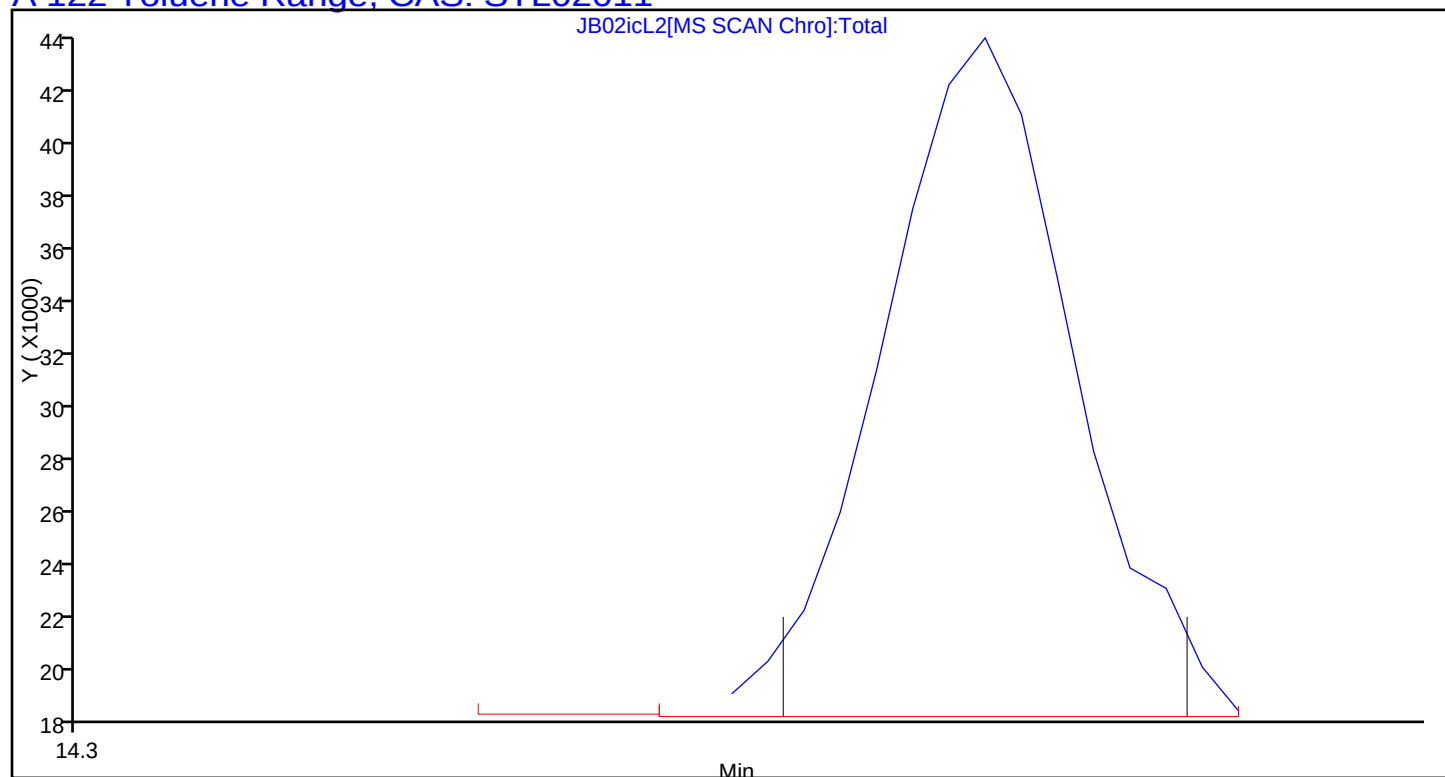
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL2.D

Injection Date: 02-Feb-2015 13:43:30

Instrument ID: MJ

Lims ID: IC L2

Client ID:

Operator ID: 7126

ALS Bottle#:

9

Worklist Smp#:

3

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MJ_TO15

Limit Group:

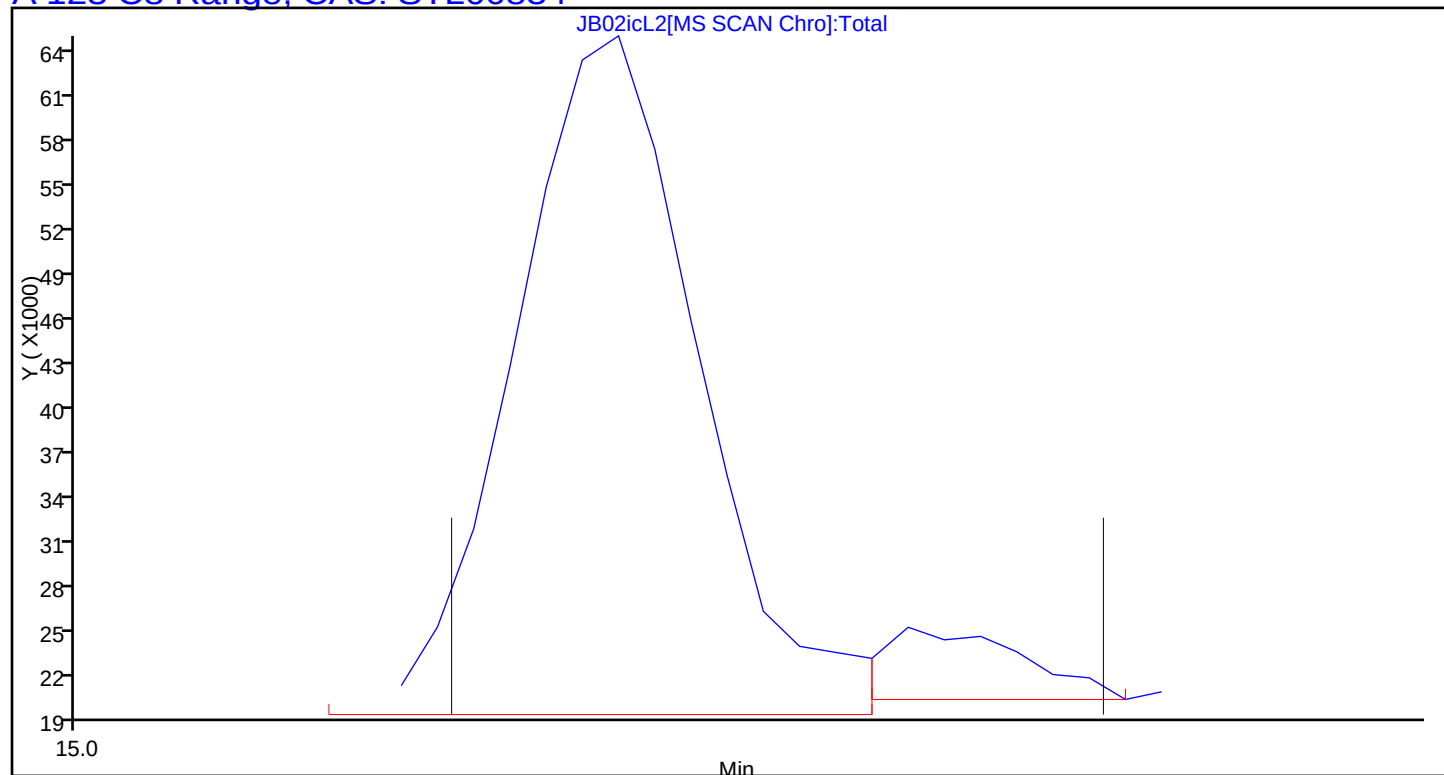
MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

A 123 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL3.D
 Lims ID: IC L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 02-Feb-2015 14:37:30 ALS Bottle#: 10 Worklist Smp#: 4
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 022290,,1,3,,ICAL 0.16
 Misc. Info.: J020215I,TO15,,140-0001328-004
 Operator ID: 7126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub3
 Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Feb-2015 08:51:10 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: barlozhetskayaa

Date: 03-Feb-2015 09:57:43

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	9.590	9.593	-0.003	97	317151	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.736	11.736	0.000	96	1449596	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.379	16.380	-0.001	89	1258655	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.992	17.991	0.001	94	768365	4.00	3.73	
6 Chlorodifluoromethane	67	4.027	4.021	0.006	97	8860	0.2000	0.2311	
7 Propene	41	4.038	4.036	0.002	95	42023	0.2000	0.2793	
8 Dichlorodifluoromethane	85	4.097	4.093	0.004	100	86277	0.2000	0.2416	
9 Chloromethane	52	4.302	4.302	0.000	62	13477	0.2000	0.2654	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.307	4.307	0.000	93	55459	0.2000	0.2371	
11 Acetaldehyde	44	4.474	4.476	-0.002	99	82928	1.00	1.89	
12 Vinyl chloride	62	4.495	4.497	-0.002	99	33856	0.2000	0.2471	
13 Butane	43	4.598	4.597	0.001	87	59552	0.2000	0.2487	
14 Butadiene	54	4.598	4.598	0.000	61	25907	0.2000	0.2381	
15 Bromomethane	94	4.969	4.968	0.001	98	28141	0.2000	0.2420	
16 Chloroethane	64	5.125	5.127	-0.002	91	14347	0.2000	0.2391	
17 Ethanol	31	5.222	5.223	-0.001	97	61484	1.00	1.39	
18 Vinyl bromide	106	5.469	5.470	-0.001	98	24723	0.2000	0.2426	
19 2-Methylbutane	43	5.523	5.520	0.003	92	40642	0.2000	0.2526	
20 Trichlorofluoromethane	101	5.770	5.766	0.004	99	76025	0.2000	0.2432	
21 Acrolein	56	5.770	5.774	-0.004	32	10043	0.2000	0.2778	
22 Acetonitrile	40	5.851	5.850	0.001	93	12064	0.2000	0.3168	
23 Acetone	58	5.899	5.899	0.000	99	49926	0.6000	1.22	
24 Isopropyl alcohol	45	5.975	5.979	-0.004	91	138024	0.6000	0.8392	
25 Pentane	72	6.002	6.005	-0.002	97	4339	0.2000	0.2268	
26 Ethyl ether	31	6.185	6.184	0.001	90	34989	0.2000	0.3137	
27 1,1-Dichloroethene	96	6.534	6.540	-0.006	96	23607	0.2000	0.2343	
28 2-Methyl-2-propanol	59	6.626	6.627	-0.001	96	51169	0.2000	0.2732	
29 Acrylonitrile	53	6.647	6.650	-0.003	93	17104	0.2000	0.3032	
30 1,1,2-Trichloro-1,2,2-trif	101	6.722	6.722	0.000	94	52435	0.2000	0.2492	
31 Methylene Chloride	84	6.916	6.915	0.001	97	28915	0.2000	0.2844	

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	6.932	6.930	0.002	93	28172	0.2000	0.2552	
33 Carbon disulfide	76	7.099	7.098	0.001	99	85555	0.2000	0.2408	
34 trans-1,2-Dichloroethene	96	7.777	7.774	0.003	95	28651	0.2000	0.2494	
35 2-Methylpentane	43	7.782	7.783	-0.001	97	75663	0.2000	0.2514	
36 Methyl tert-butyl ether	73	7.901	7.898	0.003	97	60333	0.2000	0.3119	
37 1,1-Dichloroethane	63	8.218	8.219	-0.001	100	50600	0.2000	0.2618	
38 Vinyl acetate	43	8.315	8.317	-0.002	100	58700	0.2000	0.2927	
39 2-Butanone (MEK)	72	8.788	8.788	0.000	96	11724	0.2000	0.3105	
40 Hexane	56	8.810	8.811	-0.001	87	27640	0.2000	0.2614	
139 Isopropyl ether	45	8.966	8.966	0.000	98	97358	0.2000	0.3009	
41 cis-1,2-Dichloroethene	96	9.245	9.246	-0.001	96	26537	0.2000	0.2683	
42 Ethyl acetate	43	9.418	9.417	0.001	98	54737	0.2000	0.2968	
43 Chloroform	83	9.595	9.599	-0.004	32	56129	0.2000	0.2804	
142 Tert-butyl ethyl ether	59	9.665	9.667	-0.002	97	73299	0.2000	0.3021	
44 Tetrahydrofuran	42	10.020	10.018	0.002	94	29342	0.2000	0.2901	
45 1,1,1-Trichloroethane	97	10.639	10.643	-0.004	97	57170	0.2000	0.2724	
46 1,2-Dichloroethane	62	10.746	10.750	-0.004	97	33204	0.2000	0.2750	
47 n-Butanol	31	11.144	11.144	0.000	87	11138	0.2000	0.2539	
49 Cyclohexane	69	11.220	11.222	-0.002	77	14857	0.2000	0.2685	
48 Benzene	78	11.225	11.226	-0.001	97	72062	0.2000	0.2691	
50 Carbon tetrachloride	117	11.241	11.247	-0.006	98	46211	0.2000	0.2339	
51 2,3-Dimethylpentane	71	11.322	11.320	0.002	92	18743	0.2000	0.2748	
52 Thiophene	84	11.494	11.493	0.001	97	40734	0.2000	0.2686	
140 Tert-amyl methyl ether	73	11.661	11.660	0.001	95	60937	0.2000	0.3090	
53 Isooctane	57	11.941	11.939	0.002	98	152003	0.2000	0.2855	
54 n-Heptane	71	12.296	12.295	0.001	95	27922	0.2000	0.2844	
55 1,2-Dichloropropane	63	12.409	12.405	0.004	89	27087	0.2000	0.2833	
56 Trichloroethene	130	12.435	12.437	-0.002	95	33142	0.2000	0.2841	
57 Dibromomethane	93	12.527	12.528	-0.001	97	28940	0.2000	0.2580	
59 Dichlorobromomethane	83	12.661	12.661	0.000	98	50671	0.2000	0.2641	
58 1,4-Dioxane	88	12.672	12.670	0.002	89	11078	0.2000	0.2937	
60 Methyl methacrylate	41	12.721	12.724	-0.003	95	33768	0.2000	0.3153	
61 Methylcyclohexane	83	13.183	13.185	-0.002	91	62498	0.2000	0.2873	
62 4-Methyl-2-pentanone (MIBK)	43	13.560	13.560	0.000	98	62867	0.2000	0.2854	
63 cis-1,3-Dichloropropene	75	13.630	13.630	0.000	98	33291	0.2000	0.2689	
64 trans-1,3-Dichloropropene	75	14.308	14.306	0.002	98	30041	0.2000	0.2892	
65 Toluene	91	14.431	14.436	-0.005	93	74297	0.2000	0.3235	
66 1,1,2-Trichloroethane	83	14.501	14.507	-0.006	97	23388	0.2000	0.3033	
67 2-Methylthiophene	97	14.587	14.588	-0.001	98	57843	0.2000	0.2896	
68 3-Methylthiophene	97	14.786	14.786	0.000	100	58976	0.2000	0.3019	
69 2-Hexanone	58	14.867	14.866	0.001	91	25954	0.2000	0.2831	
70 n-Octane	85	15.077	15.081	-0.004	96	23293	0.2000	0.2726	
71 Chlorodibromomethane	129	15.206	15.209	-0.003	97	43786	0.2000	0.2826	
72 Ethylene Dibromide	107	15.496	15.500	-0.004	97	38462	0.2000	0.2993	
73 Tetrachloroethene	129	15.561	15.561	0.000	95	29878	0.2000	0.2989	
74 2,3-Dimethylheptane	43	16.411	16.411	0.000	95	88230	0.2000	0.2976	
75 Chlorobenzene	112	16.427	16.429	-0.002	91	52937	0.2000	0.2891	
76 Ethylbenzene	91	16.701	16.703	-0.002	99	88367	0.2000	0.3291	
77 2-Ethylthiophene	97	16.804	16.807	-0.003	97	65978	0.2000	0.3186	
78 m-Xylene & p-Xylene	91	16.857	16.861	-0.004	99	140025	0.4000	0.6473	
79 n-Nonane	57	17.245	17.245	0.000	95	50203	0.2000	0.2779	
80 Styrene	104	17.325	17.326	-0.001	99	45149	0.2000	0.2962	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
81 Bromoform	173	17.325	17.328	-0.003	90	37533	0.2000	0.2792	
82 o-Xylene	91	17.385	17.386	-0.001	99	75681	0.2000	0.3208	
83 1,1,2,2-Tetrachloroethane	83	17.702	17.704	-0.002	99	55254	0.2000	0.2989	
84 1,2,3-Trichloropropane	110	17.858	17.860	-0.002	98	12919	0.2000	0.3032	
85 Isopropylbenzene	105	17.949	17.953	-0.004	94	99997	0.2000	0.3246	
86 N-Propylbenzene	120	18.460	18.463	-0.003	99	25935	0.2000	0.3147	
87 2-Chlorotoluene	126	18.514	18.517	-0.003	98	24262	0.2000	0.2943	
88 4-Ethyltoluene	105	18.606	18.605	0.001	98	88362	0.2000	0.2970	
89 1,3,5-Trimethylbenzene	120	18.670	18.673	-0.003	92	44028	0.2000	0.3110	
90 Alpha Methyl Styrene	118	18.896	18.896	0.000	86	32639	0.2000	0.2881	
91 n-Decane	57	18.923	18.925	-0.002	87	61578	0.2000	0.2993	
92 tert-Butylbenzene	119	19.085	19.083	0.001	93	85228	0.2000	0.3067	
93 1,2,4-Trimethylbenzene	105	19.095	19.097	-0.002	96	79047	0.2000	0.3109	
94 sec-Butylbenzene	105	19.343	19.341	0.002	99	116691	0.2000	0.3129	
95 1,3-Dichlorobenzene	146	19.370	19.370	0.000	98	41670	0.2000	0.2850	
96 Benzyl chloride	91	19.440	19.439	0.001	98	49141	0.2000	0.2880	
97 1,4-Dichlorobenzene	146	19.450	19.453	-0.003	93	38079	0.2000	0.2815	
98 4-Isopropyltoluene	119	19.493	19.496	-0.003	97	92324	0.2000	0.3114	
99 1,2,3-Trimethylbenzene	105	19.553	19.554	-0.002	99	62265	0.2000	0.3053	
100 Butylcyclohexane	83	19.596	19.597	-0.001	88	62915	0.2000	0.2868	
101 2,3-Dihydroindene	117	19.800	19.799	0.001	93	69100	0.2000	0.3035	
102 1,2-Dichlorobenzene	146	19.805	19.805	0.000	94	41359	0.2000	0.2862	
103 n-Butylbenzene	91	19.918	19.916	0.002	98	82201	0.2000	0.3057	
104 Indene	116	19.929	19.927	0.002	89	40978	0.2000	0.2701	
105 Undecane	57	20.193	20.195	-0.002	94	64951	0.2000	0.3015	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.279	20.278	0.001	98	63911	0.2000	0.2932	
141 1,2-Dibromo-3-Chloropropan	157	20.392	20.393	-0.001	92	15699	0.2000	0.2612	
108 1,2,4,5-Tetramethylbenzene	119	20.666	20.668	-0.002	97	80151	0.2000	0.2979	
107 1,2,3,5-Tetramethylbenzene	119	20.725	20.725	0.000	94	50389	0.2000	0.2993	
109 1,2,3,4-Tetramethylbenzene	119	21.145	21.147	-0.002	97	64538	0.2000	0.2967	
110 Dodecane	57	21.279	21.282	-0.003	93	53896	0.2000	0.2812	
111 1,2,4-Trichlorobenzene	180	21.527	21.525	0.002	94	12763	0.2000	0.2191	
112 Naphthalene	128	21.656	21.655	0.001	98	30221	0.2000	0.2322	
113 Benzo(b)thiophene	134	21.742	21.741	0.001	99	13207	0.2000	0.2052	
114 Hexachlorobutadiene	225	21.812	21.810	0.002	96	32549	0.2000	0.2913	
115 1,2,3-Trichlorobenzene	180	21.871	21.872	-0.001	95	11814	0.2000	0.2298	
116 2-Methylnaphthalene	142	22.404	22.402	0.002	98	9608	0.6251	0.7074	
117 1-Methylnaphthalene	142	22.527	22.528	-0.001	98	10046	0.6251	0.6968	
A 118 C6 Range	1	8.804	(8.756-8.864)		0	327237	0.2000	0.2694	
A 122 Toluene Range	1	14.431	(14.401-14.461)		0	184771	0.2000	0.3275	
A 123 C8 Range	1	15.104	(15.056-15.152)		0	266259	0.2000	0.2876	
S 124 Xylenes, Total	100				0		0.6000	0.9681	
S 144 1,2-Dichloroethene, Total	1				0			0.5176	

Reagents:

MAic5_00013

Amount Added: 20.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL3.D

Injection Date: 02-Feb-2015 14:37:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: IC L3

Worklist Smp#: 4

Client ID:

Purge Vol: 500.000 mL

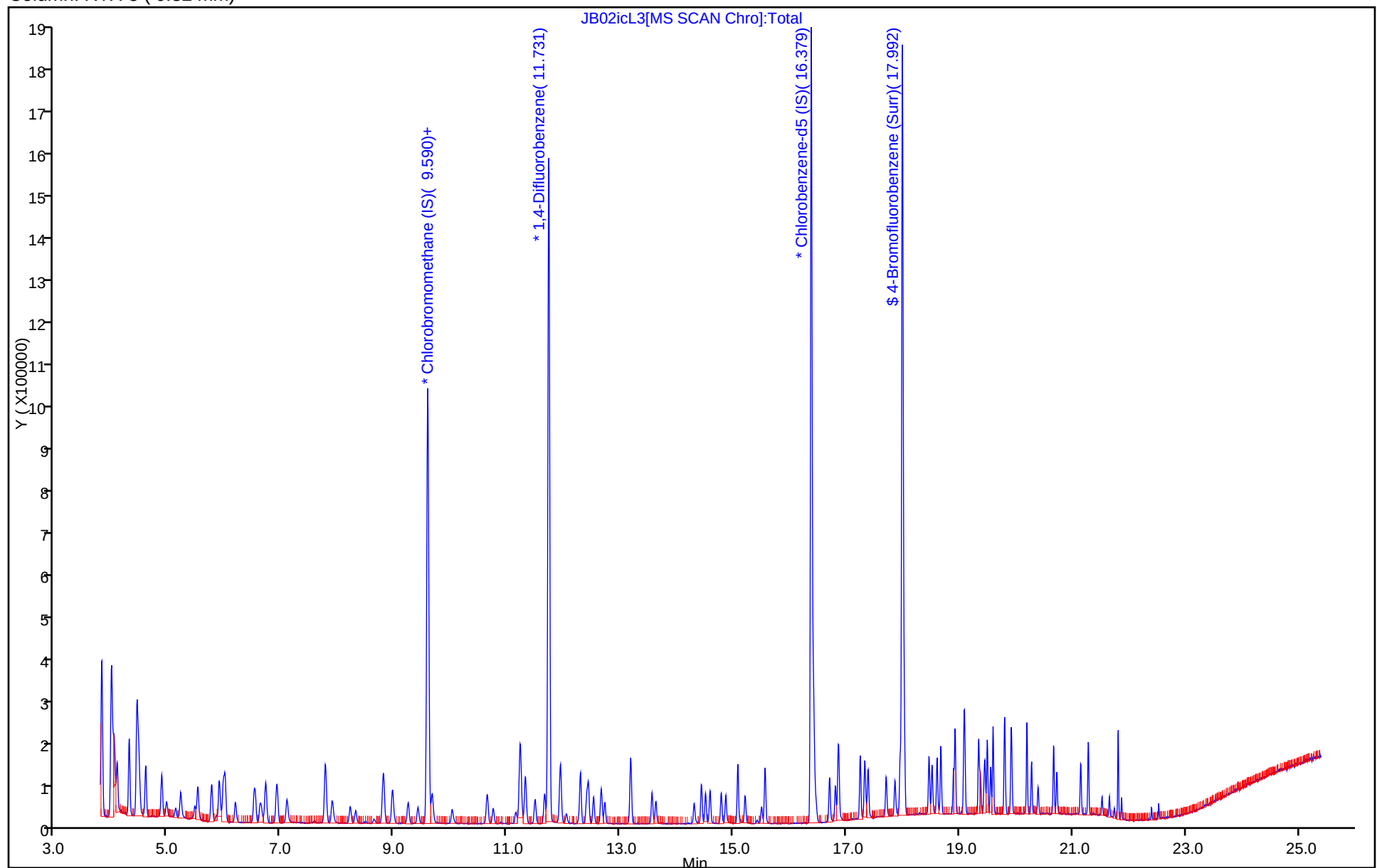
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL3.D

Injection Date: 02-Feb-2015 14:37:30

Instrument ID: MJ

Lims ID: IC L3

Client ID:

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 4

Purge Vol: 500.000 mL

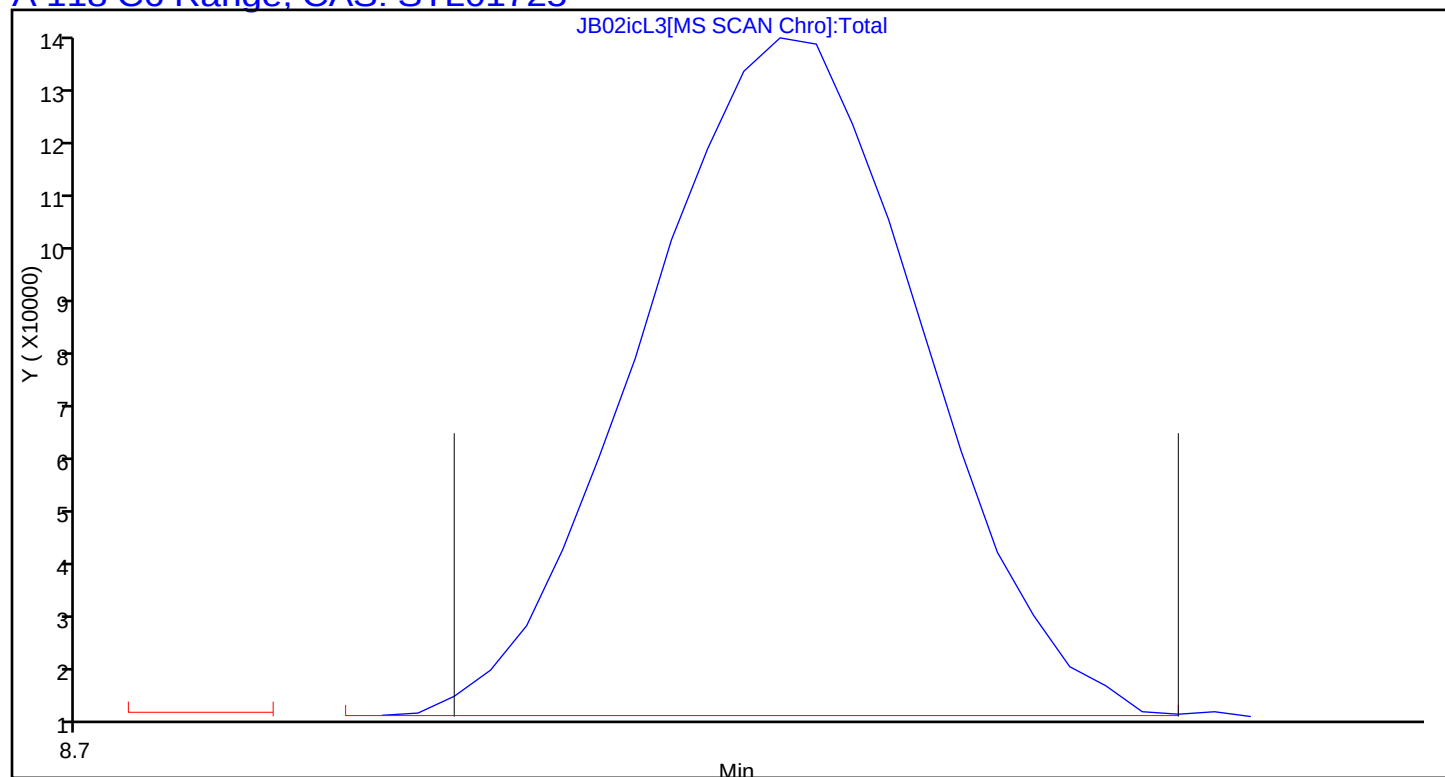
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

A 118 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL3.D

Injection Date: 02-Feb-2015 14:37:30

Instrument ID: MJ

Lims ID: IC L3

Client ID:

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 4

Purge Vol: 500.000 mL

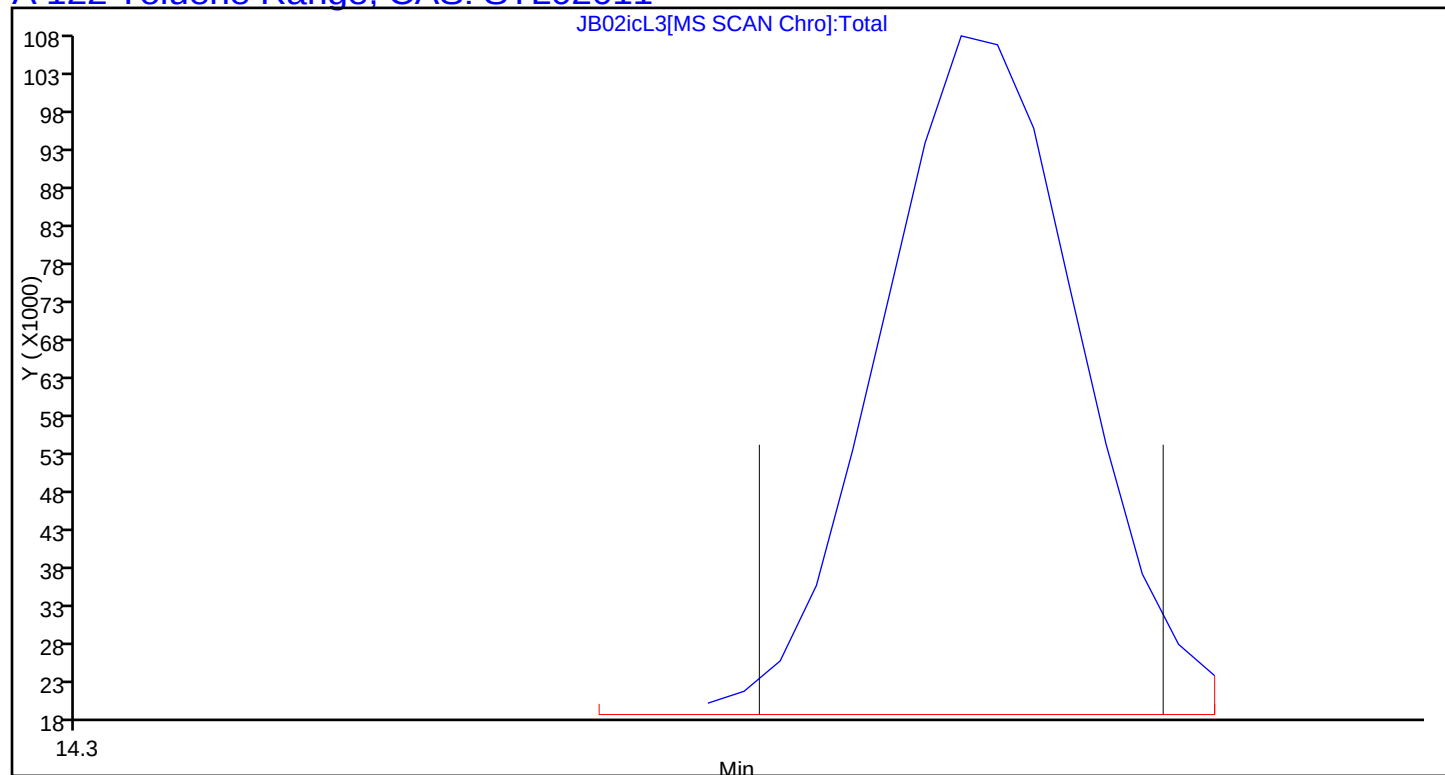
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL3.D

Injection Date: 02-Feb-2015 14:37:30

Instrument ID: MJ

Lims ID: IC L3

Client ID:

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 4

Purge Vol: 500.000 mL

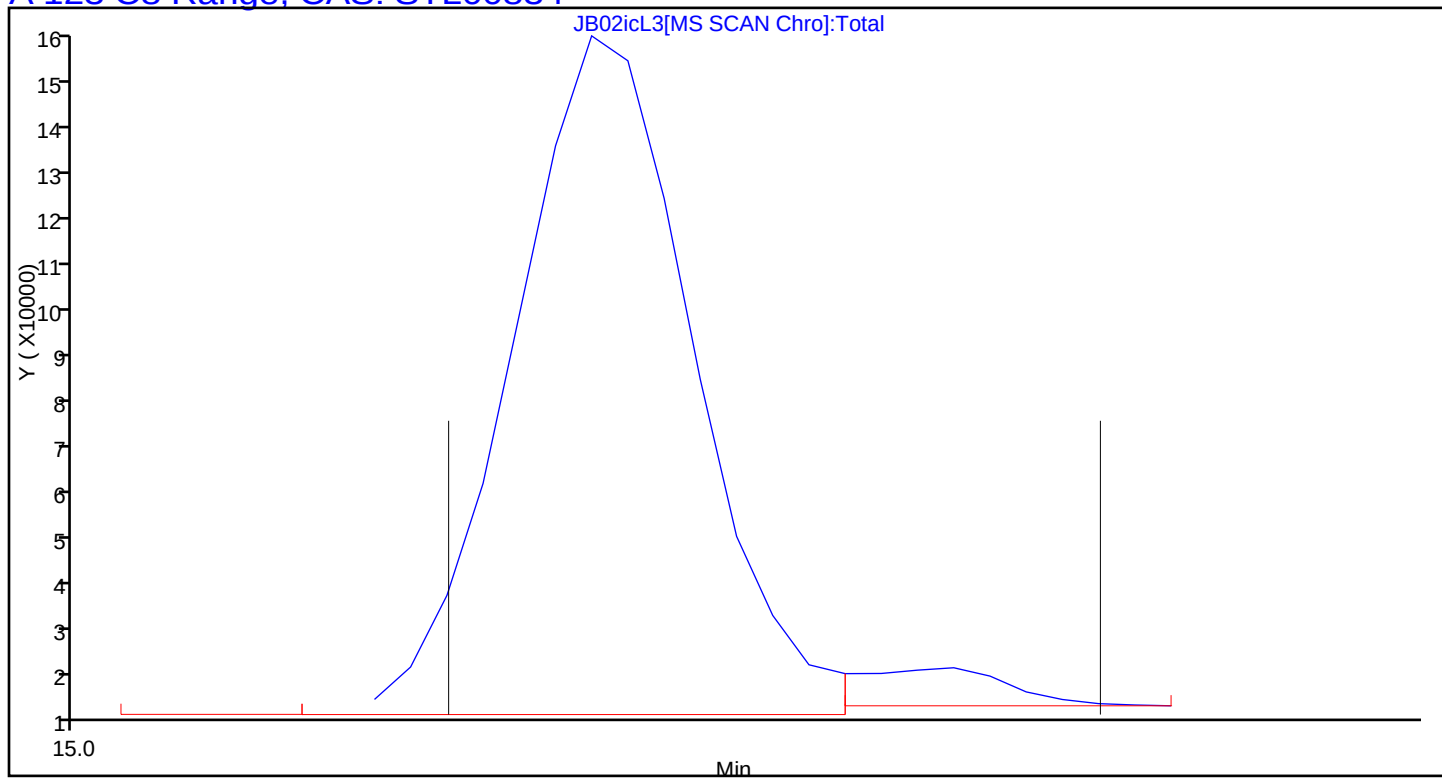
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 123 C8 Range, CAS: STL00834

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL4.D
 Lims ID: IC L4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 02-Feb-2015 15:32:30 ALS Bottle#: 11 Worklist Smp#: 5
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 022289,,1,4,,ICAL 0.4
 Misc. Info.: J020215I,TO15,,140-0001328-005
 Operator ID: 7126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub3
 Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Feb-2015 08:51:14 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: barlozhetskayaa

Date: 02-Feb-2015 16:37:09

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	9.593	9.593	0.000	97	274964	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.734	11.736	-0.002	96	1152980	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.381	16.380	0.001	89	1077285	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.990	17.991	-0.001	90	746943	4.00	4.24	
6 Chlorodifluoromethane	67	4.019	4.021	-0.002	97	14782	0.4000	0.4447	
7 Propene	41	4.036	4.036	0.000	98	65383	0.4000	0.5013	
8 Dichlorodifluoromethane	85	4.095	4.093	0.002	100	143956	0.4000	0.4651	
9 Chloromethane	52	4.305	4.302	0.003	97	20905	0.4000	0.4749	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.310	4.307	0.003	93	94740	0.4000	0.4672	
11 Acetaldehyde	44	4.477	4.476	0.001	97	86354	2.00	2.27	
12 Vinyl chloride	62	4.498	4.497	0.001	99	55811	0.4000	0.4698	
13 Butane	43	4.595	4.597	-0.002	87	99559	0.4000	0.4795	
14 Butadiene	54	4.600	4.598	0.002	61	44283	0.4000	0.4695	
15 Bromomethane	94	4.966	4.968	-0.002	99	46423	0.4000	0.4605	
16 Chloroethane	64	5.128	5.127	0.001	94	24468	0.4000	0.4703	
17 Ethanol	31	5.219	5.223	-0.004	95	83182	2.00	2.17	
18 Vinyl bromide	106	5.472	5.470	0.002	99	40783	0.4000	0.4616	
19 2-Methylbutane	43	5.515	5.520	-0.005	92	62797	0.4000	0.4502	
20 Trichlorofluoromethane	101	5.762	5.766	-0.004	99	125854	0.4000	0.4643	
21 Acrolein	56	5.773	5.774	-0.001	30	11176	0.4000	0.3566	
22 Acetonitrile	40	5.848	5.850	-0.002	94	15421	0.4000	0.4670	
23 Acetone	58	5.902	5.899	0.003	99	59706	1.20	1.69	
24 Isopropyl alcohol	45	5.972	5.979	-0.007	92	190752	1.20	1.34	
25 Pentane	72	6.004	6.005	0.000	97	7656	0.4000	0.4616	
26 Ethyl ether	31	6.187	6.184	0.003	91	37146	0.4000	0.3841	
27 1,1-Dichloroethene	96	6.537	6.540	-0.003	95	39787	0.4000	0.4554	
28 2-Methyl-2-propanol	59	6.618	6.627	-0.009	96	72191	0.4000	0.4446	
29 Acrylonitrile	53	6.650	6.650	0.000	97	20358	0.4000	0.4162	
30 1,1,2-Trichloro-1,2,2-trif	101	6.720	6.722	-0.002	95	82806	0.4000	0.4540	
31 Methylene Chloride	84	6.914	6.915	-0.001	97	43037	0.4000	0.4882	

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	6.930	6.930	0.000	94	42284	0.4000	0.4418	
33 Carbon disulfide	76	7.096	7.098	-0.002	99	143653	0.4000	0.4664	
34 trans-1,2-Dichloroethene	96	7.774	7.774	0.000	95	46737	0.4000	0.4692	
35 2-Methylpentane	43	7.785	7.783	0.002	96	117748	0.4000	0.4512	
36 Methyl tert-butyl ether	73	7.898	7.898	0.000	97	71035	0.4000	0.4236	
37 1,1-Dichloroethane	63	8.215	8.219	-0.004	99	70804	0.4000	0.4226	
38 Vinyl acetate	43	8.318	8.317	0.001	100	62583	0.4000	0.3600	
39 2-Butanone (MEK)	72	8.786	8.788	-0.002	95	13810	0.4000	0.4218	
40 Hexane	56	8.807	8.811	-0.004	89	39474	0.4000	0.4306	
139 Isopropyl ether	45	8.969	8.966	0.003	97	116839	0.4000	0.4164	
41 cis-1,2-Dichloroethene	96	9.237	9.246	-0.009	97	36673	0.4000	0.4276	
42 Ethyl acetate	43	9.415	9.417	-0.002	98	62629	0.4000	0.3917	
43 Chloroform	83	9.593	9.599	-0.006	34	72858	0.4000	0.4197	
142 Tert-butyl ethyl ether	59	9.668	9.667	0.001	97	91084	0.4000	0.4330	
44 Tetrahydrofuran	42	10.018	10.018	0.000	95	34658	0.4000	0.3952	
45 1,1,1-Trichloroethane	97	10.642	10.643	-0.001	97	77564	0.4000	0.4262	
46 1,2-Dichloroethane	62	10.749	10.750	-0.001	97	40539	0.4000	0.4221	
47 n-Butanol	31	11.142	11.144	-0.002	87	16216	0.4000	0.4648	
49 Cyclohexane	69	11.223	11.222	0.000	88	22926	0.4000	0.5208	
48 Benzene	78	11.223	11.226	-0.004	96	86310	0.4000	0.4052	
50 Carbon tetrachloride	117	11.244	11.247	-0.003	98	66767	0.4000	0.4248	
51 2,3-Dimethylpentane	71	11.319	11.320	-0.001	92	25958	0.4000	0.4785	
52 Thiophene	84	11.491	11.493	-0.002	97	49998	0.4000	0.4145	
140 Tert-amyl methyl ether	73	11.658	11.660	-0.002	95	76260	0.4000	0.4518	
53 Isooctane	57	11.938	11.939	-0.001	98	192544	0.4000	0.4547	
54 n-Heptane	71	12.293	12.295	-0.002	95	35713	0.4000	0.4573	
55 1,2-Dichloropropane	63	12.406	12.405	0.001	90	31968	0.4000	0.4204	
56 Trichloroethene	130	12.433	12.437	-0.004	95	42837	0.4000	0.4617	
57 Dibromomethane	93	12.524	12.528	-0.004	94	38789	0.4000	0.4348	
59 Dichlorobromomethane	83	12.659	12.661	-0.002	98	64200	0.4000	0.4207	
58 1,4-Dioxane	88	12.670	12.670	0.000	92	14676	0.4000	0.4892	
60 Methyl methacrylate	41	12.723	12.724	-0.001	94	35036	0.4000	0.4113	
61 Methylcyclohexane	83	13.186	13.185	0.001	91	82063	0.4000	0.4744	
62 4-Methyl-2-pentanone (MIBK)	43	13.563	13.560	0.003	98	82553	0.4000	0.4712	
63 cis-1,3-Dichloropropene	75	13.627	13.630	-0.003	97	40533	0.4000	0.4117	
64 trans-1,3-Dichloropropene	75	14.305	14.306	-0.001	99	37546	0.4000	0.4223	
65 Toluene	91	14.434	14.436	-0.002	93	85756	0.4000	0.4363	
66 1,1,2-Trichloroethane	83	14.509	14.507	0.002	98	28171	0.4000	0.4268	
67 2-Methylthiophene	97	14.585	14.588	-0.003	97	71024	0.4000	0.4155	
68 3-Methylthiophene	97	14.784	14.786	-0.002	100	67221	0.4000	0.4021	
69 2-Hexanone	58	14.864	14.866	-0.002	91	37426	0.4000	0.4770	
70 n-Octane	85	15.080	15.081	-0.001	97	31044	0.4000	0.4244	
71 Chlorodibromomethane	129	15.209	15.209	0.000	97	55052	0.4000	0.4151	
72 Ethylene Dibromide	107	15.499	15.500	-0.001	99	48660	0.4000	0.4424	
73 Tetrachloroethene	129	15.558	15.561	-0.003	95	38238	0.4000	0.4469	
74 2,3-Dimethylheptane	43	16.408	16.411	-0.003	95	111490	0.4000	0.4394	
75 Chlorobenzene	112	16.430	16.429	0.001	93	68232	0.4000	0.4354	
76 Ethylbenzene	91	16.699	16.703	-0.004	99	104105	0.4000	0.4530	
77 2-Ethylthiophene	97	16.806	16.807	-0.001	98	78773	0.4000	0.4444	
78 m-Xylene & p-Xylene	91	16.860	16.861	-0.001	99	164123	0.8000	0.8865	
79 n-Nonane	57	17.242	17.245	-0.003	95	64902	0.4000	0.4198	
80 Styrene	104	17.323	17.326	-0.003	98	57296	0.4000	0.4392	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
81 Bromoform	173	17.328	17.328	0.000	93	49248	0.4000	0.4281	
82 o-Xylene	91	17.387	17.386	0.001	99	91841	0.4000	0.4548	
83 1,1,2,2-Tetrachloroethane	83	17.705	17.704	0.001	99	72048	0.4000	0.4553	
84 1,2,3-Trichloropropane	110	17.861	17.860	0.001	97	16612	0.4000	0.4555	
85 Isopropylbenzene	105	17.952	17.953	-0.001	93	120638	0.4000	0.4575	
86 N-Propylbenzene	120	18.463	18.463	0.000	99	30429	0.4000	0.4314	
87 2-Chlorotoluene	126	18.517	18.517	0.000	98	31380	0.4000	0.4447	
88 4-Ethyltoluene	105	18.603	18.605	-0.002	98	112001	0.4000	0.4398	
89 1,3,5-Trimethylbenzene	120	18.673	18.673	0.000	92	54216	0.4000	0.4475	
90 Alpha Methyl Styrene	118	18.894	18.896	-0.002	87	41756	0.4000	0.4307	
91 n-Decane	57	18.926	18.925	0.001	88	80467	0.4000	0.4570	
92 tert-Butylbenzene	119	19.082	19.083	-0.001	91	105370	0.4000	0.4431	
93 1,2,4-Trimethylbenzene	105	19.093	19.097	-0.004	96	98024	0.4000	0.4504	
94 sec-Butylbenzene	105	19.340	19.341	-0.001	99	142130	0.4000	0.4453	
95 1,3-Dichlorobenzene	146	19.372	19.370	0.002	98	54244	0.4000	0.4335	
96 Benzyl chloride	91	19.437	19.439	-0.002	97	63695	0.4000	0.4362	
97 1,4-Dichlorobenzene	146	19.453	19.453	0.000	93	50329	0.4000	0.4347	
98 4-Isopropyltoluene	119	19.496	19.496	0.000	97	116989	0.4000	0.4610	
99 1,2,3-Trimethylbenzene	105	19.555	19.554	0.001	98	78769	0.4000	0.4513	
100 Butylcyclohexane	83	19.598	19.597	0.001	89	82036	0.4000	0.4369	
101 2,3-Dihydroindene	117	19.797	19.799	-0.002	94	90069	0.4000	0.4623	
102 1,2-Dichlorobenzene	146	19.803	19.805	-0.002	94	56467	0.4000	0.4565	
103 n-Butylbenzene	91	19.916	19.916	0.000	98	105027	0.4000	0.4564	
104 Indene	116	19.926	19.927	-0.001	88	55104	0.4000	0.4244	
105 Undecane	57	20.195	20.195	0.000	95	87943	0.4000	0.4770	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.276	20.278	-0.002	98	86542	0.4000	0.4638	
141 1,2-Dibromo-3-Chloropropan	157	20.395	20.393	0.001	92	22303	0.4000	0.4335	
108 1,2,4,5-Tetramethylbenzene	119	20.669	20.668	0.001	97	108430	0.4000	0.4709	
107 1,2,3,5-Tetramethylbenzene	119	20.723	20.725	-0.002	95	67239	0.4000	0.4666	
109 1,2,3,4-Tetramethylbenzene	119	21.148	21.147	0.001	97	88622	0.4000	0.4760	
110 Dodecane	57	21.282	21.282	0.000	93	78965	0.4000	0.4814	
111 1,2,4-Trichlorobenzene	180	21.524	21.525	-0.001	94	18639	0.4000	0.3738	
112 Naphthalene	128	21.653	21.655	-0.002	99	45619	0.4000	0.4095	
113 Benzo(b)thiophene	134	21.739	21.741	-0.002	99	20810	0.4000	0.3778	
114 Hexachlorobutadiene	225	21.809	21.810	-0.001	95	44388	0.4000	0.4641	
115 1,2,3-Trichlorobenzene	180	21.868	21.872	-0.004	95	17743	0.4000	0.4032	
116 2-Methylnaphthalene	142	22.401	22.402	-0.001	98	15379	1.25	1.32	
117 1-Methylnaphthalene	142	22.530	22.528	0.002	98	15808	1.25	1.28	
A 118 C6 Range	1	8.807	(8.748-8.866)		0	457447	0.4000	0.4343	
A 122 Toluene Range	1	14.434	(14.404-14.464)		0	207864	0.4000	0.4305	
A 123 C8 Range	1	15.104	(15.056-15.152)		0	345651	0.4000	0.4363	
S 124 Xylenes, Total	100				0		1.20	1.34	
S 144 1,2-Dichloroethene, Total	1				0			0.8968	

Reagents:

MAic5_00013

Amount Added: 40.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL4.D

Injection Date: 02-Feb-2015 15:32:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: IC L4

Worklist Smp#: 5

Client ID:

Purge Vol: 500.000 mL

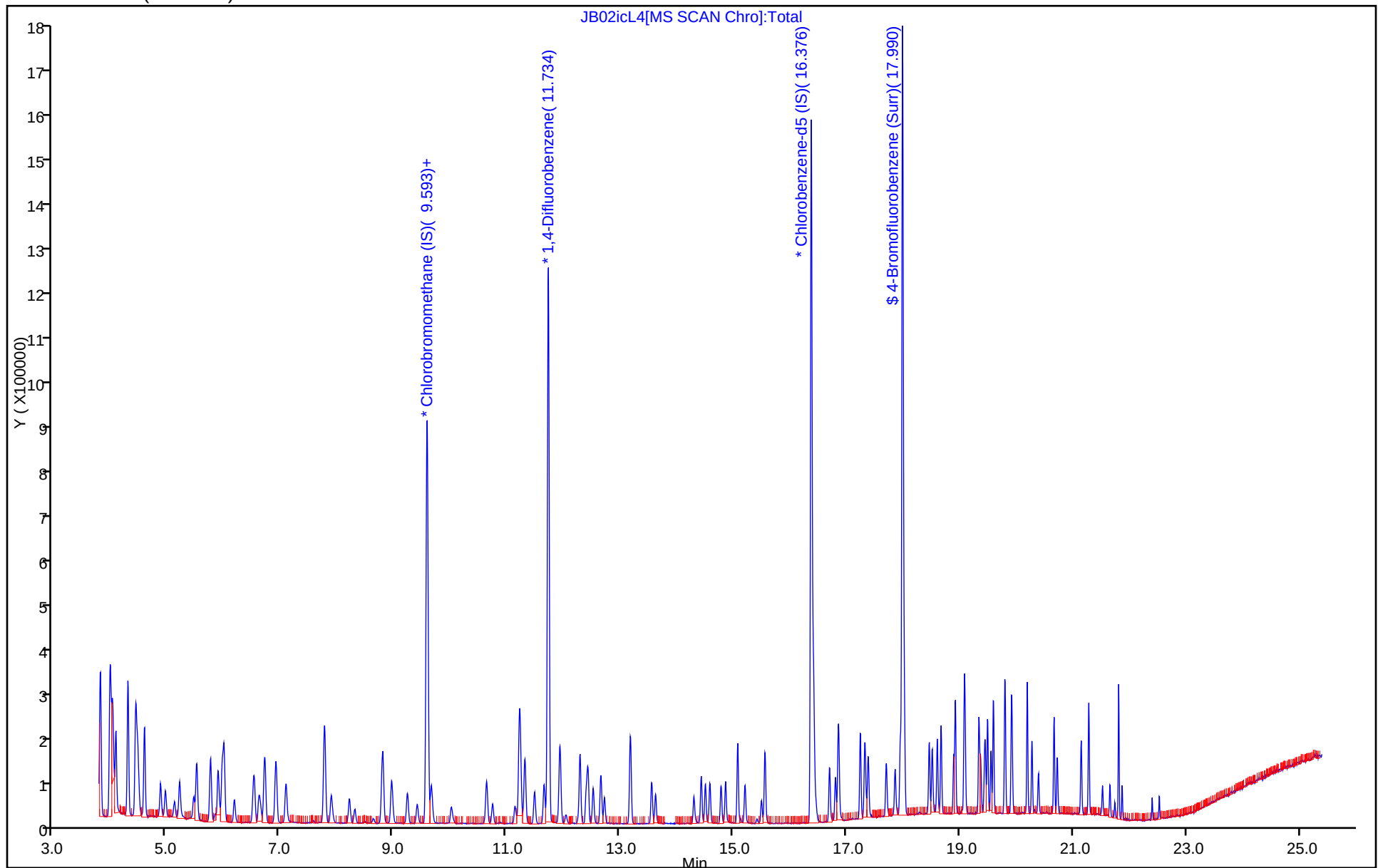
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL4.D

Injection Date: 02-Feb-2015 15:32:30

Instrument ID: MJ

Lims ID: IC L4

Client ID:

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 5

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

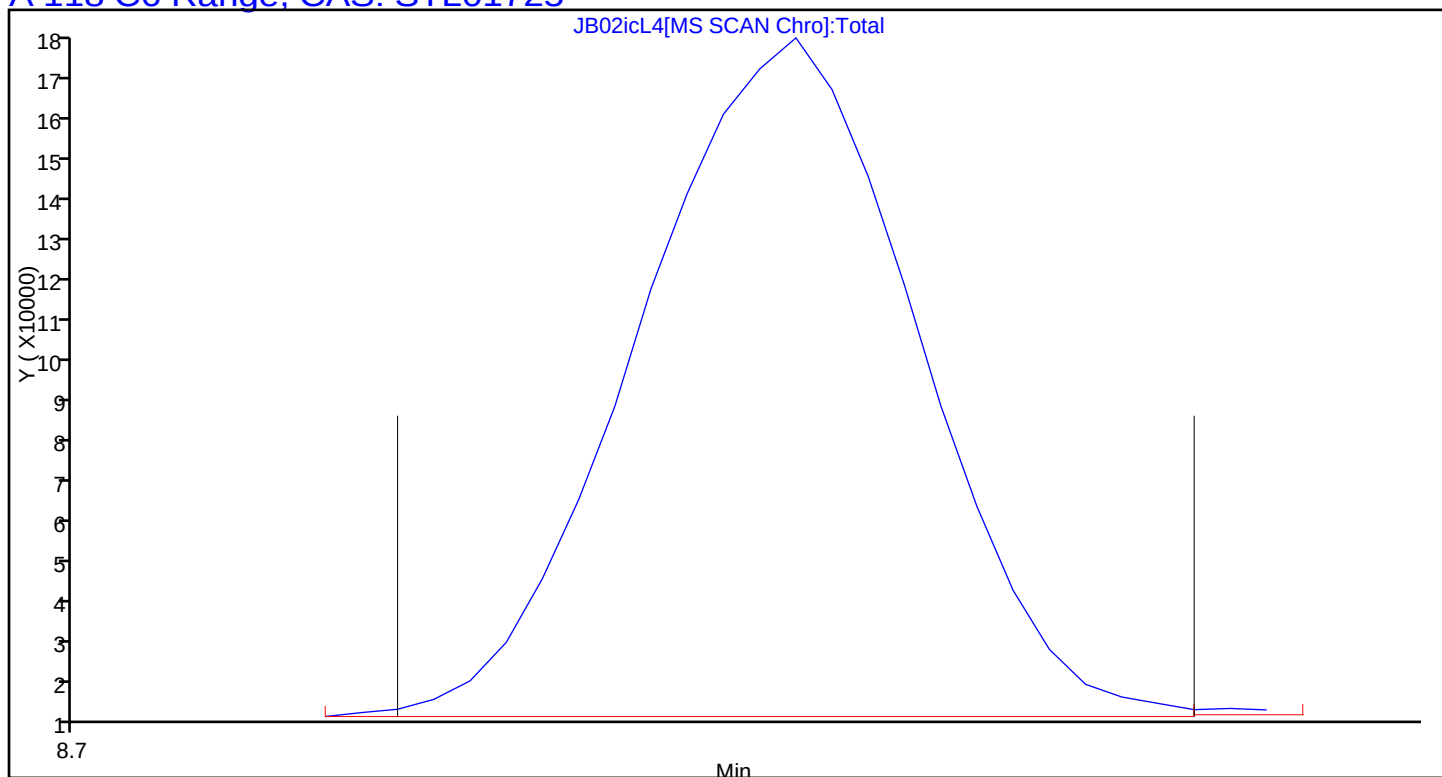
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

A 118 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL4.D

Injection Date: 02-Feb-2015 15:32:30

Instrument ID: MJ

Lims ID: IC L4

Client ID:

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 5

Purge Vol: 500.000 mL

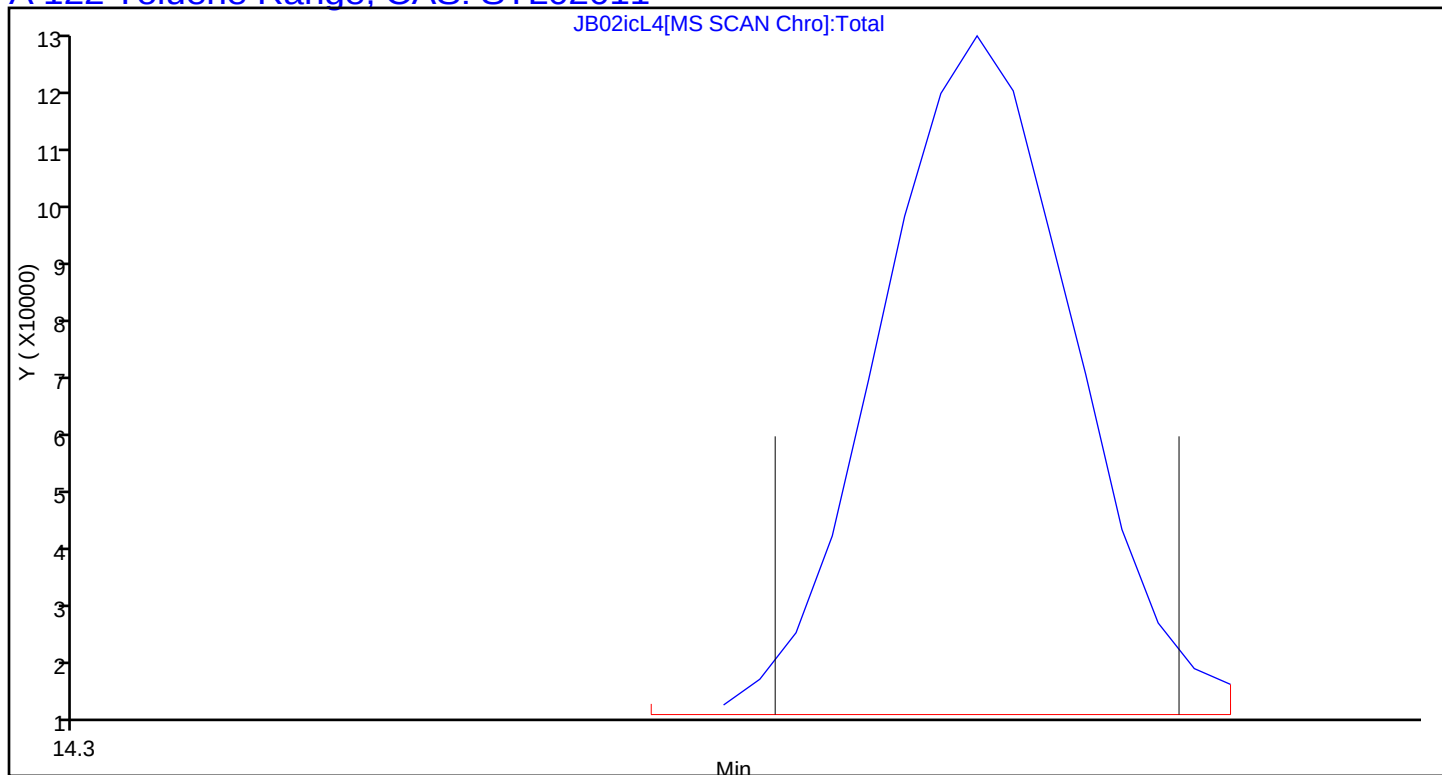
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 122 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL4.D

Injection Date: 02-Feb-2015 15:32:30

Instrument ID: MJ

Lims ID: IC L4

Client ID:

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 5

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

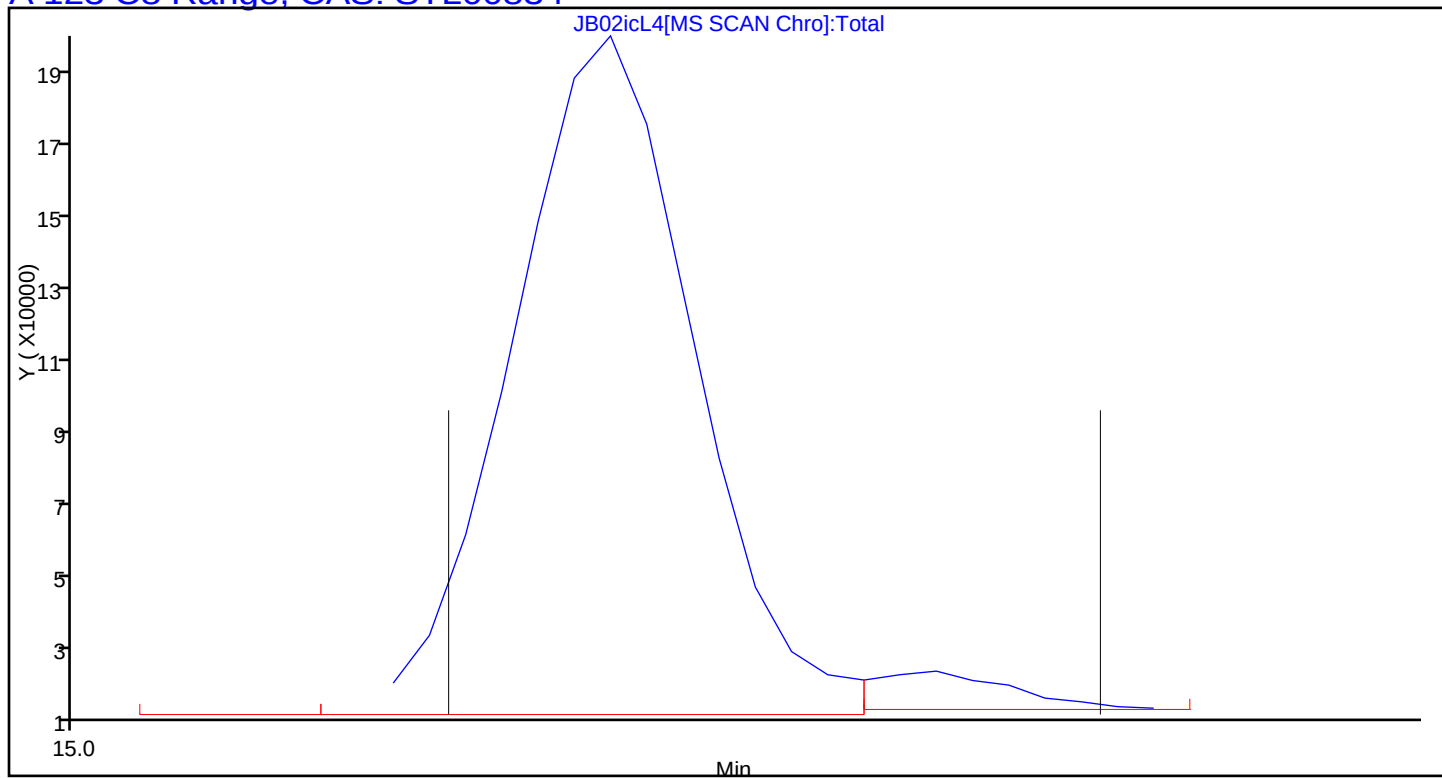
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 123 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL5.D
 Lims ID: IC L5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 02-Feb-2015 16:27:30 ALS Bottle#: 12 Worklist Smp#: 6
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 022287,,1,5,,ICAL 1
 Misc. Info.: J020215I,TO15,,140-0001328-006
 Operator ID: 7126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub3
 Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Feb-2015 08:51:18 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: tajh

Date: 03-Feb-2015 10:16:54

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	9.587	9.593	-0.006	97	307264	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.734	11.736	-0.002	96	1486491	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.381	16.380	0.001	89	1317855	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.990	17.991	-0.001	90	869463	4.00	4.03	
6 Chlorodifluoromethane	67	4.019	4.021	-0.002	97	32955	1.00	0.8872	
7 Propene	41	4.030	4.036	-0.006	98	132305	1.00	0.9078	
8 Dichlorodifluoromethane	85	4.089	4.093	-0.004	100	325851	1.00	0.9420	
9 Chloromethane	52	4.299	4.302	-0.003	98	43576	1.00	0.8859	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.305	4.307	-0.003	93	209418	1.00	0.9242	
11 Acetaldehyde	44	4.471	4.476	-0.005	100	193433	5.00	4.56	
12 Vinyl chloride	62	4.493	4.497	-0.004	99	122506	1.00	0.9229	
13 Butane	43	4.595	4.597	-0.002	86	217307	1.00	0.9367	
14 Butadiene	54	4.595	4.598	-0.003	62	95618	1.00	0.9072	
15 Bromomethane	94	4.966	4.968	-0.002	99	101275	1.00	0.8990	
16 Chloroethane	64	5.128	5.127	0.001	93	52424	1.00	0.9017	
17 Ethanol	31	5.214	5.223	-0.009	96	174738	5.00	4.09	
18 Vinyl bromide	106	5.466	5.470	-0.004	99	88520	1.00	0.8966	
19 2-Methylbutane	43	5.520	5.520	0.000	92	136811	1.00	0.8777	
20 Trichlorofluoromethane	101	5.762	5.766	-0.004	100	281649	1.00	0.9298	
21 Acrolein	56	5.773	5.774	-0.001	30	21172	1.00	0.6046	
22 Acetonitrile	40	5.848	5.850	-0.002	99	28527	1.00	0.7731	
23 Acetone	58	5.897	5.899	-0.002	99	121002	3.00	3.06	
24 Isopropyl alcohol	45	5.967	5.979	-0.012	98	414752	3.00	2.60	
25 Pentane	72	5.999	6.005	-0.005	97	17062	1.00	0.9205	
26 Ethyl ether	31	6.182	6.184	-0.002	91	77865	1.00	0.7205	
27 1,1-Dichloroethene	96	6.537	6.540	-0.003	95	89173	1.00	0.9133	
28 2-Methyl-2-propanol	59	6.618	6.627	-0.009	96	152052	1.00	0.8380	
29 Acrylonitrile	53	6.645	6.650	-0.005	96	41067	1.00	0.7513	
30 1,1,2-Trichloro-1,2,2-trif	101	6.720	6.722	-0.002	94	190514	1.00	0.9347	
31 Methylene Chloride	84	6.914	6.915	-0.001	96	91824	1.00	0.9321	

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	6.930	6.930	0.000	93	96937	1.00	0.9064	
33 Carbon disulfide	76	7.096	7.098	-0.002	99	322755	1.00	0.9377	
34 trans-1,2-Dichloroethene	96	7.774	7.774	0.000	95	104152	1.00	0.9356	
35 2-Methylpentane	43	7.780	7.783	-0.003	97	268820	1.00	0.9219	
36 Methyl tert-butyl ether	73	7.898	7.898	0.000	97	142235	1.00	0.7591	
37 1,1-Dichloroethane	63	8.215	8.219	-0.004	100	170750	1.00	0.9120	
38 Vinyl acetate	43	8.312	8.317	-0.005	100	130681	1.00	0.6727	
39 2-Butanone (MEK)	72	8.786	8.788	-0.002	95	30213	1.00	0.8258	
40 Hexane	56	8.813	8.811	0.001	92	90771	1.00	0.8861	
139 Isopropyl ether	45	8.963	8.966	-0.003	97	235216	1.00	0.7502	
41 cis-1,2-Dichloroethene	96	9.248	9.246	0.002	97	86254	1.00	0.9000	
42 Ethyl acetate	43	9.415	9.417	-0.002	98	134435	1.00	0.7524	
43 Chloroform	83	9.598	9.599	-0.001	94	170732	1.00	0.8802	
142 Tert-butyl ethyl ether	59	9.668	9.667	0.001	97	181863	1.00	0.7737	
44 Tetrahydrofuran	42	10.018	10.018	0.000	94	71698	1.00	0.7316	
45 1,1,1-Trichloroethane	97	10.642	10.643	-0.001	97	189252	1.00	0.9306	
46 1,2-Dichloroethane	62	10.749	10.750	-0.001	97	108883	1.00	0.8794	
47 n-Butanol	31	11.136	11.144	-0.008	91	36780	1.00	0.8176	
49 Cyclohexane	69	11.217	11.222	-0.005	83	51385	1.00	0.9055	
48 Benzene	78	11.223	11.226	-0.004	97	232144	1.00	0.8454	
50 Carbon tetrachloride	117	11.244	11.247	-0.003	98	161764	1.00	0.7983	
51 2,3-Dimethylpentane	71	11.319	11.320	-0.001	93	59612	1.00	0.8524	
52 Thiophene	84	11.491	11.493	-0.002	97	135004	1.00	0.8681	
140 Tert-amyl methyl ether	73	11.658	11.660	-0.002	95	158012	1.00	0.7653	
53 Isooctane	57	11.938	11.939	-0.001	98	452989	1.00	0.8297	
54 n-Heptane	71	12.293	12.295	-0.002	95	81056	1.00	0.8051	
55 1,2-Dichloropropane	63	12.401	12.405	-0.004	90	75149	1.00	0.7664	
56 Trichloroethene	130	12.433	12.437	-0.004	96	100360	1.00	0.8391	
57 Dibromomethane	93	12.524	12.528	-0.004	95	96908	1.00	0.8425	
59 Dichlorobromomethane	83	12.659	12.661	-0.002	99	163139	1.00	0.8292	
58 1,4-Dioxane	88	12.670	12.670	0.000	95	29376	1.00	0.7595	
60 Methyl methacrylate	41	12.723	12.724	-0.001	95	75660	1.00	0.6888	
61 Methylcyclohexane	83	13.186	13.185	0.001	92	196019	1.00	0.8788	
62 4-Methyl-2-pentanone (MIBK)	43	13.557	13.560	-0.003	98	165821	1.00	0.7341	
63 cis-1,3-Dichloropropene	75	13.627	13.630	-0.003	97	94684	1.00	0.7459	
64 trans-1,3-Dichloropropene	75	14.305	14.306	-0.001	98	78959	1.00	0.7260	
65 Toluene	91	14.434	14.436	-0.002	93	178095	1.00	0.7406	
66 1,1,2-Trichloroethane	83	14.504	14.507	-0.003	97	61191	1.00	0.7579	
67 2-Methylthiophene	97	14.585	14.588	-0.003	98	154183	1.00	0.7374	
68 3-Methylthiophene	97	14.784	14.786	-0.002	99	144312	1.00	0.7056	
69 2-Hexanone	58	14.864	14.866	-0.002	91	76652	1.00	0.7985	
70 n-Octane	85	15.080	15.081	-0.001	97	74508	1.00	0.8327	
71 Chlorodibromomethane	129	15.209	15.209	0.000	98	131962	1.00	0.8134	
72 Ethylene Dibromide	107	15.499	15.500	-0.001	98	102354	1.00	0.7607	
73 Tetrachloroethene	129	15.558	15.561	-0.003	96	87178	1.00	0.8328	
74 2,3-Dimethylheptane	43	16.408	16.411	-0.003	95	268292	1.00	0.8643	
75 Chlorobenzene	112	16.430	16.429	0.001	97	142301	1.00	0.7423	
76 Ethylbenzene	91	16.704	16.703	0.001	99	202896	1.00	0.7217	
77 2-Ethylthiophene	97	16.806	16.807	-0.001	98	155636	1.00	0.7178	
78 m-Xylene & p-Xylene	91	16.860	16.861	-0.001	99	318841	2.00	1.41	
79 n-Nonane	57	17.242	17.245	-0.003	95	149048	1.00	0.7880	
80 Styrene	104	17.323	17.326	-0.003	99	110576	1.00	0.6929	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
81 Bromoform	173	17.328	17.328	0.000	96	105000	1.00	0.7460	
82 o-Xylene	91	17.382	17.386	-0.004	99	173902	1.00	0.7040	
83 1,1,2,2-Tetrachloroethane	83	17.705	17.704	0.001	98	142468	1.00	0.7359	
84 1,2,3-Trichloropropane	110	17.861	17.860	0.001	98	33297	1.00	0.7464	
85 Isopropylbenzene	105	17.952	17.953	-0.001	97	238383	1.00	0.7390	
86 N-Propylbenzene	120	18.463	18.463	0.000	98	60259	1.00	0.6984	
87 2-Chlorotoluene	126	18.517	18.517	0.000	93	62446	1.00	0.7234	
88 4-Ethyltoluene	105	18.603	18.605	-0.002	98	220642	1.00	0.7082	
89 1,3,5-Trimethylbenzene	120	18.673	18.673	0.000	92	107543	1.00	0.7256	
90 Alpha Methyl Styrene	118	18.894	18.896	-0.002	87	80612	1.00	0.6797	
91 n-Decane	57	18.926	18.925	0.001	87	150935	1.00	0.7007	
92 tert-Butylbenzene	119	19.082	19.083	-0.001	91	212848	1.00	0.7316	
93 1,2,4-Trimethylbenzene	105	19.098	19.097	0.001	96	194096	1.00	0.7290	
94 sec-Butylbenzene	105	19.340	19.341	-0.001	99	286712	1.00	0.7342	
95 1,3-Dichlorobenzene	146	19.367	19.370	-0.003	99	103715	1.00	0.6776	
96 Benzyl chloride	91	19.437	19.439	-0.002	97	118897	1.00	0.6655	
97 1,4-Dichlorobenzene	146	19.453	19.453	0.000	94	91835	1.00	0.6484	
98 4-Isopropyltoluene	119	19.496	19.496	0.000	97	223257	1.00	0.7192	
99 1,2,3-Trimethylbenzene	105	19.555	19.554	0.001	98	157089	1.00	0.7357	
100 Butylcyclohexane	83	19.598	19.597	0.001	90	179037	1.00	0.7794	
101 2,3-Dihydroindene	117	19.797	19.799	-0.002	94	175381	1.00	0.7358	
102 1,2-Dichlorobenzene	146	19.803	19.805	-0.002	95	105420	1.00	0.6967	
103 n-Butylbenzene	91	19.916	19.916	0.000	97	193152	1.00	0.6861	
104 Indene	116	19.926	19.927	-0.001	90	105535	1.00	0.6644	
105 Undecane	57	20.195	20.195	0.000	95	161550	1.00	0.7163	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.276	20.278	-0.002	98	155168	1.00	0.6798	
141 1,2-Dibromo-3-Chloropropan	157	20.394	20.393	0.001	93	43812	1.00	0.6961	
108 1,2,4,5-Tetramethylbenzene	119	20.669	20.668	0.001	97	194644	1.00	0.6910	
107 1,2,3,5-Tetramethylbenzene	119	20.723	20.725	-0.002	95	121580	1.00	0.6897	
109 1,2,3,4-Tetramethylbenzene	119	21.148	21.147	0.001	97	161331	1.00	0.7083	
110 Dodecane	57	21.282	21.282	0.000	93	155825	1.00	0.7766	
111 1,2,4-Trichlorobenzene	180	21.524	21.525	-0.001	95	39424	1.00	0.6463	
112 Naphthalene	128	21.653	21.655	-0.002	99	95333	1.00	0.6995	
113 Benzo(b)thiophene	134	21.745	21.741	0.004	99	44465	1.00	0.6598	
114 Hexachlorobutadiene	225	21.809	21.810	-0.001	96	83096	1.00	0.7102	
115 1,2,3-Trichlorobenzene	180	21.874	21.872	0.002	95	37937	1.00	0.7047	
116 2-Methylnaphthalene	142	22.401	22.402	-0.001	99	31630	3.13	2.22	
117 1-Methylnaphthalene	142	22.530	22.528	0.002	99	34839	3.13	2.31	
A 118 C6 Range	1	8.807	(8.748-8.866)		0	1046587	1.00	0.8892	
A 122 Toluene Range	1	14.434	(14.404-14.464)		0	437179	1.00	0.7401	
A 123 C8 Range	1	15.104	(15.056-15.152)		0	827615	1.00	0.8539	
S 124 Xylenes, Total	100				0		3.00	2.11	
S 144 1,2-Dichloroethene, Total	1				0			1.84	

Reagents:

MAic5_00013

Amount Added: 100.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL5.D

Injection Date: 02-Feb-2015 16:27:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: IC L5

Worklist Smp#: 6

Client ID:

Purge Vol: 500.000 mL

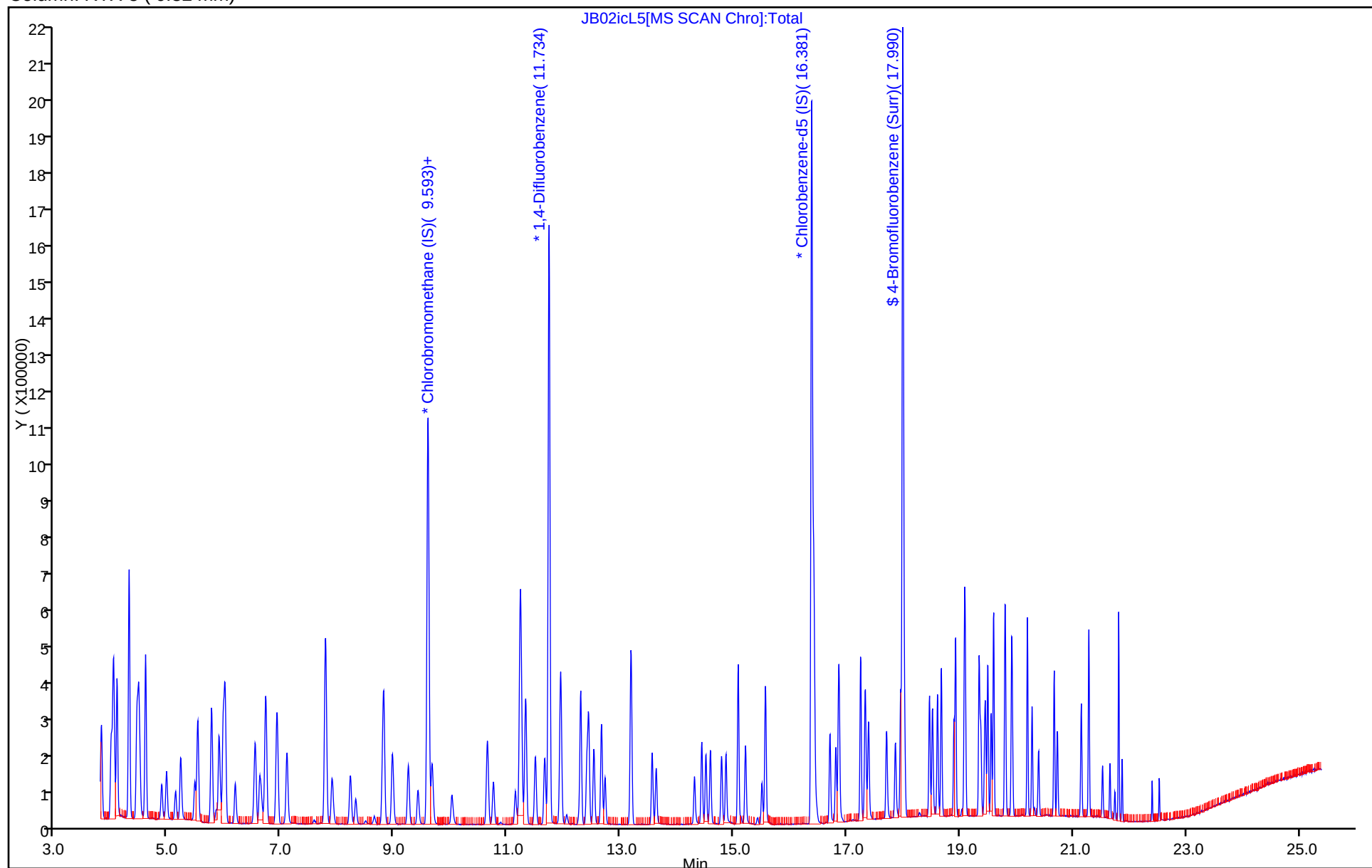
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL5.D

Injection Date: 02-Feb-2015 16:27:30

Instrument ID: MJ

Lims ID: IC L5

Client ID:

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 6

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

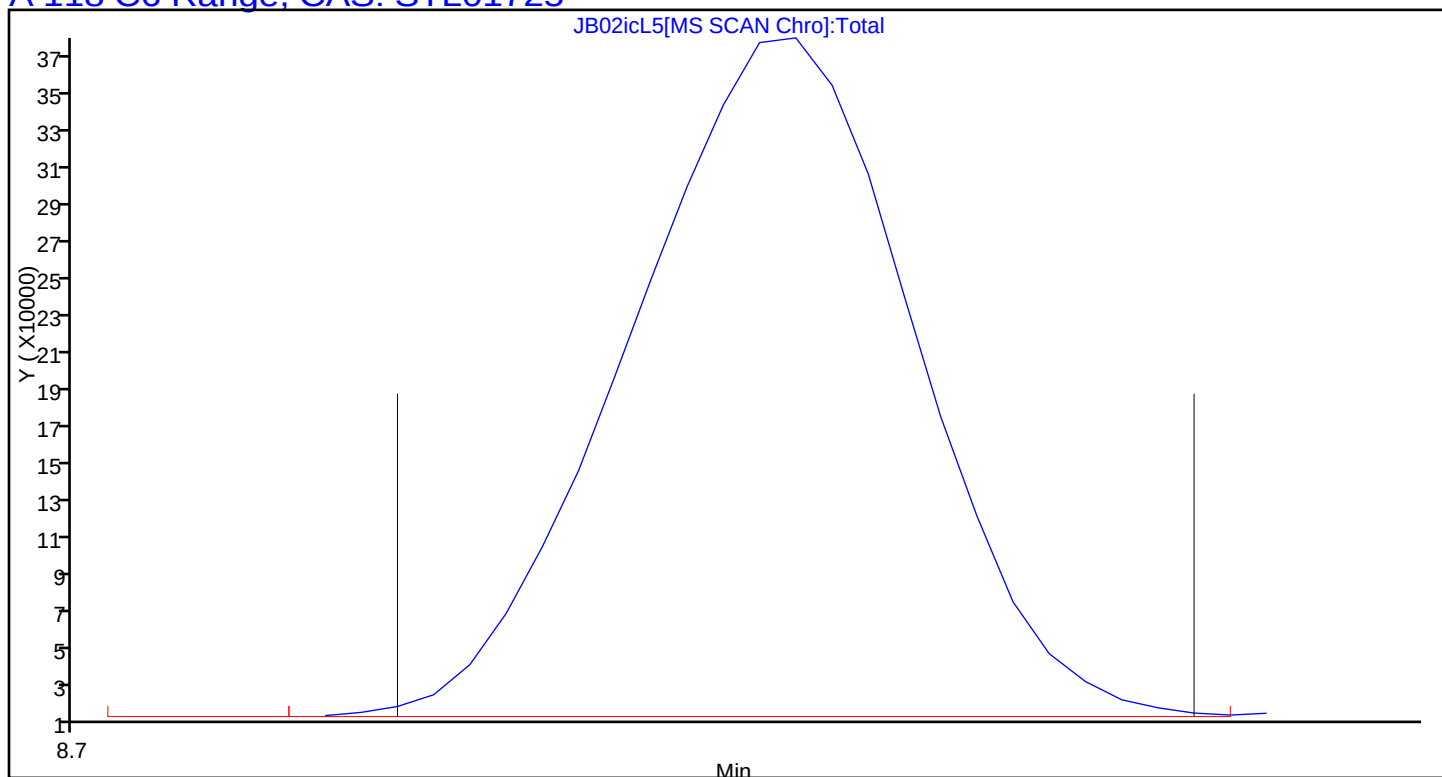
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL5.D

Injection Date: 02-Feb-2015 16:27:30

Instrument ID: MJ

Lims ID: IC L5

Client ID:

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 6

Purge Vol: 500.000 mL

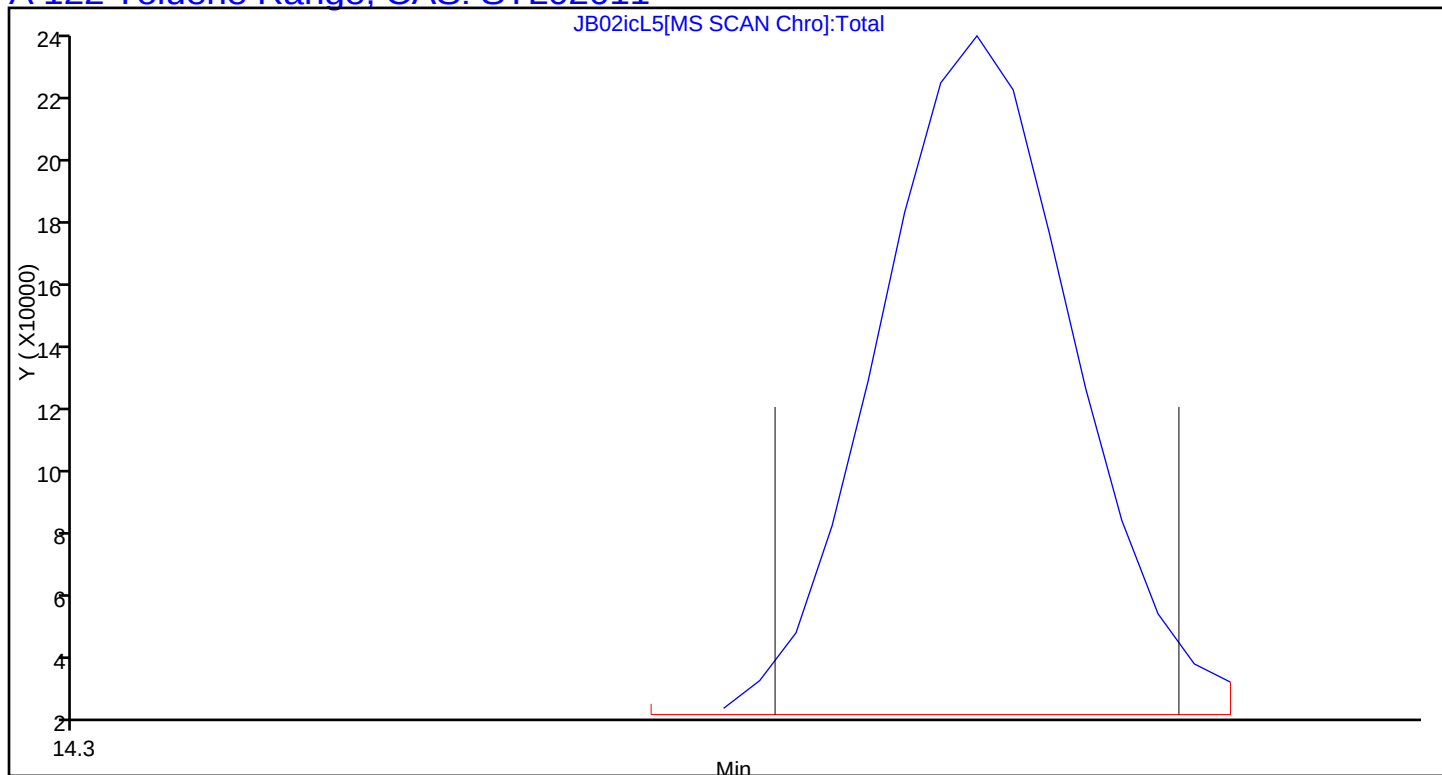
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 122 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL5.D

Injection Date: 02-Feb-2015 16:27:30

Instrument ID: MJ

Lims ID: IC L5

Client ID:

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 6

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

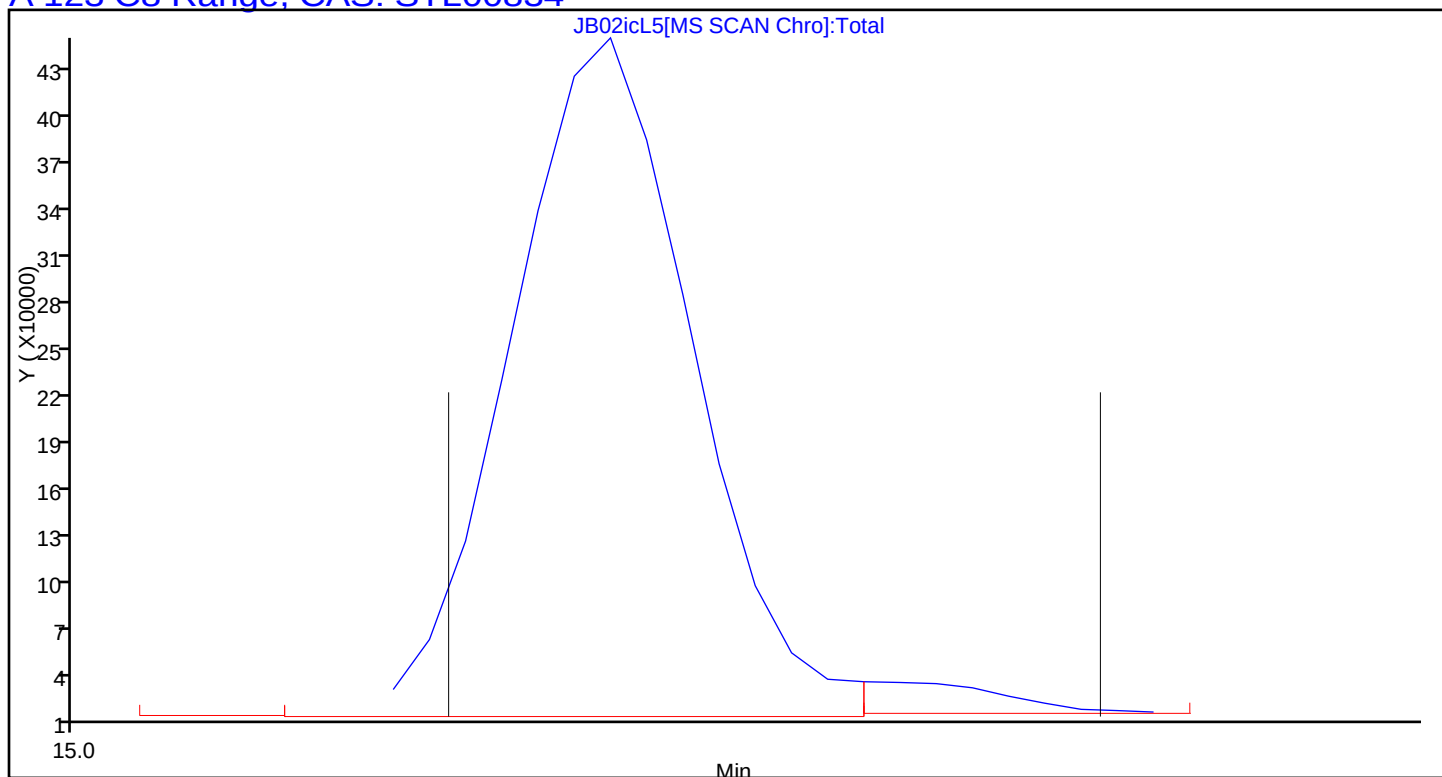
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 123 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icisL6.D
 Lims ID: ICIS 6
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 02-Feb-2015 17:21:30 ALS Bottle#: 13 Worklist Smp#: 7
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 022287,,1,6,,ICAL 2
 Misc. Info.: J020215I,TO15,,140-0001328-007
 Operator ID: 7126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub3
 Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Feb-2015 08:51:22 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: barlozhetskayaa

Date: 02-Feb-2015 18:40:46

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	9.595	9.593	0.002	95	289189	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.736	11.736	0.000	96	1333947	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.379	16.380	-0.001	89	1321331	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.992	17.991	0.001	90	873686	4.00	4.04	
6 Chlorodifluoromethane	67	4.017	4.021	-0.004	97	73369	2.00	2.10	
7 Propene	41	4.033	4.036	-0.003	99	279142	2.00	2.03	
8 Dichlorodifluoromethane	85	4.092	4.093	-0.001	100	712382	2.00	2.19	
9 Chloromethane	52	4.302	4.302	0.000	98	93053	2.00	2.01	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.307	4.307	0.000	92	461044	2.00	2.16	
11 Acetaldehyde	44	4.474	4.476	-0.002	99	460018	10.0	11.5	
12 Vinyl chloride	62	4.495	4.497	-0.002	99	267849	2.00	2.14	
13 Butane	43	4.598	4.597	0.001	86	440683	2.00	2.02	
14 Butadiene	54	4.598	4.598	0.000	65	211780	2.00	2.13	
15 Bromomethane	94	4.969	4.968	0.001	99	223862	2.00	2.11	
16 Chloroethane	64	5.130	5.127	0.003	94	115555	2.00	2.11	
17 Ethanol	31	5.222	5.223	-0.001	96	402629	10.0	10.0	
18 Vinyl bromide	106	5.469	5.470	-0.001	99	197531	2.00	2.13	
19 2-Methylbutane	43	5.517	5.520	-0.003	92	293654	2.00	2.00	
20 Trichlorofluoromethane	101	5.765	5.766	-0.001	100	626895	2.00	2.20	
21 Acrolein	56	5.770	5.774	-0.004	94	59615	2.00	1.81	
22 Acetonitrile	40	5.851	5.850	0.001	98	78425	2.00	2.26	
23 Acetone	58	5.894	5.899	-0.005	99	263015	6.00	7.07	
24 Isopropyl alcohol	45	5.975	5.979	-0.004	98	956109	6.00	6.38	
25 Pentane	72	6.002	6.005	-0.002	97	37923	2.00	2.17	
26 Ethyl ether	31	6.179	6.184	-0.005	91	195750	2.00	1.92	
27 1,1-Dichloroethene	96	6.540	6.540	0.000	95	196396	2.00	2.14	
28 2-Methyl-2-propanol	59	6.615	6.627	-0.012	96	364383	2.00	2.13	
29 Acrylonitrile	53	6.653	6.650	0.003	94	117234	2.00	2.28	
30 1,1,2-Trichloro-1,2,2-trif	101	6.722	6.722	0.000	95	414416	2.00	2.16	
31 Methylene Chloride	84	6.911	6.915	-0.004	97	190357	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
32 3-Chloro-1-propene	39	6.932	6.930	0.002	93	210397	2.00	2.09	
33 Carbon disulfide	76	7.099	7.098	0.001	99	709227	2.00	2.19	
34 trans-1,2-Dichloroethene	96	7.771	7.774	-0.003	95	227185	2.00	2.17	
35 2-Methylpentane	43	7.782	7.783	-0.001	96	583813	2.00	2.13	
36 Methyl tert-butyl ether	73	7.890	7.898	-0.008	97	377086	2.00	2.14	
37 1,1-Dichloroethane	63	8.218	8.219	-0.001	100	373428	2.00	2.12	
38 Vinyl acetate	43	8.315	8.317	-0.002	100	373840	2.00	2.04	
39 2-Butanone (MEK)	72	8.783	8.788	-0.005	96	75250	2.00	2.19	
40 Hexane	56	8.810	8.811	-0.001	93	201062	2.00	2.09	
139 Isopropyl ether	45	8.960	8.966	-0.006	97	630327	2.00	2.14	
41 cis-1,2-Dichloroethene	96	9.245	9.246	-0.001	97	189453	2.00	2.10	
42 Ethyl acetate	43	9.412	9.417	-0.005	98	347626	2.00	2.07	
43 Chloroform	83	9.600	9.599	0.001	96	366179	2.00	2.01	
142 Tert-butyl ethyl ether	59	9.660	9.667	-0.007	97	488593	2.00	2.21	
44 Tetrahydrofuran	42	10.009	10.018	-0.009	94	188789	2.00	2.05	
45 1,1,1-Trichloroethane	97	10.644	10.643	0.001	97	397886	2.00	2.08	
46 1,2-Dichloroethane	62	10.752	10.750	0.002	97	208212	2.00	1.87	
47 n-Butanol	31	11.134	11.144	-0.010	93	92621	2.00	2.29	
49 Cyclohexane	69	11.220	11.222	-0.002	88	106942	2.00	2.10	
48 Benzene	78	11.225	11.226	-0.001	97	444457	2.00	1.80	
50 Carbon tetrachloride	117	11.247	11.247	0.000	97	427542	2.00	2.35	
51 2,3-Dimethylpentane	71	11.322	11.320	0.002	93	128091	2.00	2.04	
52 Thiophene	84	11.494	11.493	0.001	97	268671	2.00	1.93	
140 Tert-amyl methyl ether	73	11.655	11.660	-0.005	95	423837	2.00	2.05	
53 Isooctane	57	11.935	11.939	-0.004	98	980897	2.00	2.00	
54 n-Heptane	71	12.296	12.295	0.001	95	184125	2.00	2.04	
55 1,2-Dichloropropane	63	12.403	12.405	-0.002	90	167458	2.00	1.90	
56 Trichloroethene	130	12.435	12.437	-0.002	96	220680	2.00	2.06	
57 Dibromomethane	93	12.527	12.528	-0.001	95	208058	2.00	2.02	
59 Dichlorobromomethane	83	12.661	12.661	0.000	98	371303	2.00	2.10	
58 1,4-Dioxane	88	12.661	12.670	-0.009	89	73038	2.00	2.10	
60 Methyl methacrylate	41	12.721	12.724	-0.003	95	207175	2.00	2.10	
61 Methylcyclohexane	83	13.183	13.185	-0.002	91	411526	2.00	2.06	
62 4-Methyl-2-pentanone (MIBK)	43	13.554	13.560	-0.006	98	438930	2.00	2.17	
63 cis-1,3-Dichloropropene	75	13.630	13.630	0.000	97	222341	2.00	1.95	
64 trans-1,3-Dichloropropene	75	14.302	14.306	-0.004	99	212168	2.00	1.95	
65 Toluene	91	14.437	14.436	0.001	93	452462	2.00	1.88	
66 1,1,2-Trichloroethane	83	14.507	14.507	0.000	97	147163	2.00	1.82	
67 2-Methylthiophene	97	14.587	14.588	-0.001	98	384728	2.00	1.84	
68 3-Methylthiophene	97	14.786	14.786	0.000	99	374640	2.00	1.83	
69 2-Hexanone	58	14.862	14.866	-0.004	91	210993	2.00	2.19	
70 n-Octane	85	15.082	15.081	0.001	97	174854	2.00	1.95	
71 Chlorodibromomethane	129	15.211	15.209	0.002	98	310253	2.00	1.91	
72 Ethylene Dibromide	107	15.502	15.500	0.002	98	259344	2.00	1.92	
73 Tetrachloroethene	129	15.561	15.561	0.000	96	197241	2.00	1.88	
74 2,3-Dimethylheptane	43	16.411	16.411	0.000	95	567430	2.00	1.82	
75 Chlorobenzene	112	16.427	16.429	-0.002	92	351581	2.00	1.83	
76 Ethylbenzene	91	16.701	16.703	-0.002	99	564283	2.00	2.00	
77 2-Ethylthiophene	97	16.804	16.807	-0.003	98	429043	2.00	1.97	
78 m-Xylene & p-Xylene	91	16.857	16.861	-0.004	99	880871	4.00	3.88	
79 n-Nonane	57	17.245	17.245	0.000	95	360199	2.00	1.90	
80 Styrene	104	17.325	17.326	-0.001	99	326941	2.00	2.04	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
81 Bromoform	173	17.325	17.328	-0.003	95	285129	2.00	2.02	
82 o-Xylene	91	17.385	17.386	-0.001	99	477117	2.00	1.93	
83 1,1,2,2-Tetrachloroethane	83	17.702	17.704	-0.002	99	395176	2.00	2.04	
84 1,2,3-Trichloropropane	110	17.858	17.860	-0.002	98	91715	2.00	2.05	
85 Isopropylbenzene	105	17.949	17.953	-0.004	96	659703	2.00	2.04	
86 N-Propylbenzene	120	18.460	18.463	-0.003	98	179690	2.00	2.08	
87 2-Chlorotoluene	126	18.514	18.517	-0.003	98	167171	2.00	1.93	
88 4-Ethyltoluene	105	18.606	18.605	0.001	98	650578	2.00	2.08	
89 1,3,5-Trimethylbenzene	120	18.670	18.673	-0.003	92	306387	2.00	2.06	
90 Alpha Methyl Styrene	118	18.896	18.896	0.000	87	254025	2.00	2.14	
91 n-Decane	57	18.923	18.925	-0.002	88	428443	2.00	1.98	
92 tert-Butylbenzene	119	19.084	19.083	0.001	91	595558	2.00	2.04	
93 1,2,4-Trimethylbenzene	105	19.095	19.097	-0.002	96	556397	2.00	2.08	
94 sec-Butylbenzene	105	19.343	19.341	0.002	98	812671	2.00	2.08	
95 1,3-Dichlorobenzene	146	19.370	19.370	0.000	99	307594	2.00	2.00	
96 Benzyl chloride	91	19.440	19.439	0.001	97	389116	2.00	2.17	
97 1,4-Dichlorobenzene	146	19.450	19.453	-0.003	93	280978	2.00	1.98	
98 4-Isopropyltoluene	119	19.493	19.496	-0.003	97	640395	2.00	2.06	
99 1,2,3-Trimethylbenzene	105	19.552	19.554	-0.002	99	439173	2.00	2.05	
100 Butylcyclohexane	83	19.596	19.597	-0.001	89	456578	2.00	1.98	
101 2,3-Dihydroindene	117	19.800	19.799	0.001	94	505040	2.00	2.11	
102 1,2-Dichlorobenzene	146	19.805	19.805	0.000	96	311215	2.00	2.05	
103 n-Butylbenzene	91	19.913	19.916	-0.003	98	592548	2.00	2.10	
104 Indene	116	19.924	19.927	-0.003	97	340799	2.00	2.14	
105 Undecane	57	20.193	20.195	-0.002	95	482089	2.00	2.13	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.279	20.278	0.001	98	467559	2.00	2.04	
141 1,2-Dibromo-3-Chloropropan	157	20.392	20.393	-0.001	94	137741	2.00	2.18	
108 1,2,4,5-Tetramethylbenzene	119	20.666	20.668	-0.002	97	567879	2.00	2.01	
107 1,2,3,5-Tetramethylbenzene	119	20.725	20.725	0.000	95	347340	2.00	1.97	
109 1,2,3,4-Tetramethylbenzene	119	21.145	21.147	-0.002	97	454371	2.00	1.99	
110 Dodecane	57	21.279	21.282	-0.003	93	420435	2.00	2.09	
111 1,2,4-Trichlorobenzene	180	21.527	21.525	0.002	94	130070	2.00	2.13	
112 Naphthalene	128	21.656	21.655	0.001	99	297395	2.00	2.18	
113 Benzo(b)thiophene	134	21.742	21.741	0.001	99	139849	2.00	2.07	
114 Hexachlorobutadiene	225	21.812	21.810	0.002	96	221411	2.00	1.89	
115 1,2,3-Trichlorobenzene	180	21.871	21.872	-0.001	96	111816	2.00	2.07	
116 2-Methylnaphthalene	142	22.404	22.402	0.002	99	77436	6.25	5.43	
117 1-Methylnaphthalene	142	22.527	22.528	-0.001	99	78839	6.25	5.21	
A 118 C6 Range	1	8.810	(8.740-8.880)		0	2319650	2.00	2.09	
A 122 Toluene Range	1	14.437	(14.407-14.467)		0	1110449	2.00	1.87	
A 123 C8 Range	1	15.104	(15.056-15.152)		0	1940288	2.00	2.00	
S 124 Xylenes, Total	100				0		6.00	5.81	

Reagents:

MAic10_00014

Amount Added: 100.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icisL6.D

Injection Date: 02-Feb-2015 17:21:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: ICIS 6

Worklist Smp#: 7

Client ID:

Purge Vol: 500.000 mL

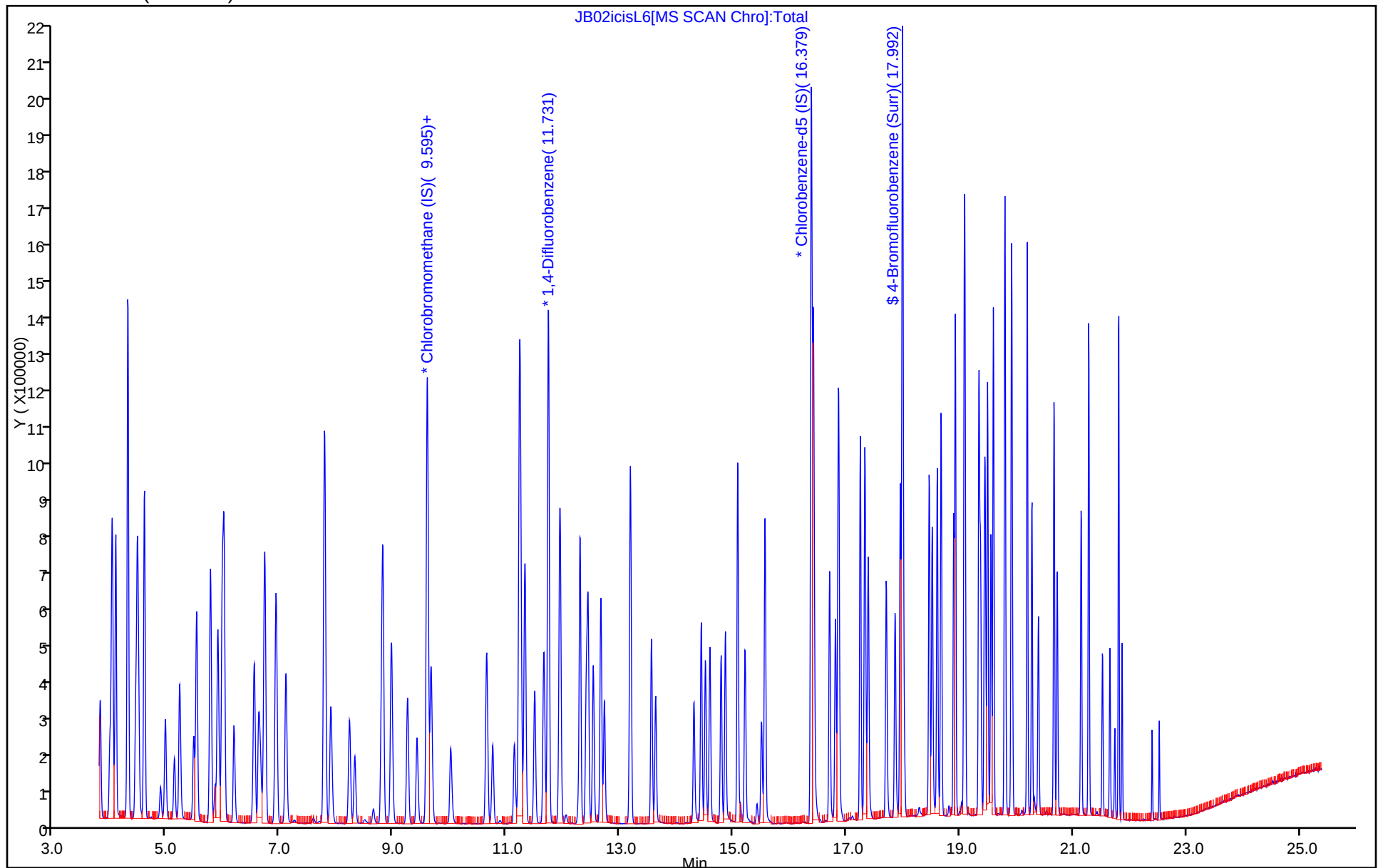
Dil. Factor: 1.0000

ALS Bottle#: 13

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icisL6.D

Injection Date: 02-Feb-2015 17:21:30

Instrument ID: MJ

Lims ID: ICIS 6

Client ID:

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 7

Purge Vol: 500.000 mL

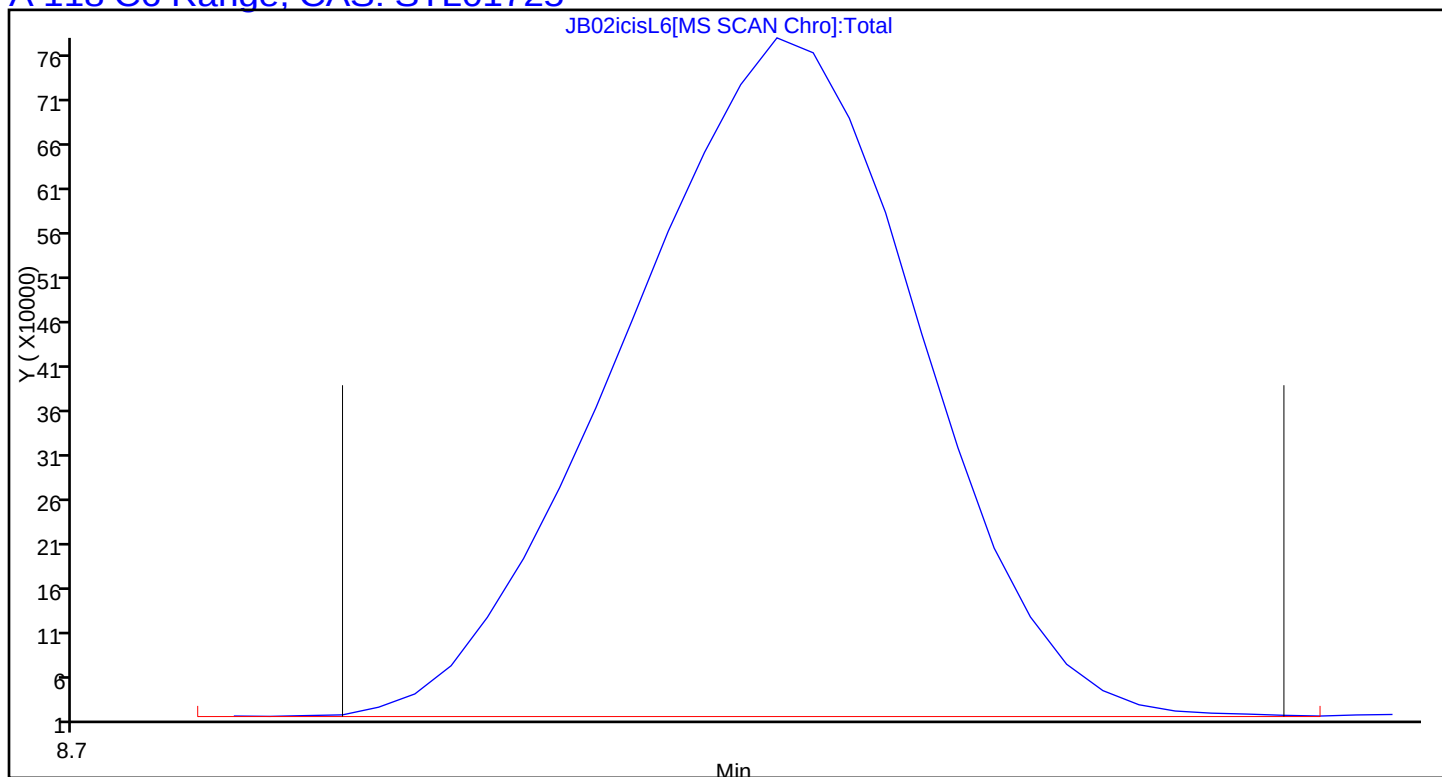
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icisL6.D

Injection Date: 02-Feb-2015 17:21:30

Instrument ID: MJ

Lims ID: ICIS 6

Client ID:

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 7

Purge Vol: 500.000 mL

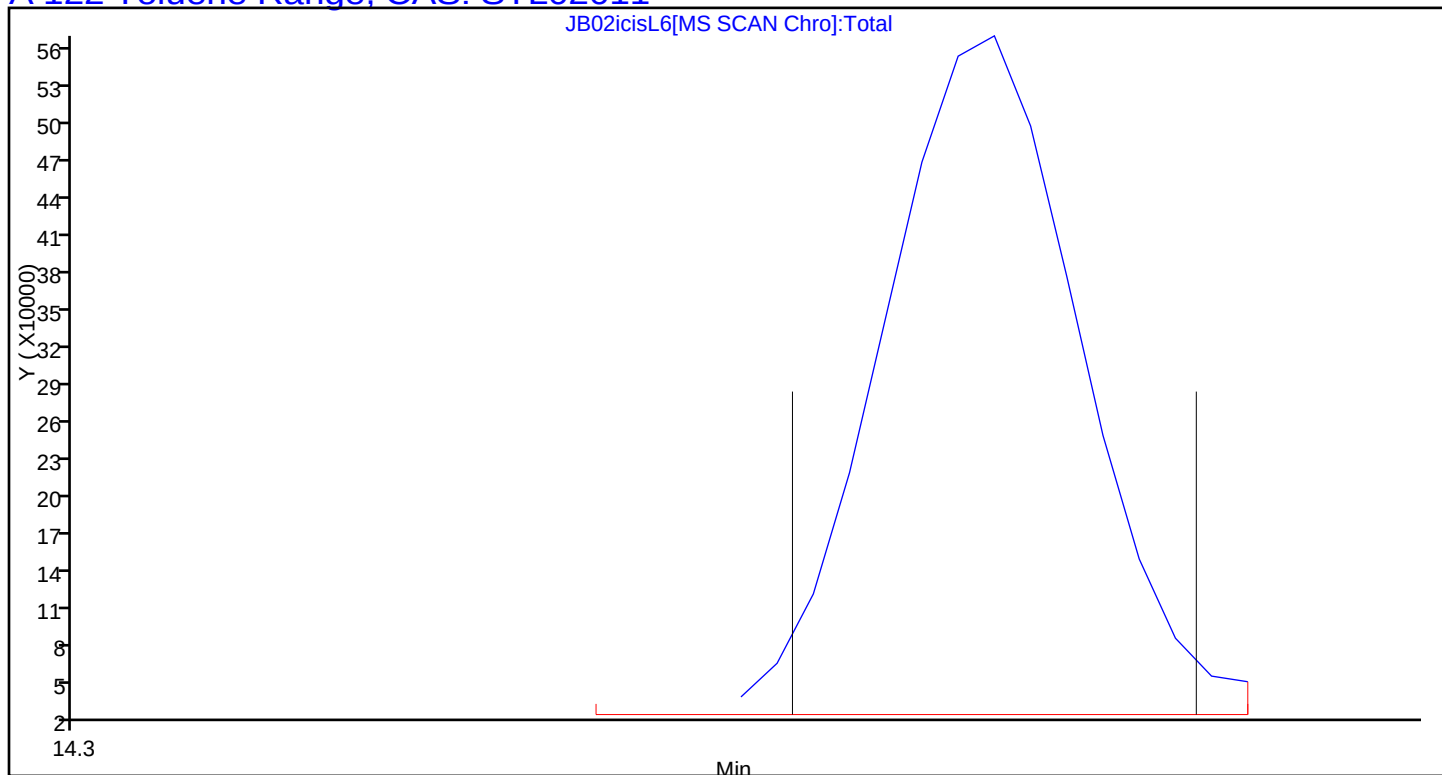
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

[A 122 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icisL6.D

Injection Date: 02-Feb-2015 17:21:30

Instrument ID: MJ

Lims ID: ICIS 6

Client ID:

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 7

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

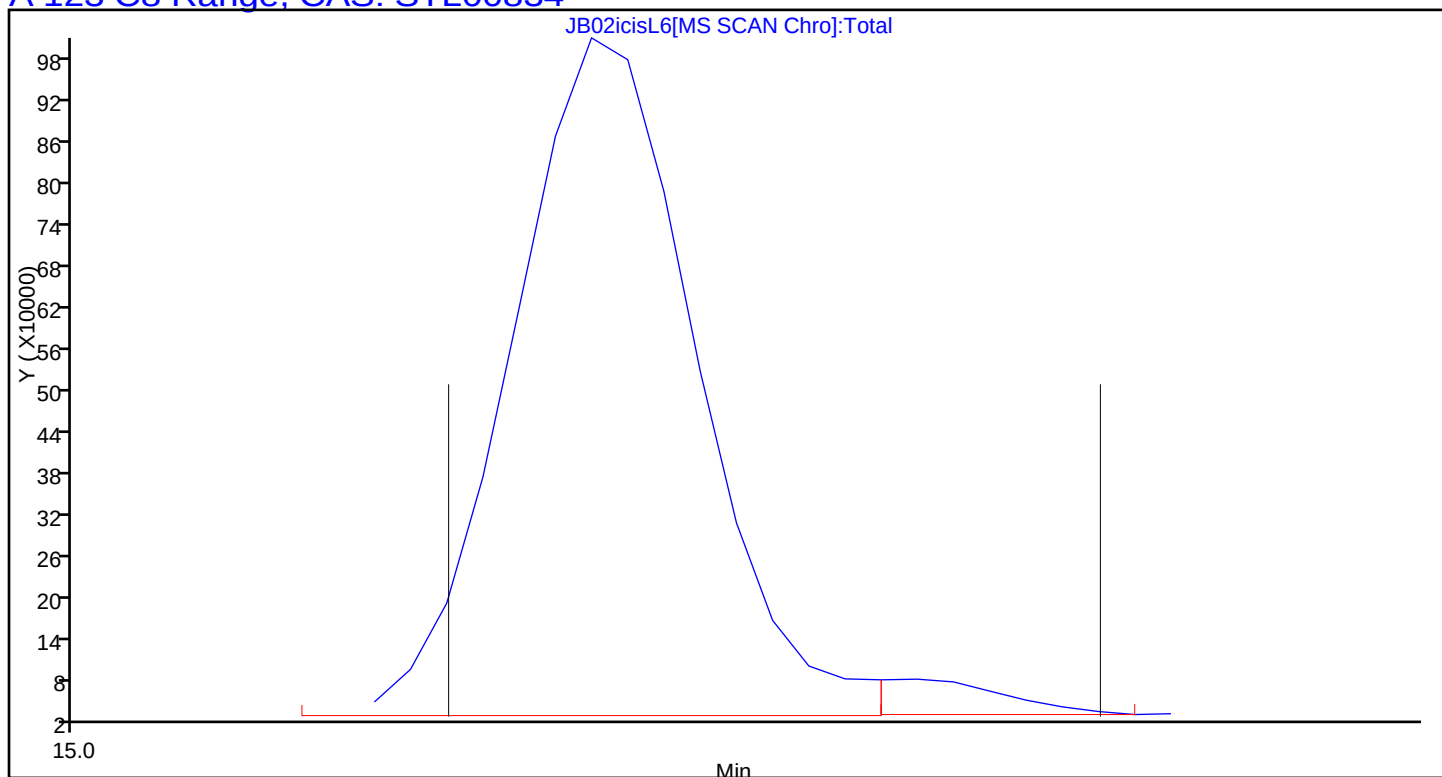
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 123 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL7.D
 Lims ID: IC L7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 02-Feb-2015 18:16:30 ALS Bottle#: 14 Worklist Smp#: 8
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 022286,,1,7,,ICAL 4
 Misc. Info.: J020215I,TO15,,140-0001328-008
 Operator ID: 7126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub3
 Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Feb-2015 08:51:26 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: tajh

Date: 03-Feb-2015 10:18:09

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	9.593	9.593	0.000	96	302699	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.739	11.736	0.003	96	1459853	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.382	16.380	0.001	89	1389950	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.990	17.991	-0.001	90	948768	4.00	4.17	
6 Chlorodifluoromethane	67	4.019	4.021	-0.002	97	139030	4.00	3.80	
7 Propene	41	4.030	4.036	-0.006	99	523001	4.00	3.64	
8 Dichlorodifluoromethane	85	4.089	4.093	-0.004	100	1345206	4.00	3.95	
9 Chloromethane	52	4.299	4.302	-0.003	61	171399	4.00	3.54	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.305	4.307	-0.002	92	883226	4.00	3.96	
11 Acetaldehyde	44	4.477	4.476	0.001	99	918159	20.0	22.0	
12 Vinyl chloride	62	4.498	4.497	0.001	99	509003	4.00	3.89	
13 Butane	43	4.595	4.597	-0.002	86	828963	4.00	3.63	
14 Butadiene	54	4.595	4.598	-0.003	66	404323	4.00	3.89	
15 Bromomethane	94	4.966	4.968	-0.002	99	429197	4.00	3.87	
16 Chloroethane	64	5.128	5.127	0.001	96	222490	4.00	3.88	
17 Ethanol	31	5.224	5.223	0.001	96	733956	20.0	17.4	
18 Vinyl bromide	106	5.467	5.470	-0.003	99	377459	4.00	3.88	
19 2-Methylbutane	43	5.520	5.520	0.000	92	548772	4.00	3.57	
20 Trichlorofluoromethane	101	5.762	5.766	-0.004	100	1190242	4.00	3.99	
21 Acrolein	56	5.773	5.774	-0.001	94	121783	4.00	3.53	
22 Acetonitrile	40	5.849	5.850	-0.002	100	153373	4.00	4.22	
23 Acetone	58	5.897	5.899	-0.002	99	507711	12.0	13.0	
24 Isopropyl alcohol	45	5.978	5.979	-0.001	98	1736744	12.0	11.1	
25 Pentane	72	6.005	6.005	0.000	97	72775	4.00	3.99	
26 Ethyl ether	31	6.177	6.184	-0.007	91	418905	4.00	3.93	
27 1,1-Dichloroethene	96	6.537	6.540	-0.003	95	379393	4.00	3.94	
28 2-Methyl-2-propanol	59	6.623	6.627	-0.004	96	667284	4.00	3.73	
29 Acrylonitrile	53	6.650	6.650	0.000	94	232603	4.00	4.32	
30 1,1,2-Trichloro-1,2,2-trif	101	6.720	6.722	-0.002	95	793825	4.00	3.95	
31 Methylene Chloride	84	6.914	6.915	-0.001	97	360167	4.00	3.71	

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	6.930	6.930	0.000	94	390186	4.00	3.70	
33 Carbon disulfide	76	7.097	7.098	-0.001	99	1351244	4.00	3.98	
34 trans-1,2-Dichloroethene	96	7.774	7.774	0.000	94	439892	4.00	4.01	
35 2-Methylpentane	43	7.785	7.783	0.002	96	1104518	4.00	3.84	
36 Methyl tert-butyl ether	73	7.887	7.898	-0.011	97	708984	4.00	3.84	
37 1,1-Dichloroethane	63	8.221	8.219	0.002	100	711643	4.00	3.86	
38 Vinyl acetate	43	8.312	8.317	-0.005	100	748230	4.00	3.91	
39 2-Butanone (MEK)	72	8.780	8.788	-0.008	96	147275	4.00	4.09	
40 Hexane	56	8.813	8.811	0.002	91	381457	4.00	3.78	
139 Isopropyl ether	45	8.958	8.966	-0.008	97	1163550	4.00	3.77	
41 cis-1,2-Dichloroethene	96	9.248	9.246	0.002	97	362314	4.00	3.84	
42 Ethyl acetate	43	9.415	9.417	-0.002	98	683079	4.00	3.88	
43 Chloroform	83	9.603	9.599	0.004	96	699491	4.00	3.66	
142 Tert-butyl ethyl ether	59	9.663	9.667	-0.004	96	889084	4.00	3.84	
44 Tetrahydrofuran	42	10.007	10.018	-0.011	94	366881	4.00	3.80	
45 1,1,1-Trichloroethane	97	10.647	10.643	0.004	97	769030	4.00	3.84	
46 1,2-Dichloroethane	62	10.749	10.750	-0.001	97	470172	4.00	3.87	
47 n-Butanol	31	11.137	11.144	-0.007	90	170470	4.00	3.86	
49 Cyclohexane	69	11.223	11.222	0.001	82	206842	4.00	3.71	
48 Benzene	78	11.223	11.226	-0.003	97	975273	4.00	3.62	
50 Carbon tetrachloride	117	11.249	11.247	0.002	98	834144	4.00	4.19	
51 2,3-Dimethylpentane	71	11.319	11.320	-0.001	92	241958	4.00	3.52	
52 Thiophene	84	11.492	11.493	-0.001	97	579718	4.00	3.80	
140 Tert-amyl methyl ether	73	11.653	11.660	-0.007	96	759639	4.00	3.49	
53 Isooctane	57	11.938	11.939	-0.001	97	1854422	4.00	3.46	
54 n-Heptane	71	12.298	12.295	0.003	95	349391	4.00	3.53	
55 1,2-Dichloropropane	63	12.406	12.405	0.001	90	379911	4.00	3.95	
56 Trichloroethene	130	12.438	12.437	0.001	95	416123	4.00	3.54	
57 Dibromomethane	93	12.530	12.528	0.002	96	418582	4.00	3.71	
59 Dichlorobromomethane	83	12.664	12.661	0.003	99	743446	4.00	3.85	
58 1,4-Dioxane	88	12.664	12.670	-0.006	39	139540	4.00	3.67	
60 Methyl methacrylate	41	12.723	12.724	-0.001	95	419174	4.00	3.89	
61 Methylcyclohexane	83	13.186	13.185	0.001	91	789531	4.00	3.60	
62 4-Methyl-2-pentanone (MIBK)	43	13.557	13.560	-0.003	98	829084	4.00	3.74	
63 cis-1,3-Dichloropropene	75	13.633	13.630	0.003	97	499796	4.00	4.01	
64 trans-1,3-Dichloropropene	75	14.305	14.306	-0.001	99	459032	4.00	4.00	
65 Toluene	91	14.440	14.436	0.004	93	960784	4.00	3.79	
66 1,1,2-Trichloroethane	83	14.509	14.507	0.002	98	317612	4.00	3.73	
67 2-Methylthiophene	97	14.590	14.588	0.002	98	840106	4.00	3.81	
68 3-Methylthiophene	97	14.789	14.786	0.003	99	821973	4.00	3.81	
69 2-Hexanone	58	14.859	14.866	-0.007	91	391088	4.00	3.86	
70 n-Octane	85	15.080	15.081	-0.001	97	351104	4.00	3.72	
71 Chlorodibromomethane	129	15.209	15.209	0.000	98	686011	4.00	4.01	
72 Ethylene Dibromide	107	15.499	15.500	-0.001	98	553685	4.00	3.90	
73 Tetrachloroethene	129	15.564	15.561	0.003	96	385841	4.00	3.49	
74 2,3-Dimethylheptane	43	16.414	16.411	0.003	95	1220814	4.00	3.73	
75 Chlorobenzene	112	16.430	16.429	0.001	95	748137	4.00	3.70	
76 Ethylbenzene	91	16.704	16.703	0.001	99	1097171	4.00	3.70	
77 2-Ethylthiophene	97	16.806	16.807	-0.001	98	874188	4.00	3.82	
78 m-Xylene & p-Xylene	91	16.860	16.861	-0.001	99	1675287	8.00	7.01	
79 n-Nonane	57	17.248	17.245	0.003	95	796594	4.00	3.99	
80 Styrene	104	17.328	17.326	0.002	99	649833	4.00	3.86	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
81 Bromoform	173	17.328	17.328	0.000	96	617093	4.00	4.16	
82 o-Xylene	91	17.387	17.386	0.001	99	897431	4.00	3.44	
83 1,1,2,2-Tetrachloroethane	83	17.705	17.704	0.001	99	752518	4.00	3.69	
84 1,2,3-Trichloropropane	110	17.861	17.860	0.001	98	179115	4.00	3.81	
85 Isopropylbenzene	105	17.952	17.953	-0.001	96	1245518	4.00	3.66	
86 N-Propylbenzene	120	18.463	18.463	0.000	99	340422	4.00	3.74	
87 2-Chlorotoluene	126	18.517	18.517	0.000	98	339076	4.00	3.72	
88 4-Ethyltoluene	105	18.603	18.605	-0.002	98	1215330	4.00	3.70	
89 1,3,5-Trimethylbenzene	120	18.673	18.673	0.000	92	562124	4.00	3.60	
90 Alpha Methyl Styrene	118	18.894	18.896	-0.002	86	498059	4.00	3.98	
91 n-Decane	57	18.926	18.925	0.001	88	867371	4.00	3.82	
92 tert-Butylbenzene	119	19.082	19.083	-0.001	91	1083048	4.00	3.53	
93 1,2,4-Trimethylbenzene	105	19.098	19.097	0.001	96	1018993	4.00	3.63	
94 sec-Butylbenzene	105	19.340	19.341	-0.001	98	1493413	4.00	3.63	
95 1,3-Dichlorobenzene	146	19.367	19.370	-0.003	99	600787	4.00	3.72	
96 Benzyl chloride	91	19.437	19.439	-0.002	98	753863	4.00	4.00	
97 1,4-Dichlorobenzene	146	19.453	19.453	0.000	95	550794	4.00	3.69	
98 4-Isopropyltoluene	119	19.496	19.496	0.000	96	1201806	4.00	3.67	
99 1,2,3-Trimethylbenzene	105	19.555	19.554	0.001	98	799833	4.00	3.55	
100 Butylcyclohexane	83	19.598	19.597	0.001	89	923937	4.00	3.81	
101 2,3-Dihydroindene	117	19.797	19.799	-0.002	94	931126	4.00	3.70	
102 1,2-Dichlorobenzene	146	19.803	19.805	-0.002	96	593910	4.00	3.72	
103 n-Butylbenzene	91	19.916	19.916	0.000	98	1118397	4.00	3.77	
104 Indene	116	19.927	19.927	0.000	89	652622	4.00	3.90	
105 Undecane	57	20.196	20.195	0.001	96	883826	4.00	3.72	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.276	20.278	-0.002	98	895008	4.00	3.72	
141 1,2-Dibromo-3-Chloropropan	157	20.395	20.393	0.002	96	267988	4.00	4.04	
108 1,2,4,5-Tetramethylbenzene	119	20.669	20.668	0.001	97	1082335	4.00	3.64	
107 1,2,3,5-Tetramethylbenzene	119	20.723	20.725	-0.002	95	664567	4.00	3.57	
109 1,2,3,4-Tetramethylbenzene	119	21.148	21.147	0.001	98	874226	4.00	3.64	
110 Dodecane	57	21.282	21.282	0.000	93	751872	4.00	3.55	
111 1,2,4-Trichlorobenzene	180	21.524	21.525	-0.001	94	261358	4.00	4.06	
112 Naphthalene	128	21.653	21.655	-0.002	99	583681	4.00	4.06	
113 Benzo(b)thiophene	134	21.739	21.741	-0.002	99	288619	4.00	4.06	
114 Hexachlorobutadiene	225	21.809	21.810	-0.001	96	431913	4.00	3.50	
115 1,2,3-Trichlorobenzene	180	21.869	21.872	-0.003	96	222581	4.00	3.92	
116 2-Methylnaphthalene	142	22.401	22.402	-0.001	99	180845	12.5	12.1	
117 1-Methylnaphthalene	142	22.525	22.528	-0.003	99	170215	12.5	10.7	
A 118 C6 Range	1	8.802	(8.727-8.877)		0	4434032	4.00	3.82	
A 122 Toluene Range	1	14.440	(14.410-14.470)		0	2381997	4.00	3.82	
A 123 C8 Range	1	15.104	(15.056-15.152)		0	3839953	4.00	3.76	
S 124 Xylenes, Total	100				0		12.0	10.5	
S 144 1,2-Dichloroethene, Total	1				0			7.85	

Reagents:

MAic10_00014

Amount Added: 200.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL7.D

Injection Date: 02-Feb-2015 18:16:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: IC L7

Worklist Smp#: 8

Client ID:

Purge Vol: 500.000 mL

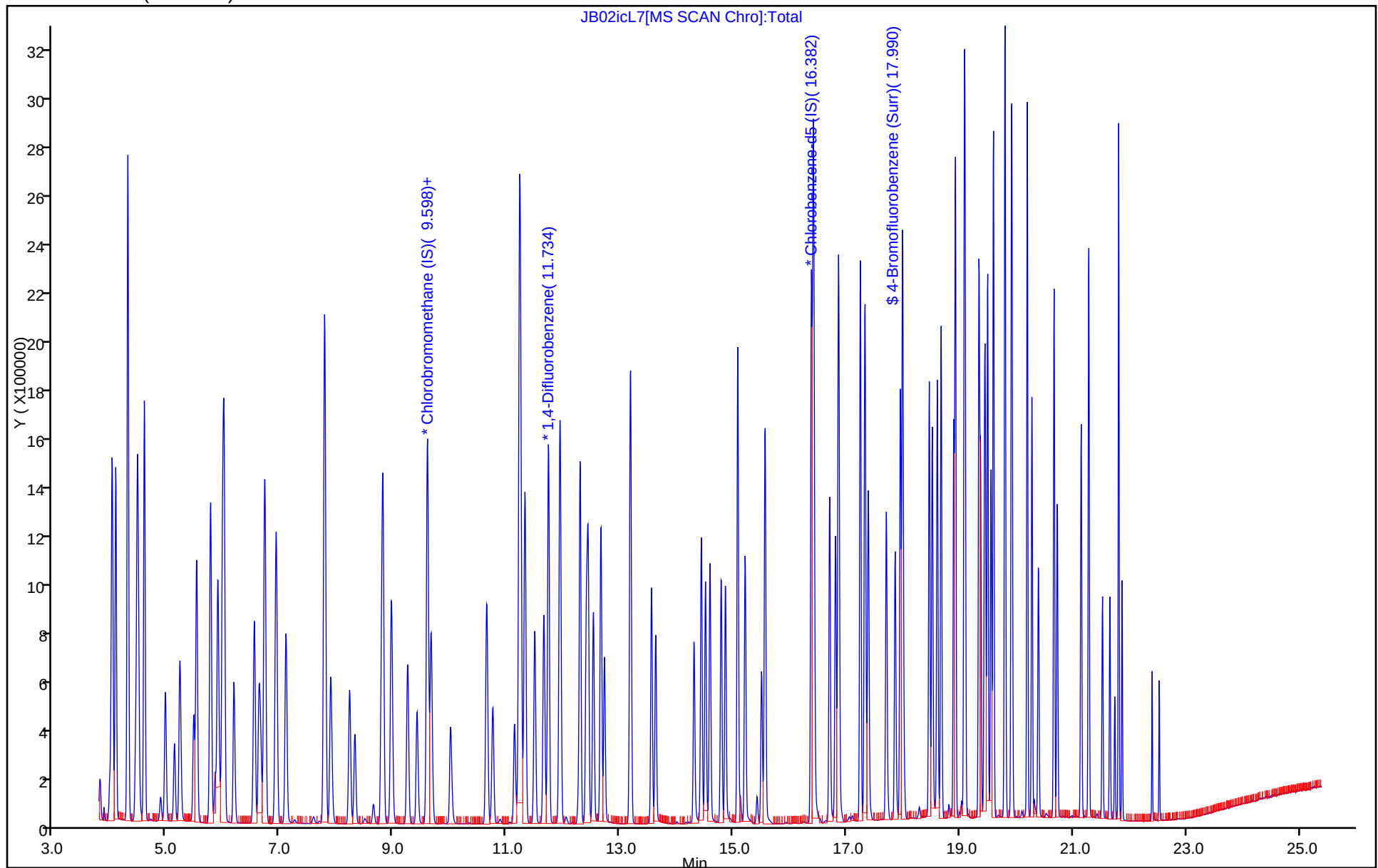
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL7.D

Injection Date: 02-Feb-2015 18:16:30

Instrument ID: MJ

Lims ID: IC L7

Client ID:

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 8

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

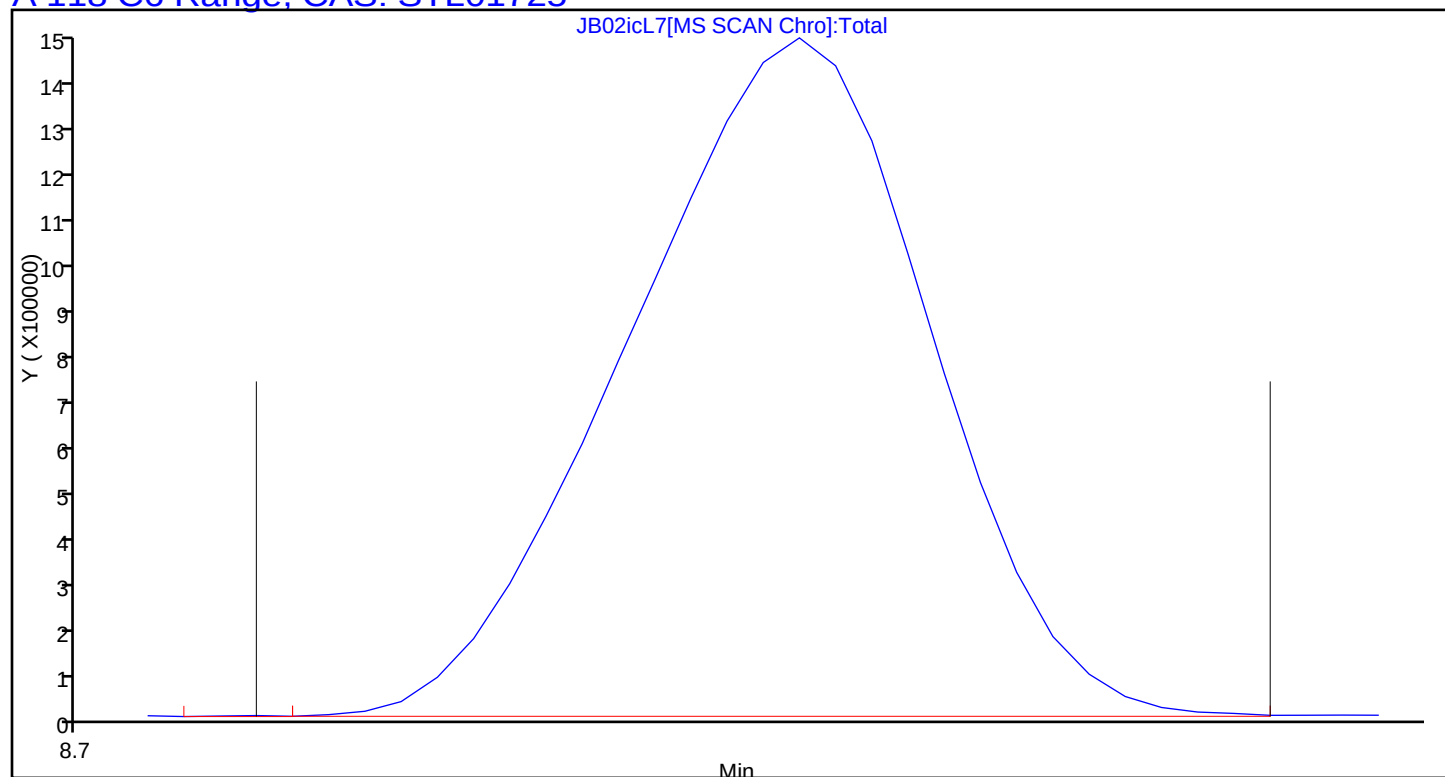
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL7.D

Injection Date: 02-Feb-2015 18:16:30

Instrument ID: MJ

Lims ID: IC L7

Client ID:

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 8

Purge Vol: 500.000 mL

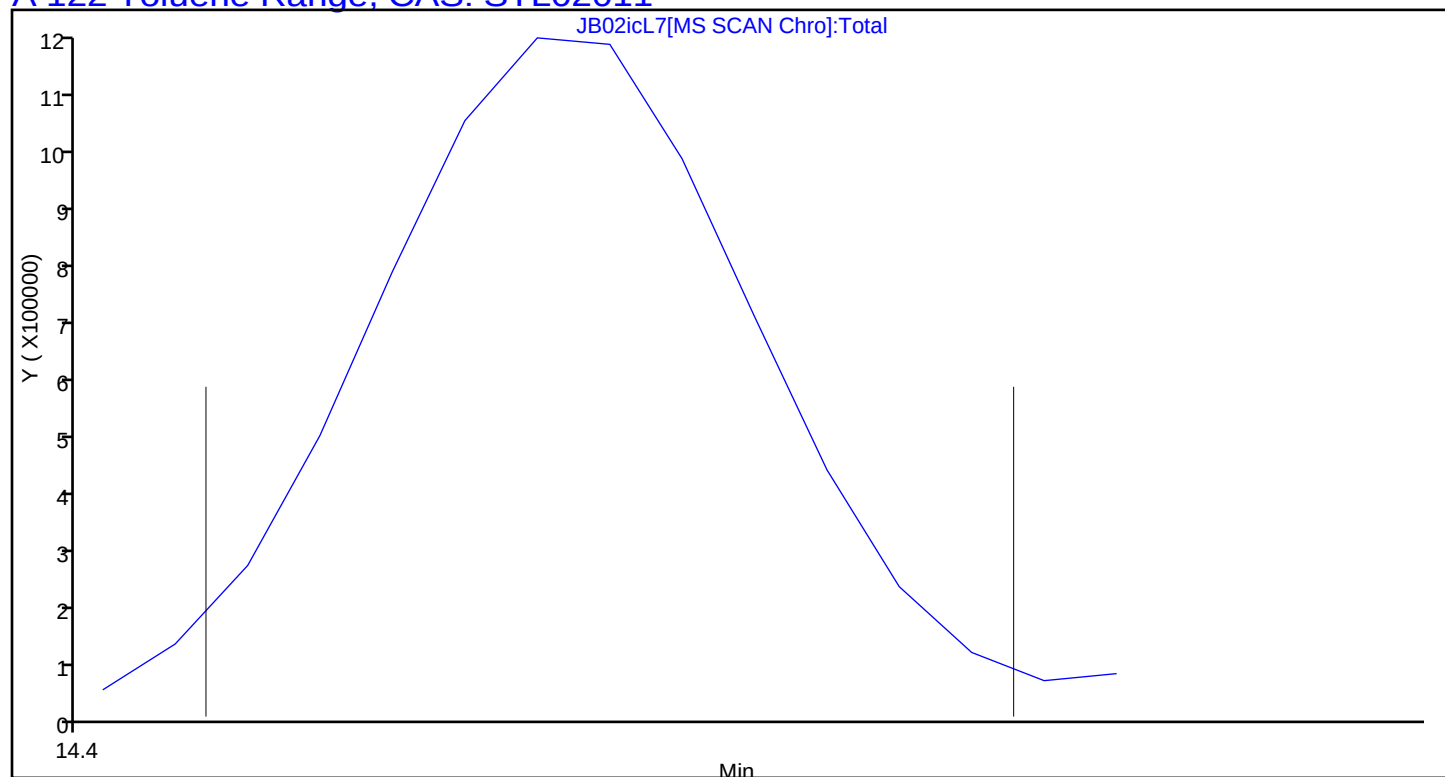
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL7.D

Injection Date: 02-Feb-2015 18:16:30

Instrument ID: MJ

Lims ID: IC L7

Client ID:

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 8

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

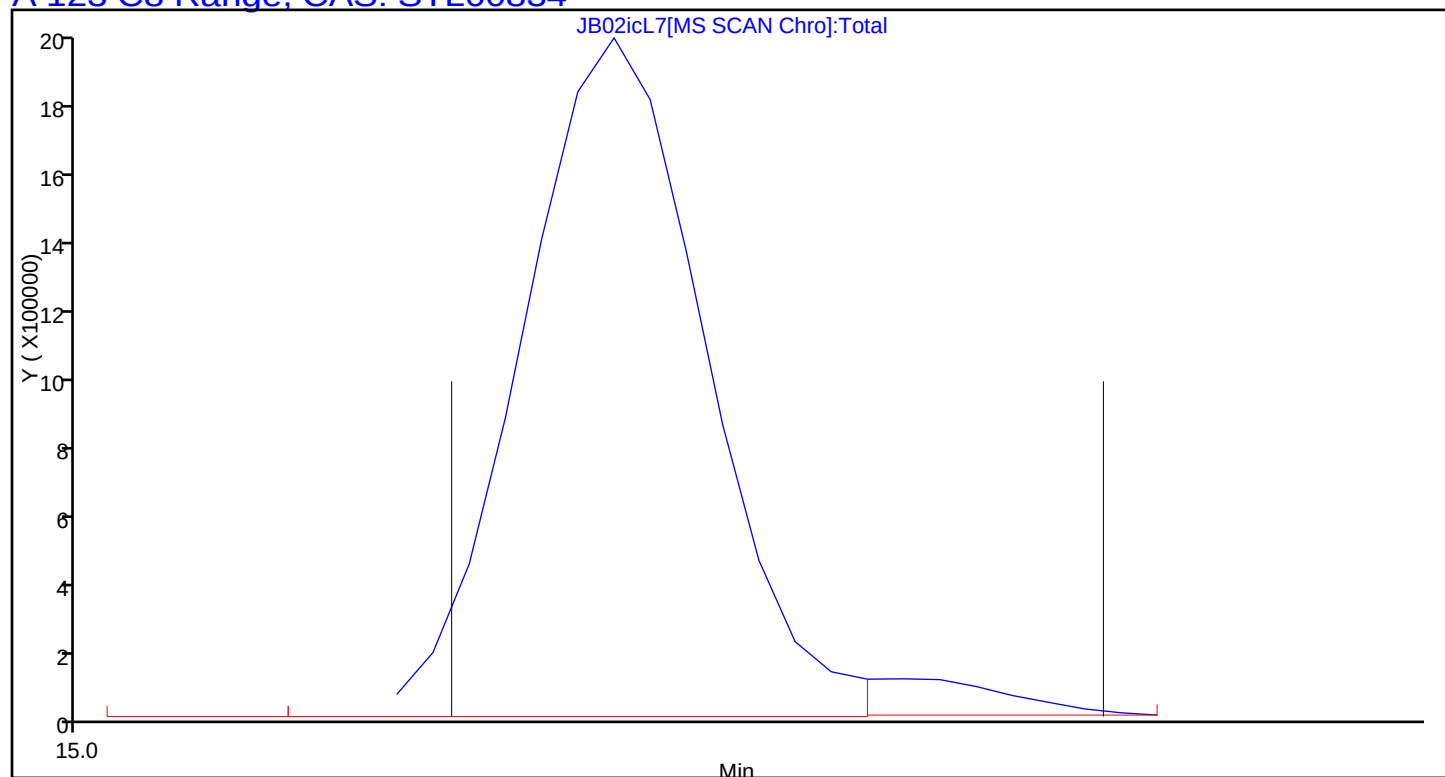
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 123 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL8.D
 Lims ID: IC L8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 02-Feb-2015 19:10:30 ALS Bottle#: 15 Worklist Smp#: 9
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 023170,,1,8,,ICAL 8
 Misc. Info.: J020215I,TO15,,140-0001328-009
 Operator ID: 7126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub3
 Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Feb-2015 08:51:30 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: tajh

Date: 03-Feb-2015 10:18:51

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	9.598	9.593	0.005	96	289600	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.739	11.736	0.003	96	1330796	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.381	16.380	0.001	89	1260199	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.990	17.991	-0.001	90	908244	4.00	4.40	
6 Chlorodifluoromethane	67	4.019	4.021	-0.002	97	246192	8.00	7.03	
7 Propene	41	4.030	4.036	-0.006	99	858998	8.00	6.25	
8 Dichlorodifluoromethane	85	4.089	4.093	-0.004	99	2220880	8.00	6.81	
9 Chloromethane	52	4.305	4.302	0.003	60	290411	8.00	6.26	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.305	4.307	-0.002	91	1472653	8.00	6.90	
11 Acetaldehyde	44	4.477	4.476	0.001	99	1337471	40.0	33.5	
12 Vinyl chloride	62	4.498	4.497	0.001	99	861009	8.00	6.88	
13 Butane	43	4.595	4.597	-0.002	85	1376936	8.00	6.30	
14 Butadiene	54	4.595	4.598	-0.003	67	690799	8.00	6.95	
15 Bromomethane	94	4.966	4.968	-0.002	99	729644	8.00	6.87	
16 Chloroethane	64	5.128	5.127	0.001	94	372958	8.00	6.81	
17 Ethanol	31	5.224	5.223	0.001	96	1028478	40.0	25.5	
18 Vinyl bromide	106	5.472	5.470	0.002	99	641424	8.00	6.89	
19 2-Methylbutane	43	5.520	5.520	0.000	92	907660	8.00	6.18	
20 Trichlorofluoromethane	101	5.768	5.766	0.002	100	1970709	8.00	6.90	
21 Acrolein	56	5.779	5.774	0.005	94	207242	8.00	6.28	
22 Acetonitrile	40	5.848	5.850	-0.002	99	246422	8.00	7.09	
23 Acetone	58	5.897	5.899	-0.002	98	558708	24.0	15.0	
24 Isopropyl alcohol	45	5.983	5.979	0.004	97	2564747	24.0	17.1	
25 Pentane	72	6.010	6.005	0.006	97	119661	8.00	6.85	
26 Ethyl ether	31	6.177	6.184	-0.007	92	674189	8.00	6.62	
27 1,1-Dichloroethene	96	6.542	6.540	0.002	96	626243	8.00	6.81	
28 2-Methyl-2-propanol	59	6.623	6.627	-0.004	96	1077056	8.00	6.30	
29 Acrylonitrile	53	6.650	6.650	0.000	94	387279	8.00	7.52	
30 1,1,2-Trichloro-1,2,2-trif	101	6.725	6.722	0.003	96	1230455	8.00	6.40	
31 Methylene Chloride	84	6.919	6.915	0.004	97	536859	8.00	5.78	

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	6.930	6.930	0.000	94	515698	8.00	5.12	
33 Carbon disulfide	76	7.097	7.098	-0.001	99	2234586	8.00	6.89	
34 trans-1,2-Dichloroethene	96	7.774	7.774	0.000	95	651321	8.00	6.21	
35 2-Methylpentane	43	7.785	7.783	0.002	96	1647824	8.00	6.00	
36 Methyl tert-butyl ether	73	7.887	7.898	-0.011	97	1036143	8.00	5.87	
37 1,1-Dichloroethane	63	8.221	8.219	0.002	100	1121361	8.00	6.35	
38 Vinyl acetate	43	8.318	8.317	0.001	100	1184112	8.00	6.47	
39 2-Butanone (MEK)	72	8.780	8.788	-0.008	96	192577	8.00	5.58	
40 Hexane	56	8.813	8.811	0.002	91	574959	8.00	5.95	
139 Isopropyl ether	45	8.963	8.966	-0.003	97	1686677	8.00	5.71	
41 cis-1,2-Dichloroethene	96	9.248	9.246	0.002	97	571755	8.00	6.33	
42 Ethyl acetate	43	9.415	9.417	-0.002	98	1005122	8.00	5.97	
43 Chloroform	83	9.603	9.599	0.004	96	1135194	8.00	6.21	
142 Tert-butyl ethyl ether	59	9.663	9.667	-0.004	96	1330879	8.00	6.01	
44 Tetrahydrofuran	42	10.007	10.018	-0.011	95	560530	8.00	6.07	
45 1,1,1-Trichloroethane	97	10.647	10.643	0.004	97	1185383	8.00	6.18	
46 1,2-Dichloroethane	62	10.755	10.750	0.005	96	749644	8.00	6.76	
47 n-Butanol	31	11.137	11.144	-0.008	89	260136	8.00	6.46	
49 Cyclohexane	69	11.223	11.222	0.001	91	301035	8.00	5.93	
48 Benzene	78	11.228	11.226	0.002	98	1564537	8.00	6.36	
50 Carbon tetrachloride	117	11.249	11.247	0.002	98	1210447	8.00	6.67	
51 2,3-Dimethylpentane	71	11.319	11.320	-0.001	92	388956	8.00	6.21	
52 Thiophene	84	11.492	11.493	-0.001	97	924914	8.00	6.64	
140 Tert-amyl methyl ether	73	11.658	11.660	-0.002	96	1163690	8.00	5.89	
53 Isooctane	57	11.938	11.939	-0.001	97	2976164	8.00	6.09	
54 n-Heptane	71	12.298	12.295	0.003	94	566164	8.00	6.28	
55 1,2-Dichloropropane	63	12.406	12.405	0.001	91	611640	8.00	6.97	
56 Trichloroethene	130	12.438	12.437	0.001	96	661074	8.00	6.17	
57 Dibromomethane	93	12.530	12.528	0.002	96	666985	8.00	6.48	
59 Dichlorobromomethane	83	12.664	12.661	0.003	99	1204865	8.00	6.84	
58 1,4-Dioxane	88	12.659	12.670	-0.011	68	212876	8.00	6.15	
60 Methyl methacrylate	41	12.723	12.724	-0.001	94	621512	8.00	6.32	
61 Methylcyclohexane	83	13.186	13.185	0.001	92	1227126	8.00	6.15	
62 4-Methyl-2-pentanone (MIBK)	43	13.557	13.560	-0.003	98	1291012	8.00	6.38	
63 cis-1,3-Dichloropropene	75	13.633	13.630	0.003	97	817502	8.00	7.19	
64 trans-1,3-Dichloropropene	75	14.305	14.306	-0.001	99	715096	8.00	6.88	
65 Toluene	91	14.440	14.436	0.004	93	1522934	8.00	6.62	
66 1,1,2-Trichloroethane	83	14.509	14.507	0.002	98	510378	8.00	6.61	
67 2-Methylthiophene	97	14.590	14.588	0.002	98	1332270	8.00	6.66	
68 3-Methylthiophene	97	14.789	14.786	0.003	99	1313774	8.00	6.72	
69 2-Hexanone	58	14.864	14.866	-0.002	92	604250	8.00	6.58	
70 n-Octane	85	15.080	15.081	-0.001	96	573265	8.00	6.70	
71 Chlorodibromomethane	129	15.209	15.209	0.000	98	1114615	8.00	7.18	
72 Ethylene Dibromide	107	15.499	15.500	-0.001	98	892760	8.00	6.94	
73 Tetrachloroethene	129	15.564	15.561	0.003	97	619114	8.00	6.19	
74 2,3-Dimethylheptane	43	16.414	16.411	0.003	95	1916286	8.00	6.46	
75 Chlorobenzene	112	16.430	16.429	0.001	92	1206328	8.00	6.58	
76 Ethylbenzene	91	16.704	16.703	0.001	98	1731979	8.00	6.44	
77 2-Ethylthiophene	97	16.806	16.807	-0.001	98	1379714	8.00	6.65	
78 m-Xylene & p-Xylene	91	16.860	16.861	-0.001	98	2584852	16.0	11.9	
79 n-Nonane	57	17.248	17.245	0.003	94	1298235	8.00	7.18	
80 Styrene	104	17.328	17.326	0.002	99	1058356	8.00	6.93	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
81 Bromoform	173	17.328	17.328	0.000	96	999215	8.00	7.42	
82 o-Xylene	91	17.387	17.386	0.001	99	1417298	8.00	6.00	
83 1,1,2,2-Tetrachloroethane	83	17.705	17.704	0.001	99	1221582	8.00	6.60	
84 1,2,3-Trichloropropane	110	17.861	17.860	0.001	97	295930	8.00	6.94	
85 Isopropylbenzene	105	17.952	17.953	-0.001	97	1958677	8.00	6.35	
86 N-Propylbenzene	120	18.463	18.463	0.000	99	551761	8.00	6.69	
87 2-Chlorotoluene	126	18.517	18.517	0.000	98	546325	8.00	6.62	
88 4-Ethyltoluene	105	18.603	18.605	-0.002	98	1954170	8.00	6.56	
89 1,3,5-Trimethylbenzene	120	18.673	18.673	0.000	93	910938	8.00	6.43	
90 Alpha Methyl Styrene	118	18.899	18.896	0.003	86	863924	8.00	7.62	
91 n-Decane	57	18.926	18.925	0.001	89	1409402	8.00	6.84	
92 tert-Butylbenzene	119	19.082	19.083	-0.001	90	1718951	8.00	6.18	
93 1,2,4-Trimethylbenzene	105	19.098	19.097	0.001	96	1640694	8.00	6.44	
94 sec-Butylbenzene	105	19.340	19.341	-0.001	97	2384356	8.00	6.39	
95 1,3-Dichlorobenzene	146	19.367	19.370	-0.003	99	1021760	8.00	6.98	
96 Benzyl chloride	91	19.437	19.439	-0.002	98	1209361	8.00	7.08	
97 1,4-Dichlorobenzene	146	19.453	19.453	0.000	94	958044	8.00	7.07	
98 4-Isopropyltoluene	119	19.496	19.496	0.000	96	1937413	8.00	6.53	
99 1,2,3-Trimethylbenzene	105	19.555	19.554	0.001	98	1303753	8.00	6.39	
100 Butylcyclohexane	83	19.598	19.597	0.001	89	1502351	8.00	6.84	
101 2,3-Dihydroindene	117	19.797	19.799	-0.002	94	1532701	8.00	6.72	
102 1,2-Dichlorobenzene	146	19.803	19.805	-0.002	95	1003547	8.00	6.94	
103 n-Butylbenzene	91	19.916	19.916	0.000	99	1829707	8.00	6.80	
104 Indene	116	19.927	19.927	0.000	93	1135584	8.00	7.48	
105 Undecane	57	20.196	20.195	0.001	96	1412079	8.00	6.55	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.276	20.278	-0.002	98	1469826	8.00	6.73	
141 1,2-Dibromo-3-Chloropropan	157	20.395	20.393	0.002	96	441219	8.00	7.33	
108 1,2,4,5-Tetramethylbenzene	119	20.669	20.668	0.001	97	1760180	8.00	6.53	
107 1,2,3,5-Tetramethylbenzene	119	20.728	20.725	0.003	95	1091723	8.00	6.48	
109 1,2,3,4-Tetramethylbenzene	119	21.148	21.147	0.001	98	1424220	8.00	6.54	
110 Dodecane	57	21.282	21.282	0.000	94	1237355	8.00	6.45	
111 1,2,4-Trichlorobenzene	180	21.524	21.525	-0.001	94	482865	8.00	8.28	
112 Naphthalene	128	21.653	21.655	-0.002	99	1029922	8.00	7.90	
113 Benzo(b)thiophene	134	21.739	21.741	-0.002	99	513760	8.00	7.97	
114 Hexachlorobutadiene	225	21.809	21.810	-0.001	96	751618	8.00	6.72	
115 1,2,3-Trichlorobenzene	180	21.869	21.872	-0.003	95	399699	8.00	7.76	
116 2-Methylnaphthalene	142	22.401	22.402	-0.001	99	314249	25.0	23.1	
117 1-Methylnaphthalene	142	22.530	22.528	0.002	99	378573	25.0	26.2	
A 118 C6 Range	1	8.807	(8.732-8.883)		0	6416009	8.00	5.78	
A 122 Toluene Range	1	14.440	(14.410-14.470)		0	3748206	8.00	6.64	
A 123 C8 Range	1	15.104	(15.056-15.152)		0	5917096	8.00	6.38	
S 124 Xylenes, Total	100				0		24.0	17.9	
S 144 1,2-Dichloroethene, Total	1				0			12.5	

Reagents:

CBN2C00X40_00001

Amount Added: 100.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL8.D

Injection Date: 02-Feb-2015 19:10:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: IC L8

Worklist Smp#: 9

Client ID:

Purge Vol: 500.000 mL

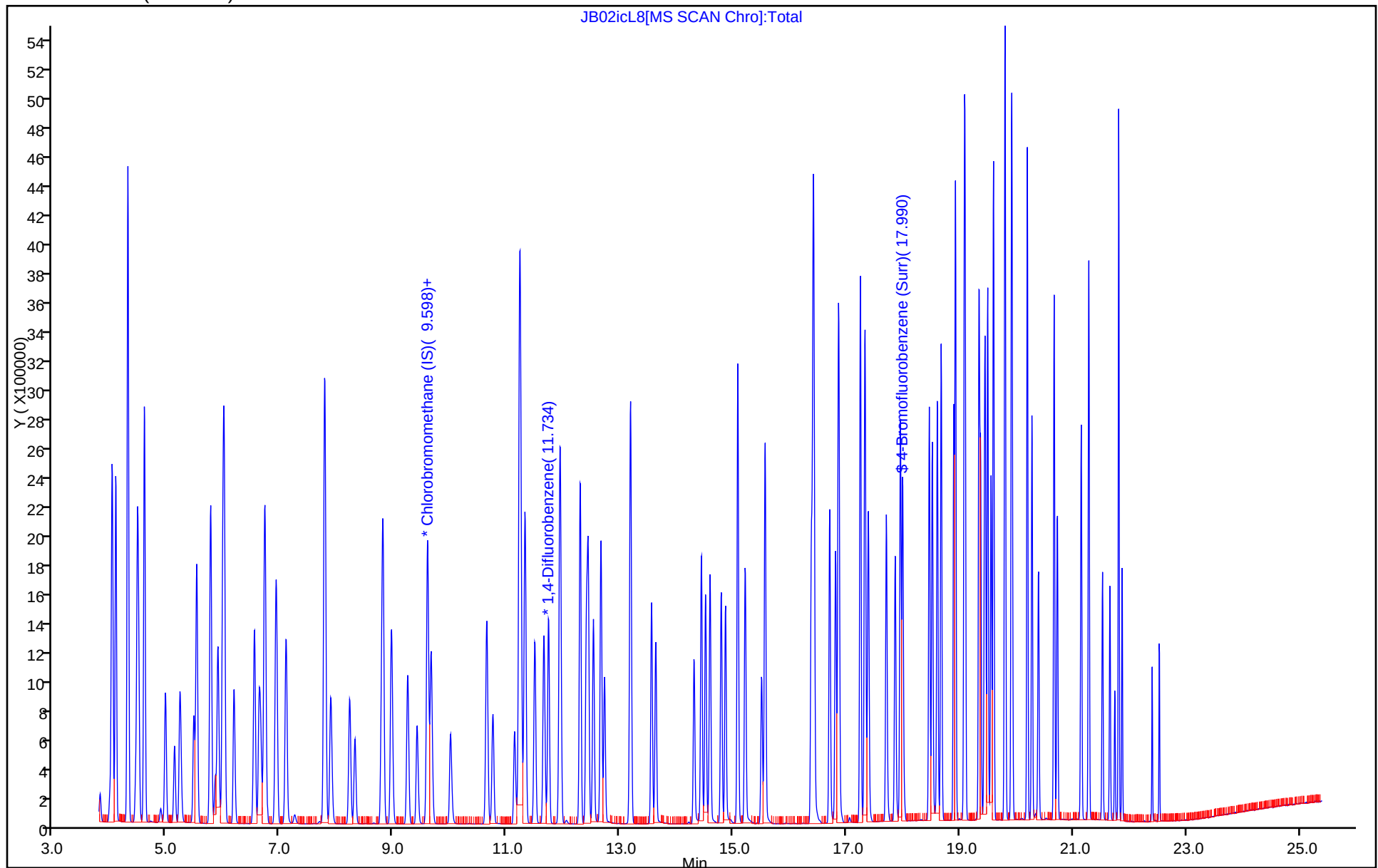
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL8.D

Injection Date: 02-Feb-2015 19:10:30

Instrument ID: MJ

Lims ID: IC L8

Client ID:

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 9

Purge Vol: 500.000 mL

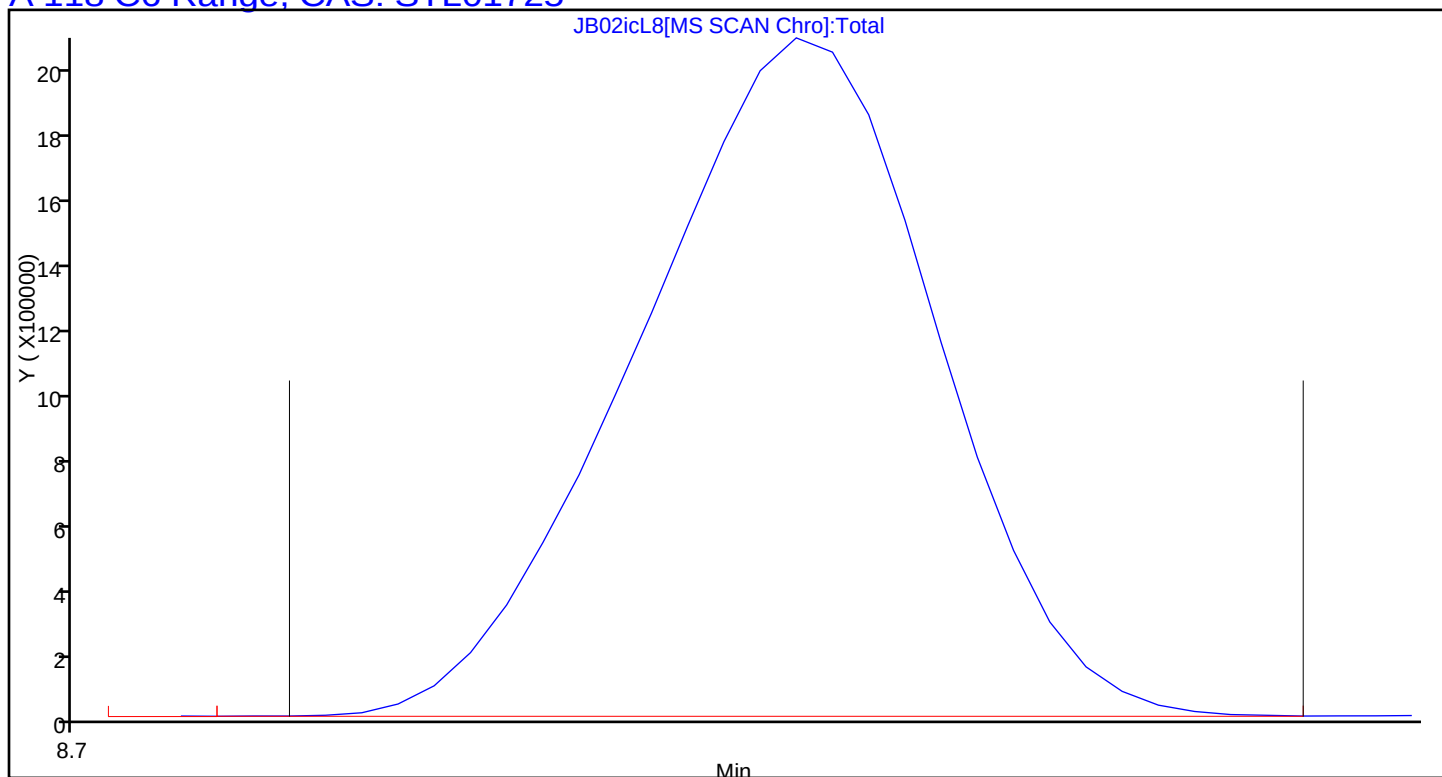
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL8.D

Injection Date: 02-Feb-2015 19:10:30

Instrument ID: MJ

Lims ID: IC L8

Client ID:

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 9

Purge Vol: 500.000 mL

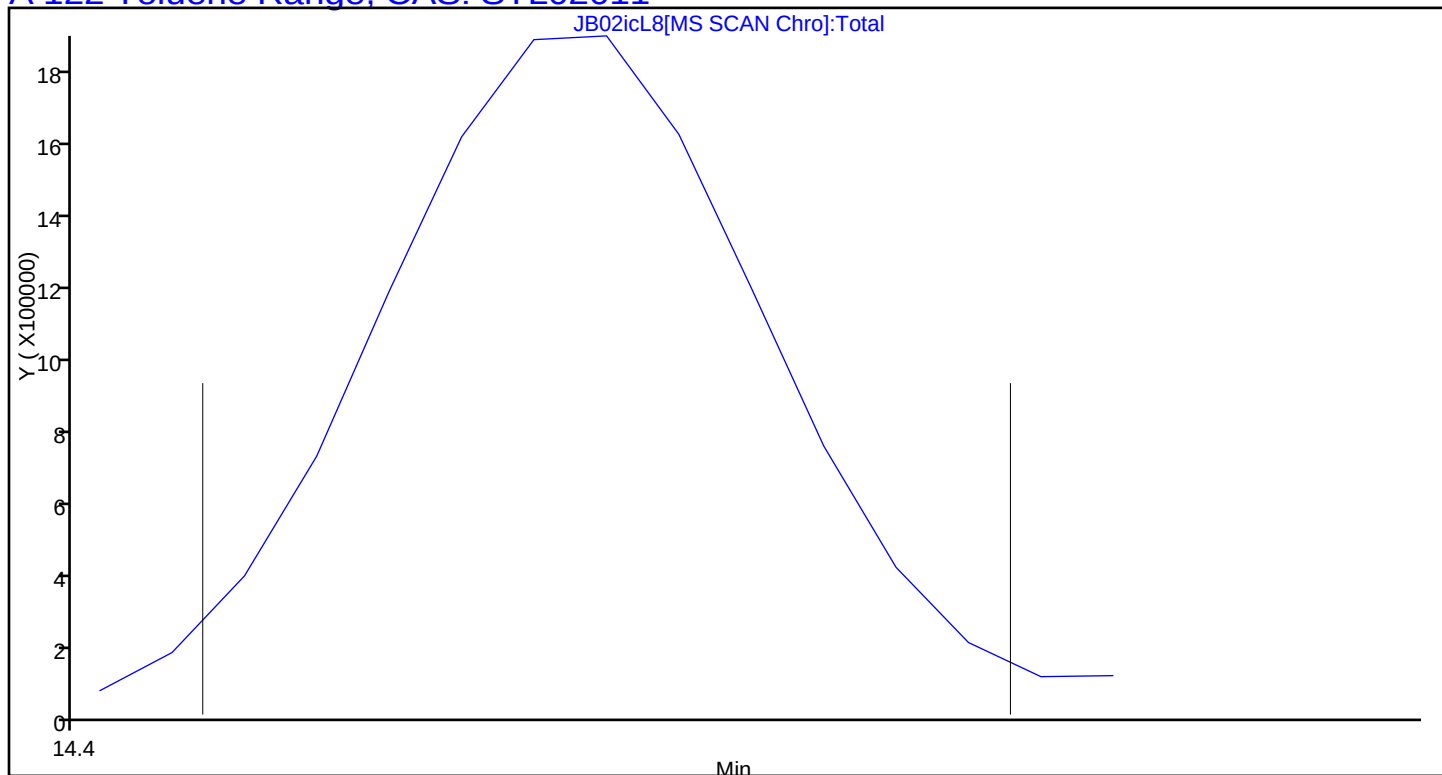
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL8.D

Injection Date: 02-Feb-2015 19:10:30

Instrument ID: MJ

Lims ID: IC L8

Client ID:

Operator ID: 7126

ALS Bottle#:

15

Worklist Smp#:

9

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MJ_TO15

Limit Group:

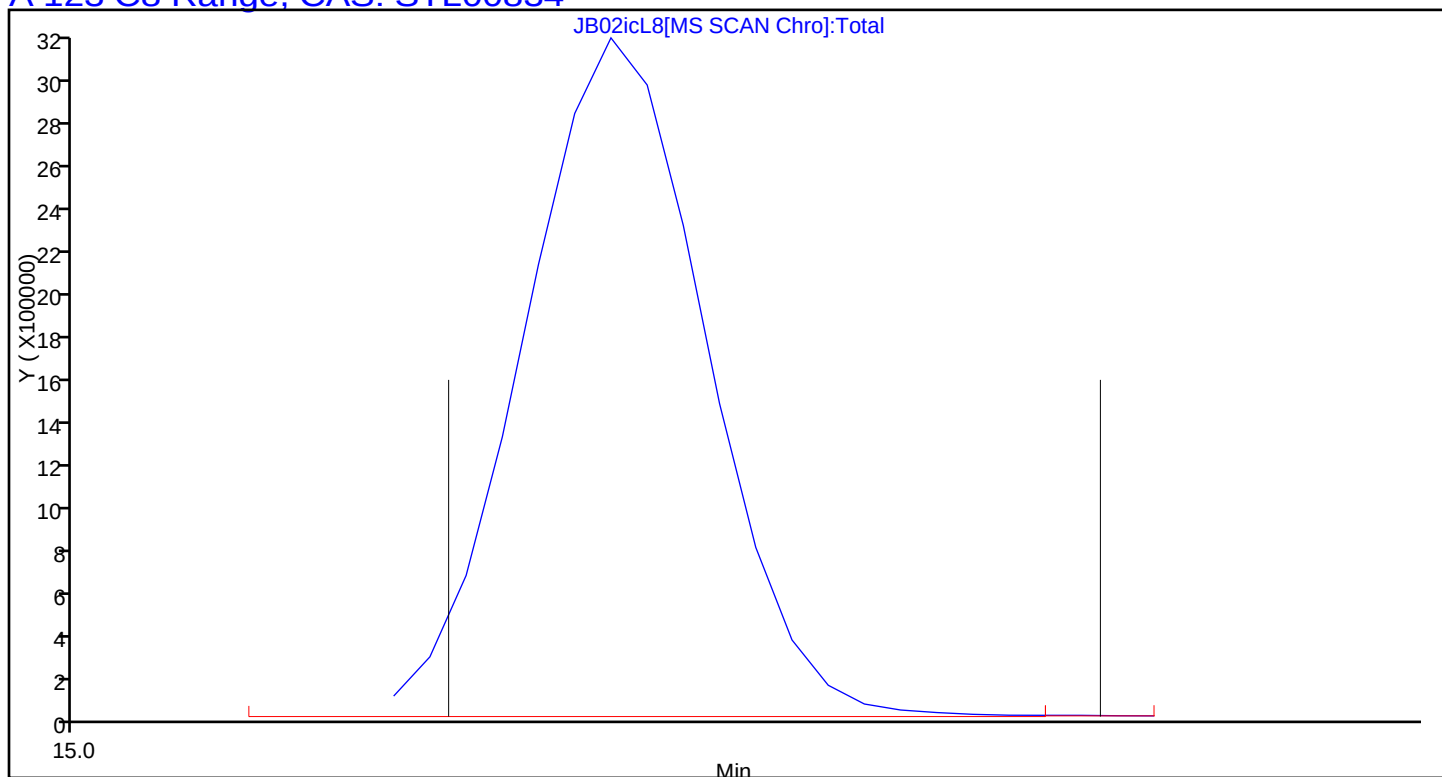
MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

A 123 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Lims ID: IC L9
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 02-Feb-2015 20:05:30 ALS Bottle#: 15 Worklist Smp#: 10
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 023170,,1,9,,ICAL 16
 Misc. Info.: J020215I,TO15,,140-0001328-010
 Operator ID: 7126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub3
 Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Feb-2015 08:51:33 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: tajh

Date: 03-Feb-2015 10:19:25

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	9.604	9.593	0.011	95	281493	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.740	11.736	0.004	96	1328201	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.382	16.380	0.002	89	1296640	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.996	17.991	0.005	90	926977	4.00	4.37	
6 Chlorodifluoromethane	67	4.020	4.021	-0.001	97	456091	16.0	13.4	
7 Propene	41	4.036	4.036	0.000	99	1565043	16.0	11.7	
8 Dichlorodifluoromethane	85	4.095	4.093	0.002	98	4023663	16.0	12.7	
9 Chloromethane	52	4.305	4.302	0.003	62	533733	16.0	11.8	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.311	4.307	0.004	89	2732986	16.0	13.2	
11 Acetaldehyde	44	4.477	4.476	0.001	97	2684944	80.0	69.1	
12 Vinyl chloride	62	4.499	4.497	0.002	98	1612356	16.0	13.3	
13 Butane	43	4.601	4.597	0.004	85	2526819	16.0	11.9	
14 Butadiene	54	4.601	4.598	0.003	69	1287411	16.0	13.3	
15 Bromomethane	94	4.972	4.968	0.004	99	1405706	16.0	13.6	
16 Chloroethane	64	5.134	5.127	0.007	96	731868	16.0	13.7	
17 Ethanol	31	5.236	5.223	0.013	95	2118175	80.0	54.1	
18 Vinyl bromide	106	5.472	5.470	0.002	99	1259030	16.0	13.9	
19 2-Methylbutane	43	5.521	5.520	0.001	91	1746402	16.0	12.2	
20 Trichlorofluoromethane	101	5.768	5.766	0.002	100	3654003	16.0	13.2	
21 Acrolein	56	5.779	5.774	0.005	93	464276	16.0	14.5	
22 Acetonitrile	40	5.854	5.850	0.004	99	535163	16.0	15.8	
23 Acetone	58	5.897	5.899	-0.002	98	1191572	48.0	32.9	
24 Isopropyl alcohol	45	6.000	5.979	0.021	94	5129253	48.0	35.1	
25 Pentane	72	6.010	6.005	0.006	98	231477	16.0	13.6	
26 Ethyl ether	31	6.183	6.184	-0.001	92	1310999	16.0	13.2	
27 1,1-Dichloroethene	96	6.543	6.540	0.003	96	1223778	16.0	13.7	
28 2-Methyl-2-propanol	59	6.645	6.627	0.018	96	2277047	16.0	13.7	
29 Acrylonitrile	53	6.656	6.650	0.006	94	840602	16.0	16.8	
30 1,1,2-Trichloro-1,2,2-trif	101	6.726	6.722	0.004	95	2470886	16.0	13.2	
31 Methylene Chloride	84	6.920	6.915	0.005	98	1081220	16.0	12.0	

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	6.936	6.930	0.006	94	1034161	16.0	10.6	
33 Carbon disulfide	76	7.102	7.098	0.004	99	4177657	16.0	13.2	
34 trans-1,2-Dichloroethene	96	7.780	7.774	0.006	95	1277566	16.0	12.5	
35 2-Methylpentane	43	7.791	7.783	0.008	95	3261067	16.0	12.2	
36 Methyl tert-butyl ether	73	7.893	7.898	-0.005	97	2121045	16.0	12.4	
37 1,1-Dichloroethane	63	8.227	8.219	0.008	100	2245258	16.0	13.1	
38 Vinyl acetate	43	8.324	8.317	0.007	100	2481272	16.0	13.9	
39 2-Butanone (MEK)	72	8.786	8.788	-0.002	96	405025	16.0	12.1	
40 Hexane	56	8.813	8.811	0.002	91	1180131	16.0	12.6	
139 Isopropyl ether	45	8.964	8.966	-0.002	99	3332719	16.0	11.6	
41 cis-1,2-Dichloroethene	96	9.254	9.246	0.008	97	1146045	16.0	13.1	
42 Ethyl acetate	43	9.421	9.417	0.004	98	2099963	16.0	12.8	
43 Chloroform	83	9.609	9.599	0.010	97	2255531	16.0	12.7	
142 Tert-butyl ethyl ether	59	9.668	9.667	0.001	97	2669450	16.0	12.4	
44 Tetrahydrofuran	42	10.007	10.018	-0.011	94	1215789	16.0	13.5	
45 1,1,1-Trichloroethane	97	10.648	10.643	0.005	97	2323629	16.0	12.5	
46 1,2-Dichloroethane	62	10.761	10.750	0.010	96	1489491	16.0	13.5	
47 n-Butanol	31	11.148	11.144	0.004	89	577894	16.0	14.4	
49 Cyclohexane	69	11.223	11.222	0.001	93	574799	16.0	11.3	
48 Benzene	78	11.234	11.226	0.008	99	2960278	16.0	12.1	
50 Carbon tetrachloride	117	11.250	11.247	0.003	98	2367862	16.0	13.1	
51 2,3-Dimethylpentane	71	11.325	11.320	0.005	92	781028	16.0	12.5	
52 Thiophene	84	11.497	11.493	0.004	97	1858435	16.0	13.4	
140 Tert-amyl methyl ether	73	11.659	11.660	-0.001	95	2393639	16.0	11.8	
53 Isooctane	57	11.944	11.939	0.005	96	5653514	16.0	11.6	
54 n-Heptane	71	12.299	12.295	0.004	94	1129883	16.0	12.6	
55 1,2-Dichloropropane	63	12.412	12.405	0.007	90	1229456	16.0	14.0	
56 Trichloroethene	130	12.444	12.437	0.007	95	1311549	16.0	12.3	
57 Dibromomethane	93	12.536	12.528	0.008	96	1348312	16.0	13.1	
59 Dichlorobromomethane	83	12.665	12.661	0.004	99	2369348	16.0	13.5	
58 1,4-Dioxane	88	12.665	12.670	-0.005	41	455676	16.0	13.2	
60 Methyl methacrylate	41	12.729	12.724	0.005	94	1310001	16.0	13.3	
61 Methylcyclohexane	83	13.187	13.185	0.002	91	2372870	16.0	11.9	
62 4-Methyl-2-pentanone (MIBK)	43	13.563	13.560	0.003	98	2730173	16.0	13.5	
63 cis-1,3-Dichloropropene	75	13.633	13.630	0.003	96	1661597	16.0	14.6	
64 trans-1,3-Dichloropropene	75	14.311	14.306	0.005	99	1514639	16.0	14.2	
65 Toluene	91	14.440	14.436	0.004	94	3023734	16.0	12.8	
66 1,1,2-Trichloroethane	83	14.515	14.507	0.008	98	1028843	16.0	13.0	
67 2-Methylthiophene	97	14.596	14.588	0.008	97	2724049	16.0	13.2	
68 3-Methylthiophene	97	14.790	14.786	0.004	98	2672064	16.0	13.3	
69 2-Hexanone	58	14.870	14.866	0.004	93	1358936	16.0	14.4	
70 n-Octane	85	15.086	15.081	0.005	94	1137688	16.0	12.9	
71 Chlorodibromomethane	129	15.215	15.209	0.006	97	2263093	16.0	14.2	
72 Ethylene Dibromide	107	15.505	15.500	0.005	98	1876913	16.0	14.2	
73 Tetrachloroethene	129	15.564	15.561	0.003	96	1260721	16.0	12.2	
74 2,3-Dimethylheptane	43	16.414	16.411	0.003	95	3477383	16.0	11.4	
75 Chlorobenzene	112	16.436	16.429	0.007	93	2452735	16.0	13.0	
76 Ethylbenzene	91	16.705	16.703	0.002	98	3517516	16.0	12.7	
77 2-Ethylthiophene	97	16.812	16.807	0.005	98	2855581	16.0	13.4	
78 m-Xylene & p-Xylene	91	16.866	16.861	0.005	96	5144380	32.0	23.1	
79 n-Nonane	57	17.248	17.245	0.003	92	2529868	16.0	13.6	
80 Styrene	104	17.329	17.326	0.003	99	2188134	16.0	13.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
81 Bromoform	173	17.334	17.328	0.006	96	2141767	16.0	15.5	
82 o-Xylene	91	17.393	17.386	0.007	100	2908413	16.0	12.0	
83 1,1,2,2-Tetrachloroethane	83	17.711	17.704	0.007	99	2559502	16.0	13.4	
84 1,2,3-Trichloropropane	110	17.867	17.860	0.007	97	647877	16.0	14.8	
85 Isopropylbenzene	105	17.958	17.953	0.005	97	3945641	16.0	12.4	
86 N-Propylbenzene	120	18.469	18.463	0.006	98	1209554	16.0	14.2	
87 2-Chlorotoluene	126	18.523	18.517	0.006	97	1162874	16.0	13.7	
88 4-Ethyltoluene	105	18.609	18.605	0.004	96	4061702	16.0	13.3	
89 1,3,5-Trimethylbenzene	120	18.679	18.673	0.006	93	1948422	16.0	13.4	
90 Alpha Methyl Styrene	118	18.900	18.896	0.004	86	1904974	16.0	16.3	
91 n-Decane	57	18.932	18.925	0.007	92	2756738	16.0	13.0	
92 tert-Butylbenzene	119	19.088	19.083	0.005	93	3627062	16.0	12.7	
93 1,2,4-Trimethylbenzene	105	19.104	19.097	0.007	95	3413188	16.0	13.0	
94 sec-Butylbenzene	105	19.346	19.341	0.005	96	4833755	16.0	12.6	
95 1,3-Dichlorobenzene	146	19.373	19.370	0.003	98	2282246	16.0	15.2	
96 Benzyl chloride	91	19.443	19.439	0.004	98	2793035	16.0	15.9	
97 1,4-Dichlorobenzene	146	19.459	19.453	0.006	93	2174777	16.0	15.6	
98 4-Isopropyltoluene	119	19.497	19.496	0.001	94	4005716	16.0	13.1	
99 1,2,3-Trimethylbenzene	105	19.561	19.554	0.007	98	2761285	16.0	13.1	
100 Butylcyclohexane	83	19.599	19.597	0.002	90	2918010	16.0	12.9	
101 2,3-Dihydroindene	117	19.803	19.799	0.004	94	3201210	16.0	13.7	
102 1,2-Dichlorobenzene	146	19.809	19.805	0.004	94	2199254	16.0	14.8	
103 n-Butylbenzene	91	19.916	19.916	0.000	99	3818089	16.0	13.8	
104 Indene	116	19.933	19.927	0.005	89	2486930	16.0	15.9	
105 Undecane	57	20.196	20.195	0.001	96	2991407	16.0	13.5	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.282	20.278	0.004	98	3185170	16.0	14.2	
141 1,2-Dibromo-3-Chloropropan	157	20.395	20.393	0.002	97	1086555	16.0	17.5	
108 1,2,4,5-Tetramethylbenzene	119	20.669	20.668	0.001	98	3777909	16.0	13.6	
107 1,2,3,5-Tetramethylbenzene	119	20.729	20.725	0.004	96	2390272	16.0	13.8	
109 1,2,3,4-Tetramethylbenzene	119	21.148	21.147	0.001	98	3147228	16.0	14.0	
110 Dodecane	57	21.283	21.282	0.001	95	2794574	16.0	14.2	
111 1,2,4-Trichlorobenzene	180	21.525	21.525	0.000	95	1327570	16.0	22.1	
112 Naphthalene	128	21.654	21.655	-0.001	98	2564117	16.0	19.1	
113 Benzo(b)thiophene	134	21.740	21.741	-0.001	99	1444640	16.0	21.8	
114 Hexachlorobutadiene	225	21.810	21.810	0.000	95	1731386	16.0	15.0	
115 1,2,3-Trichlorobenzene	180	21.874	21.872	0.002	95	1088532	16.0	20.6	
116 2-Methylnaphthalene	142	22.402	22.402	0.000	99	937834	50.0	67.0	
117 1-Methylnaphthalene	142	22.525	22.528	-0.003	99	1028106	50.0	69.2	
A 118 C6 Range	1	8.814	(8.738-8.910)		0	13006005	16.0	12.1	
A 122 Toluene Range	1	14.440	(14.410-14.470)		0	7607152	16.0	13.1	
A 123 C8 Range	1	15.104	(15.056-15.152)		0	11525806	16.0	12.1	
S 124 Xylenes, Total	100				0		48.0	35.1	
S 144 1,2-Dichloroethene, Total	1				0			25.6	

Reagents:

CBN2C00X40_00001

Amount Added: 200.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D

Injection Date: 02-Feb-2015 20:05:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: IC L9

Worklist Smp#: 10

Client ID:

Purge Vol: 500.000 mL

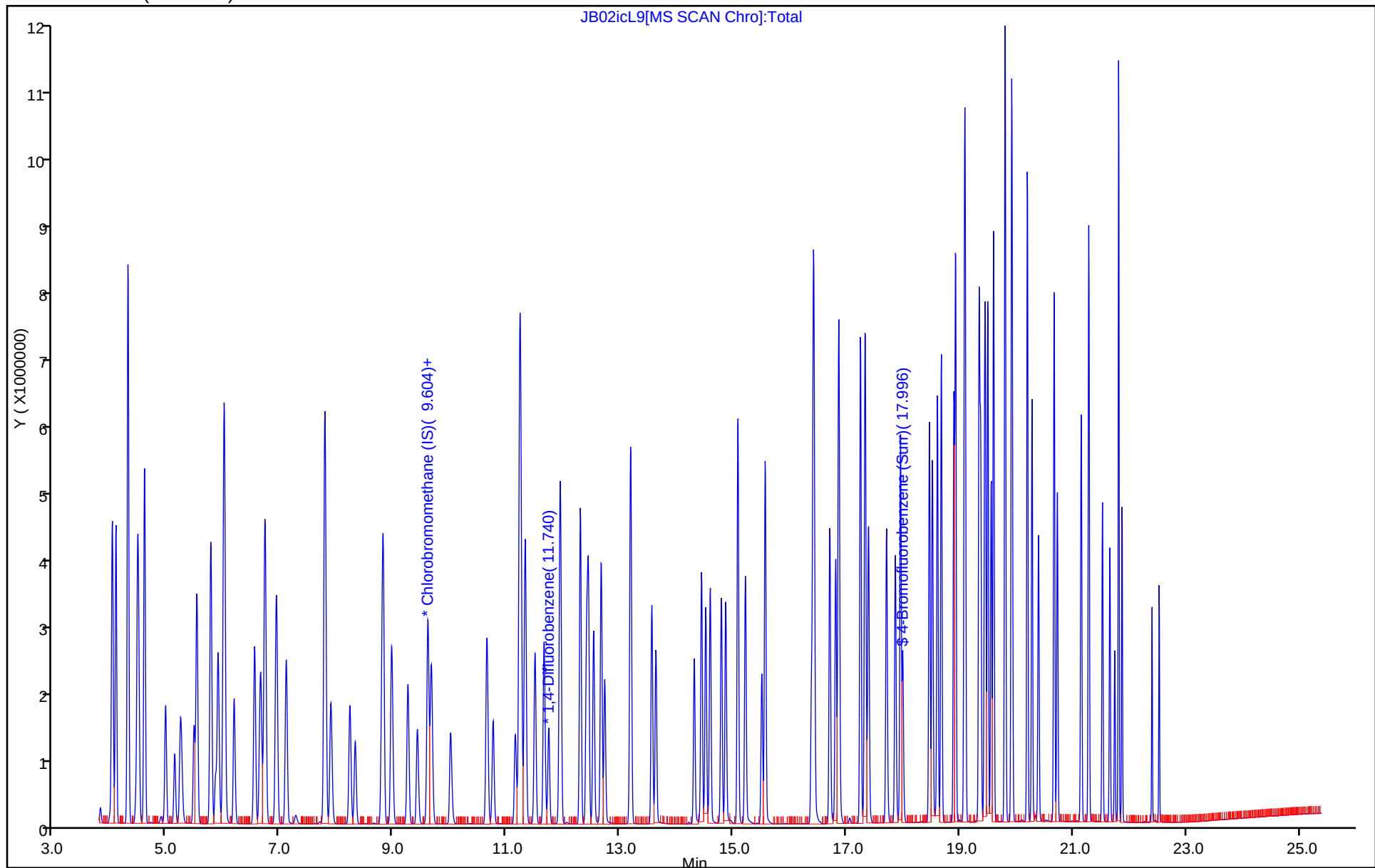
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D

Injection Date: 02-Feb-2015 20:05:30

Instrument ID: MJ

Lims ID: IC L9

Client ID:

Operator ID: 7126

ALS Bottle#:

15

Worklist Smp#:

10

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MJ_TO15

Limit Group:

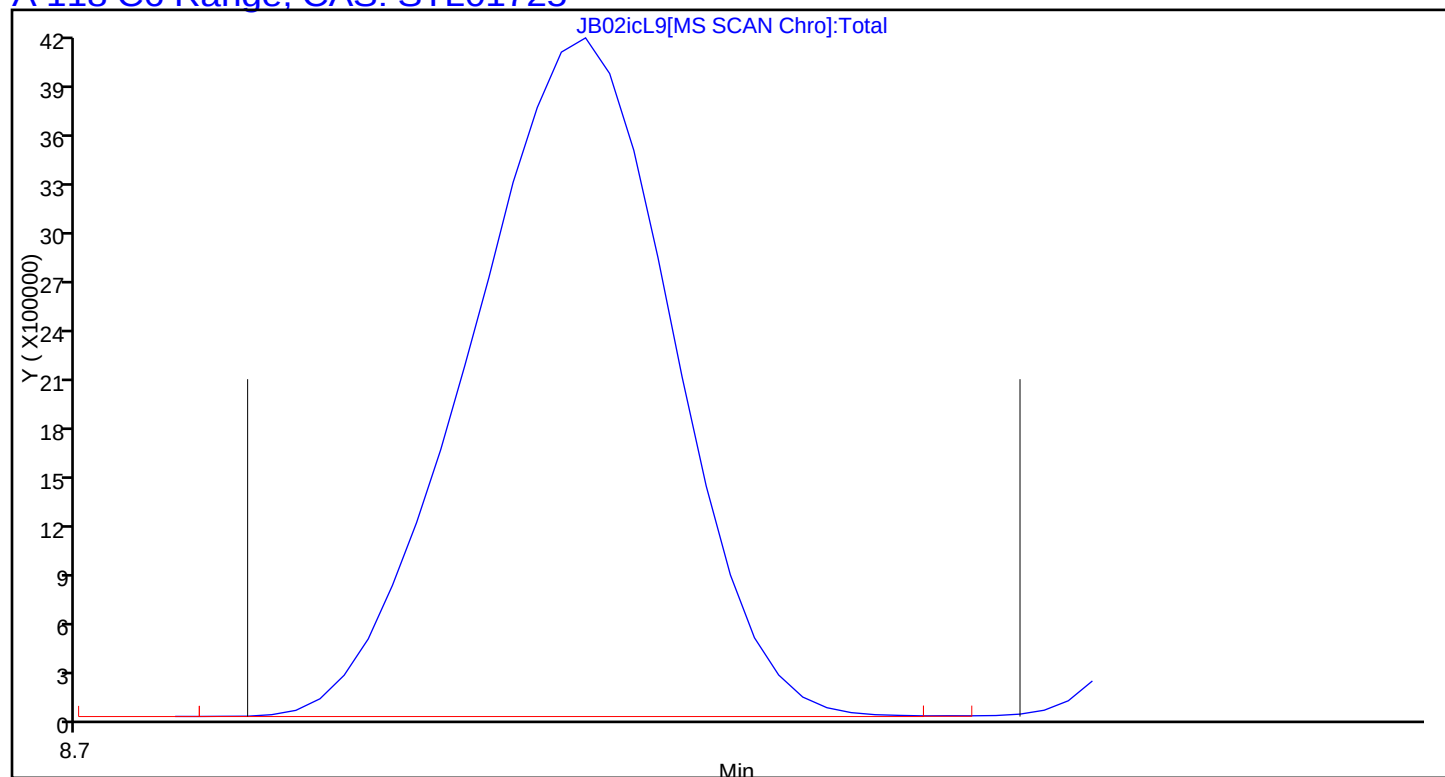
MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

A 118 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D

Injection Date: 02-Feb-2015 20:05:30

Instrument ID: MJ

Lims ID: IC L9

Client ID:

Operator ID: 7126

ALS Bottle#:

15

Worklist Smp#:

10

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MJ_TO15

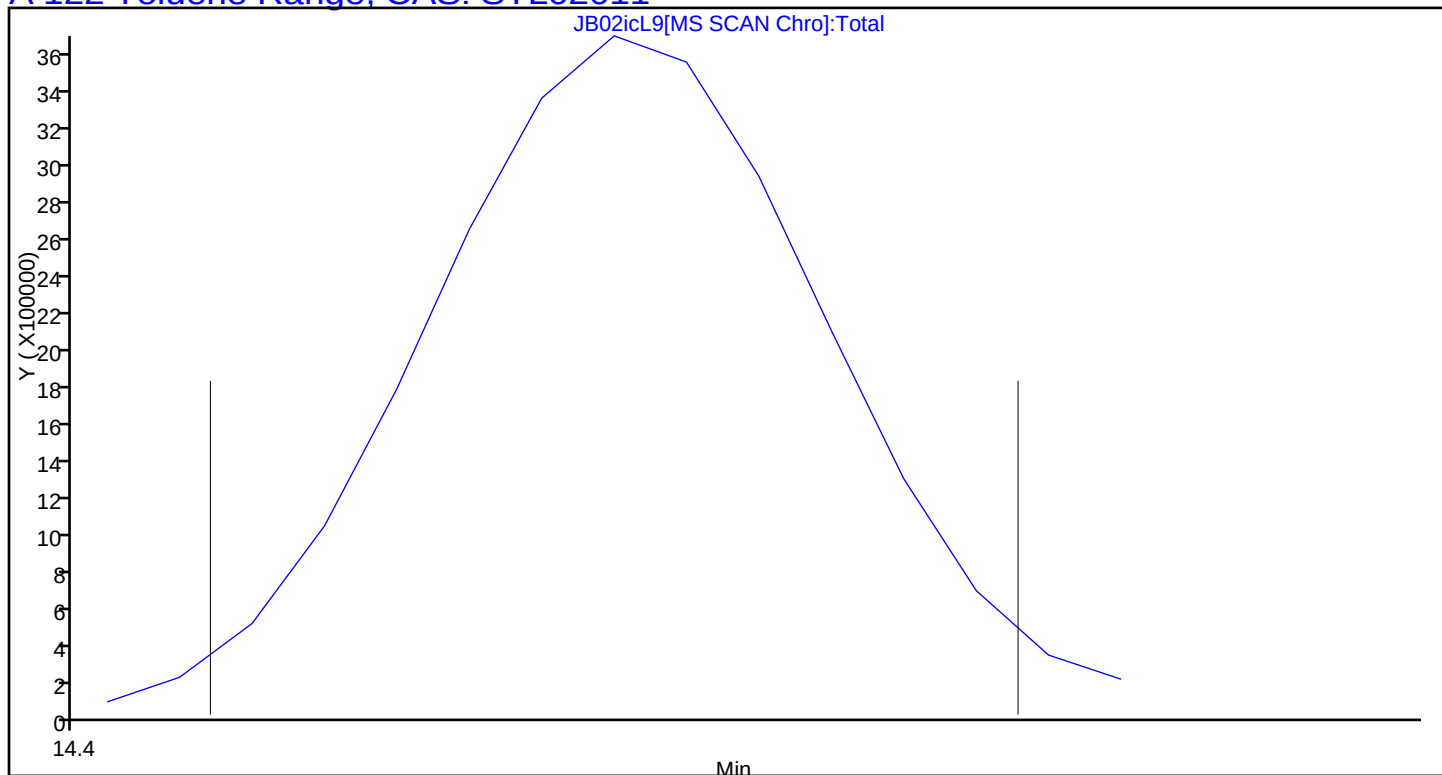
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

A 122 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D

Injection Date: 02-Feb-2015 20:05:30

Instrument ID: MJ

Lims ID: IC L9

Client ID:

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 10

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

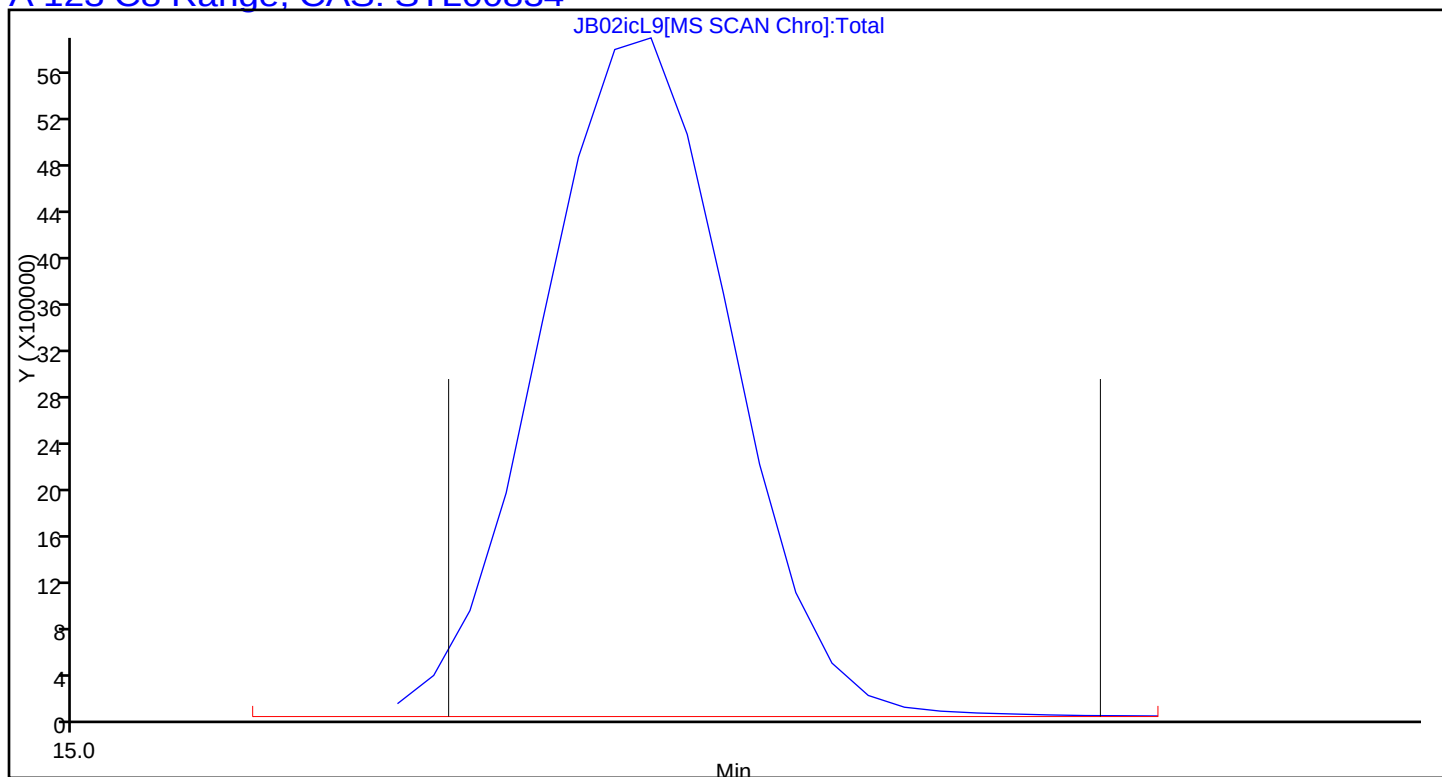
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 123 C8 Range, CAS: STL00834



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Lab Sample ID: ICV 140-2321/13 Calibration Date: 02/02/2015 22:48

Instrument ID: MJ Calib Start Date: 02/02/2015 12:48

GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 02/02/2015 20:05

Lab File ID: JB02LCS.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	0.4836	0.4126		3.41	4.00	-14.7	35.0
Propene	Ave	1.897	1.570		3.31	4.00	-17.3	35.0
Dichlorodifluoromethane	Ave	4.503	3.893		3.46	4.00	-13.5	35.0
1,2-Dichlorotetrafluoroethane	Ave	2.950	2.466		3.34	4.00	-16.4	35.0
Chloromethane	Ave	0.6404	0.5103		3.19	4.00	-20.3	35.0
Acetaldehyde	Ave	0.5522	0.3967		14.4	20.0	-28.2	80.0
Vinyl chloride	Ave	1.728	1.496		3.46	4.00	-13.4	35.0
1,3-Butadiene	Ave	1.372	1.214		3.54	4.00	-11.5	35.0
Butane	Ave	3.020	2.451		3.25	4.00	-18.9	35.0
Bromomethane	Ave	1.466	1.218		3.32	4.00	-17.0	35.0
Chloroethane	Ave	0.7569	0.6347		3.35	4.00	-16.1	35.0
Ethanol	Ave	0.5564	0.4142		14.9	20.0	-25.6	80.0
Vinyl bromide	Ave	1.285	1.166		3.63	4.00	-9.3	35.0
2-Methylbutane	Ave	2.029	1.621		3.20	4.00	-20.1	35.0
Trichlorofluoromethane	Ave	3.943	3.367		3.42	4.00	-14.6	35.0
Acrolein	Ave	0.4559	0.3491		3.06	4.00	-23.4	35.0
Acetonitrile	Ave	0.4803	0.4487		3.74	4.00	-6.6	35.0
Acetone	Ave	0.5147	0.3763		8.77	12.0	-26.9	35.0
Isopropyl alcohol	Ave	2.074	1.800		10.4	12.0	-13.2	35.0
Pentane	Ave	0.2413	0.2096		3.47	4.00	-13.1	35.0
Ethyl ether	Ave	1.407	1.117		3.18	4.00	-20.6	35.0
1,1-Dichloroethene	Ave	1.271	1.278		4.02	4.00	0.6	35.0
t-Butyl alcohol	Ave	2.362	2.097		3.55	4.00	-11.2	35.0
Acrylonitrile	Ave	0.7116	0.7084		3.98	4.00	-0.5	35.0
1,1,2-Trichlorotrifluoroethane	Ave	2.653	2.675		4.03	4.00	0.8	35.0
Methylene Chloride	Ave	1.282	1.165		3.63	4.00	-9.2	35.0
3-Chloropropene	Ave	1.392	0.9824		2.82	4.00	-29.4	35.0
Carbon disulfide	Ave	4.481	3.854		3.44	4.00	-14.0	35.0
trans-1,2-Dichloroethene	Ave	1.449	1.243		3.43	4.00	-14.2	35.0
2-Methylpentane	Ave	3.796	3.441		3.63	4.00	-9.3	80.0
Methyl tert-butyl ether	Ave	2.439	2.117		3.47	4.00	-13.2	35.0
1,1-Dichloroethane	Ave	2.437	2.240		3.68	4.00	-8.1	35.0
Vinyl acetate	Ave	2.529	2.366		3.74	4.00	-6.4	35.0
2-Butanone	Ave	0.4763	0.3960		3.33	4.00	-16.9	35.0
Hexane	Ave	1.334	1.077		3.23	4.00	-19.2	35.0
Isopropyl ether	Ave	4.081	3.512		3.44	4.00	-14.0	
cis-1,2-Dichloroethene	Ave	1.248	1.159		3.72	4.00	-7.1	35.0
Ethyl acetate	Ave	2.326	1.996		3.43	4.00	-14.2	35.0
Chloroform	Ave	2.525	2.246		3.56	4.00	-11.0	35.0
Tert-butyl ethyl ether	Ave	3.060	2.597		3.39	4.00	-15.1	

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Lab Sample ID: ICV 140-2321/13 Calibration Date: 02/02/2015 22:48

Instrument ID: MJ Calib Start Date: 02/02/2015 12:48

GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 02/02/2015 20:05

Lab File ID: JB02LCS.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	1.276	1.083		3.39	4.00	-15.1	35.0
1,1,1-Trichloroethane	Ave	2.647	2.372		3.58	4.00	-10.4	35.0
1,2-Dichloroethane	Ave	0.3332	0.3055		3.67	4.00	-8.3	35.0
1-Butanol	Ave	0.1210	0.1160		3.83	4.00	-4.1	35.0
Cyclohexane	Ave	0.1527	0.1242		3.25	4.00	-18.7	35.0
Benzene	Ave	0.7389	0.6515		3.53	4.00	-11.8	35.0
Carbon tetrachloride	Ave	0.5452	0.5314		3.90	4.00	-2.5	35.0
2,3-Dimethylpentane	Ave	0.1882	0.1402		2.98	4.00	-25.5	80.0
Thiophene	Ave	0.4185	0.3732		3.57	4.00	-10.8	80.0
Tert-amyl methyl ether	Ave	0.6267	0.5606		3.58	4.00	-10.5	
2,2,4-Trimethylpentane	Ave	1.469	1.190		3.24	4.00	-19.0	35.0
Heptane	Ave	0.2709	0.2201		3.25	4.00	-18.8	35.0
1,2-Dichloropropane	Ave	0.2638	0.2419		3.67	4.00	-8.3	35.0
Trichloroethene	Ave	0.3218	0.2692		3.35	4.00	-16.4	35.0
Dibromomethane	Ave	0.3095	0.2642		3.41	4.00	-14.7	35.0
1,4-Dioxane	Ave	0.1041	0.0877		3.37	4.00	-15.7	35.0
Bromodichloromethane	Ave	0.5294	0.4652		3.51	4.00	-12.1	35.0
Methyl methacrylate	Ave	0.2956	0.2482		3.36	4.00	-16.0	35.0
Methylcyclohexane	Ave	0.6002	0.3949		2.63	4.00	-34.2	80.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6078	0.5211		3.43	4.00	-14.3	35.0
cis-1,3-Dichloropropene	Ave	0.3416	0.3411		3.99	4.00	-0.1	35.0
trans-1,3-Dichloropropene	Ave	0.3301	0.2907		3.52	4.00	-11.9	35.0
Toluene	Ave	0.7298	0.6669		3.65	4.00	-8.6	35.0
1,1,2-Trichloroethane	Ave	0.2451	0.2096		3.42	4.00	-14.5	35.0
2-Methylthiophene	Ave	0.6347	0.5701		3.59	4.00	-10.2	80.0
3-Methylthiophene	Ave	0.6208	0.5746		3.70	4.00	-7.4	80.0
2-Hexanone	Ave	0.2914	0.2648		3.63	4.00	-9.1	35.0
Octane	Ave	0.2716	0.2389		3.52	4.00	-12.0	35.0
Dibromochloromethane	Ave	0.4924	0.4650		3.78	4.00	-5.6	35.0
1,2-Dibromoethane	Ave	0.4084	0.3691		3.61	4.00	-9.6	35.0
Tetrachloroethene	Ave	0.3177	0.2679		3.37	4.00	-15.7	35.0
2,3-Dimethylheptane	Ave	0.9422	0.8392		3.56	4.00	-10.9	80.0
Chlorobenzene	Ave	0.5818	0.5133		3.53	4.00	-11.8	35.0
Ethylbenzene	Ave	0.8533	0.7630		3.58	4.00	-10.6	35.0
2-Ethylthiophene	Ave	0.6581	0.5616		3.41	4.00	-14.7	80.0
m-Xylene & p-Xylene	Ave	0.6874	0.5779		6.73	8.00	-15.9	35.0
Nonane	Ave	0.5741	0.5262		3.67	4.00	-8.3	35.0
Styrene	Ave	0.4844	0.4643		3.83	4.00	-4.1	35.0
Bromoform	Ave	0.4272	0.4028		3.77	4.00	-5.7	35.0
o-Xylene	Ave	0.7498	0.6129		3.27	4.00	-18.2	35.0
1,1,2,2-Tetrachloroethane	Ave	0.5876	0.5208		3.55	4.00	-11.4	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Lab Sample ID: ICV 140-2321/13 Calibration Date: 02/02/2015 22:48
 Instrument ID: MJ Calib Start Date: 02/02/2015 12:48
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 02/02/2015 20:05
 Lab File ID: JB02LCS.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
1,2,3-Trichloropropane	Ave	0.1354	0.1240		3.66	4.00	-8.5	35.0
Isopropylbenzene	Ave	0.9791	0.8538		3.49	4.00	-12.8	35.0
Propylbenzene	Ave	0.2619	0.2355		3.60	4.00	-10.1	35.0
2-Chlorotoluene	Ave	0.2620	0.2281		3.48	4.00	-12.9	35.0
4-Ethyltoluene	Ave	0.9456	0.8003		3.39	4.00	-15.4	35.0
1,3,5-Trimethylbenzene	Ave	0.4499	0.4042		3.59	4.00	-10.2	35.0
Alpha Methyl Styrene	Ave	0.3600	0.3633		4.04	4.00	0.9	35.0
Decane	Ave	0.6538	0.5959		3.65	4.00	-8.9	35.0
tert-Butylbenzene	Ave	0.8830	0.7626		3.45	4.00	-13.6	35.0
1,2,4-Trimethylbenzene	Ave	0.8081	0.7271		3.60	4.00	-10.0	35.0
sec-Butylbenzene	Ave	1.185	1.059		3.57	4.00	-10.7	35.0
1,3-Dichlorobenzene	Ave	0.4646	0.4264		3.67	4.00	-8.2	35.0
Benzyl chloride	Ave	0.5422	0.5311		3.92	4.00	-2.1	35.0
1,4-Dichlorobenzene	Ave	0.4299	0.3961		3.69	4.00	-7.9	35.0
4-Isopropyltoluene	Ave	0.9422	0.8552		3.63	4.00	-9.2	35.0
1,2,3-Trimethylbenzene	Ave	0.6481	0.5970		3.68	4.00	-7.9	80.0
Butylcyclohexane	Ave	0.6972	0.5965		3.42	4.00	-14.5	80.0
1,2-Dichlorobenzene	Ave	0.4593	0.4326		3.77	4.00	-5.8	35.0
Indane	Ave	0.7235	0.6032		3.33	4.00	-16.6	80.0
Butylbenzene	Ave	0.8544	0.8224		3.85	4.00	-3.8	35.0
Indene	Ave	0.4821	0.5822		4.83	4.00	20.7	80.0
Undecane	Ave	0.6845	0.6229		3.64	4.00	-9.0	35.0
1,2-Dimethyl-4-Ethylbenzene	Ave	0.6928	0.7679		4.43	4.00	10.8	80.0
1,2-Dibromo-3-Chloropropane	Ave	0.1910	0.1360		2.85	4.00	-28.8	
1,2,4,5-Tetramethylbenzene	Ave	0.8550	0.8002		3.74	4.00	-6.4	80.0
1,2,3,5-Tetramethylbenzene	Ave	0.5350	0.5047		3.77	4.00	-5.7	80.0
1,2,3,4-Tetramethylbenzene	Ave	0.6913	0.6365		3.68	4.00	-7.9	80.0
Dodecane	Ave	0.6090	0.6284		4.13	4.00	3.2	35.0
1,2,4-Trichlorobenzene	Ave	0.1851	0.2236		4.83	4.00	20.8	35.0
Naphthalene	Ave	0.4137	0.5099		4.93	4.00	23.3	35.0
Benzo (b) thiophene	Ave	0.2045	0.2277		4.45	4.00	11.3	80.0
Hexachlorobutadiene	Ave	0.3552	0.3312		3.73	4.00	-6.8	35.0
1,2,3-Trichlorobenzene	Ave	0.1634	0.1971		4.82	4.00	20.6	35.0
2-Methylnaphthalene	Ave	0.0432	0.0405		11.7	12.5	-6.2	80.0
1-Methylnaphthalene	Ave	0.0458	0.0411		11.2	12.5	-10.3	80.0
4-Bromofluorobenzene (Surr)	Ave	0.6548	0.6834		4.17	4.00	4.4	35.0

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02LCS.D

Lims ID: ICV

Client ID:

Sample Type: ICV

Inject. Date: 02-Feb-2015 22:48:30

ALS Bottle#: 1

Worklist Smp#: 13

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

Sample Info: ICV-LCS,,3,,,023171

Misc. Info.: J020215I,TO15,,140-0001328-013

Operator ID: 7126

Instrument ID: MJ

Sublist:

Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m

Limit Group: MSA TO14A_15 Routine ICAL

Last Update: 04-Feb-2015 08:51:33

Calib Date: 02-Feb-2015 20:05:30

Integrator: RTE

ID Type: Deconvolution ID

Quant Method: Internal Standard

Quant By: Initial Calibration

Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D

Column 1 : RTX-5 (0.32 mm)

Det: MS SCAN

Process Host: XAWRK011

First Level Reviewer: tajh

Date: 03-Feb-2015 10:32:46

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	9.590	9.593	-0.003	96	299316	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.737	11.736	0.001	96	1429867	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.379	16.380	-0.001	89	1314806	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.988	17.991	-0.003	90	898563	4.00	4.17	
6 Chlorodifluoromethane	67	4.017	4.021	-0.004	97	123504	4.00	3.41	
7 Propene	41	4.033	4.036	-0.003	99	469903	4.00	3.31	
8 Dichlorodifluoromethane	85	4.093	4.093	0.000	100	1165251	4.00	3.46	
9 Chloromethane	52	4.302	4.302	0.000	62	152742	4.00	3.19	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.302	4.307	-0.005	91	738084	4.00	3.34	
11 Acetaldehyde	44	4.475	4.476	-0.001	100	593676	20.0	14.4	
12 Vinyl chloride	62	4.496	4.497	-0.001	99	447878	4.00	3.46	
13 Butane	43	4.593	4.597	-0.004	86	733593	4.00	3.25	
14 Butadiene	54	4.593	4.598	-0.005	66	363398	4.00	3.54	
15 Bromomethane	94	4.964	4.968	-0.004	99	364419	4.00	3.32	
16 Chloroethane	64	5.125	5.127	-0.002	94	189985	4.00	3.35	
17 Ethanol	31	5.222	5.223	-0.001	95	619895	20.0	14.9	
18 Vinyl bromide	106	5.464	5.470	-0.006	99	349106	4.00	3.63	
19 2-Methylbutane	43	5.518	5.520	-0.002	92	485197	4.00	3.20	
20 Trichlorofluoromethane	101	5.760	5.766	-0.006	100	1007817	4.00	3.42	
21 Acrolein	56	5.771	5.774	-0.003	94	104493	4.00	3.06	
22 Acetonitrile	40	5.846	5.850	-0.004	99	134297	4.00	3.74	
23 Acetone	58	5.895	5.899	-0.004	98	337957	12.0	8.77	
24 Isopropyl alcohol	45	5.975	5.979	-0.004	95	1616861	12.0	10.4	
25 Pentane	72	6.002	6.005	-0.002	97	62737	4.00	3.47	
26 Ethyl ether	31	6.180	6.184	-0.004	92	334447	4.00	3.18	
27 1,1-Dichloroethene	96	6.540	6.540	0.000	95	382599	4.00	4.02	
28 2-Methyl-2-propanol	59	6.621	6.627	-0.006	96	627583	4.00	3.55	
29 Acrylonitrile	53	6.648	6.650	-0.002	95	212021	4.00	3.98	
30 1,1,2-Trichloro-1,2,2-trif	101	6.723	6.722	0.001	95	800588	4.00	4.03	
31 Methylene Chloride	84	6.917	6.915	0.002	97	348607	4.00	3.63	

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	6.928	6.930	-0.002	93	294034	4.00	2.82	
33 Carbon disulfide	76	7.094	7.098	-0.004	99	1153487	4.00	3.44	
34 trans-1,2-Dichloroethene	96	7.772	7.774	-0.002	95	372135	4.00	3.43	
35 2-Methylpentane	43	7.783	7.783	0.000	96	1029985	4.00	3.63	
36 Methyl tert-butyl ether	73	7.891	7.898	-0.007	97	633605	4.00	3.47	
37 1,1-Dichloroethane	63	8.219	8.219	0.000	100	670330	4.00	3.68	
38 Vinyl acetate	43	8.316	8.317	-0.001	100	708175	4.00	3.74	
39 2-Butanone (MEK)	72	8.784	8.788	-0.004	96	118520	4.00	3.33	
40 Hexane	56	8.810	8.811	-0.001	92	322342	4.00	3.23	
139 Isopropyl ether	45	8.961	8.966	-0.005	97	1051302	4.00	3.44	
41 cis-1,2-Dichloroethene	96	9.246	9.246	0.000	97	346926	4.00	3.72	
42 Ethyl acetate	43	9.413	9.417	-0.004	98	597508	4.00	3.43	
43 Chloroform	83	9.601	9.599	0.002	96	672370	4.00	3.56	
142 Tert-butyl ethyl ether	59	9.660	9.667	-0.007	96	777352	4.00	3.39	
44 Tetrahydrofuran	42	10.005	10.018	-0.013	95	324063	4.00	3.39	
45 1,1,1-Trichloroethane	97	10.639	10.643	-0.004	97	709957	4.00	3.58	
46 1,2-Dichloroethane	62	10.752	10.750	0.002	97	436794	4.00	3.67	
47 n-Butanol	31	11.134	11.144	-0.010	91	165923	4.00	3.83	
49 Cyclohexane	69	11.220	11.222	-0.002	93	177563	4.00	3.25	
48 Benzene	78	11.226	11.226	0.000	98	931568	4.00	3.53	
50 Carbon tetrachloride	117	11.247	11.247	0.000	98	759789	4.00	3.90	
51 2,3-Dimethylpentane	71	11.317	11.320	-0.003	92	200454	4.00	2.98	
52 Thiophene	84	11.495	11.493	0.002	97	533637	4.00	3.57	
140 Tert-amyl methyl ether	73	11.651	11.660	-0.009	96	737215	4.00	3.58	
53 Isooctane	57	11.936	11.939	-0.003	98	1701421	4.00	3.24	
54 n-Heptane	71	12.291	12.295	-0.004	95	314637	4.00	3.25	
55 1,2-Dichloropropane	63	12.404	12.405	-0.001	90	345865	4.00	3.67	
56 Trichloroethene	130	12.436	12.437	-0.001	95	384915	4.00	3.35	
57 Dibromomethane	93	12.528	12.528	0.000	95	377720	4.00	3.41	
59 Dichlorobromomethane	83	12.662	12.661	0.001	99	665204	4.00	3.51	
58 1,4-Dioxane	88	12.662	12.670	-0.008	41	125443	4.00	3.37	
60 Methyl methacrylate	41	12.721	12.724	-0.003	94	354878	4.00	3.36	
61 Methylcyclohexane	83	13.184	13.185	-0.001	92	564674	4.00	2.63	
62 4-Methyl-2-pentanone (MIBK)	43	13.555	13.560	-0.005	98	745109	4.00	3.43	
63 cis-1,3-Dichloropropene	75	13.630	13.630	0.000	97	487720	4.00	3.99	
64 trans-1,3-Dichloropropene	75	14.308	14.306	0.002	99	382270	4.00	3.52	
65 Toluene	91	14.437	14.436	0.001	93	876841	4.00	3.65	
66 1,1,2-Trichloroethane	83	14.507	14.507	0.000	97	275542	4.00	3.42	
67 2-Methylthiophene	97	14.588	14.588	0.000	98	749544	4.00	3.59	
68 3-Methylthiophene	97	14.787	14.786	0.001	99	755520	4.00	3.70	
69 2-Hexanone	58	14.862	14.866	-0.004	91	348119	4.00	3.63	
70 n-Octane	85	15.077	15.081	-0.004	97	314070	4.00	3.52	
71 Chlorodibromomethane	129	15.207	15.209	-0.002	98	611434	4.00	3.78	
72 Ethylene Dibromide	107	15.497	15.500	-0.003	98	485234	4.00	3.61	
73 Tetrachloroethene	129	15.562	15.561	0.001	96	352286	4.00	3.37	
74 2,3-Dimethylheptane	43	16.412	16.411	0.001	95	1103317	4.00	3.56	
75 Chlorobenzene	112	16.428	16.429	-0.001	92	674862	4.00	3.53	
76 Ethylbenzene	91	16.702	16.703	-0.001	99	1003134	4.00	3.58	
77 2-Ethylthiophene	97	16.804	16.807	-0.003	98	738346	4.00	3.41	
78 m-Xylene & p-Xylene	91	16.858	16.861	-0.003	99	1519699	8.00	6.73	
79 n-Nonane	57	17.245	17.245	0.000	95	691900	4.00	3.67	
80 Styrene	104	17.321	17.326	-0.005	99	610514	4.00	3.83	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
81 Bromoform	173	17.326	17.328	-0.002	95	529663	4.00	3.77	
82 o-Xylene	91	17.385	17.386	-0.001	99	805898	4.00	3.27	
83 1,1,2,2-Tetrachloroethane	83	17.703	17.704	-0.001	99	684722	4.00	3.55	
84 1,2,3-Trichloropropane	110	17.859	17.860	-0.001	98	162965	4.00	3.66	
85 Isopropylbenzene	105	17.950	17.953	-0.003	96	1122580	4.00	3.49	
86 N-Propylbenzene	120	18.461	18.463	-0.002	99	309577	4.00	3.60	
87 2-Chlorotoluene	126	18.515	18.517	-0.002	98	299902	4.00	3.48	
88 4-Ethyltoluene	105	18.606	18.605	0.001	98	1052230	4.00	3.39	
89 1,3,5-Trimethylbenzene	120	18.671	18.673	-0.002	92	531411	4.00	3.59	
90 Alpha Methyl Styrene	118	18.897	18.896	0.001	86	477639	4.00	4.04	
91 n-Decane	57	18.924	18.925	-0.001	88	783440	4.00	3.65	
92 tert-Butylbenzene	119	19.080	19.083	-0.003	92	1002715	4.00	3.45	
93 1,2,4-Trimethylbenzene	105	19.096	19.097	-0.001	96	956010	4.00	3.60	
94 sec-Butylbenzene	105	19.338	19.341	-0.003	98	1392118	4.00	3.57	
95 1,3-Dichlorobenzene	146	19.370	19.370	0.000	99	560576	4.00	3.67	
96 Benzyl chloride	91	19.435	19.439	-0.004	98	698320	4.00	3.92	
97 1,4-Dichlorobenzene	146	19.451	19.453	-0.002	95	520786	4.00	3.69	
98 4-Isopropyltoluene	119	19.494	19.496	-0.002	96	1124413	4.00	3.63	
99 1,2,3-Trimethylbenzene	105	19.553	19.554	-0.001	98	784923	4.00	3.68	
100 Butylcyclohexane	83	19.596	19.597	-0.001	89	784227	4.00	3.42	
101 2,3-Dihydroindene	117	19.801	19.799	0.002	94	793024	4.00	3.33	
102 1,2-Dichlorobenzene	146	19.801	19.805	-0.004	95	568827	4.00	3.77	
103 n-Butylbenzene	91	19.914	19.916	-0.002	98	1081256	4.00	3.85	
104 Indene	116	19.924	19.927	-0.003	89	765437	4.00	4.83	
105 Undecane	57	20.193	20.195	-0.002	95	819012	4.00	3.64	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.279	20.278	0.001	98	1009612	4.00	4.43	
141 1,2-Dibromo-3-Chloropropan	157	20.392	20.393	-0.001	95	178857	4.00	2.85	
108 1,2,4,5-Tetramethylbenzene	119	20.667	20.668	-0.001	97	1052097	4.00	3.74	
107 1,2,3,5-Tetramethylbenzene	119	20.726	20.725	0.001	95	663580	4.00	3.77	
109 1,2,3,4-Tetramethylbenzene	119	21.146	21.147	-0.001	98	836841	4.00	3.68	
110 Dodecane	57	21.280	21.282	-0.002	94	826279	4.00	4.13	
111 1,2,4-Trichlorobenzene	180	21.522	21.525	-0.003	94	293949	4.00	4.83	
112 Naphthalene	128	21.657	21.655	0.002	99	670417	4.00	4.93	
113 Benzo(b)thiophene	134	21.743	21.741	0.002	99	299382	4.00	4.45	
114 Hexachlorobutadiene	225	21.807	21.810	-0.003	96	435406	4.00	3.73	
115 1,2,3-Trichlorobenzene	180	21.872	21.872	0.000	96	259079	4.00	4.82	
116 2-Methylnaphthalene	142	22.399	22.402	-0.003	99	166377	12.5	11.7	
117 1-Methylnaphthalene	142	22.528	22.528	0.000	99	168946	12.5	11.2	
A 118 C6 Range	1	8.807	(8.738-8.910)		0	3671021	4.00	3.20	
A 122 Toluene Range	1	14.440	(14.410-14.470)		0	2167652	4.00	3.68	
A 123 C8 Range	1	15.104	(15.056-15.152)		0	3252944	4.00	3.36	
S 124 Xylenes, Total	100				0		12.0	10.0	
S 144 1,2-Dichloroethene, Total	1				0		8.00	7.15	

Reagents:

ICM2C00X10_00004

Amount Added: 200.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 04-Feb-2015 08:53:25

Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02LCS.D

Injection Date: 02-Feb-2015 22:48:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: ICV

Worklist Smp#: 13

Client ID:

Purge Vol: 500.000 mL

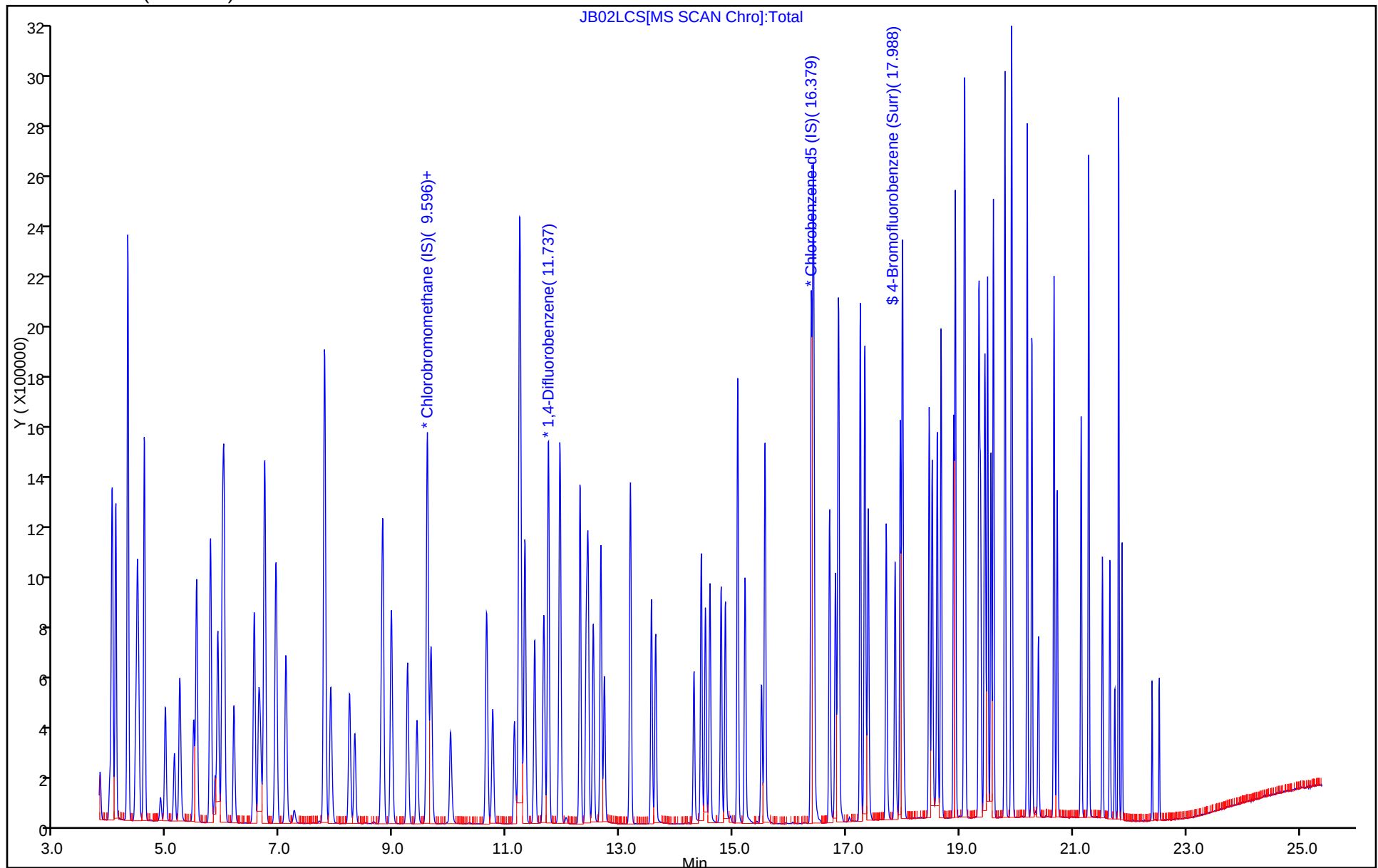
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MJ_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: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Lab Sample ID: CCVIS 140-2449/2 Calibration Date: 03/03/2015 17:45

Instrument ID: MJ Calib Start Date: 02/02/2015 12:48

GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 02/02/2015 20:05

Lab File ID: JCCVC04C.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	0.4836	0.5262		2.18	2.00	8.8	30.0
Propene	Ave	1.897	2.073		2.19	2.00	9.3	30.0
Dichlorodifluoromethane	Ave	4.503	4.913		2.18	2.00	9.1	30.0
Chloromethane	Ave	0.6404	0.6839		2.14	2.00	6.8	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.950	3.228		2.19	2.00	9.4	30.0
Acetaldehyde	Ave	0.5522	0.5342		9.68	10.0	-3.3	50.0
Vinyl chloride	Ave	1.728	2.003		2.32	2.00	15.9	30.0
1,3-Butadiene	Ave	1.372	1.600		2.33	2.00	16.6	30.0
Butane	Ave	3.020	3.477		2.30	2.00	15.1	30.0
Bromomethane	Ave	1.466	1.616		2.21	2.00	10.2	30.0
Chloroethane	Ave	0.7569	0.8335		2.20	2.00	10.1	30.0
Ethanol	Ave	0.5564	0.5693		10.2	10.0	2.3	50.0
Vinyl bromide	Ave	1.285	1.526		2.38	2.00	18.7	30.0
2-Methylbutane	Ave	2.029	2.283		2.25	2.00	12.5	30.0
Trichlorofluoromethane	Ave	3.943	4.226		2.14	2.00	7.2	30.0
Acrolein	Ave	0.4559	0.4841		2.12	2.00	6.2	30.0
Acetonitrile	Ave	0.4803	0.5883		2.45	2.00	22.5	30.0
Acetone	Ave	0.5147	0.5280		6.16	6.00	2.6	30.0
Isopropyl alcohol	Ave	2.074	2.138		6.19	6.00	3.0	30.0
Pentane	Ave	0.2413	0.2669		2.21	2.00	10.6	30.0
Ethyl ether	Ave	1.407	1.625		2.31	2.00	15.5	30.0
1,1-Dichloroethene	Ave	1.271	1.593		2.51	2.00	25.3	30.0
t-Butyl alcohol	Ave	2.362	2.549		2.16	2.00	7.9	30.0
Acrylonitrile	Ave	0.7116	0.9078		2.55	2.00	27.6	30.0
1,1,2-Trichlorotrifluoroethane	Ave	2.653	3.198		2.41	2.00	20.5	30.0
Methylene Chloride	Ave	1.282	1.448		2.26	2.00	12.9	30.0
3-Chloropropene	Ave	1.392	1.432		2.06	2.00	2.8	30.0
Carbon disulfide	Ave	4.481	4.966		2.22	2.00	10.8	30.0
trans-1,2-Dichloroethene	Ave	1.449	1.494		2.06	2.00	3.1	30.0
2-Methylpentane	Ave	3.796	3.909		2.06	2.00	3.0	50.0
Methyl tert-butyl ether	Ave	2.439	3.199		2.62	2.00	31.1*	30.0
1,1-Dichloroethane	Ave	2.437	2.461		2.02	2.00	1.0	30.0
Vinyl acetate	Ave	2.529	3.396		2.69	2.00	34.3*	30.0
2-Butanone	Ave	0.4763	0.5125		2.15	2.00	7.6	30.0
Hexane	Ave	1.334	1.306		1.96	2.00	-2.1	30.0
Isopropyl ether	Ave	4.081	5.118		2.51	2.00	25.4	
cis-1,2-Dichloroethene	Ave	1.248	1.320		2.12	2.00	5.8	30.0
Ethyl acetate	Ave	2.326	2.649		2.28	2.00	13.9	30.0
Chloroform	Ave	2.525	2.731		2.16	2.00	8.2	30.0
Tert-butyl ethyl ether	Ave	3.060	3.919		2.56	2.00	28.1	

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Lab Sample ID: CCVIS 140-2449/2 Calibration Date: 03/03/2015 17:45

Instrument ID: MJ Calib Start Date: 02/02/2015 12:48

GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 02/02/2015 20:05

Lab File ID: JCCVC04C.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	1.276	1.530		2.40	2.00	19.9	30.0
1,1,1-Trichloroethane	Ave	2.647	2.696		2.04	2.00	1.8	30.0
1,2-Dichloroethane	Ave	0.3332	0.3493		2.10	2.00	4.8	30.0
1-Butanol	Ave	0.1210	0.1451		2.40	2.00	19.8	30.0
Cyclohexane	Ave	0.1527	0.1530		2.00	2.00	0.2	30.0
Benzene	Ave	0.7389	0.7403		2.00	2.00	0.2	30.0
Carbon tetrachloride	Ave	0.5452	0.6744		2.47	2.00	23.7	30.0
2,3-Dimethylpentane	Ave	0.1882	0.2002		2.13	2.00	6.4	50.0
Thiophene	Ave	0.4185	0.4108		1.96	2.00	-1.8	50.0
Tert-amyl methyl ether	Ave	0.6267	0.7852		2.51	2.00	25.3	
2,2,4-Trimethylpentane	Ave	1.469	1.615		2.20	2.00	9.9	30.0
Heptane	Ave	0.2709	0.2952		2.18	2.00	9.0	30.0
1,2-Dichloropropane	Ave	0.2638	0.3036		2.30	2.00	15.1	30.0
Trichloroethene	Ave	0.3218	0.3407		2.12	2.00	5.9	30.0
Dibromomethane	Ave	0.3095	0.3096		2.00	2.00	0.0	30.0
1,4-Dioxane	Ave	0.1041	0.1069		2.05	2.00	2.7	30.0
Bromodichloromethane	Ave	0.5294	0.5533		2.09	2.00	4.5	30.0
Methyl methacrylate	Ave	0.2956	0.3287		2.23	2.00	11.2	30.0
Methylcyclohexane	Ave	0.6002	0.6506		2.17	2.00	8.4	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6078	0.6925		2.28	2.00	13.9	30.0
cis-1,3-Dichloropropene	Ave	0.3416	0.4103		2.40	2.00	20.1	30.0
trans-1,3-Dichloropropene	Ave	0.3301	0.3656		2.22	2.00	10.7	30.0
Toluene	Ave	0.7298	0.9309		2.55	2.00	27.5	30.0
1,1,2-Trichloroethane	Ave	0.2451	0.2851		2.33	2.00	16.3	30.0
2-Methylthiophene	Ave	0.6347	0.7228		2.28	2.00	13.9	50.0
3-Methylthiophene	Ave	0.6208	0.7054		2.27	2.00	13.6	50.0
2-Hexanone	Ave	0.2914	0.3485		2.39	2.00	19.6	30.0
Octane	Ave	0.2716	0.2928		2.16	2.00	7.8	30.0
Dibromochloromethane	Ave	0.4924	0.5710		2.32	2.00	15.9	30.0
1,2-Dibromoethane	Ave	0.4084	0.4676		2.29	2.00	14.5	30.0
Tetrachloroethene	Ave	0.3177	0.3555		2.24	2.00	11.9	30.0
2,3-Dimethylheptane	Ave	0.9422	1.023		2.17	2.00	8.6	50.0
Chlorobenzene	Ave	0.5818	0.6702		2.30	2.00	15.2	30.0
Ethylbenzene	Ave	0.8533	1.152		2.70	2.00	35.0*	30.0
2-Ethylthiophene	Ave	0.6581	0.8037		2.44	2.00	22.1	50.0
m-Xylene & p-Xylene	Ave	0.6874	0.8894		5.18	4.00	29.4	30.0
Nonane	Ave	0.5741	0.6753		2.35	2.00	17.6	30.0
Styrene	Ave	0.4844	0.6140		2.54	2.00	26.7	30.0
Bromoform	Ave	0.4272	0.4851		2.27	2.00	13.6	30.0
o-Xylene	Ave	0.7498	0.9476		2.53	2.00	26.4	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5876	0.6942		2.36	2.00	18.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-2449/2 Calibration Date: 03/03/2015 17:45
 Instrument ID: MJ Calib Start Date: 02/02/2015 12:48
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 02/02/2015 20:05
 Lab File ID: JCCVC04C.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
1,2,3-Trichloropropane	Ave	0.1354	0.1608		2.38	2.00	18.8	30.0
Isopropylbenzene	Ave	0.9791	1.319		2.70	2.00	34.7*	30.0
Propylbenzene	Ave	0.2619	0.3301		2.52	2.00	26.0	30.0
2-Chlorotoluene	Ave	0.2620	0.3108		2.37	2.00	18.6	30.0
4-Ethyltoluene	Ave	0.9456	1.095		2.32	2.00	15.8	30.0
1,3,5-Trimethylbenzene	Ave	0.4499	0.5667		2.52	2.00	26.0	30.0
Alpha Methyl Styrene	Ave	0.3600	0.4323		2.40	2.00	20.1	30.0
Decane	Ave	0.6538	0.7396		2.26	2.00	13.1	30.0
tert-Butylbenzene	Ave	0.8830	1.060		2.40	2.00	20.1	30.0
1,2,4-Trimethylbenzene	Ave	0.8081	0.9585		2.37	2.00	18.6	30.0
sec-Butylbenzene	Ave	1.185	1.407		2.38	2.00	18.7	30.0
1,3-Dichlorobenzene	Ave	0.4646	0.4811		2.07	2.00	3.6	30.0
Benzyl chloride	Ave	0.5422	0.6127		2.26	2.00	13.0	30.0
1,4-Dichlorobenzene	Ave	0.4299	0.4282		1.99	2.00	-0.4	30.0
4-Isopropyltoluene	Ave	0.9422	1.059		2.25	2.00	12.4	30.0
1,2,3-Trimethylbenzene	Ave	0.6481	0.7266		2.24	2.00	12.1	50.0
Butylcyclohexane	Ave	0.6972	0.7968		2.29	2.00	14.3	50.0
1,2-Dichlorobenzene	Ave	0.4593	0.4906		2.14	2.00	6.8	30.0
Indane	Ave	0.7235	0.8427		2.33	2.00	16.5	50.0
Butylbenzene	Ave	0.8544	0.9876		2.31	2.00	15.6	30.0
Indene	Ave	0.4821	0.5475		2.27	2.00	13.6	50.0
Undecane	Ave	0.6845	0.8196		2.40	2.00	19.7	30.0
1,2-Dimethyl-4-Ethylbenzene	Ave	0.6928	0.7623		2.20	2.00	10.0	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1910	0.1964		2.06	2.00	2.8	
1,2,4,5-Tetramethylbenzene	Ave	0.8550	0.9400		2.20	2.00	9.9	50.0
1,2,3,5-Tetramethylbenzene	Ave	0.5350	0.5843		2.19	2.00	9.2	50.0
1,2,3,4-Tetramethylbenzene	Ave	0.6913	0.7727		2.24	2.00	11.8	50.0
Dodecane	Ave	0.6090	0.6902		2.27	2.00	13.3	30.0
1,2,4-Trichlorobenzene	Ave	0.1851	0.1597		1.73	2.00	-13.8	30.0
Naphthalene	Ave	0.4137	0.3950		1.91	2.00	-4.5	30.0
Benzo (b) thiophene	Ave	0.2045	0.2039		1.99	2.00	-0.3	50.0
Hexachlorobutadiene	Ave	0.3552	0.3276		1.85	2.00	-7.8	30.0
1,2,3-Trichlorobenzene	Ave	0.1634	0.1398		1.71	2.00	-14.4	30.0
2-Methylnaphthalene	Ave	0.0432	0.0302		4.38	6.25	-29.9	50.0
1-Methylnaphthalene	Ave	0.0458	0.0327		4.47	6.25	-28.5	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6548	0.5952		3.64	4.00	-9.1	30.0

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JCCVC04C.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 03-Mar-2015 17:45:30 ALS Bottle#: 15 Worklist Smp#: 2
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: CCV/LCS,,2,6,,CCV10
 Misc. Info.: J030415,TO15,,140-0001414-002
 Operator ID: 403648 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub5
 Method: \\KNXCHROM\ChromData\MJ\20150228-1414.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 11:02:31 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK052

First Level Reviewer: tajh

Date: 04-Mar-2015 11:02:30

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	9.587	9.587	0.000	95	247394	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.728	11.728	0.000	93	1140650	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.370	16.370	0.000	89	1019974	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.979	17.979	0.000	87	607042	4.00	3.64	
6 Chlorodifluoromethane	67	4.035	4.035	0.000	75	65121	2.00	2.18	
7 Propene	41	4.051	4.051	0.000	98	256573	2.00	2.19	
8 Dichlorodifluoromethane	85	4.105	4.105	0.000	100	608066	2.00	2.18	
9 Chloromethane	52	4.315	4.315	0.000	64	84640	2.00	2.14	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.320	4.320	0.000	91	399501	2.00	2.19	
11 Acetaldehyde	44	4.492	4.492	0.000	98	330559	10.0	9.68	
12 Vinyl chloride	62	4.509	4.509	0.000	99	247957	2.00	2.32	
13 Butane	43	4.611	4.611	0.000	86	430307	2.00	2.30	
14 Butadiene	54	4.611	4.611	0.000	63	198053	2.00	2.33	
15 Bromomethane	94	4.982	4.982	0.000	98	200004	2.00	2.21	
16 Chloroethane	64	5.138	5.138	0.000	92	103155	2.00	2.20	
17 Ethanol	31	5.240	5.240	0.000	96	352273	10.0	10.2	
18 Vinyl bromide	106	5.482	5.482	0.000	97	188879	2.00	2.38	
19 2-Methylbutane	43	5.531	5.531	0.000	93	282582	2.00	2.25	
20 Trichlorofluoromethane	101	5.778	5.778	0.000	98	523020	2.00	2.14	
21 Acrolein	56	5.784	5.784	0.000	9	59916	2.00	2.12	
22 Acetonitrile	40	5.864	5.864	0.000	93	72810	2.00	2.45	
23 Acetone	58	5.907	5.907	0.000	73	196036	6.00	6.16	
24 Isopropyl alcohol	45	5.993	5.993	0.000	96	793694	6.00	6.19	
25 Pentane	72	6.009	6.009	0.000	95	33035	2.00	2.21	
26 Ethyl ether	31	6.192	6.192	0.000	91	201075	2.00	2.31	
27 1,1-Dichloroethene	96	6.547	6.547	0.000	90	197151	2.00	2.51	
28 2-Methyl-2-propanol	59	6.633	6.633	0.000	95	315459	2.00	2.16	
29 Acrylonitrile	53	6.660	6.660	0.000	86	112350	2.00	2.55	
30 1,1,2-Trichloro-1,2,2-trif	101	6.730	6.730	0.000	94	395776	2.00	2.41	
31 Methylene Chloride	84	6.924	6.924	0.000	94	179217	2.00	2.26	

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	6.935	6.935	0.000	88	177195	2.00	2.06	
33 Carbon disulfide	76	7.102	7.102	0.000	99	614659	2.00	2.22	
34 trans-1,2-Dichloroethene	96	7.774	7.774	0.000	91	184877	2.00	2.06	
35 2-Methylpentane	43	7.790	7.790	0.000	97	483736	2.00	2.06	
36 Methyl tert-butyl ether	73	7.898	7.898	0.000	97	395892	2.00	2.62	
37 1,1-Dichloroethane	63	8.220	8.220	0.000	99	304561	2.00	2.02	
38 Vinyl acetate	43	8.317	8.317	0.000	100	420326	2.00	2.69	
39 2-Butanone (MEK)	72	8.785	8.785	0.000	91	63429	2.00	2.15	
40 Hexane	56	8.807	8.807	0.000	86	161599	2.00	1.96	
139 Isopropyl ether	45	8.963	8.963	0.000	97	633405	2.00	2.51	
41 cis-1,2-Dichloroethene	96	9.243	9.243	0.000	98	163347	2.00	2.12	
42 Ethyl acetate	43	9.415	9.415	0.000	97	327875	2.00	2.28	
43 Chloroform	83	9.598	9.598	0.000	68	338014	2.00	2.16	
142 Tert-butyl ethyl ether	59	9.662	9.662	0.000	95	485047	2.00	2.56	
44 Tetrahydrofuran	42	10.006	10.006	0.000	95	189336	2.00	2.40	
45 1,1,1-Trichloroethane	97	10.636	10.636	0.000	94	333710	2.00	2.04	
46 1,2-Dichloroethane	62	10.743	10.743	0.000	94	199299	2.00	2.10	
47 n-Butanol	31	11.136	11.136	0.000	88	82776	2.00	2.40	
49 Cyclohexane	69	11.211	11.211	0.000	64	87277	2.00	2.00	
48 Benzene	78	11.217	11.217	0.000	97	422442	2.00	2.00	
50 Carbon tetrachloride	117	11.238	11.238	0.000	95	384804	2.00	2.47	
51 2,3-Dimethylpentane	71	11.314	11.314	0.000	93	114215	2.00	2.13	
52 Thiophene	84	11.486	11.486	0.000	97	234428	2.00	1.96	
140 Tert-amyl methyl ether	73	11.647	11.647	0.000	87	400673	2.00	2.51	
53 Isooctane	57	11.932	11.932	0.000	98	921521	2.00	2.20	
54 n-Heptane	71	12.287	12.287	0.000	95	168443	2.00	2.18	
55 1,2-Dichloropropane	63	12.395	12.395	0.000	87	173240	2.00	2.30	
56 Trichloroethene	130	12.427	12.427	0.000	96	194419	2.00	2.12	
57 Dibromomethane	93	12.519	12.519	0.000	94	176667	2.00	2.00	
58 1,4-Dioxane	88	12.653	12.653	0.000	38	60979	2.00	2.05	
59 Dichlorobromomethane	83	12.653	12.653	0.000	97	315744	2.00	2.09	
60 Methyl methacrylate	41	12.718	12.718	0.000	84	187551	2.00	2.23	
61 Methylcyclohexane	83	13.175	13.175	0.000	91	371265	2.00	2.17	
62 4-Methyl-2-pentanone (MIBK)	43	13.546	13.546	0.000	98	395168	2.00	2.28	
63 cis-1,3-Dichloropropene	75	13.616	13.616	0.000	94	234104	2.00	2.40	
64 trans-1,3-Dichloropropene	75	14.294	14.294	0.000	98	186532	2.00	2.22	
65 Toluene	91	14.423	14.423	0.000	93	474979	2.00	2.55	
66 1,1,2-Trichloroethane	83	14.498	14.498	0.000	67	145483	2.00	2.33	
67 2-Methylthiophene	97	14.579	14.579	0.000	98	368789	2.00	2.28	
68 3-Methylthiophene	97	14.773	14.773	0.000	99	359934	2.00	2.27	
69 2-Hexanone	58	14.853	14.853	0.000	91	177830	2.00	2.39	
70 n-Octane	85	15.069	15.069	0.000	97	149418	2.00	2.16	
71 Chlorodibromomethane	129	15.198	15.198	0.000	97	291337	2.00	2.32	
72 Ethylene Dibromide	107	15.488	15.488	0.000	98	238570	2.00	2.29	
73 Tetrachloroethene	129	15.547	15.547	0.000	95	181401	2.00	2.24	
74 2,3-Dimethylheptane	43	16.403	16.403	0.000	94	521934	2.00	2.17	
75 Chlorobenzene	112	16.419	16.419	0.000	83	341978	2.00	2.30	
76 Ethylbenzene	91	16.693	16.693	0.000	97	587665	2.00	2.70	
77 2-Ethylthiophene	97	16.795	16.795	0.000	98	410068	2.00	2.44	
78 m-Xylene & p-Xylene	91	16.849	16.849	0.000	99	907612	4.00	5.18	
79 n-Nonane	57	17.236	17.236	0.000	95	344558	2.00	2.35	
80 Styrene	104	17.312	17.312	0.000	98	313290	2.00	2.54	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
81 Bromoform	173	17.317	17.317	0.000	86	247540	2.00	2.27	
82 o-Xylene	91	17.371	17.371	0.000	88	483506	2.00	2.53	
83 1,1,2,2-Tetrachloroethane	83	17.694	17.694	0.000	99	354222	2.00	2.36	
84 1,2,3-Trichloropropane	110	17.850	17.850	0.000	95	82049	2.00	2.38	
85 Isopropylbenzene	105	17.941	17.941	0.000	95	673148	2.00	2.70	
86 N-Propylbenzene	120	18.452	18.452	0.000	99	168438	2.00	2.52	
87 2-Chlorotoluene	126	18.506	18.506	0.000	34	158565	2.00	2.37	
88 4-Ethyltoluene	105	18.592	18.592	0.000	82	558559	2.00	2.32	
89 1,3,5-Trimethylbenzene	120	18.662	18.662	0.000	92	289167	2.00	2.52	
90 Alpha Methyl Styrene	118	18.888	18.888	0.000	88	220573	2.00	2.40	
91 n-Decane	57	18.915	18.915	0.000	86	377365	2.00	2.26	
92 tert-Butylbenzene	119	19.071	19.071	0.000	88	541006	2.00	2.40	
93 1,2,4-Trimethylbenzene	105	19.087	19.087	0.000	91	489064	2.00	2.37	
94 sec-Butylbenzene	105	19.329	19.329	0.000	98	717971	2.00	2.38	
95 1,3-Dichlorobenzene	146	19.361	19.361	0.000	97	245484	2.00	2.07	
96 Benzyl chloride	91	19.426	19.426	0.000	97	312638	2.00	2.26	
97 1,4-Dichlorobenzene	146	19.442	19.442	0.000	92	218511	2.00	1.99	
98 4-Isopropyltoluene	119	19.485	19.485	0.000	80	540131	2.00	2.25	
99 1,2,3-Trimethylbenzene	105	19.544	19.544	0.000	80	370742	2.00	2.24	
100 Butylcyclohexane	83	19.587	19.587	0.000	86	406562	2.00	2.29	
102 1,2-Dichlorobenzene	146	19.792	19.792	0.000	75	250329	2.00	2.14	
101 2,3-Dihydroindene	117	19.792	19.792	0.000	89	429974	2.00	2.33	
103 n-Butylbenzene	91	19.905	19.905	0.000	97	503932	2.00	2.31	
104 Indene	116	19.915	19.915	0.000	85	279355	2.00	2.27	
105 Undecane	57	20.184	20.184	0.000	94	418220	2.00	2.40	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.270	20.270	0.000	97	388947	2.00	2.20	
141 1,2-Dibromo-3-Chloropropan	157	20.383	20.383	0.000	92	100210	2.00	2.06	
108 1,2,4,5-Tetramethylbenzene	119	20.658	20.658	0.000	96	479624	2.00	2.20	
107 1,2,3,5-Tetramethylbenzene	119	20.717	20.717	0.000	95	298122	2.00	2.19	
109 1,2,3,4-Tetramethylbenzene	119	21.137	21.137	0.000	96	394258	2.00	2.24	
110 Dodecane	57	21.271	21.271	0.000	92	352194	2.00	2.27	
111 1,2,4-Trichlorobenzene	180	21.513	21.513	0.000	94	81479	2.00	1.73	
112 Naphthalene	128	21.648	21.648	0.000	99	201560	2.00	1.91	
113 Benzo(b)thiophene	134	21.734	21.734	0.000	98	104027	2.00	1.99	
114 Hexachlorobutadiene	225	21.804	21.804	0.000	85	167172	2.00	1.85	
115 1,2,3-Trichlorobenzene	180	21.863	21.863	0.000	94	71353	2.00	1.71	
116 2-Methylnaphthalene	142	22.395	22.395	0.000	98	48214	6.25	4.38	
117 1-Methylnaphthalene	142	22.519	22.519	0.000	95	52201	6.25	4.47	
A 118 C6 Range	1	8.812	(8.748-8.877)		0	1901631	2.00	2.01	
A 122 Toluene Range	1	14.423	(14.393-14.453)		0	1151930	2.00	2.52	
A 123 C8 Range	1	15.097	(15.056-15.152)		0	1592516	2.00	2.12	
S 124 Xylenes, Total	100				0		6.00	7.71	
S 144 1,2-Dichloroethene, Total	1				0		4.00	4.18	

Reagents:

DCN2C00X10_00001

Amount Added: 100.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 04-Mar-2015 11:02:31

Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JCCVC04C.D

Injection Date: 03-Mar-2015 17:45:30

Instrument ID: MJ

Operator ID: 403648

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 500.000 mL

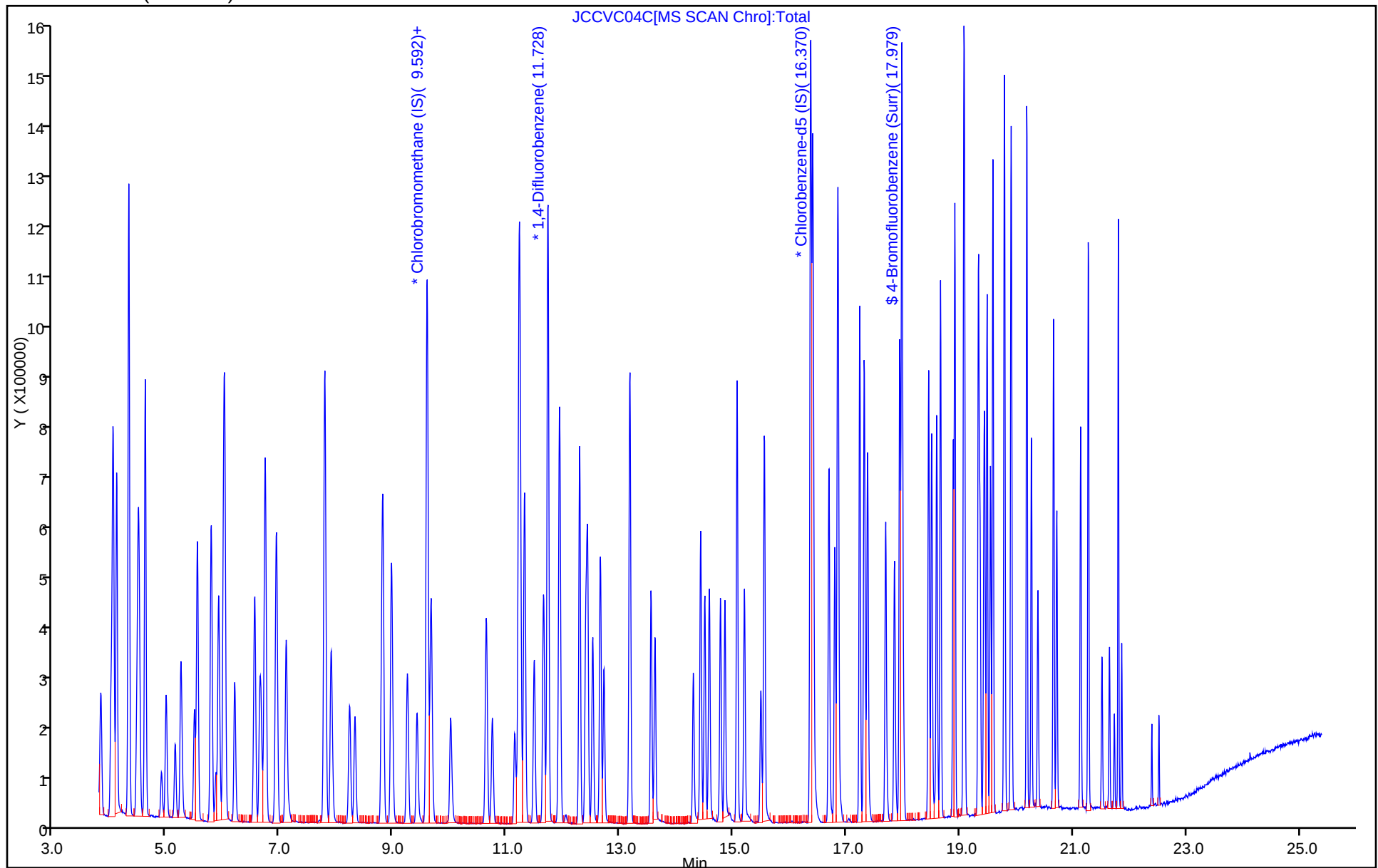
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MJ_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: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Lab Sample ID: CCVIS 140-2450/2 Calibration Date: 03/04/2015 16:35

Instrument ID: MJ Calib Start Date: 02/02/2015 12:48

GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 02/02/2015 20:05

Lab File ID: JCCVC04.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	0.4836	0.4373		1.81	2.00	-9.6	30.0
Propene	Ave	1.897	1.712		1.81	2.00	-9.8	30.0
Dichlorodifluoromethane	Ave	4.503	4.382		1.95	2.00	-2.7	30.0
Chloromethane	Ave	0.6404	0.6001		1.88	2.00	-6.3	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.950	2.829		1.92	2.00	-4.1	30.0
Acetaldehyde	Ave	0.5522	0.3717		6.73	10.0	-32.7	50.0
Vinyl chloride	Ave	1.728	1.716		1.99	2.00	-0.7	30.0
1,3-Butadiene	Ave	1.372	1.352		1.97	2.00	-1.4	30.0
Butane	Ave	3.020	2.872		1.90	2.00	-4.9	30.0
Bromomethane	Ave	1.466	1.385		1.89	2.00	-5.6	30.0
Chloroethane	Ave	0.7569	0.7130		1.88	2.00	-5.8	30.0
Ethanol	Ave	0.5564	0.4961		8.92	10.0	-10.8	50.0
Vinyl bromide	Ave	1.285	1.184		1.84	2.00	-7.9	30.0
2-Methylbutane	Ave	2.029	1.957		1.93	2.00	-3.6	30.0
Trichlorofluoromethane	Ave	3.943	3.571		1.81	2.00	-9.4	30.0
Acrolein	Ave	0.4559	0.3157		1.39	2.00	-30.8*	30.0
Acetonitrile	Ave	0.4803	0.4171		1.74	2.00	-13.2	30.0
Acetone	Ave	0.5147	0.3449		4.02	6.00	-33.0*	30.0
Isopropyl alcohol	Ave	2.074	1.665		4.82	6.00	-19.7	30.0
Pentane	Ave	0.2413	0.2195		1.82	2.00	-9.0	30.0
Ethyl ether	Ave	1.407	1.112		1.58	2.00	-21.0	30.0
1,1-Dichloroethene	Ave	1.271	1.136		1.79	2.00	-10.7	30.0
t-Butyl alcohol	Ave	2.362	1.936		1.64	2.00	-18.1	30.0
Acrylonitrile	Ave	0.7116	0.6222		1.75	2.00	-12.6	30.0
1,1,2-Trichlorotrifluoroethane	Ave	2.653	2.139		1.61	2.00	-19.4	30.0
Methylene Chloride	Ave	1.282	0.9934		1.55	2.00	-22.5	30.0
3-Chloropropene	Ave	1.392	1.067		1.53	2.00	-23.4	30.0
Carbon disulfide	Ave	4.481	4.181		1.87	2.00	-6.7	30.0
trans-1,2-Dichloroethene	Ave	1.449	1.178		1.63	2.00	-18.7	30.0
2-Methylpentane	Ave	3.796	3.355		1.77	2.00	-11.6	50.0
Methyl tert-butyl ether	Ave	2.439	2.025		1.66	2.00	-17.0	30.0
1,1-Dichloroethane	Ave	2.437	1.931		1.59	2.00	-20.8	30.0
Vinyl acetate	Ave	2.529	1.905		1.51	2.00	-24.7	30.0
2-Butanone	Ave	0.4763	0.3519		1.48	2.00	-26.1	30.0
Hexane	Ave	1.334	1.021		1.53	2.00	-23.5	30.0
Isopropyl ether	Ave	4.081	3.540		1.74	2.00	-13.3	
cis-1,2-Dichloroethene	Ave	1.248	0.9758		1.57	2.00	-21.8	30.0
Ethyl acetate	Ave	2.326	1.877		1.61	2.00	-19.3	30.0
Chloroform	Ave	2.525	2.016		1.60	2.00	-20.2	30.0
Tert-butyl ethyl ether	Ave	3.060	2.764		1.81	2.00	-9.7	

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Lab Sample ID: CCVIS 140-2450/2 Calibration Date: 03/04/2015 16:35

Instrument ID: MJ Calib Start Date: 02/02/2015 12:48

GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 02/02/2015 20:05

Lab File ID: JCCVC04.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	1.276	1.035		1.62	2.00	-18.9	30.0
1,1,1-Trichloroethane	Ave	2.647	2.047		1.55	2.00	-22.7	30.0
1,2-Dichloroethane	Ave	0.3332	0.2381		1.43	2.00	-28.5	30.0
1-Butanol	Ave	0.1210	0.1148		1.90	2.00	-5.1	30.0
Benzene	Ave	0.7389	0.5165		1.40	2.00	-30.1*	30.0
Cyclohexane	Ave	0.1527	0.1250		1.64	2.00	-18.1	30.0
Carbon tetrachloride	Ave	0.5452	0.4196		1.54	2.00	-23.0	30.0
2,3-Dimethylpentane	Ave	0.1882	0.1484		1.58	2.00	-21.1	50.0
Thiophene	Ave	0.4185	0.3153		1.51	2.00	-24.6	50.0
Tert-amyl methyl ether	Ave	0.6267	0.6206		1.98	2.00	-1.0	
2,2,4-Trimethylpentane	Ave	1.469	1.263		1.72	2.00	-14.1	30.0
Heptane	Ave	0.2709	0.2262		1.67	2.00	-16.5	30.0
1,2-Dichloropropane	Ave	0.2638	0.1928		1.46	2.00	-26.9	30.0
Trichloroethene	Ave	0.3218	0.2542		1.58	2.00	-21.0	30.0
Dibromomethane	Ave	0.3095	0.2331		1.51	2.00	-24.7	30.0
Bromodichloromethane	Ave	0.5294	0.4171		1.58	2.00	-21.2	30.0
1,4-Dioxane	Ave	0.1041	0.0877		1.69	2.00	-15.7	30.0
Methyl methacrylate	Ave	0.2956	0.2425		1.64	2.00	-18.0	30.0
Methylcyclohexane	Ave	0.6002	0.4071		1.36	2.00	-32.2	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6078	0.5398		1.78	2.00	-11.2	30.0
cis-1,3-Dichloropropene	Ave	0.3416	0.2472		1.45	2.00	-27.6	30.0
trans-1,3-Dichloropropene	Ave	0.3301	0.2493		1.51	2.00	-24.5	30.0
Toluene	Ave	0.7298	0.5972		1.64	2.00	-18.2	30.0
1,1,2-Trichloroethane	Ave	0.2451	0.1910		1.56	2.00	-22.0	30.0
2-Methylthiophene	Ave	0.6347	0.5175		1.63	2.00	-18.5	50.0
3-Methylthiophene	Ave	0.6208	0.5040		1.62	2.00	-18.8	50.0
2-Hexanone	Ave	0.2914	0.2846		1.95	2.00	-2.3	30.0
Octane	Ave	0.2716	0.2268		1.67	2.00	-16.5	30.0
Dibromochloromethane	Ave	0.4924	0.3990		1.62	2.00	-19.0	30.0
1,2-Dibromoethane	Ave	0.4084	0.3150		1.54	2.00	-22.9	30.0
Tetrachloroethene	Ave	0.3177	0.2717		1.71	2.00	-14.5	30.0
2,3-Dimethylheptane	Ave	0.9422	0.8489		1.80	2.00	-9.9	50.0
Chlorobenzene	Ave	0.5818	0.4532		1.56	2.00	-22.1	30.0
Ethylbenzene	Ave	0.8533	0.7332		1.72	2.00	-14.1	30.0
2-Ethylthiophene	Ave	0.6581	0.5477		1.67	2.00	-16.8	50.0
m-Xylene & p-Xylene	Ave	0.6874	0.5824		3.39	4.00	-15.3	30.0
Nonane	Ave	0.5741	0.4965		1.73	2.00	-13.5	30.0
Bromoform	Ave	0.4272	0.3215		1.51	2.00	-24.7	30.0
Styrene	Ave	0.4844	0.4129		1.71	2.00	-14.8	30.0
o-Xylene	Ave	0.7498	0.6326		1.69	2.00	-15.6	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5876	0.5299		1.80	2.00	-9.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-2450/2 Calibration Date: 03/04/2015 16:35
 Instrument ID: MJ Calib Start Date: 02/02/2015 12:48
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 02/02/2015 20:05
 Lab File ID: JCCVC04.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
1,2,3-Trichloropropane	Ave	0.1354	0.1206		1.78	2.00	-10.9	30.0
Isopropylbenzene	Ave	0.9791	0.8809		1.80	2.00	-10.0	30.0
Propylbenzene	Ave	0.2619	0.2328		1.78	2.00	-11.1	30.0
2-Chlorotoluene	Ave	0.2620	0.2143		1.64	2.00	-18.2	30.0
4-Ethyltoluene	Ave	0.9456	0.8422		1.78	2.00	-10.9	30.0
1,3,5-Trimethylbenzene	Ave	0.4499	0.4126		1.84	2.00	-8.3	30.0
Alpha Methyl Styrene	Ave	0.3600	0.3258		1.81	2.00	-9.5	30.0
Decane	Ave	0.6538	0.5690		1.74	2.00	-13.0	30.0
tert-Butylbenzene	Ave	0.8830	0.7726		1.75	2.00	-12.5	30.0
1,2,4-Trimethylbenzene	Ave	0.8081	0.7172		1.78	2.00	-11.3	30.0
sec-Butylbenzene	Ave	1.185	1.042		1.76	2.00	-12.1	30.0
1,3-Dichlorobenzene	Ave	0.4646	0.3699		1.59	2.00	-20.4	30.0
Benzyl chloride	Ave	0.5422	0.4685		1.73	2.00	-13.6	30.0
1,4-Dichlorobenzene	Ave	0.4299	0.3398		1.58	2.00	-21.0	30.0
4-Isopropyltoluene	Ave	0.9422	0.8184		1.74	2.00	-13.1	30.0
1,2,3-Trimethylbenzene	Ave	0.6481	0.6177		1.91	2.00	-4.7	50.0
Butylcyclohexane	Ave	0.6972	0.6238		1.79	2.00	-10.5	50.0
Indane	Ave	0.7235	0.6288		1.74	2.00	-13.1	50.0
1,2-Dichlorobenzene	Ave	0.4593	0.3858		1.68	2.00	-16.0	30.0
Butylbenzene	Ave	0.8544	0.7513		1.76	2.00	-12.1	30.0
Indene	Ave	0.4821	0.5518		2.29	2.00	14.4	50.0
Undecane	Ave	0.6845	0.6568		1.92	2.00	-4.0	30.0
1,2-Dimethyl-4-Ethylbenzene	Ave	0.6928	0.7597		2.19	2.00	9.6	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1910	0.1205		1.26	2.00	-36.9	
1,2,4,5-Tetramethylbenzene	Ave	0.8550	0.8161		1.91	2.00	-4.6	50.0
1,2,3,5-Tetramethylbenzene	Ave	0.5350	0.5168		1.93	2.00	-3.4	50.0
1,2,3,4-Tetramethylbenzene	Ave	0.6913	0.6570		1.90	2.00	-5.0	50.0
Dodecane	Ave	0.6090	0.6348		2.09	2.00	4.2	30.0
1,2,4-Trichlorobenzene	Ave	0.1851	0.1507		1.63	2.00	-18.6	30.0
Naphthalene	Ave	0.4137	0.3900		1.89	2.00	-5.7	30.0
Benzo(b)thiophene	Ave	0.2045	0.1889		1.85	2.00	-7.7	50.0
Hexachlorobutadiene	Ave	0.3552	0.2961		1.67	2.00	-16.6	30.0
1,2,3-Trichlorobenzene	Ave	0.1634	0.1377		1.69	2.00	-15.7	30.0
2-Methylnaphthalene	Ave	0.0432	0.0195		2.82	6.25	-54.9*	50.0
1-Methylnaphthalene	Ave	0.0458	0.0228		3.12	6.25	-50.1*	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6548	0.6813		4.16	4.00	4.1	30.0

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JCCVC04.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 04-Mar-2015 16:35:30 ALS Bottle#: 4 Worklist Smp#: 2
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: CCV/LCS,,2,6,,CCV10
 Misc. Info.: J030415,TO15,,140-0001415-002
 Operator ID: 403648 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub3
 Method: \\KNXCHROM\ChromData\MJ\20150228-1415.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 05-Mar-2015 13:01:05 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK036

First Level Reviewer: barlozhetskayaa

Date: 04-Mar-2015 17:05:51

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	9.586	9.586	0.000	96	264856	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.722	11.722	0.000	96	1173359	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.365	16.365	0.000	90	999917	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.978	17.978	0.000	88	681241	4.00	4.16	
6 Chlorodifluoromethane	67	4.035	4.035	0.000	97	57937	2.00	1.81	
7 Propene	41	4.046	4.046	0.000	98	226881	2.00	1.81	
8 Dichlorodifluoromethane	85	4.105	4.105	0.000	100	580556	2.00	1.95	
9 Chloromethane	52	4.315	4.315	0.000	79	79507	2.00	1.88	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.320	4.320	0.000	93	374858	2.00	1.92	
11 Acetaldehyde	44	4.487	4.487	0.000	99	246263	10.0	6.73	
12 Vinyl chloride	62	4.508	4.508	0.000	99	227350	2.00	1.99	
13 Butane	43	4.610	4.610	0.000	86	380515	2.00	1.90	
14 Butadiene	54	4.610	4.610	0.000	65	179168	2.00	1.97	
15 Bromomethane	94	4.976	4.976	0.000	99	183497	2.00	1.89	
16 Chloroethane	64	5.138	5.138	0.000	91	94465	2.00	1.88	
17 Ethanol	31	5.229	5.229	0.000	96	328669	10.0	8.92	
18 Vinyl bromide	106	5.477	5.477	0.000	99	156888	2.00	1.84	
19 2-Methylbutane	43	5.525	5.525	0.000	93	259237	2.00	1.93	
20 Trichlorofluoromethane	101	5.772	5.772	0.000	100	473142	2.00	1.81	
21 Acrolein	56	5.783	5.783	0.000	96	41828	2.00	1.39	
22 Acetonitrile	40	5.853	5.853	0.000	98	55260	2.00	1.74	
23 Acetone	58	5.902	5.902	0.000	99	137102	6.00	4.02	
24 Isopropyl alcohol	45	5.982	5.982	0.000	95	661884	6.00	4.82	
25 Pentane	72	6.009	6.009	0.000	97	29082	2.00	1.82	
26 Ethyl ether	31	6.187	6.187	0.000	90	147311	2.00	1.58	
27 1,1-Dichloroethene	96	6.542	6.542	0.000	94	150460	2.00	1.79	
28 2-Methyl-2-propanol	59	6.622	6.622	0.000	96	256462	2.00	1.64	
29 Acrylonitrile	53	6.649	6.649	0.000	95	82441	2.00	1.75	
30 1,1,2-Trichloro-1,2,2-trif	101	6.725	6.725	0.000	93	283369	2.00	1.61	
31 Methylene Chloride	84	6.918	6.918	0.000	96	131625	2.00	1.55	

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	6.929	6.929	0.000	93	141323	2.00	1.53	
33 Carbon disulfide	76	7.096	7.096	0.000	100	554009	2.00	1.87	
34 trans-1,2-Dichloroethene	96	7.774	7.774	0.000	95	156094	2.00	1.63	
35 2-Methylpentane	43	7.784	7.784	0.000	96	444482	2.00	1.77	
36 Methyl tert-butyl ether	73	7.892	7.892	0.000	97	268343	2.00	1.66	
37 1,1-Dichloroethane	63	8.215	8.215	0.000	100	255843	2.00	1.59	
38 Vinyl acetate	43	8.312	8.312	0.000	100	252353	2.00	1.51	
39 2-Butanone (MEK)	72	8.780	8.780	0.000	95	46625	2.00	1.48	
40 Hexane	56	8.801	8.801	0.000	91	135225	2.00	1.53	
139 Isopropyl ether	45	8.957	8.957	0.000	97	469059	2.00	1.74	
41 cis-1,2-Dichloroethene	96	9.237	9.237	0.000	98	129298	2.00	1.57	
42 Ethyl acetate	43	9.409	9.409	0.000	98	248713	2.00	1.61	
43 Chloroform	83	9.592	9.592	0.000	96	267141	2.00	1.60	
142 Tert-butyl ethyl ether	59	9.656	9.656	0.000	97	366245	2.00	1.81	
44 Tetrahydrofuran	42	10.001	10.001	0.000	94	137098	2.00	1.62	
45 1,1,1-Trichloroethane	97	10.635	10.635	0.000	97	271282	2.00	1.55	
46 1,2-Dichloroethane	62	10.738	10.738	0.000	97	139775	2.00	1.43	
47 n-Butanol	31	11.125	11.125	0.000	92	67408	2.00	1.90	
49 Cyclohexane	69	11.211	11.211	0.000	87	73370	2.00	1.64	
48 Benzene	78	11.211	11.211	0.000	97	303170	2.00	1.40	
50 Carbon tetrachloride	117	11.233	11.233	0.000	98	246301	2.00	1.54	
51 2,3-Dimethylpentane	71	11.308	11.308	0.000	92	87121	2.00	1.58	
52 Thiophene	84	11.480	11.480	0.000	97	185094	2.00	1.51	
140 Tert-amyl methyl ether	73	11.647	11.647	0.000	95	310468	2.00	1.98	
53 Isooctane	57	11.927	11.927	0.000	98	741188	2.00	1.72	
54 n-Heptane	71	12.282	12.282	0.000	95	132782	2.00	1.67	
55 1,2-Dichloropropane	63	12.389	12.389	0.000	90	113173	2.00	1.46	
56 Trichloroethene	130	12.421	12.421	0.000	93	149205	2.00	1.58	
57 Dibromomethane	93	12.513	12.513	0.000	93	136805	2.00	1.51	
59 Dichlorobromomethane	83	12.647	12.647	0.000	98	244834	2.00	1.58	
58 1,4-Dioxane	88	12.653	12.653	0.000	92	51476	2.00	1.69	
60 Methyl methacrylate	41	12.712	12.712	0.000	94	142329	2.00	1.64	
61 Methylcyclohexane	83	13.169	13.169	0.000	90	238970	2.00	1.36	
62 4-Methyl-2-pentanone (MIBK)	43	13.540	13.540	0.000	98	316874	2.00	1.78	
63 cis-1,3-Dichloropropene	75	13.616	13.616	0.000	98	145089	2.00	1.45	
64 trans-1,3-Dichloropropene	75	14.288	14.288	0.000	97	124685	2.00	1.51	
65 Toluene	91	14.423	14.423	0.000	93	298710	2.00	1.64	
66 1,1,2-Trichloroethane	83	14.493	14.493	0.000	97	95563	2.00	1.56	
67 2-Methylthiophene	97	14.573	14.573	0.000	98	258846	2.00	1.63	
68 3-Methylthiophene	97	14.772	14.772	0.000	99	252103	2.00	1.62	
69 2-Hexanone	58	14.848	14.848	0.000	90	142385	2.00	1.95	
70 n-Octane	85	15.068	15.068	0.000	98	113469	2.00	1.67	
71 Chlorodibromomethane	129	15.192	15.192	0.000	98	199594	2.00	1.62	
72 Ethylene Dibromide	107	15.482	15.482	0.000	98	157546	2.00	1.54	
73 Tetrachloroethene	129	15.547	15.547	0.000	95	135898	2.00	1.71	
74 2,3-Dimethylheptane	43	16.397	16.397	0.000	94	424640	2.00	1.80	
75 Chlorobenzene	112	16.413	16.413	0.000	92	226697	2.00	1.56	
76 Ethylbenzene	91	16.687	16.687	0.000	99	366768	2.00	1.72	
77 2-Ethylthiophene	97	16.790	16.790	0.000	98	273972	2.00	1.67	
78 m-Xylene & p-Xylene	91	16.843	16.843	0.000	99	582631	4.00	3.39	
79 n-Nonane	57	17.231	17.231	0.000	95	248382	2.00	1.73	
81 Bromoform	173	17.311	17.311	0.000	95	160832	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
80 Styrene	104	17.311	17.311	0.000	98	206522	2.00	1.71	
82 o-Xylene	91	17.371	17.371	0.000	99	316437	2.00	1.69	
83 1,1,2,2-Tetrachloroethane	83	17.688	17.688	0.000	98	265064	2.00	1.80	
84 1,2,3-Trichloropropane	110	17.844	17.844	0.000	97	60336	2.00	1.78	
85 Isopropylbenzene	105	17.941	17.941	0.000	96	440651	2.00	1.80	
86 N-Propylbenzene	120	18.446	18.446	0.000	99	116441	2.00	1.78	
87 2-Chlorotoluene	126	18.506	18.506	0.000	98	107185	2.00	1.64	
88 4-Ethyltoluene	105	18.592	18.592	0.000	98	421292	2.00	1.78	
89 1,3,5-Trimethylbenzene	120	18.662	18.662	0.000	92	206388	2.00	1.84	
90 Alpha Methyl Styrene	118	18.882	18.882	0.000	87	162969	2.00	1.81	
91 n-Decane	57	18.914	18.914	0.000	87	284619	2.00	1.74	
92 tert-Butylbenzene	119	19.070	19.070	0.000	90	386450	2.00	1.75	
93 1,2,4-Trimethylbenzene	105	19.081	19.081	0.000	96	358749	2.00	1.78	
94 sec-Butylbenzene	105	19.329	19.329	0.000	98	521301	2.00	1.76	
95 1,3-Dichlorobenzene	146	19.356	19.356	0.000	99	185042	2.00	1.59	
96 Benzyl chloride	91	19.425	19.425	0.000	97	234355	2.00	1.73	
97 1,4-Dichlorobenzene	146	19.442	19.442	0.000	94	169978	2.00	1.58	
98 4-Isopropyltoluene	119	19.485	19.485	0.000	96	409383	2.00	1.74	
99 1,2,3-Trimethylbenzene	105	19.544	19.544	0.000	99	308976	2.00	1.91	
100 Butylcyclohexane	83	19.587	19.587	0.000	89	312026	2.00	1.79	
101 2,3-Dihydroindene	117	19.786	19.786	0.000	94	314545	2.00	1.74	
102 1,2-Dichlorobenzene	146	19.791	19.791	0.000	95	192977	2.00	1.68	
103 n-Butylbenzene	91	19.904	19.904	0.000	98	375796	2.00	1.76	
104 Indene	116	19.915	19.915	0.000	94	276016	2.00	2.29	
105 Undecane	57	20.184	20.184	0.000	93	328564	2.00	1.92	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.265	20.265	0.000	98	379994	2.00	2.19	
141 1,2-Dibromo-3-Chloropropan	157	20.383	20.383	0.000	91	60304	2.00	1.26	
108 1,2,4,5-Tetramethylbenzene	119	20.657	20.657	0.000	97	408219	2.00	1.91	
107 1,2,3,5-Tetramethylbenzene	119	20.711	20.711	0.000	94	258531	2.00	1.93	
109 1,2,3,4-Tetramethylbenzene	119	21.136	21.136	0.000	98	328638	2.00	1.90	
110 Dodecane	57	21.271	21.271	0.000	92	317551	2.00	2.09	
111 1,2,4-Trichlorobenzene	180	21.513	21.513	0.000	94	75380	2.00	1.63	
112 Naphthalene	128	21.647	21.647	0.000	99	195086	2.00	1.89	
113 Benzo(b)thiophene	134	21.733	21.733	0.000	99	94491	2.00	1.85	
114 Hexachlorobutadiene	225	21.803	21.803	0.000	96	148119	2.00	1.67	
115 1,2,3-Trichlorobenzene	180	21.862	21.862	0.000	95	68860	2.00	1.69	
116 2-Methylnaphthalene	142	22.395	22.395	0.000	100	30407	6.25	2.82	
117 1-Methylnaphthalene	142	22.519	22.519	0.000	100	35714	6.25	3.12	
A 118 C6 Range	1	8.812	(8.747-8.876)		0	1575733	2.00	1.55	
A 122 Toluene Range	1	14.423	(14.393-14.453)		0	747603	2.00	1.67	
A 123 C8 Range	1	15.097	(15.056-15.142)		0	1251349	2.00	1.70	
S 124 Xylenes, Total	100				0		6.00	5.08	

Reagents:

IBM2C00X10_00002

Amount Added: 100.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JCCVC04.D

Injection Date: 04-Mar-2015 16:35:30

Instrument ID: MJ

Operator ID: 403648

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 500.000 mL

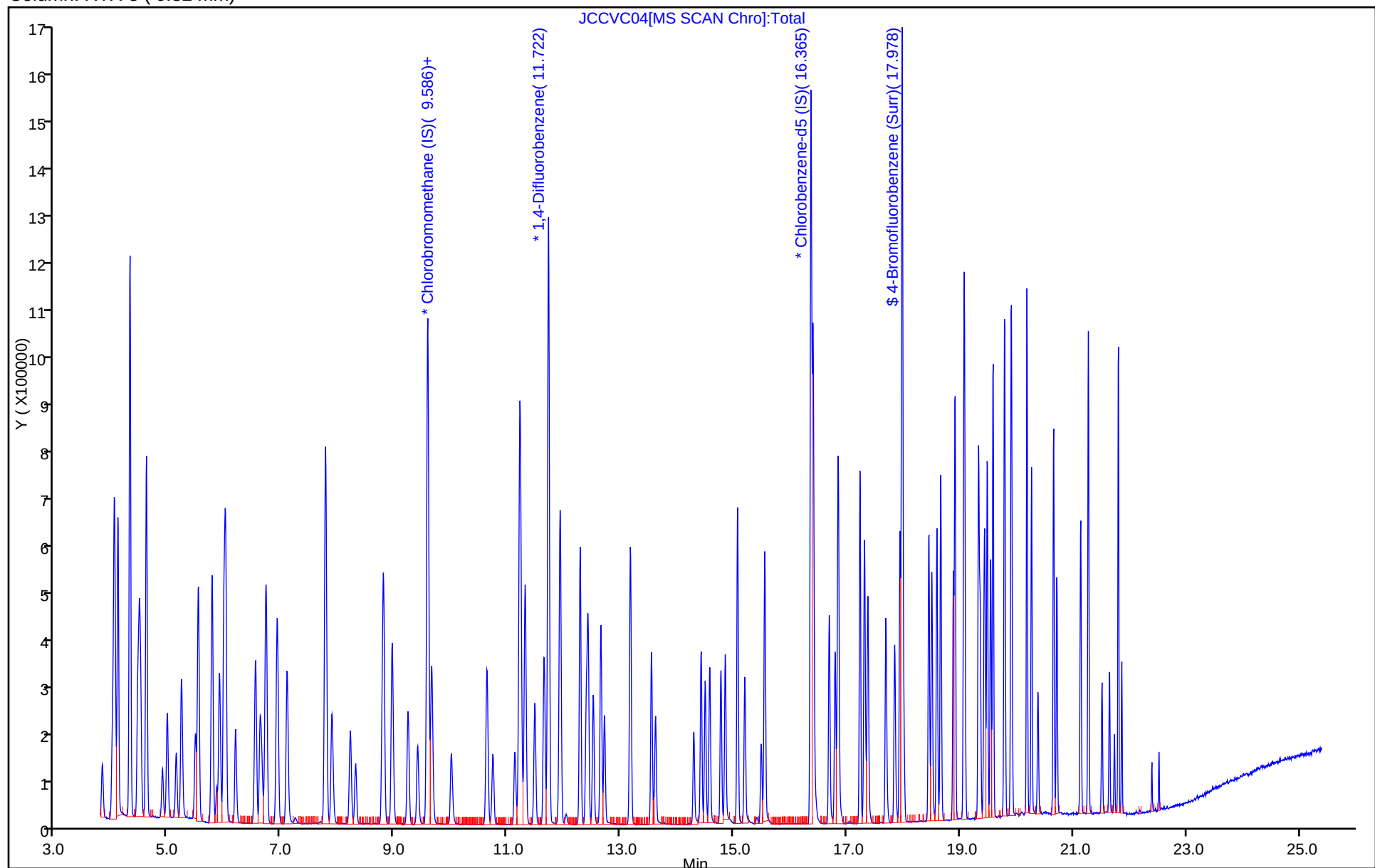
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JBFB02.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 02-Feb-2015 12:20:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: BFB,,3,,,BFB
Misc. Info.: J020215I,BFB,,,140-0001328-001
Operator ID: 7126 Instrument ID: MJ
Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Feb-2015 08:50:59 Calib Date: 02-Feb-2015 20:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: tajh

Date: 03-Feb-2015 10:04:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags

\$ 4 BFB	95	4.207	4.207	0.000	0	367779	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

MAbfb1_00003

Amount Added: 40.00

Units: ml

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JBFBB02.D

Injection Date: 02-Feb-2015 12:20:30

Instrument ID: MJ

Lims ID: BFB

Client ID:

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 1

Injection Vol: 500.0 mL

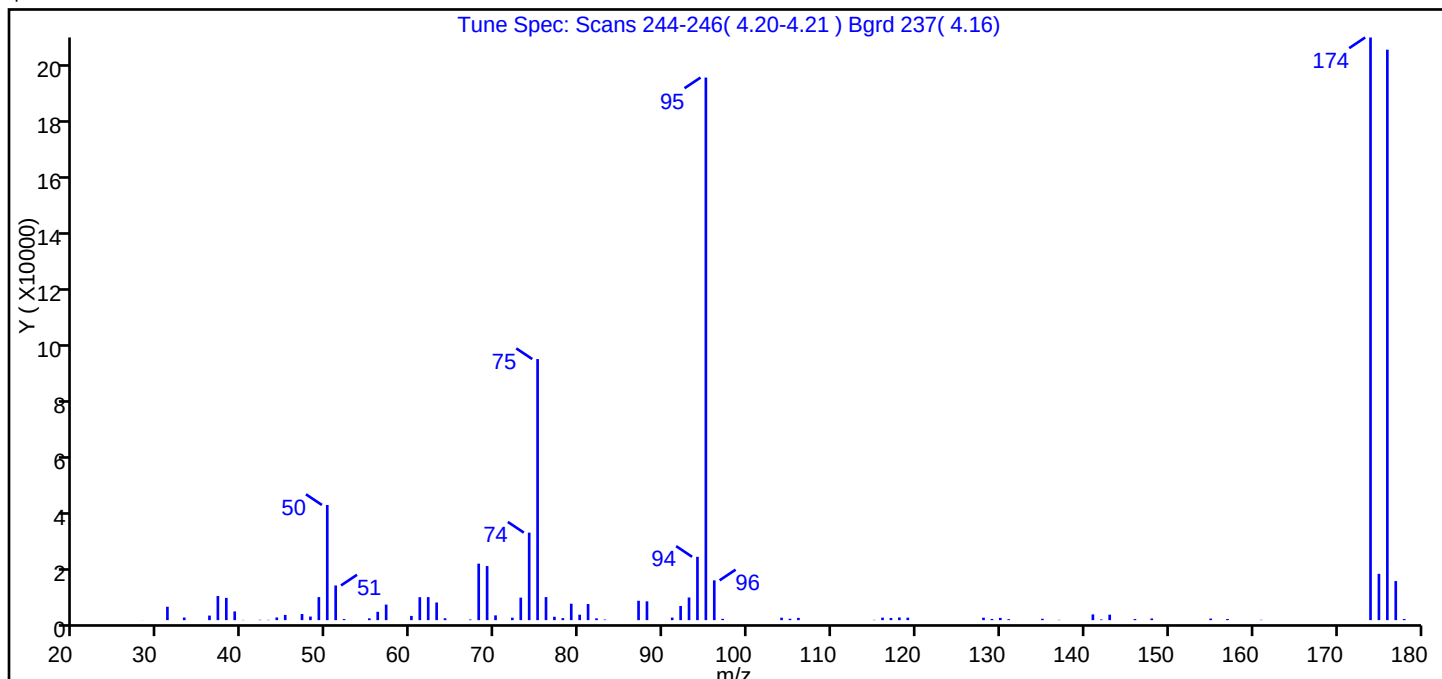
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Tune Method: BFB Method 8260

\$ 4 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.2
75	30 to 60% of m/z 95	48.1
96	5 to 9% of m/z 95	7.3
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	107.4
175	5 to 9% of m/z 174	8.5 (7.9)
176	Greater than 95% but less than 101% of m/z 174	105.1 (97.9)
177	5 to 9% of m/z 176	7.2 (6.8)

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JBFB02.D\MJ_TO15.rslt\spectra.d
Injection Date: 02-Feb-2015 12:20:30
Spectrum: Tune Spec: Scans 244-246(4.20-4.21) Bgrd 237(4.16)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 79

m/z	Y	m/z	Y	m/z	Y	m/z	Y
28.00	26	56.00	2929	81.00	5678	128.00	863
29.00	2	57.00	5460	82.00	633	129.00	419
31.00	4706	60.00	1487	83.00	203	130.00	796
33.00	925	61.00	8059	87.00	6801	131.00	342
36.00	1606	62.00	8093	88.00	6611	135.00	485
37.00	8488	63.00	6196	91.00	892	137.00	115
38.00	7826	64.00	656	92.00	4967	141.00	2017
39.00	3061	67.00	232	93.00	7955	142.00	237
40.00	78	68.00	19840	94.00	22248	143.00	1921
42.00	133	69.00	19000	95.00	190592	146.00	394
43.00	107	70.00	1674	96.00	13981	148.00	589
44.00	948	72.00	853	97.00	459	155.00	546
45.00	1836	73.00	7900	104.00	861	157.00	398
47.00	2153	74.00	30744	105.00	487	161.00	123
48.00	1264	75.00	91712	106.00	799	174.00	204672
49.00	8099	76.00	8101	115.00	109	175.00	16258
50.00	40456	77.00	1190	116.00	878	176.00	200384
51.00	12180	78.00	704	117.00	772	177.00	13726
52.00	378	79.00	5772	118.00	943	178.00	402
55.00	628	80.00	1906	119.00	876		

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JBFBB02.D

Injection Date: 02-Feb-2015 12:20:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 500.0 mL

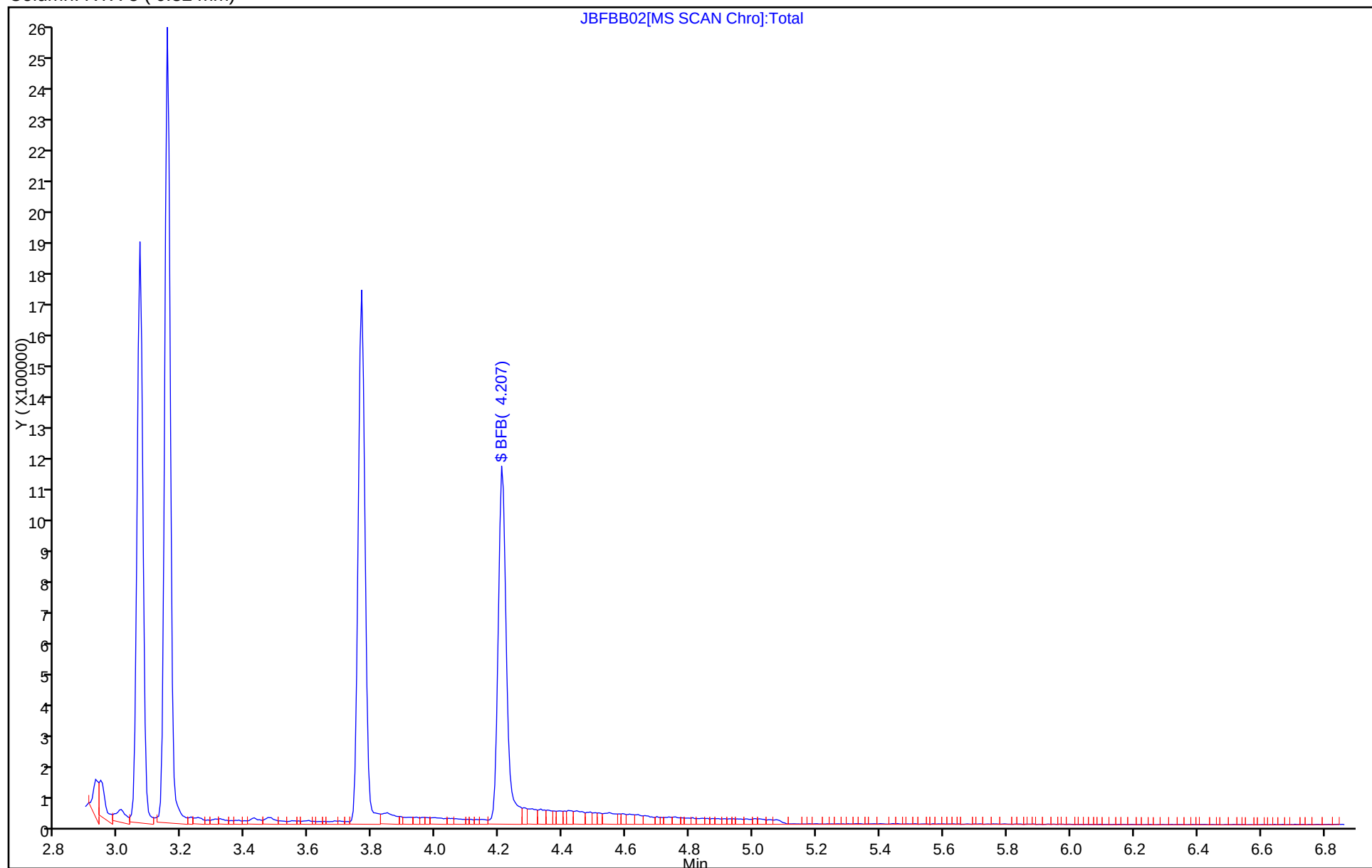
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JBFB04C.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 03-Mar-2015 17:17:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: BFB,,3,,,bfb
Misc. Info.: J030415,BFB,,140-0001414-001
Operator ID: 403648 Instrument ID: MJ
Method: \\KNXCHROM\ChromData\MJ\20150228-1414.b\MJ_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Mar-2015 11:00:53 Calib Date: 02-Feb-2015 20:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK052

First Level Reviewer: tajh

Date: 04-Mar-2015 11:00:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags

\$ 4 BFB	95	4.208	4.208	0.000	0	287178	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

MAbfb1_00003

Amount Added: 40.00

Units: ml

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JBFBC04C.D

Injection Date: 03-Mar-2015 17:17:30

Instrument ID: MJ

Lims ID: BFB

Client ID:

Operator ID: 403648

ALS Bottle#: 16

Worklist Smp#: 1

Injection Vol: 500.0 mL

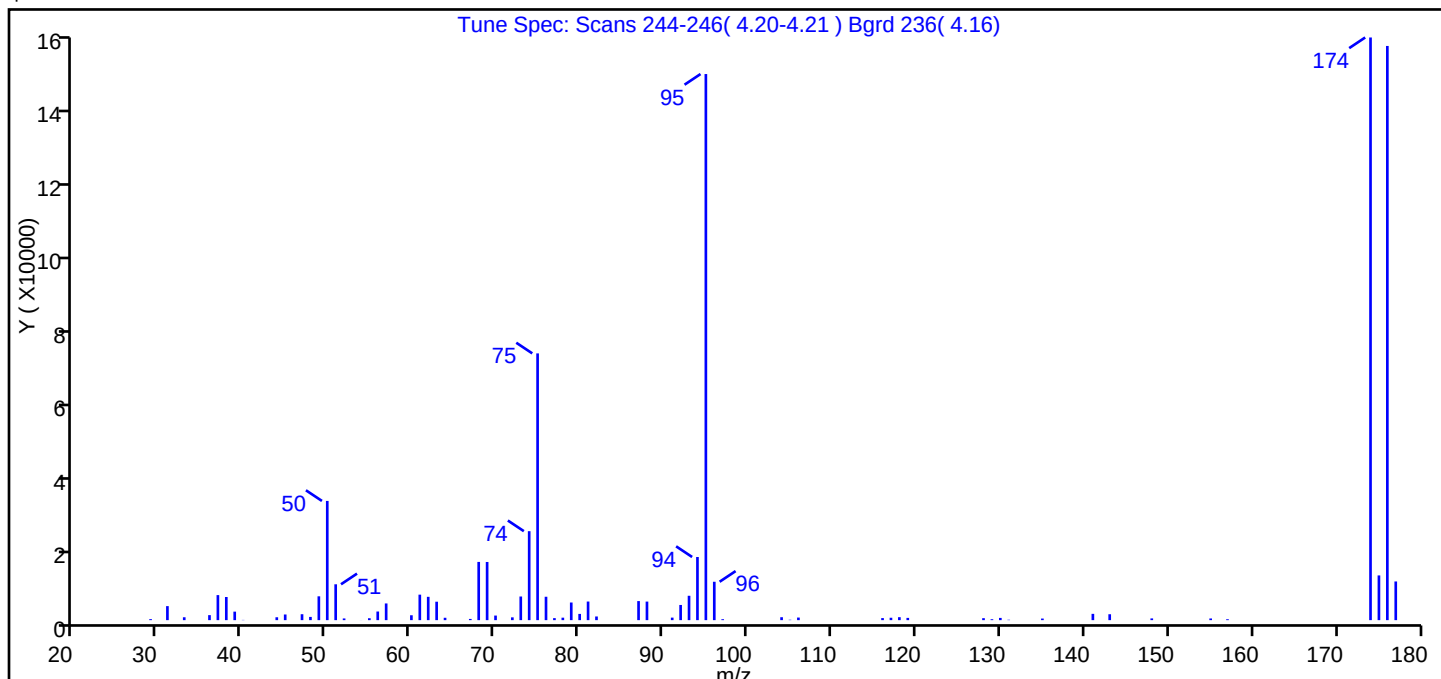
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Tune Method: BFB Method 8260

\$ 4 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.8
75	30 to 60% of m/z 95	48.8
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	106.7
175	5 to 9% of m/z 174	8.2 (7.7)
176	Greater than 95% but less than 101% of m/z 174	105.1 (98.5)
177	5 to 9% of m/z 176	7.1 (6.7)

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JBFB04C.D\MJ_TO15.rslt\spectra.d
Injection Date: 03-Mar-2015 17:17:30
Spectrum: Tune Spec: Scans 244-246(4.20-4.21) Bgrd 236(4.16)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 70

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	266	56.00	2278	79.00	4661	118.00	782
31.00	3707	57.00	4413	80.00	1648	119.00	594
33.00	763	60.00	1292	81.00	4917	128.00	520
36.00	1324	61.00	6736	82.00	969	129.00	239
37.00	6617	62.00	6164	87.00	5036	130.00	591
38.00	6116	63.00	4873	88.00	4904	131.00	102
39.00	2248	64.00	627	91.00	668	135.00	423
40.00	61	67.00	321	92.00	4011	141.00	1664
44.00	763	68.00	15388	93.00	6441	143.00	1561
45.00	1495	69.00	15371	94.00	16688	148.00	459
47.00	1569	70.00	1211	95.00	144320	155.00	443
48.00	854	72.00	739	96.00	10143	157.00	236
49.00	6297	73.00	6247	97.00	244	174.00	153984
50.00	31504	74.00	23512	104.00	773	175.00	11817
51.00	9477	75.00	70496	105.00	101	176.00	151744
52.00	449	76.00	6182	106.00	684	177.00	10223
54.00	13	77.00	534	116.00	545		
55.00	505	78.00	653	117.00	633		

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JBFB04C.D

Injection Date: 03-Mar-2015 17:17:30

Instrument ID: MJ

Operator ID: 403648

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 500.0 mL

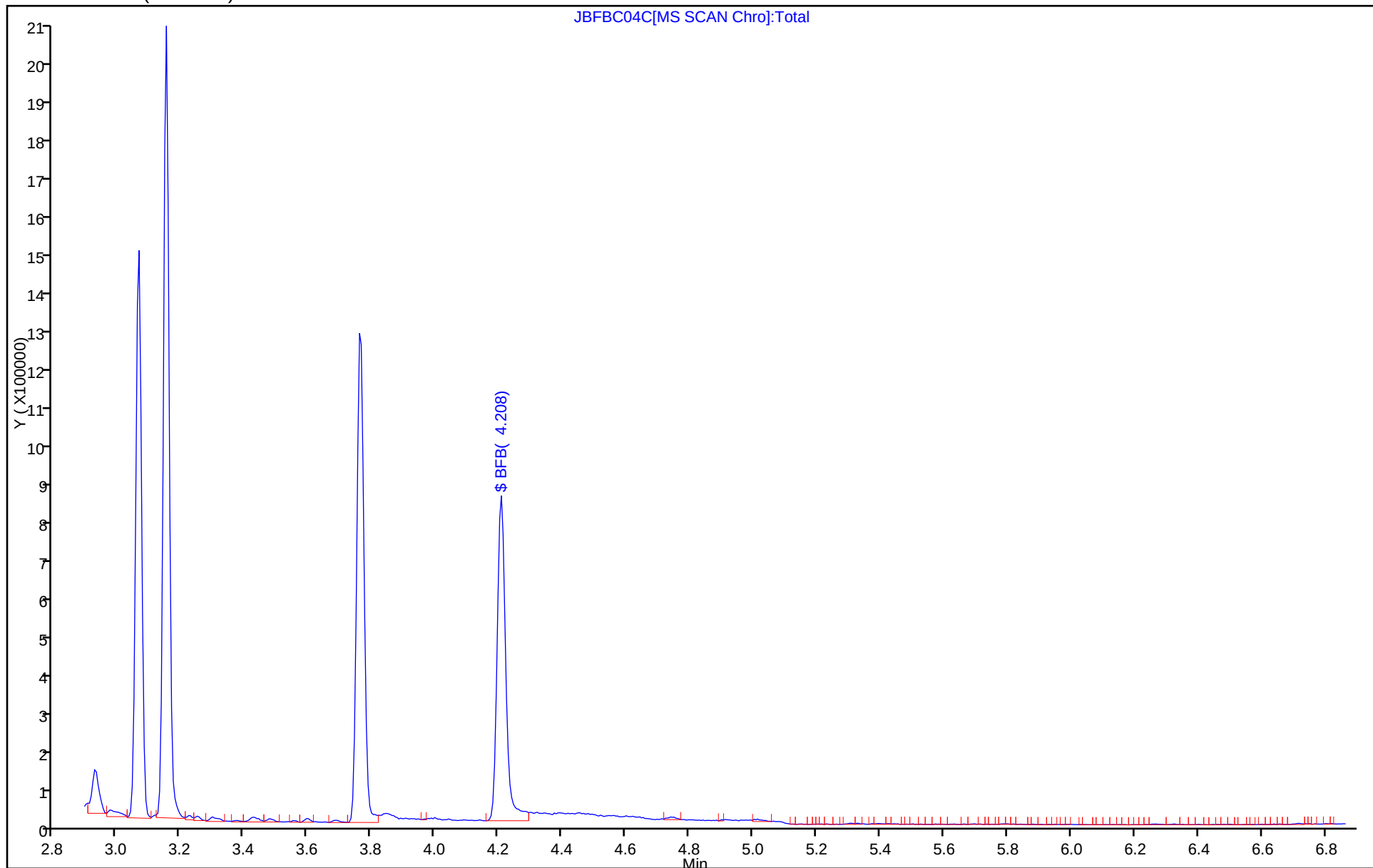
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JBFB04.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 04-Mar-2015 16:08:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: BFB,,3,,,bfb
Misc. Info.: J030415,BFB,,140-0001415-001
Operator ID: 403648 Instrument ID: MJ
Method: \\KNXCHROM\ChromData\MJ\20150228-1415.b\MJ_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 05-Mar-2015 13:01:04 Calib Date: 02-Feb-2015 20:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK036

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
\$ 4 BFB	95	4.246	4.246	0.000	0	303624	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

MAbfb1_00003

Amount Added: 40.00

Units: ml

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JBFBC04.D

Injection Date: 04-Mar-2015 16:08:30

Instrument ID: MJ

Lims ID: BFB

Client ID:

Operator ID: 403648

ALS Bottle#: 16

Worklist Smp#: 1

Injection Vol: 500.0 mL

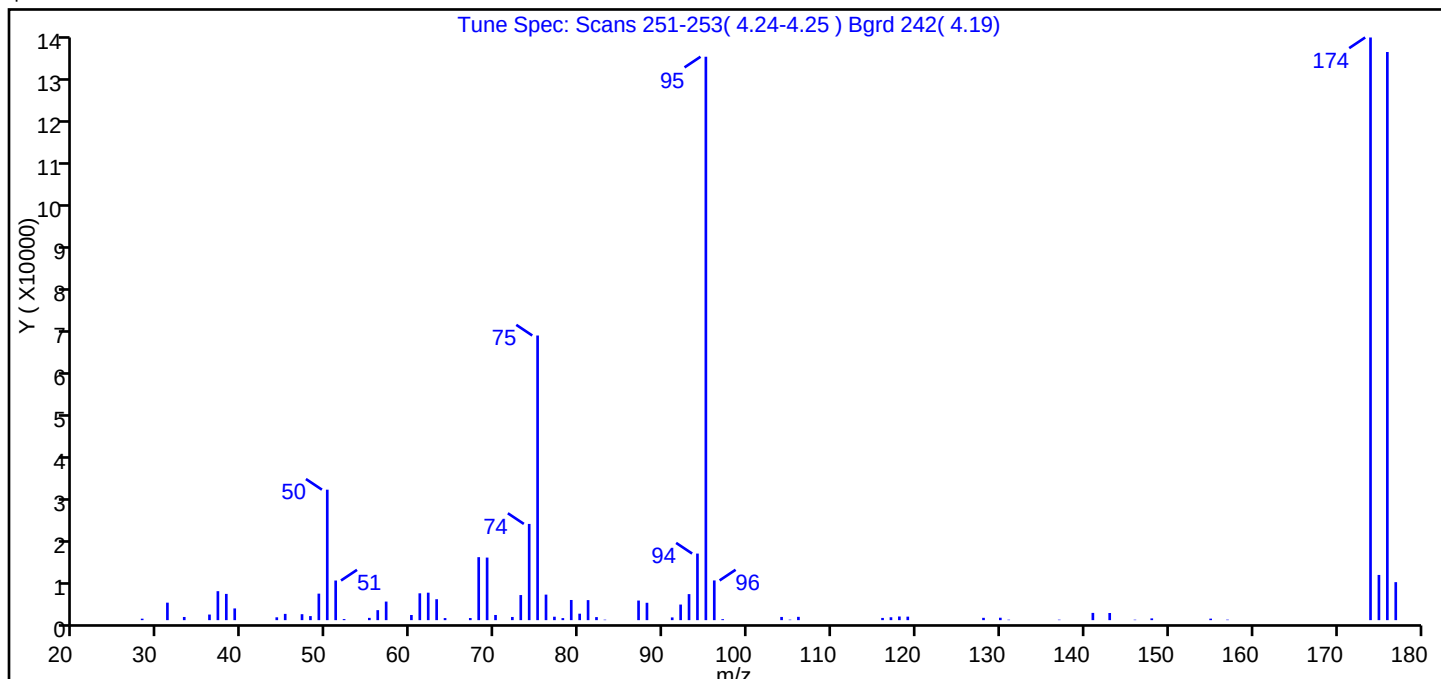
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Tune Method: BFB Method 8260

\$ 4 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	23.2
75	30 to 60% of m/z 95	50.5
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	103.4
175	5 to 9% of m/z 174	8.0 (7.8)
176	Greater than 95% but less than 101% of m/z 174	100.8 (97.5)
177	5 to 9% of m/z 176	6.7 (6.7)

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JBFB04.D\MJ_TO15.rslt\spectra.d
Injection Date: 04-Mar-2015 16:08:30
Spectrum: Tune Spec: Scans 251-253(4.24-4.25) Bgrd 242(4.19)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 69

m/z	Y	m/z	Y	m/z	Y	m/z	Y
28.00	338	60.00	1186	81.00	4617	119.00	807
31.00	4031	61.00	6186	82.00	703	128.00	535
33.00	731	62.00	6332	83.00	106	130.00	557
36.00	1291	63.00	4826	87.00	4517	131.00	102
37.00	6679	64.00	478	88.00	4004	137.00	109
38.00	6051	67.00	489	91.00	629	141.00	1671
39.00	2700	68.00	14519	92.00	3594	143.00	1647
44.00	655	69.00	14425	93.00	6001	146.00	102
45.00	1443	70.00	1190	94.00	15349	148.00	405
47.00	1375	72.00	731	95.00	129896	155.00	346
48.00	934	73.00	5784	96.00	9154	157.00	113
49.00	6113	74.00	22184	97.00	217	174.00	134336
50.00	30080	75.00	65624	104.00	734	175.00	10421
51.00	9135	76.00	5886	105.00	111	176.00	130984
52.00	245	77.00	789	106.00	760	177.00	8761
55.00	526	78.00	470	116.00	511		
56.00	2304	79.00	4648	117.00	668		
57.00	4282	80.00	1490	118.00	841		

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JBFB04.D

Injection Date: 04-Mar-2015 16:08:30

Instrument ID: MJ

Operator ID: 403648

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 500.0 mL

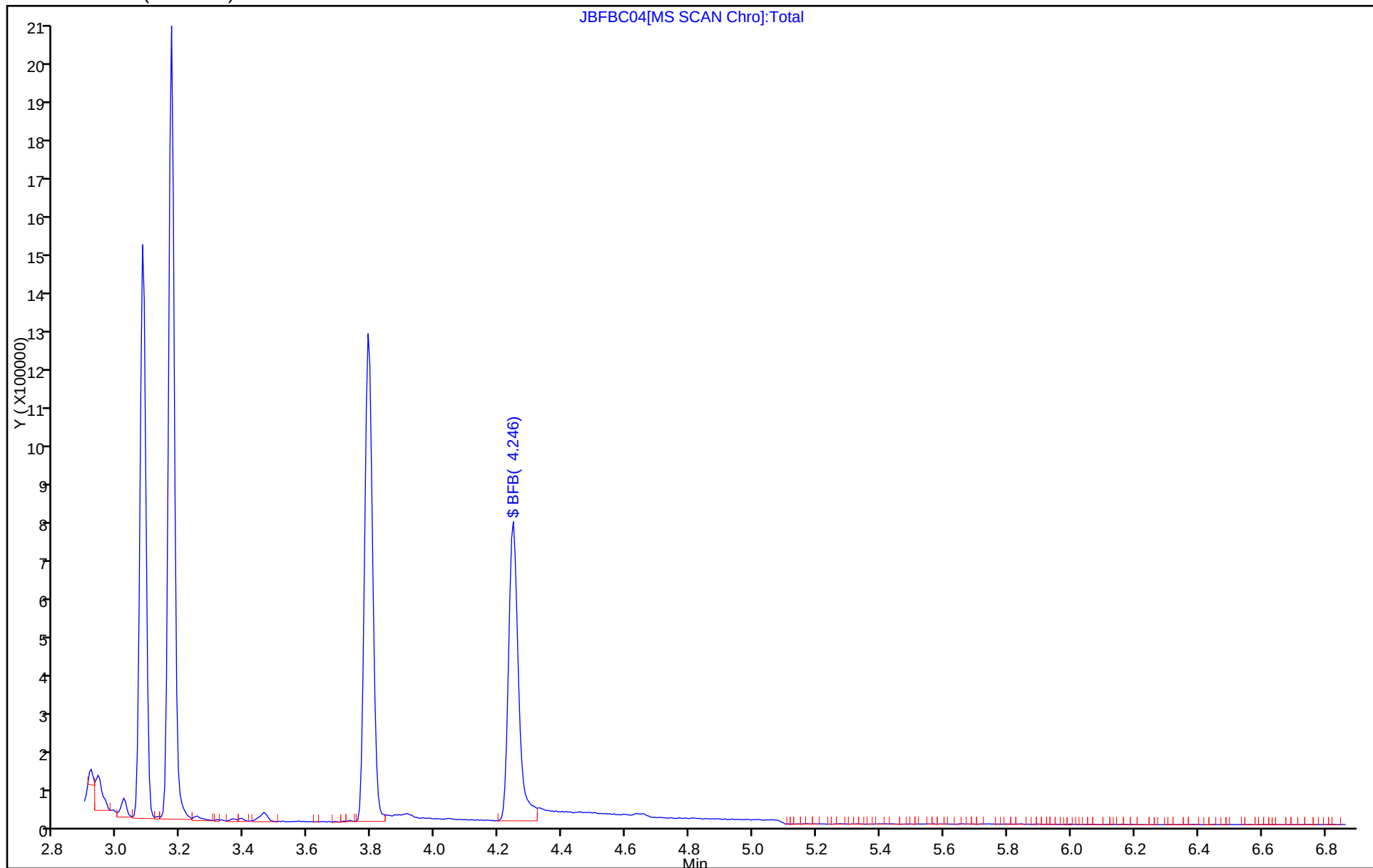
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MJ_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: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: MB 140-2449/5

Matrix: Air Lab File ID: J500BC03.D

Analysis Method: TO 15 LL Date Collected: _____

Sample wt/vol: 500 (mL) Date Analyzed: 03/03/2015 20:18

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.: 2449 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		0.080	
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		0.040	
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		0.080	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-2449/5
 Matrix: Air Lab File ID: J500BC03.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 03/03/2015 20:18
 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.: 2449 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		0.80	
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		0.040	
75-69-4	Trichlorofluoromethane	137.37	ND		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: MB 140-2449/5

Matrix: Air Lab File ID: J500BC03.D

Analysis Method: TO 15 LL Date Collected: _____

Sample wt/vol: 500 (mL) Date Analyzed: 03/03/2015 20:18

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.: 2449 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		0.32	
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		0.25	
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		0.32	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-2449/5
 Matrix: Air Lab File ID: J500BC03.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 03/03/2015 20:18
 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.: 2449 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		1.5	
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		0.21	
75-69-4	Trichlorofluoromethane	137.37	ND		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\J500BC03.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 03-Mar-2015 20:18:30 ALS Bottle#: 16 Worklist Smp#: 5
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: MB500mL
 Misc. Info.: J030315,TO15,,140-0001414-005
 Operator ID: 403648 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150228-1414.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 11:02:31 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK052

First Level Reviewer: tajh

Date: 04-Mar-2015 08:35:54

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	9.588	9.587	0.001	97	314590	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.724	11.728	-0.004	96	1405938	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.366	16.370	-0.004	89	1130381	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.980	17.979	0.001	90	669926	4.00	3.62	
31 Methylene Chloride	84	6.920	6.924	-0.004	97	5826		0.0578	
T 136 Methanol TIC	31	12.041	4.400	7.641	2	25356		0.3224	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\J500BC03.D

Injection Date: 03-Mar-2015 20:18:30

Instrument ID: MJ

Operator ID: 403648

Lims ID: MB

Worklist Smp#: 5

Client ID:

Purge Vol: 500.000 mL

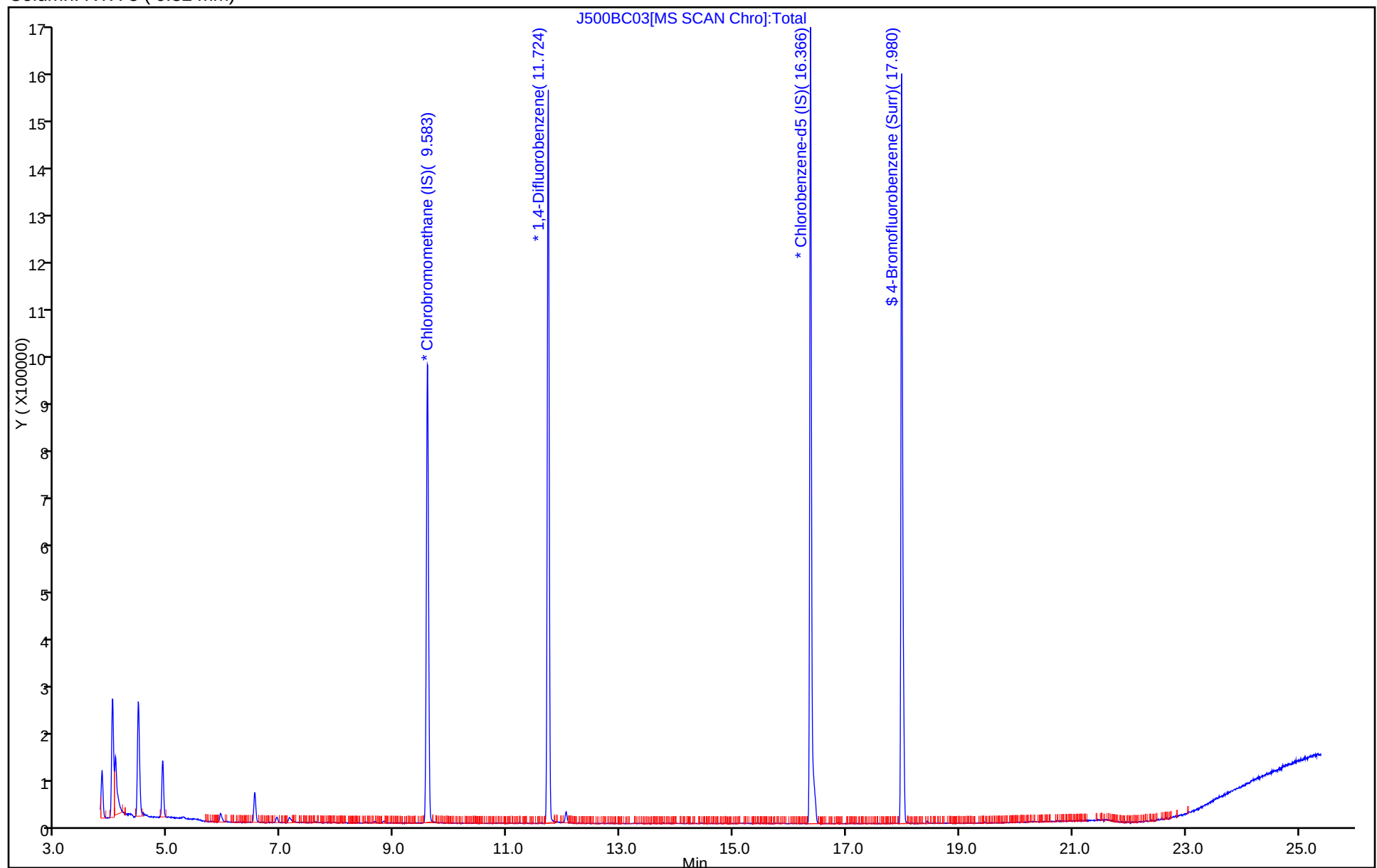
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MJ_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: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: MB 140-2450/7

Matrix: Air Lab File ID: JC04MB500.D

Analysis Method: TO 15 LL Date Collected: _____

Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 21:23

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.: 2450 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		0.080	
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		0.040	
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		0.080	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-2450/7
 Matrix: Air Lab File ID: JC04MB500.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 21:23
 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.: 2450 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		0.80	
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		0.040	
75-69-4	Trichlorofluoromethane	137.37	ND		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

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: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: MB 140-2450/7

Matrix: Air Lab File ID: JC04MB500.D

Analysis Method: TO 15 LL Date Collected: _____

Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 21:23

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.: 2450 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		0.32	
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		0.25	
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		0.32	
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: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-2450/7
 Matrix: Air Lab File ID: JC04MB500.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 21:23
 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.: 2450 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		1.5	
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		0.21	
75-69-4	Trichlorofluoromethane	137.37	ND		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

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

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04MB500.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 04-Mar-2015 21:23:30 ALS Bottle#: 16 Worklist Smp#: 7
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: MB500mL
 Misc. Info.: J030415,TO15,,140-0001415-007
 Operator ID: 403648 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150228-1415.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 05-Mar-2015 13:01:05 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK036

First Level Reviewer: tajh

Date: 05-Mar-2015 08:13:04

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	9.590	9.586	0.004	97	275672	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.725	11.722	0.003	96	1223275	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.368	16.365	0.003	90	1071492	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.976	17.978	-0.002	89	672468	4.00	3.83	
31 Methylene Chloride	84	6.927	6.918	0.009	96	5226		0.0591	
T 136 Methanol TIC	31	4.474	4.400	0.074	95	244234		3.54	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JC04MB500.D

Injection Date: 04-Mar-2015 21:23:30

Instrument ID: MJ

Operator ID: 403648

Lims ID: MB

Worklist Smp#: 7

Client ID:

Purge Vol: 500.000 mL

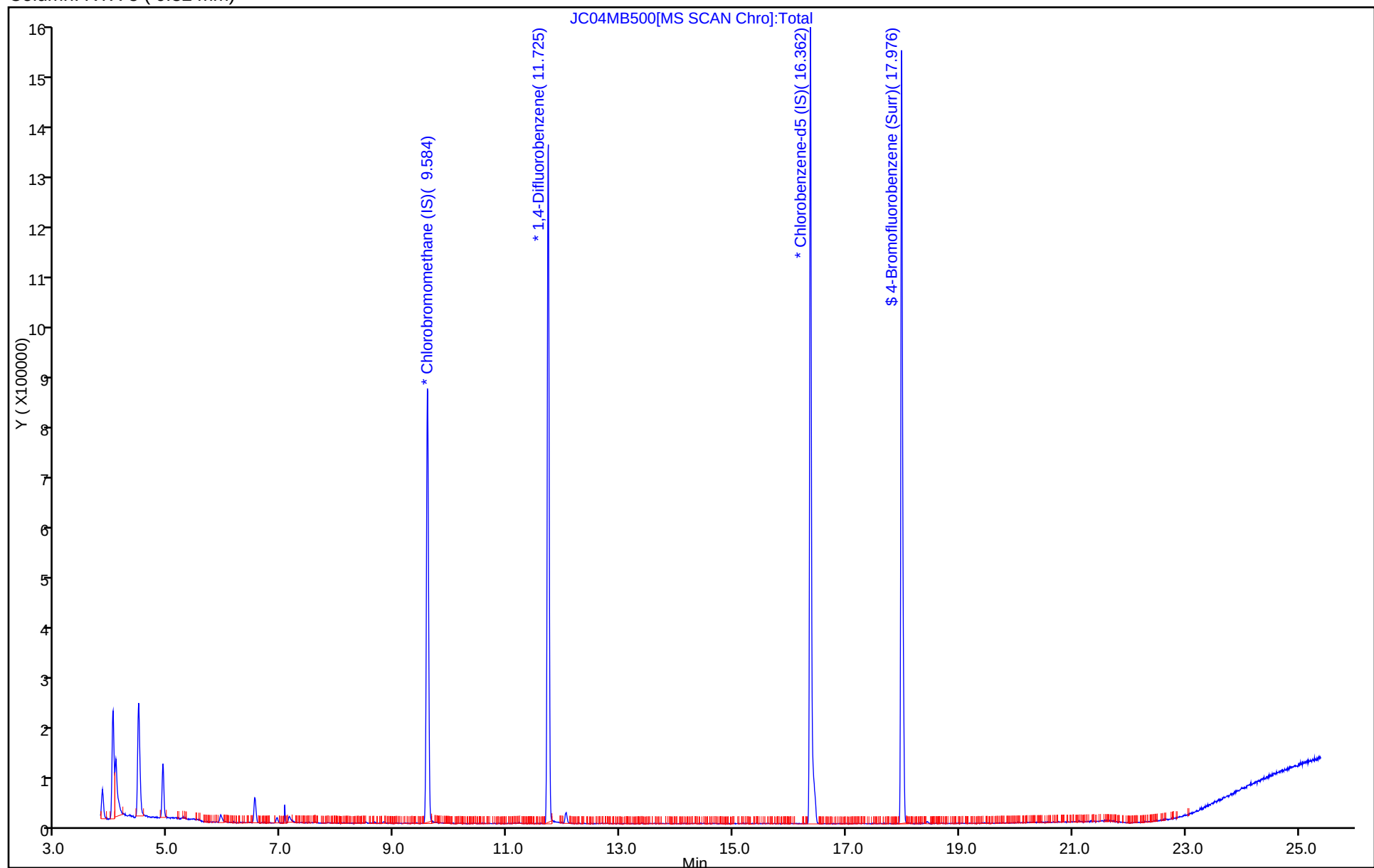
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MJ_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: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCS 140-2449/1002

Matrix: Air Lab File ID: JCCVC04C-LCS.d

Analysis Method: TO 15 LL Date Collected: _____

Sample wt/vol: 500 (mL) Date Analyzed: 03/03/2015 17:45

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.: 2449 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	2.04		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	2.36		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	2.33		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	2.41		0.080	
75-34-3	1,1-Dichloroethane	98.96	2.02		0.080	
75-35-4	1,1-Dichloroethene	96.94	2.51		0.080	
120-82-1	1,2,4-Trichlorobenzene	181.45	1.73		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	2.37		0.080	
106-93-4	1,2-Dibromoethane	187.87	2.29		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	2.14		0.080	
107-06-2	1,2-Dichloroethane	98.96	2.10		0.080	
78-87-5	1,2-Dichloropropane	112.99	2.30		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.19		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	2.52		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	2.07		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	1.99		0.080	
123-91-1	1,4-Dioxane	88.11	2.05		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	2.20		0.20	
78-93-3	2-Butanone	72.11	2.15		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	2.28		0.20	
71-43-2	Benzene	78.11	2.00		0.080	
100-44-7	Benzyl chloride	126.58	2.26		0.16	
75-27-4	Bromodichloromethane	163.83	2.09		0.080	
75-25-2	Bromoform	252.75	2.27		0.080	
74-83-9	Bromomethane	94.94	2.21		0.080	
56-23-5	Carbon tetrachloride	153.81	2.47		0.040	
108-90-7	Chlorobenzene	112.56	2.30		0.080	
75-00-3	Chloroethane	64.52	2.20		0.080	
67-66-3	Chloroform	119.38	2.16		0.080	
74-87-3	Chloromethane	50.49	2.14		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	2.12		0.080	
10061-01-5	cis-1,3-Dichloropropene	110.97	2.40		0.080	
110-82-7	Cyclohexane	84.16	2.00		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 140-2449/1002
 Matrix: Air Lab File ID: JCCVC04C-LCS.d
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 03/03/2015 17:45
 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.: 2449 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	2.32		0.080	
75-71-8	Dichlorodifluoromethane	120.91	2.18		0.080	
64-17-5	Ethanol	46.07	10.2		0.80	
100-41-4	Ethylbenzene	106.17	2.70		0.080	
87-68-3	Hexachlorobutadiene	260.76	1.85		0.080	
110-54-3	Hexane	86.17	1.96		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	2.62		0.16	
75-09-2	Methylene Chloride	84.93	2.26		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	5.18		0.080	
95-47-6	o-Xylene	106.17	2.53		0.080	
100-42-5	Styrene	104.15	2.54		0.080	
75-65-0	t-Butyl alcohol	74.12	2.16		0.32	
127-18-4	Tetrachloroethene	165.83	2.24		0.080	
108-88-3	Toluene	92.14	2.55		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	2.06		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	2.22		0.080	
79-01-6	Trichloroethene	131.39	2.12		0.040	
75-69-4	Trichlorofluoromethane	137.37	2.14		0.080	
75-01-4	Vinyl chloride	62.50	2.32		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

TestAmerica Laboratories
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JCCVC04C-LCS.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 03-Mar-2015 17:45:30 ALS Bottle#: 15 Worklist Smp#: 1002
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: CCV/LCS,,2,6,,CCV10
 Misc. Info.: J030415,TO15,,140-0001414-002
 Operator ID: 403648 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150228-1414.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 11:02:31 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK052

First Level Reviewer: tajh

Date: 04-Mar-2015 11:02:30

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	9.587	9.587	0.000	95	247394	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.728	11.728	0.000	93	1140650	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.370	16.370	0.000	89	1019974	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.979	17.979	0.000	87	607042	4.00	3.64	
6 Chlorodifluoromethane	67	4.035	4.035	0.000	75	65121	2.00	2.18	
7 Propene	41	4.051	4.051	0.000	98	256573	2.00	2.19	
8 Dichlorodifluoromethane	85	4.105	4.105	0.000	100	608066	2.00	2.18	
9 Chloromethane	52	4.315	4.315	0.000	64	84640	2.00	2.14	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.320	4.320	0.000	91	399501	2.00	2.19	
11 Acetaldehyde	44	4.492	4.492	0.000	98	330559	10.0	9.68	
12 Vinyl chloride	62	4.509	4.509	0.000	99	247957	2.00	2.32	
13 Butane	43	4.611	4.611	0.000	86	430307	2.00	2.30	
14 Butadiene	54	4.611	4.611	0.000	63	198053	2.00	2.33	
15 Bromomethane	94	4.982	4.982	0.000	98	200004	2.00	2.21	
16 Chloroethane	64	5.138	5.138	0.000	92	103155	2.00	2.20	
17 Ethanol	31	5.240	5.240	0.000	96	352273	10.0	10.2	
18 Vinyl bromide	106	5.482	5.482	0.000	97	188879	2.00	2.38	
19 2-Methylbutane	43	5.531	5.531	0.000	93	282582	2.00	2.25	
20 Trichlorofluoromethane	101	5.778	5.778	0.000	98	523020	2.00	2.14	
21 Acrolein	56	5.784	5.784	0.000	9	59916	2.00	2.12	
22 Acetonitrile	40	5.864	5.864	0.000	93	72810	2.00	2.45	
23 Acetone	58	5.907	5.907	0.000	73	196036	6.00	6.16	
24 Isopropyl alcohol	45	5.993	5.993	0.000	96	793694	6.00	6.19	
25 Pentane	72	6.009	6.009	0.000	95	33035	2.00	2.21	
26 Ethyl ether	31	6.192	6.192	0.000	91	201075	2.00	2.31	
27 1,1-Dichloroethene	96	6.547	6.547	0.000	90	197151	2.00	2.51	
28 2-Methyl-2-propanol	59	6.633	6.633	0.000	95	315459	2.00	2.16	
29 Acrylonitrile	53	6.660	6.660	0.000	86	112350	2.00	2.55	
30 1,1,2-Trichloro-1,2,2-trif	101	6.730	6.730	0.000	94	395776	2.00	2.41	
31 Methylene Chloride	84	6.924	6.924	0.000	94	179217	2.00	2.26	
32 3-Chloro-1-propene	39	6.935	6.935	0.000	88	177195	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
33 Carbon disulfide	76	7.102	7.102	0.000	99	614659	2.00	2.22	
34 trans-1,2-Dichloroethene	96	7.774	7.774	0.000	91	184877	2.00	2.06	
35 2-Methylpentane	43	7.790	7.790	0.000	97	483736	2.00	2.06	
36 Methyl tert-butyl ether	73	7.898	7.898	0.000	97	395892	2.00	2.62	
37 1,1-Dichloroethane	63	8.220	8.220	0.000	99	304561	2.00	2.02	
38 Vinyl acetate	43	8.317	8.317	0.000	100	420326	2.00	2.69	
39 2-Butanone (MEK)	72	8.785	8.785	0.000	91	63429	2.00	2.15	
40 Hexane	56	8.807	8.807	0.000	86	161599	2.00	1.96	
139 Isopropyl ether	45	8.963	8.963	0.000	97	633405	2.00	2.51	
41 cis-1,2-Dichloroethene	96	9.243	9.243	0.000	98	163347	2.00	2.12	
42 Ethyl acetate	43	9.415	9.415	0.000	97	327875	2.00	2.28	
43 Chloroform	83	9.598	9.598	0.000	68	338014	2.00	2.16	
142 Tert-butyl ethyl ether	59	9.662	9.662	0.000	95	485047	2.00	2.56	
44 Tetrahydrofuran	42	10.006	10.006	0.000	95	189336	2.00	2.40	
45 1,1,1-Trichloroethane	97	10.636	10.636	0.000	94	333710	2.00	2.04	
46 1,2-Dichloroethane	62	10.743	10.743	0.000	94	199299	2.00	2.10	
47 n-Butanol	31	11.136	11.136	0.000	88	82776	2.00	2.40	
49 Cyclohexane	69	11.211	11.211	0.000	64	87277	2.00	2.00	
48 Benzene	78	11.217	11.217	0.000	97	422442	2.00	2.00	
50 Carbon tetrachloride	117	11.238	11.238	0.000	95	384804	2.00	2.47	
51 2,3-Dimethylpentane	71	11.314	11.314	0.000	93	114215	2.00	2.13	
52 Thiophene	84	11.486	11.486	0.000	97	234428	2.00	1.96	
140 Tert-amyl methyl ether	73	11.647	11.647	0.000	87	400673	2.00	2.51	
53 Isooctane	57	11.932	11.932	0.000	98	921521	2.00	2.20	
54 n-Heptane	71	12.287	12.287	0.000	95	168443	2.00	2.18	
55 1,2-Dichloropropane	63	12.395	12.395	0.000	87	173240	2.00	2.30	
56 Trichloroethene	130	12.427	12.427	0.000	96	194419	2.00	2.12	
57 Dibromomethane	93	12.519	12.519	0.000	94	176667	2.00	2.00	
59 Dichlorobromomethane	83	12.653	12.653	0.000	97	315744	2.00	2.09	
58 1,4-Dioxane	88	12.653	12.653	0.000	38	60979	2.00	2.05	
60 Methyl methacrylate	41	12.718	12.718	0.000	84	187551	2.00	2.23	
61 Methylcyclohexane	83	13.175	13.175	0.000	91	371265	2.00	2.17	
62 4-Methyl-2-pentanone (MIBK)	43	13.546	13.546	0.000	98	395168	2.00	2.28	
63 cis-1,3-Dichloropropene	75	13.616	13.616	0.000	94	234104	2.00	2.40	
64 trans-1,3-Dichloropropene	75	14.294	14.294	0.000	98	186532	2.00	2.22	
65 Toluene	91	14.423	14.423	0.000	93	474979	2.00	2.55	
66 1,1,2-Trichloroethane	83	14.498	14.498	0.000	67	145483	2.00	2.33	
67 2-Methylthiophene	97	14.579	14.579	0.000	98	368789	2.00	2.28	
68 3-Methylthiophene	97	14.773	14.773	0.000	99	359934	2.00	2.27	
69 2-Hexanone	58	14.853	14.853	0.000	91	177830	2.00	2.39	
70 n-Octane	85	15.069	15.069	0.000	97	149418	2.00	2.16	
71 Chlorodibromomethane	129	15.198	15.198	0.000	97	291337	2.00	2.32	
72 Ethylene Dibromide	107	15.488	15.488	0.000	98	238570	2.00	2.29	
73 Tetrachloroethene	129	15.547	15.547	0.000	95	181401	2.00	2.24	
74 2,3-Dimethylheptane	43	16.403	16.403	0.000	94	521934	2.00	2.17	
75 Chlorobenzene	112	16.419	16.419	0.000	83	341978	2.00	2.30	
76 Ethylbenzene	91	16.693	16.693	0.000	97	587665	2.00	2.70	
77 2-Ethylthiophene	97	16.795	16.795	0.000	98	410068	2.00	2.44	
78 m-Xylene & p-Xylene	91	16.849	16.849	0.000	99	907612	4.00	5.18	
79 n-Nonane	57	17.236	17.236	0.000	95	344558	2.00	2.35	
80 Styrene	104	17.312	17.312	0.000	98	313290	2.00	2.54	
81 Bromoform	173	17.317	17.317	0.000	86	247540	2.00	2.27	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
82 o-Xylene	91	17.371	17.371	0.000	88	483506	2.00	2.53	
83 1,1,2,2-Tetrachloroethane	83	17.694	17.694	0.000	99	354222	2.00	2.36	
84 1,2,3-Trichloropropane	110	17.850	17.850	0.000	95	82049	2.00	2.38	
85 Isopropylbenzene	105	17.941	17.941	0.000	95	673148	2.00	2.70	
86 N-Propylbenzene	120	18.452	18.452	0.000	99	168438	2.00	2.52	
87 2-Chlorotoluene	126	18.506	18.506	0.000	34	158565	2.00	2.37	
88 4-Ethyltoluene	105	18.592	18.592	0.000	82	558559	2.00	2.32	
89 1,3,5-Trimethylbenzene	120	18.662	18.662	0.000	92	289167	2.00	2.52	
90 Alpha Methyl Styrene	118	18.888	18.888	0.000	88	220573	2.00	2.40	
91 n-Decane	57	18.915	18.915	0.000	86	377365	2.00	2.26	
92 tert-Butylbenzene	119	19.071	19.071	0.000	88	541006	2.00	2.40	
93 1,2,4-Trimethylbenzene	105	19.087	19.087	0.000	91	489064	2.00	2.37	
94 sec-Butylbenzene	105	19.329	19.329	0.000	98	717971	2.00	2.38	
95 1,3-Dichlorobenzene	146	19.361	19.361	0.000	97	245484	2.00	2.07	
96 Benzyl chloride	91	19.426	19.426	0.000	97	312638	2.00	2.26	
97 1,4-Dichlorobenzene	146	19.442	19.442	0.000	92	218511	2.00	1.99	
98 4-Isopropyltoluene	119	19.485	19.485	0.000	80	540131	2.00	2.25	
99 1,2,3-Trimethylbenzene	105	19.544	19.544	0.000	80	370742	2.00	2.24	
100 Butylcyclohexane	83	19.587	19.587	0.000	86	406562	2.00	2.29	
101 2,3-Dihydroindene	117	19.792	19.792	0.000	89	429974	2.00	2.33	
102 1,2-Dichlorobenzene	146	19.792	19.792	0.000	75	250329	2.00	2.14	
103 n-Butylbenzene	91	19.905	19.905	0.000	97	503932	2.00	2.31	
104 Indene	116	19.915	19.915	0.000	85	279355	2.00	2.27	
105 Undecane	57	20.184	20.184	0.000	94	418220	2.00	2.40	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.270	20.270	0.000	97	388947	2.00	2.20	
141 1,2-Dibromo-3-Chloropropan	157	20.383	20.383	0.000	92	100210	2.00	2.06	
108 1,2,4,5-Tetramethylbenzene	119	20.658	20.658	0.000	96	479624	2.00	2.20	
107 1,2,3,5-Tetramethylbenzene	119	20.717	20.717	0.000	95	298122	2.00	2.19	
109 1,2,3,4-Tetramethylbenzene	119	21.137	21.137	0.000	96	394258	2.00	2.24	
110 Dodecane	57	21.271	21.271	0.000	92	352194	2.00	2.27	
111 1,2,4-Trichlorobenzene	180	21.513	21.513	0.000	94	81479	2.00	1.73	
112 Naphthalene	128	21.648	21.648	0.000	99	201560	2.00	1.91	
113 Benzo(b)thiophene	134	21.734	21.734	0.000	98	104027	2.00	1.99	
114 Hexachlorobutadiene	225	21.804	21.804	0.000	85	167172	2.00	1.85	
115 1,2,3-Trichlorobenzene	180	21.863	21.863	0.000	94	71353	2.00	1.71	
116 2-Methylnaphthalene	142	22.395	22.395	0.000	98	48214	6.25	4.38	
117 1-Methylnaphthalene	142	22.519	22.519	0.000	95	52201	6.25	4.47	
A 118 C6 Range	1	8.812	(8.748-8.877)		0	1901631	2.00	2.01	
A 122 Toluene Range	1	14.423	(14.393-14.453)		0	1151930	2.00	2.52	
A 123 C8 Range	1	15.097	(15.056-15.152)		0	1592516	2.00	2.12	
S 124 Xylenes, Total	100				0		6.00	7.71	
S 144 1,2-Dichloroethene, Total	1				0		4.00	4.18	

Reagents:

DCN2C00X10_00001

Amount Added: 100.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 04-Mar-2015 11:02:32

Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Laboratories

Data File: \\KNXCHROM\ChromData\MJ\20150228-1414.b\JCCVC04C-LCS.d

Injection Date: 03-Mar-2015 17:45:30

Instrument ID: MJ

Operator ID: 403648

Lims ID: LCS

Worklist Smp#: 1002

Client ID:

Purge Vol: 500.000 mL

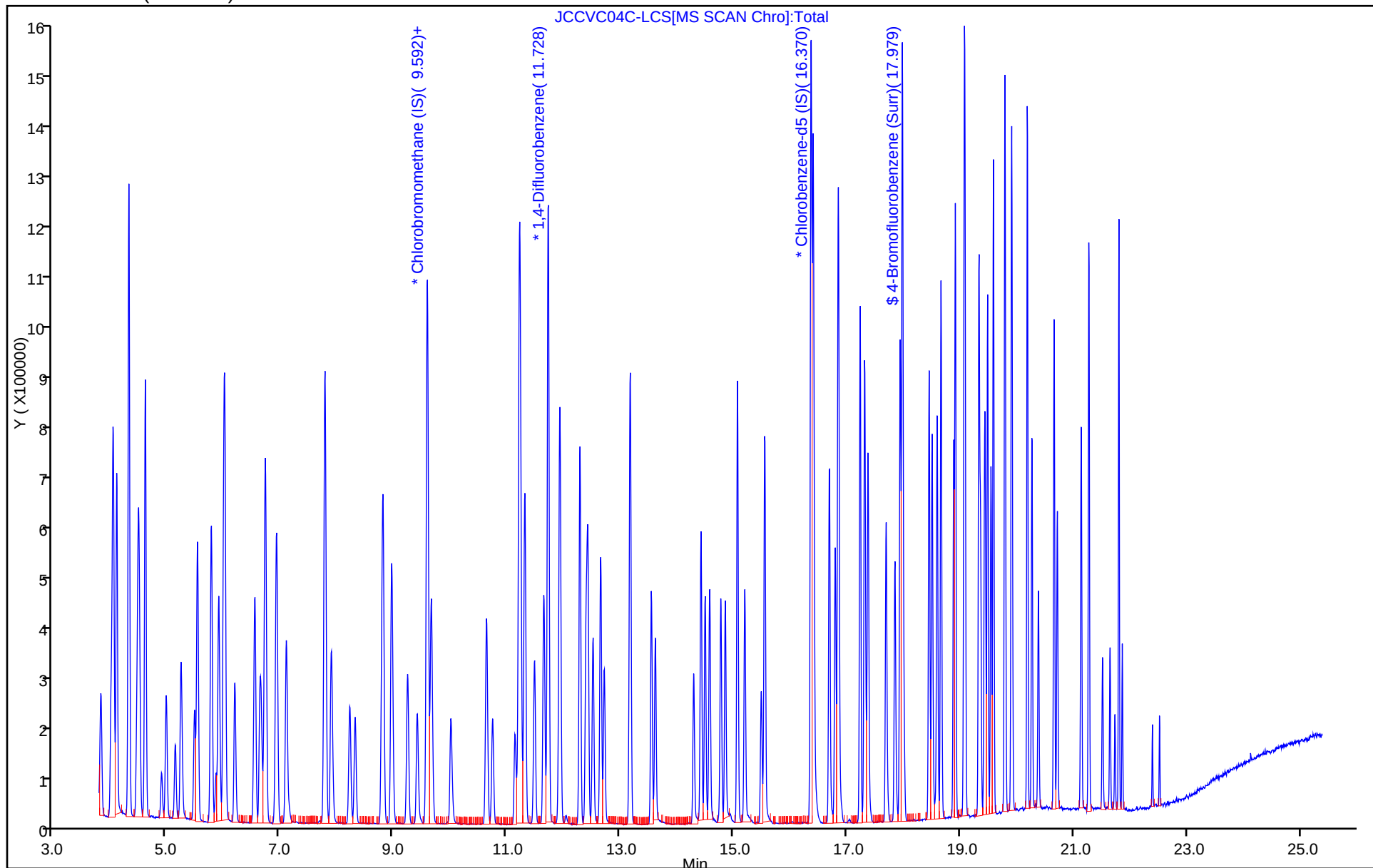
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MJ_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: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCS 140-2450/1002

Matrix: Air Lab File ID: JCCVC04-LCS.d

Analysis Method: TO 15 LL Date Collected: _____

Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 16:35

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.: 2450 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	1.55		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.80		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	1.56		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	1.61		0.080	
75-34-3	1,1-Dichloroethane	98.96	1.59		0.080	
75-35-4	1,1-Dichloroethene	96.94	1.79		0.080	
120-82-1	1,2,4-Trichlorobenzene	181.45	1.63		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	1.78		0.080	
106-93-4	1,2-Dibromoethane	187.87	1.54		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	1.68		0.080	
107-06-2	1,2-Dichloroethane	98.96	1.43		0.080	
78-87-5	1,2-Dichloropropane	112.99	1.46		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	1.92		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	1.84		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	1.59		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	1.58		0.080	
123-91-1	1,4-Dioxane	88.11	1.69		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	1.72		0.20	
78-93-3	2-Butanone	72.11	1.48		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.78		0.20	
71-43-2	Benzene	78.11	1.40		0.080	
100-44-7	Benzyl chloride	126.58	1.73		0.16	
75-27-4	Bromodichloromethane	163.83	1.58		0.080	
75-25-2	Bromoform	252.75	1.51		0.080	
74-83-9	Bromomethane	94.94	1.89		0.080	
56-23-5	Carbon tetrachloride	153.81	1.54		0.040	
108-90-7	Chlorobenzene	112.56	1.56		0.080	
75-00-3	Chloroethane	64.52	1.88		0.080	
67-66-3	Chloroform	119.38	1.60		0.080	
74-87-3	Chloromethane	50.49	1.88		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	1.57		0.080	
10061-01-5	cis-1,3-Dichloropropene	110.97	1.45		0.080	
110-82-7	Cyclohexane	84.16	1.64		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 140-2450/1002
 Matrix: Air Lab File ID: JCCVC04-LCS.d
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 03/04/2015 16:35
 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.: 2450 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	1.62		0.080	
75-71-8	Dichlorodifluoromethane	120.91	1.95		0.080	
64-17-5	Ethanol	46.07	8.92		0.80	
100-41-4	Ethylbenzene	106.17	1.72		0.080	
87-68-3	Hexachlorobutadiene	260.76	1.67		0.080	
110-54-3	Hexane	86.17	1.53		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	1.66		0.16	
75-09-2	Methylene Chloride	84.93	1.55		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	3.39		0.080	
95-47-6	o-Xylene	106.17	1.69		0.080	
100-42-5	Styrene	104.15	1.71		0.080	
75-65-0	t-Butyl alcohol	74.12	1.64		0.32	
127-18-4	Tetrachloroethene	165.83	1.71		0.080	
108-88-3	Toluene	92.14	1.64		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	1.63		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	1.51		0.080	
79-01-6	Trichloroethene	131.39	1.58		0.040	
75-69-4	Trichlorofluoromethane	137.37	1.81		0.080	
75-01-4	Vinyl chloride	62.50	1.99		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

TestAmerica Laboratories
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JCCVC04-LCS.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 04-Mar-2015 16:35:30 ALS Bottle#: 4 Worklist Smp#: 1002
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: CCV/LCS,,2,6,,CCV10
 Misc. Info.: J030415,TO15,,140-0001415-002
 Operator ID: 403648 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150228-1415.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 05-Mar-2015 13:01:05 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK036

First Level Reviewer: barlozhetskayaa

Date: 04-Mar-2015 17:05:51

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	9.586	9.586	0.000	96	264856	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.722	11.722	0.000	96	1173359	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.365	16.365	0.000	90	999917	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.978	17.978	0.000	88	681241	4.00	4.16	
6 Chlorodifluoromethane	67	4.035	4.035	0.000	97	57937	2.00	1.81	
7 Propene	41	4.046	4.046	0.000	98	226881	2.00	1.81	
8 Dichlorodifluoromethane	85	4.105	4.105	0.000	100	580556	2.00	1.95	
9 Chloromethane	52	4.315	4.315	0.000	79	79507	2.00	1.88	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.320	4.320	0.000	93	374858	2.00	1.92	
11 Acetaldehyde	44	4.487	4.487	0.000	99	246263	10.0	6.73	
12 Vinyl chloride	62	4.508	4.508	0.000	99	227350	2.00	1.99	
13 Butane	43	4.610	4.610	0.000	86	380515	2.00	1.90	
14 Butadiene	54	4.610	4.610	0.000	65	179168	2.00	1.97	
15 Bromomethane	94	4.976	4.976	0.000	99	183497	2.00	1.89	
16 Chloroethane	64	5.138	5.138	0.000	91	94465	2.00	1.88	
17 Ethanol	31	5.229	5.229	0.000	96	328669	10.0	8.92	
18 Vinyl bromide	106	5.477	5.477	0.000	99	156888	2.00	1.84	
19 2-Methylbutane	43	5.525	5.525	0.000	93	259237	2.00	1.93	
20 Trichlorofluoromethane	101	5.772	5.772	0.000	100	473142	2.00	1.81	
21 Acrolein	56	5.783	5.783	0.000	96	41828	2.00	1.39	
22 Acetonitrile	40	5.853	5.853	0.000	98	55260	2.00	1.74	
23 Acetone	58	5.902	5.902	0.000	99	137102	6.00	4.02	
24 Isopropyl alcohol	45	5.982	5.982	0.000	95	661884	6.00	4.82	
25 Pentane	72	6.009	6.009	0.000	97	29082	2.00	1.82	
26 Ethyl ether	31	6.187	6.187	0.000	90	147311	2.00	1.58	
27 1,1-Dichloroethene	96	6.542	6.542	0.000	94	150460	2.00	1.79	
28 2-Methyl-2-propanol	59	6.622	6.622	0.000	96	256462	2.00	1.64	
29 Acrylonitrile	53	6.649	6.649	0.000	95	82441	2.00	1.75	
30 1,1,2-Trichloro-1,2,2-trif	101	6.725	6.725	0.000	93	283369	2.00	1.61	
31 Methylene Chloride	84	6.918	6.918	0.000	96	131625	2.00	1.55	
32 3-Chloro-1-propene	39	6.929	6.929	0.000	93	141323	2.00	1.53	

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	7.096	7.096	0.000	100	554009	2.00	1.87	
34 trans-1,2-Dichloroethene	96	7.774	7.774	0.000	95	156094	2.00	1.63	
35 2-Methylpentane	43	7.784	7.784	0.000	96	444482	2.00	1.77	
36 Methyl tert-butyl ether	73	7.892	7.892	0.000	97	268343	2.00	1.66	
37 1,1-Dichloroethane	63	8.215	8.215	0.000	100	255843	2.00	1.59	
38 Vinyl acetate	43	8.312	8.312	0.000	100	252353	2.00	1.51	
39 2-Butanone (MEK)	72	8.780	8.780	0.000	95	46625	2.00	1.48	
40 Hexane	56	8.801	8.801	0.000	91	135225	2.00	1.53	
139 Isopropyl ether	45	8.957	8.957	0.000	97	469059	2.00	1.74	
41 cis-1,2-Dichloroethene	96	9.237	9.237	0.000	98	129298	2.00	1.57	
42 Ethyl acetate	43	9.409	9.409	0.000	98	248713	2.00	1.61	
43 Chloroform	83	9.592	9.592	0.000	96	267141	2.00	1.60	
142 Tert-butyl ethyl ether	59	9.656	9.656	0.000	97	366245	2.00	1.81	
44 Tetrahydrofuran	42	10.001	10.001	0.000	94	137098	2.00	1.62	
45 1,1,1-Trichloroethane	97	10.635	10.635	0.000	97	271282	2.00	1.55	
46 1,2-Dichloroethane	62	10.738	10.738	0.000	97	139775	2.00	1.43	
47 n-Butanol	31	11.125	11.125	0.000	92	67408	2.00	1.90	
49 Cyclohexane	69	11.211	11.211	0.000	87	73370	2.00	1.64	
48 Benzene	78	11.211	11.211	0.000	97	303170	2.00	1.40	
50 Carbon tetrachloride	117	11.233	11.233	0.000	98	246301	2.00	1.54	
51 2,3-Dimethylpentane	71	11.308	11.308	0.000	92	87121	2.00	1.58	
52 Thiophene	84	11.480	11.480	0.000	97	185094	2.00	1.51	
140 Tert-amyl methyl ether	73	11.647	11.647	0.000	95	310468	2.00	1.98	
53 Isooctane	57	11.927	11.927	0.000	98	741188	2.00	1.72	
54 n-Heptane	71	12.282	12.282	0.000	95	132782	2.00	1.67	
55 1,2-Dichloropropane	63	12.389	12.389	0.000	90	113173	2.00	1.46	
56 Trichloroethene	130	12.421	12.421	0.000	93	149205	2.00	1.58	
57 Dibromomethane	93	12.513	12.513	0.000	93	136805	2.00	1.51	
59 Dichlorobromomethane	83	12.647	12.647	0.000	98	244834	2.00	1.58	
58 1,4-Dioxane	88	12.653	12.653	0.000	92	51476	2.00	1.69	
60 Methyl methacrylate	41	12.712	12.712	0.000	94	142329	2.00	1.64	
61 Methylcyclohexane	83	13.169	13.169	0.000	90	238970	2.00	1.36	
62 4-Methyl-2-pentanone (MIBK)	43	13.540	13.540	0.000	98	316874	2.00	1.78	
63 cis-1,3-Dichloropropene	75	13.616	13.616	0.000	98	145089	2.00	1.45	
64 trans-1,3-Dichloropropene	75	14.288	14.288	0.000	97	124685	2.00	1.51	
65 Toluene	91	14.423	14.423	0.000	93	298710	2.00	1.64	
66 1,1,2-Trichloroethane	83	14.493	14.493	0.000	97	95563	2.00	1.56	
67 2-Methylthiophene	97	14.573	14.573	0.000	98	258846	2.00	1.63	
68 3-Methylthiophene	97	14.772	14.772	0.000	99	252103	2.00	1.62	
69 2-Hexanone	58	14.848	14.848	0.000	90	142385	2.00	1.95	
70 n-Octane	85	15.068	15.068	0.000	98	113469	2.00	1.67	
71 Chlorodibromomethane	129	15.192	15.192	0.000	98	199594	2.00	1.62	
72 Ethylene Dibromide	107	15.482	15.482	0.000	98	157546	2.00	1.54	
73 Tetrachloroethene	129	15.547	15.547	0.000	95	135898	2.00	1.71	
74 2,3-Dimethylheptane	43	16.397	16.397	0.000	94	424640	2.00	1.80	
75 Chlorobenzene	112	16.413	16.413	0.000	92	226697	2.00	1.56	
76 Ethylbenzene	91	16.687	16.687	0.000	99	366768	2.00	1.72	
77 2-Ethylthiophene	97	16.790	16.790	0.000	98	273972	2.00	1.67	
78 m-Xylene & p-Xylene	91	16.843	16.843	0.000	99	582631	4.00	3.39	
79 n-Nonane	57	17.231	17.231	0.000	95	248382	2.00	1.73	
81 Bromoform	173	17.311	17.311	0.000	95	160832	2.00	1.51	
80 Styrene	104	17.311	17.311	0.000	98	206522	2.00	1.71	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
82 o-Xylene	91	17.371	17.371	0.000	99	316437	2.00	1.69	
83 1,1,2,2-Tetrachloroethane	83	17.688	17.688	0.000	98	265064	2.00	1.80	
84 1,2,3-Trichloropropane	110	17.844	17.844	0.000	97	60336	2.00	1.78	
85 Isopropylbenzene	105	17.941	17.941	0.000	96	440651	2.00	1.80	
86 N-Propylbenzene	120	18.446	18.446	0.000	99	116441	2.00	1.78	
87 2-Chlorotoluene	126	18.506	18.506	0.000	98	107185	2.00	1.64	
88 4-Ethyltoluene	105	18.592	18.592	0.000	98	421292	2.00	1.78	
89 1,3,5-Trimethylbenzene	120	18.662	18.662	0.000	92	206388	2.00	1.84	
90 Alpha Methyl Styrene	118	18.882	18.882	0.000	87	162969	2.00	1.81	
91 n-Decane	57	18.914	18.914	0.000	87	284619	2.00	1.74	
92 tert-Butylbenzene	119	19.070	19.070	0.000	90	386450	2.00	1.75	
93 1,2,4-Trimethylbenzene	105	19.081	19.081	0.000	96	358749	2.00	1.78	
94 sec-Butylbenzene	105	19.329	19.329	0.000	98	521301	2.00	1.76	
95 1,3-Dichlorobenzene	146	19.356	19.356	0.000	99	185042	2.00	1.59	
96 Benzyl chloride	91	19.425	19.425	0.000	97	234355	2.00	1.73	
97 1,4-Dichlorobenzene	146	19.442	19.442	0.000	94	169978	2.00	1.58	
98 4-Isopropyltoluene	119	19.485	19.485	0.000	96	409383	2.00	1.74	
99 1,2,3-Trimethylbenzene	105	19.544	19.544	0.000	99	308976	2.00	1.91	
100 Butylcyclohexane	83	19.587	19.587	0.000	89	312026	2.00	1.79	
101 2,3-Dihydroindene	117	19.786	19.786	0.000	94	314545	2.00	1.74	
102 1,2-Dichlorobenzene	146	19.791	19.791	0.000	95	192977	2.00	1.68	
103 n-Butylbenzene	91	19.904	19.904	0.000	98	375796	2.00	1.76	
104 Indene	116	19.915	19.915	0.000	94	276016	2.00	2.29	
105 Undecane	57	20.184	20.184	0.000	93	328564	2.00	1.92	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.265	20.265	0.000	98	379994	2.00	2.19	
141 1,2-Dibromo-3-Chloropropan	157	20.383	20.383	0.000	91	60304	2.00	1.26	
108 1,2,4,5-Tetramethylbenzene	119	20.657	20.657	0.000	97	408219	2.00	1.91	
107 1,2,3,5-Tetramethylbenzene	119	20.711	20.711	0.000	94	258531	2.00	1.93	
109 1,2,3,4-Tetramethylbenzene	119	21.136	21.136	0.000	98	328638	2.00	1.90	
110 Dodecane	57	21.271	21.271	0.000	92	317551	2.00	2.09	
111 1,2,4-Trichlorobenzene	180	21.513	21.513	0.000	94	75380	2.00	1.63	
112 Naphthalene	128	21.647	21.647	0.000	99	195086	2.00	1.89	
113 Benzo(b)thiophene	134	21.733	21.733	0.000	99	94491	2.00	1.85	
114 Hexachlorobutadiene	225	21.803	21.803	0.000	96	148119	2.00	1.67	
115 1,2,3-Trichlorobenzene	180	21.862	21.862	0.000	95	68860	2.00	1.69	
116 2-Methylnaphthalene	142	22.395	22.395	0.000	100	30407	6.25	2.82	
117 1-Methylnaphthalene	142	22.519	22.519	0.000	100	35714	6.25	3.12	
A 118 C6 Range	1	8.812	(8.747-8.876)		0	1575733	2.00	1.55	
A 122 Toluene Range	1	14.423	(14.393-14.453)		0	747603	2.00	1.67	
A 123 C8 Range	1	15.097	(15.056-15.142)		0	1251349	2.00	1.70	
S 124 Xylenes, Total	100				0		6.00	5.08	

Reagents:

IBM2C00X10_00002

Amount Added: 100.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Laboratories

Data File: \\KNXCHROM\ChromData\MJ\20150228-1415.b\JCCVC04-LCS.d

Injection Date: 04-Mar-2015 16:35:30

Instrument ID: MJ

Operator ID: 403648

Lims ID: LCS

Worklist Smp#: 1002

Client ID:

Purge Vol: 500.000 mL

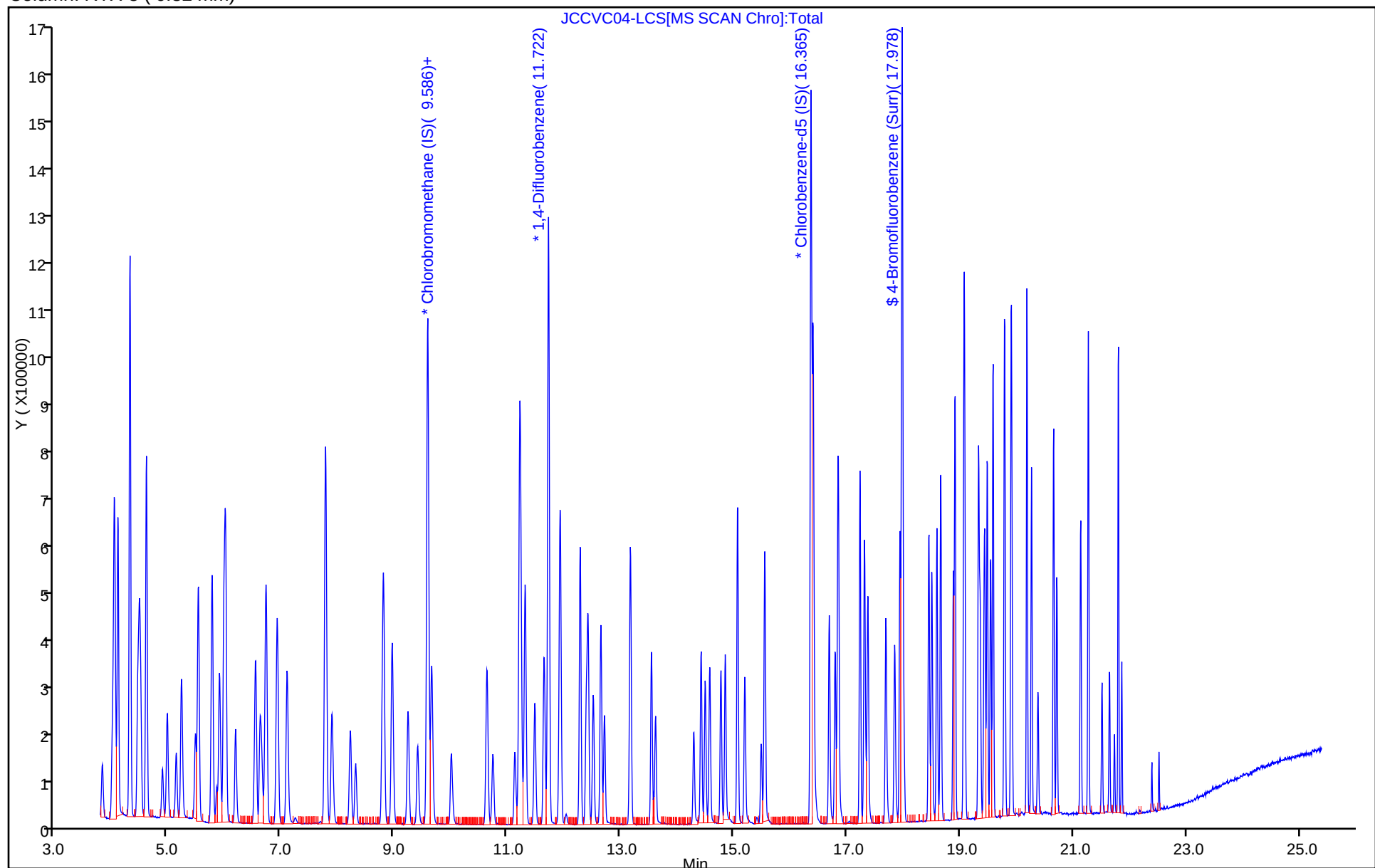
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Knoxville Job No.: 140-2797-1

SDG No.: _____

Instrument ID: MJ Start Date: 02/02/2015 12:20Analysis Batch Number: 2321 End Date: 02/03/2015 01:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-2321/1		02/02/2015 12:20	1	JBFB02.D	RTX-5 0.32 (mm)
IC 140-2321/2		02/02/2015 12:48	1	JB02icL1.D	RTX-5 0.32 (mm)
IC 140-2321/3		02/02/2015 13:43	1	JB02icL2.D	RTX-5 0.32 (mm)
IC 140-2321/4		02/02/2015 14:37	1	JB02icL3.D	RTX-5 0.32 (mm)
IC 140-2321/5		02/02/2015 15:32	1	JB02icL4.D	RTX-5 0.32 (mm)
IC 140-2321/6		02/02/2015 16:27	1	JB02icL5.D	RTX-5 0.32 (mm)
ICIS 140-2321/7		02/02/2015 17:21	1	JB02icisL6.D	RTX-5 0.32 (mm)
IC 140-2321/8		02/02/2015 18:16	1	JB02icL7.D	RTX-5 0.32 (mm)
IC 140-2321/9		02/02/2015 19:10	1	JB02icL8.D	RTX-5 0.32 (mm)
IC 140-2321/10		02/02/2015 20:05	1	JB02icL9.D	RTX-5 0.32 (mm)
ICV 140-2321/13		02/02/2015 22:48	1	JB02LCS.D	RTX-5 0.32 (mm)
ZZZZZ		02/03/2015 00:45	1		RTX-5 0.32 (mm)
ZZZZZ		02/03/2015 01:39	1		RTX-5 0.32 (mm)

150202

TA-Knoxville
TO-14 Autosampler Log

Sample	Position/Volume	psia	Date	Time
BFB	16 - 100 mL	21.1	2/2/2015	12:20:26 PM
ICLV01	11 - 101 mL	20.1	2/2/2015	12:48:29 PM
ICLV02	11 - 201 mL	19.7	2/2/2015	1:43:09 PM
ICLV03	12 - 20 mL	21	2/2/2015	2:37:50 PM
ICLV04	12 - 41 mL	20.4	2/2/2015	3:32:24 PM
ICLV05	12 - 101 mL	19.6	2/2/2015	4:27:00 PM
ICLV06	13 - 101 mL	19.9	2/2/2015	5:21:40 PM
ICLV07	13 - 201 mL	18.8	2/2/2015	6:16:14 PM
ICLV08	14 - 101 mL	29	2/2/2015	7:10:51 PM
ICLV09	14 - 201 mL	27.6	2/2/2015	8:05:16 PM
FLUSH	15 - 50 mL	29.7	2/2/2015	8:59:48 PM
ICV-LCS	15 - 101 mL	28.6	2/2/2015	9:54:12 PM
LCS-ICV	15 - 201 mL	27.3	2/2/2015	10:48:42 PM
MB500mL	16 - 501 mL	20.3	2/2/2015	11:44:23 PM
2643-04	11 - 1001 mL	17.7	2/3/2015	12:45:14 AM
2643-03	14 - 10 mL	27.1	2/3/2015	1:39:34 AM

TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 15 & KNOX-MS-0023, Rev 1

Analysis Date:	2/2/15	Instrument:	MS	Chrom WL #:	1328	TALS Batch & Event #	TO14/15: 2321 / 275 DOD: 2326 / 276	AFCEE: 2327 / 277 OHIO: 2328 / 278	
Chrom/Worklist Review						1 st	Comments		2 nd
1. Re-read each Limit Group [method editor-limit groups]						✓			
2. Verify LODV in Chrom [method editor -> edit -> MDL]						✓			
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]						✓			✓
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						✓			✓
• 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						✓			✓
• tert-butylbenzene/4-isopropyltoluene						✓			✓
• 1,3-, 1,4-, and 1,2-dichlorobenzene						✓			✓
• 1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes						✓			✓
• 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?						CF LV2-7			
MEG Review						TO	ATC	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) [F6 Σ] <i>MTXylene Acrolein</i>						✓	✓	✓	✓
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	NA	NA	NA
18. If curves were used, is correlation coefficient >0.990? [F6]						NA	NA	NA	NA
19. Is the intercept less than the RL for each curve? [F6]						NA	NA	NA	NA
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Chart-C, details]						NA	NA	NA	NA
21. Is the second source analysis within limits? [F8 - icv] <i>LCS</i>						✓	✓	✓	✓
22. Analyst/Date: <i>MS 2/3/15</i>						2nd Level Reviewer/Date: <i>RS 2/3/15</i>			
Comments:									
TALS Review						TO	ATC	DOD	OH
23. Upload ICAL						✓	✓	✓	✓
24. Graphics uploaded? [Sample List Tab]						✓	✓	✓	✓
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. If criteria not met, was a NCM generated?						NA	NA	NA	NA
28. After review in TALS, approve the method in TALS.						✓	✓	✓	✓
29. After verifying TALS is correct, lock method in Chrom <resolve any error issues>						✓	✓	✓	✓
30. Checklist & Entech report scanned, attached & assigned properly?						✓	✓	✓	✓
Analyst: <i>MS</i> Date: <i>2/2/15</i>						2nd Level Reviewer: <i>RS</i> Date: <i>2/2/15</i>			
Comments:									

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica KnoxvilleJob No.: 140-2797-1

SDG No.: _____

Instrument ID: MJStart Date: 03/03/2015 17:17Analysis Batch Number: 2449End Date: 03/04/2015 14:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-2449/1		03/03/2015 17:17	1	JBFBC04C.D	RTX-5 0.32 (mm)
CCVIS 140-2449/2		03/03/2015 17:45	1	JCCVC04C.D	RTX-5 0.32 (mm)
LCS 140-2449/1002		03/03/2015 17:45	1	JCCVC04C-LCS.d	RTX-5 0.32 (mm)
ZZZZZ		03/03/2015 19:24	1		RTX-5 0.32 (mm)
MB 140-2449/5		03/03/2015 20:18	1	J500BC03.D	RTX-5 0.32 (mm)
ZZZZZ		03/03/2015 21:13	1		RTX-5 0.32 (mm)
ZZZZZ		03/03/2015 22:08	42.08		RTX-5 0.32 (mm)
ZZZZZ		03/03/2015 23:02	1		RTX-5 0.32 (mm)
ZZZZZ		03/03/2015 23:57	148.01		RTX-5 0.32 (mm)
140-2797-1	H24-BA-2015	03/04/2015 00:51	1	JC03P105.D	RTX-5 0.32 (mm)
140-2797-2	H24-SS-2015	03/04/2015 01:46	1	JC03P106.D	RTX-5 0.32 (mm)
140-2797-3	H15-BA-2015	03/04/2015 02:40	1	JC03P107.D	RTX-5 0.32 (mm)
140-2797-4	H15-SS-2015	03/04/2015 03:36	1	JC03P108.D	RTX-5 0.32 (mm)
140-2797-5	H16-BA-2015	03/04/2015 04:30	1	JC03P109.D	RTX-5 0.32 (mm)
140-2797-6	H16-SS-2015	03/04/2015 05:26	1	JC03P110.D	RTX-5 0.32 (mm)
140-2797-7	H25-BA-2015	03/04/2015 06:22	1	JC03P111.D	RTX-5 0.32 (mm)
140-2797-8	H26-BA-2015	03/04/2015 07:17	1	JC03P112.D	RTX-5 0.32 (mm)
140-2797-9	H26-SS-2015	03/04/2015 08:12	1	JC03P113.D	RTX-5 0.32 (mm)
140-2797-10	H26-CS-2015	03/04/2015 09:06	1	JC03P114.D	RTX-5 0.32 (mm)
ZZZZZ		03/04/2015 10:01	1		RTX-5 0.32 (mm)
ZZZZZ		03/04/2015 11:19	1		RTX-5 0.32 (mm)
ZZZZZ		03/04/2015 12:14	1		RTX-5 0.32 (mm)
ZZZZZ		03/04/2015 13:08	1		RTX-5 0.32 (mm)
ZZZZZ		03/04/2015 14:03	1		RTX-5 0.32 (mm)
ZZZZZ		03/04/2015 14:58	1		RTX-5 0.32 (mm)

150303

MJ WL 2449

TA-Knoxville
TO-14 Autosampler Log

Sample	Position/Volume	psia	Date	Time
BFB	16 - 101 mL	30.3	3/3/2015	5:17:36 PM
CCV	15 - 101 mL	23.6	3/3/2015	5:45:21 PM
DNULEAK	16 - 101 mL	30.2	3/3/2015	6:56:04 PM
MB200mL	16 - 201 mL	29.9	3/3/2015	7:23:58 PM
MB500mL	16 - 500 mL	29.5	3/3/2015	8:18:47 PM
2796-01	1 - 250 mL	11.7	3/3/2015	9:13:27 PM
2796-02	2 - 10 mL	13.7	3/3/2015	10:08:02 PM
2796-03	3 - 250 mL	11.9	3/3/2015	11:02:31 PM
2796-04	4 - 20 mL	13.6	3/3/2015	11:57:14 PM
2797-01	5 - 500 mL	8.8	3/4/2015	12:51:48 AM
2797-02	6 - 502 mL	8.3	3/4/2015	1:46:32 AM
2797-03	7 - 500 mL	11.6	3/4/2015	2:40:51 AM
2797-04	8 - 502 mL	8.1	3/4/2015	3:35:58 AM
2797-05	9 - 502 mL	8	3/4/2015	4:30:37 AM
2797-06	10 - 500 mL	9.5	3/4/2015	5:26:33 AM
2797-07	11 - 500 mL	9.5	3/4/2015	6:22:34 AM
2797-08	12 - 502 mL	8.7	3/4/2015	7:17:47 AM
2797-09	13 - 502 mL	7.9	3/4/2015	8:12:41 AM
2797-10	14 - 502 mL	9	3/4/2015	9:06:55 AM
2797-10D	14 - 502 mL	6.9	3/4/2015	10:01:52 AM
dnuleak	16 - 20 mL	29.3	3/4/2015	10:50:55 AM
2812-01	1 - 10 mL	12	3/4/2015	11:19:32 AM
2812-02	2 - 10 mL	12	3/4/2015	12:14:14 PM
2812-03	3 - 10 mL	12	3/4/2015	1:08:22 PM
2812-04	4 - 10 mL	12	3/4/2015	2:02:58 PM
2812-05	5 - 10 mL	11.9	3/4/2015	2:58:13 PM

TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 15 & KNOX-MS-0023, Rev 1

Page 1 of 2

Instrument/Date	UJ 3/3/15	Routine	AFCEE	POD	OHIO
CCAL Chrom WL #	1414	CCAL Batch #	2449	3/4/15	
ICAL Chrom WL #	1328	ICAL Batch # / Event #	2301 / 275		

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]	✓		✓
2. Did BFB meet tune criteria? [F8]	✓	☐ [Failed TO-14A, but passes TO-15] (NCM#)	✓
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICAL File batch #/start/end Cal date/time)? [F8]	✓		✓
4. Is the %D ≤ 30% for all target analytes? [≤ 40% for AFCEE non-table analytes] [Chrom-F8] [TALS-Sample Results Tab]	✓	m-bz & ethbz (only) ☐ CCV - %D - LCS criteria met (NCM# <u>NCM#-2502</u>) ☐ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM#)	✓
5. 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	✓		✓
• tert-butylbenzene/4-isopropyltoluene	✓		✓
• 1,3-, 1,4-, and 1,2-dichlorobenzene	✓		✓
• 1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	✓		✓
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		✓
• 2-, and 1-methylphthalene	✓		✓
6. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		MA
7. Has the RT been updated to the method?	✓		✓
Analyst: <u>UJ</u> Date: <u>3/4/15</u>		2nd Level Reviewer: <u>JS</u> Date: <u>3/4/15</u>	
Comments:		Comments:	
8. 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]	✓		✓
9. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		✓
10. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		✓
11. 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#)	✓
12. All runs - peaks ID'd correctly and false positives removed?	✓		✓
13. If manual integrations performed, are they properly performed, correctly ID'd, baseline clearly identified, and reason given?	✓		✓
14. 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			
15. Samples outside calibration range scheduled for dilution? Samples:	MA	☐ ICAL - Range Exceeded; Minimum Dilution	MA
Chrom Review	1 st	If No, why is data reportable?	2 nd
16. 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		22812 Bags 1/20	
17. RIC inspected for proper integration for TPH?	MA		MA
18. Obvious non-TPH peaks excluded?	✓		✓
19. Individual TPH peak area < octane high point area?	✓		✓

Page 2 of 2

Analyst: XS	Date: 3/9/15	2nd Level Reviewer: 	Date: 030415
Comments:		Comments:	
J2796 - Ethylhexen + MTBE J2797 - Ethylhexen			
Example Calculation: 2796 - 2 plc On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			
$8.3257 \times 10 \times 42.08 = 17516.01$		~~17796.01~~ 3/9/15 17516.01	

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica KnoxvilleJob No.: 140-2797-1

SDG No.: _____

Instrument ID: MJStart Date: 03/04/2015 16:08Analysis Batch Number: 2450End Date: 03/05/2015 15:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-2450/1		03/04/2015 16:08	1	JBFBC04.D	RTX-5 0.32 (mm)
CCVIS 140-2450/2		03/04/2015 16:35	1	JCCVC04.D	RTX-5 0.32 (mm)
LCS 140-2450/1002		03/04/2015 16:35	1	JCCVC04-LCS.d	RTX-5 0.32 (mm)
ZZZZZ		03/04/2015 18:35	1		RTX-5 0.32 (mm)
ZZZZZ		03/04/2015 19:32	1		RTX-5 0.32 (mm)
MB 140-2450/7		03/04/2015 21:23	1	JC04MB500.D	RTX-5 0.32 (mm)
ZZZZZ		03/04/2015 22:18	1		RTX-5 0.32 (mm)
ZZZZZ		03/04/2015 23:12	1		RTX-5 0.32 (mm)
ZZZZZ		03/05/2015 01:01	1		RTX-5 0.32 (mm)
ZZZZZ		03/05/2015 01:55	1		RTX-5 0.32 (mm)
ZZZZZ		03/05/2015 02:49	1		RTX-5 0.32 (mm)
ZZZZZ		03/05/2015 03:43	1		RTX-5 0.32 (mm)
ZZZZZ		03/05/2015 04:37	1		RTX-5 0.32 (mm)
ZZZZZ		03/05/2015 05:32	1		RTX-5 0.32 (mm)
140-2797-11	DI-OA-2015	03/05/2015 06:27	1	JC04P108.D	RTX-5 0.32 (mm)
140-2797-12	H27-BA-2015	03/05/2015 07:21	1	JC04P109.D	RTX-5 0.32 (mm)
ZZZZZ		03/05/2015 10:07	1		RTX-5 0.32 (mm)
ZZZZZ		03/05/2015 11:01	1		RTX-5 0.32 (mm)
ZZZZZ		03/05/2015 11:56	1		RTX-5 0.32 (mm)
ZZZZZ		03/05/2015 12:50	1		RTX-5 0.32 (mm)
ZZZZZ		03/05/2015 13:44	1		RTX-5 0.32 (mm)
ZZZZZ		03/05/2015 14:40	1		RTX-5 0.32 (mm)
ZZZZZ		03/05/2015 15:34	5.14		RTX-5 0.32 (mm)

150304

TA-Knoxville
TO-14 Autosampler Log

Sample	Position/Volume	psia	Date	Time
BFB	16 - 100 mL	29.1	3/4/2015	4:08:03 PM
CCV	15 - 100 mL	27.6	3/4/2015	4:35:50 PM
DNUFLUSH	13 - 101 mL	19.6	3/4/2015	6:05:33 PM
LOT2816	13 - 501 mL	17.5	3/4/2015	6:35:21 PM
LOT2818	14 - 501 mL	19.8	3/4/2015	7:32:36 PM
FLOW09852	15 - 501 mL	13.1	3/4/2015	8:28:17 PM
MB500mL	16 - 500 mL	28.7	3/4/2015	9:23:37 PM
MB200mL	16 - 200 mL	28.4	3/4/2015	10:18:34 PM
2778-01	1 - 201 mL	7.1	3/4/2015	11:12:49 PM
2778-02	2 - 201 mL	8.4	3/5/2015	12:07:25 AM
2778-03	3 - 201 mL	8.7	3/5/2015	1:01:18 AM
2778-04	4 - 202 mL	10.5	3/5/2015	1:55:19 AM
2778-04D	4 - 202 mL	9.6	3/5/2015	2:49:21 AM
2778-05	5 - 202 mL	10.5	3/5/2015	3:43:13 AM
2778-06	6 - 201 mL	8.6	3/5/2015	4:37:54 AM
2823-01	7 - 502 mL	9.5	3/5/2015	5:32:43 AM
2797-11	8 - 500 mL	10	3/5/2015	6:27:40 AM
2797-12	9 - 502 mL	8.5	3/5/2015	7:21:57 AM
2810-01	10 - 20 mL	13.3	3/5/2015	8:17:14 AM
2810-02	11 - 20 mL	12.5	3/5/2015	9:12:14 AM
2778-01	1 - 11 mL	7.2	3/5/2015	10:07:18 AM
2778-02	2 - 11 mL	8.5	3/5/2015	11:01:33 AM
2778-03	3 - 11 mL	8.7	3/5/2015	11:56:05 AM
2778-05	5 - 22 mL	10.2	3/5/2015	12:50:27 PM
2778-06	6 - 81 mL	8.1	3/5/2015	1:44:54 PM
2823-01	7 - 101 mL	8.9	3/5/2015	2:40:05 PM
2778-01	1 - 10 mL	13.1	3/5/2015	3:34:43 PM

TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 15 & KNOX-MS-0023, Rev 1

Page 1 of 2

Instrument/Date	MJ	3/4/15	Routine	AFCEE	DOD	OHIO
CCAL Chrom WL #	1415	CCAL Batch #	2450			
ICAL Chrom WL #	1328	ICAL Batch # / Event #	2321 / 275	/	/	/

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]	✓		✓
2. Did BFB meet tune criteria? [F8]	✓	☐ [Failed TO-14A, but passes TO-15] (NCM# _____)	✓
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICAL File batch #/start/end Cal date/time)? [F8]	✓		✓
4. Is the %D ≤ 30% for all target analytes? <i>acetone 02778</i> [≤ 40% for AFCEE non-table analytes] [Chrom-F8] [TALS-Sample Results Tab] <i>acetone</i>	✓	☒ CCV - %D - LCS criteria met (NCM# <i>2507</i>) ☐ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM# _____)	✓
5. 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	✓		✓
• tert-butylbenzene/4-isopropyltoluene	✓		✓
• 1,3-, 1,4-, and 1,2-dichlorobenzene	✓		✓
• 1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	✓		✓
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		✓
• 2-, and 1-methylnaphthalene	✓		✓
6. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	M		M
7. Has the RT been updated to the method?	3/5/15	2nd Level Reviewer : _____	Date: <i>0309/15</i>
Analyst: _____	Date: _____	Comments: _____	
8. 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]	✓		✓
9. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		✓
10. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		✓
11. 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# _____)	✓
12. All runs - peaks ID'd correctly and false positives removed?	✓		✓
13. If manual integrations performed, are they properly performed, correctly ID'd, baseline clearly identified, and reason given?	✓		✓
14. 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 concour, Report both (NCM# _____) ☐ (5) ISTD - Matrix, DL required (NCM# _____)	✓
Sample Reason Sample Reason			
15. Samples outside calibration range scheduled for dilution?	✓	☐ ICAL - Range Exceeded; Minimum Dilution	✓
Samples:			

Chrom Review	1 st	If No, why is data reportable?	2 nd
16. 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			
17. RIC inspected for proper integration for TPH?	M		M
18. Obvious non-TPH peaks excluded?	8		J
19. Individual TPH peak area < octane high point area?			

Page 2 of 2

[illegible]

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

Lab Name: TestAmerica Knoxville Job No.: 140-2709-1

SDG No.: _____

Client Sample ID: 09683 Lab Sample ID: 140-2709-5

Matrix: Air Lab File ID: LOT2709.D

Analysis Method: TO 15 LL Date Collected: 02/06/2015 10:20

Sample wt/vol: 500(mL) Date Analyzed: 02/10/2015 07:36

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.: 2366 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-43-2	Benzene	ND		0.080	
100-44-7	Benzyl chloride	ND		0.16	
74-83-9	Bromomethane	ND		0.080	
56-23-5	Carbon tetrachloride	ND		0.040	
108-90-7	Chlorobenzene	ND		0.080	
75-00-3	Chloroethane	ND		0.080	
87-61-6	1,2,3-Trichlorobenzene	ND		0.40	
67-66-3	Chloroform	ND		0.080	
96-18-4	1,2,3-Trichloropropane	ND		0.20	
74-87-3	Chloromethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.080	
541-73-1	1,3-Dichlorobenzene	ND		0.080	
106-46-7	1,4-Dichlorobenzene	ND		0.080	
75-71-8	Dichlorodifluoromethane	ND		0.080	
75-34-3	1,1-Dichloroethane	ND		0.080	
107-06-2	1,2-Dichloroethane	ND		0.080	
75-35-4	1,1-Dichloroethene	ND		0.080	
156-59-2	cis-1,2-Dichloroethene	ND		0.080	
78-87-5	1,2-Dichloropropane	ND		0.080	
123-91-1	1,4-Dioxane	ND		0.20	
78-93-3	2-Butanone	ND		0.32	
10061-01-5	cis-1,3-Dichloropropene	ND		0.080	
95-49-8	2-Chlorotoluene	ND		0.16	
10061-02-6	trans-1,3-Dichloropropene	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.080	
591-78-6	2-Hexanone	ND		0.20	
107-05-1	3-Chloroprene	ND		0.080	
100-41-4	Ethylbenzene	ND		0.080	
622-96-8	4-Ethyltoluene	ND		0.16	
75-69-4	Trichlorofluoromethane	ND		0.080	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		0.080	
67-64-1	Acetone	ND		2.0	
75-09-2	Methylene Chloride	ND		0.20	
75-05-8	Acetonitrile	ND		0.40	
100-42-5	Styrene	ND		0.080	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2709-1
 SDG No.: _____
 Client Sample ID: 09683 Lab Sample ID: 140-2709-5
 Matrix: Air Lab File ID: LOT2709.D
 Analysis Method: TO 15 LL Date Collected: 02/06/2015 10:20
 Sample wt/vol: 500(mL) Date Analyzed: 02/10/2015 07:36
 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.: 2366 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.080	
107-02-8	Acrolein	ND		0.16	
107-13-1	Acrylonitrile	ND		0.80	
127-18-4	Tetrachloroethene	ND		0.040	
98-83-9	Alpha Methyl Styrene	ND		0.16	
108-88-3	Toluene	ND		0.12	
120-82-1	1,2,4-Trichlorobenzene	ND		0.080	
71-55-6	1,1,1-Trichloroethane	ND		0.080	
75-27-4	Bromodichloromethane	ND		0.080	
79-00-5	1,1,2-Trichloroethane	ND		0.080	
75-25-2	Bromoform	ND		0.080	
79-01-6	Trichloroethene	ND		0.040	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	ND		0.080	
106-97-8	Butane	ND		0.16	
108-67-8	1,3,5-Trimethylbenzene	ND		0.080	
75-15-0	Carbon disulfide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.040	
95-47-6	o-Xylene	ND		0.080	
75-45-6	Chlorodifluoromethane	ND		0.080	
179601-23-1	m-Xylene & p-Xylene	ND		0.080	
106-93-4	1,2-Dibromoethane	ND		0.080	
110-82-7	Cyclohexane	ND		0.20	
124-18-5	n-Decane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.080	
74-95-3	Dibromomethane	ND		0.16	
112-40-3	n-Dodecane	ND		0.40	
64-17-5	Ethanol	ND		0.80	
141-78-6	Ethyl acetate	ND		0.80	
60-29-7	Ethyl ether	ND		0.80	
142-82-5	n-Heptane	ND		0.20	
110-54-3	Hexane	ND		0.20	
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	
91-20-3	Naphthalene	ND		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2709-1

SDG No.: _____

Client Sample ID: 09683 Lab Sample ID: 140-2709-5

Matrix: Air Lab File ID: LOT2709.D

Analysis Method: TO 15 LL Date Collected: 02/06/2015 10:20

Sample wt/vol: 500(mL) Date Analyzed: 02/10/2015 07:36

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.: 2366 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
104-51-8	n-Butylbenzene	ND		0.16	
103-65-1	N-Propylbenzene	ND		0.16	
111-65-9	n-Octane	ND		0.16	
109-66-0	Pentane	ND		0.40	
115-07-1	Propene	ND		0.20	
135-98-8	sec-Butylbenzene	ND		0.16	
98-06-6	tert-Butylbenzene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		0.40	
156-60-5	trans-1,2-Dichloroethene	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	
488-23-3	1,2,3,4-Tetramethylbenzene	ND		0.080	
527-53-7	1,2,3,5-Tetramethylbenzene	ND		0.080	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.080	
934-80-5	1,2-Dimethyl-4-Ethylbenzene	ND		0.080	
90-12-0	1-Methylnaphthalene	ND		1.0	
3074-71-3	2,3-Dimethylheptane	ND		0.080	
872-55-9	2-Ethylthiophene	ND		0.080	
554-14-3	2-Methylthiophene	ND		0.080	
91-57-6	2-Methylnaphthalene	ND		1.0	
616-44-4	3-Methylthiophene	ND		0.080	
95-15-8	Benzo(b) thiophene	ND		0.16	
110-02-1	Thiophene	ND		0.080	
1678-93-9	Butylcyclohexane	ND		0.080	
526-73-8	1,2,3-Trimethylbenzene	ND		0.080	
106-99-0	1,3-Butadiene	ND		0.16	
540-84-1	2,2,4-Trimethylpentane	ND		0.20	
71-36-3	1-Butanol	ND		0.80	
565-59-3	2,3-Dimethylpentane	ND		0.080	
78-78-4	2-Methylbutane	ND		0.20	
107-83-5	2-Methylpentane	ND		0.080	
75-07-0	Acetaldehyde	ND		4.0	
98-82-8	Cumene	ND		0.16	
496-11-7	Indane	ND		0.080	
95-13-6	Indene	ND		0.16	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2709-1
SDG No.: _____
Client Sample ID: 09683 Lab Sample ID: 140-2709-5
Matrix: Air Lab File ID: LOT2709.D
Analysis Method: TO 15 LL Date Collected: 02/06/2015 10:20
Sample wt/vol: 500 (mL) Date Analyzed: 02/10/2015 07:36
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.: 2366 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
99-87-6	p-Cymene	ND		0.080	
75-65-0	tert-Butanol	ND		0.32	
108-87-2	Methylcyclohexane	ND		0.080	
111-84-2	n-Nonane	ND		0.20	

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150206-1355.b\LOT2709.D
 Lims ID: 140-2709-A-5 Lab Sample ID: 140-2709-5
 Client ID: 09683
 Sample Type: Client
 Inject. Date: 10-Feb-2015 07:36:30 ALS Bottle#: 15 Worklist Smp#: 22
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2709-a-5
 Misc. Info.: J020915,TO15,,140-0001355-022
 Operator ID: 7126 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150206-1355.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 10-Feb-2015 11:03:46 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: tajh

Date: 10-Feb-2015 11:02:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.582	9.587	-0.005	98	285535	4.00	
* 2 1,4-Difluorobenzene	114	11.729	11.728	0.001	96	1191831	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.377	16.376	0.001	89	1069654	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.985	17.990	-0.005	90	698760	3.99	
31 Methylene Chloride	84	6.914	6.914	0.000	96	5191	0.0567	
62 4-Methyl-2-pentanone (MIBK	43	13.563	13.552	0.011	97	9857	0.0544	
110 Dodecane	57	21.277	21.282	-0.005	88	5081	0.0312	
114 Hexachlorobutadiene	225	21.810	21.810	0.000	92	3020	0.0318	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150206-1355.b\LOT2709.D

Injection Date: 10-Feb-2015 07:36:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: 140-2709-A-5

Lab Sample ID: 140-2709-5

Worklist Smp#: 22

Client ID: 09683

Purge Vol: 500.000 mL

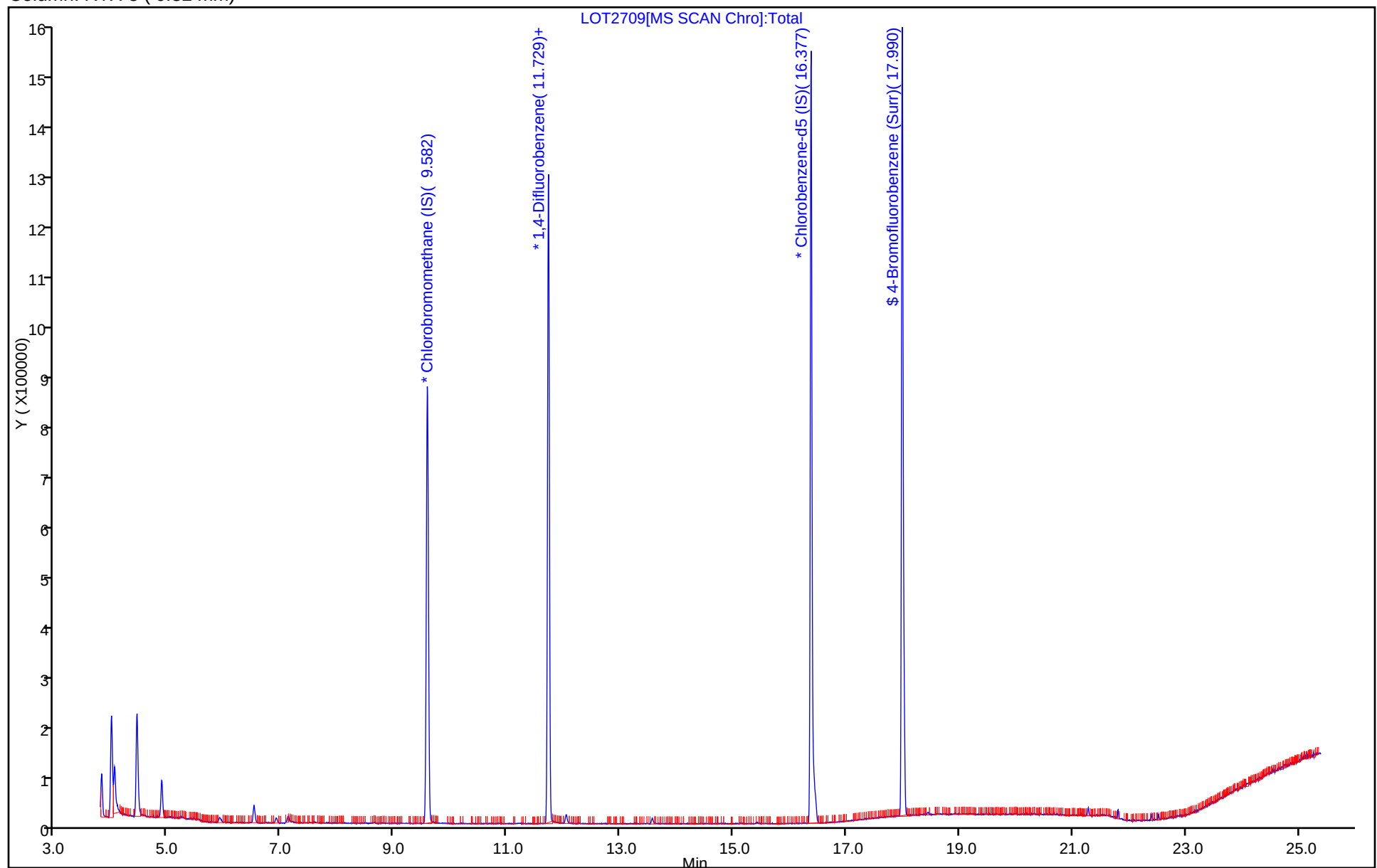
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MJ_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: TestAmerica Knoxville Job No.: 140-2714-1

SDG No.: _____

Client Sample ID: 10807 Lab Sample ID: 140-2714-3

Matrix: Air Lab File ID: LOT2714R.D

Analysis Method: TO 15 LL Date Collected: 02/09/2015 09:25

Sample wt/vol: 500(mL) Date Analyzed: 02/11/2015 07:50

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.: 2359 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-43-2	Benzene	ND		0.080	
100-44-7	Benzyl chloride	ND		0.16	
74-83-9	Bromomethane	ND		0.080	
56-23-5	Carbon tetrachloride	ND		0.040	
108-90-7	Chlorobenzene	ND		0.080	
75-00-3	Chloroethane	ND		0.080	
87-61-6	1,2,3-Trichlorobenzene	ND		0.40	
67-66-3	Chloroform	ND		0.080	
96-18-4	1,2,3-Trichloropropane	ND		0.20	
74-87-3	Chloromethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.080	
541-73-1	1,3-Dichlorobenzene	ND		0.080	
106-46-7	1,4-Dichlorobenzene	ND		0.080	
75-71-8	Dichlorodifluoromethane	ND		0.080	
75-34-3	1,1-Dichloroethane	ND		0.080	
107-06-2	1,2-Dichloroethane	ND		0.080	
75-35-4	1,1-Dichloroethene	ND		0.080	
156-59-2	cis-1,2-Dichloroethene	ND		0.080	
78-87-5	1,2-Dichloropropane	ND		0.080	
123-91-1	1,4-Dioxane	ND		0.20	
78-93-3	2-Butanone	ND		0.32	
10061-01-5	cis-1,3-Dichloropropene	ND		0.080	
95-49-8	2-Chlorotoluene	ND		0.16	
10061-02-6	trans-1,3-Dichloropropene	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.080	
591-78-6	2-Hexanone	ND		0.20	
107-05-1	3-Chloroprene	ND		0.080	
100-41-4	Ethylbenzene	ND		0.080	
622-96-8	4-Ethyltoluene	ND		0.16	
75-69-4	Trichlorofluoromethane	ND		0.080	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		0.080	
67-64-1	Acetone	ND		2.0	
75-09-2	Methylene Chloride	ND		0.20	
75-05-8	Acetonitrile	ND		0.40	
100-42-5	Styrene	ND		0.080	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2714-1

SDG No.: _____

Client Sample ID: 10807 Lab Sample ID: 140-2714-3

Matrix: Air Lab File ID: LOT2714R.D

Analysis Method: TO 15 LL Date Collected: 02/09/2015 09:25

Sample wt/vol: 500(mL) Date Analyzed: 02/11/2015 07:50

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.: 2359 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.080	
107-02-8	Acrolein	ND		0.16	
107-13-1	Acrylonitrile	ND		0.80	
127-18-4	Tetrachloroethene	ND		0.040	
98-83-9	Alpha Methyl Styrene	ND		0.16	
108-88-3	Toluene	ND		0.12	
120-82-1	1,2,4-Trichlorobenzene	ND		0.080	
71-55-6	1,1,1-Trichloroethane	ND		0.080	
75-27-4	Bromodichloromethane	ND		0.080	
79-00-5	1,1,2-Trichloroethane	ND		0.080	
75-25-2	Bromoform	ND		0.080	
79-01-6	Trichloroethene	ND		0.040	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	ND		0.080	
106-97-8	Butane	ND		0.16	
108-67-8	1,3,5-Trimethylbenzene	ND		0.080	
75-15-0	Carbon disulfide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.040	
95-47-6	o-Xylene	ND		0.080	
75-45-6	Chlorodifluoromethane	ND		0.080	
179601-23-1	m-Xylene & p-Xylene	ND		0.080	
106-93-4	1,2-Dibromoethane	ND		0.080	
110-82-7	Cyclohexane	ND		0.20	
124-18-5	n-Decane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.080	
74-95-3	Dibromomethane	ND		0.16	
112-40-3	n-Dodecane	ND		0.40	
64-17-5	Ethanol	ND		0.80	
141-78-6	Ethyl acetate	ND		0.80	
60-29-7	Ethyl ether	ND		0.80	
142-82-5	n-Heptane	ND		0.20	
110-54-3	Hexane	ND		0.20	
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	
91-20-3	Naphthalene	ND		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2714-1

SDG No.: _____

Client Sample ID: 10807 Lab Sample ID: 140-2714-3

Matrix: Air Lab File ID: LOT2714R.D

Analysis Method: TO 15 LL Date Collected: 02/09/2015 09:25

Sample wt/vol: 500 (mL) Date Analyzed: 02/11/2015 07:50

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.: 2359 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
104-51-8	n-Butylbenzene	ND		0.16	
103-65-1	N-Propylbenzene	ND		0.16	
111-65-9	n-Octane	ND		0.16	
109-66-0	Pentane	ND		0.40	
115-07-1	Propene	ND		0.20	
135-98-8	sec-Butylbenzene	ND		0.16	
98-06-6	tert-Butylbenzene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		0.40	
156-60-5	trans-1,2-Dichloroethene	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	
488-23-3	1,2,3,4-Tetramethylbenzene	ND		0.080	
527-53-7	1,2,3,5-Tetramethylbenzene	ND		0.080	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.080	
934-80-5	1,2-Dimethyl-4-Ethylbenzene	ND		0.080	
90-12-0	1-Methylnaphthalene	ND		1.0	
3074-71-3	2,3-Dimethylheptane	ND		0.080	
872-55-9	2-Ethylthiophene	ND		0.080	
554-14-3	2-Methylthiophene	ND		0.080	
91-57-6	2-Methylnaphthalene	ND		1.0	
616-44-4	3-Methylthiophene	ND		0.080	
95-15-8	Benzo(b) thiophene	ND		0.16	
110-02-1	Thiophene	ND		0.080	
1678-93-9	Butylcyclohexane	ND		0.080	
526-73-8	1,2,3-Trimethylbenzene	ND		0.080	
106-99-0	1,3-Butadiene	ND		0.16	
540-84-1	2,2,4-Trimethylpentane	ND		0.20	
71-36-3	1-Butanol	ND		0.80	
565-59-3	2,3-Dimethylpentane	ND		0.080	
78-78-4	2-Methylbutane	ND		0.20	
107-83-5	2-Methylpentane	ND		0.080	
75-07-0	Acetaldehyde	ND		4.0	
98-82-8	Cumene	ND		0.16	
496-11-7	Indane	ND		0.080	
95-13-6	Indene	ND		0.16	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2714-1
SDG No.: _____
Client Sample ID: 10807 Lab Sample ID: 140-2714-3
Matrix: Air Lab File ID: LOT2714R.D
Analysis Method: TO 15 LL Date Collected: 02/09/2015 09:25
Sample wt/vol: 500 (mL) Date Analyzed: 02/11/2015 07:50
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.: 2359 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
99-87-6	p-Cymene	ND		0.080	
75-65-0	tert-Butanol	ND		0.32	
108-87-2	Methylcyclohexane	ND		0.080	
111-84-2	n-Nonane	ND		0.20	

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MR\20150206-1349.b\LOT2714R.D
 Lims ID: 140-2714-A-3 Lab Sample ID: 140-2714-3
 Client ID: 10807
 Sample Type: Client
 Inject. Date: 11-Feb-2015 07:50:30 ALS Bottle#: 5 Worklist Smp#: 25
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 10807, RECLEANED
 Misc. Info.: 140-0001349-025
 Operator ID: Instrument ID: MR
 Method: \\KNXCHROM\ChromData\MR\20150206-1349.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 11-Feb-2015 09:27:25 Calib Date: 31-Jan-2015 21:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\MR\20150130-1312.b\RA31IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: tajh

Date: 11-Feb-2015 09:58:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.468	8.485	-0.017	98	327619	4.00	
* 2 1,4-Difluorobenzene	114	10.669	10.679	-0.010	95	1673908	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.902	16.908	-0.006	89	1425577	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	19.652	19.658	-0.006	87	938250	4.12	
13 Butane	43	4.241	4.235	0.006	93	13296	0.0787	
19 2-Methylbutane	43	4.980	4.974	0.006	90	3646	0.0235	
31 Methylene Chloride	84	6.096	6.107	-0.011	98	9689	0.0951	
62 4-Methyl-2-pentanone (MIBK	43	12.901	12.890	0.011	98	13118	0.0413	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MR\20150206-1349.b\LOT2714R.D

Injection Date: 11-Feb-2015 07:50:30

Instrument ID: MR

Operator ID:

Lims ID: 140-2714-A-3

Lab Sample ID: 140-2714-3

Worklist Smp#: 25

Client ID: 10807

Purge Vol: 500.000 mL

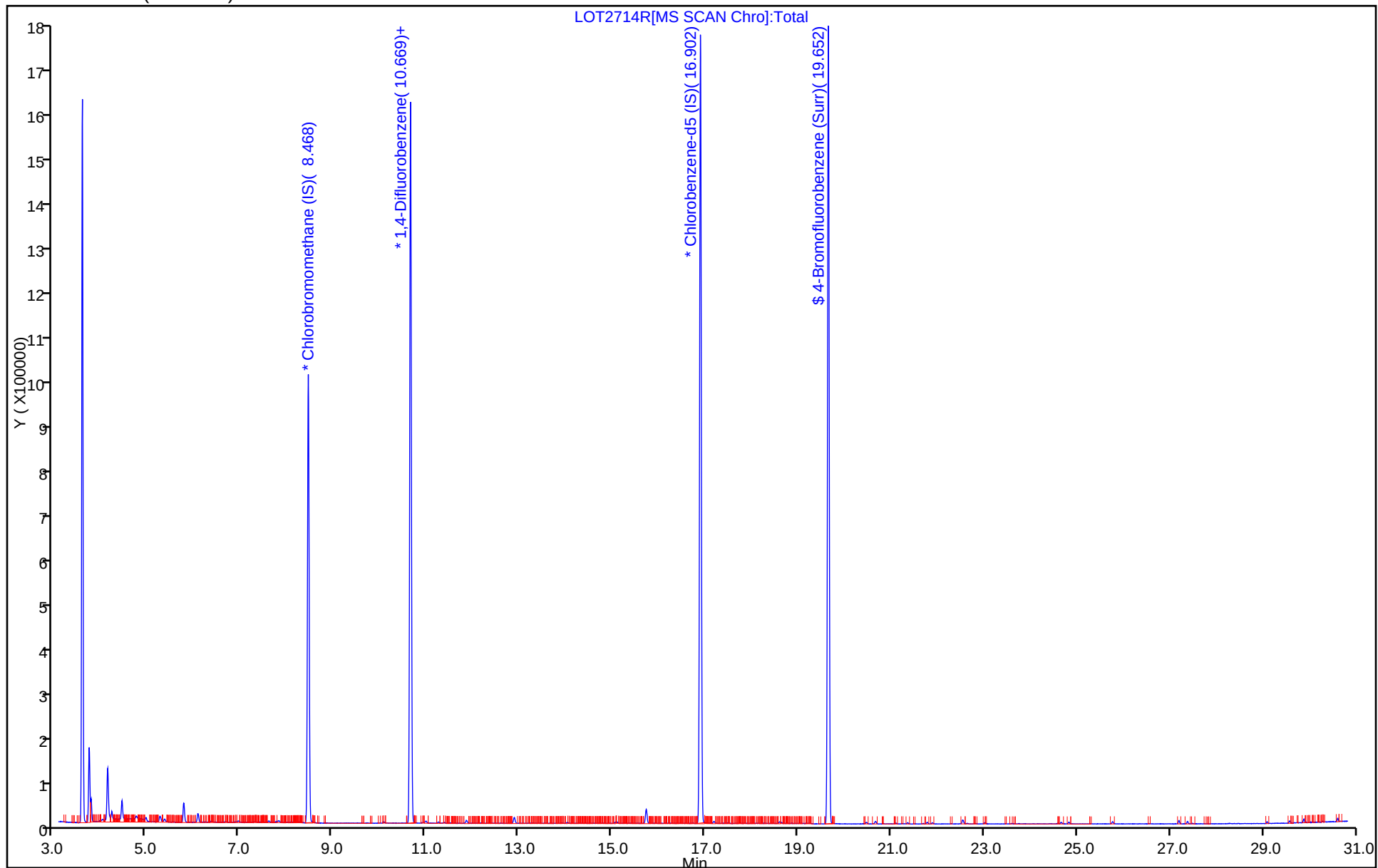
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



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

Lab Name: TestAmerica Knoxville Job No.: 140-2715-1
 SDG No.: _____
 Client Sample ID: 10806 Lab Sample ID: 140-2715-1
 Matrix: Air Lab File ID: LOT2715.D
 Analysis Method: TO 15 LL Date Collected: 02/09/2015 10:35
 Sample wt/vol: 500(mL) Date Analyzed: 02/10/2015 12:42
 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.: 2359 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-43-2	Benzene	ND		0.080	
100-44-7	Benzyl chloride	ND		0.16	
74-83-9	Bromomethane	ND		0.080	
56-23-5	Carbon tetrachloride	ND		0.040	
108-90-7	Chlorobenzene	ND		0.080	
75-00-3	Chloroethane	ND		0.080	
87-61-6	1,2,3-Trichlorobenzene	ND		0.40	
67-66-3	Chloroform	ND		0.080	
96-18-4	1,2,3-Trichloropropane	ND		0.20	
74-87-3	Chloromethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.080	
541-73-1	1,3-Dichlorobenzene	ND		0.080	
106-46-7	1,4-Dichlorobenzene	ND		0.080	
75-71-8	Dichlorodifluoromethane	ND		0.080	
75-34-3	1,1-Dichloroethane	ND		0.080	
107-06-2	1,2-Dichloroethane	ND		0.080	
75-35-4	1,1-Dichloroethene	ND		0.080	
156-59-2	cis-1,2-Dichloroethene	ND		0.080	
78-87-5	1,2-Dichloropropane	ND		0.080	
123-91-1	1,4-Dioxane	ND		0.20	
78-93-3	2-Butanone	ND		0.32	
10061-01-5	cis-1,3-Dichloropropene	ND		0.080	
95-49-8	2-Chlorotoluene	ND		0.16	
10061-02-6	trans-1,3-Dichloropropene	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.080	
591-78-6	2-Hexanone	ND		0.20	
107-05-1	3-Chloroprene	ND		0.080	
100-41-4	Ethylbenzene	ND		0.080	
622-96-8	4-Ethyltoluene	ND		0.16	
75-69-4	Trichlorofluoromethane	ND		0.080	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		0.080	
67-64-1	Acetone	ND		2.0	
75-09-2	Methylene Chloride	ND		0.20	
75-05-8	Acetonitrile	ND		0.40	
100-42-5	Styrene	ND		0.080	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2715-1
 SDG No.: _____
 Client Sample ID: 10806 Lab Sample ID: 140-2715-1
 Matrix: Air Lab File ID: LOT2715.D
 Analysis Method: TO 15 LL Date Collected: 02/09/2015 10:35
 Sample wt/vol: 500(mL) Date Analyzed: 02/10/2015 12:42
 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.: 2359 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.080	
107-02-8	Acrolein	ND		0.16	
107-13-1	Acrylonitrile	ND		0.80	
127-18-4	Tetrachloroethene	ND		0.040	
98-83-9	Alpha Methyl Styrene	ND		0.16	
108-88-3	Toluene	ND		0.12	
120-82-1	1,2,4-Trichlorobenzene	ND		0.080	
71-55-6	1,1,1-Trichloroethane	ND		0.080	
75-27-4	Bromodichloromethane	ND		0.080	
79-00-5	1,1,2-Trichloroethane	ND		0.080	
75-25-2	Bromoform	ND		0.080	
79-01-6	Trichloroethene	ND		0.040	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	ND		0.080	
106-97-8	Butane	ND		0.16	
108-67-8	1,3,5-Trimethylbenzene	ND		0.080	
75-15-0	Carbon disulfide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.040	
95-47-6	o-Xylene	ND		0.080	
75-45-6	Chlorodifluoromethane	ND		0.080	
179601-23-1	m-Xylene & p-Xylene	ND		0.080	
106-93-4	1,2-Dibromoethane	ND		0.080	
110-82-7	Cyclohexane	ND		0.20	
124-18-5	n-Decane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.080	
74-95-3	Dibromomethane	ND		0.16	
112-40-3	n-Dodecane	ND		0.40	
64-17-5	Ethanol	ND		0.80	
141-78-6	Ethyl acetate	ND		0.80	
60-29-7	Ethyl ether	ND		0.80	
142-82-5	n-Heptane	ND		0.20	
110-54-3	Hexane	ND		0.20	
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	
91-20-3	Naphthalene	ND		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2715-1
 SDG No.: _____
 Client Sample ID: 10806 Lab Sample ID: 140-2715-1
 Matrix: Air Lab File ID: LOT2715.D
 Analysis Method: TO 15 LL Date Collected: 02/09/2015 10:35
 Sample wt/vol: 500(mL) Date Analyzed: 02/10/2015 12:42
 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.: 2359 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
104-51-8	n-Butylbenzene	ND		0.16	
103-65-1	N-Propylbenzene	ND		0.16	
111-65-9	n-Octane	ND		0.16	
109-66-0	Pentane	ND		0.40	
115-07-1	Propene	ND		0.20	
135-98-8	sec-Butylbenzene	ND		0.16	
98-06-6	tert-Butylbenzene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		0.40	
156-60-5	trans-1,2-Dichloroethene	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	
488-23-3	1,2,3,4-Tetramethylbenzene	ND		0.080	
527-53-7	1,2,3,5-Tetramethylbenzene	ND		0.080	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.080	
934-80-5	1,2-Dimethyl-4-Ethylbenzene	ND		0.080	
90-12-0	1-Methylnaphthalene	ND		1.0	
3074-71-3	2,3-Dimethylheptane	ND		0.080	
872-55-9	2-Ethylthiophene	ND		0.080	
554-14-3	2-Methylthiophene	ND		0.080	
91-57-6	2-Methylnaphthalene	ND		1.0	
616-44-4	3-Methylthiophene	ND		0.080	
95-15-8	Benzo(b) thiophene	ND		0.16	
110-02-1	Thiophene	ND		0.080	
1678-93-9	Butylcyclohexane	ND		0.080	
526-73-8	1,2,3-Trimethylbenzene	ND		0.080	
106-99-0	1,3-Butadiene	ND		0.16	
540-84-1	2,2,4-Trimethylpentane	ND		0.20	
71-36-3	1-Butanol	ND		0.80	
565-59-3	2,3-Dimethylpentane	ND		0.080	
78-78-4	2-Methylbutane	ND		0.20	
107-83-5	2-Methylpentane	ND		0.080	
75-07-0	Acetaldehyde	ND		4.0	
98-82-8	Cumene	ND		0.16	
496-11-7	Indane	ND		0.080	
95-13-6	Indene	ND		0.16	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2715-1
SDG No.: _____
Client Sample ID: 10806 Lab Sample ID: 140-2715-1
Matrix: Air Lab File ID: LOT2715.D
Analysis Method: TO 15 LL Date Collected: 02/09/2015 10:35
Sample wt/vol: 500 (mL) Date Analyzed: 02/10/2015 12:42
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.: 2359 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
99-87-6	p-Cymene	ND		0.080	
75-65-0	tert-Butanol	ND		0.32	
108-87-2	Methylcyclohexane	ND		0.080	
111-84-2	n-Nonane	ND		0.20	

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MR\20150206-1349.b\LOT2715.D
 Lims ID: 140-2715-A-1 Lab Sample ID: 140-2715-1
 Client ID: 10806
 Sample Type: Client
 Inject. Date: 10-Feb-2015 12:42:30 ALS Bottle#: 2 Worklist Smp#: 5
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 10806
 Misc. Info.: 140-0001349-005
 Operator ID: Instrument ID: MR
 Method: \\KNXCHROM\ChromData\MR\20150206-1349.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 11-Feb-2015 09:23:41 Calib Date: 31-Jan-2015 21:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\MR\20150130-1312.b\RA31IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: tajh

Date: 10-Feb-2015 13:32:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.468	8.485	-0.017	98	326352	4.00	
* 2 1,4-Difluorobenzene	114	10.668	10.679	-0.011	95	1681027	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.907	16.908	-0.001	89	1453272	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	19.658	19.658	0.000	91	974878	4.20	
31 Methylene Chloride	84	6.090	6.107	-0.017	97	7853	0.0774	
40 Hexane	56	7.832	7.838	-0.006	85	2156	0.0191	
62 4-Methyl-2-pentanone (MIBK	43	12.901	12.890	0.011	98	15645	0.0490	

Reagents:

MAissur1_00002 Amount Added: 40.00 Units: mL Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MR\20150206-1349.b\LOT2715.D

Injection Date: 10-Feb-2015 12:42:30

Instrument ID: MR

Operator ID:

Lims ID: 140-2715-A-1

Lab Sample ID: 140-2715-1

Worklist Smp#: 5

Client ID: 10806

Purge Vol: 500.000 mL

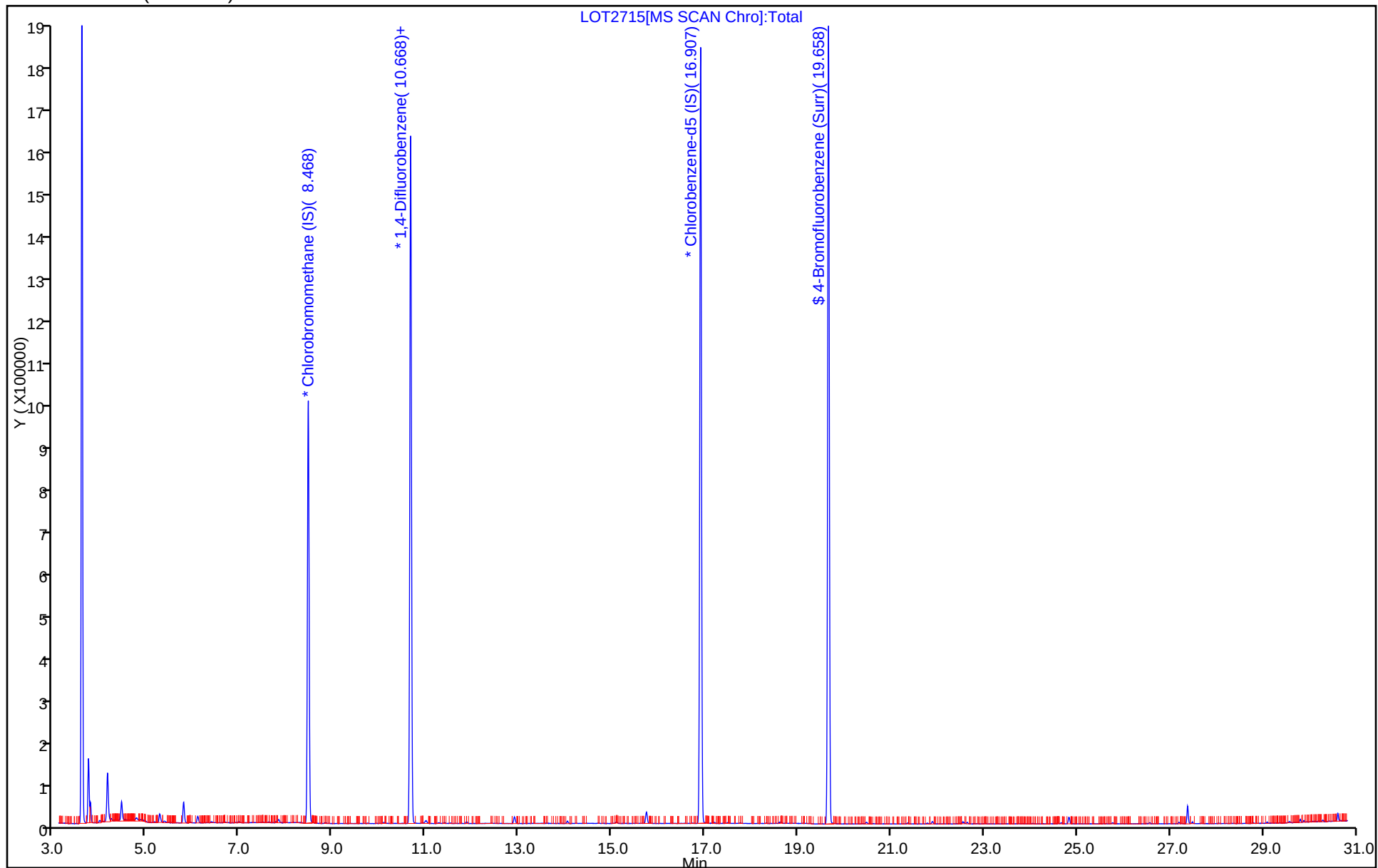
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Shipping and Receiving Documents

Client Contact Information		Project Manager: Gary Priscott		Sampled By: Gary Priscott		1 of 1 COCs for Box	
Company: NYSDEC		Phone: 607 775 2545		Joshua Cook			
Address: 1671 Rt 11		Site Contact: gary.priscott@dec.ny.gov					
City/State/Zip: Kirkwood/NY		TAL Contact:					
Phone: 607 775 2545							
FAX:							
Project Name: Fmr Johnson Green - Off Site		Analysis Turnaround Time					
Site/Location: C-755019A		X Standard (Specify) 30 DAY					
PO# Call Out 121941		Rush (Specify)					
Sample Identification		Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID
H24-BA-2015	2/23	0948	0842	-30	-5	10600	11045
H24-SS-2015	1	0945	0844	-30	-5	10822	09862
H15-BA-2015	1	1126	1026	-29	0	11051	10775
H15-SS-2015	1	1126	1026	-30	-6	10460	09518
H16-BA-2015	1	1058	1017	-29.5	-5	09866	10134
H16-SS-2015	1	1058	1017	-30	-2	09945	10504
Sampled by: Gary Priscott Joshua Cook		Temperature (Fahrenheit)		Ambient		Received @ ambient, 2 boxes Fedex SO, T-K# 62294788 1201 30 day TAT, KU 2/27/15	
		Start	Interior	Ambient			
		Stop	Ambient				
		Pressure (inches of Hg)		Ambient		No custody seal	
		Start	Ambient				
		Stop	Ambient				
Special Instructions/QC Requirements & Comments: BA = BASEMENT INDOOR AIR SS = BASEMENT SUB-SLAB VAPOR		Run H15-BA-2015 even through 0 and vacuum					

Canisters Shipped by:	Date/Time:	Canisters Received by:	Date/Time:
Relinquished by:	2/26/15 1358	Received by:	2/27/15 1115
Relinquished by:	2/26/15 19:00	Received by:	2/27/15 1115

12 gals
12 floor
12 cc

Canister Samples Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

Client Contact Information Company: <u>NYSEC</u> Address: <u>1679 Rt 11</u> City/State/Zip: <u>Kirkwood / NY</u> Phone: <u>607 775 2545</u> FAX: _____		Project Manager: <u>Gary Priscott</u> Phone: <u>607 775 2545</u> Site Contact: <u>gary.priscott@ceder.ny.gov</u> TAL Contact: _____		Sampled By: <u>Gary Priscott</u> <u>Joshua Cooke</u>		1 of 1 COCs for Box	
Project Name: <u>Fmr Johnson Gun Off Site</u> Site/Location: <u>CT55019A</u> <u>Box Call 10/12/1941</u>		Analysis Turnaround Time Standard (Specify): _____ Rush (Specify): _____					
Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID
H25-BA-2015	2/23/2015 - 2/24/2015	12:10	11:30	-30	-21	09551	10576
H26-BA-2015		14:59	14:24	-29.5	-2.5	10791	10777
H26-SS-2015		14:58	14:24	-29.5	-5	10152	09941
H26-CS-2015		14:58	14:22	-29	-3	10198	10090
D1-OA-2015		15:20	14:30	-30	-3	10436	10734
H27-BA-2015	2/24/15 - 2/25/15	09:42	08:30	-28	-2	10435	09526
Sampled by: <u>Gary Priscott</u> <u>Joshua Cooke</u>							
Temperature (Fahrenheit) Interior: _____ Ambient: _____ Start: _____ ~ 20°F Stop: _____ ~ 20°F							
Pressure (inches of Hg) Interior: _____ Ambient: _____ Start: _____ ~ 30.5 Stop: _____ ~ 30.25							
Special Instructions/QC Requirements & Comments: BA: Basement Indoor Air SS: Basement Sub-slab vapor CS: Crawl Space Indoor Air OA: Outdoor (Ambient) Air							
Canisters Shipped by: _____		Date/Time: _____		Canisters Received by: _____		Date/Time: _____	
Samples Relinquished by: _____		Date/Time: <u>2/26/15 13:58</u>		Received by: <u>REING/11/14, Sgr</u>		Date/Time: _____	
Relinquished by: <u>REING/11/14</u>		Date/Time: <u>2-26-15 19:10</u>		Received by: _____		Date/Time: _____	

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G1
Date: 2/28/2015

[illegible]

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 140-2797-1

Login Number: 2797

List Source: TestAmerica Knoxville

List Number: 1

Creator: Wilson, Ken

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

ANALYTICAL REPORT

Job Number: 140-2815-1

Job Description: Former Ithaca Gun Factory # C755019A

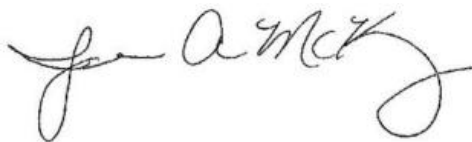
For:

New York State D.E.C.

1679 Rte. 11

Kirkwood, NY 13795

Attention: Gary Priscott



Approved for release.
Jamie A McKinney
Senior Project Manager
3/16/2015 12:10 PM

Jamie A McKinney, Senior Project Manager
5815 Middlebrook Pike, Knoxville, TN, 37921
(865)291-3000
jamie.mckinney@testamericainc.com
03/16/2015

The test results in this report meet all 2003 NELAC and 2003 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Table of Contents

Cover Title Page	1
Data Summaries	4
Definitions	4
Case Narrative	5
Detection Summary	6
Client Sample Results	13
Default Detection Limits	45
Surrogate Summary	47
QC Sample Results	48
QC Association	53
Chronicle	54
Certification Summary	57
Method Summary	58
Sample Summary	59
Organic Sample Data	60
Air - GC/MS VOA	60
Method TO15 Low Level	60
Method TO15 Low Level QC Summary	61
Method TO15 Low Level Sample Data	69
Standards Data	301
Method TO15 Low Level ICAL Data	301
Method TO15 Low Level CCAL Data	378
Raw QC Data	392
Method TO15 Low Level Tune Data	392
Method TO15 Low Level Blank Data	400
Method TO15 Low Level LCS/LCSD Data	406

Table of Contents

Method TO15 Low Level Run Logs	412
Clean Canister Certification	419
Clean Canister Data	419
Shipping and Receiving Documents	443
Client Chain of Custody	444
Sample Receipt Checklist	447

Definitions/Glossary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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
140-2815-1

Comments

No additional comments.

Receipt

The samples were received on 3/3/2015 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air - GC/MS VOA

Method(s) TO 14A, 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 TestAmerica Knoxville.

Method(s) TO 15 LL, TO-14A, TO-15: Quantitation for ethanol was previously based on a one-point calibration standard at the reporting limit. This compound was quantitated based on a minimum 5-point calibration curve. The following interim criteria are being used until the method performance for this additional analyte is fully established:

- The initial calibration acceptance criteria is set at 40% RSD. Any compound greater than 40% RSD was changed to a linear or quadratic model with an $r^2 \geq 0.990$ acceptance criteria.
- There are no criteria for second source standard verification % D. The second source standard was independently prepared from the same parent mixture (as the primary source).
- The continuing calibration verification criteria are set at 50% D. Any compound greater than 50% D must pass the LCS criteria.
- The LCS recovery criteria are set at 20% to 180%.
- A method detection limit study has not been performed. The detection of the analytes is demonstrated by detection of the calibration standard at the reporting limit. No estimated results are reported below the reporting limit.

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: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H20-BA-2015

Lab Sample ID: 140-2815-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	0.35		0.32		ppb v/v	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	0.42		0.20		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.15		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.072		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.36		0.080		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.48		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.50		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	10		0.80		ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.094		0.080		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.41		0.080		ppb v/v	1		TO 15 LL	Total/NA
o-Xylene	0.15		0.080		ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.67		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.20		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.27		0.040		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.42		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	1.0		0.94		ug/m3	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	1.7		0.82		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.49		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.45		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	1.8		0.39		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.99		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.5		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	19		1.5		ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.41		0.35		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	1.8		0.35		ug/m3	1		TO 15 LL	Total/NA
o-Xylene	0.65		0.35		ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	4.6		0.54		ug/m3	1		TO 15 LL	Total/NA
Toluene	0.77		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	1.4		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	2.3		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: DUP1-2015

Lab Sample ID: 140-2815-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.16		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.12		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.36		0.080		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.48		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.53		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	9.9		0.80		ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.099		0.080		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.45		0.080		ppb v/v	1		TO 15 LL	Total/NA
o-Xylene	0.16		0.080		ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.74		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.22		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.28		0.040		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.41		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.52		0.26		ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Knoxville

Detection Summary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: DUP1-2015 (Continued)

Lab Sample ID: 140-2815-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.73		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	1.8		0.39		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.99		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.6		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	19		1.5		ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.43		0.35		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	2.0		0.35		ug/m3	1		TO 15 LL	Total/NA
o-Xylene	0.68		0.35		ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	5.0		0.54		ug/m3	1		TO 15 LL	Total/NA
Toluene	0.83		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	1.5		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	2.3		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: D3-OA-2015

Lab Sample ID: 140-2815-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.15		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.062		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.52		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.46		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	2.4		0.80		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
Benzene	0.48		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.39		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	1.1		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.3		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	4.6		1.5		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.2		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H23-BA-2015

Lab Sample ID: 140-2815-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.15		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.079		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.093		0.080		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.45		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.50		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	6.4		0.80		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.14		0.040		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
Benzene	0.49		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.50		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.45		0.39		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.93		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.5		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	12		1.5		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	0.75		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.2		0.45		ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Knoxville

Detection Summary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H23-SS-2015

Lab Sample ID: 140-2815-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	0.14		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.48		0.32		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.45		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	2.2		0.80		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.094		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.12		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.19		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	0.82		0.48		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	1.4		0.94		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.2		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	4.1		1.5		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.41		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	0.46		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.1		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: DUP2-2015

Lab Sample ID: 140-2815-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	0.087		0.080		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.46		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	1.1		0.80		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.20		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.088		0.080		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.19		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	0.52		0.48		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.3		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	2.0		1.5		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	0.69		0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.38		0.35		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.1		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: D2-OA-2015

Lab Sample ID: 140-2815-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	0.44		0.32		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.20		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.074		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.64		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.51		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	7.5		0.80		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.11		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.18		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.24		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	1.3		0.94		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.62		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.46		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	1.3		0.41		ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Knoxville

Detection Summary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: D2-OA-2015 (Continued)

Lab Sample ID: 140-2815-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	2.5		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	14		1.5		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.46		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	0.67		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.4		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H28-BA-2015

Lab Sample ID: 140-2815-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.21		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.067		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.082		0.080		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.64		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.47		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	230	E	0.80		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.096		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.18		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.22		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol - DL	260	D	8.0		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.67		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.42		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.40		0.39		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	1.3		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.3		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	430	E	1.5		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.42		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	0.69		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.3		0.45		ug/m3	1		TO 15 LL	Total/NA
Ethanol - DL	500	D	15		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H28-SS-2015

Lab Sample ID: 140-2815-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.46		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.41		0.32		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.22		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	1.8		0.080		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.46		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	2.0		0.80		ppb v/v	1		TO 15 LL	Total/NA
Hexane	0.21		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.16		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.21		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	1.1		0.040		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
1,1,1-Trichloroethane	2.5		0.44		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	1.2		0.94		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	1.4		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	9.0		0.39		ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Knoxville

Detection Summary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H28-SS-2015 (Continued)

Lab Sample ID: 140-2815-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	2.3		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	3.8		1.5		ug/m3	1		TO 15 LL	Total/NA
Hexane	0.72		0.70		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.69		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	0.80		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	5.8		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.2		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H3-BA-2015

Lab Sample ID: 140-2815-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.10		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.50		0.32		ppb v/v	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	0.28		0.20		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.23		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.12		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.50		0.080		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.64		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.50		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	8.0		0.80		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.29		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.14		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.53		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.87		0.040		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.29		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.55		0.44		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	1.5		0.94		ug/m3	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	1.1		0.82		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.74		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.77		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	2.4		0.39		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	1.3		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.5		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	15		1.5		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	1.0		0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.63		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	2.0		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	4.7		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.6		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H3-SS-2015

Lab Sample ID: 140-2815-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.13		0.080		ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.15		0.080		ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.15		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.39		0.32		ppb v/v	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	0.24		0.20		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.16		0.080		ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Knoxville

Detection Summary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H3-SS-2015 (Continued)

Lab Sample ID: 140-2815-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.11		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.36		0.080		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.49		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	2.6		0.80		ppb v/v	1		TO 15 LL	Total/NA
Hexane	0.42		0.20		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.29		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.41		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
Tetrachloroethene	0.17		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.53		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.83		0.040		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.24		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.70		0.44		ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.74		0.39		ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.73		0.39		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	1.1		0.94		ug/m3	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	0.99		0.82		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.52		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.68		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	1.8		0.39		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.4		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	4.9		1.5		ug/m3	1		TO 15 LL	Total/NA
Hexane	1.5		0.70		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	0.99		0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	1.8		0.35		ug/m3	1		TO 15 LL	Total/NA
o-Xylene	0.54		0.35		ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	1.1		0.54		ug/m3	1		TO 15 LL	Total/NA
Toluene	2.0		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	4.4		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.3		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H15-BA2-2015

Lab Sample ID: 140-2815-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	0.32		0.32		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.16		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.068		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.52		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.47		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	5.4		0.80		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.13		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.046		0.040		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
2-Butanone	0.94		0.94		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.52		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.43		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	1.1		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.3		0.40		ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Knoxville

Detection Summary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H15-BA2-2015 (Continued)

Lab Sample ID: 140-2815-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethanol	10		1.5		ug/m3	1		TO 15 LL	Total/NA
Toluene	0.48		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	0.25		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.2		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H2-BA-2015

Lab Sample ID: 140-2815-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.30		0.080		ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.090		0.080		ppb v/v	1		TO 15 LL	Total/NA
2,2,4-Trimethylpentane	0.31		0.20		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.23		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.072		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.53		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.49		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	18		0.80		ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.19		0.080		ppb v/v	1		TO 15 LL	Total/NA
Hexane	1.1		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.71		0.080		ppb v/v	1		TO 15 LL	Total/NA
o-Xylene	0.28		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	0.077		0.040		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.25		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	1.5		0.39		ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.44		0.39		ug/m3	1		TO 15 LL	Total/NA
2,2,4-Trimethylpentane	1.5		0.93		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.73		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.46		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	1.1		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.4		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	35		1.5		ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.84		0.35		ug/m3	1		TO 15 LL	Total/NA
Hexane	4.0		0.70		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	3.1		0.35		ug/m3	1		TO 15 LL	Total/NA
o-Xylene	1.2		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	4.7		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	0.41		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.4		0.45		ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H20-BA-2015

Lab Sample ID: 140-2815-1

Date Collected: 02/27/15 10:09

Matrix: Air

Date Received: 03/03/15 09:20

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			03/05/15 14:23	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/05/15 14:23	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/05/15 14:23	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/05/15 14:23	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/05/15 14:23	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/05/15 14:23	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/05/15 14:23	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 14:23	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/05/15 14:23	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 14:23	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/05/15 14:23	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/05/15 14:23	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/05/15 14:23	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 14:23	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 14:23	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 14:23	1
1,4-Dioxane	ND		0.20		ppb v/v			03/05/15 14:23	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/05/15 14:23	1
2-Butanone	0.35		0.32		ppb v/v			03/05/15 14:23	1
4-Methyl-2-pentanone (MIBK)	0.42		0.20		ppb v/v			03/05/15 14:23	1
Benzene	0.15		0.080		ppb v/v			03/05/15 14:23	1
Benzyl chloride	ND		0.16		ppb v/v			03/05/15 14:23	1
Bromodichloromethane	ND		0.080		ppb v/v			03/05/15 14:23	1
Bromoform	ND		0.080		ppb v/v			03/05/15 14:23	1
Bromomethane	ND		0.080		ppb v/v			03/05/15 14:23	1
Carbon tetrachloride	0.072		0.040		ppb v/v			03/05/15 14:23	1
Chlorobenzene	ND		0.080		ppb v/v			03/05/15 14:23	1
Chloroethane	ND		0.080		ppb v/v			03/05/15 14:23	1
Chloroform	0.36		0.080		ppb v/v			03/05/15 14:23	1
Chloromethane	0.48		0.20		ppb v/v			03/05/15 14:23	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 14:23	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 14:23	1
Cyclohexane	ND		0.20		ppb v/v			03/05/15 14:23	1
Dibromochloromethane	ND		0.080		ppb v/v			03/05/15 14:23	1
Dichlorodifluoromethane	0.50		0.080		ppb v/v			03/05/15 14:23	1
Ethanol	10		0.80		ppb v/v			03/05/15 14:23	1
Ethylbenzene	0.094		0.080		ppb v/v			03/05/15 14:23	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/05/15 14:23	1
Hexane	ND		0.20		ppb v/v			03/05/15 14:23	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/05/15 14:23	1
Methylene Chloride	ND		0.20		ppb v/v			03/05/15 14:23	1
m-Xylene & p-Xylene	0.41		0.080		ppb v/v			03/05/15 14:23	1
o-Xylene	0.15		0.080		ppb v/v			03/05/15 14:23	1
Styrene	ND		0.080		ppb v/v			03/05/15 14:23	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/05/15 14:23	1
Tetrachloroethene	0.67		0.080		ppb v/v			03/05/15 14:23	1
Toluene	0.20		0.12		ppb v/v			03/05/15 14:23	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 14:23	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H20-BA-2015

Lab Sample ID: 140-2815-1

Date Collected: 02/27/15 10:09

Matrix: Air

Date Received: 03/03/15 09:20

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			03/05/15 14:23	1
Trichloroethene	0.27		0.040		ppb v/v			03/05/15 14:23	1
Trichlorofluoromethane	0.42		0.080		ppb v/v			03/05/15 14:23	1
Vinyl chloride	ND		0.080		ppb v/v			03/05/15 14:23	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/05/15 14:23	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/05/15 14:23	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/05/15 14:23	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/05/15 14:23	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/05/15 14:23	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/05/15 14:23	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/05/15 14:23	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 14:23	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/05/15 14:23	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 14:23	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/05/15 14:23	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/05/15 14:23	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/05/15 14:23	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 14:23	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 14:23	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 14:23	1
1,4-Dioxane	ND		0.72		ug/m3			03/05/15 14:23	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/05/15 14:23	1
2-Butanone	1.0		0.94		ug/m3			03/05/15 14:23	1
4-Methyl-2-pentanone (MIBK)	1.7		0.82		ug/m3			03/05/15 14:23	1
Benzene	0.49		0.26		ug/m3			03/05/15 14:23	1
Benzyl chloride	ND		0.83		ug/m3			03/05/15 14:23	1
Bromodichloromethane	ND		0.54		ug/m3			03/05/15 14:23	1
Bromoform	ND		0.83		ug/m3			03/05/15 14:23	1
Bromomethane	ND		0.31		ug/m3			03/05/15 14:23	1
Carbon tetrachloride	0.45		0.25		ug/m3			03/05/15 14:23	1
Chlorobenzene	ND		0.37		ug/m3			03/05/15 14:23	1
Chloroethane	ND		0.21		ug/m3			03/05/15 14:23	1
Chloroform	1.8		0.39		ug/m3			03/05/15 14:23	1
Chloromethane	0.99		0.41		ug/m3			03/05/15 14:23	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 14:23	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 14:23	1
Cyclohexane	ND		0.69		ug/m3			03/05/15 14:23	1
Dibromochloromethane	ND		0.68		ug/m3			03/05/15 14:23	1
Dichlorodifluoromethane	2.5		0.40		ug/m3			03/05/15 14:23	1
Ethanol	19		1.5		ug/m3			03/05/15 14:23	1
Ethylbenzene	0.41		0.35		ug/m3			03/05/15 14:23	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/05/15 14:23	1
Hexane	ND		0.70		ug/m3			03/05/15 14:23	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/05/15 14:23	1
Methylene Chloride	ND		0.69		ug/m3			03/05/15 14:23	1
m-Xylene & p-Xylene	1.8		0.35		ug/m3			03/05/15 14:23	1
o-Xylene	0.65		0.35		ug/m3			03/05/15 14:23	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H20-BA-2015

Lab Sample ID: 140-2815-1

Date Collected: 02/27/15 10:09

Matrix: Air

Date Received: 03/03/15 09:20

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			03/05/15 14:23	1
t-Butyl alcohol	ND		0.97		ug/m3			03/05/15 14:23	1
Tetrachloroethene	4.6		0.54		ug/m3			03/05/15 14:23	1
Toluene	0.77		0.45		ug/m3			03/05/15 14:23	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 14:23	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 14:23	1
Trichloroethene	1.4		0.21		ug/m3			03/05/15 14:23	1
Trichlorofluoromethane	2.3		0.45		ug/m3			03/05/15 14:23	1
Vinyl chloride	ND		0.20		ug/m3			03/05/15 14:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		60 - 140					03/05/15 14:23	1

Client Sample ID: DUP1-2015

Lab Sample ID: 140-2815-2

Date Collected: 02/27/15 00:00

Matrix: Air

Date Received: 03/03/15 09:20

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			03/05/15 15:12	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/05/15 15:12	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/05/15 15:12	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/05/15 15:12	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/05/15 15:12	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/05/15 15:12	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/05/15 15:12	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 15:12	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/05/15 15:12	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 15:12	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/05/15 15:12	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/05/15 15:12	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/05/15 15:12	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 15:12	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 15:12	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 15:12	1
1,4-Dioxane	ND		0.20		ppb v/v			03/05/15 15:12	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/05/15 15:12	1
2-Butanone	ND		0.32		ppb v/v			03/05/15 15:12	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/05/15 15:12	1
Benzene	0.16		0.080		ppb v/v			03/05/15 15:12	1
Benzyl chloride	ND		0.16		ppb v/v			03/05/15 15:12	1
Bromodichloromethane	ND		0.080		ppb v/v			03/05/15 15:12	1
Bromoform	ND		0.080		ppb v/v			03/05/15 15:12	1
Bromomethane	ND		0.080		ppb v/v			03/05/15 15:12	1
Carbon tetrachloride	0.12		0.040		ppb v/v			03/05/15 15:12	1
Chlorobenzene	ND		0.080		ppb v/v			03/05/15 15:12	1
Chloroethane	ND		0.080		ppb v/v			03/05/15 15:12	1
Chloroform	0.36		0.080		ppb v/v			03/05/15 15:12	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: DUP1-2015

Lab Sample ID: 140-2815-2

Date Collected: 02/27/15 00:00

Matrix: Air

Date Received: 03/03/15 09:20

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	0.48		0.20		ppb v/v			03/05/15 15:12	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 15:12	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 15:12	1
Cyclohexane	ND		0.20		ppb v/v			03/05/15 15:12	1
Dibromochloromethane	ND		0.080		ppb v/v			03/05/15 15:12	1
Dichlorodifluoromethane	0.53		0.080		ppb v/v			03/05/15 15:12	1
Ethanol	9.9		0.80		ppb v/v			03/05/15 15:12	1
Ethylbenzene	0.099		0.080		ppb v/v			03/05/15 15:12	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/05/15 15:12	1
Hexane	ND		0.20		ppb v/v			03/05/15 15:12	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/05/15 15:12	1
Methylene Chloride	ND		0.20		ppb v/v			03/05/15 15:12	1
m-Xylene & p-Xylene	0.45		0.080		ppb v/v			03/05/15 15:12	1
o-Xylene	0.16		0.080		ppb v/v			03/05/15 15:12	1
Styrene	ND		0.080		ppb v/v			03/05/15 15:12	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/05/15 15:12	1
Tetrachloroethene	0.74		0.080		ppb v/v			03/05/15 15:12	1
Toluene	0.22		0.12		ppb v/v			03/05/15 15:12	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 15:12	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 15:12	1
Trichloroethene	0.28		0.040		ppb v/v			03/05/15 15:12	1
Trichlorofluoromethane	0.41		0.080		ppb v/v			03/05/15 15:12	1
Vinyl chloride	ND		0.080		ppb v/v			03/05/15 15:12	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/05/15 15:12	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/05/15 15:12	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/05/15 15:12	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/05/15 15:12	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/05/15 15:12	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/05/15 15:12	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/05/15 15:12	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 15:12	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/05/15 15:12	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 15:12	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/05/15 15:12	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/05/15 15:12	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/05/15 15:12	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 15:12	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 15:12	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 15:12	1
1,4-Dioxane	ND		0.72		ug/m3			03/05/15 15:12	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/05/15 15:12	1
2-Butanone	ND		0.94		ug/m3			03/05/15 15:12	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/05/15 15:12	1
Benzene	0.52		0.26		ug/m3			03/05/15 15:12	1
Benzyl chloride	ND		0.83		ug/m3			03/05/15 15:12	1
Bromodichloromethane	ND		0.54		ug/m3			03/05/15 15:12	1
Bromoform	ND		0.83		ug/m3			03/05/15 15:12	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: DUP1-2015

Lab Sample ID: 140-2815-2

Date Collected: 02/27/15 00:00

Matrix: Air

Date Received: 03/03/15 09:20

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		0.31		ug/m3			03/05/15 15:12	1
Carbon tetrachloride	0.73		0.25		ug/m3			03/05/15 15:12	1
Chlorobenzene	ND		0.37		ug/m3			03/05/15 15:12	1
Chloroethane	ND		0.21		ug/m3			03/05/15 15:12	1
Chloroform	1.8		0.39		ug/m3			03/05/15 15:12	1
Chloromethane	0.99		0.41		ug/m3			03/05/15 15:12	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 15:12	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 15:12	1
Cyclohexane	ND		0.69		ug/m3			03/05/15 15:12	1
Dibromochloromethane	ND		0.68		ug/m3			03/05/15 15:12	1
Dichlorodifluoromethane	2.6		0.40		ug/m3			03/05/15 15:12	1
Ethanol	19		1.5		ug/m3			03/05/15 15:12	1
Ethylbenzene	0.43		0.35		ug/m3			03/05/15 15:12	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/05/15 15:12	1
Hexane	ND		0.70		ug/m3			03/05/15 15:12	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/05/15 15:12	1
Methylene Chloride	ND		0.69		ug/m3			03/05/15 15:12	1
m-Xylene & p-Xylene	2.0		0.35		ug/m3			03/05/15 15:12	1
o-Xylene	0.68		0.35		ug/m3			03/05/15 15:12	1
Styrene	ND		0.34		ug/m3			03/05/15 15:12	1
t-Butyl alcohol	ND		0.97		ug/m3			03/05/15 15:12	1
Tetrachloroethene	5.0		0.54		ug/m3			03/05/15 15:12	1
Toluene	0.83		0.45		ug/m3			03/05/15 15:12	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 15:12	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 15:12	1
Trichloroethene	1.5		0.21		ug/m3			03/05/15 15:12	1
Trichlorofluoromethane	2.3		0.45		ug/m3			03/05/15 15:12	1
Vinyl chloride	ND		0.20		ug/m3			03/05/15 15:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		60 - 140					03/05/15 15:12	1

Client Sample ID: D3-OA-2015

Lab Sample ID: 140-2815-3

Date Collected: 02/27/15 10:07

Matrix: Air

Date Received: 03/03/15 09:20

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			03/05/15 16:01	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/05/15 16:01	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/05/15 16:01	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/05/15 16:01	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/05/15 16:01	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/05/15 16:01	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/05/15 16:01	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 16:01	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/05/15 16:01	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 16:01	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: D3-OA-2015

Lab Sample ID: 140-2815-3

Date Collected: 02/27/15 10:07

Matrix: Air

Date Received: 03/03/15 09:20

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			03/05/15 16:01	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/05/15 16:01	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/05/15 16:01	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 16:01	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 16:01	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 16:01	1
1,4-Dioxane	ND		0.20		ppb v/v			03/05/15 16:01	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/05/15 16:01	1
2-Butanone	ND		0.32		ppb v/v			03/05/15 16:01	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/05/15 16:01	1
Benzene	0.15		0.080		ppb v/v			03/05/15 16:01	1
Benzyl chloride	ND		0.16		ppb v/v			03/05/15 16:01	1
Bromodichloromethane	ND		0.080		ppb v/v			03/05/15 16:01	1
Bromoform	ND		0.080		ppb v/v			03/05/15 16:01	1
Bromomethane	ND		0.080		ppb v/v			03/05/15 16:01	1
Carbon tetrachloride	0.062		0.040		ppb v/v			03/05/15 16:01	1
Chlorobenzene	ND		0.080		ppb v/v			03/05/15 16:01	1
Chloroethane	ND		0.080		ppb v/v			03/05/15 16:01	1
Chloroform	ND		0.080		ppb v/v			03/05/15 16:01	1
Chloromethane	0.52		0.20		ppb v/v			03/05/15 16:01	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 16:01	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 16:01	1
Cyclohexane	ND		0.20		ppb v/v			03/05/15 16:01	1
Dibromochloromethane	ND		0.080		ppb v/v			03/05/15 16:01	1
Dichlorodifluoromethane	0.46		0.080		ppb v/v			03/05/15 16:01	1
Ethanol	2.4		0.80		ppb v/v			03/05/15 16:01	1
Ethylbenzene	ND		0.080		ppb v/v			03/05/15 16:01	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/05/15 16:01	1
Hexane	ND		0.20		ppb v/v			03/05/15 16:01	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/05/15 16:01	1
Methylene Chloride	ND		0.20		ppb v/v			03/05/15 16:01	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			03/05/15 16:01	1
o-Xylene	ND		0.080		ppb v/v			03/05/15 16:01	1
Styrene	ND		0.080		ppb v/v			03/05/15 16:01	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/05/15 16:01	1
Tetrachloroethene	ND		0.080		ppb v/v			03/05/15 16:01	1
Toluene	ND		0.12		ppb v/v			03/05/15 16:01	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 16:01	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 16:01	1
Trichloroethene	ND		0.040		ppb v/v			03/05/15 16:01	1
Trichlorofluoromethane	0.22		0.080		ppb v/v			03/05/15 16:01	1
Vinyl chloride	ND		0.080		ppb v/v			03/05/15 16:01	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/05/15 16:01	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/05/15 16:01	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/05/15 16:01	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/05/15 16:01	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/05/15 16:01	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: D3-OA-2015

Lab Sample ID: 140-2815-3

Date Collected: 02/27/15 10:07

Matrix: Air

Date Received: 03/03/15 09:20

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		0.32		ug/m3			03/05/15 16:01	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/05/15 16:01	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 16:01	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/05/15 16:01	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 16:01	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/05/15 16:01	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/05/15 16:01	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/05/15 16:01	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 16:01	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 16:01	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 16:01	1
1,4-Dioxane	ND		0.72		ug/m3			03/05/15 16:01	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/05/15 16:01	1
2-Butanone	ND		0.94		ug/m3			03/05/15 16:01	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/05/15 16:01	1
Benzene	0.48		0.26		ug/m3			03/05/15 16:01	1
Benzyl chloride	ND		0.83		ug/m3			03/05/15 16:01	1
Bromodichloromethane	ND		0.54		ug/m3			03/05/15 16:01	1
Bromoform	ND		0.83		ug/m3			03/05/15 16:01	1
Bromomethane	ND		0.31		ug/m3			03/05/15 16:01	1
Carbon tetrachloride	0.39		0.25		ug/m3			03/05/15 16:01	1
Chlorobenzene	ND		0.37		ug/m3			03/05/15 16:01	1
Chloroethane	ND		0.21		ug/m3			03/05/15 16:01	1
Chloroform	ND		0.39		ug/m3			03/05/15 16:01	1
Chloromethane	1.1		0.41		ug/m3			03/05/15 16:01	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 16:01	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 16:01	1
Cyclohexane	ND		0.69		ug/m3			03/05/15 16:01	1
Dibromochloromethane	ND		0.68		ug/m3			03/05/15 16:01	1
Dichlorodifluoromethane	2.3		0.40		ug/m3			03/05/15 16:01	1
Ethanol	4.6		1.5		ug/m3			03/05/15 16:01	1
Ethylbenzene	ND		0.35		ug/m3			03/05/15 16:01	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/05/15 16:01	1
Hexane	ND		0.70		ug/m3			03/05/15 16:01	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/05/15 16:01	1
Methylene Chloride	ND		0.69		ug/m3			03/05/15 16:01	1
m-Xylene & p-Xylene	ND		0.35		ug/m3			03/05/15 16:01	1
o-Xylene	ND		0.35		ug/m3			03/05/15 16:01	1
Styrene	ND		0.34		ug/m3			03/05/15 16:01	1
t-Butyl alcohol	ND		0.97		ug/m3			03/05/15 16:01	1
Tetrachloroethene	ND		0.54		ug/m3			03/05/15 16:01	1
Toluene	ND		0.45		ug/m3			03/05/15 16:01	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 16:01	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 16:01	1
Trichloroethene	ND		0.21		ug/m3			03/05/15 16:01	1
Trichlorofluoromethane	1.2		0.45		ug/m3			03/05/15 16:01	1
Vinyl chloride	ND		0.20		ug/m3			03/05/15 16:01	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: D3-OA-2015

Lab Sample ID: 140-2815-3

Date Collected: 02/27/15 10:07

Matrix: Air

Date Received: 03/03/15 09:20

Sample Container: Summa Canister 6L

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		60 - 140		03/05/15 16:01	1

Client Sample ID: H23-BA-2015

Lab Sample ID: 140-2815-4

Date Collected: 02/27/15 11:21

Matrix: Air

Date Received: 03/03/15 09:20

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			03/05/15 16:52	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/05/15 16:52	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/05/15 16:52	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/05/15 16:52	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/05/15 16:52	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/05/15 16:52	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/05/15 16:52	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 16:52	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/05/15 16:52	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 16:52	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/05/15 16:52	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/05/15 16:52	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/05/15 16:52	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 16:52	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 16:52	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 16:52	1
1,4-Dioxane	ND		0.20		ppb v/v			03/05/15 16:52	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/05/15 16:52	1
2-Butanone	ND		0.32		ppb v/v			03/05/15 16:52	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/05/15 16:52	1
Benzene	0.15		0.080		ppb v/v			03/05/15 16:52	1
Benzyl chloride	ND		0.16		ppb v/v			03/05/15 16:52	1
Bromodichloromethane	ND		0.080		ppb v/v			03/05/15 16:52	1
Bromoform	ND		0.080		ppb v/v			03/05/15 16:52	1
Bromomethane	ND		0.080		ppb v/v			03/05/15 16:52	1
Carbon tetrachloride	0.079		0.040		ppb v/v			03/05/15 16:52	1
Chlorobenzene	ND		0.080		ppb v/v			03/05/15 16:52	1
Chloroethane	ND		0.080		ppb v/v			03/05/15 16:52	1
Chloroform	0.093		0.080		ppb v/v			03/05/15 16:52	1
Chloromethane	0.45		0.20		ppb v/v			03/05/15 16:52	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 16:52	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 16:52	1
Cyclohexane	ND		0.20		ppb v/v			03/05/15 16:52	1
Dibromochloromethane	ND		0.080		ppb v/v			03/05/15 16:52	1
Dichlorodifluoromethane	0.50		0.080		ppb v/v			03/05/15 16:52	1
Ethanol	6.4		0.80		ppb v/v			03/05/15 16:52	1
Ethylbenzene	ND		0.080		ppb v/v			03/05/15 16:52	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/05/15 16:52	1
Hexane	ND		0.20		ppb v/v			03/05/15 16:52	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/05/15 16:52	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H23-BA-2015

Lab Sample ID: 140-2815-4

Date Collected: 02/27/15 11:21

Matrix: Air

Date Received: 03/03/15 09:20

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	ND		0.20		ppb v/v			03/05/15 16:52	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			03/05/15 16:52	1
o-Xylene	ND		0.080		ppb v/v			03/05/15 16:52	1
Styrene	ND		0.080		ppb v/v			03/05/15 16:52	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/05/15 16:52	1
Tetrachloroethene	ND		0.080		ppb v/v			03/05/15 16:52	1
Toluene	ND		0.12		ppb v/v			03/05/15 16:52	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 16:52	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 16:52	1
Trichloroethene	0.14		0.040		ppb v/v			03/05/15 16:52	1
Trichlorofluoromethane	0.22		0.080		ppb v/v			03/05/15 16:52	1
Vinyl chloride	ND		0.080		ppb v/v			03/05/15 16:52	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/05/15 16:52	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/05/15 16:52	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/05/15 16:52	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/05/15 16:52	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/05/15 16:52	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/05/15 16:52	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/05/15 16:52	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 16:52	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/05/15 16:52	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 16:52	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/05/15 16:52	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/05/15 16:52	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/05/15 16:52	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 16:52	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 16:52	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 16:52	1
1,4-Dioxane	ND		0.72		ug/m3			03/05/15 16:52	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/05/15 16:52	1
2-Butanone	ND		0.94		ug/m3			03/05/15 16:52	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/05/15 16:52	1
Benzene	0.49		0.26		ug/m3			03/05/15 16:52	1
Benzyl chloride	ND		0.83		ug/m3			03/05/15 16:52	1
Bromodichloromethane	ND		0.54		ug/m3			03/05/15 16:52	1
Bromoform	ND		0.83		ug/m3			03/05/15 16:52	1
Bromomethane	ND		0.31		ug/m3			03/05/15 16:52	1
Carbon tetrachloride	0.50		0.25		ug/m3			03/05/15 16:52	1
Chlorobenzene	ND		0.37		ug/m3			03/05/15 16:52	1
Chloroethane	ND		0.21		ug/m3			03/05/15 16:52	1
Chloroform	0.45		0.39		ug/m3			03/05/15 16:52	1
Chloromethane	0.93		0.41		ug/m3			03/05/15 16:52	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 16:52	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 16:52	1
Cyclohexane	ND		0.69		ug/m3			03/05/15 16:52	1
Dibromochloromethane	ND		0.68		ug/m3			03/05/15 16:52	1
Dichlorodifluoromethane	2.5		0.40		ug/m3			03/05/15 16:52	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H23-BA-2015

Lab Sample ID: 140-2815-4

Date Collected: 02/27/15 11:21

Matrix: Air

Date Received: 03/03/15 09:20

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	12		1.5		ug/m3			03/05/15 16:52	1
Ethylbenzene	ND		0.35		ug/m3			03/05/15 16:52	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/05/15 16:52	1
Hexane	ND		0.70		ug/m3			03/05/15 16:52	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/05/15 16:52	1
Methylene Chloride	ND		0.69		ug/m3			03/05/15 16:52	1
m-Xylene & p-Xylene	ND		0.35		ug/m3			03/05/15 16:52	1
o-Xylene	ND		0.35		ug/m3			03/05/15 16:52	1
Styrene	ND		0.34		ug/m3			03/05/15 16:52	1
t-Butyl alcohol	ND		0.97		ug/m3			03/05/15 16:52	1
Tetrachloroethene	ND		0.54		ug/m3			03/05/15 16:52	1
Toluene	ND		0.45		ug/m3			03/05/15 16:52	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 16:52	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 16:52	1
Trichloroethene	0.75		0.21		ug/m3			03/05/15 16:52	1
Trichlorofluoromethane	1.2		0.45		ug/m3			03/05/15 16:52	1
Vinyl chloride	ND		0.20		ug/m3			03/05/15 16:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		60 - 140					03/05/15 16:52	1

Client Sample ID: H23-SS-2015

Lab Sample ID: 140-2815-5

Date Collected: 02/27/15 11:22

Matrix: Air

Date Received: 03/03/15 09:20

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			03/05/15 17:41	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/05/15 17:41	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/05/15 17:41	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/05/15 17:41	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/05/15 17:41	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/05/15 17:41	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/05/15 17:41	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 17:41	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/05/15 17:41	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 17:41	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/05/15 17:41	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/05/15 17:41	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/05/15 17:41	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 17:41	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 17:41	1
1,4-Dichlorobenzene	0.14		0.080		ppb v/v			03/05/15 17:41	1
1,4-Dioxane	ND		0.20		ppb v/v			03/05/15 17:41	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/05/15 17:41	1
2-Butanone	0.48		0.32		ppb v/v			03/05/15 17:41	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/05/15 17:41	1
Benzene	ND		0.080		ppb v/v			03/05/15 17:41	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H23-SS-2015

Lab Sample ID: 140-2815-5

Date Collected: 02/27/15 11:22

Matrix: Air

Date Received: 03/03/15 09:20

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			03/05/15 17:41	1
Bromodichloromethane	ND		0.080		ppb v/v			03/05/15 17:41	1
Bromoform	ND		0.080		ppb v/v			03/05/15 17:41	1
Bromomethane	ND		0.080		ppb v/v			03/05/15 17:41	1
Carbon tetrachloride	ND		0.040		ppb v/v			03/05/15 17:41	1
Chlorobenzene	ND		0.080		ppb v/v			03/05/15 17:41	1
Chloroethane	ND		0.080		ppb v/v			03/05/15 17:41	1
Chloroform	ND		0.080		ppb v/v			03/05/15 17:41	1
Chloromethane	ND		0.20		ppb v/v			03/05/15 17:41	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 17:41	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 17:41	1
Cyclohexane	ND		0.20		ppb v/v			03/05/15 17:41	1
Dibromochloromethane	ND		0.080		ppb v/v			03/05/15 17:41	1
Dichlorodifluoromethane	0.45		0.080		ppb v/v			03/05/15 17:41	1
Ethanol	2.2		0.80		ppb v/v			03/05/15 17:41	1
Ethylbenzene	ND		0.080		ppb v/v			03/05/15 17:41	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/05/15 17:41	1
Hexane	ND		0.20		ppb v/v			03/05/15 17:41	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/05/15 17:41	1
Methylene Chloride	ND		0.20		ppb v/v			03/05/15 17:41	1
m-Xylene & p-Xylene	0.094		0.080		ppb v/v			03/05/15 17:41	1
o-Xylene	ND		0.080		ppb v/v			03/05/15 17:41	1
Styrene	ND		0.080		ppb v/v			03/05/15 17:41	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/05/15 17:41	1
Tetrachloroethene	ND		0.080		ppb v/v			03/05/15 17:41	1
Toluene	0.12		0.12		ppb v/v			03/05/15 17:41	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 17:41	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 17:41	1
Trichloroethene	ND		0.040		ppb v/v			03/05/15 17:41	1
Trichlorofluoromethane	0.19		0.080		ppb v/v			03/05/15 17:41	1
Vinyl chloride	ND		0.080		ppb v/v			03/05/15 17:41	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/05/15 17:41	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/05/15 17:41	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/05/15 17:41	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/05/15 17:41	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/05/15 17:41	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/05/15 17:41	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/05/15 17:41	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 17:41	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/05/15 17:41	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 17:41	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/05/15 17:41	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/05/15 17:41	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/05/15 17:41	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 17:41	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 17:41	1
1,4-Dichlorobenzene	0.82		0.48		ug/m3			03/05/15 17:41	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H23-SS-2015

Lab Sample ID: 140-2815-5

Date Collected: 02/27/15 11:22

Matrix: Air

Date Received: 03/03/15 09:20

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			03/05/15 17:41	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/05/15 17:41	1
2-Butanone	1.4		0.94		ug/m3			03/05/15 17:41	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/05/15 17:41	1
Benzene	ND		0.26		ug/m3			03/05/15 17:41	1
Benzyl chloride	ND		0.83		ug/m3			03/05/15 17:41	1
Bromodichloromethane	ND		0.54		ug/m3			03/05/15 17:41	1
Bromoform	ND		0.83		ug/m3			03/05/15 17:41	1
Bromomethane	ND		0.31		ug/m3			03/05/15 17:41	1
Carbon tetrachloride	ND		0.25		ug/m3			03/05/15 17:41	1
Chlorobenzene	ND		0.37		ug/m3			03/05/15 17:41	1
Chloroethane	ND		0.21		ug/m3			03/05/15 17:41	1
Chloroform	ND		0.39		ug/m3			03/05/15 17:41	1
Chloromethane	ND		0.41		ug/m3			03/05/15 17:41	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 17:41	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 17:41	1
Cyclohexane	ND		0.69		ug/m3			03/05/15 17:41	1
Dibromochloromethane	ND		0.68		ug/m3			03/05/15 17:41	1
Dichlorodifluoromethane	2.2		0.40		ug/m3			03/05/15 17:41	1
Ethanol	4.1		1.5		ug/m3			03/05/15 17:41	1
Ethylbenzene	ND		0.35		ug/m3			03/05/15 17:41	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/05/15 17:41	1
Hexane	ND		0.70		ug/m3			03/05/15 17:41	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/05/15 17:41	1
Methylene Chloride	ND		0.69		ug/m3			03/05/15 17:41	1
m-Xylene & p-Xylene	0.41		0.35		ug/m3			03/05/15 17:41	1
o-Xylene	ND		0.35		ug/m3			03/05/15 17:41	1
Styrene	ND		0.34		ug/m3			03/05/15 17:41	1
t-Butyl alcohol	ND		0.97		ug/m3			03/05/15 17:41	1
Tetrachloroethene	ND		0.54		ug/m3			03/05/15 17:41	1
Toluene	0.46		0.45		ug/m3			03/05/15 17:41	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 17:41	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 17:41	1
Trichloroethene	ND		0.21		ug/m3			03/05/15 17:41	1
Trichlorofluoromethane	1.1		0.45		ug/m3			03/05/15 17:41	1
Vinyl chloride	ND		0.20		ug/m3			03/05/15 17:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		60 - 140					03/05/15 17:41	1

Client Sample ID: DUP2-2015

Lab Sample ID: 140-2815-6

Date Collected: 02/27/15 00:00

Matrix: Air

Date Received: 03/03/15 09:20

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			03/05/15 18:35	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/05/15 18:35	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: DUP2-2015

Lab Sample ID: 140-2815-6

Date Collected: 02/27/15 00:00

Matrix: Air

Date Received: 03/03/15 09:20

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		0.080		ppb v/v			03/05/15 18:35	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/05/15 18:35	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/05/15 18:35	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/05/15 18:35	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/05/15 18:35	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 18:35	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/05/15 18:35	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 18:35	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/05/15 18:35	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/05/15 18:35	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/05/15 18:35	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 18:35	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 18:35	1
1,4-Dichlorobenzene	0.087		0.080		ppb v/v			03/05/15 18:35	1
1,4-Dioxane	ND		0.20		ppb v/v			03/05/15 18:35	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/05/15 18:35	1
2-Butanone	ND		0.32		ppb v/v			03/05/15 18:35	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/05/15 18:35	1
Benzene	ND		0.080		ppb v/v			03/05/15 18:35	1
Benzyl chloride	ND		0.16		ppb v/v			03/05/15 18:35	1
Bromodichloromethane	ND		0.080		ppb v/v			03/05/15 18:35	1
Bromoform	ND		0.080		ppb v/v			03/05/15 18:35	1
Bromomethane	ND		0.080		ppb v/v			03/05/15 18:35	1
Carbon tetrachloride	ND		0.040		ppb v/v			03/05/15 18:35	1
Chlorobenzene	ND		0.080		ppb v/v			03/05/15 18:35	1
Chloroethane	ND		0.080		ppb v/v			03/05/15 18:35	1
Chloroform	ND		0.080		ppb v/v			03/05/15 18:35	1
Chloromethane	ND		0.20		ppb v/v			03/05/15 18:35	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 18:35	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 18:35	1
Cyclohexane	ND		0.20		ppb v/v			03/05/15 18:35	1
Dibromochloromethane	ND		0.080		ppb v/v			03/05/15 18:35	1
Dichlorodifluoromethane	0.46		0.080		ppb v/v			03/05/15 18:35	1
Ethanol	1.1		0.80		ppb v/v			03/05/15 18:35	1
Ethylbenzene	ND		0.080		ppb v/v			03/05/15 18:35	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/05/15 18:35	1
Hexane	ND		0.20		ppb v/v			03/05/15 18:35	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/05/15 18:35	1
Methylene Chloride	0.20		0.20		ppb v/v			03/05/15 18:35	1
m-Xylene & p-Xylene	0.088		0.080		ppb v/v			03/05/15 18:35	1
o-Xylene	ND		0.080		ppb v/v			03/05/15 18:35	1
Styrene	ND		0.080		ppb v/v			03/05/15 18:35	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/05/15 18:35	1
Tetrachloroethene	ND		0.080		ppb v/v			03/05/15 18:35	1
Toluene	ND		0.12		ppb v/v			03/05/15 18:35	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 18:35	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 18:35	1
Trichloroethene	ND		0.040		ppb v/v			03/05/15 18:35	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: DUP2-2015

Lab Sample ID: 140-2815-6

Date Collected: 02/27/15 00:00

Matrix: Air

Date Received: 03/03/15 09:20

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	0.19		0.080		ppb v/v			03/05/15 18:35	1
Vinyl chloride	ND		0.080		ppb v/v			03/05/15 18:35	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/05/15 18:35	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/05/15 18:35	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/05/15 18:35	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/05/15 18:35	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/05/15 18:35	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/05/15 18:35	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/05/15 18:35	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 18:35	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/05/15 18:35	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 18:35	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/05/15 18:35	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/05/15 18:35	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/05/15 18:35	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 18:35	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 18:35	1
1,4-Dichlorobenzene	0.52		0.48		ug/m3			03/05/15 18:35	1
1,4-Dioxane	ND		0.72		ug/m3			03/05/15 18:35	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/05/15 18:35	1
2-Butanone	ND		0.94		ug/m3			03/05/15 18:35	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/05/15 18:35	1
Benzene	ND		0.26		ug/m3			03/05/15 18:35	1
Benzyl chloride	ND		0.83		ug/m3			03/05/15 18:35	1
Bromodichloromethane	ND		0.54		ug/m3			03/05/15 18:35	1
Bromoform	ND		0.83		ug/m3			03/05/15 18:35	1
Bromomethane	ND		0.31		ug/m3			03/05/15 18:35	1
Carbon tetrachloride	ND		0.25		ug/m3			03/05/15 18:35	1
Chlorobenzene	ND		0.37		ug/m3			03/05/15 18:35	1
Chloroethane	ND		0.21		ug/m3			03/05/15 18:35	1
Chloroform	ND		0.39		ug/m3			03/05/15 18:35	1
Chloromethane	ND		0.41		ug/m3			03/05/15 18:35	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 18:35	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 18:35	1
Cyclohexane	ND		0.69		ug/m3			03/05/15 18:35	1
Dibromochloromethane	ND		0.68		ug/m3			03/05/15 18:35	1
Dichlorodifluoromethane	2.3		0.40		ug/m3			03/05/15 18:35	1
Ethanol	2.0		1.5		ug/m3			03/05/15 18:35	1
Ethylbenzene	ND		0.35		ug/m3			03/05/15 18:35	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/05/15 18:35	1
Hexane	ND		0.70		ug/m3			03/05/15 18:35	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/05/15 18:35	1
Methylene Chloride	0.69		0.69		ug/m3			03/05/15 18:35	1
m-Xylene & p-Xylene	0.38		0.35		ug/m3			03/05/15 18:35	1
o-Xylene	ND		0.35		ug/m3			03/05/15 18:35	1
Styrene	ND		0.34		ug/m3			03/05/15 18:35	1
t-Butyl alcohol	ND		0.97		ug/m3			03/05/15 18:35	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: DUP2-2015

Lab Sample ID: 140-2815-6

Date Collected: 02/27/15 00:00

Matrix: Air

Date Received: 03/03/15 09:20

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		0.54		ug/m3			03/05/15 18:35	1
Toluene	ND		0.45		ug/m3			03/05/15 18:35	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 18:35	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 18:35	1
Trichloroethene	ND		0.21		ug/m3			03/05/15 18:35	1
Trichlorofluoromethane	1.1		0.45		ug/m3			03/05/15 18:35	1
Vinyl chloride	ND		0.20		ug/m3			03/05/15 18:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		60 - 140		03/05/15 18:35	1

Client Sample ID: D2-OA-2015

Lab Sample ID: 140-2815-7

Date Collected: 02/25/15 12:47

Matrix: Air

Date Received: 03/03/15 09:20

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			03/05/15 19:25	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/05/15 19:25	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/05/15 19:25	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/05/15 19:25	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/05/15 19:25	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/05/15 19:25	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/05/15 19:25	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 19:25	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/05/15 19:25	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 19:25	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/05/15 19:25	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/05/15 19:25	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/05/15 19:25	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 19:25	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 19:25	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 19:25	1
1,4-Dioxane	ND		0.20		ppb v/v			03/05/15 19:25	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/05/15 19:25	1
2-Butanone	0.44		0.32		ppb v/v			03/05/15 19:25	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/05/15 19:25	1
Benzene	0.20		0.080		ppb v/v			03/05/15 19:25	1
Benzyl chloride	ND		0.16		ppb v/v			03/05/15 19:25	1
Bromodichloromethane	ND		0.080		ppb v/v			03/05/15 19:25	1
Bromoform	ND		0.080		ppb v/v			03/05/15 19:25	1
Bromomethane	ND		0.080		ppb v/v			03/05/15 19:25	1
Carbon tetrachloride	0.074		0.040		ppb v/v			03/05/15 19:25	1
Chlorobenzene	ND		0.080		ppb v/v			03/05/15 19:25	1
Chloroethane	ND		0.080		ppb v/v			03/05/15 19:25	1
Chloroform	ND		0.080		ppb v/v			03/05/15 19:25	1
Chloromethane	0.64		0.20		ppb v/v			03/05/15 19:25	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 19:25	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: D2-OA-2015

Lab Sample ID: 140-2815-7

Date Collected: 02/25/15 12:47

Matrix: Air

Date Received: 03/03/15 09:20

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			03/05/15 19:25	1
Cyclohexane	ND		0.20		ppb v/v			03/05/15 19:25	1
Dibromochloromethane	ND		0.080		ppb v/v			03/05/15 19:25	1
Dichlorodifluoromethane	0.51		0.080		ppb v/v			03/05/15 19:25	1
Ethanol	7.5		0.80		ppb v/v			03/05/15 19:25	1
Ethylbenzene	ND		0.080		ppb v/v			03/05/15 19:25	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/05/15 19:25	1
Hexane	ND		0.20		ppb v/v			03/05/15 19:25	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/05/15 19:25	1
Methylene Chloride	ND		0.20		ppb v/v			03/05/15 19:25	1
m-Xylene & p-Xylene	0.11		0.080		ppb v/v			03/05/15 19:25	1
o-Xylene	ND		0.080		ppb v/v			03/05/15 19:25	1
Styrene	ND		0.080		ppb v/v			03/05/15 19:25	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/05/15 19:25	1
Tetrachloroethene	ND		0.080		ppb v/v			03/05/15 19:25	1
Toluene	0.18		0.12		ppb v/v			03/05/15 19:25	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 19:25	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 19:25	1
Trichloroethene	ND		0.040		ppb v/v			03/05/15 19:25	1
Trichlorofluoromethane	0.24		0.080		ppb v/v			03/05/15 19:25	1
Vinyl chloride	ND		0.080		ppb v/v			03/05/15 19:25	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/05/15 19:25	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/05/15 19:25	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/05/15 19:25	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/05/15 19:25	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/05/15 19:25	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/05/15 19:25	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/05/15 19:25	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 19:25	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/05/15 19:25	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 19:25	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/05/15 19:25	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/05/15 19:25	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/05/15 19:25	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 19:25	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 19:25	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 19:25	1
1,4-Dioxane	ND		0.72		ug/m3			03/05/15 19:25	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/05/15 19:25	1
2-Butanone	1.3		0.94		ug/m3			03/05/15 19:25	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/05/15 19:25	1
Benzene	0.62		0.26		ug/m3			03/05/15 19:25	1
Benzyl chloride	ND		0.83		ug/m3			03/05/15 19:25	1
Bromodichloromethane	ND		0.54		ug/m3			03/05/15 19:25	1
Bromoform	ND		0.83		ug/m3			03/05/15 19:25	1
Bromomethane	ND		0.31		ug/m3			03/05/15 19:25	1
Carbon tetrachloride	0.46		0.25		ug/m3			03/05/15 19:25	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: D2-OA-2015

Lab Sample ID: 140-2815-7

Date Collected: 02/25/15 12:47

Matrix: Air

Date Received: 03/03/15 09:20

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			03/05/15 19:25	1
Chloroethane	ND		0.21		ug/m3			03/05/15 19:25	1
Chloroform	ND		0.39		ug/m3			03/05/15 19:25	1
Chloromethane	1.3		0.41		ug/m3			03/05/15 19:25	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 19:25	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 19:25	1
Cyclohexane	ND		0.69		ug/m3			03/05/15 19:25	1
Dibromochloromethane	ND		0.68		ug/m3			03/05/15 19:25	1
Dichlorodifluoromethane	2.5		0.40		ug/m3			03/05/15 19:25	1
Ethanol	14		1.5		ug/m3			03/05/15 19:25	1
Ethylbenzene	ND		0.35		ug/m3			03/05/15 19:25	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/05/15 19:25	1
Hexane	ND		0.70		ug/m3			03/05/15 19:25	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/05/15 19:25	1
Methylene Chloride	ND		0.69		ug/m3			03/05/15 19:25	1
m-Xylene & p-Xylene	0.46		0.35		ug/m3			03/05/15 19:25	1
o-Xylene	ND		0.35		ug/m3			03/05/15 19:25	1
Styrene	ND		0.34		ug/m3			03/05/15 19:25	1
t-Butyl alcohol	ND		0.97		ug/m3			03/05/15 19:25	1
Tetrachloroethene	ND		0.54		ug/m3			03/05/15 19:25	1
Toluene	0.67		0.45		ug/m3			03/05/15 19:25	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 19:25	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 19:25	1
Trichloroethene	ND		0.21		ug/m3			03/05/15 19:25	1
Trichlorofluoromethane	1.4		0.45		ug/m3			03/05/15 19:25	1
Vinyl chloride	ND		0.20		ug/m3			03/05/15 19:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		60 - 140					03/05/15 19:25	1

Client Sample ID: H28-BA-2015

Lab Sample ID: 140-2815-8

Date Collected: 02/25/15 13:05

Matrix: Air

Date Received: 03/03/15 09:20

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			03/05/15 20:15	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/05/15 20:15	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/05/15 20:15	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/05/15 20:15	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/05/15 20:15	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/05/15 20:15	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/05/15 20:15	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 20:15	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/05/15 20:15	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 20:15	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/05/15 20:15	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/05/15 20:15	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H28-BA-2015

Lab Sample ID: 140-2815-8

Date Collected: 02/25/15 13:05

Matrix: Air

Date Received: 03/03/15 09:20

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			03/05/15 20:15	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 20:15	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 20:15	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 20:15	1
1,4-Dioxane	ND		0.20		ppb v/v			03/05/15 20:15	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/05/15 20:15	1
2-Butanone	ND		0.32		ppb v/v			03/05/15 20:15	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/05/15 20:15	1
Benzene	0.21		0.080		ppb v/v			03/05/15 20:15	1
Benzyl chloride	ND		0.16		ppb v/v			03/05/15 20:15	1
Bromodichloromethane	ND		0.080		ppb v/v			03/05/15 20:15	1
Bromoform	ND		0.080		ppb v/v			03/05/15 20:15	1
Bromomethane	ND		0.080		ppb v/v			03/05/15 20:15	1
Carbon tetrachloride	0.067		0.040		ppb v/v			03/05/15 20:15	1
Chlorobenzene	ND		0.080		ppb v/v			03/05/15 20:15	1
Chloroethane	ND		0.080		ppb v/v			03/05/15 20:15	1
Chloroform	0.082		0.080		ppb v/v			03/05/15 20:15	1
Chloromethane	0.64		0.20		ppb v/v			03/05/15 20:15	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 20:15	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 20:15	1
Cyclohexane	ND		0.20		ppb v/v			03/05/15 20:15	1
Dibromochloromethane	ND		0.080		ppb v/v			03/05/15 20:15	1
Dichlorodifluoromethane	0.47		0.080		ppb v/v			03/05/15 20:15	1
Ethanol	230	E	0.80		ppb v/v			03/05/15 20:15	1
Ethylbenzene	ND		0.080		ppb v/v			03/05/15 20:15	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/05/15 20:15	1
Hexane	ND		0.20		ppb v/v			03/05/15 20:15	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/05/15 20:15	1
Methylene Chloride	ND		0.20		ppb v/v			03/05/15 20:15	1
m-Xylene & p-Xylene	0.096		0.080		ppb v/v			03/05/15 20:15	1
o-Xylene	ND		0.080		ppb v/v			03/05/15 20:15	1
Styrene	ND		0.080		ppb v/v			03/05/15 20:15	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/05/15 20:15	1
Tetrachloroethene	ND		0.080		ppb v/v			03/05/15 20:15	1
Toluene	0.18		0.12		ppb v/v			03/05/15 20:15	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 20:15	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 20:15	1
Trichloroethene	ND		0.040		ppb v/v			03/05/15 20:15	1
Trichlorofluoromethane	0.22		0.080		ppb v/v			03/05/15 20:15	1
Vinyl chloride	ND		0.080		ppb v/v			03/05/15 20:15	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/05/15 20:15	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/05/15 20:15	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/05/15 20:15	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/05/15 20:15	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/05/15 20:15	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/05/15 20:15	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/05/15 20:15	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H28-BA-2015

Lab Sample ID: 140-2815-8

Date Collected: 02/25/15 13:05

Matrix: Air

Date Received: 03/03/15 09:20

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	ND		0.39		ug/m3			03/05/15 20:15	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/05/15 20:15	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 20:15	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/05/15 20:15	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/05/15 20:15	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/05/15 20:15	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 20:15	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 20:15	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 20:15	1
1,4-Dioxane	ND		0.72		ug/m3			03/05/15 20:15	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/05/15 20:15	1
2-Butanone	ND		0.94		ug/m3			03/05/15 20:15	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/05/15 20:15	1
Benzene	0.67		0.26		ug/m3			03/05/15 20:15	1
Benzyl chloride	ND		0.83		ug/m3			03/05/15 20:15	1
Bromodichloromethane	ND		0.54		ug/m3			03/05/15 20:15	1
Bromoform	ND		0.83		ug/m3			03/05/15 20:15	1
Bromomethane	ND		0.31		ug/m3			03/05/15 20:15	1
Carbon tetrachloride	0.42		0.25		ug/m3			03/05/15 20:15	1
Chlorobenzene	ND		0.37		ug/m3			03/05/15 20:15	1
Chloroethane	ND		0.21		ug/m3			03/05/15 20:15	1
Chloroform	0.40		0.39		ug/m3			03/05/15 20:15	1
Chloromethane	1.3		0.41		ug/m3			03/05/15 20:15	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 20:15	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 20:15	1
Cyclohexane	ND		0.69		ug/m3			03/05/15 20:15	1
Dibromochloromethane	ND		0.68		ug/m3			03/05/15 20:15	1
Dichlorodifluoromethane	2.3		0.40		ug/m3			03/05/15 20:15	1
Ethanol	430 E		1.5		ug/m3			03/05/15 20:15	1
Ethylbenzene	ND		0.35		ug/m3			03/05/15 20:15	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/05/15 20:15	1
Hexane	ND		0.70		ug/m3			03/05/15 20:15	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/05/15 20:15	1
Methylene Chloride	ND		0.69		ug/m3			03/05/15 20:15	1
m-Xylene & p-Xylene	0.42		0.35		ug/m3			03/05/15 20:15	1
o-Xylene	ND		0.35		ug/m3			03/05/15 20:15	1
Styrene	ND		0.34		ug/m3			03/05/15 20:15	1
t-Butyl alcohol	ND		0.97		ug/m3			03/05/15 20:15	1
Tetrachloroethene	ND		0.54		ug/m3			03/05/15 20:15	1
Toluene	0.69		0.45		ug/m3			03/05/15 20:15	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 20:15	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 20:15	1
Trichloroethene	ND		0.21		ug/m3			03/05/15 20:15	1
Trichlorofluoromethane	1.3		0.45		ug/m3			03/05/15 20:15	1
Vinyl chloride	ND		0.20		ug/m3			03/05/15 20:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		60 - 140		03/05/15 20:15	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H28-BA-2015

Lab Sample ID: 140-2815-8

Date Collected: 02/25/15 13:05

Matrix: Air

Date Received: 03/03/15 09:20

Sample Container: Summa Canister 6L

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	260	D	8.0		ppb v/v			03/06/15 08:03	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	500	D	15		ug/m3			03/06/15 08:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		60 - 140					03/06/15 08:03	1

Client Sample ID: H28-SS-2015

Lab Sample ID: 140-2815-9

Date Collected: 02/25/15 13:00

Matrix: Air

Date Received: 03/03/15 09:20

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	0.46		0.080		ppb v/v			03/05/15 21:04	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/05/15 21:04	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/05/15 21:04	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/05/15 21:04	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/05/15 21:04	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/05/15 21:04	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/05/15 21:04	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 21:04	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/05/15 21:04	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 21:04	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/05/15 21:04	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/05/15 21:04	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/05/15 21:04	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 21:04	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 21:04	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 21:04	1
1,4-Dioxane	ND		0.20		ppb v/v			03/05/15 21:04	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/05/15 21:04	1
2-Butanone	0.41		0.32		ppb v/v			03/05/15 21:04	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/05/15 21:04	1
Benzene	ND		0.080		ppb v/v			03/05/15 21:04	1
Benzyl chloride	ND		0.16		ppb v/v			03/05/15 21:04	1
Bromodichloromethane	ND		0.080		ppb v/v			03/05/15 21:04	1
Bromoform	ND		0.080		ppb v/v			03/05/15 21:04	1
Bromomethane	ND		0.080		ppb v/v			03/05/15 21:04	1
Carbon tetrachloride	0.22		0.040		ppb v/v			03/05/15 21:04	1
Chlorobenzene	ND		0.080		ppb v/v			03/05/15 21:04	1
Chloroethane	ND		0.080		ppb v/v			03/05/15 21:04	1
Chloroform	1.8		0.080		ppb v/v			03/05/15 21:04	1
Chloromethane	ND		0.20		ppb v/v			03/05/15 21:04	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 21:04	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 21:04	1
Cyclohexane	ND		0.20		ppb v/v			03/05/15 21:04	1
Dibromochloromethane	ND		0.080		ppb v/v			03/05/15 21:04	1
Dichlorodifluoromethane	0.46		0.080		ppb v/v			03/05/15 21:04	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H28-SS-2015

Lab Sample ID: 140-2815-9

Date Collected: 02/25/15 13:00

Matrix: Air

Date Received: 03/03/15 09:20

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	2.0		0.80		ppb v/v			03/05/15 21:04	1
Ethylbenzene	ND		0.080		ppb v/v			03/05/15 21:04	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/05/15 21:04	1
Hexane	0.21		0.20		ppb v/v			03/05/15 21:04	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/05/15 21:04	1
Methylene Chloride	ND		0.20		ppb v/v			03/05/15 21:04	1
m-Xylene & p-Xylene	0.16		0.080		ppb v/v			03/05/15 21:04	1
o-Xylene	ND		0.080		ppb v/v			03/05/15 21:04	1
Styrene	ND		0.080		ppb v/v			03/05/15 21:04	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/05/15 21:04	1
Tetrachloroethene	ND		0.080		ppb v/v			03/05/15 21:04	1
Toluene	0.21		0.12		ppb v/v			03/05/15 21:04	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 21:04	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 21:04	1
Trichloroethene	1.1		0.040		ppb v/v			03/05/15 21:04	1
Trichlorofluoromethane	0.22		0.080		ppb v/v			03/05/15 21:04	1
Vinyl chloride	ND		0.080		ppb v/v			03/05/15 21:04	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	2.5		0.44		ug/m3			03/05/15 21:04	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/05/15 21:04	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/05/15 21:04	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/05/15 21:04	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/05/15 21:04	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/05/15 21:04	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/05/15 21:04	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 21:04	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/05/15 21:04	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 21:04	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/05/15 21:04	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/05/15 21:04	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/05/15 21:04	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 21:04	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 21:04	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 21:04	1
1,4-Dioxane	ND		0.72		ug/m3			03/05/15 21:04	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/05/15 21:04	1
2-Butanone	1.2		0.94		ug/m3			03/05/15 21:04	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/05/15 21:04	1
Benzene	ND		0.26		ug/m3			03/05/15 21:04	1
Benzyl chloride	ND		0.83		ug/m3			03/05/15 21:04	1
Bromodichloromethane	ND		0.54		ug/m3			03/05/15 21:04	1
Bromoform	ND		0.83		ug/m3			03/05/15 21:04	1
Bromomethane	ND		0.31		ug/m3			03/05/15 21:04	1
Carbon tetrachloride	1.4		0.25		ug/m3			03/05/15 21:04	1
Chlorobenzene	ND		0.37		ug/m3			03/05/15 21:04	1
Chloroethane	ND		0.21		ug/m3			03/05/15 21:04	1
Chloroform	9.0		0.39		ug/m3			03/05/15 21:04	1
Chloromethane	ND		0.41		ug/m3			03/05/15 21:04	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H28-SS-2015

Lab Sample ID: 140-2815-9

Date Collected: 02/25/15 13:00

Matrix: Air

Date Received: 03/03/15 09:20

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-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 21:04	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 21:04	1
Cyclohexane	ND		0.69		ug/m3			03/05/15 21:04	1
Dibromochloromethane	ND		0.68		ug/m3			03/05/15 21:04	1
Dichlorodifluoromethane	2.3		0.40		ug/m3			03/05/15 21:04	1
Ethanol	3.8		1.5		ug/m3			03/05/15 21:04	1
Ethylbenzene	ND		0.35		ug/m3			03/05/15 21:04	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/05/15 21:04	1
Hexane	0.72		0.70		ug/m3			03/05/15 21:04	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/05/15 21:04	1
Methylene Chloride	ND		0.69		ug/m3			03/05/15 21:04	1
m-Xylene & p-Xylene	0.69		0.35		ug/m3			03/05/15 21:04	1
o-Xylene	ND		0.35		ug/m3			03/05/15 21:04	1
Styrene	ND		0.34		ug/m3			03/05/15 21:04	1
t-Butyl alcohol	ND		0.97		ug/m3			03/05/15 21:04	1
Tetrachloroethene	ND		0.54		ug/m3			03/05/15 21:04	1
Toluene	0.80		0.45		ug/m3			03/05/15 21:04	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 21:04	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 21:04	1
Trichloroethene	5.8		0.21		ug/m3			03/05/15 21:04	1
Trichlorofluoromethane	1.2		0.45		ug/m3			03/05/15 21:04	1
Vinyl chloride	ND		0.20		ug/m3			03/05/15 21:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		60 - 140					03/05/15 21:04	1

Client Sample ID: H3-BA-2015

Lab Sample ID: 140-2815-10

Date Collected: 02/25/15 13:59

Matrix: Air

Date Received: 03/03/15 09:20

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	0.10		0.080		ppb v/v			03/05/15 21:55	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/05/15 21:55	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/05/15 21:55	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/05/15 21:55	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/05/15 21:55	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/05/15 21:55	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/05/15 21:55	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 21:55	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/05/15 21:55	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 21:55	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/05/15 21:55	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/05/15 21:55	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/05/15 21:55	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 21:55	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 21:55	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 21:55	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H3-BA-2015

Lab Sample ID: 140-2815-10

Date Collected: 02/25/15 13:59

Matrix: Air

Date Received: 03/03/15 09:20

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		0.20		ppb v/v			03/05/15 21:55	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/05/15 21:55	1
2-Butanone	0.50		0.32		ppb v/v			03/05/15 21:55	1
4-Methyl-2-pentanone (MIBK)	0.28		0.20		ppb v/v			03/05/15 21:55	1
Benzene	0.23		0.080		ppb v/v			03/05/15 21:55	1
Benzyl chloride	ND		0.16		ppb v/v			03/05/15 21:55	1
Bromodichloromethane	ND		0.080		ppb v/v			03/05/15 21:55	1
Bromoform	ND		0.080		ppb v/v			03/05/15 21:55	1
Bromomethane	ND		0.080		ppb v/v			03/05/15 21:55	1
Carbon tetrachloride	0.12		0.040		ppb v/v			03/05/15 21:55	1
Chlorobenzene	ND		0.080		ppb v/v			03/05/15 21:55	1
Chloroethane	ND		0.080		ppb v/v			03/05/15 21:55	1
Chloroform	0.50		0.080		ppb v/v			03/05/15 21:55	1
Chloromethane	0.64		0.20		ppb v/v			03/05/15 21:55	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 21:55	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 21:55	1
Cyclohexane	ND		0.20		ppb v/v			03/05/15 21:55	1
Dibromochloromethane	ND		0.080		ppb v/v			03/05/15 21:55	1
Dichlorodifluoromethane	0.50		0.080		ppb v/v			03/05/15 21:55	1
Ethanol	8.0		0.80		ppb v/v			03/05/15 21:55	1
Ethylbenzene	ND		0.080		ppb v/v			03/05/15 21:55	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/05/15 21:55	1
Hexane	ND		0.20		ppb v/v			03/05/15 21:55	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/05/15 21:55	1
Methylene Chloride	0.29		0.20		ppb v/v			03/05/15 21:55	1
m-Xylene & p-Xylene	0.14		0.080		ppb v/v			03/05/15 21:55	1
o-Xylene	ND		0.080		ppb v/v			03/05/15 21:55	1
Styrene	ND		0.080		ppb v/v			03/05/15 21:55	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/05/15 21:55	1
Tetrachloroethene	ND		0.080		ppb v/v			03/05/15 21:55	1
Toluene	0.53		0.12		ppb v/v			03/05/15 21:55	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 21:55	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 21:55	1
Trichloroethene	0.87		0.040		ppb v/v			03/05/15 21:55	1
Trichlorofluoromethane	0.29		0.080		ppb v/v			03/05/15 21:55	1
Vinyl chloride	ND		0.080		ppb v/v			03/05/15 21:55	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.55		0.44		ug/m3			03/05/15 21:55	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/05/15 21:55	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/05/15 21:55	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/05/15 21:55	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/05/15 21:55	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/05/15 21:55	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/05/15 21:55	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 21:55	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/05/15 21:55	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 21:55	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/05/15 21:55	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H3-BA-2015

Lab Sample ID: 140-2815-10

Date Collected: 02/25/15 13:59

Matrix: Air

Date Received: 03/03/15 09:20

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-Dichloropropane	ND		0.37		ug/m3			03/05/15 21:55	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/05/15 21:55	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 21:55	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 21:55	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 21:55	1
1,4-Dioxane	ND		0.72		ug/m3			03/05/15 21:55	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/05/15 21:55	1
2-Butanone	1.5		0.94		ug/m3			03/05/15 21:55	1
4-Methyl-2-pentanone (MIBK)	1.1		0.82		ug/m3			03/05/15 21:55	1
Benzene	0.74		0.26		ug/m3			03/05/15 21:55	1
Benzyl chloride	ND		0.83		ug/m3			03/05/15 21:55	1
Bromodichloromethane	ND		0.54		ug/m3			03/05/15 21:55	1
Bromoform	ND		0.83		ug/m3			03/05/15 21:55	1
Bromomethane	ND		0.31		ug/m3			03/05/15 21:55	1
Carbon tetrachloride	0.77		0.25		ug/m3			03/05/15 21:55	1
Chlorobenzene	ND		0.37		ug/m3			03/05/15 21:55	1
Chloroethane	ND		0.21		ug/m3			03/05/15 21:55	1
Chloroform	2.4		0.39		ug/m3			03/05/15 21:55	1
Chloromethane	1.3		0.41		ug/m3			03/05/15 21:55	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 21:55	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 21:55	1
Cyclohexane	ND		0.69		ug/m3			03/05/15 21:55	1
Dibromochloromethane	ND		0.68		ug/m3			03/05/15 21:55	1
Dichlorodifluoromethane	2.5		0.40		ug/m3			03/05/15 21:55	1
Ethanol	15		1.5		ug/m3			03/05/15 21:55	1
Ethylbenzene	ND		0.35		ug/m3			03/05/15 21:55	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/05/15 21:55	1
Hexane	ND		0.70		ug/m3			03/05/15 21:55	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/05/15 21:55	1
Methylene Chloride	1.0		0.69		ug/m3			03/05/15 21:55	1
m-Xylene & p-Xylene	0.63		0.35		ug/m3			03/05/15 21:55	1
o-Xylene	ND		0.35		ug/m3			03/05/15 21:55	1
Styrene	ND		0.34		ug/m3			03/05/15 21:55	1
t-Butyl alcohol	ND		0.97		ug/m3			03/05/15 21:55	1
Tetrachloroethene	ND		0.54		ug/m3			03/05/15 21:55	1
Toluene	2.0		0.45		ug/m3			03/05/15 21:55	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 21:55	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 21:55	1
Trichloroethene	4.7		0.21		ug/m3			03/05/15 21:55	1
Trichlorofluoromethane	1.6		0.45		ug/m3			03/05/15 21:55	1
Vinyl chloride	ND		0.20		ug/m3			03/05/15 21:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		60 - 140		03/05/15 21:55	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H3-SS-2015

Lab Sample ID: 140-2815-11

Date Collected: 02/25/15 13:55

Matrix: Air

Date Received: 03/03/15 09:20

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	0.13		0.080		ppb v/v			03/05/15 22:44	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/05/15 22:44	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/05/15 22:44	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/05/15 22:44	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/05/15 22:44	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/05/15 22:44	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/05/15 22:44	1
1,2,4-Trimethylbenzene	0.15		0.080		ppb v/v			03/05/15 22:44	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/05/15 22:44	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 22:44	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/05/15 22:44	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/05/15 22:44	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/05/15 22:44	1
1,3,5-Trimethylbenzene	0.15		0.080		ppb v/v			03/05/15 22:44	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 22:44	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 22:44	1
1,4-Dioxane	ND		0.20		ppb v/v			03/05/15 22:44	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/05/15 22:44	1
2-Butanone	0.39		0.32		ppb v/v			03/05/15 22:44	1
4-Methyl-2-pentanone (MIBK)	0.24		0.20		ppb v/v			03/05/15 22:44	1
Benzene	0.16		0.080		ppb v/v			03/05/15 22:44	1
Benzyl chloride	ND		0.16		ppb v/v			03/05/15 22:44	1
Bromodichloromethane	ND		0.080		ppb v/v			03/05/15 22:44	1
Bromoform	ND		0.080		ppb v/v			03/05/15 22:44	1
Bromomethane	ND		0.080		ppb v/v			03/05/15 22:44	1
Carbon tetrachloride	0.11		0.040		ppb v/v			03/05/15 22:44	1
Chlorobenzene	ND		0.080		ppb v/v			03/05/15 22:44	1
Chloroethane	ND		0.080		ppb v/v			03/05/15 22:44	1
Chloroform	0.36		0.080		ppb v/v			03/05/15 22:44	1
Chloromethane	ND		0.20		ppb v/v			03/05/15 22:44	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 22:44	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 22:44	1
Cyclohexane	ND		0.20		ppb v/v			03/05/15 22:44	1
Dibromochloromethane	ND		0.080		ppb v/v			03/05/15 22:44	1
Dichlorodifluoromethane	0.49		0.080		ppb v/v			03/05/15 22:44	1
Ethanol	2.6		0.80		ppb v/v			03/05/15 22:44	1
Ethylbenzene	ND		0.080		ppb v/v			03/05/15 22:44	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/05/15 22:44	1
Hexane	0.42		0.20		ppb v/v			03/05/15 22:44	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/05/15 22:44	1
Methylene Chloride	0.29		0.20		ppb v/v			03/05/15 22:44	1
m-Xylene & p-Xylene	0.41		0.080		ppb v/v			03/05/15 22:44	1
o-Xylene	0.13		0.080		ppb v/v			03/05/15 22:44	1
Styrene	ND		0.080		ppb v/v			03/05/15 22:44	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/05/15 22:44	1
Tetrachloroethene	0.17		0.080		ppb v/v			03/05/15 22:44	1
Toluene	0.53		0.12		ppb v/v			03/05/15 22:44	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 22:44	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H3-SS-2015

Lab Sample ID: 140-2815-11

Date Collected: 02/25/15 13:55

Matrix: Air

Date Received: 03/03/15 09:20

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			03/05/15 22:44	1
Trichloroethene	0.83		0.040		ppb v/v			03/05/15 22:44	1
Trichlorofluoromethane	0.24		0.080		ppb v/v			03/05/15 22:44	1
Vinyl chloride	ND		0.080		ppb v/v			03/05/15 22:44	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.70		0.44		ug/m3			03/05/15 22:44	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/05/15 22:44	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/05/15 22:44	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/05/15 22:44	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/05/15 22:44	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/05/15 22:44	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/05/15 22:44	1
1,2,4-Trimethylbenzene	0.74		0.39		ug/m3			03/05/15 22:44	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/05/15 22:44	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 22:44	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/05/15 22:44	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/05/15 22:44	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/05/15 22:44	1
1,3,5-Trimethylbenzene	0.73		0.39		ug/m3			03/05/15 22:44	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 22:44	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 22:44	1
1,4-Dioxane	ND		0.72		ug/m3			03/05/15 22:44	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/05/15 22:44	1
2-Butanone	1.1		0.94		ug/m3			03/05/15 22:44	1
4-Methyl-2-pentanone (MIBK)	0.99		0.82		ug/m3			03/05/15 22:44	1
Benzene	0.52		0.26		ug/m3			03/05/15 22:44	1
Benzyl chloride	ND		0.83		ug/m3			03/05/15 22:44	1
Bromodichloromethane	ND		0.54		ug/m3			03/05/15 22:44	1
Bromoform	ND		0.83		ug/m3			03/05/15 22:44	1
Bromomethane	ND		0.31		ug/m3			03/05/15 22:44	1
Carbon tetrachloride	0.68		0.25		ug/m3			03/05/15 22:44	1
Chlorobenzene	ND		0.37		ug/m3			03/05/15 22:44	1
Chloroethane	ND		0.21		ug/m3			03/05/15 22:44	1
Chloroform	1.8		0.39		ug/m3			03/05/15 22:44	1
Chloromethane	ND		0.41		ug/m3			03/05/15 22:44	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 22:44	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 22:44	1
Cyclohexane	ND		0.69		ug/m3			03/05/15 22:44	1
Dibromochloromethane	ND		0.68		ug/m3			03/05/15 22:44	1
Dichlorodifluoromethane	2.4		0.40		ug/m3			03/05/15 22:44	1
Ethanol	4.9		1.5		ug/m3			03/05/15 22:44	1
Ethylbenzene	ND		0.35		ug/m3			03/05/15 22:44	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/05/15 22:44	1
Hexane	1.5		0.70		ug/m3			03/05/15 22:44	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/05/15 22:44	1
Methylene Chloride	0.99		0.69		ug/m3			03/05/15 22:44	1
m-Xylene & p-Xylene	1.8		0.35		ug/m3			03/05/15 22:44	1
o-Xylene	0.54		0.35		ug/m3			03/05/15 22:44	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H3-SS-2015

Lab Sample ID: 140-2815-11

Date Collected: 02/25/15 13:55

Matrix: Air

Date Received: 03/03/15 09:20

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			03/05/15 22:44	1
t-Butyl alcohol	ND		0.97		ug/m3			03/05/15 22:44	1
Tetrachloroethene	1.1		0.54		ug/m3			03/05/15 22:44	1
Toluene	2.0		0.45		ug/m3			03/05/15 22:44	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 22:44	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 22:44	1
Trichloroethene	4.4		0.21		ug/m3			03/05/15 22:44	1
Trichlorofluoromethane	1.3		0.45		ug/m3			03/05/15 22:44	1
Vinyl chloride	ND		0.20		ug/m3			03/05/15 22:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		60 - 140					03/05/15 22:44	1

Client Sample ID: H15-BA2-2015

Lab Sample ID: 140-2815-12

Date Collected: 02/27/15 08:45

Matrix: Air

Date Received: 03/03/15 09:20

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			03/05/15 23:33	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/05/15 23:33	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/05/15 23:33	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/05/15 23:33	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/05/15 23:33	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/05/15 23:33	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/05/15 23:33	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 23:33	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/05/15 23:33	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 23:33	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/05/15 23:33	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/05/15 23:33	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/05/15 23:33	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 23:33	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 23:33	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 23:33	1
1,4-Dioxane	ND		0.20		ppb v/v			03/05/15 23:33	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/05/15 23:33	1
2-Butanone	0.32		0.32		ppb v/v			03/05/15 23:33	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/05/15 23:33	1
Benzene	0.16		0.080		ppb v/v			03/05/15 23:33	1
Benzyl chloride	ND		0.16		ppb v/v			03/05/15 23:33	1
Bromodichloromethane	ND		0.080		ppb v/v			03/05/15 23:33	1
Bromoform	ND		0.080		ppb v/v			03/05/15 23:33	1
Bromomethane	ND		0.080		ppb v/v			03/05/15 23:33	1
Carbon tetrachloride	0.068		0.040		ppb v/v			03/05/15 23:33	1
Chlorobenzene	ND		0.080		ppb v/v			03/05/15 23:33	1
Chloroethane	ND		0.080		ppb v/v			03/05/15 23:33	1
Chloroform	ND		0.080		ppb v/v			03/05/15 23:33	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H15-BA2-2015

Lab Sample ID: 140-2815-12

Date Collected: 02/27/15 08:45

Matrix: Air

Date Received: 03/03/15 09:20

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	0.52		0.20		ppb v/v			03/05/15 23:33	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 23:33	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 23:33	1
Cyclohexane	ND		0.20		ppb v/v			03/05/15 23:33	1
Dibromochloromethane	ND		0.080		ppb v/v			03/05/15 23:33	1
Dichlorodifluoromethane	0.47		0.080		ppb v/v			03/05/15 23:33	1
Ethanol	5.4		0.80		ppb v/v			03/05/15 23:33	1
Ethylbenzene	ND		0.080		ppb v/v			03/05/15 23:33	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/05/15 23:33	1
Hexane	ND		0.20		ppb v/v			03/05/15 23:33	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/05/15 23:33	1
Methylene Chloride	ND		0.20		ppb v/v			03/05/15 23:33	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			03/05/15 23:33	1
o-Xylene	ND		0.080		ppb v/v			03/05/15 23:33	1
Styrene	ND		0.080		ppb v/v			03/05/15 23:33	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/05/15 23:33	1
Tetrachloroethene	ND		0.080		ppb v/v			03/05/15 23:33	1
Toluene	0.13		0.12		ppb v/v			03/05/15 23:33	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 23:33	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 23:33	1
Trichloroethene	0.046		0.040		ppb v/v			03/05/15 23:33	1
Trichlorofluoromethane	0.22		0.080		ppb v/v			03/05/15 23:33	1
Vinyl chloride	ND		0.080		ppb v/v			03/05/15 23:33	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/05/15 23:33	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/05/15 23:33	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/05/15 23:33	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/05/15 23:33	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/05/15 23:33	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/05/15 23:33	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/05/15 23:33	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 23:33	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/05/15 23:33	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 23:33	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/05/15 23:33	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/05/15 23:33	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/05/15 23:33	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 23:33	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 23:33	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 23:33	1
1,4-Dioxane	ND		0.72		ug/m3			03/05/15 23:33	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/05/15 23:33	1
2-Butanone	0.94		0.94		ug/m3			03/05/15 23:33	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/05/15 23:33	1
Benzene	0.52		0.26		ug/m3			03/05/15 23:33	1
Benzyl chloride	ND		0.83		ug/m3			03/05/15 23:33	1
Bromodichloromethane	ND		0.54		ug/m3			03/05/15 23:33	1
Bromoform	ND		0.83		ug/m3			03/05/15 23:33	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H15-BA2-2015

Lab Sample ID: 140-2815-12

Date Collected: 02/27/15 08:45

Matrix: Air

Date Received: 03/03/15 09:20

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		0.31		ug/m3			03/05/15 23:33	1
Carbon tetrachloride	0.43		0.25		ug/m3			03/05/15 23:33	1
Chlorobenzene	ND		0.37		ug/m3			03/05/15 23:33	1
Chloroethane	ND		0.21		ug/m3			03/05/15 23:33	1
Chloroform	ND		0.39		ug/m3			03/05/15 23:33	1
Chloromethane	1.1		0.41		ug/m3			03/05/15 23:33	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 23:33	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 23:33	1
Cyclohexane	ND		0.69		ug/m3			03/05/15 23:33	1
Dibromochloromethane	ND		0.68		ug/m3			03/05/15 23:33	1
Dichlorodifluoromethane	2.3		0.40		ug/m3			03/05/15 23:33	1
Ethanol	10		1.5		ug/m3			03/05/15 23:33	1
Ethylbenzene	ND		0.35		ug/m3			03/05/15 23:33	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/05/15 23:33	1
Hexane	ND		0.70		ug/m3			03/05/15 23:33	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/05/15 23:33	1
Methylene Chloride	ND		0.69		ug/m3			03/05/15 23:33	1
m-Xylene & p-Xylene	ND		0.35		ug/m3			03/05/15 23:33	1
o-Xylene	ND		0.35		ug/m3			03/05/15 23:33	1
Styrene	ND		0.34		ug/m3			03/05/15 23:33	1
t-Butyl alcohol	ND		0.97		ug/m3			03/05/15 23:33	1
Tetrachloroethene	ND		0.54		ug/m3			03/05/15 23:33	1
Toluene	0.48		0.45		ug/m3			03/05/15 23:33	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 23:33	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 23:33	1
Trichloroethene	0.25		0.21		ug/m3			03/05/15 23:33	1
Trichlorofluoromethane	1.2		0.45		ug/m3			03/05/15 23:33	1
Vinyl chloride	ND		0.20		ug/m3			03/05/15 23:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		60 - 140					03/05/15 23:33	1

Client Sample ID: H2-BA-2015

Lab Sample ID: 140-2815-13

Date Collected: 02/27/15 11:47

Matrix: Air

Date Received: 03/03/15 09:20

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			03/06/15 00:22	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/06/15 00:22	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/06/15 00:22	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/06/15 00:22	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/06/15 00:22	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/06/15 00:22	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/06/15 00:22	1
1,2,4-Trimethylbenzene	0.30		0.080		ppb v/v			03/06/15 00:22	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/06/15 00:22	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/06/15 00:22	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H2-BA-2015

Lab Sample ID: 140-2815-13

Date Collected: 02/27/15 11:47

Matrix: Air

Date Received: 03/03/15 09:20

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			03/06/15 00:22	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/06/15 00:22	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/06/15 00:22	1
1,3,5-Trimethylbenzene	0.090		0.080		ppb v/v			03/06/15 00:22	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/06/15 00:22	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/06/15 00:22	1
1,4-Dioxane	ND		0.20		ppb v/v			03/06/15 00:22	1
2,2,4-Trimethylpentane	0.31		0.20		ppb v/v			03/06/15 00:22	1
2-Butanone	ND		0.32		ppb v/v			03/06/15 00:22	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/06/15 00:22	1
Benzene	0.23		0.080		ppb v/v			03/06/15 00:22	1
Benzyl chloride	ND		0.16		ppb v/v			03/06/15 00:22	1
Bromodichloromethane	ND		0.080		ppb v/v			03/06/15 00:22	1
Bromoform	ND		0.080		ppb v/v			03/06/15 00:22	1
Bromomethane	ND		0.080		ppb v/v			03/06/15 00:22	1
Carbon tetrachloride	0.072		0.040		ppb v/v			03/06/15 00:22	1
Chlorobenzene	ND		0.080		ppb v/v			03/06/15 00:22	1
Chloroethane	ND		0.080		ppb v/v			03/06/15 00:22	1
Chloroform	ND		0.080		ppb v/v			03/06/15 00:22	1
Chloromethane	0.53		0.20		ppb v/v			03/06/15 00:22	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/06/15 00:22	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/06/15 00:22	1
Cyclohexane	ND		0.20		ppb v/v			03/06/15 00:22	1
Dibromochloromethane	ND		0.080		ppb v/v			03/06/15 00:22	1
Dichlorodifluoromethane	0.49		0.080		ppb v/v			03/06/15 00:22	1
Ethanol	18		0.80		ppb v/v			03/06/15 00:22	1
Ethylbenzene	0.19		0.080		ppb v/v			03/06/15 00:22	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/06/15 00:22	1
Hexane	1.1		0.20		ppb v/v			03/06/15 00:22	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/06/15 00:22	1
Methylene Chloride	ND		0.20		ppb v/v			03/06/15 00:22	1
m-Xylene & p-Xylene	0.71		0.080		ppb v/v			03/06/15 00:22	1
o-Xylene	0.28		0.080		ppb v/v			03/06/15 00:22	1
Styrene	ND		0.080		ppb v/v			03/06/15 00:22	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/06/15 00:22	1
Tetrachloroethene	ND		0.080		ppb v/v			03/06/15 00:22	1
Toluene	1.2		0.12		ppb v/v			03/06/15 00:22	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/06/15 00:22	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/06/15 00:22	1
Trichloroethene	0.077		0.040		ppb v/v			03/06/15 00:22	1
Trichlorofluoromethane	0.25		0.080		ppb v/v			03/06/15 00:22	1
Vinyl chloride	ND		0.080		ppb v/v			03/06/15 00:22	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/06/15 00:22	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/06/15 00:22	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/06/15 00:22	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/06/15 00:22	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/06/15 00:22	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H2-BA-2015

Lab Sample ID: 140-2815-13

Date Collected: 02/27/15 11:47

Matrix: Air

Date Received: 03/03/15 09:20

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		0.32		ug/m3			03/06/15 00:22	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/06/15 00:22	1
1,2,4-Trimethylbenzene	1.5		0.39		ug/m3			03/06/15 00:22	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/06/15 00:22	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/06/15 00:22	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/06/15 00:22	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/06/15 00:22	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/06/15 00:22	1
1,3,5-Trimethylbenzene	0.44		0.39		ug/m3			03/06/15 00:22	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/06/15 00:22	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/06/15 00:22	1
1,4-Dioxane	ND		0.72		ug/m3			03/06/15 00:22	1
2,2,4-Trimethylpentane	1.5		0.93		ug/m3			03/06/15 00:22	1
2-Butanone	ND		0.94		ug/m3			03/06/15 00:22	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/06/15 00:22	1
Benzene	0.73		0.26		ug/m3			03/06/15 00:22	1
Benzyl chloride	ND		0.83		ug/m3			03/06/15 00:22	1
Bromodichloromethane	ND		0.54		ug/m3			03/06/15 00:22	1
Bromoform	ND		0.83		ug/m3			03/06/15 00:22	1
Bromomethane	ND		0.31		ug/m3			03/06/15 00:22	1
Carbon tetrachloride	0.46		0.25		ug/m3			03/06/15 00:22	1
Chlorobenzene	ND		0.37		ug/m3			03/06/15 00:22	1
Chloroethane	ND		0.21		ug/m3			03/06/15 00:22	1
Chloroform	ND		0.39		ug/m3			03/06/15 00:22	1
Chloromethane	1.1		0.41		ug/m3			03/06/15 00:22	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/06/15 00:22	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/06/15 00:22	1
Cyclohexane	ND		0.69		ug/m3			03/06/15 00:22	1
Dibromochloromethane	ND		0.68		ug/m3			03/06/15 00:22	1
Dichlorodifluoromethane	2.4		0.40		ug/m3			03/06/15 00:22	1
Ethanol	35		1.5		ug/m3			03/06/15 00:22	1
Ethylbenzene	0.84		0.35		ug/m3			03/06/15 00:22	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/06/15 00:22	1
Hexane	4.0		0.70		ug/m3			03/06/15 00:22	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/06/15 00:22	1
Methylene Chloride	ND		0.69		ug/m3			03/06/15 00:22	1
m-Xylene & p-Xylene	3.1		0.35		ug/m3			03/06/15 00:22	1
o-Xylene	1.2		0.35		ug/m3			03/06/15 00:22	1
Styrene	ND		0.34		ug/m3			03/06/15 00:22	1
t-Butyl alcohol	ND		0.97		ug/m3			03/06/15 00:22	1
Tetrachloroethene	ND		0.54		ug/m3			03/06/15 00:22	1
Toluene	4.7		0.45		ug/m3			03/06/15 00:22	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/06/15 00:22	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/06/15 00:22	1
Trichloroethene	0.41		0.21		ug/m3			03/06/15 00:22	1
Trichlorofluoromethane	1.4		0.45		ug/m3			03/06/15 00:22	1
Vinyl chloride	ND		0.20		ug/m3			03/06/15 00:22	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H2-BA-2015

Date Collected: 02/27/15 11:47

Date Received: 03/03/15 09:20

Sample Container: Summa Canister 6L

Lab Sample ID: 140-2815-13

Matrix: Air

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	101		60 - 140		03/06/15 00:22	1

Default Detection Limits

Client: New York State D.E.C.

TestAmerica Job ID: 140-2815-1

Project/Site: Former Ithaca Gun Factory # C755019A

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

Analyte	RL	MDL	Units	Method
1,1,1-Trichloroethane	0.080	0.012	ppb v/v	TO 15 LL
1,1,1-Trichloroethane	0.44	0.065	ug/m3	TO 15 LL
1,1,2,2-Tetrachloroethane	0.080	0.024	ppb v/v	TO 15 LL
1,1,2,2-Tetrachloroethane	0.55	0.16	ug/m3	TO 15 LL
1,1,2-Trichloroethane	0.080	0.021	ppb v/v	TO 15 LL
1,1,2-Trichloroethane	0.44	0.11	ug/m3	TO 15 LL
1,1,2-Trichlorotrifluoroethane	0.080	0.012	ppb v/v	TO 15 LL
1,1,2-Trichlorotrifluoroethane	0.61	0.092	ug/m3	TO 15 LL
1,1-Dichloroethane	0.080	0.010	ppb v/v	TO 15 LL
1,1-Dichloroethane	0.32	0.040	ug/m3	TO 15 LL
1,1-Dichloroethene	0.080	0.014	ppb v/v	TO 15 LL
1,1-Dichloroethene	0.32	0.056	ug/m3	TO 15 LL
1,2,4-Trichlorobenzene	0.080	0.039	ppb v/v	TO 15 LL
1,2,4-Trichlorobenzene	0.59	0.29	ug/m3	TO 15 LL
1,2,4-Trimethylbenzene	0.080	0.025	ppb v/v	TO 15 LL
1,2,4-Trimethylbenzene	0.39	0.12	ug/m3	TO 15 LL
1,2-Dibromoethane	0.080	0.018	ppb v/v	TO 15 LL
1,2-Dibromoethane	0.61	0.14	ug/m3	TO 15 LL
1,2-Dichlorobenzene	0.080	0.028	ppb v/v	TO 15 LL
1,2-Dichlorobenzene	0.48	0.17	ug/m3	TO 15 LL
1,2-Dichloroethane	0.080	0.019	ppb v/v	TO 15 LL
1,2-Dichloroethane	0.32	0.077	ug/m3	TO 15 LL
1,2-Dichloropropane	0.080	0.021	ppb v/v	TO 15 LL
1,2-Dichloropropane	0.37	0.097	ug/m3	TO 15 LL
1,2-Dichlorotetrafluoroethane	0.080	0.013	ppb v/v	TO 15 LL
1,2-Dichlorotetrafluoroethane	0.56	0.091	ug/m3	TO 15 LL
1,3,5-Trimethylbenzene	0.080	0.026	ppb v/v	TO 15 LL
1,3,5-Trimethylbenzene	0.39	0.13	ug/m3	TO 15 LL
1,3-Dichlorobenzene	0.080	0.026	ppb v/v	TO 15 LL
1,3-Dichlorobenzene	0.48	0.16	ug/m3	TO 15 LL
1,4-Dichlorobenzene	0.080	0.026	ppb v/v	TO 15 LL
1,4-Dichlorobenzene	0.48	0.16	ug/m3	TO 15 LL
1,4-Dioxane	0.20	0.032	ppb v/v	TO 15 LL
1,4-Dioxane	0.72	0.12	ug/m3	TO 15 LL
2,2,4-Trimethylpentane	0.20	0.016	ppb v/v	TO 15 LL
2,2,4-Trimethylpentane	0.93	0.075	ug/m3	TO 15 LL
2-Butanone	0.32	0.080	ppb v/v	TO 15 LL
2-Butanone	0.94	0.24	ug/m3	TO 15 LL
4-Methyl-2-pentanone (MIBK)	0.20	0.018	ppb v/v	TO 15 LL
4-Methyl-2-pentanone (MIBK)	0.82	0.074	ug/m3	TO 15 LL
Benzene	0.080	0.023	ppb v/v	TO 15 LL
Benzene	0.26	0.073	ug/m3	TO 15 LL
Benzyl chloride	0.16	0.031	ppb v/v	TO 15 LL
Benzyl chloride	0.83	0.16	ug/m3	TO 15 LL
Bromodichloromethane	0.080	0.018	ppb v/v	TO 15 LL
Bromodichloromethane	0.54	0.12	ug/m3	TO 15 LL
Bromoform	0.080	0.019	ppb v/v	TO 15 LL
Bromoform	0.83	0.20	ug/m3	TO 15 LL
Bromomethane	0.080	0.013	ppb v/v	TO 15 LL
Bromomethane	0.31	0.050	ug/m3	TO 15 LL
Carbon tetrachloride	0.040	0.015	ppb v/v	TO 15 LL
Carbon tetrachloride	0.25	0.094	ug/m3	TO 15 LL

TestAmerica Knoxville

Default Detection Limits

Client: New York State D.E.C.

TestAmerica Job ID: 140-2815-1

Project/Site: Former Ithaca Gun Factory # C755019A

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

Analyte	RL	MDL	Units	Method
Chlorobenzene	0.080	0.020	ppb v/v	TO 15 LL
Chlorobenzene	0.37	0.092	ug/m3	TO 15 LL
Chloroethane	0.080	0.014	ppb v/v	TO 15 LL
Chloroethane	0.21	0.037	ug/m3	TO 15 LL
Chloroform	0.080	0.015	ppb v/v	TO 15 LL
Chloroform	0.39	0.073	ug/m3	TO 15 LL
Chloromethane	0.20	0.064	ppb v/v	TO 15 LL
Chloromethane	0.41	0.13	ug/m3	TO 15 LL
cis-1,2-Dichloroethene	0.080	0.024	ppb v/v	TO 15 LL
cis-1,2-Dichloroethene	0.32	0.095	ug/m3	TO 15 LL
cis-1,3-Dichloropropene	0.080	0.029	ppb v/v	TO 15 LL
cis-1,3-Dichloropropene	0.36	0.13	ug/m3	TO 15 LL
Cyclohexane	0.20	0.016	ppb v/v	TO 15 LL
Cyclohexane	0.69	0.055	ug/m3	TO 15 LL
Dibromochloromethane	0.080	0.017	ppb v/v	TO 15 LL
Dibromochloromethane	0.68	0.14	ug/m3	TO 15 LL
Dichlorodifluoromethane	0.080	0.027	ppb v/v	TO 15 LL
Dichlorodifluoromethane	0.40	0.13	ug/m3	TO 15 LL
Ethanol	0.80	0.80	ppb v/v	TO 15 LL
Ethanol	1.5	1.5	ug/m3	TO 15 LL
Ethylbenzene	0.080	0.027	ppb v/v	TO 15 LL
Ethylbenzene	0.35	0.12	ug/m3	TO 15 LL
Hexachlorobutadiene	0.080	0.049	ppb v/v	TO 15 LL
Hexachlorobutadiene	0.85	0.52	ug/m3	TO 15 LL
Hexane	0.20	0.013	ppb v/v	TO 15 LL
Hexane	0.70	0.046	ug/m3	TO 15 LL
Methyl tert-butyl ether	0.16	0.068	ppb v/v	TO 15 LL
Methyl tert-butyl ether	0.58	0.25	ug/m3	TO 15 LL
Methylene Chloride	0.20	0.13	ppb v/v	TO 15 LL
Methylene Chloride	0.69	0.45	ug/m3	TO 15 LL
m-Xylene & p-Xylene	0.080	0.053	ppb v/v	TO 15 LL
m-Xylene & p-Xylene	0.35	0.23	ug/m3	TO 15 LL
o-Xylene	0.080	0.024	ppb v/v	TO 15 LL
o-Xylene	0.35	0.10	ug/m3	TO 15 LL
Styrene	0.080	0.023	ppb v/v	TO 15 LL
Styrene	0.34	0.098	ug/m3	TO 15 LL
t-Butyl alcohol	0.32	0.015	ppb v/v	TO 15 LL
t-Butyl alcohol	0.97	0.045	ug/m3	TO 15 LL
Tetrachloroethene	0.080	0.016	ppb v/v	TO 15 LL
Tetrachloroethene	0.54	0.11	ug/m3	TO 15 LL
Toluene	0.12	0.12	ppb v/v	TO 15 LL
Toluene	0.45	0.45	ug/m3	TO 15 LL
trans-1,2-Dichloroethene	0.080	0.020	ppb v/v	TO 15 LL
trans-1,2-Dichloroethene	0.32	0.079	ug/m3	TO 15 LL
trans-1,3-Dichloropropene	0.080	0.019	ppb v/v	TO 15 LL
trans-1,3-Dichloropropene	0.36	0.086	ug/m3	TO 15 LL
Trichloroethene	0.040	0.014	ppb v/v	TO 15 LL
Trichloroethene	0.21	0.075	ug/m3	TO 15 LL
Trichlorofluoromethane	0.080	0.010	ppb v/v	TO 15 LL
Trichlorofluoromethane	0.45	0.056	ug/m3	TO 15 LL
Vinyl chloride	0.080	0.029	ppb v/v	TO 15 LL
Vinyl chloride	0.20	0.074	ug/m3	TO 15 LL

TestAmerica Knoxville

Surrogate Summary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

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)
140-2815-1	H20-BA-2015	102
140-2815-2	DUP1-2015	99
140-2815-3	D3-OA-2015	100
140-2815-4	H23-BA-2015	102
140-2815-5	H23-SS-2015	100
140-2815-6	DUP2-2015	103
140-2815-7	D2-OA-2015	100
140-2815-8	H28-BA-2015	100
140-2815-8 - DL	H28-BA-2015	99
140-2815-9	H28-SS-2015	101
140-2815-10	H3-BA-2015	102
140-2815-11	H3-SS-2015	103
140-2815-12	H15-BA2-2015	100
140-2815-13	H2-BA-2015	101
LCS 140-2464/1002	Lab Control Sample	104
MB 140-2464/6	Method Blank	101

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

QC Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

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

Lab Sample ID: MB 140-2464/6

Matrix: Air

Analysis Batch: 2464

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			03/05/15 13:33	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/05/15 13:33	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/05/15 13:33	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/05/15 13:33	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/05/15 13:33	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/05/15 13:33	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/05/15 13:33	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 13:33	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/05/15 13:33	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 13:33	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/05/15 13:33	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/05/15 13:33	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/05/15 13:33	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/05/15 13:33	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 13:33	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/05/15 13:33	1
1,4-Dioxane	ND		0.20		ppb v/v			03/05/15 13:33	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/05/15 13:33	1
2-Butanone	ND		0.32		ppb v/v			03/05/15 13:33	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/05/15 13:33	1
Benzene	ND		0.080		ppb v/v			03/05/15 13:33	1
Benzyl chloride	ND		0.16		ppb v/v			03/05/15 13:33	1
Bromodichloromethane	ND		0.080		ppb v/v			03/05/15 13:33	1
Bromoform	ND		0.080		ppb v/v			03/05/15 13:33	1
Bromomethane	ND		0.080		ppb v/v			03/05/15 13:33	1
Carbon tetrachloride	ND		0.040		ppb v/v			03/05/15 13:33	1
Chlorobenzene	ND		0.080		ppb v/v			03/05/15 13:33	1
Chloroethane	ND		0.080		ppb v/v			03/05/15 13:33	1
Chloroform	ND		0.080		ppb v/v			03/05/15 13:33	1
Chloromethane	ND		0.20		ppb v/v			03/05/15 13:33	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 13:33	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/05/15 13:33	1
Cyclohexane	ND		0.20		ppb v/v			03/05/15 13:33	1
Dibromochloromethane	ND		0.080		ppb v/v			03/05/15 13:33	1
Dichlorodifluoromethane	ND		0.080		ppb v/v			03/05/15 13:33	1
Ethanol	ND		0.80		ppb v/v			03/05/15 13:33	1
Ethylbenzene	ND		0.080		ppb v/v			03/05/15 13:33	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/05/15 13:33	1
Hexane	ND		0.20		ppb v/v			03/05/15 13:33	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/05/15 13:33	1
Methylene Chloride	ND		0.20		ppb v/v			03/05/15 13:33	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			03/05/15 13:33	1
o-Xylene	ND		0.080		ppb v/v			03/05/15 13:33	1
Styrene	ND		0.080		ppb v/v			03/05/15 13:33	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/05/15 13:33	1
Tetrachloroethene	ND		0.080		ppb v/v			03/05/15 13:33	1
Toluene	ND		0.12		ppb v/v			03/05/15 13:33	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/05/15 13:33	1

TestAmerica Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

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

Lab Sample ID: MB 140-2464/6

Matrix: Air

Analysis Batch: 2464

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			03/05/15 13:33	1
Trichloroethene	ND		0.040		ppb v/v			03/05/15 13:33	1
Trichlorofluoromethane	ND		0.080		ppb v/v			03/05/15 13:33	1
Vinyl chloride	ND		0.080		ppb v/v			03/05/15 13:33	1
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/05/15 13:33	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/05/15 13:33	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/05/15 13:33	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/05/15 13:33	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/05/15 13:33	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/05/15 13:33	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/05/15 13:33	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 13:33	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/05/15 13:33	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 13:33	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/05/15 13:33	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/05/15 13:33	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/05/15 13:33	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/05/15 13:33	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 13:33	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/05/15 13:33	1
1,4-Dioxane	ND		0.72		ug/m3			03/05/15 13:33	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/05/15 13:33	1
2-Butanone	ND		0.94		ug/m3			03/05/15 13:33	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/05/15 13:33	1
Benzene	ND		0.26		ug/m3			03/05/15 13:33	1
Benzyl chloride	ND		0.83		ug/m3			03/05/15 13:33	1
Bromodichloromethane	ND		0.54		ug/m3			03/05/15 13:33	1
Bromoform	ND		0.83		ug/m3			03/05/15 13:33	1
Bromomethane	ND		0.31		ug/m3			03/05/15 13:33	1
Carbon tetrachloride	ND		0.25		ug/m3			03/05/15 13:33	1
Chlorobenzene	ND		0.37		ug/m3			03/05/15 13:33	1
Chloroethane	ND		0.21		ug/m3			03/05/15 13:33	1
Chloroform	ND		0.39		ug/m3			03/05/15 13:33	1
Chloromethane	ND		0.41		ug/m3			03/05/15 13:33	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 13:33	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 13:33	1
Cyclohexane	ND		0.69		ug/m3			03/05/15 13:33	1
Dibromochloromethane	ND		0.68		ug/m3			03/05/15 13:33	1
Dichlorodifluoromethane	ND		0.40		ug/m3			03/05/15 13:33	1
Ethanol	ND		1.5		ug/m3			03/05/15 13:33	1
Ethylbenzene	ND		0.35		ug/m3			03/05/15 13:33	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/05/15 13:33	1
Hexane	ND		0.70		ug/m3			03/05/15 13:33	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/05/15 13:33	1
Methylene Chloride	ND		0.69		ug/m3			03/05/15 13:33	1

TestAmerica Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

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

Lab Sample ID: MB 140-2464/6

Matrix: Air

Analysis Batch: 2464

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			03/05/15 13:33	1
o-Xylene	ND		0.35		ug/m3			03/05/15 13:33	1
Styrene	ND		0.34		ug/m3			03/05/15 13:33	1
t-Butyl alcohol	ND		0.97		ug/m3			03/05/15 13:33	1
Tetrachloroethene	ND		0.54		ug/m3			03/05/15 13:33	1
Toluene	ND		0.45		ug/m3			03/05/15 13:33	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/05/15 13:33	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/05/15 13:33	1
Trichloroethene	ND		0.21		ug/m3			03/05/15 13:33	1
Trichlorofluoromethane	ND		0.45		ug/m3			03/05/15 13:33	1
Vinyl chloride	ND		0.20		ug/m3			03/05/15 13:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		60 - 140		03/05/15 13:33	1

Lab Sample ID: LCS 140-2464/1002

Matrix: Air

Analysis Batch: 2464

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	2.24		ppb v/v		112	70 - 130
1,1,2,2-Tetrachloroethane	2.00	2.15		ppb v/v		107	70 - 130
1,1,2-Trichloroethane	2.00	2.16		ppb v/v		108	70 - 130
1,1,2-Trichlorotrifluoroethane	2.00	2.25		ppb v/v		113	70 - 130
1,1-Dichloroethane	2.00	2.26		ppb v/v		113	70 - 130
1,1-Dichloroethene	2.00	2.26		ppb v/v		113	70 - 130
1,2,4-Trichlorobenzene	2.00	1.68		ppb v/v		84	60 - 140
1,2,4-Trimethylbenzene	2.00	2.27		ppb v/v		113	70 - 130
1,2-Dibromoethane	2.00	2.15		ppb v/v		108	70 - 130
1,2-Dichlorobenzene	2.00	2.14		ppb v/v		107	70 - 130
1,2-Dichloroethane	2.00	2.19		ppb v/v		109	70 - 130
1,2-Dichloropropane	2.00	2.17		ppb v/v		108	70 - 130
1,2-Dichlorotetrafluoroethane	2.00	2.32		ppb v/v		116	60 - 140
1,3,5-Trimethylbenzene	2.00	2.21		ppb v/v		110	70 - 130
1,3-Dichlorobenzene	2.00	2.13		ppb v/v		106	70 - 130
1,4-Dichlorobenzene	2.00	2.11		ppb v/v		105	70 - 130
1,4-Dioxane	2.00	2.20		ppb v/v		110	60 - 140
2,2,4-Trimethylpentane	2.00	2.13		ppb v/v		107	70 - 130
2-Butanone	2.00	1.99		ppb v/v		99	60 - 140
4-Methyl-2-pentanone (MIBK)	2.00	1.95		ppb v/v		97	60 - 140
Benzene	2.00	2.17		ppb v/v		109	70 - 130
Benzyl chloride	2.00	2.21		ppb v/v		111	70 - 130
Bromodichloromethane	2.00	2.19		ppb v/v		109	70 - 130
Bromoform	2.00	2.21		ppb v/v		110	60 - 140
Bromomethane	2.00	2.36		ppb v/v		118	70 - 130
Carbon tetrachloride	2.00	2.27		ppb v/v		113	70 - 130
Chlorobenzene	2.00	2.14		ppb v/v		107	70 - 130

TestAmerica Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

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

Lab Sample ID: LCS 140-2464/1002

Matrix: Air

Analysis Batch: 2464

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	2.31		ppb v/v		115	70 - 130
Chloroform	2.00	2.23		ppb v/v		111	70 - 130
Chloromethane	2.00	2.32		ppb v/v		116	60 - 140
cis-1,2-Dichloroethene	2.00	2.26		ppb v/v		113	70 - 130
cis-1,3-Dichloropropene	2.00	2.19		ppb v/v		110	70 - 130
Cyclohexane	2.00	2.17		ppb v/v		109	70 - 130
Dibromochloromethane	2.00	2.21		ppb v/v		110	70 - 130
Dichlorodifluoromethane	2.00	2.32		ppb v/v		116	60 - 140
Ethanol	10.0	10.8		ppb v/v		108	20 - 180
Ethylbenzene	2.00	2.19		ppb v/v		110	70 - 130
Hexachlorobutadiene	2.00	1.86		ppb v/v		93	60 - 140
Hexane	2.00	2.28		ppb v/v		114	70 - 130
Methyl tert-butyl ether	2.00	2.39		ppb v/v		119	60 - 140
Methylene Chloride	2.00	2.11		ppb v/v		106	70 - 130
m-Xylene & p-Xylene	4.00	4.49		ppb v/v		112	70 - 130
o-Xylene	2.00	2.20		ppb v/v		110	70 - 130
Styrene	2.00	2.31		ppb v/v		115	70 - 130
t-Butyl alcohol	2.00	2.20		ppb v/v		110	60 - 140
Tetrachloroethene	2.00	2.09		ppb v/v		104	70 - 130
Toluene	2.00	2.12		ppb v/v		106	70 - 130
trans-1,2-Dichloroethene	2.00	2.26		ppb v/v		113	70 - 130
trans-1,3-Dichloropropene	2.00	2.18		ppb v/v		109	70 - 130
Trichloroethene	2.00	2.13		ppb v/v		107	70 - 130
Trichlorofluoromethane	2.00	2.20		ppb v/v		110	60 - 140
Vinyl chloride	2.00	2.33		ppb v/v		116	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	11	12.2		ug/m3		112	70 - 130
1,1,1,2-Tetrachloroethane	14	14.8		ug/m3		107	70 - 130
1,1,2-Trichloroethane	11	11.8		ug/m3		108	70 - 130
1,1,2-Trichlorotrifluoroethane	15	17.3		ug/m3		113	70 - 130
1,1-Dichloroethane	8.1	9.15		ug/m3		113	70 - 130
1,1-Dichloroethene	7.9	8.94		ug/m3		113	70 - 130
1,2,4-Trichlorobenzene	15	12.4		ug/m3		84	60 - 140
1,2,4-Trimethylbenzene	9.8	11.2		ug/m3		113	70 - 130
1,2-Dibromoethane	15	16.6		ug/m3		108	70 - 130
1,2-Dichlorobenzene	12	12.9		ug/m3		107	70 - 130
1,2-Dichloroethane	8.1	8.87		ug/m3		109	70 - 130
1,2-Dichloropropane	9.2	10.0		ug/m3		108	70 - 130
1,2-Dichlorotetrafluoroethane	14	16.2		ug/m3		116	60 - 140
1,3,5-Trimethylbenzene	9.8	10.9		ug/m3		110	70 - 130
1,3-Dichlorobenzene	12	12.8		ug/m3		106	70 - 130
1,4-Dichlorobenzene	12	12.7		ug/m3		105	70 - 130
1,4-Dioxane	7.2	7.93		ug/m3		110	60 - 140
2,2,4-Trimethylpentane	9.3	9.97		ug/m3		107	70 - 130
2-Butanone	5.9	5.86		ug/m3		99	60 - 140
4-Methyl-2-pentanone (MIBK)	8.2	7.97		ug/m3		97	60 - 140

TestAmerica Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

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

Lab Sample ID: LCS 140-2464/1002

Matrix: Air

Analysis Batch: 2464

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	6.94		ug/m3		109	70 - 130
Benzyl chloride	10	11.5		ug/m3		111	70 - 130
Bromodichloromethane	13	14.6		ug/m3		109	70 - 130
Bromoform	21	22.8		ug/m3		110	60 - 140
Bromomethane	7.8	9.16		ug/m3		118	70 - 130
Carbon tetrachloride	13	14.3		ug/m3		113	70 - 130
Chlorobenzene	9.2	9.87		ug/m3		107	70 - 130
Chloroethane	5.3	6.09		ug/m3		115	70 - 130
Chloroform	9.8	10.9		ug/m3		111	70 - 130
Chloromethane	4.1	4.78		ug/m3		116	60 - 140
cis-1,2-Dichloroethene	7.9	8.97		ug/m3		113	70 - 130
cis-1,3-Dichloropropene	9.1	9.96		ug/m3		110	70 - 130
Cyclohexane	6.9	7.48		ug/m3		109	70 - 130
Dibromochloromethane	17	18.8		ug/m3		110	70 - 130
Dichlorodifluoromethane	9.9	11.5		ug/m3		116	60 - 140
Ethanol	19	20.4		ug/m3		108	20 - 180
Ethylbenzene	8.7	9.53		ug/m3		110	70 - 130
Hexachlorobutadiene	21	19.8		ug/m3		93	60 - 140
Hexane	7.1	8.04		ug/m3		114	70 - 130
Methyl tert-butyl ether	7.2	8.60		ug/m3		119	60 - 140
Methylene Chloride	7.0	7.34		ug/m3		106	70 - 130
m-Xylene & p-Xylene	17	19.5		ug/m3		112	70 - 130
o-Xylene	8.7	9.56		ug/m3		110	70 - 130
Styrene	8.5	9.82		ug/m3		115	70 - 130
t-Butyl alcohol	6.1	6.67		ug/m3		110	60 - 140
Tetrachloroethene	14	14.2		ug/m3		104	70 - 130
Toluene	7.5	7.98		ug/m3		106	70 - 130
trans-1,2-Dichloroethene	7.9	8.97		ug/m3		113	70 - 130
trans-1,3-Dichloropropene	9.1	9.91		ug/m3		109	70 - 130
Trichloroethene	11	11.5		ug/m3		107	70 - 130
Trichlorofluoromethane	11	12.4		ug/m3		110	60 - 140
Vinyl chloride	5.1	5.95		ug/m3		116	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		60 - 140

QC Association Summary

Client: New York State D.E.C.

TestAmerica Job ID: 140-2815-1

Project/Site: Former Ithaca Gun Factory # C755019A

Air - GC/MS VOA

Analysis Batch: 2464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-2815-1	H20-BA-2015	Total/NA	Air	TO 15 LL	
140-2815-2	DUP1-2015	Total/NA	Air	TO 15 LL	
140-2815-3	D3-OA-2015	Total/NA	Air	TO 15 LL	
140-2815-4	H23-BA-2015	Total/NA	Air	TO 15 LL	
140-2815-5	H23-SS-2015	Total/NA	Air	TO 15 LL	
140-2815-6	DUP2-2015	Total/NA	Air	TO 15 LL	
140-2815-7	D2-OA-2015	Total/NA	Air	TO 15 LL	
140-2815-8	H28-BA-2015	Total/NA	Air	TO 15 LL	
140-2815-8 - DL	H28-BA-2015	Total/NA	Air	TO 15 LL	
140-2815-9	H28-SS-2015	Total/NA	Air	TO 15 LL	
140-2815-10	H3-BA-2015	Total/NA	Air	TO 15 LL	
140-2815-11	H3-SS-2015	Total/NA	Air	TO 15 LL	
140-2815-12	H15-BA2-2015	Total/NA	Air	TO 15 LL	
140-2815-13	H2-BA-2015	Total/NA	Air	TO 15 LL	
LCS 140-2464/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	
MB 140-2464/6	Method Blank	Total/NA	Air	TO 15 LL	

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H20-BA-2015

Date Collected: 02/27/15 10:09

Date Received: 03/03/15 09:20

Lab Sample ID: 140-2815-1

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	2464	03/05/15 14:23	HMT	TAL KNX
Instrument ID: ME										

Client Sample ID: DUP1-2015

Date Collected: 02/27/15 00:00

Date Received: 03/03/15 09:20

Lab Sample ID: 140-2815-2

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	2464	03/05/15 15:12	HMT	TAL KNX
Instrument ID: ME										

Client Sample ID: D3-OA-2015

Date Collected: 02/27/15 10:07

Date Received: 03/03/15 09:20

Lab Sample ID: 140-2815-3

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	2464	03/05/15 16:01	HMT	TAL KNX
Instrument ID: ME										

Client Sample ID: H23-BA-2015

Date Collected: 02/27/15 11:21

Date Received: 03/03/15 09:20

Lab Sample ID: 140-2815-4

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	2464	03/05/15 16:52	HMT	TAL KNX
Instrument ID: ME										

Client Sample ID: H23-SS-2015

Date Collected: 02/27/15 11:22

Date Received: 03/03/15 09:20

Lab Sample ID: 140-2815-5

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	2464	03/05/15 17:41	HMT	TAL KNX
Instrument ID: ME										

Client Sample ID: DUP2-2015

Date Collected: 02/27/15 00:00

Date Received: 03/03/15 09:20

Lab Sample ID: 140-2815-6

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	2464	03/05/15 18:35	HMT	TAL KNX
Instrument ID: ME										

TestAmerica Knoxville

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: D2-OA-2015

Date Collected: 02/25/15 12:47

Date Received: 03/03/15 09:20

Lab Sample ID: 140-2815-7

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	2464	03/05/15 19:25	HMT	TAL KNX
Instrument ID: ME										

Client Sample ID: H28-BA-2015

Date Collected: 02/25/15 13:05

Date Received: 03/03/15 09:20

Lab Sample ID: 140-2815-8

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	2464	03/05/15 20:15	HMT	TAL KNX
Instrument ID: ME										
Total/NA	Analysis	TO 15 LL	DL	1	50 mL	500 mL	2464	03/06/15 08:03	HMT	TAL KNX
Instrument ID: ME										

Client Sample ID: H28-SS-2015

Date Collected: 02/25/15 13:00

Date Received: 03/03/15 09:20

Lab Sample ID: 140-2815-9

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	2464	03/05/15 21:04	HMT	TAL KNX
Instrument ID: ME										

Client Sample ID: H3-BA-2015

Date Collected: 02/25/15 13:59

Date Received: 03/03/15 09:20

Lab Sample ID: 140-2815-10

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	2464	03/05/15 21:55	HMT	TAL KNX
Instrument ID: ME										

Client Sample ID: H3-SS-2015

Date Collected: 02/25/15 13:55

Date Received: 03/03/15 09:20

Lab Sample ID: 140-2815-11

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	2464	03/05/15 22:44	HMT	TAL KNX
Instrument ID: ME										

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2815-1

Client Sample ID: H15-BA2-2015

Lab Sample ID: 140-2815-12

Date Collected: 02/27/15 08:45

Matrix: Air

Date Received: 03/03/15 09:20

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	2464	03/05/15 23:33	HMT	TAL KNX
Instrument ID: ME										

Client Sample ID: H2-BA-2015

Lab Sample ID: 140-2815-13

Date Collected: 02/27/15 11:47

Matrix: Air

Date Received: 03/03/15 09:20

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	2464	03/06/15 00:22	HMT	TAL KNX
Instrument ID: ME										

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 140-2464/1002

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	2464	03/05/15 09:33	HMT	TAL KNX
Instrument ID: ME										

Client Sample ID: Method Blank

Lab Sample ID: MB 140-2464/6

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	2464	03/05/15 13:33	HMT	TAL KNX
Instrument ID: ME										

Laboratory References:

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

Certification Summary

Client: New York State D.E.C.

TestAmerica Job ID: 140-2815-1

Project/Site: Former Ithaca Gun Factory # C755019A

Laboratory: TestAmerica Knoxville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10781	03-31-15

The following analytes are included in this report, but are not certified under this 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	1,4-Dioxane
TO 15 LL		Air	Bromodichloromethane
TO 15 LL		Air	Cyclohexane
TO 15 LL		Air	Dibromochloromethane
TO 15 LL		Air	Dichlorodifluoromethane
TO 15 LL		Air	o-Xylene
TO 15 LL		Air	Trichlorofluoromethane

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
TO 15 LL		Air	Ethanol
TO 15 LL		Air	t-Butyl alcohol

Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 140-2815-1

Project/Site: Former Ithaca Gun Factory # C755019A

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

Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 140-2815-1

Project/Site: Former Ithaca Gun Factory # C755019A

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
140-2815-1	H20-BA-2015	Air	02/27/15 10:09	03/03/15 09:20
140-2815-2	DUP1-2015	Air	02/27/15 00:00	03/03/15 09:20
140-2815-3	D3-OA-2015	Air	02/27/15 10:07	03/03/15 09:20
140-2815-4	H23-BA-2015	Air	02/27/15 11:21	03/03/15 09:20
140-2815-5	H23-SS-2015	Air	02/27/15 11:22	03/03/15 09:20
140-2815-6	DUP2-2015	Air	02/27/15 00:00	03/03/15 09:20
140-2815-7	D2-OA-2015	Air	02/25/15 12:47	03/03/15 09:20
140-2815-8	H28-BA-2015	Air	02/25/15 13:05	03/03/15 09:20
140-2815-9	H28-SS-2015	Air	02/25/15 13:00	03/03/15 09:20
140-2815-10	H3-BA-2015	Air	02/25/15 13:59	03/03/15 09:20
140-2815-11	H3-SS-2015	Air	02/25/15 13:55	03/03/15 09:20
140-2815-12	H15-BA2-2015	Air	02/27/15 08:45	03/03/15 09:20
140-2815-13	H2-BA-2015	Air	02/27/15 11:47	03/03/15 09:20

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: TestAmerica Knoxville Job No.: 140-2815-1
SDG No.: _____
Matrix: Air Level: Low
GC Column (1): RTX-5 ID: 0.32 (mm)

Client Sample ID	Lab Sample ID	BFB #
H20-BA-2015	140-2815-1	102
DUP1-2015	140-2815-2	99
D3-OA-2015	140-2815-3	100
H23-BA-2015	140-2815-4	102
H23-SS-2015	140-2815-5	100
DUP2-2015	140-2815-6	103
D2-OA-2015	140-2815-7	100
H28-BA-2015	140-2815-8	100
H28-BA-2015 DL	140-2815-8 DL	99
H28-SS-2015	140-2815-9	101
H3-BA-2015	140-2815-10	102
H3-SS-2015	140-2815-11	103
H15-BA2-2015	140-2815-12	100
H2-BA-2015	140-2815-13	101
	MB 140-2464/6	101
	LCS 140-2464/1002	104

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: TestAmerica Knoxville Job No.: 140-2815-1
SDG No.: _____
Matrix: Air Level: Low Lab File ID: ECCVC05-LCS.d
Lab ID: LCS 140-2464/1002 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	2.00	2.24	112	70-130	
1,1,2,2-Tetrachloroethane	2.00	2.15	107	70-130	
1,1,2-Trichloroethane	2.00	2.16	108	70-130	
1,1,2-Trichlorotrifluoroethane	2.00	2.25	113	70-130	
1,1-Dichloroethane	2.00	2.26	113	70-130	
1,1-Dichloroethene	2.00	2.26	113	70-130	
1,2,4-Trichlorobenzene	2.00	1.68	84	60-140	
1,2,4-Trimethylbenzene	2.00	2.27	113	70-130	
1,2-Dibromoethane	2.00	2.15	108	70-130	
1,2-Dichlorobenzene	2.00	2.14	107	70-130	
1,2-Dichloroethane	2.00	2.19	109	70-130	
1,2-Dichloropropane	2.00	2.17	108	70-130	
1,2-Dichlorotetrafluoroethane	2.00	2.32	116	60-140	
1,3,5-Trimethylbenzene	2.00	2.21	110	70-130	
1,3-Dichlorobenzene	2.00	2.13	106	70-130	
1,4-Dichlorobenzene	2.00	2.11	105	70-130	
1,4-Dioxane	2.00	2.20	110	60-140	
2,2,4-Trimethylpentane	2.00	2.13	107	70-130	
2-Butanone	2.00	1.99	99	60-140	
4-Methyl-2-pentanone (MIBK)	2.00	1.95	97	60-140	
Benzene	2.00	2.17	109	70-130	
Benzyl chloride	2.00	2.21	111	70-130	
Bromodichloromethane	2.00	2.19	109	70-130	
Bromoform	2.00	2.21	110	60-140	
Bromomethane	2.00	2.36	118	70-130	
Carbon tetrachloride	2.00	2.27	113	70-130	
Chlorobenzene	2.00	2.14	107	70-130	
Chloroethane	2.00	2.31	115	70-130	
Chloroform	2.00	2.23	111	70-130	
Chloromethane	2.00	2.32	116	60-140	
cis-1,2-Dichloroethene	2.00	2.26	113	70-130	
cis-1,3-Dichloropropene	2.00	2.19	110	70-130	
Cyclohexane	2.00	2.17	109	70-130	
Dibromochloromethane	2.00	2.21	110	70-130	
Dichlorodifluoromethane	2.00	2.32	116	60-140	
Ethanol	10.0	10.8	108	20-180	
Ethylbenzene	2.00	2.19	110	70-130	
Hexachlorobutadiene	2.00	1.86	93	60-140	
Hexane	2.00	2.28	114	70-130	
Methyl tert-butyl ether	2.00	2.39	119	60-140	
Methylene Chloride	2.00	2.11	106	70-130	
m-Xylene & p-Xylene	4.00	4.49	112	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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Matrix: Air Level: Low Lab File ID: ECCVC05-LCS.d
 Lab ID: LCS 140-2464/1002 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
o-Xylene	2.00	2.20	110	70-130	
Styrene	2.00	2.31	115	70-130	
t-Butyl alcohol	2.00	2.20	110	60-140	
Tetrachloroethene	2.00	2.09	104	70-130	
Toluene	2.00	2.12	106	70-130	
trans-1,2-Dichloroethene	2.00	2.26	113	70-130	
trans-1,3-Dichloropropene	2.00	2.18	109	70-130	
Trichloroethene	2.00	2.13	107	70-130	
Trichlorofluoromethane	2.00	2.20	110	60-140	
Vinyl chloride	2.00	2.33	116	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Lab File ID: EB500C05.D Lab Sample ID: MB 140-2464/6
 Matrix: Air Heated Purge: (Y/N) N
 Instrument ID: ME Date Analyzed: 03/05/2015 13:33
 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 140-2464/1002	ECCVC05-LCS .d	03/05/2015 09:33
H20-BA-2015	140-2815-1	EC05P103.D	03/05/2015 14:23
DUP1-2015	140-2815-2	EC05P104.D	03/05/2015 15:12
D3-OA-2015	140-2815-3	EC05P105.D	03/05/2015 16:01
H23-BA-2015	140-2815-4	EC05P106.D	03/05/2015 16:52
H23-SS-2015	140-2815-5	EC05P107.D	03/05/2015 17:41
DUP2-2015	140-2815-6	EC05P108.D	03/05/2015 18:35
D2-OA-2015	140-2815-7	EC05P109.D	03/05/2015 19:25
H28-BA-2015	140-2815-8	EC05P110.D	03/05/2015 20:15
H28-SS-2015	140-2815-9	EC05P111.D	03/05/2015 21:04
H3-BA-2015	140-2815-10	EC05P112.D	03/05/2015 21:55
H3-SS-2015	140-2815-11	EC05P113.D	03/05/2015 22:44
H15-BA2-2015	140-2815-12	EC05P114.D	03/05/2015 23:33
H2-BA-2015	140-2815-13	EC05P115.D	03/06/2015 00:22
H28-BA-2015 DL	140-2815-8 DL	EC05P110DL. D	03/06/2015 08:03

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Lab File ID: bfb.D BFB Injection Date: 03/03/2015
 Instrument ID: ME BFB Injection Time: 09:35
 Analysis Batch No.: 2456

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	23.5
75	30.0 - 60.0 % of mass 95	51.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.9
173	Less than 2.0 % of mass 174	0.5 (0.6) 1
174	50.0 - 120.00 % of mass 95	83.4
175	5.0 - 9.0 % of mass 174	6.1 (7.3) 1
176	95.0 - 101.0 % of mass 174	82.2 (98.6) 1
177	5.0 - 9.0 % of mass 176	5.6 (6.9) 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 140-2456/2	ic 11.D	03/03/2015	10:06
	IC 140-2456/3	ic 12.D	03/03/2015	10:52
	IC 140-2456/4	ic 13.D	03/03/2015	11:36
	IC 140-2456/5	ic 14.D	03/03/2015	12:22
	IC 140-2456/6	ic 15.D	03/03/2015	13:07
	ICIS 140-2456/7	icis 16.D	03/03/2015	13:52
	IC 140-2456/8	ic 17.D	03/03/2015	14:36
	IC 140-2456/9	ic 18.D	03/03/2015	15:24
	IC 140-2456/10	ic 19.D	03/03/2015	16:09
	ICV 140-2456/12	icv.D	03/03/2015	17:39

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Lab File ID: EBFBC05.D BFB Injection Date: 03/05/2015
 Instrument ID: ME BFB Injection Time: 09:02
 Analysis Batch No.: 2464

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	23.7
75	30.0 - 60.0 % of mass 95	51.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.9
173	Less than 2.0 % of mass 174	0.5 (0.6) 1
174	50.0 - 120.00 % of mass 95	82.7
175	5.0 - 9.0 % of mass 174	6.0 (7.2) 1
176	95.0 - 101.0 % of mass 174	80.5 (97.3) 1
177	5.0 - 9.0 % of mass 176	5.5 (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 140-2464/2	ECCVC05.D	03/05/2015	09:33
	LCS 140-2464/1002	ECCVC05-LCS.d	03/05/2015	09:33
	MB 140-2464/6	EB500C05.D	03/05/2015	13:33
H20-BA-2015	140-2815-1	EC05P103.D	03/05/2015	14:23
DUP1-2015	140-2815-2	EC05P104.D	03/05/2015	15:12
D3-OA-2015	140-2815-3	EC05P105.D	03/05/2015	16:01
H23-BA-2015	140-2815-4	EC05P106.D	03/05/2015	16:52
H23-SS-2015	140-2815-5	EC05P107.D	03/05/2015	17:41
DUP2-2015	140-2815-6	EC05P108.D	03/05/2015	18:35
D2-OA-2015	140-2815-7	EC05P109.D	03/05/2015	19:25
H28-BA-2015	140-2815-8	EC05P110.D	03/05/2015	20:15
H28-SS-2015	140-2815-9	EC05P111.D	03/05/2015	21:04
H3-BA-2015	140-2815-10	EC05P112.D	03/05/2015	21:55
H3-SS-2015	140-2815-11	EC05P113.D	03/05/2015	22:44
H15-BA2-2015	140-2815-12	EC05P114.D	03/05/2015	23:33
H2-BA-2015	140-2815-13	EC05P115.D	03/06/2015	00:22
H28-BA-2015 DL	140-2815-8 DL	EC05P110DL.D	03/06/2015	08:03

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Sample No.: ICIS 140-2456/7 Date Analyzed: 03/03/2015 13:52
 Instrument ID: ME GC Column: RTX-5 ID: 0.32 (mm)
 Lab File ID (Standard): icis 16.D Heated Purge: (Y/N) N
 Calibration ID: 287

	CBM		DFB		CBZ	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	370824	8.49	1717824	10.73	1608985	15.56
UPPER LIMIT	519154	8.82	2404954	11.06	2252579	15.89
LOWER LIMIT	222494	8.16	1030694	10.40	965391	15.23
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 140-2456/12		371428	8.50	1664682	10.73	1586368
						15.56

CBM = Chlorobromomethane (IS)
 DFB = 1,4-Difluorobenzene
 CBZ = 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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Sample No.: CCVIS 140-2464/2 Date Analyzed: 03/05/2015 09:33
 Instrument ID: ME GC Column: RTX-5 ID: 0.32 (mm)
 Lab File ID (Standard): ECCVC05.D Heated Purge: (Y/N) N
 Calibration ID: 287

	CBM		DFB		CBZ	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	366360	8.49	1704113	10.73	1588808	15.56
UPPER LIMIT	512904	8.82	2385758	11.06	2224331	15.89
LOWER LIMIT	219816	8.16	1022468	10.40	953285	15.23
LAB SAMPLE ID	CLIENT SAMPLE ID					
LCS 140-2464/1002		366360	8.49	1704113	10.73	1588808
MB 140-2464/6		354849	8.49	1597715	10.73	1471468
140-2815-1	H20-BA-2015	373187	8.50	1758739	10.73	1628139
140-2815-2	DUP1-2015	360180	8.49	1646111	10.73	1472319
140-2815-3	D3-OA-2015	359463	8.49	1687238	10.73	1507456
140-2815-4	H23-BA-2015	353005	8.49	1630395	10.73	1499209
140-2815-5	H23-SS-2015	348344	8.49	1590863	10.73	1503102
140-2815-6	DUP2-2015	347141	8.49	1652100	10.73	1515933
140-2815-7	D2-OA-2015	331728	8.49	1476827	10.73	1334728
140-2815-8	H28-BA-2015	350078	8.49	1602602	10.73	1473273
140-2815-9	H28-SS-2015	343778	8.49	1632277	10.73	1489855
140-2815-10	H3-BA-2015	340352	8.49	1486033	10.73	1331984
140-2815-11	H3-SS-2015	334470	8.49	1562854	10.73	1445509
140-2815-12	H15-BA2-2015	363148	8.49	1699642	10.73	1569828
140-2815-13	H2-BA-2015	342877	8.49	1567296	10.73	1457588
140-2815-8 DL	H28-BA-2015 DL	329174	8.49	1511946	10.73	1346087

CBM = Chlorobromomethane (IS)
 DFB = 1,4-Difluorobenzene
 CBZ = 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: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: H20-BA-2015 Lab Sample ID: 140-2815-1

Matrix: Air Lab File ID: EC05P103.D

Analysis Method: TO 15 LL Date Collected: 02/27/2015 10:09

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 14:23

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.: 2464 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		0.080	
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	0.35		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	0.42		0.20	
71-43-2	Benzene	78.11	0.15		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	0.072		0.040	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	0.36		0.080	
74-87-3	Chloromethane	50.49	0.48		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: H20-BA-2015 Lab Sample ID: 140-2815-1
 Matrix: Air Lab File ID: EC05P103.D
 Analysis Method: TO 15 LL Date Collected: 02/27/2015 10:09
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 14:23
 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.: 2464 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	0.50		0.080	
64-17-5	Ethanol	46.07	10		0.80	
100-41-4	Ethylbenzene	106.17	0.094		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	0.41		0.080	
95-47-6	o-Xylene	106.17	0.15		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	0.67		0.080	
108-88-3	Toluene	92.14	0.20		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	0.27		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.42		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: H20-BA-2015 Lab Sample ID: 140-2815-1

Matrix: Air Lab File ID: EC05P103.D

Analysis Method: TO 15 LL Date Collected: 02/27/2015 10:09

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 14:23

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.: 2464 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		0.32	
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	1.0		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.7		0.82	
71-43-2	Benzene	78.11	0.49		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		0.25	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	1.8		0.39	
74-87-3	Chloromethane	50.49	0.99		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: H20-BA-2015 Lab Sample ID: 140-2815-1
 Matrix: Air Lab File ID: EC05P103.D
 Analysis Method: TO 15 LL Date Collected: 02/27/2015 10:09
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 14:23
 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.: 2464 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	2.5		0.40	
64-17-5	Ethanol	46.07	19		1.5	
100-41-4	Ethylbenzene	106.17	0.41		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	1.8		0.35	
95-47-6	o-Xylene	106.17	0.65		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	4.6		0.54	
108-88-3	Toluene	92.14	0.77		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	1.4		0.21	
75-69-4	Trichlorofluoromethane	137.37	2.3		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P103.D
 Lims ID: 140-2815-A-1 Lab Sample ID: 140-2815-1
 Client ID: H2O-BA-2015
 Sample Type: Client
 Inject. Date: 05-Mar-2015 14:23:30 ALS Bottle#: 3 Worklist Smp#: 7
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2815-a-1
 Misc. Info.: E030515,TO155,,140-0001424-007
 Operator ID: 7126 Instrument ID: ME
 Method: \\KNXCHROM\ChromData\ME\20150304-1425.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 06-Mar-2015 09:24:58 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK009

First Level Reviewer: tajh

Date: 05-Mar-2015 15:09:58

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.496	8.491	0.005	96	373187	4.00	
* 2 1,4-Difluorobenzene	114	10.734	10.729	0.005	96	1758739	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.560	15.555	0.005	90	1628139	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.216	17.210	0.006	87	1247319	4.07	
8 Dichlorodifluoromethane	85	3.449	3.438	0.011	96	191224	0.5017	
9 Chloromethane	52	3.627	3.616	0.011	99	18657	0.4773	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.621	0.000	21	3570	0.0148	
17 Ethanol	31	4.403	4.393	0.010	97	448581	10.1	
21 Trichlorofluoromethane	101	4.867	4.862	0.005	98	142218	0.4180	
29 2-Methyl-2-propanol	59	5.681	5.654	0.027	66	7550	0.0345	
30 1,1,2-Trichloro-1,2,2-trif	101	5.746	5.735	0.011	90	15396	0.0640	
31 Methylene Chloride	84	5.924	5.919	0.005	93	14497	0.1419	
39 2-Butanone (MEK)	72	7.725	7.709	0.016	95	17210	0.3526	
40 Hexane	56	7.736	7.730	0.006	55	11027	0.1036	
43 Chloroform	83	8.507	8.502	0.005	38	100436	0.3641	
45 1,1,1-Trichloroethane	97	9.548	9.537	0.011	86	25292	0.0786	
49 Cyclohexane	69	10.146	10.152	-0.006	37	1034	0.0180	
48 Benzene	78	10.162	10.157	0.005	94	50287	0.1519	
50 Carbon tetrachloride	117	10.184	10.179	0.005	94	24953	0.0716	
53 Isooctane	57	10.955	10.944	0.011	88	16053	0.0244	
56 Trichloroethene	130	11.467	11.462	0.005	94	49642	0.2674	
62 4-Methyl-2-pentanone (MIBK	43	12.675	12.664	0.011	99	119542	0.4228	
65 Toluene	91	13.565	13.560	0.005	92	83258	0.2040	
73 Tetrachloroethene	129	14.719	14.719	0.000	92	122761	0.6744	
76 Ethylbenzene	91	15.900	15.894	0.006	98	49610	0.0937	
78 m-Xylene & p-Xylene	91	16.056	16.056	0.000	98	169319	0.4149	
82 o-Xylene	91	16.590	16.585	0.005	96	63563	0.1491	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P103.D

Injection Date: 05-Mar-2015 14:23:30

Instrument ID: ME

Operator ID: 7126

Lims ID: 140-2815-A-1

Lab Sample ID: 140-2815-1

Worklist Smp#: 7

Client ID: H2O-BA-2015

Purge Vol: 500.000 mL

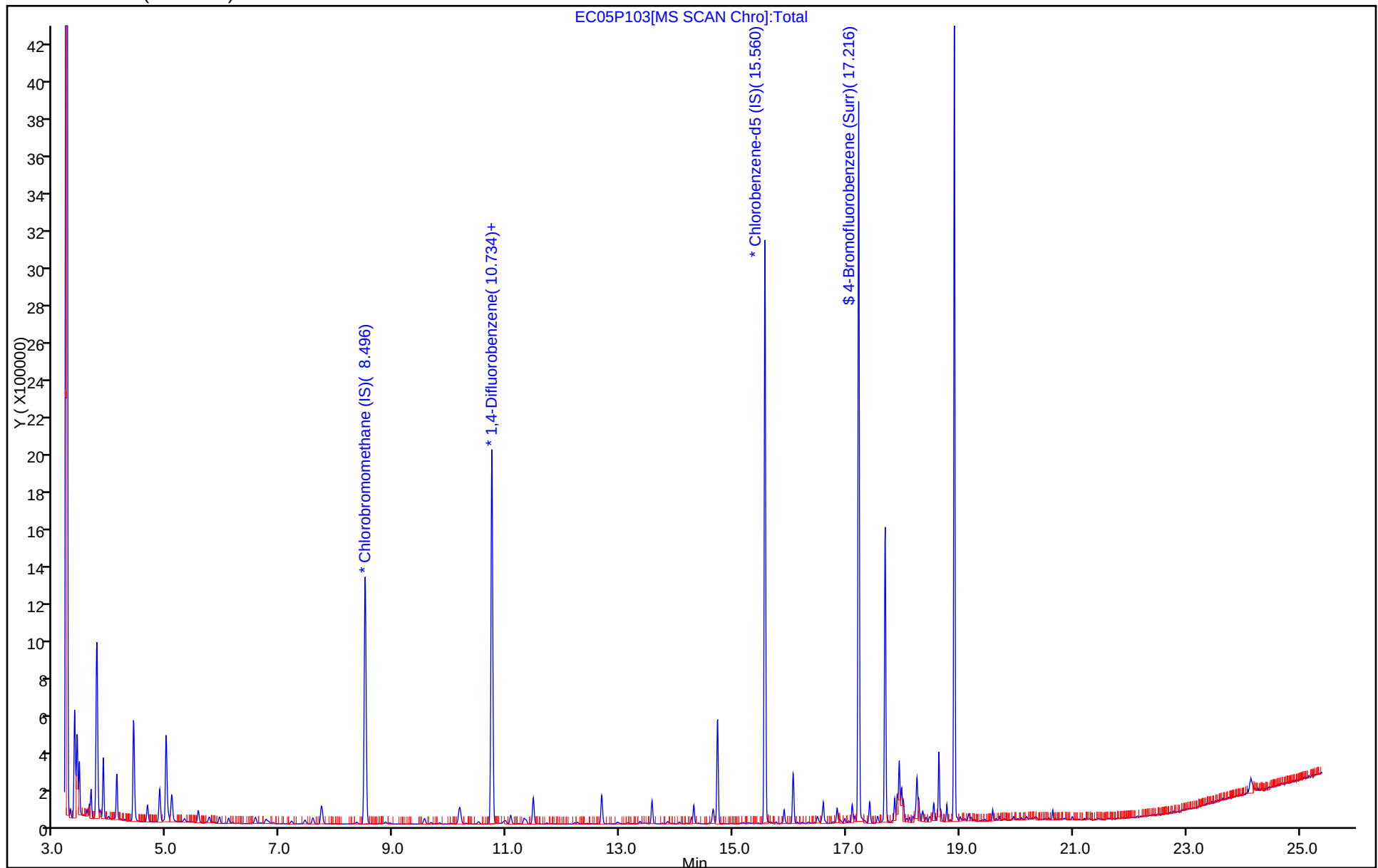
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P103.D

Injection Date: 05-Mar-2015 14:23:30

Instrument ID: ME

Lims ID: 140-2815-A-1

Lab Sample ID: 140-2815-1

Client ID: H2O-BA-2015

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

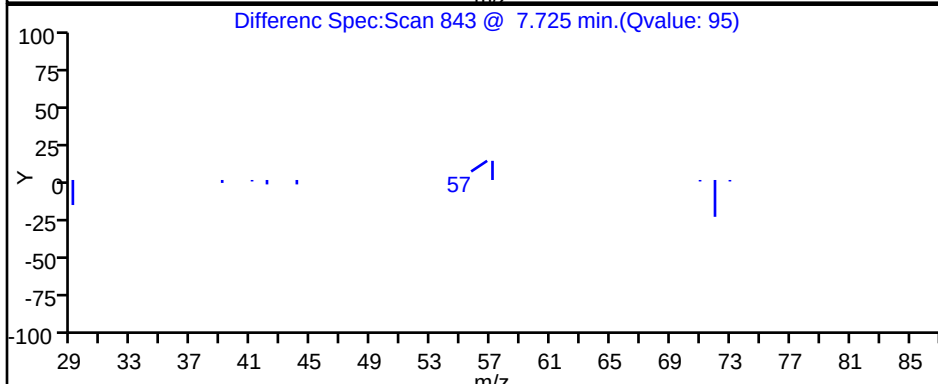
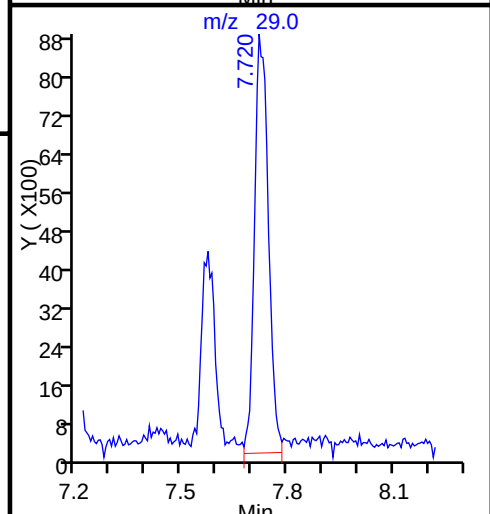
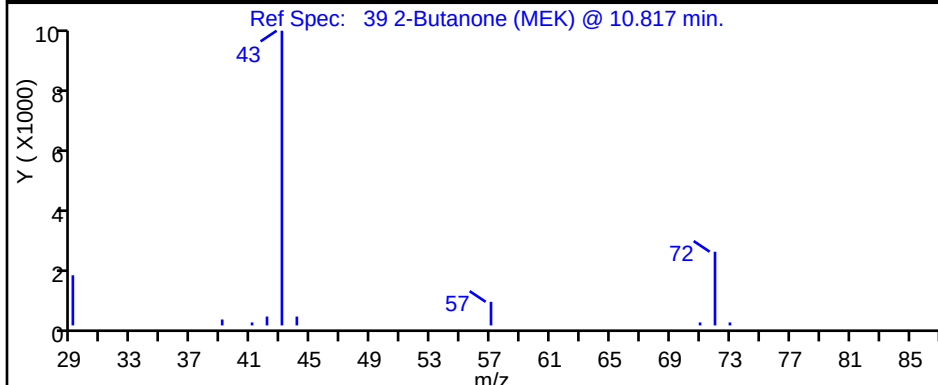
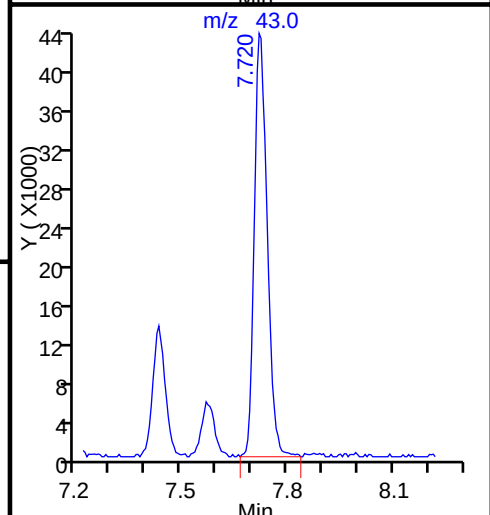
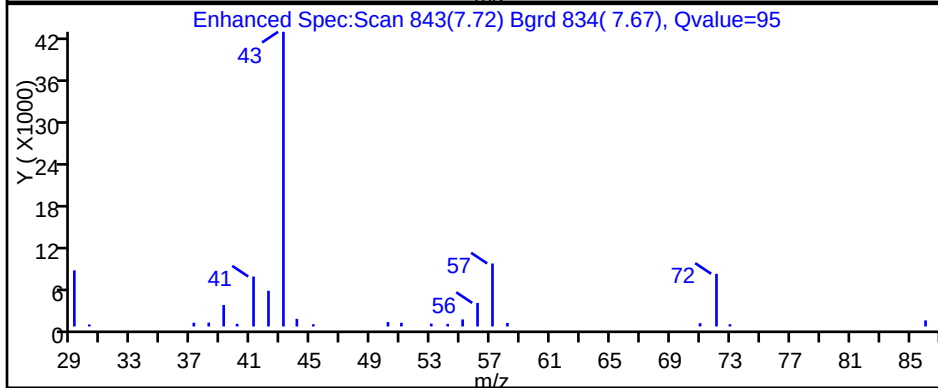
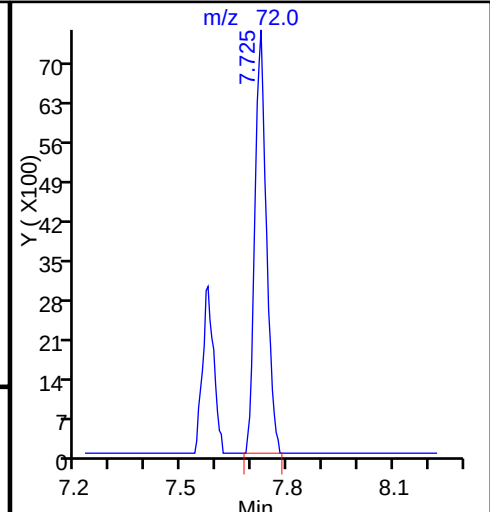
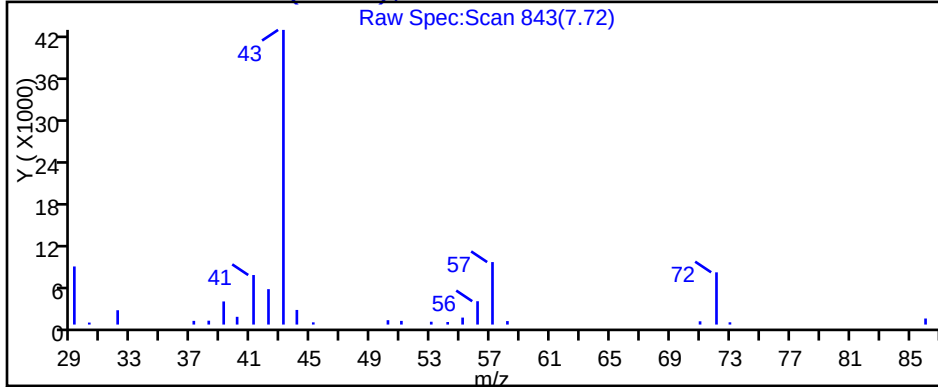
Dil. Factor: 1.0000

Method: ME_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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P103.D

Injection Date: 05-Mar-2015 14:23:30

Instrument ID: ME

Lims ID: 140-2815-A-1

Lab Sample ID: 140-2815-1

Client ID: H2O-BA-2015

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

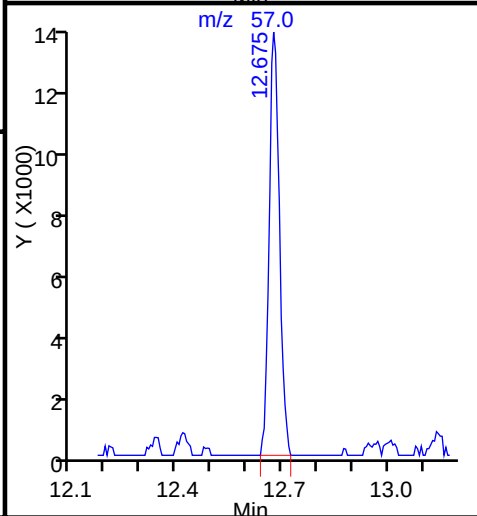
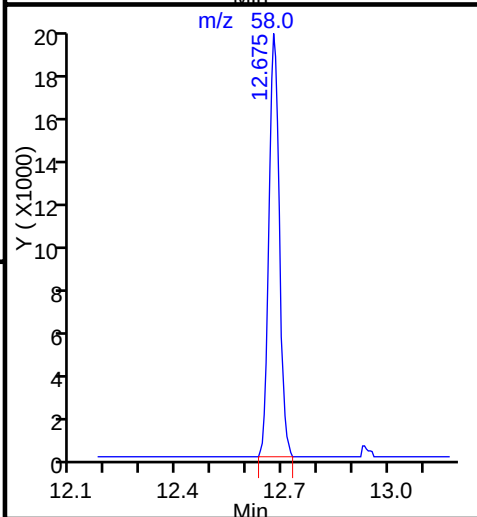
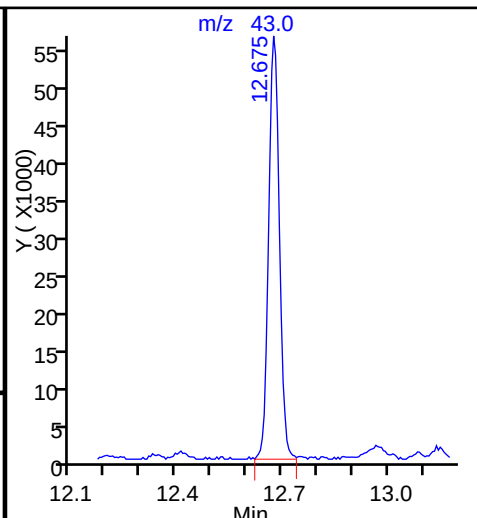
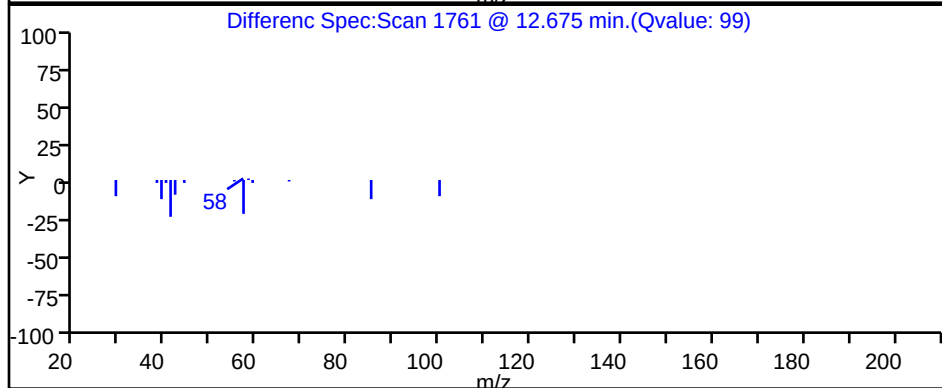
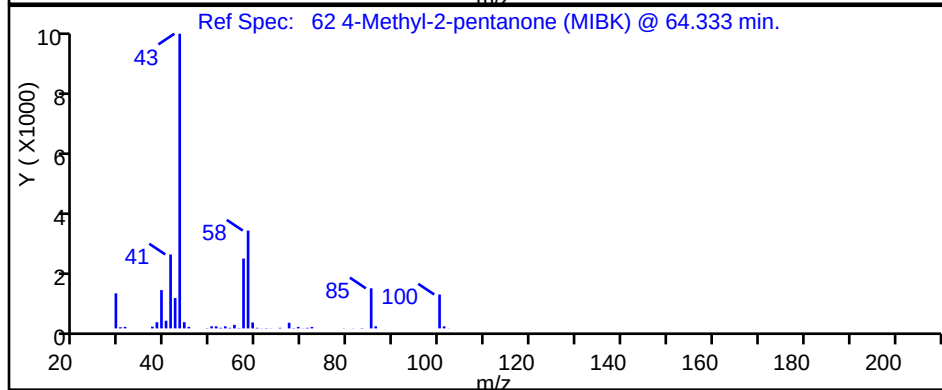
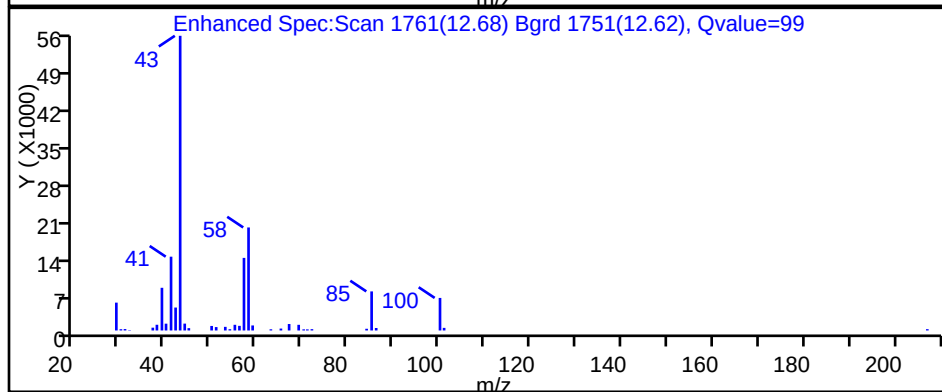
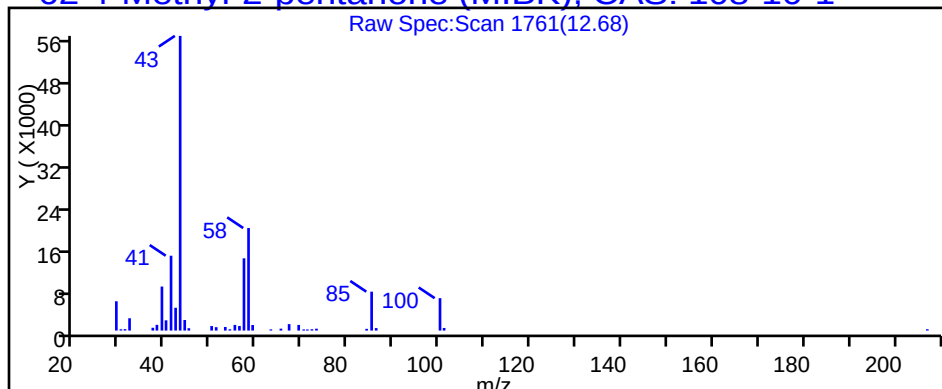
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

62 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P103.D

Injection Date: 05-Mar-2015 14:23:30

Instrument ID: ME

Lims ID: 140-2815-A-1

Lab Sample ID: 140-2815-1

Client ID: H2O-BA-2015

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

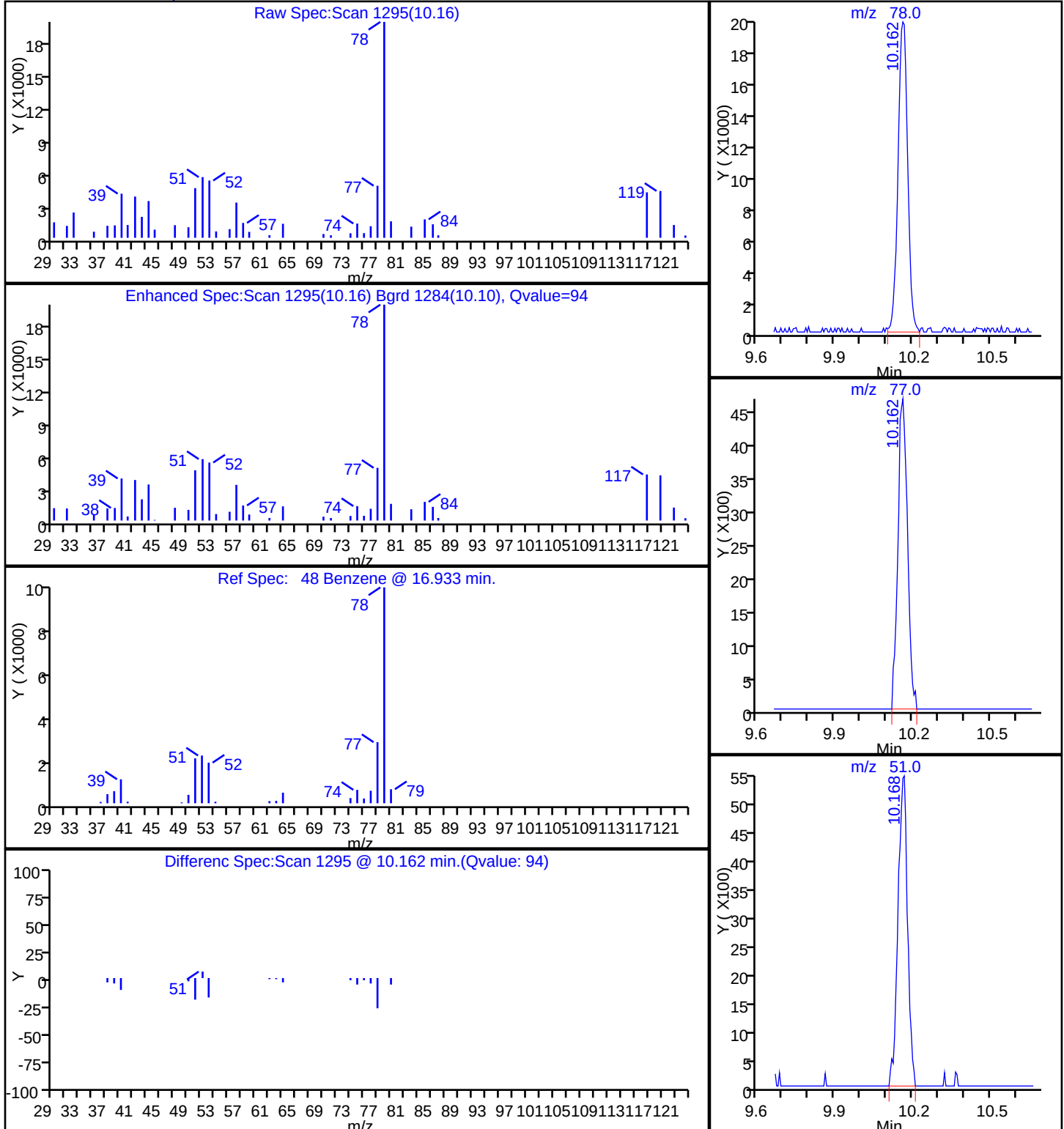
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P103.D

Injection Date: 05-Mar-2015 14:23:30

Instrument ID: ME

Lims ID: 140-2815-A-1

Lab Sample ID: 140-2815-1

Client ID: H2O-BA-2015

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

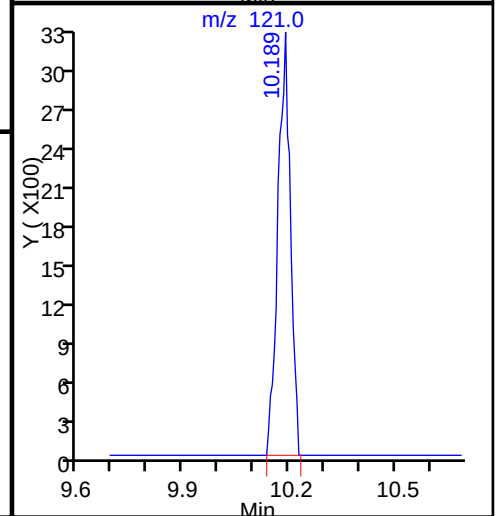
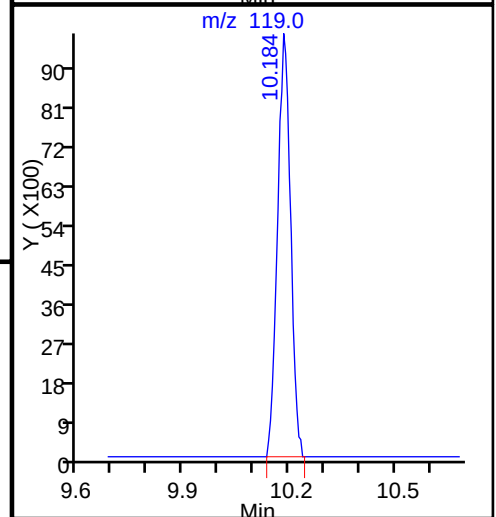
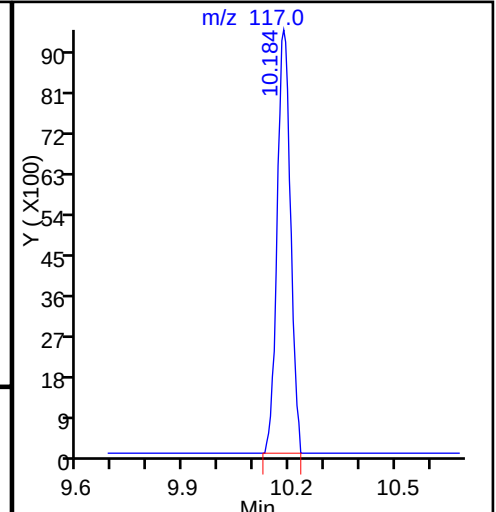
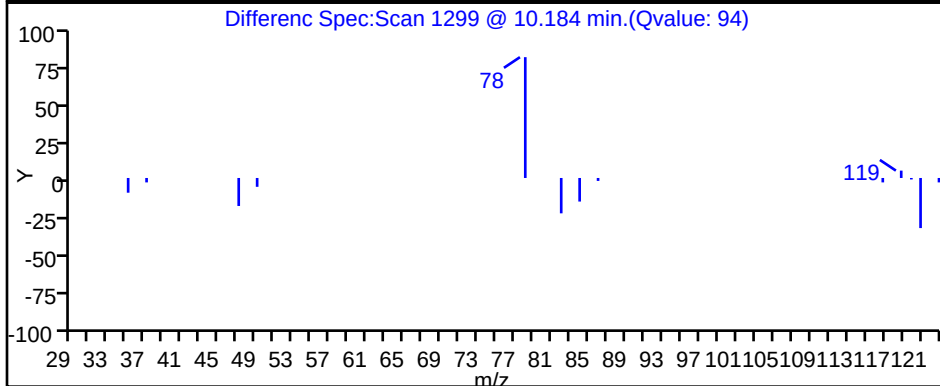
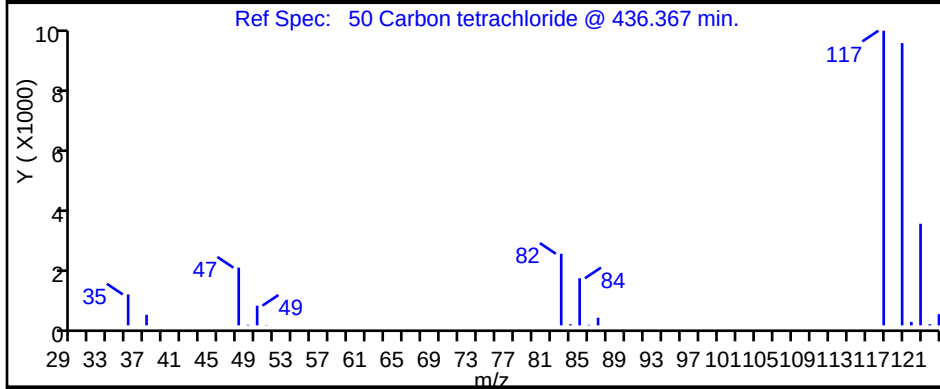
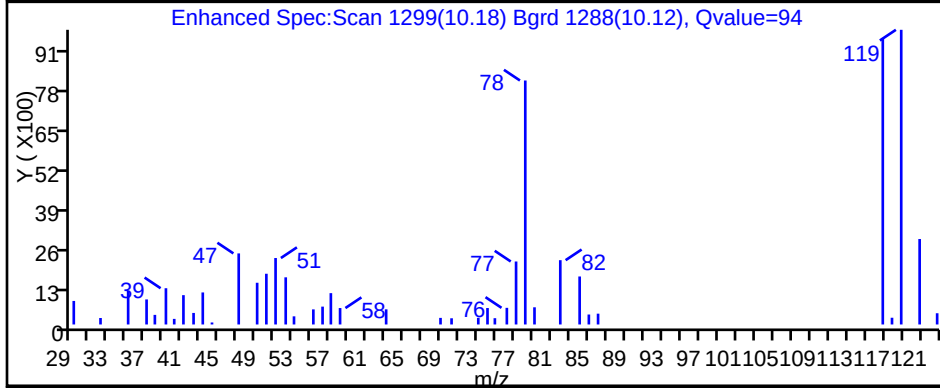
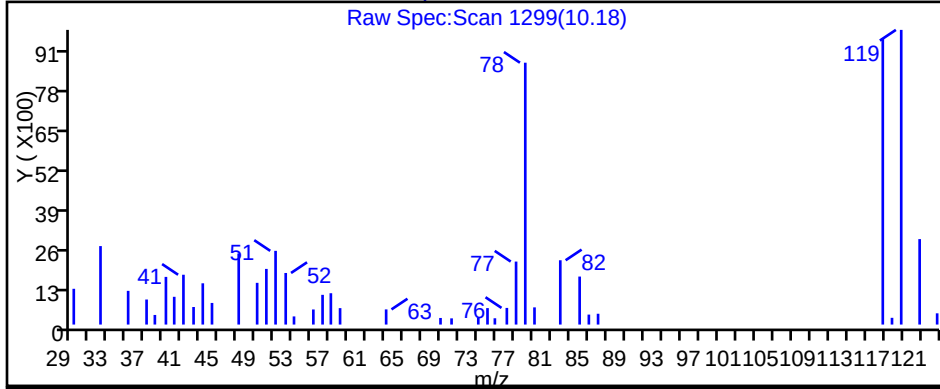
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P103.D

Injection Date: 05-Mar-2015 14:23:30

Instrument ID: ME

Lims ID: 140-2815-A-1

Lab Sample ID: 140-2815-1

Client ID: H2O-BA-2015

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

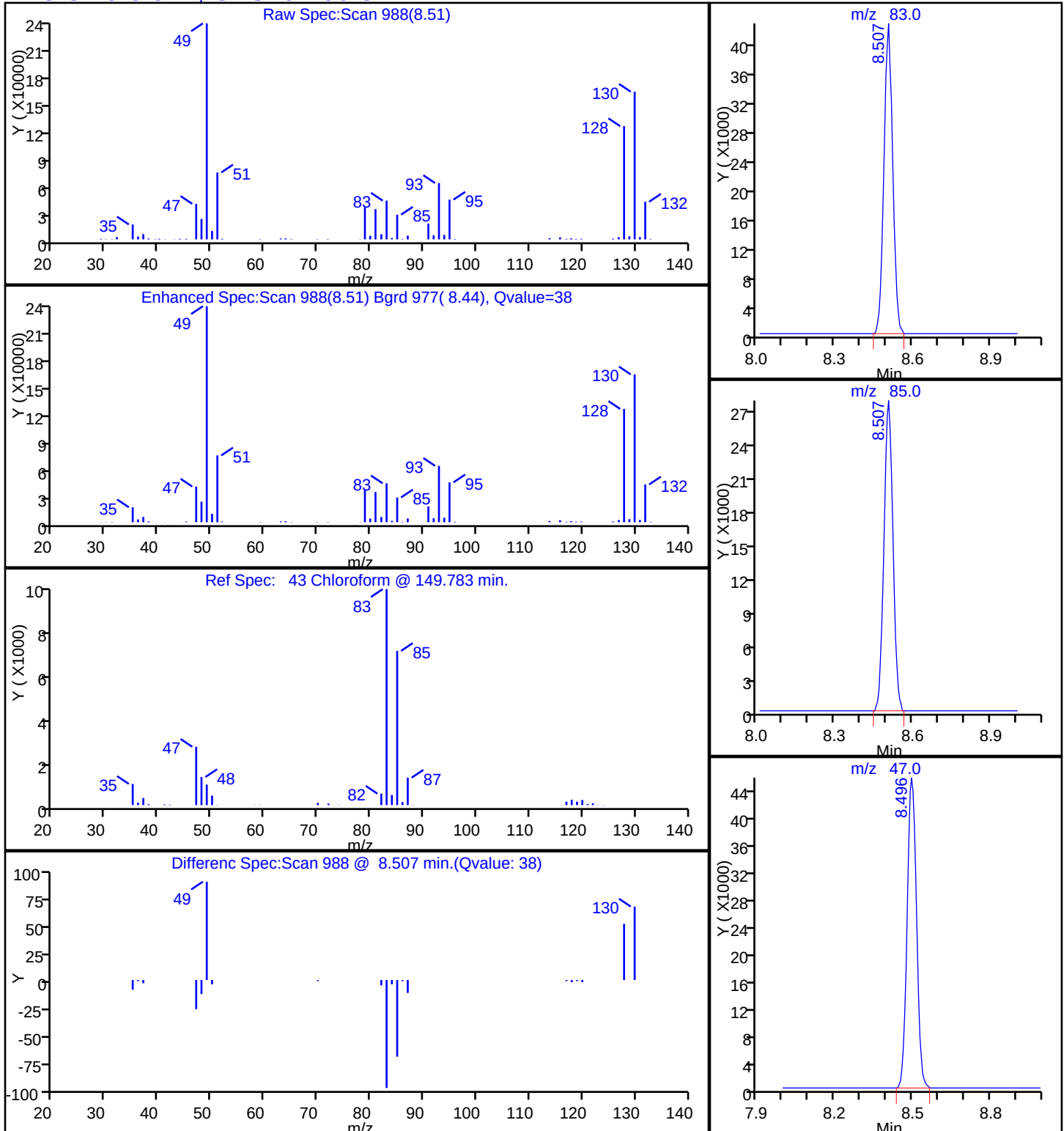
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

43 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P103.D

Injection Date: 05-Mar-2015 14:23:30

Instrument ID: ME

Lims ID: 140-2815-A-1

Lab Sample ID: 140-2815-1

Client ID: H2O-BA-2015

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

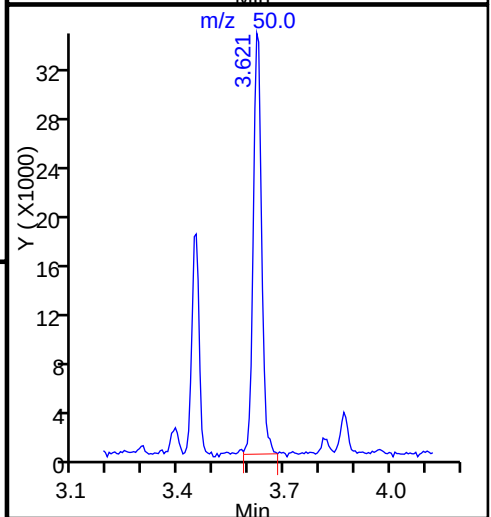
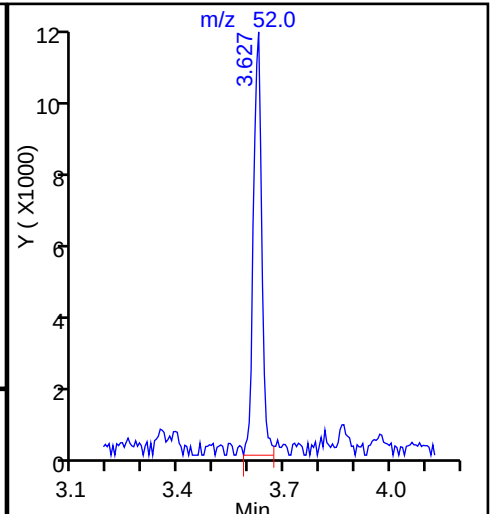
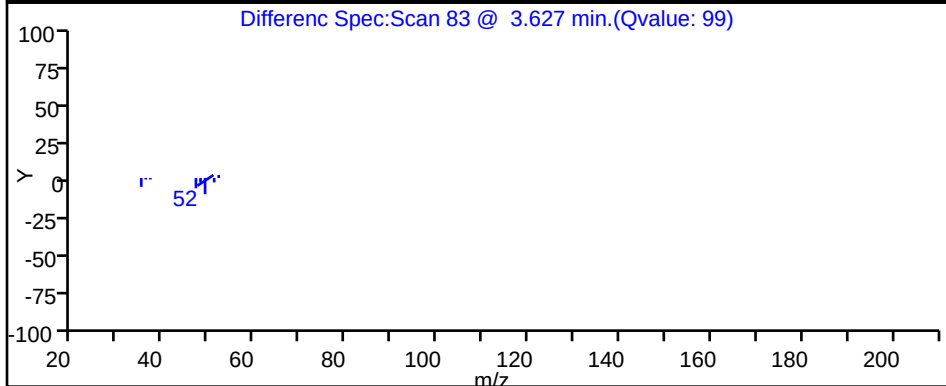
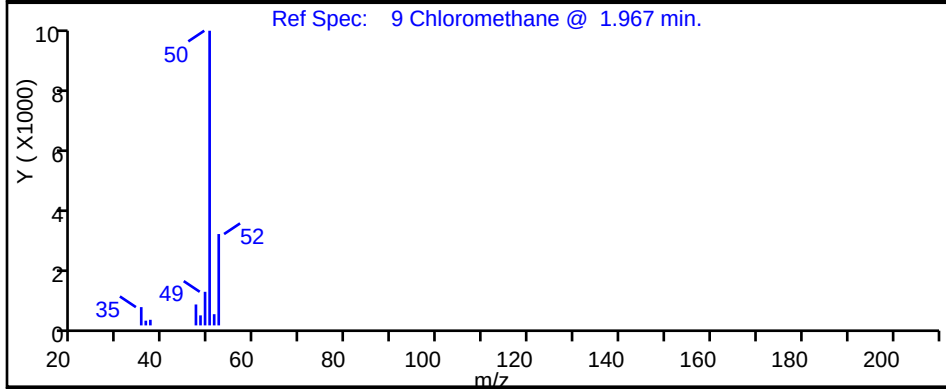
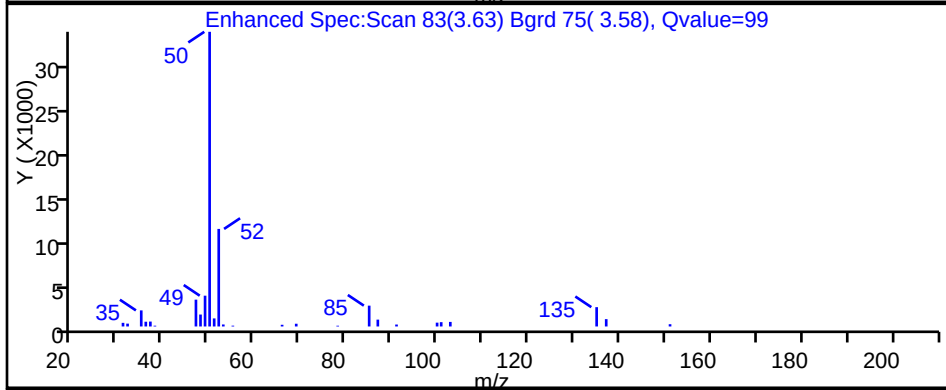
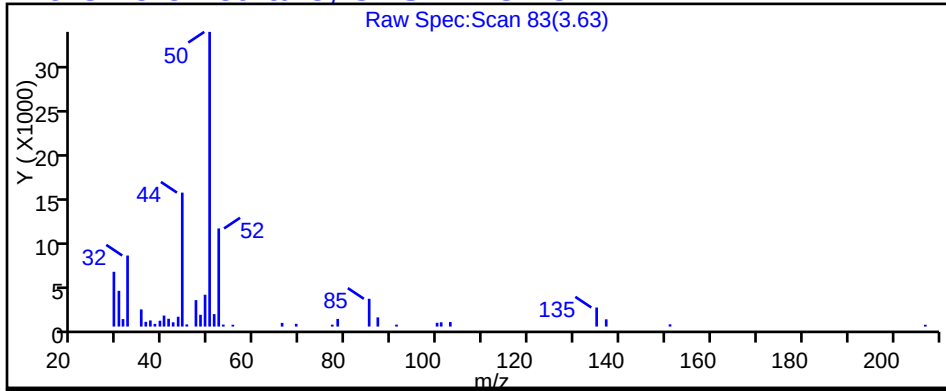
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P103.D

Injection Date: 05-Mar-2015 14:23:30

Instrument ID: ME

Lims ID: 140-2815-A-1

Lab Sample ID: 140-2815-1

Client ID: H2O-BA-2015

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

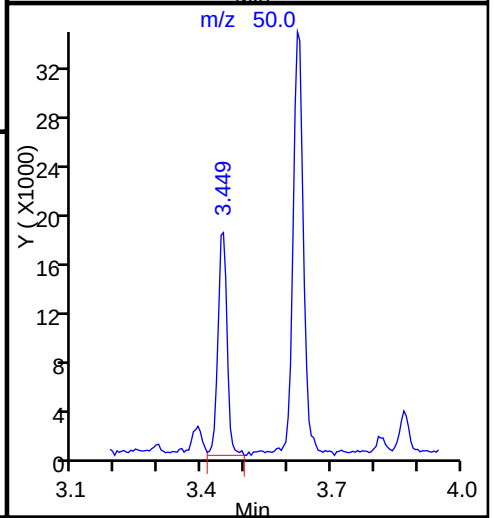
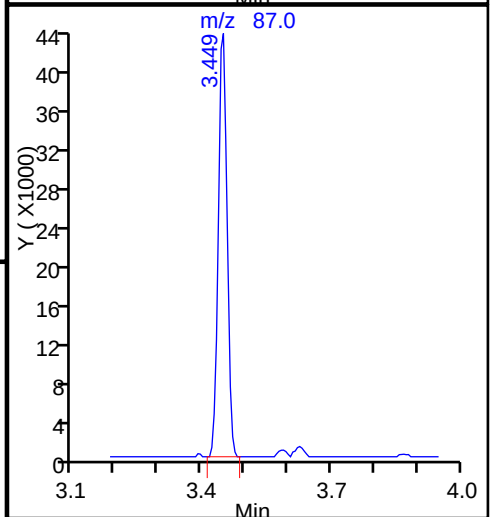
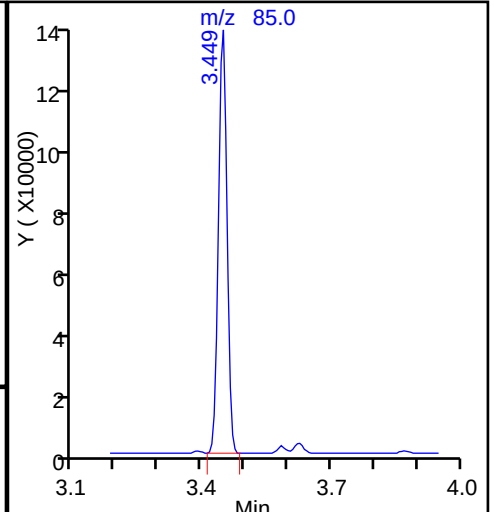
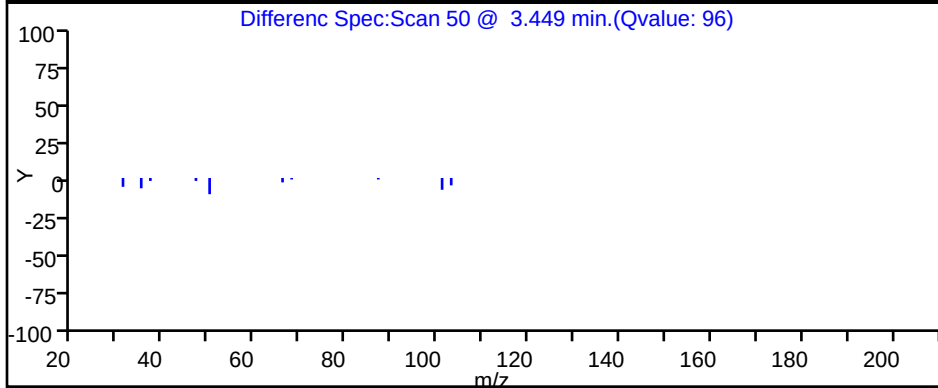
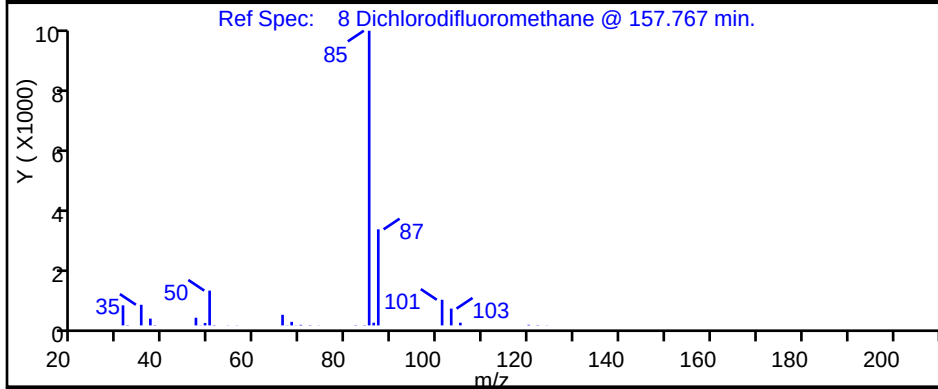
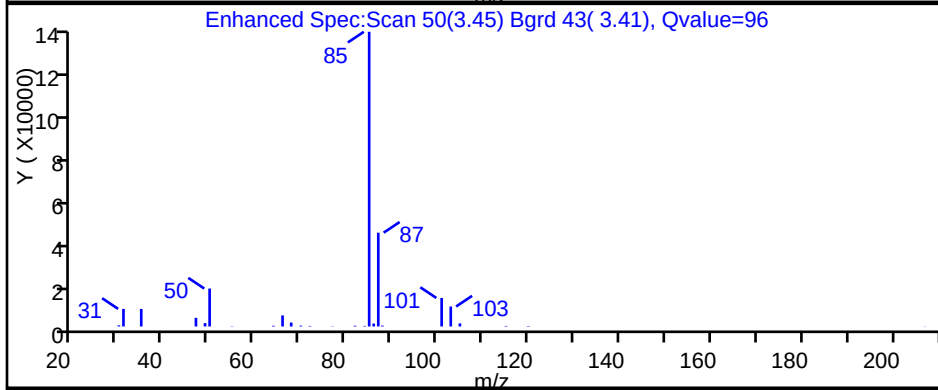
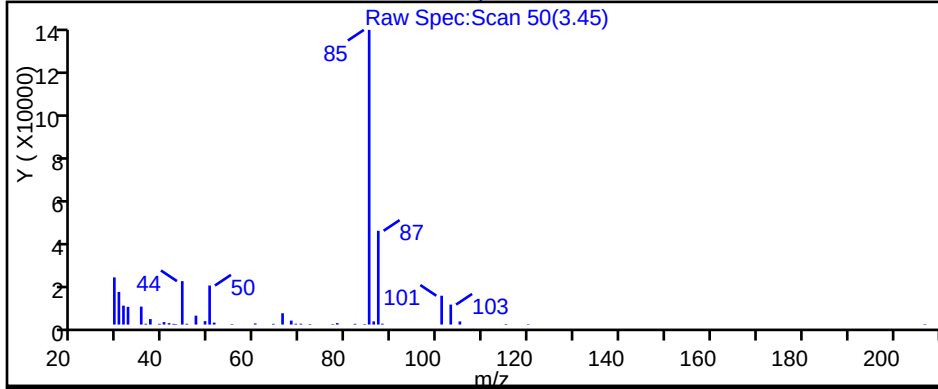
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P103.D

Injection Date: 05-Mar-2015 14:23:30

Instrument ID: ME

Lims ID: 140-2815-A-1

Lab Sample ID: 140-2815-1

Client ID: H2O-BA-2015

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

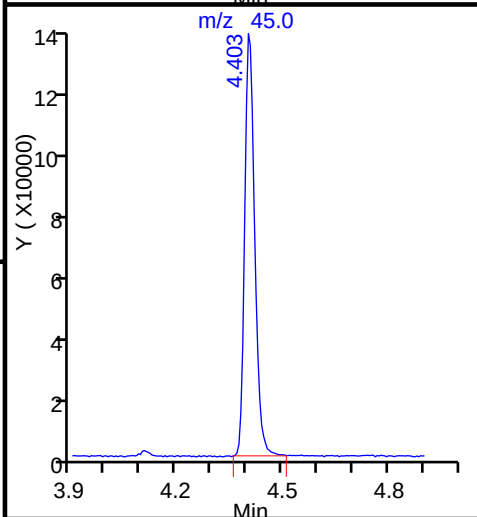
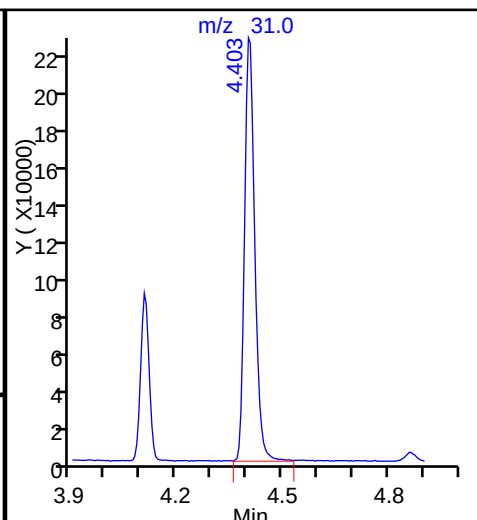
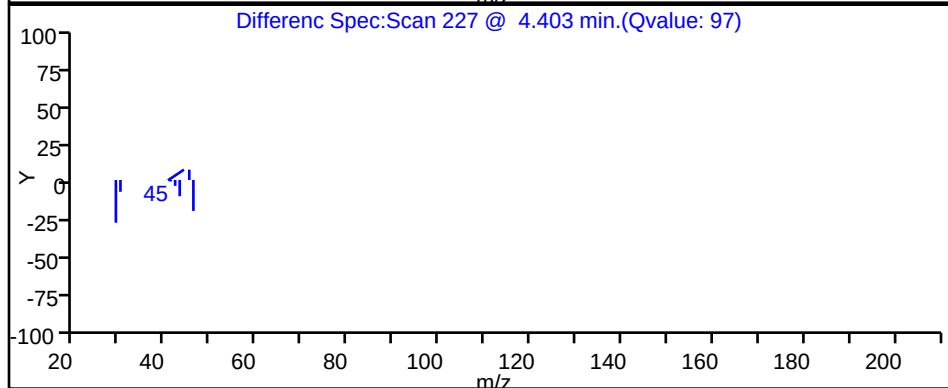
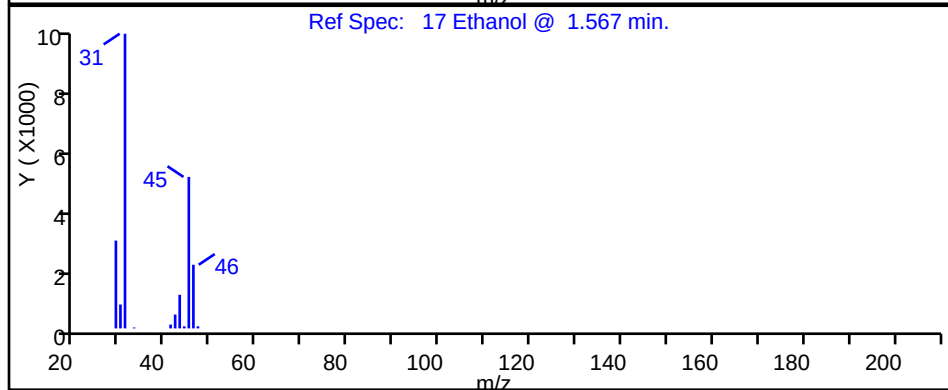
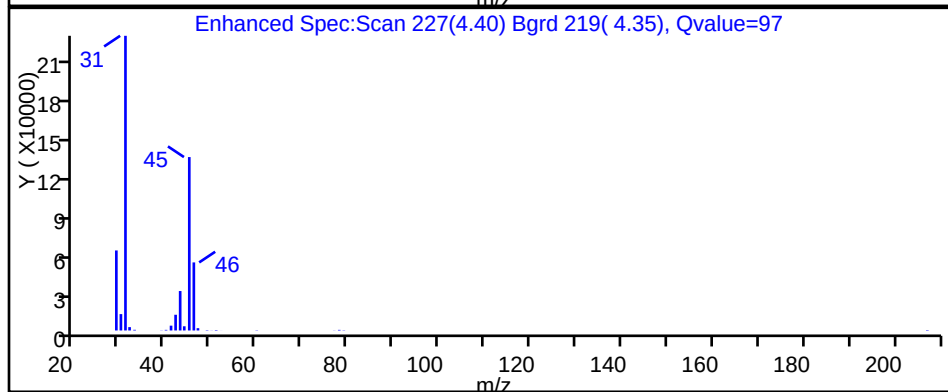
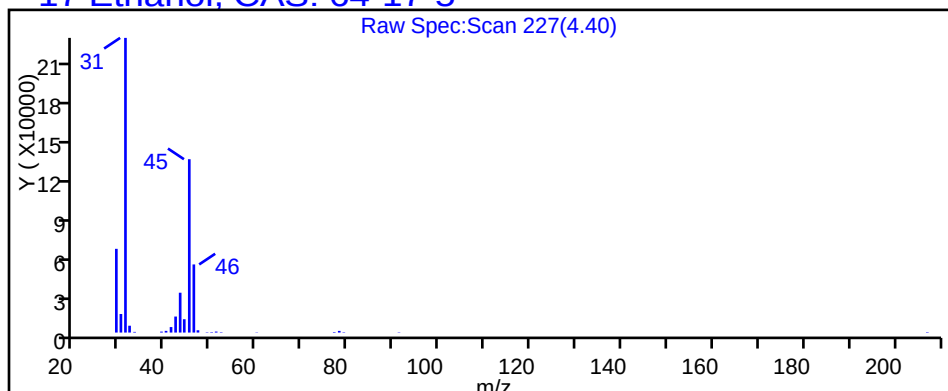
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P103.D

Injection Date: 05-Mar-2015 14:23:30

Instrument ID: ME

Lims ID: 140-2815-A-1

Lab Sample ID: 140-2815-1

Client ID: H2O-BA-2015

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

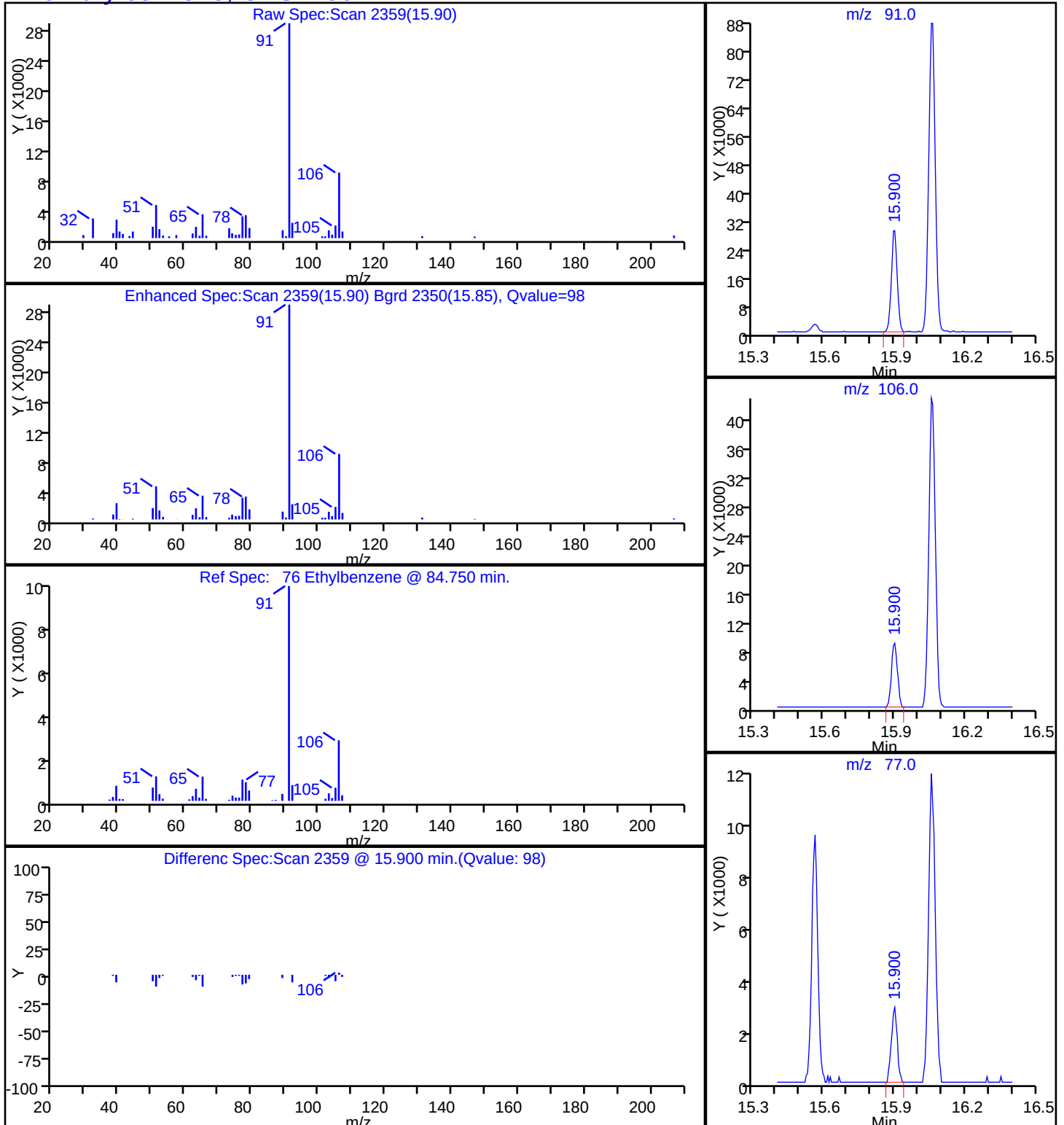
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Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

76 Ethylbenzene, CAS: 100-41-4

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P103.D

Injection Date: 05-Mar-2015 14:23:30

Instrument ID: ME

Lims ID: 140-2815-A-1

Lab Sample ID: 140-2815-1

Client ID: H2O-BA-2015

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

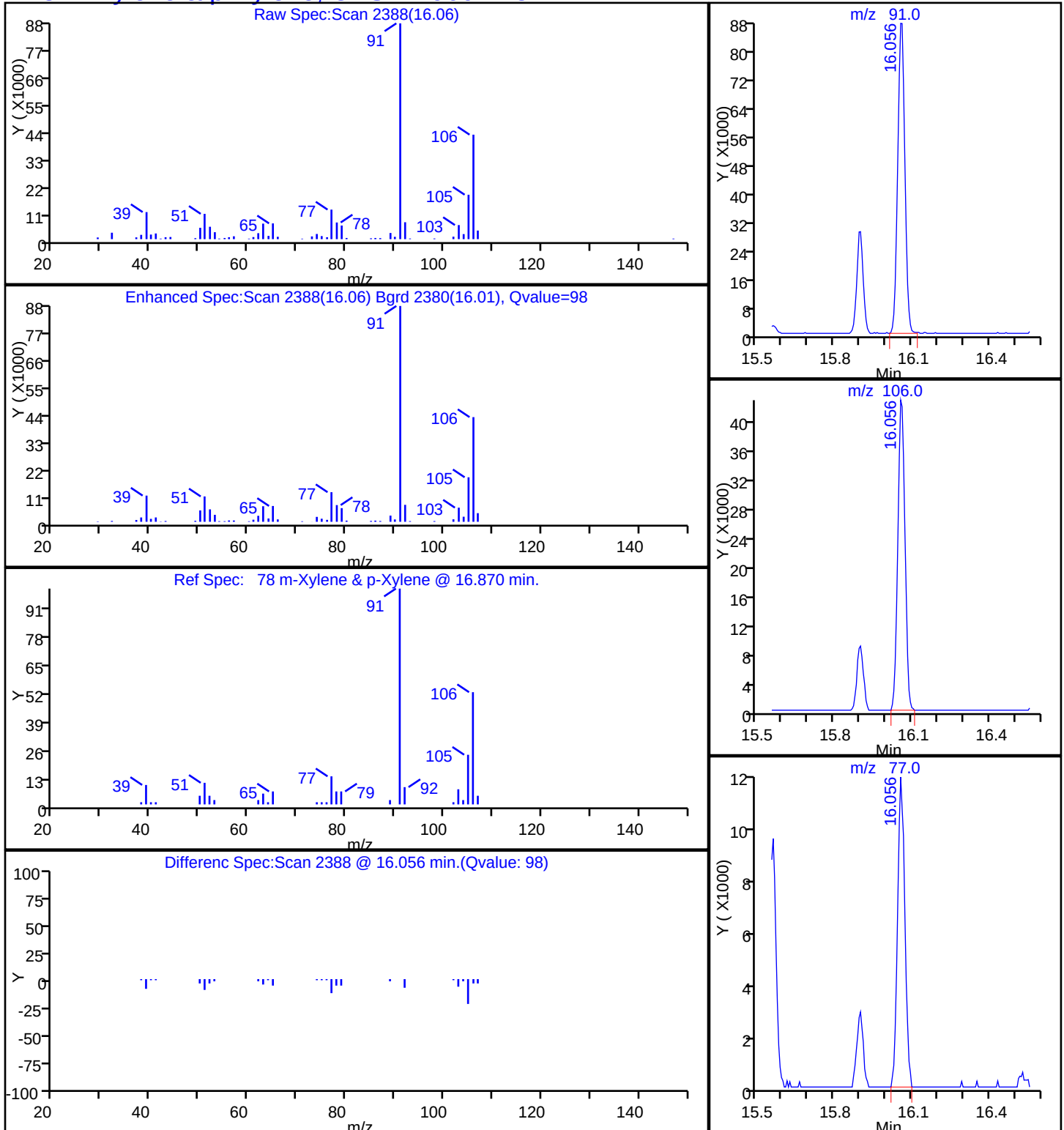
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P103.D

Injection Date: 05-Mar-2015 14:23:30

Instrument ID: ME

Lims ID: 140-2815-A-1

Lab Sample ID: 140-2815-1

Client ID: H2O-BA-2015

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

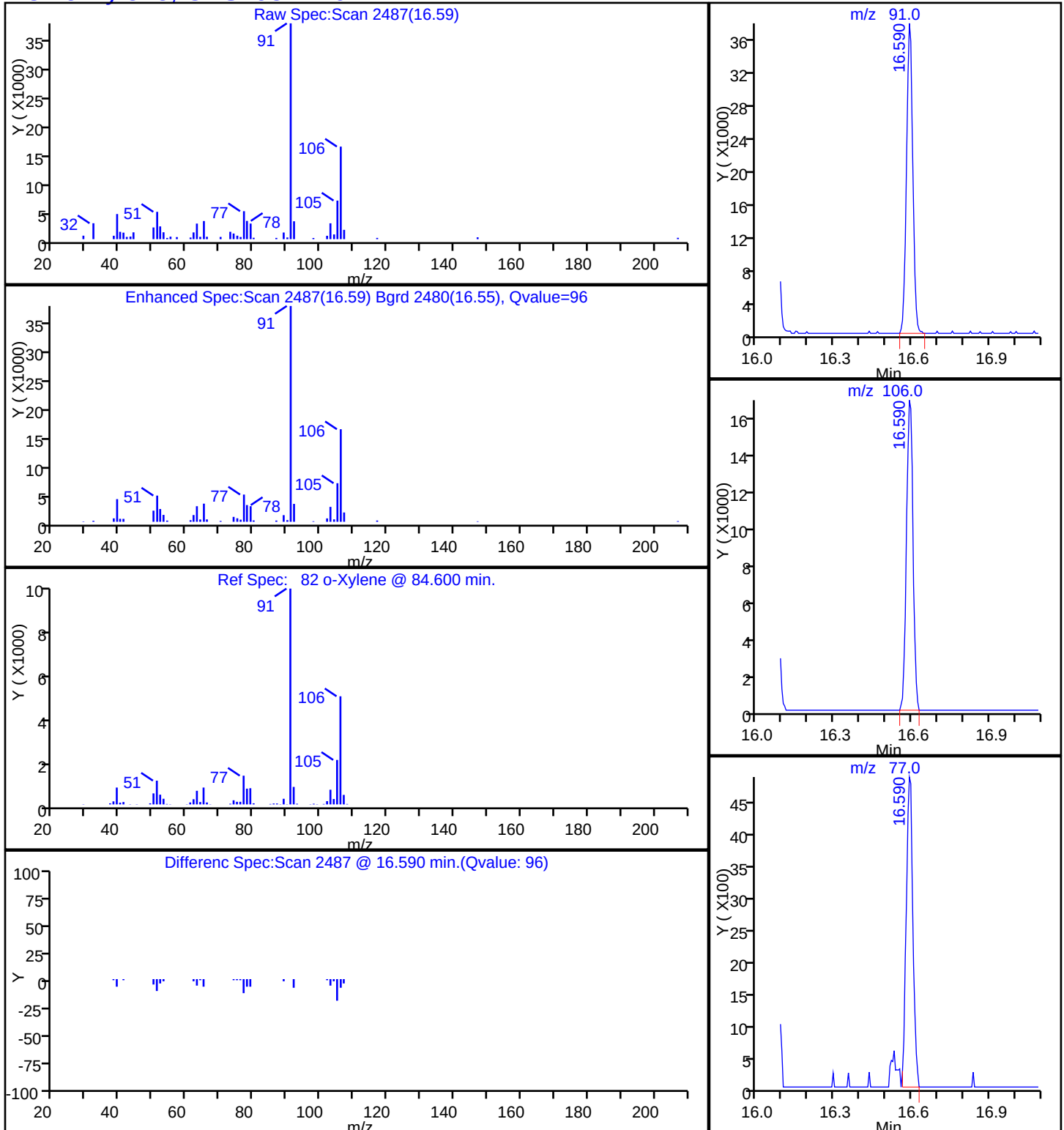
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P103.D

Injection Date: 05-Mar-2015 14:23:30

Instrument ID: ME

Lims ID: 140-2815-A-1

Lab Sample ID: 140-2815-1

Client ID: H2O-BA-2015

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

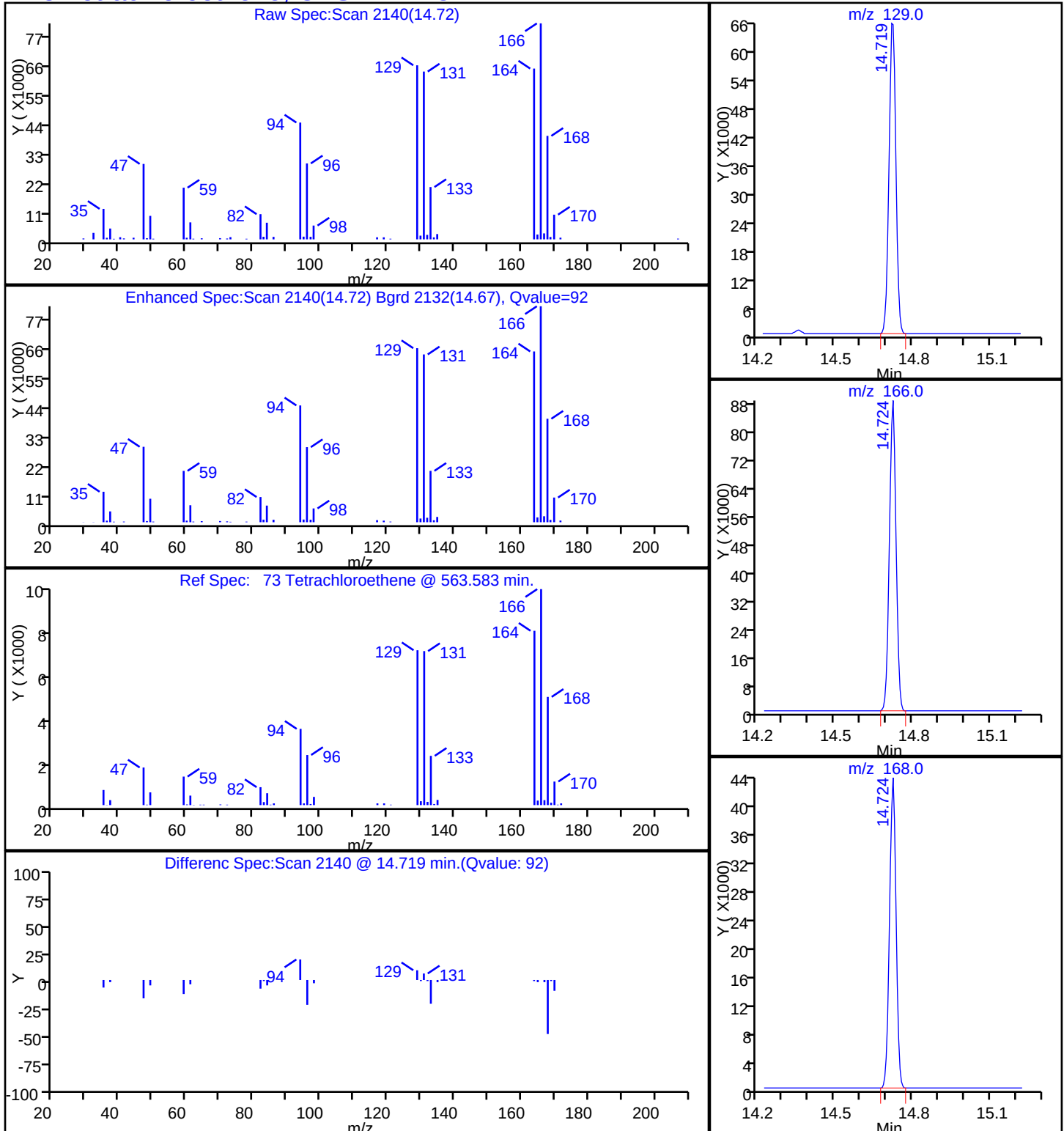
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

73 Tetrachloroethene, CAS: 127-18-4

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P103.D

Injection Date: 05-Mar-2015 14:23:30

Instrument ID: ME

Lims ID: 140-2815-A-1

Lab Sample ID: 140-2815-1

Client ID: H2O-BA-2015

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

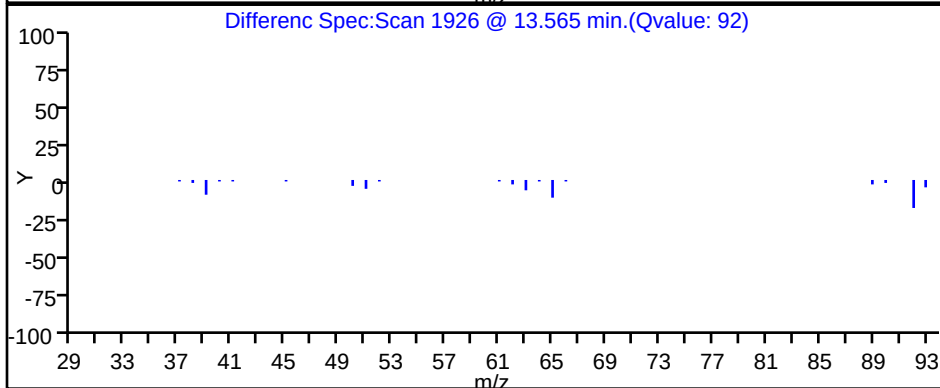
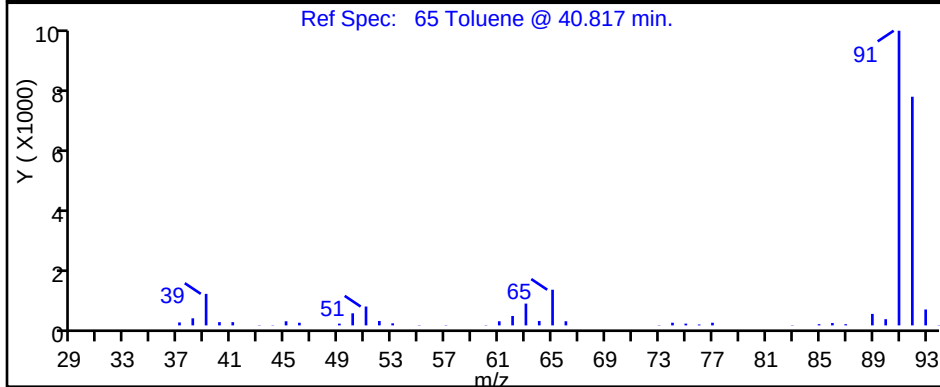
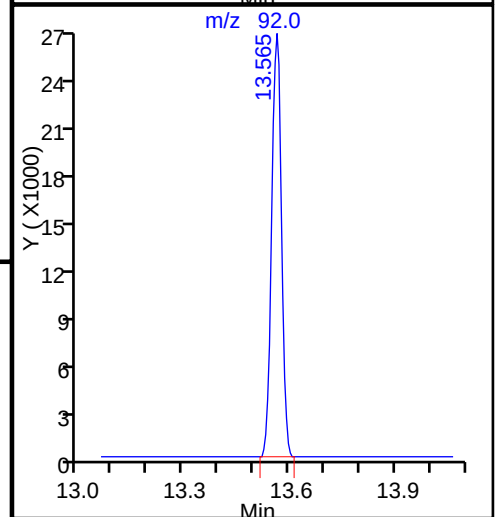
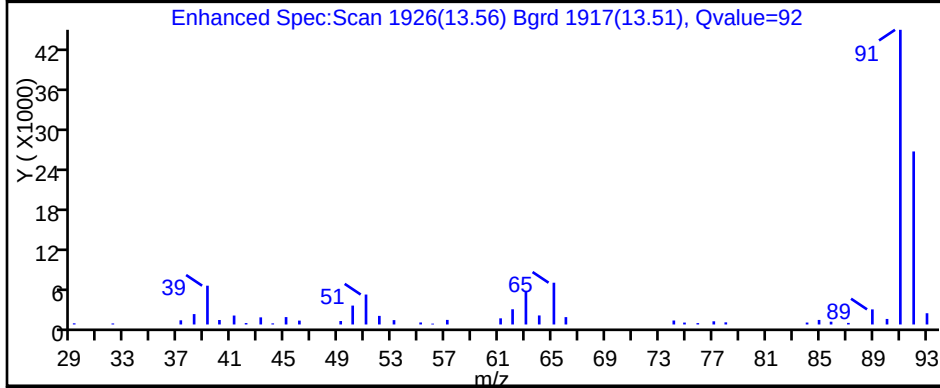
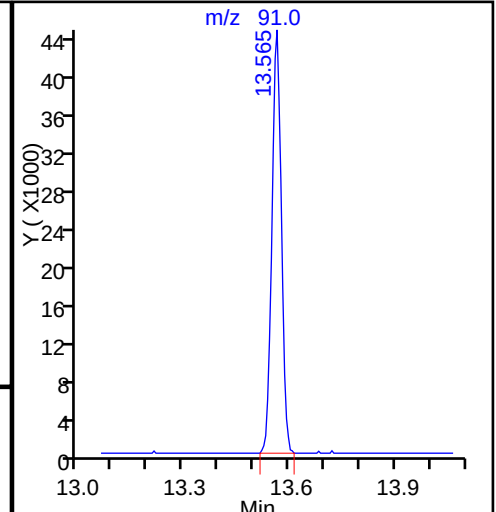
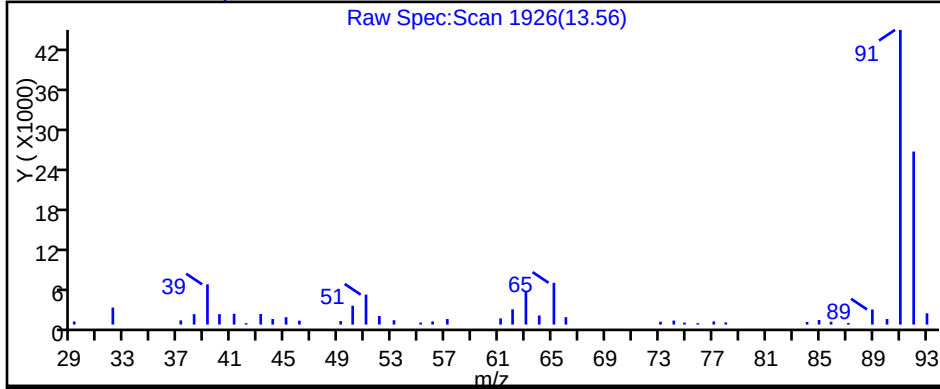
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P103.D

Injection Date: 05-Mar-2015 14:23:30

Instrument ID: ME

Lims ID: 140-2815-A-1

Lab Sample ID: 140-2815-1

Client ID: H2O-BA-2015

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

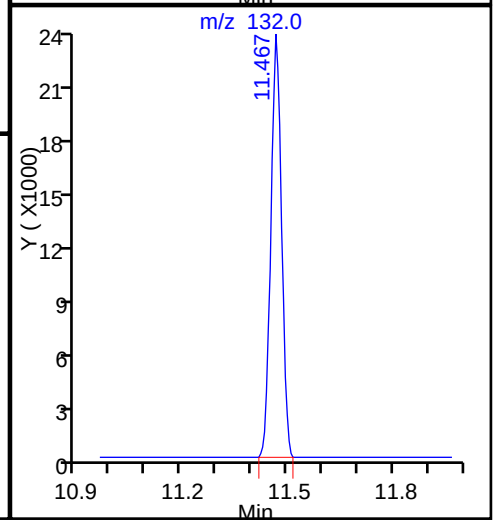
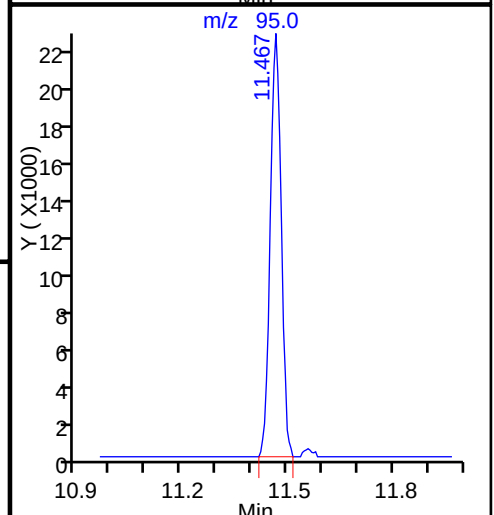
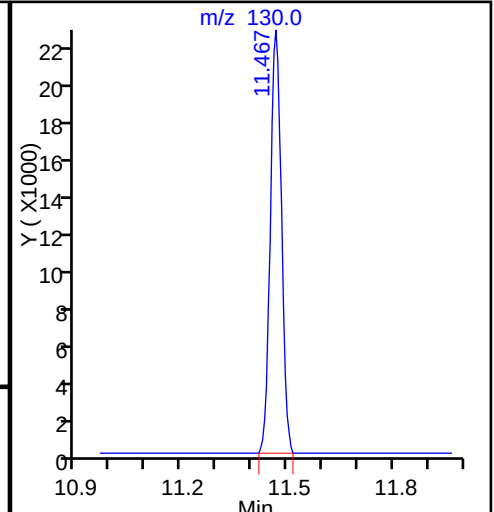
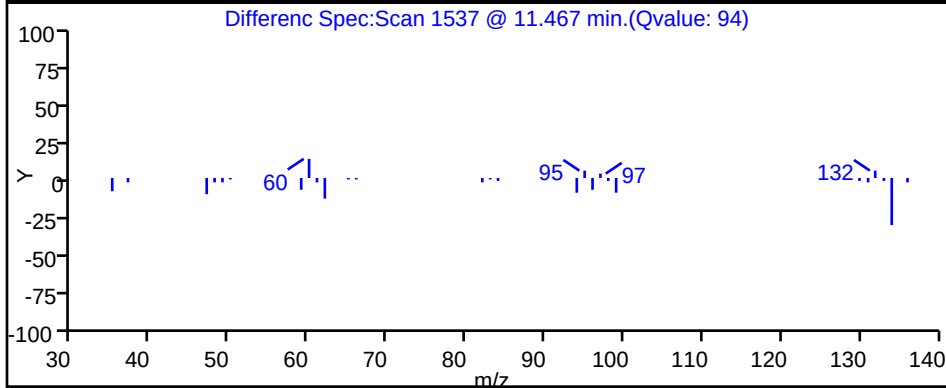
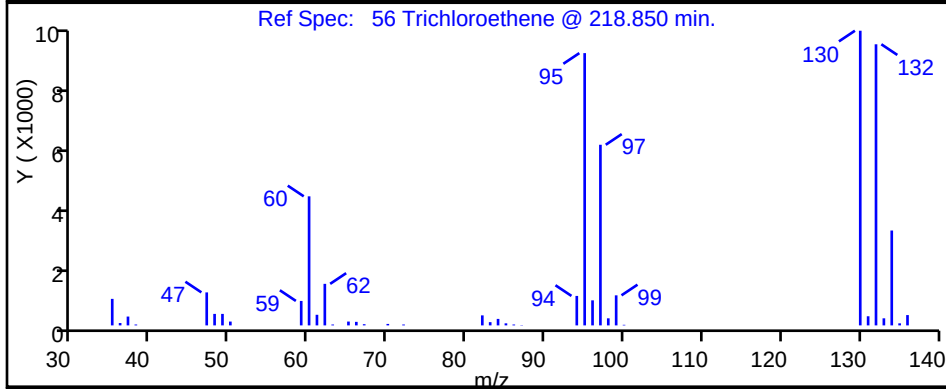
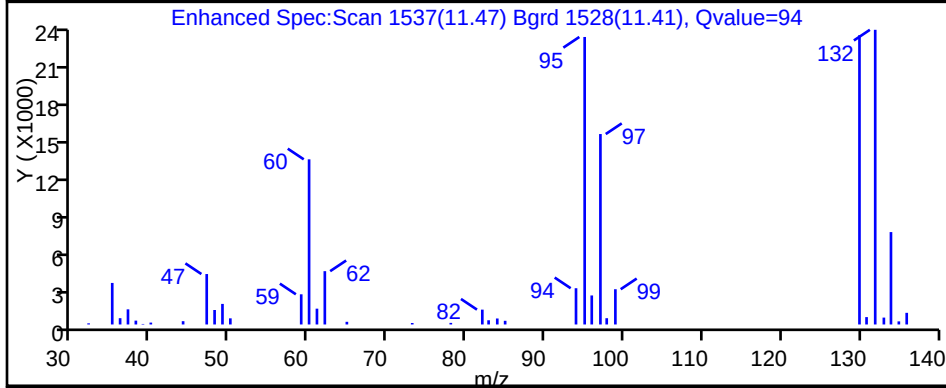
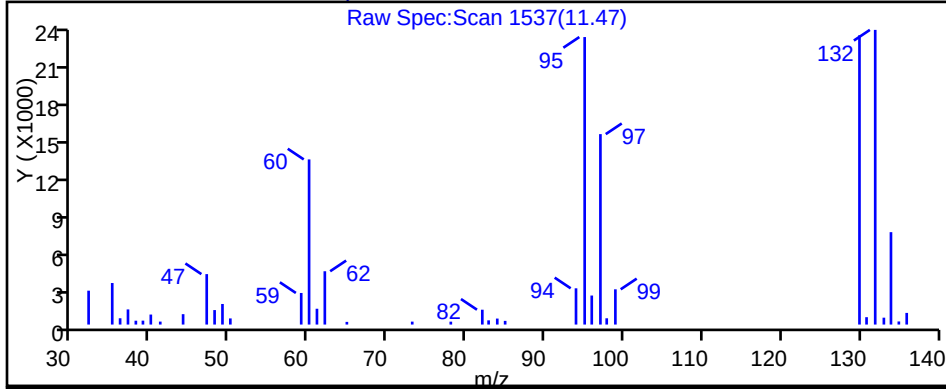
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

56 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P103.D

Injection Date: 05-Mar-2015 14:23:30

Instrument ID: ME

Lims ID: 140-2815-A-1

Lab Sample ID: 140-2815-1

Client ID: H2O-BA-2015

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

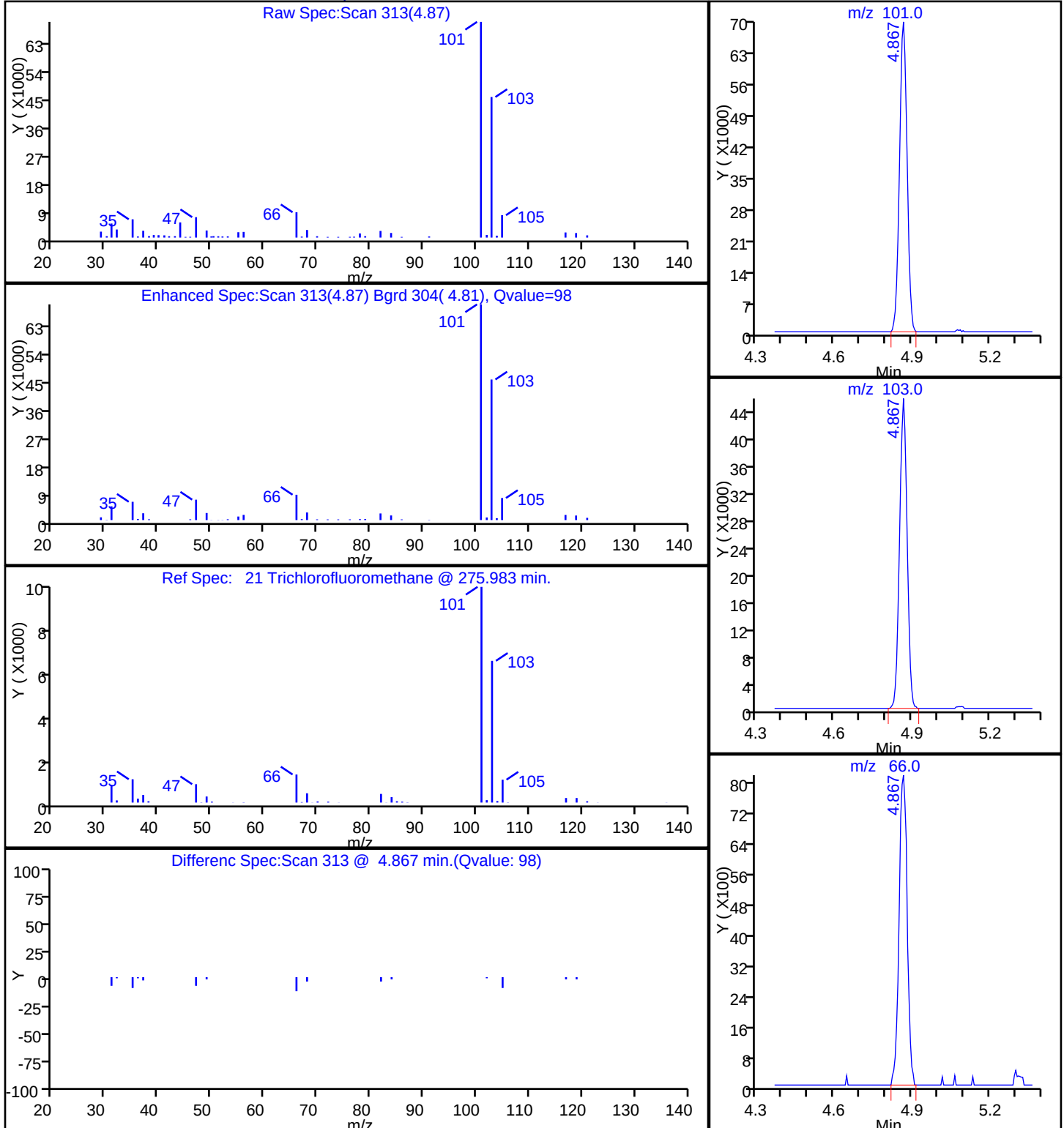
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

21 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: DUP1-2015 Lab Sample ID: 140-2815-2

Matrix: Air Lab File ID: EC05P104.D

Analysis Method: TO 15 LL Date Collected: 02/27/2015 00:00

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 15:12

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.: 2464 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		0.080	
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	0.16		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	0.12		0.040	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	0.36		0.080	
74-87-3	Chloromethane	50.49	0.48		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.080	
110-82-7	Cyclohexane	84.16	ND		0.20	

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 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 15:12
 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.: 2464 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	0.53		0.080	
64-17-5	Ethanol	46.07	9.9		0.80	
100-41-4	Ethylbenzene	106.17	0.099		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	0.45		0.080	
95-47-6	o-Xylene	106.17	0.16		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	0.74		0.080	
108-88-3	Toluene	92.14	0.22		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	0.28		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.41		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

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AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

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Matrix: Air Lab File ID: EC05P104.D

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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.: 2464 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		0.32	
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	0.52		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	0.73		0.25	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	1.8		0.39	
74-87-3	Chloromethane	50.49	0.99		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

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 Matrix: Air Lab File ID: EC05P104.D
 Analysis Method: TO 15 LL Date Collected: 02/27/2015 00:00
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 15:12
 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.: 2464 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	2.6		0.40	
64-17-5	Ethanol	46.07	19		1.5	
100-41-4	Ethylbenzene	106.17	0.43		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	2.0		0.35	
95-47-6	o-Xylene	106.17	0.68		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	5.0		0.54	
108-88-3	Toluene	92.14	0.83		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	1.5		0.21	
75-69-4	Trichlorofluoromethane	137.37	2.3		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P104.D
 Lims ID: 140-2815-A-2 Lab Sample ID: 140-2815-2
 Client ID: DUP1-2015
 Sample Type: Client
 Inject. Date: 05-Mar-2015 15:12:30 ALS Bottle#: 4 Worklist Smp#: 8
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2815-a-2
 Misc. Info.: E030515,TO155,,140-0001424-008
 Operator ID: 7126 Instrument ID: ME
 Method: \\KNXCHROM\ChromData\ME\20150304-1425.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 06-Mar-2015 09:24:58 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK009

First Level Reviewer: tajh

Date: 05-Mar-2015 15:51:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.491	8.491	0.000	96	360180	4.00	
* 2 1,4-Difluorobenzene	114	10.729	10.729	0.000	96	1646111	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.555	15.555	0.000	91	1472319	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.216	17.210	0.006	88	1102489	3.98	
8 Dichlorodifluoromethane	85	3.443	3.438	0.005	96	194674	0.5292	
9 Chloromethane	52	3.616	3.616	0.000	100	18167	0.4815	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.621	0.000	28	3379	0.0145	
17 Ethanol	31	4.393	4.393	0.000	97	424371	9.90	
21 Trichlorofluoromethane	101	4.862	4.862	0.000	99	136130	0.4146	
29 2-Methyl-2-propanol	59	5.671	5.654	0.017	71	9652	0.0457	
30 1,1,2-Trichloro-1,2,2-trif	101	5.735	5.735	0.000	88	15207	0.0655	
31 Methylene Chloride	84	5.919	5.919	0.000	93	14823	0.1504	
39 2-Butanone (MEK)	72	7.720	7.709	0.011	93	10862	0.2306	
40 Hexane	56	7.730	7.730	0.000	59	8751	0.0852	
43 Chloroform	83	8.502	8.502	0.000	38	96986	0.3643	
45 1,1,1-Trichloroethane	97	9.537	9.537	0.000	88	23943	0.0771	
49 Cyclohexane	69	10.152	10.152	0.000	26	863	0.0161	
48 Benzene	78	10.157	10.157	0.000	95	50867	0.1642	
50 Carbon tetrachloride	117	10.179	10.179	0.000	95	37635	0.1154	
53 Isooctane	57	10.939	10.944	-0.005	87	14696	0.0239	
56 Trichloroethene	130	11.462	11.462	0.000	95	49062	0.2824	
62 4-Methyl-2-pentanone (MIBK	43	12.675	12.664	0.011	92	16825	0.0636	
65 Toluene	91	13.560	13.560	0.000	91	81564	0.2210	
73 Tetrachloroethene	129	14.719	14.719	0.000	92	121111	0.7357	
76 Ethylbenzene	91	15.900	15.894	0.006	97	47529	0.0993	
78 m-Xylene & p-Xylene	91	16.056	16.056	0.000	98	166593	0.4515	
82 o-Xylene	91	16.590	16.585	0.005	95	60457	0.1569	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P104.D

Injection Date: 05-Mar-2015 15:12:30

Instrument ID: ME

Operator ID: 7126

Lims ID: 140-2815-A-2

Lab Sample ID: 140-2815-2

Worklist Smp#: 8

Client ID: DUP1-2015

Purge Vol: 500.000 mL

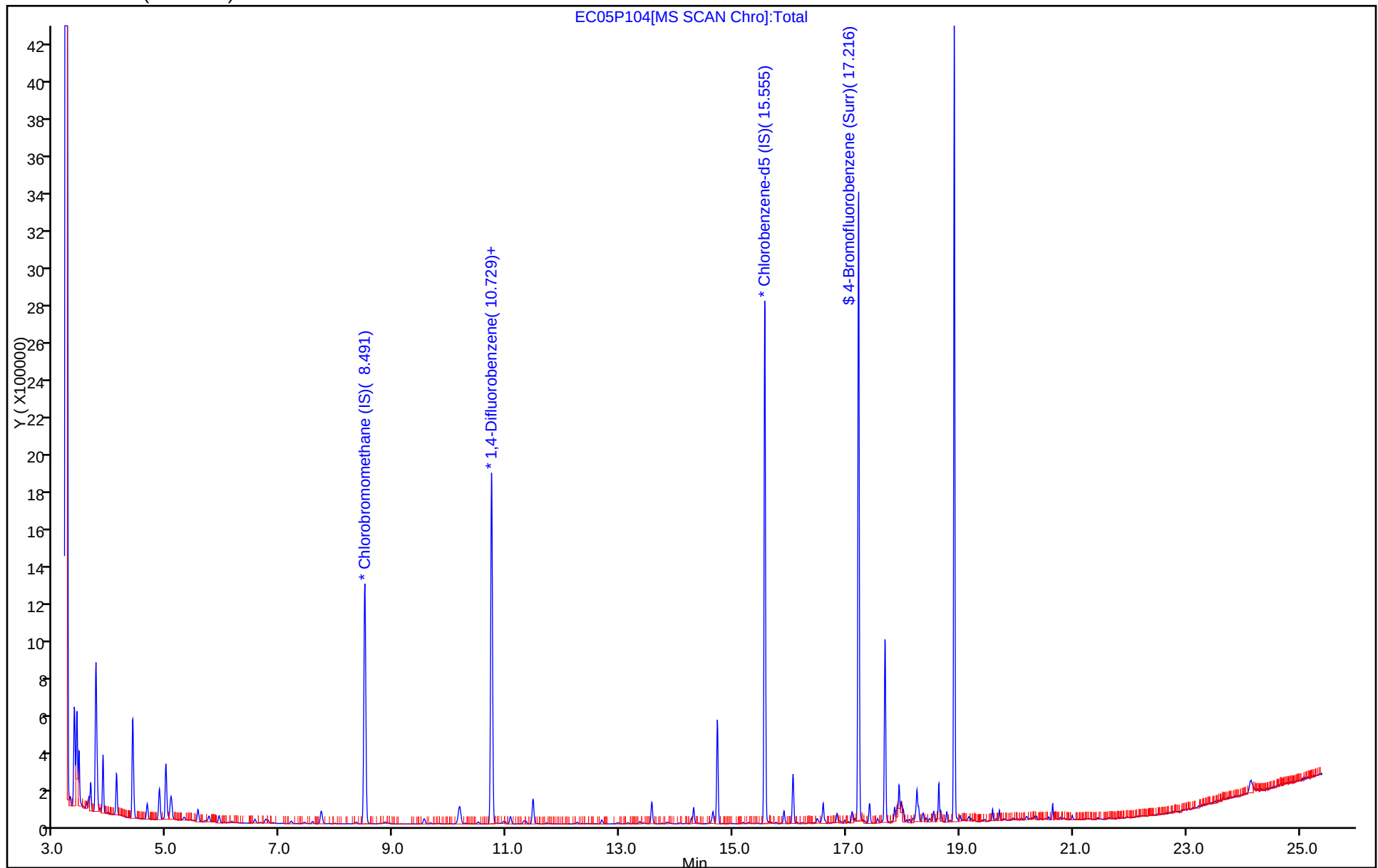
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P104.D

Injection Date: 05-Mar-2015 15:12:30

Instrument ID: ME

Lims ID: 140-2815-A-2

Lab Sample ID: 140-2815-2

Client ID: DUP1-2015

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ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

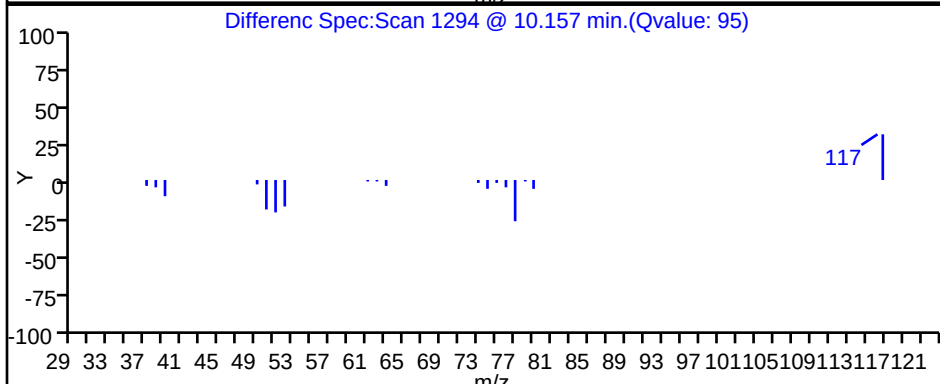
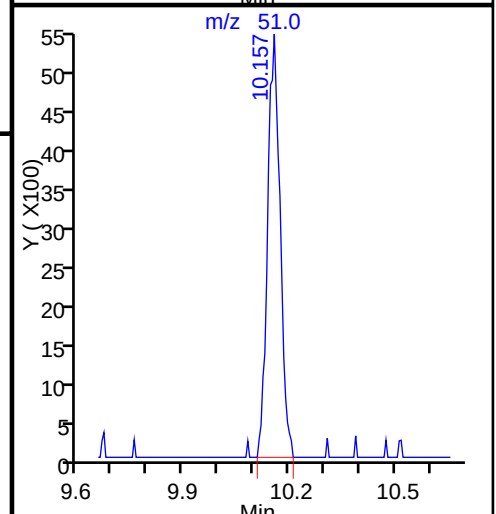
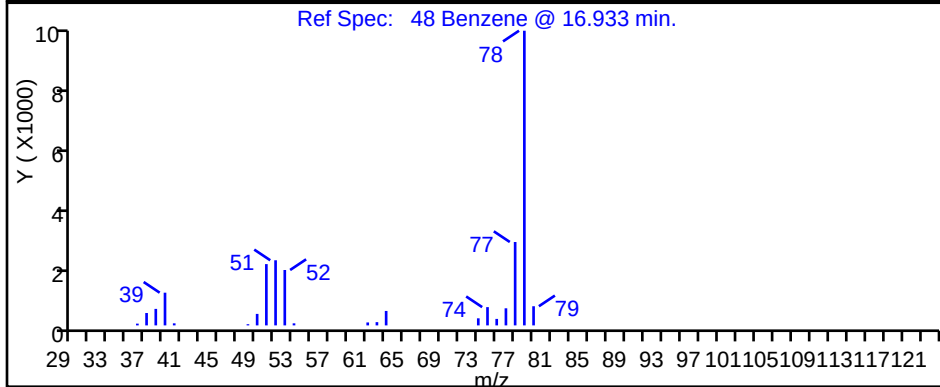
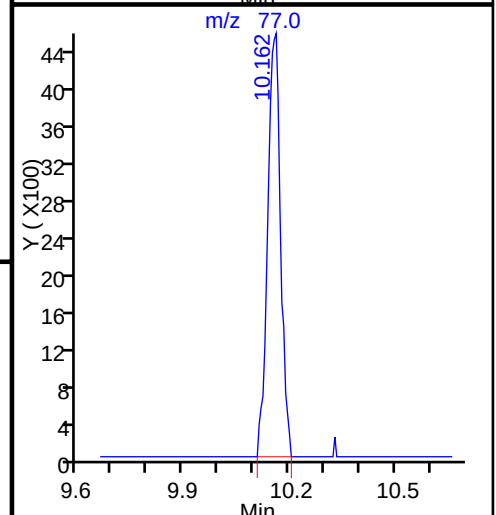
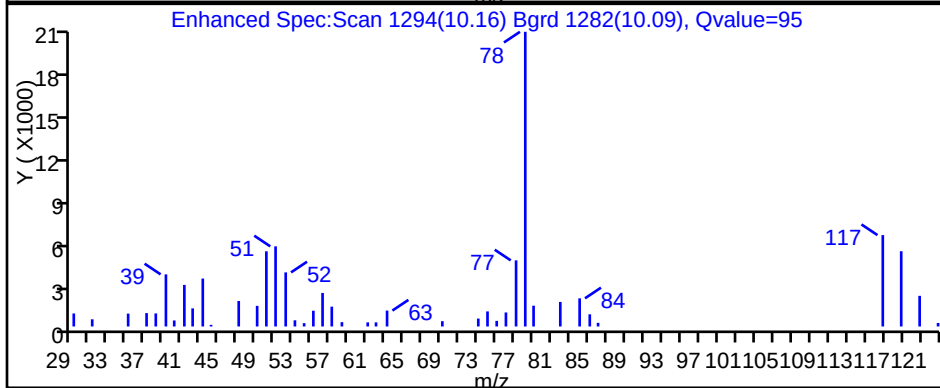
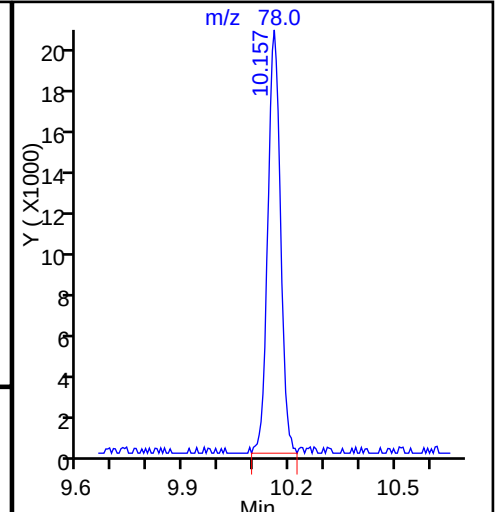
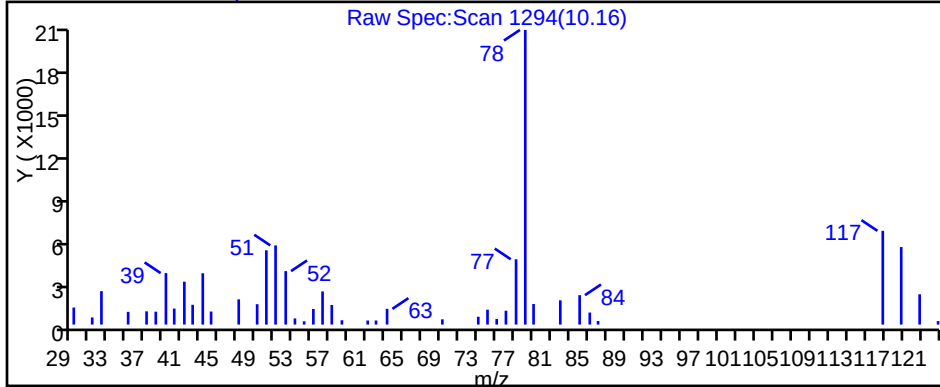
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P104.D

Injection Date: 05-Mar-2015 15:12:30

Instrument ID: ME

Lims ID: 140-2815-A-2

Lab Sample ID: 140-2815-2

Client ID: DUP1-2015

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

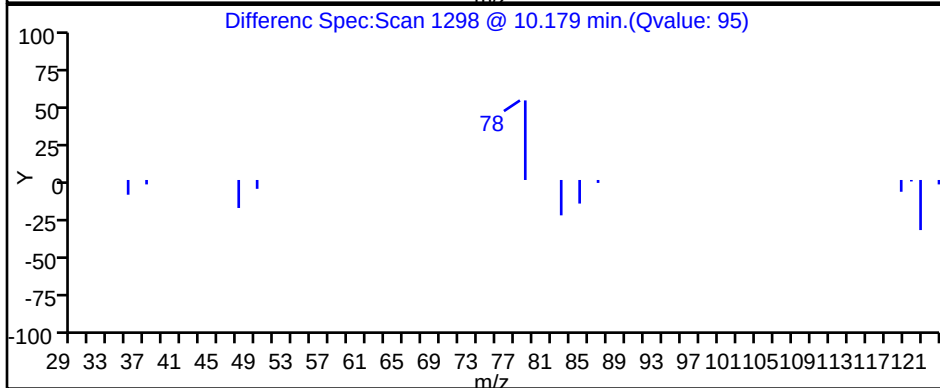
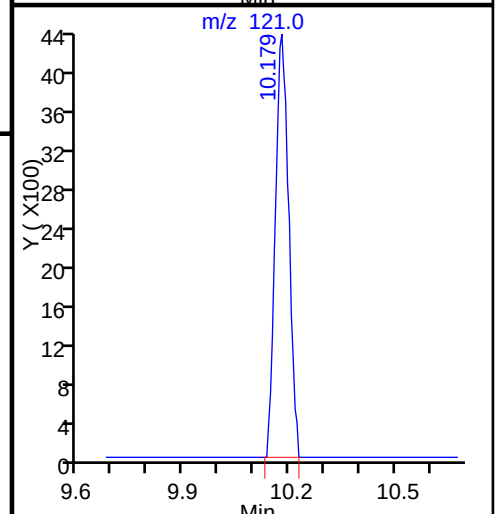
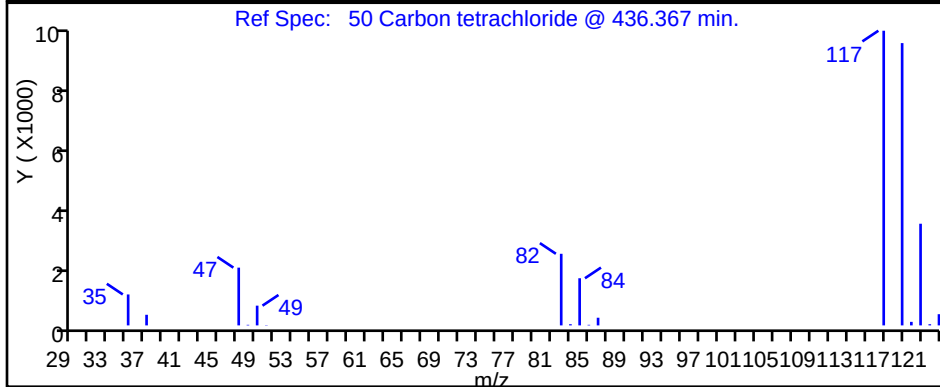
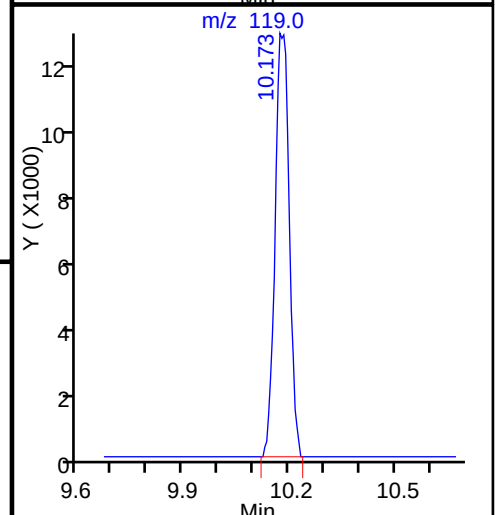
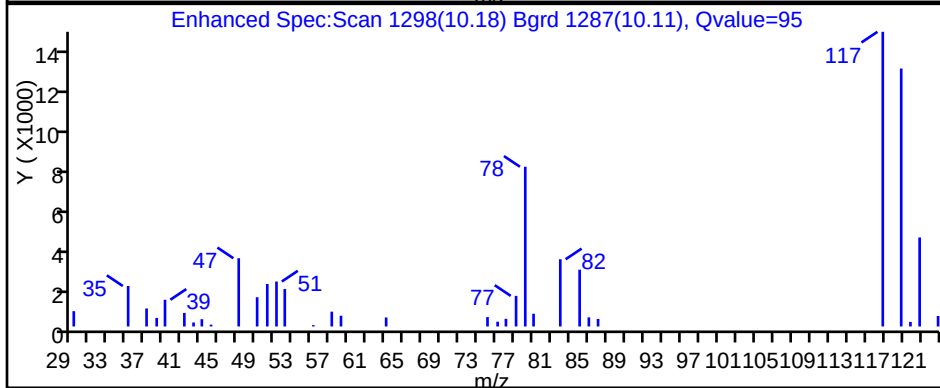
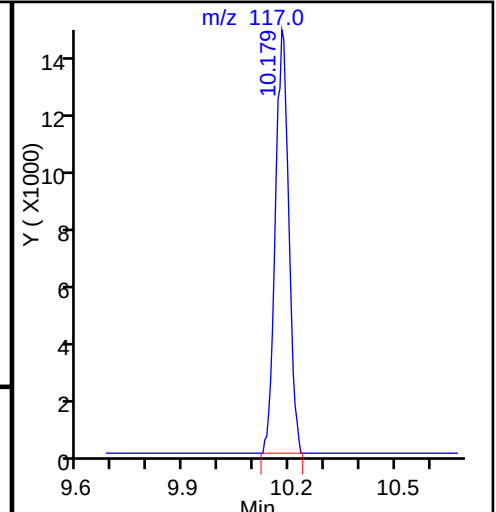
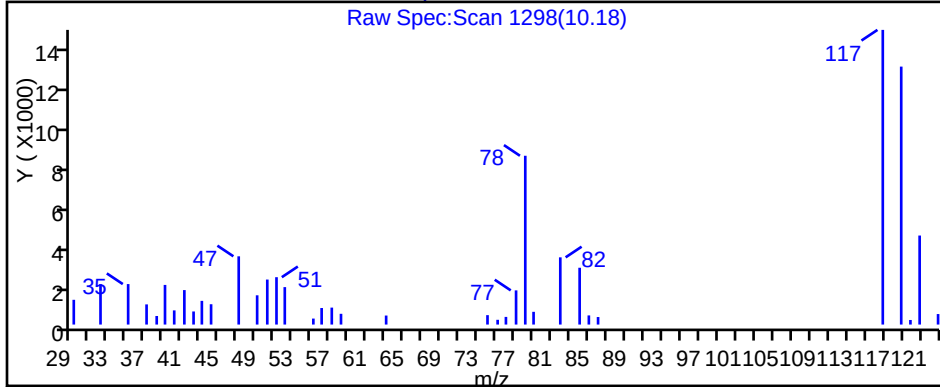
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P104.D

Injection Date: 05-Mar-2015 15:12:30

Instrument ID: ME

Lims ID: 140-2815-A-2

Lab Sample ID: 140-2815-2

Client ID: DUP1-2015

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

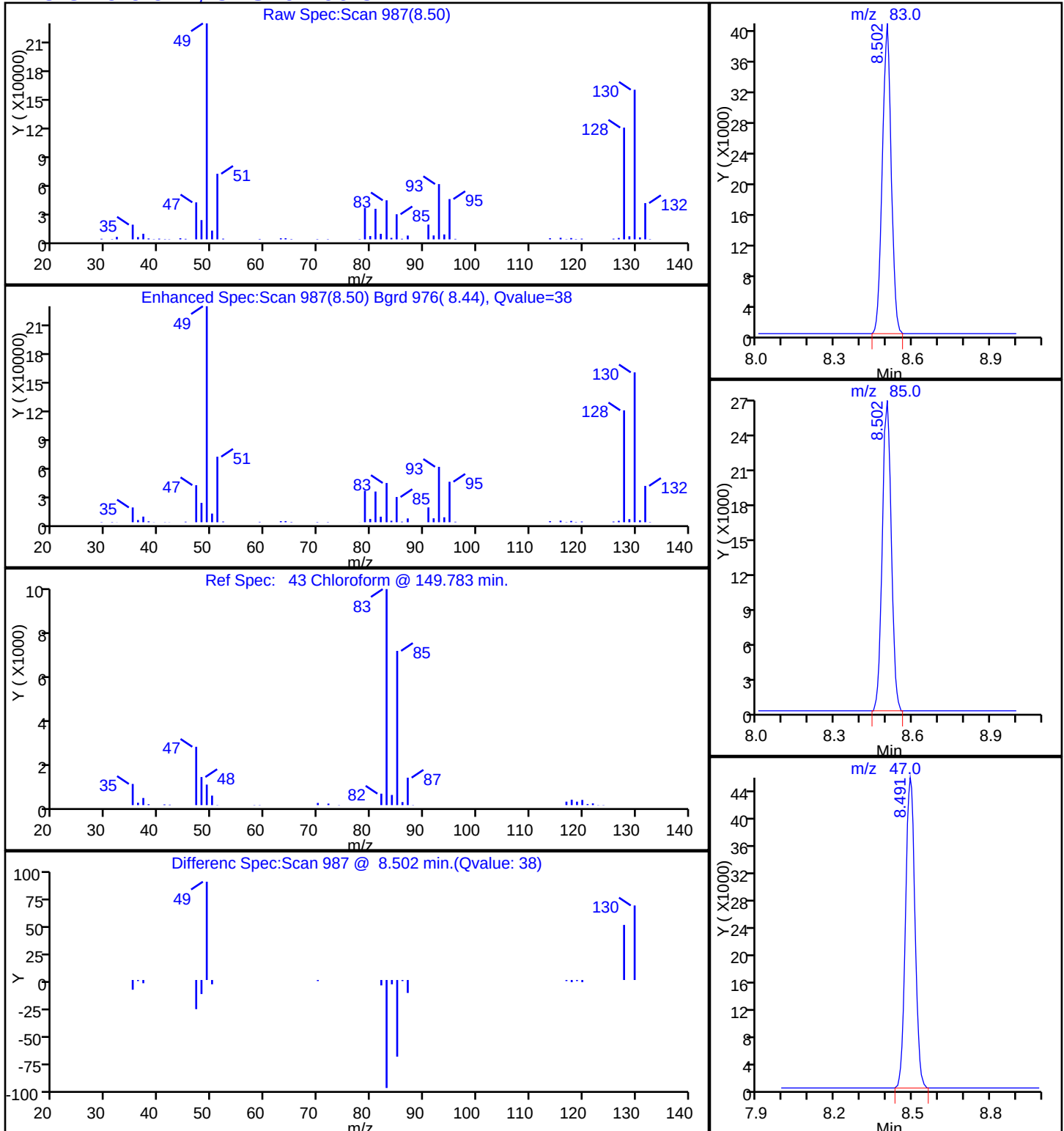
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

43 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P104.D

Injection Date: 05-Mar-2015 15:12:30

Instrument ID: ME

Lims ID: 140-2815-A-2

Lab Sample ID: 140-2815-2

Client ID: DUP1-2015

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

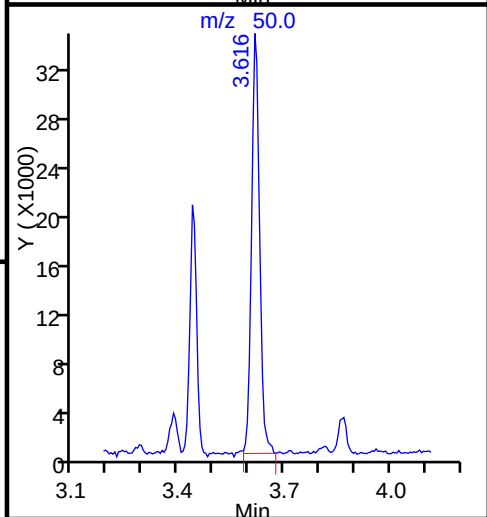
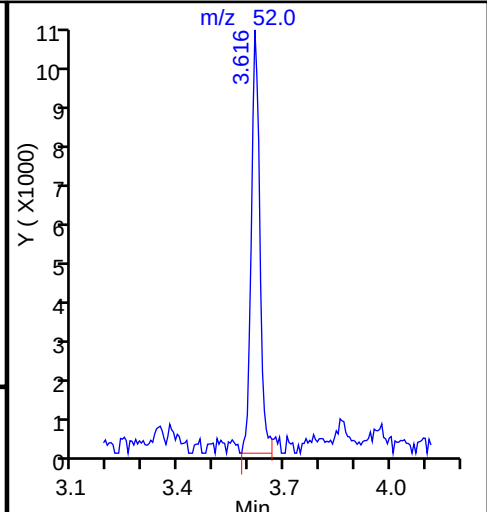
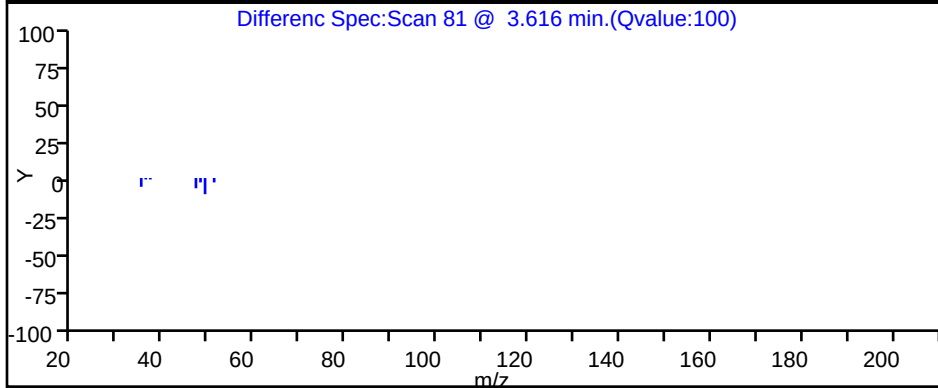
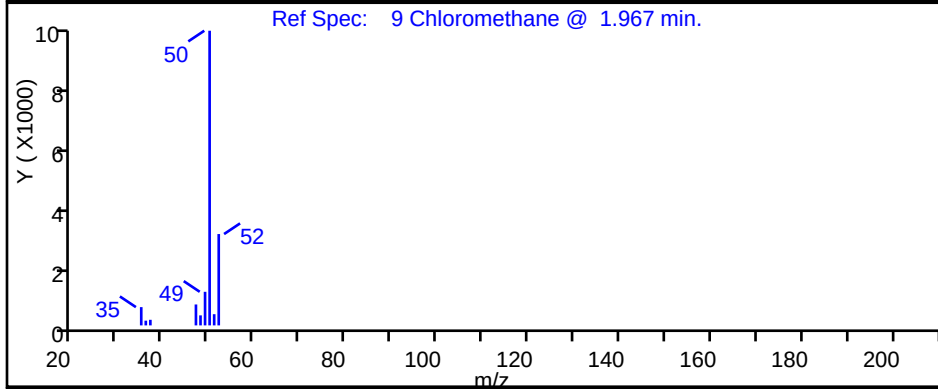
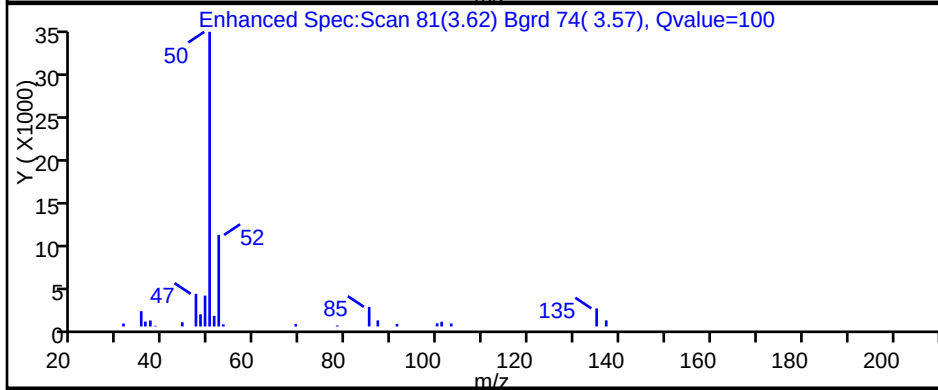
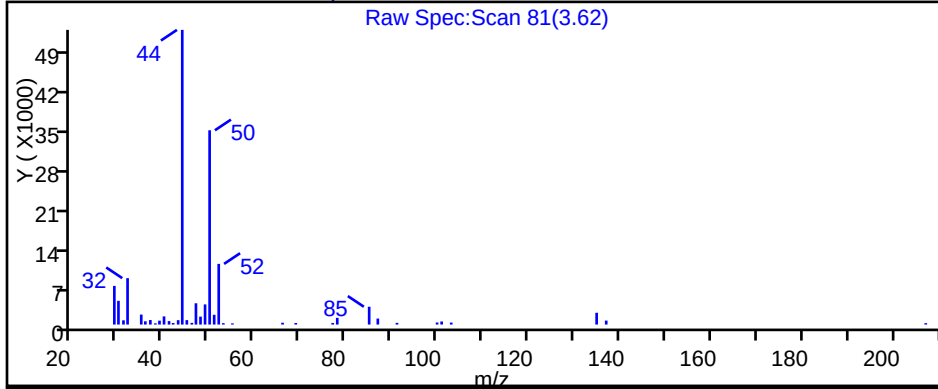
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P104.D

Injection Date: 05-Mar-2015 15:12:30

Instrument ID: ME

Lims ID: 140-2815-A-2

Lab Sample ID: 140-2815-2

Client ID: DUP1-2015

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

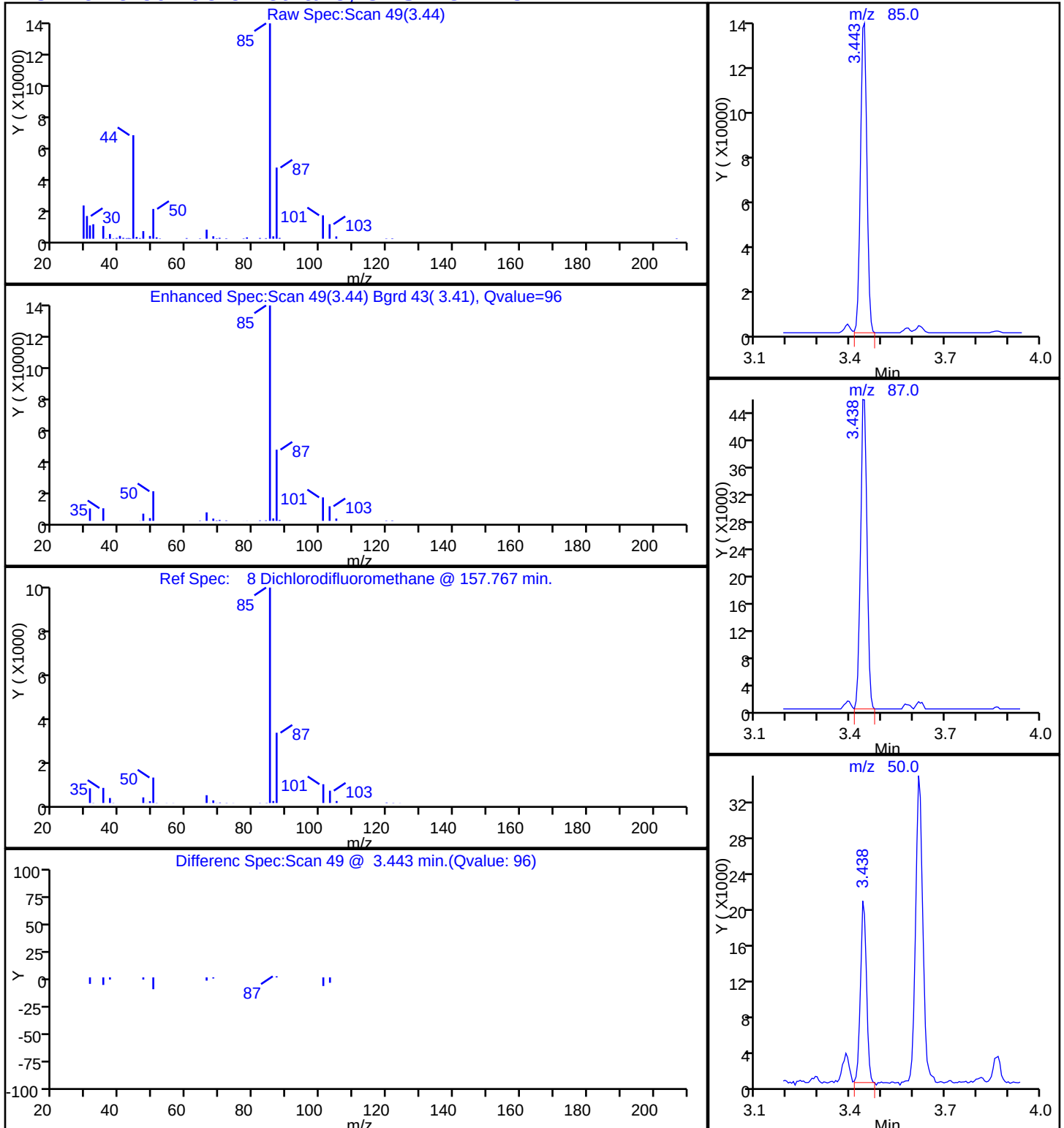
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P104.D

Injection Date: 05-Mar-2015 15:12:30

Instrument ID: ME

Lims ID: 140-2815-A-2

Lab Sample ID: 140-2815-2

Client ID: DUP1-2015

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

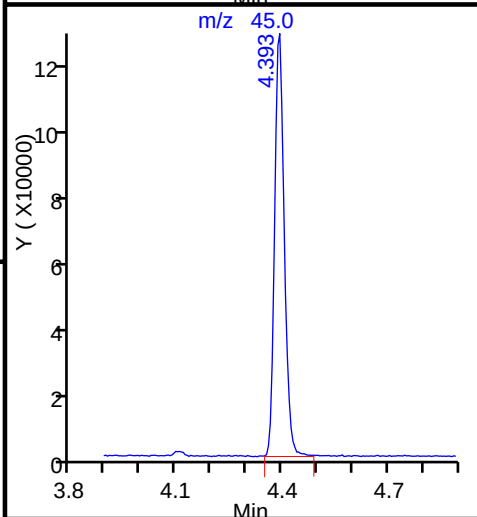
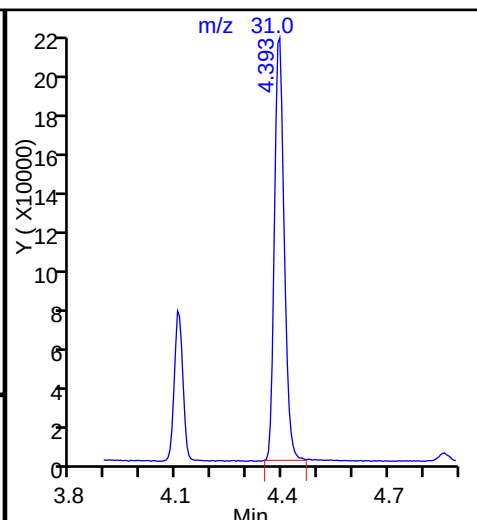
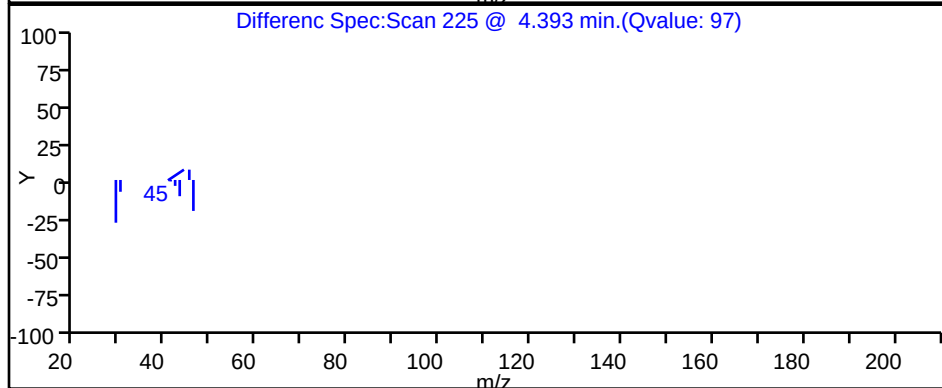
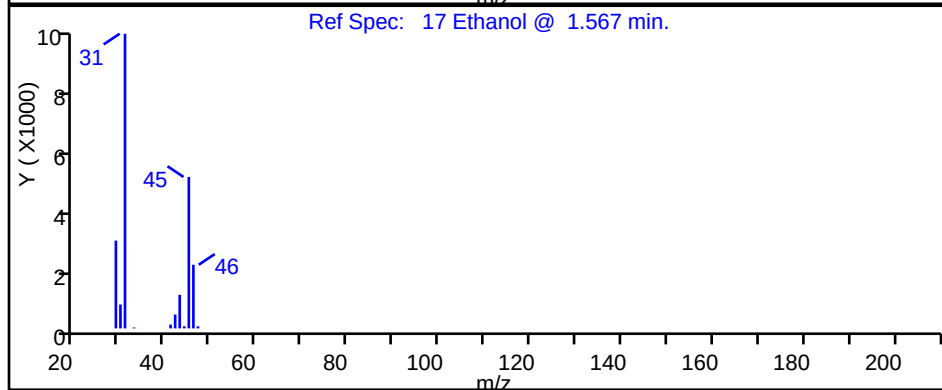
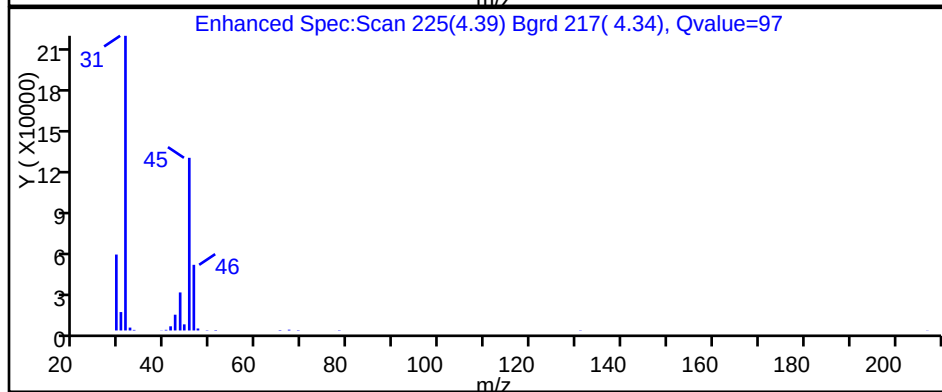
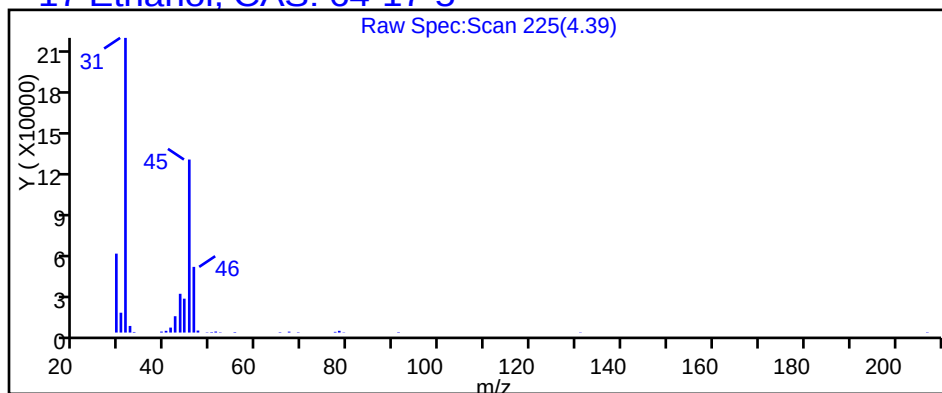
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P104.D

Injection Date: 05-Mar-2015 15:12:30

Instrument ID: ME

Lims ID: 140-2815-A-2

Lab Sample ID: 140-2815-2

Client ID: DUP1-2015

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

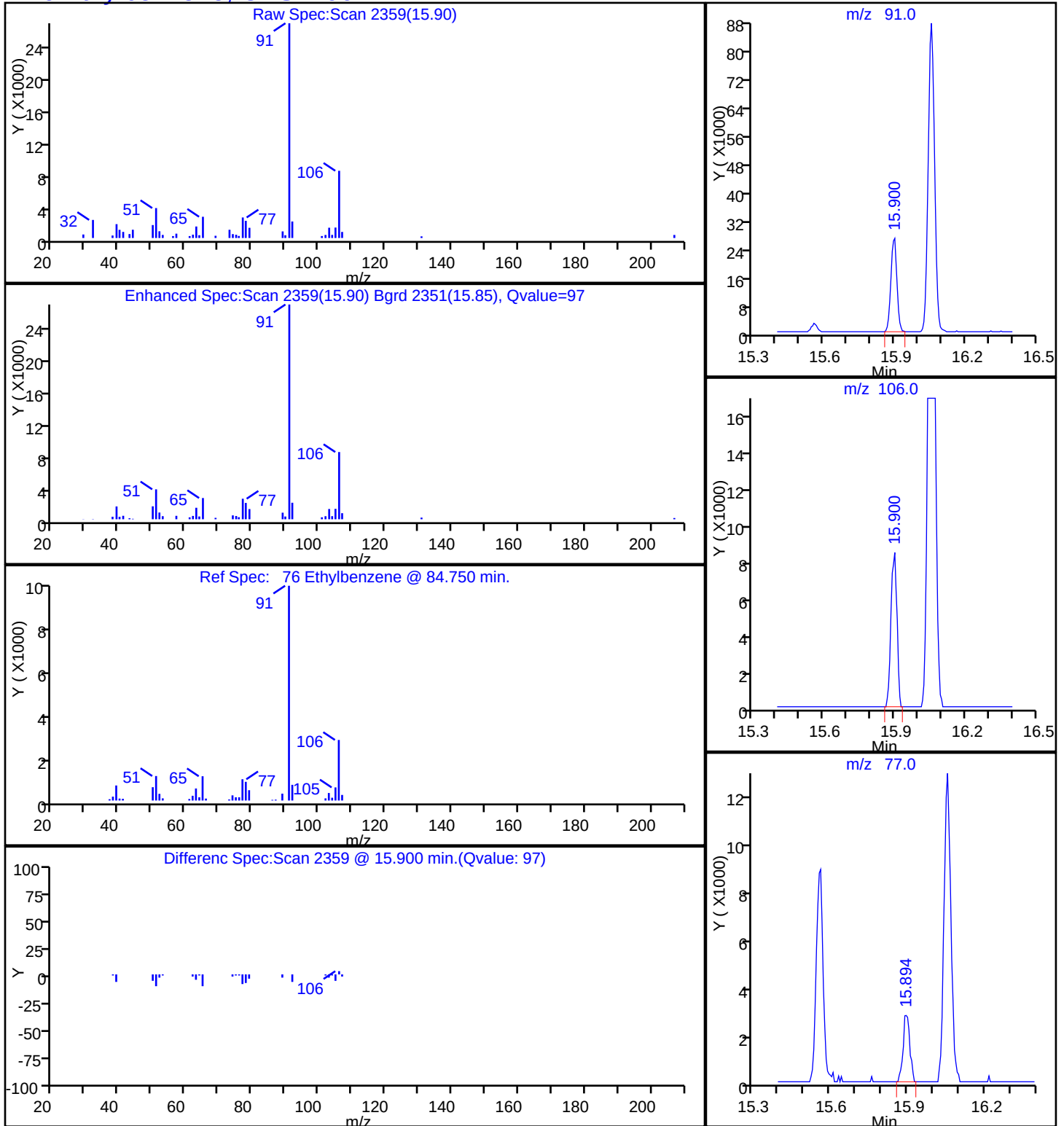
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

76 Ethylbenzene, CAS: 100-41-4

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P104.D

Injection Date: 05-Mar-2015 15:12:30

Instrument ID: ME

Lims ID: 140-2815-A-2

Lab Sample ID: 140-2815-2

Client ID: DUP1-2015

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

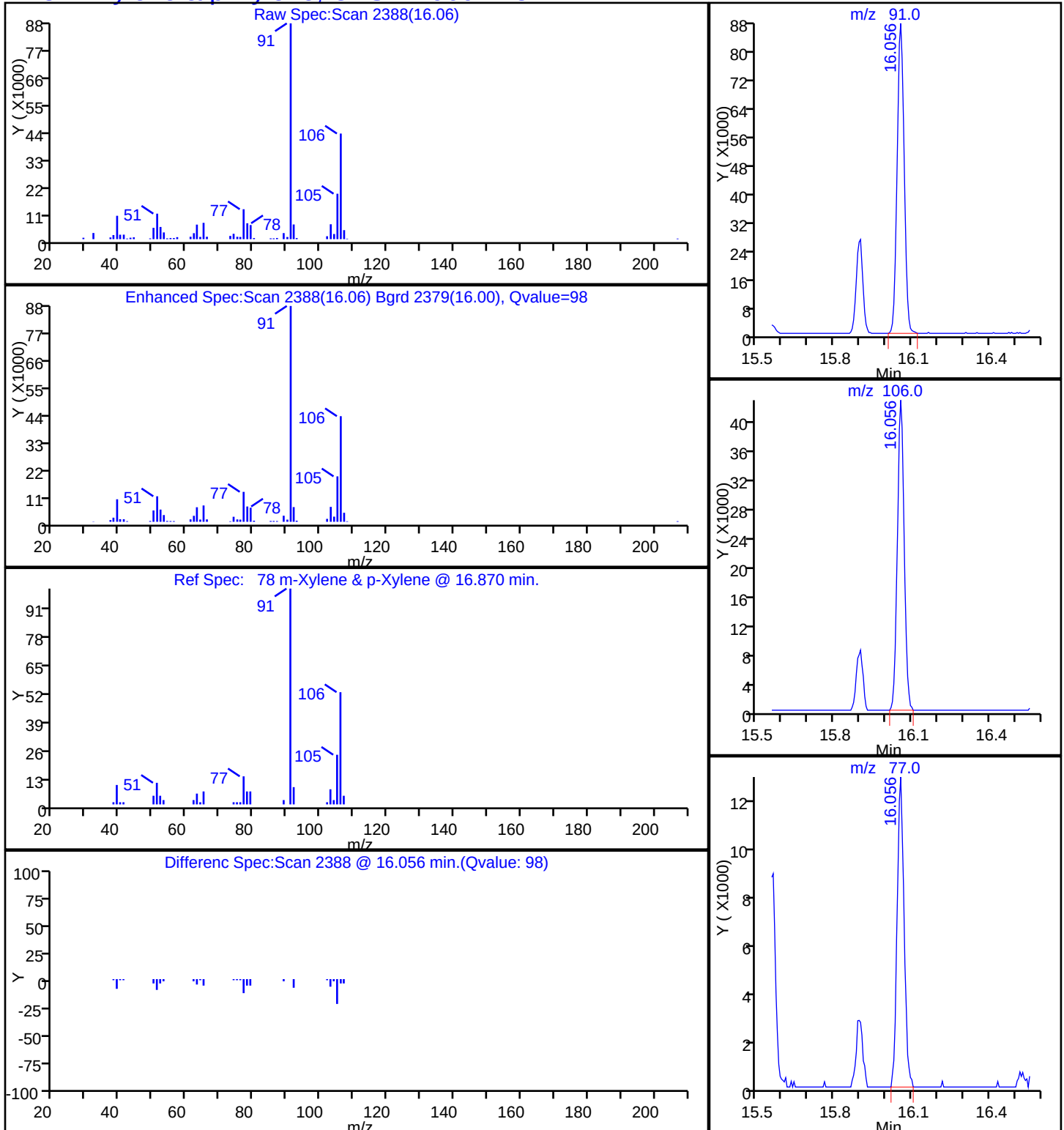
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P104.D

Injection Date: 05-Mar-2015 15:12:30

Instrument ID: ME

Lims ID: 140-2815-A-2

Lab Sample ID: 140-2815-2

Client ID: DUP1-2015

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

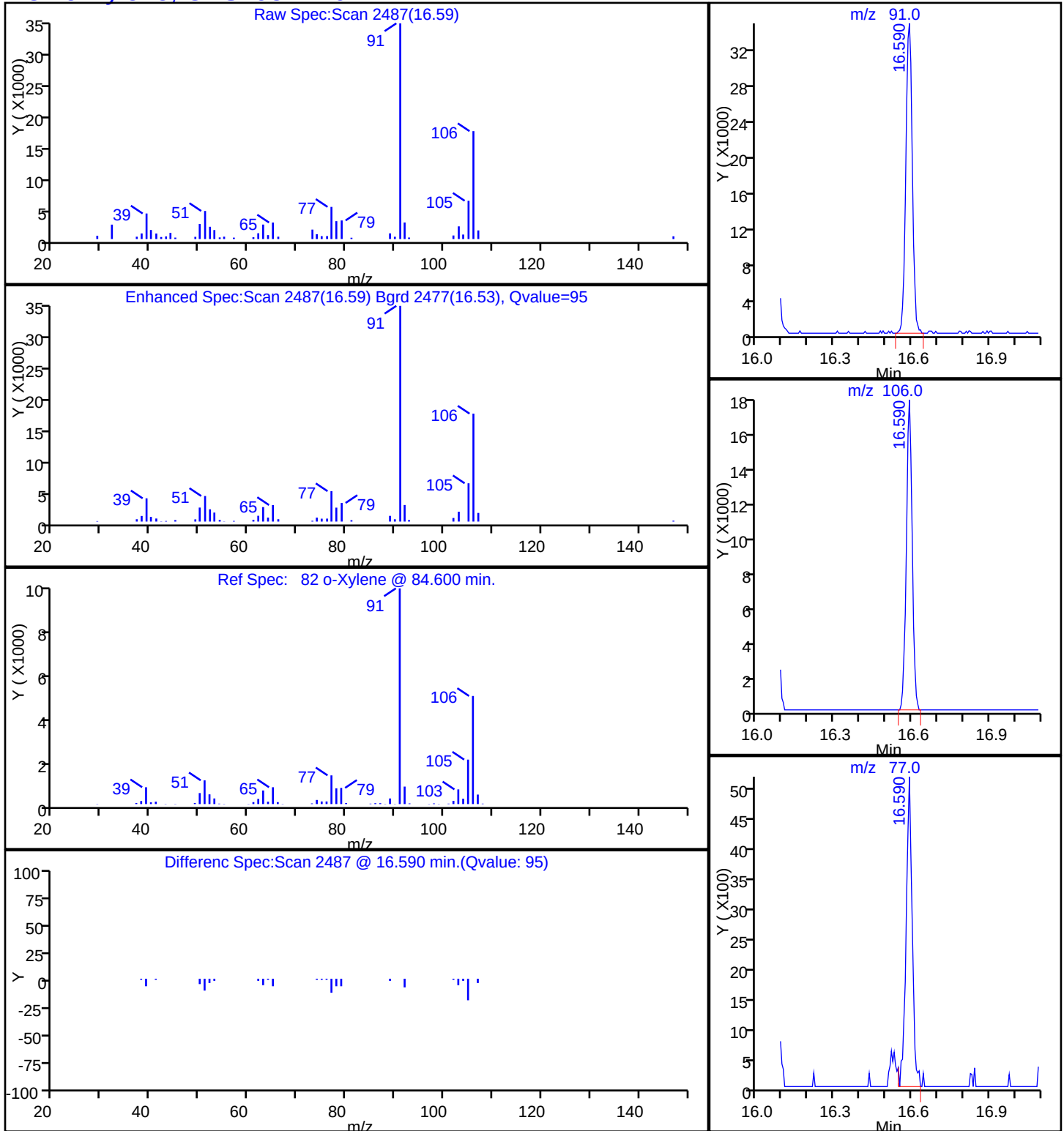
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P104.D

Injection Date: 05-Mar-2015 15:12:30

Instrument ID: ME

Lims ID: 140-2815-A-2

Lab Sample ID: 140-2815-2

Client ID: DUP1-2015

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

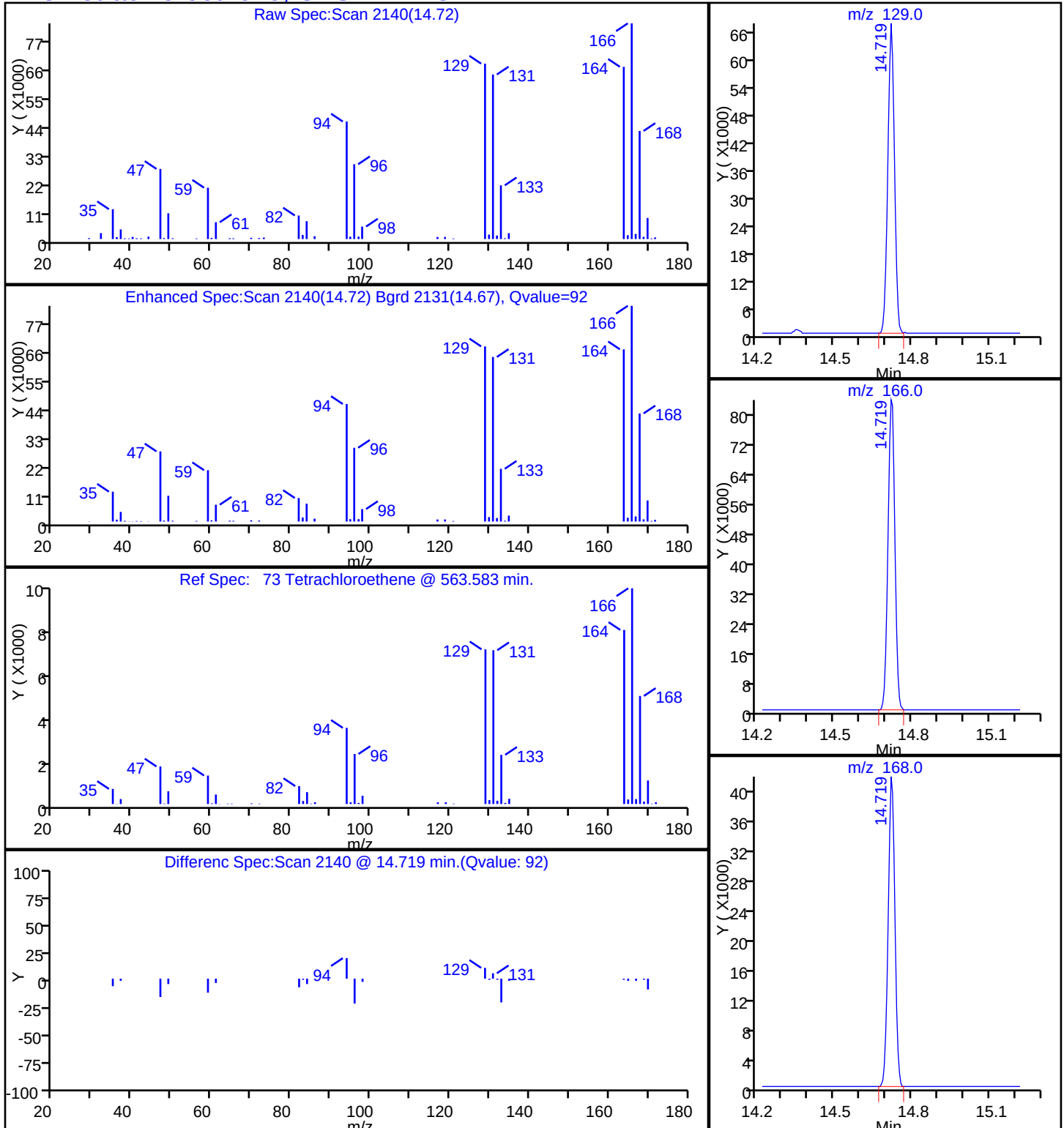
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

73 Tetrachloroethene, CAS: 127-18-4

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P104.D

Injection Date: 05-Mar-2015 15:12:30

Instrument ID: ME

Lims ID: 140-2815-A-2

Lab Sample ID: 140-2815-2

Client ID: DUP1-2015

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

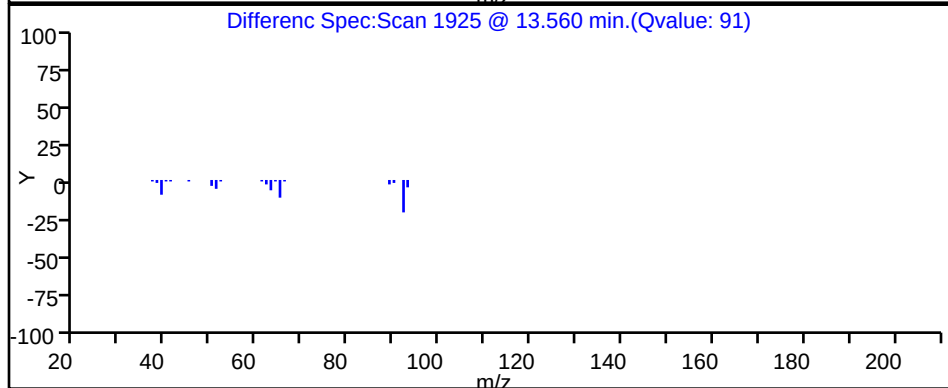
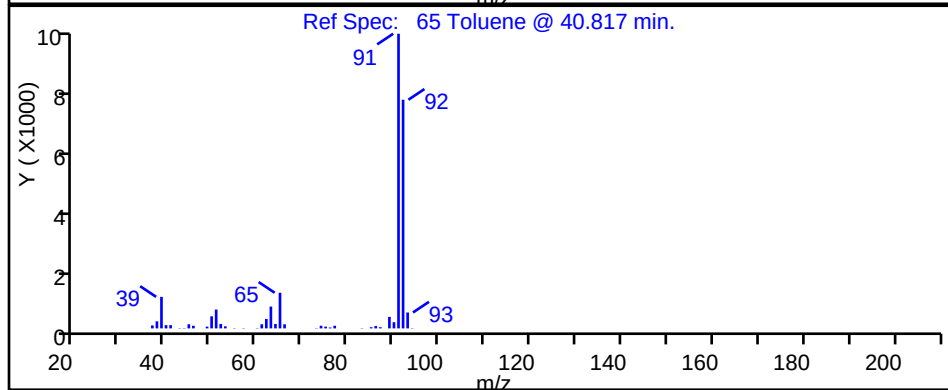
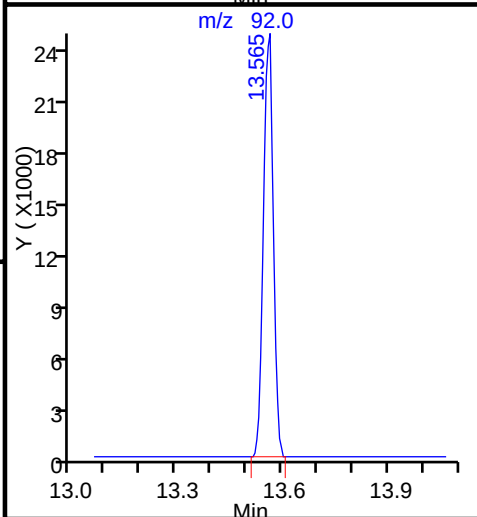
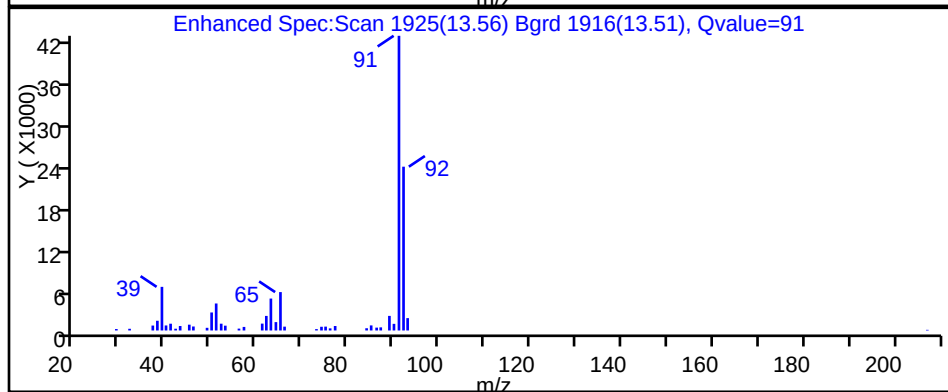
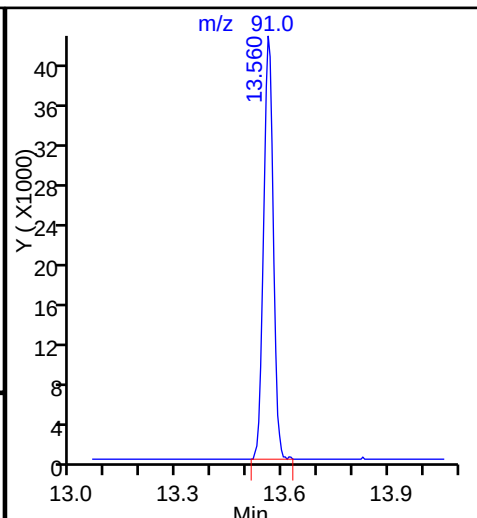
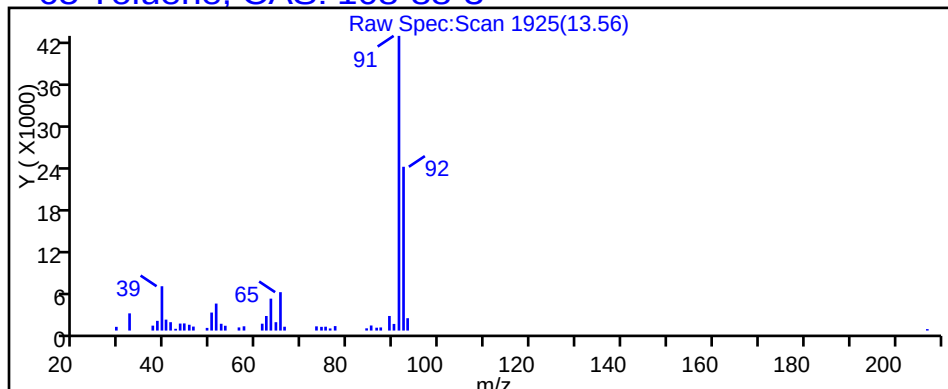
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P104.D

Injection Date: 05-Mar-2015 15:12:30

Instrument ID: ME

Lims ID: 140-2815-A-2

Lab Sample ID: 140-2815-2

Client ID: DUP1-2015

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

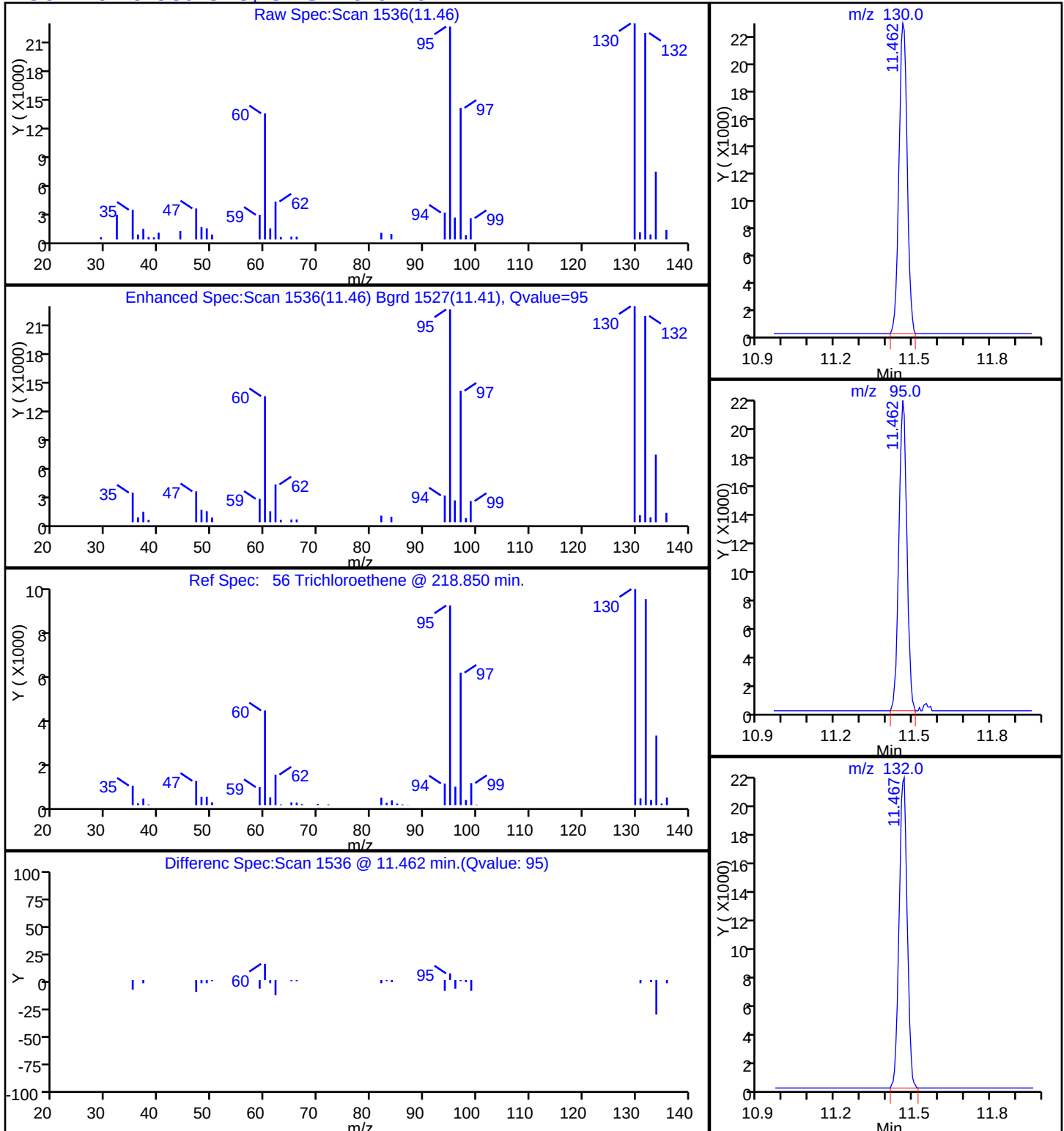
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

56 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P104.D

Injection Date: 05-Mar-2015 15:12:30

Instrument ID: ME

Lims ID: 140-2815-A-2

Lab Sample ID: 140-2815-2

Client ID: DUP1-2015

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

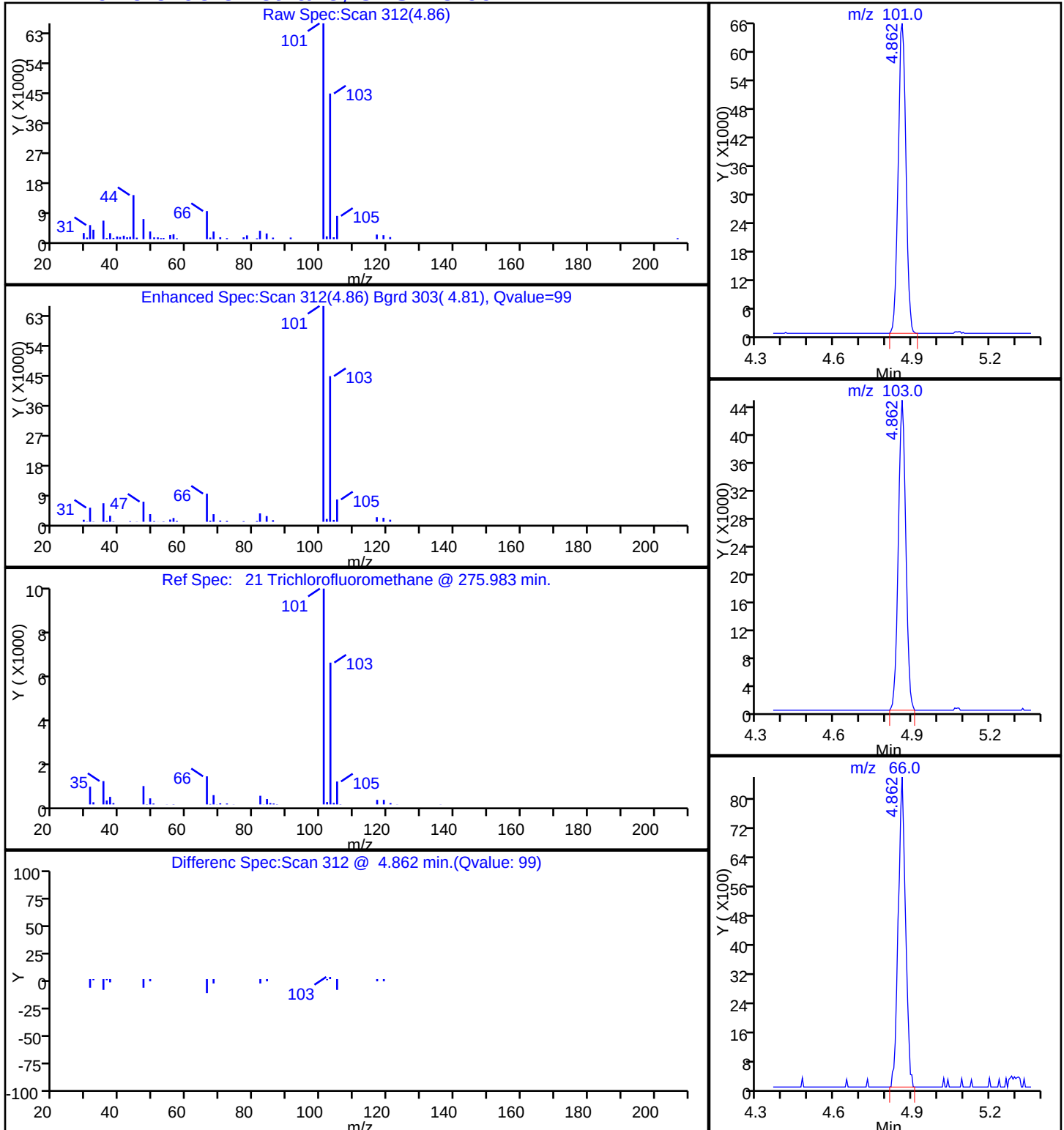
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

21 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: D3-OA-2015 Lab Sample ID: 140-2815-3

Matrix: Air Lab File ID: EC05P105.D

Analysis Method: TO 15 LL Date Collected: 02/27/2015 10:07

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 16:01

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.: 2464 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		0.080	
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	0.15		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	0.062		0.040	
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	0.52		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: D3-OA-2015 Lab Sample ID: 140-2815-3
 Matrix: Air Lab File ID: EC05P105.D
 Analysis Method: TO 15 LL Date Collected: 02/27/2015 10:07
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 16:01
 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.: 2464 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	0.46		0.080	
64-17-5	Ethanol	46.07	2.4		0.80	
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		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.22		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: D3-OA-2015 Lab Sample ID: 140-2815-3

Matrix: Air Lab File ID: EC05P105.D

Analysis Method: TO 15 LL Date Collected: 02/27/2015 10:07

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 16:01

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.: 2464 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		0.32	
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	0.48		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	0.39		0.25	
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	1.1		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: D3-OA-2015 Lab Sample ID: 140-2815-3
 Matrix: Air Lab File ID: EC05P105.D
 Analysis Method: TO 15 LL Date Collected: 02/27/2015 10:07
 Sample wt/vol: 500(mL) Date Analyzed: 03/05/2015 16:01
 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.: 2464 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	2.3		0.40	
64-17-5	Ethanol	46.07	4.6		1.5	
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		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.2		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P105.D
 Lims ID: 140-2815-A-3 Lab Sample ID: 140-2815-3
 Client ID: D3-OA-2015
 Sample Type: Client
 Inject. Date: 05-Mar-2015 16:01:30 ALS Bottle#: 5 Worklist Smp#: 9
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2815-a-3
 Misc. Info.: E030515,TO155,,140-0001425-009
 Operator ID: 7126 Instrument ID: ME
 Method: \\KNXCHROM\ChromData\ME\20150304-1425.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 06-Mar-2015 09:24:58 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK009

First Level Reviewer: barlozhetskayaa

Date: 05-Mar-2015 17:13:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.491	8.491	0.000	97	359463	4.00	
* 2 1,4-Difluorobenzene	114	10.728	10.729	-0.001	96	1687238	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.555	15.555	0.000	91	1507456	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.210	17.210	0.000	87	1134493	4.00	
8 Dichlorodifluoromethane	85	3.438	3.438	0.000	100	167997	0.4576	
9 Chloromethane	52	3.616	3.616	0.000	100	19606	0.5207	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.621	0.000	36	3185	0.0137	
17 Ethanol	31	4.387	4.393	-0.006	97	103818	2.43	
21 Trichlorofluoromethane	101	4.862	4.862	0.000	99	71463	0.2181	
29 2-Methyl-2-propanol	59	5.665	5.654	0.011	89	6929	0.0329	
30 1,1,2-Trichloro-1,2,2-trif	101	5.730	5.735	-0.005	95	14906	0.0643	
31 Methylene Chloride	84	5.913	5.919	-0.006	94	13790	0.1402	
39 2-Butanone (MEK)	72	7.714	7.709	0.005	96	7297	0.1552	
40 Hexane	56	7.730	7.730	0.000	69	7494	0.0731	
48 Benzene	78	10.157	10.157	0.000	97	47369	0.1492	
50 Carbon tetrachloride	117	10.178	10.179	-0.001	97	20740	0.0621	
53 Isooctane	57	10.944	10.944	0.000	94	13194	0.0209	
62 4-Methyl-2-pentanone (MIBK	43	12.675	12.664	0.011	99	20067	0.0740	
65 Toluene	91	13.559	13.560	-0.001	93	33640	0.0890	
78 m-Xylene & p-Xylene	91	16.056	16.056	0.000	98	20681	0.0547	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P105.D

Injection Date: 05-Mar-2015 16:01:30

Instrument ID: ME

Operator ID: 7126

Lims ID: 140-2815-A-3

Lab Sample ID: 140-2815-3

Worklist Smp#: 9

Client ID: D3-OA-2015

Purge Vol: 500.000 mL

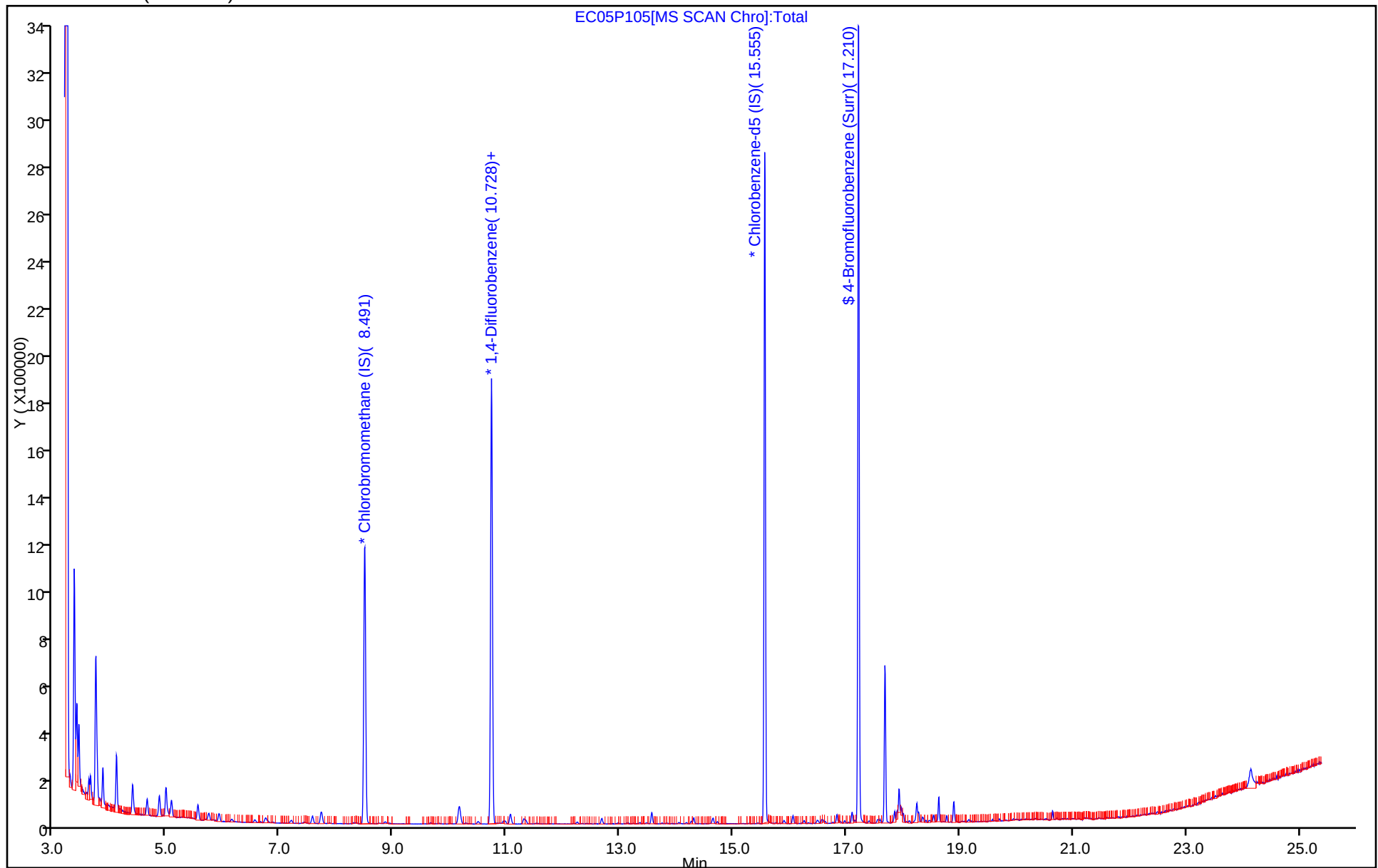
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P105.D

Injection Date: 05-Mar-2015 16:01:30

Instrument ID: ME

Lims ID: 140-2815-A-3

Lab Sample ID: 140-2815-3

Client ID: D3-OA-2015

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 9

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

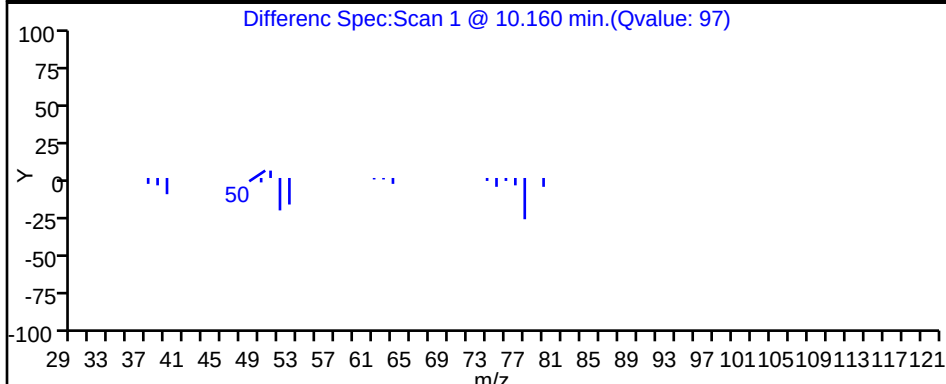
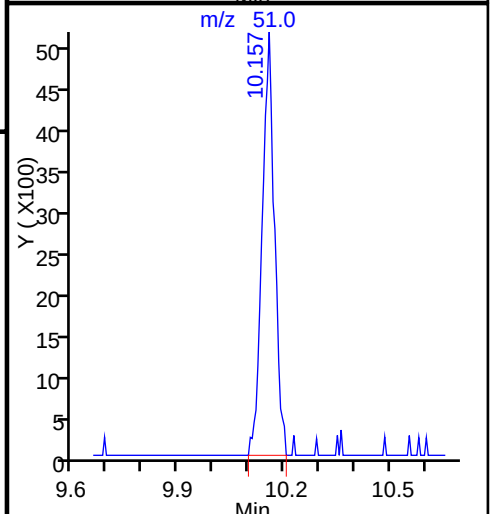
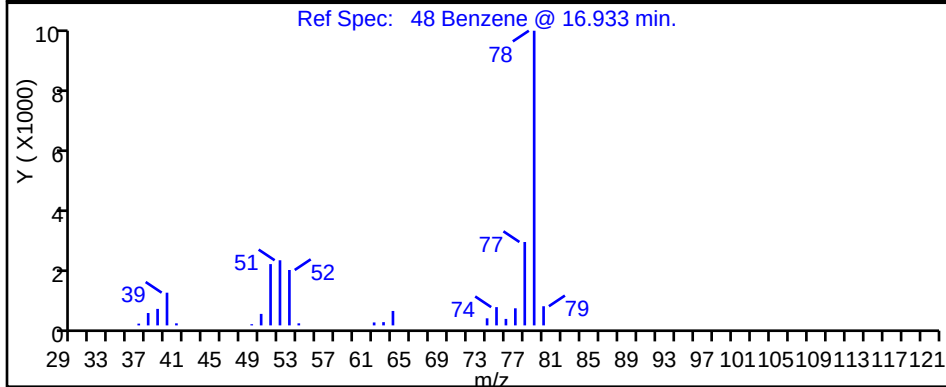
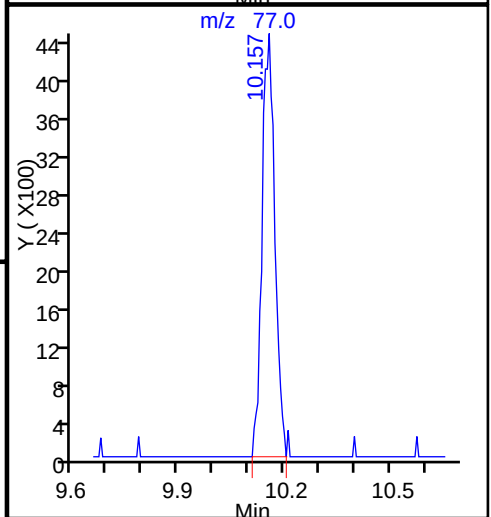
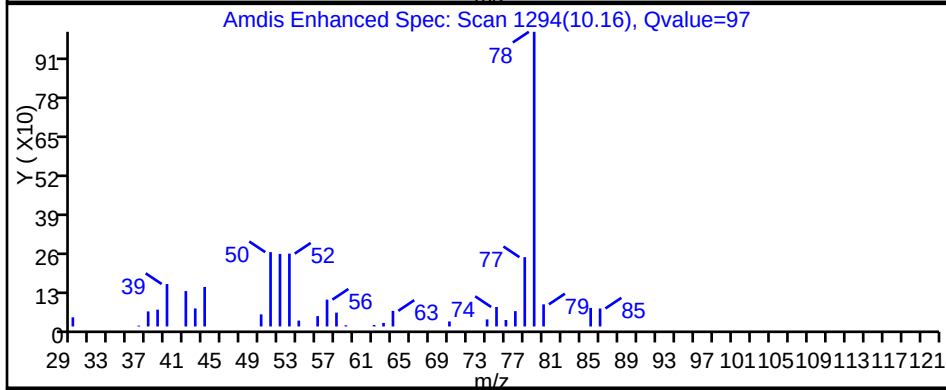
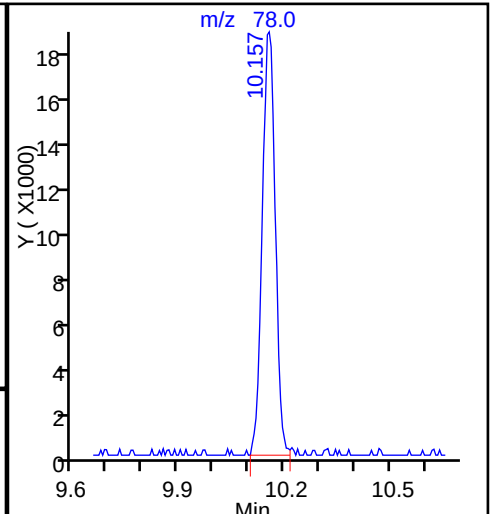
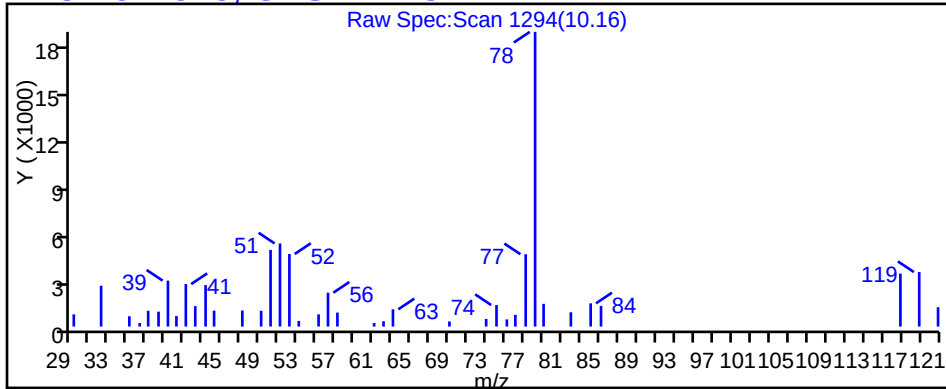
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P105.D

Injection Date: 05-Mar-2015 16:01:30

Instrument ID: ME

Lims ID: 140-2815-A-3

Lab Sample ID: 140-2815-3

Client ID: D3-OA-2015

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 9

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

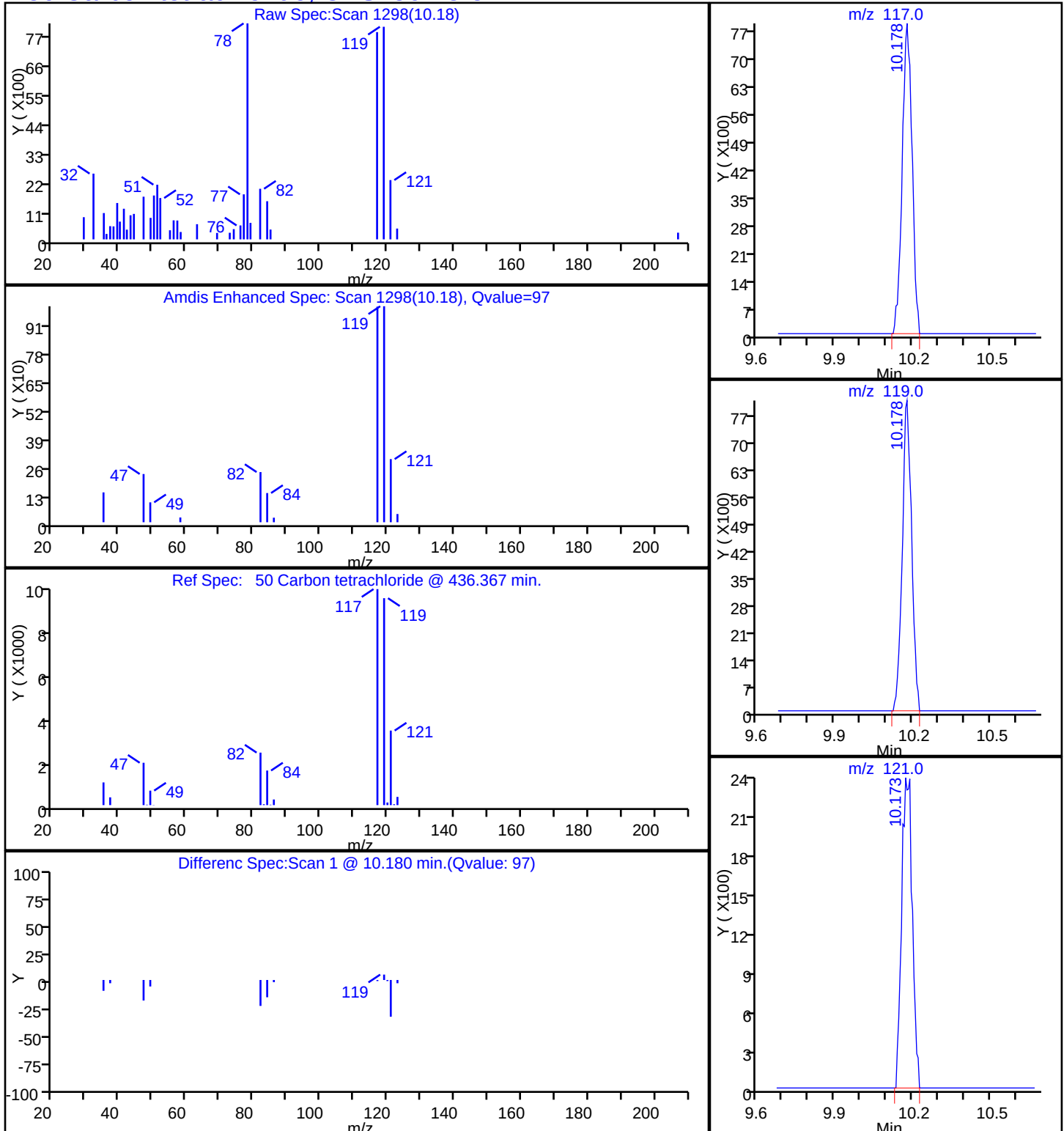
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P105.D

Injection Date: 05-Mar-2015 16:01:30

Instrument ID: ME

Lims ID: 140-2815-A-3

Lab Sample ID: 140-2815-3

Client ID: D3-OA-2015

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 9

Purge Vol: 500.000 mL

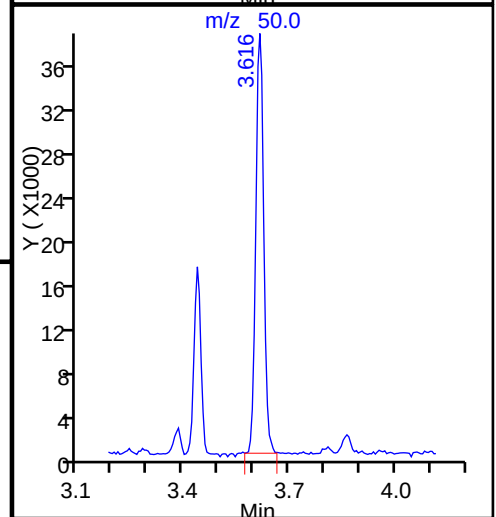
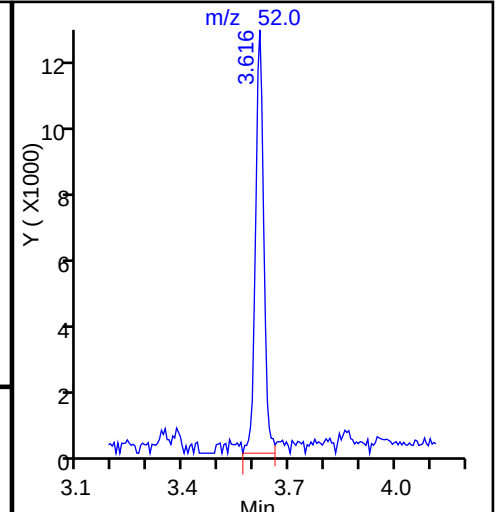
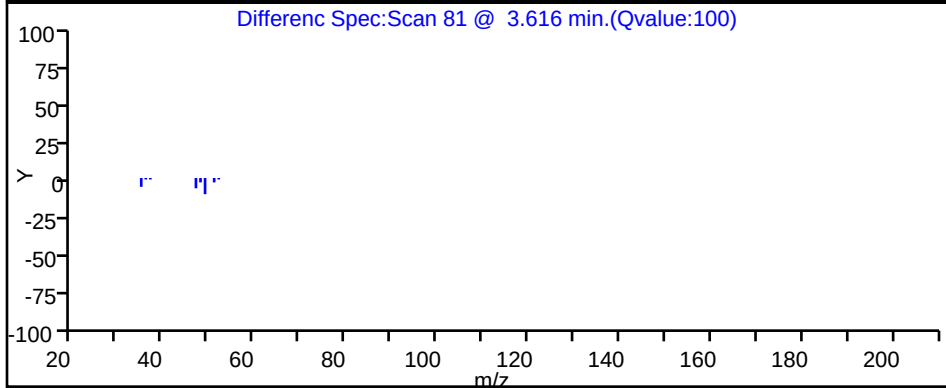
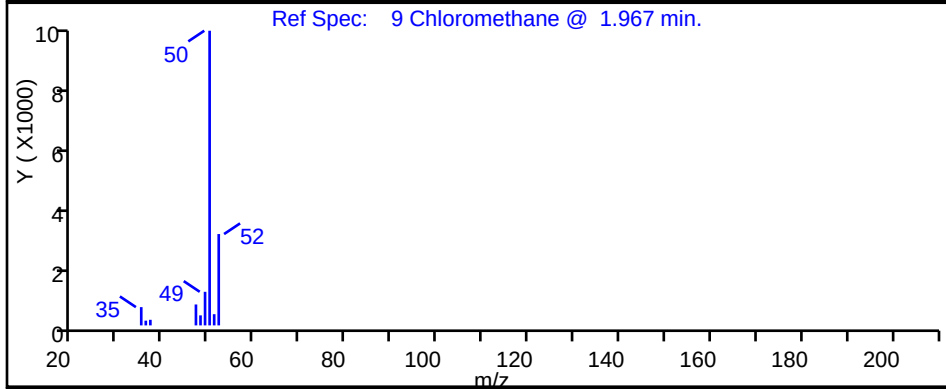
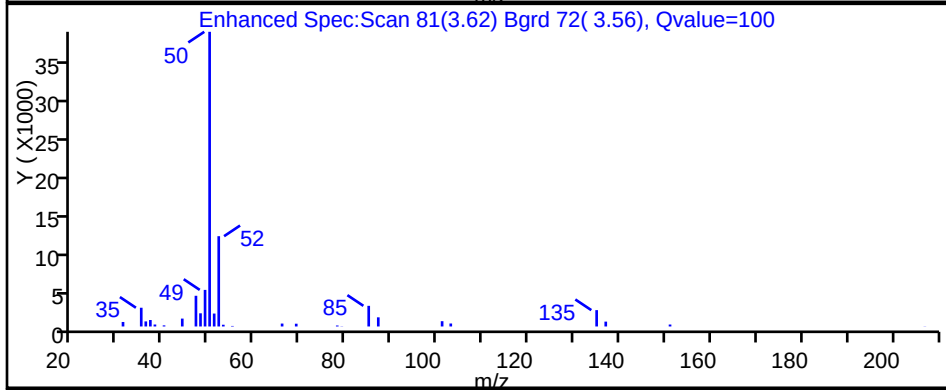
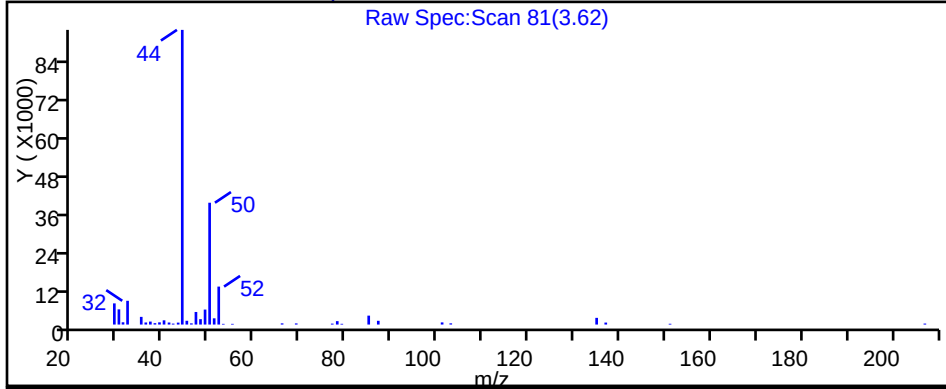
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P105.D

Injection Date: 05-Mar-2015 16:01:30

Instrument ID: ME

Lims ID: 140-2815-A-3

Lab Sample ID: 140-2815-3

Client ID: D3-OA-2015

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 9

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

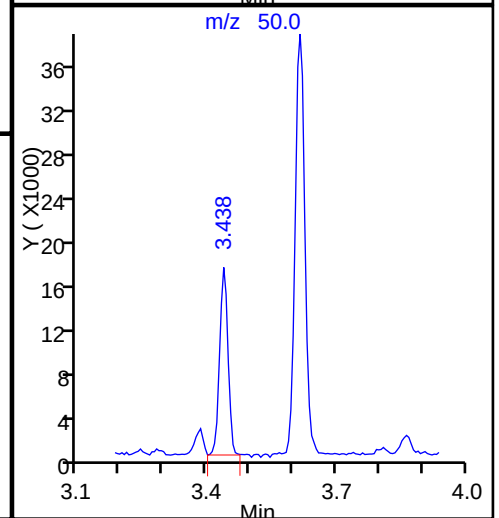
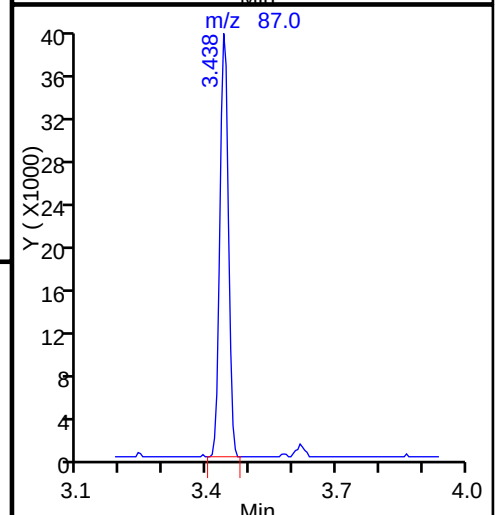
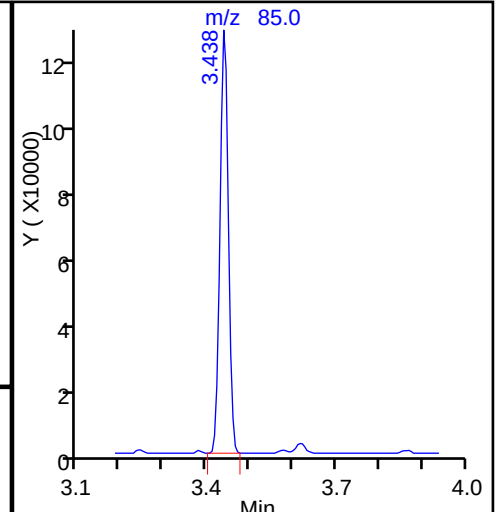
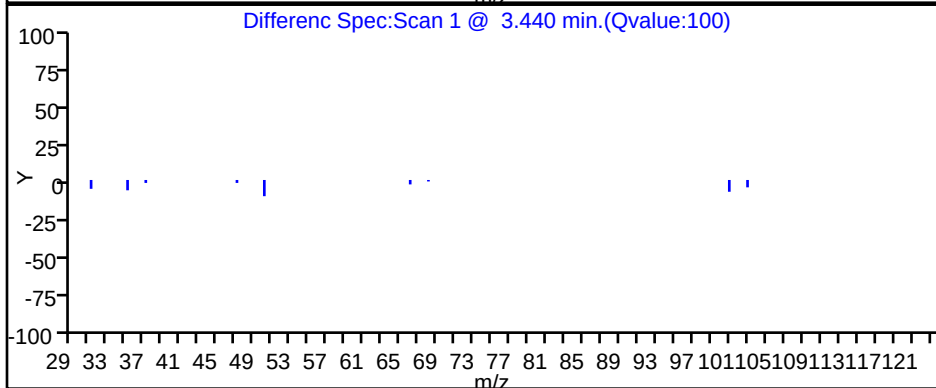
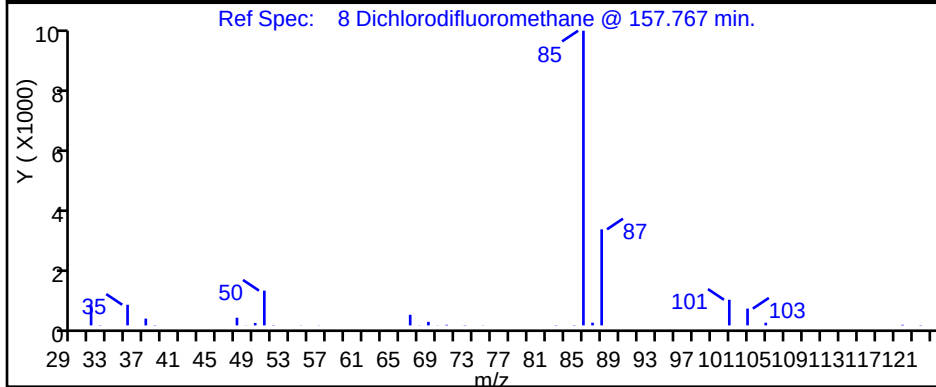
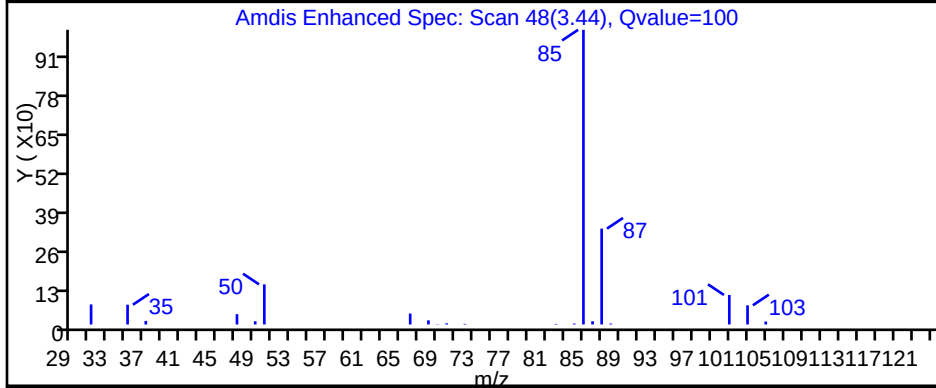
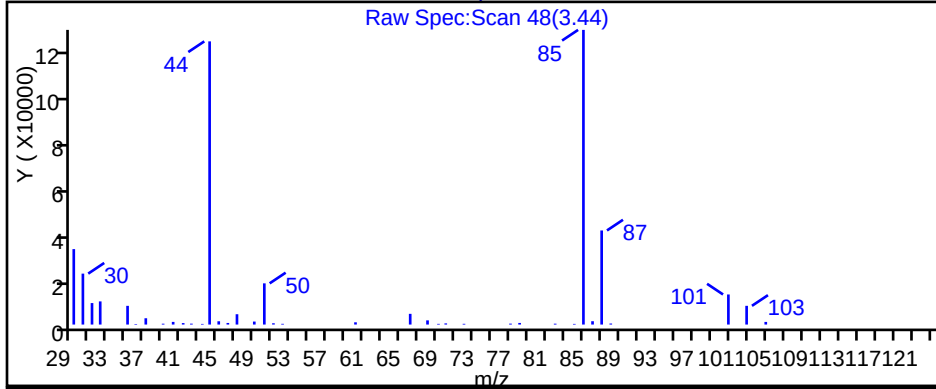
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P105.D

Injection Date: 05-Mar-2015 16:01:30

Instrument ID: ME

Lims ID: 140-2815-A-3

Lab Sample ID: 140-2815-3

Client ID: D3-OA-2015

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 9

Purge Vol: 500.000 mL

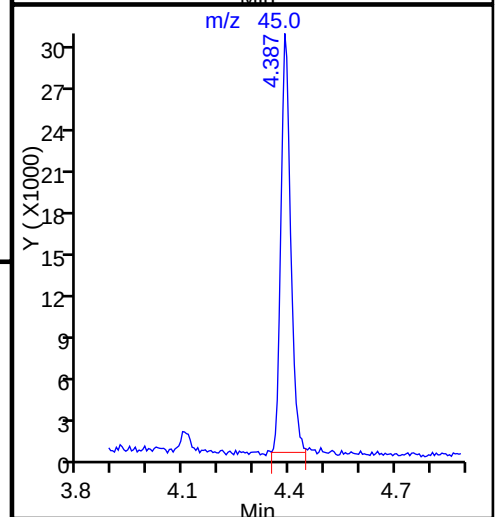
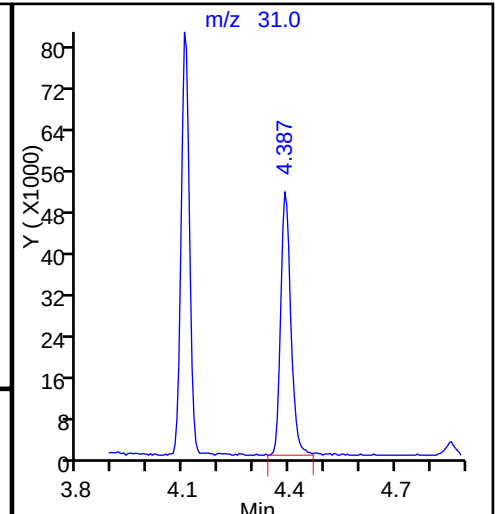
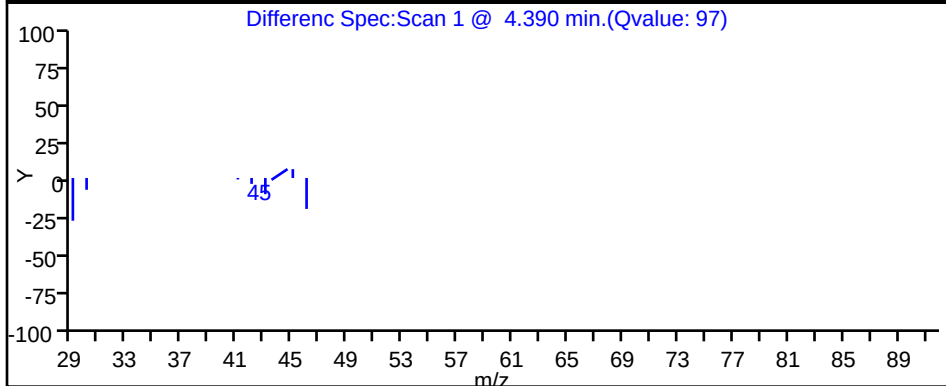
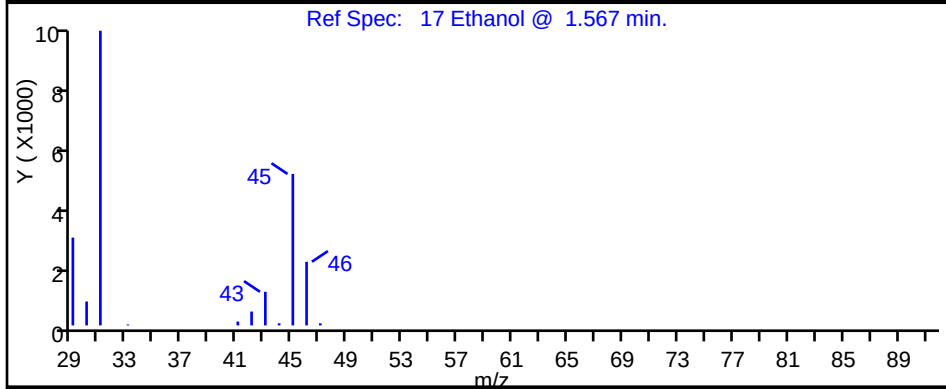
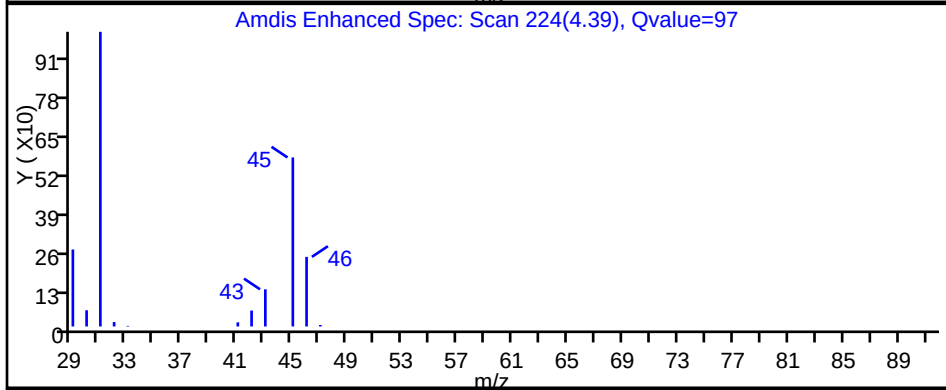
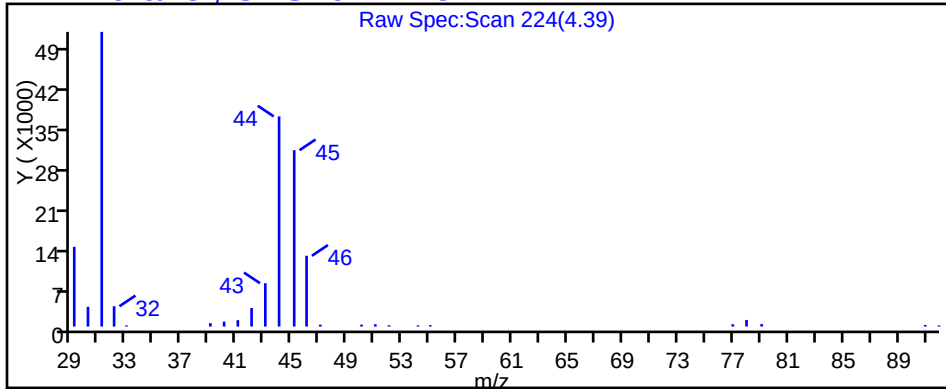
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P105.D

Injection Date: 05-Mar-2015 16:01:30

Instrument ID: ME

Lims ID: 140-2815-A-3

Lab Sample ID: 140-2815-3

Client ID: D3-OA-2015

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 9

Purge Vol: 500.000 mL

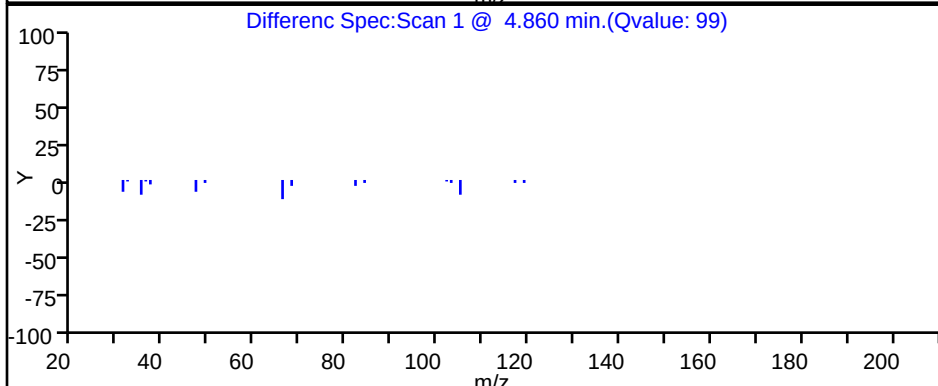
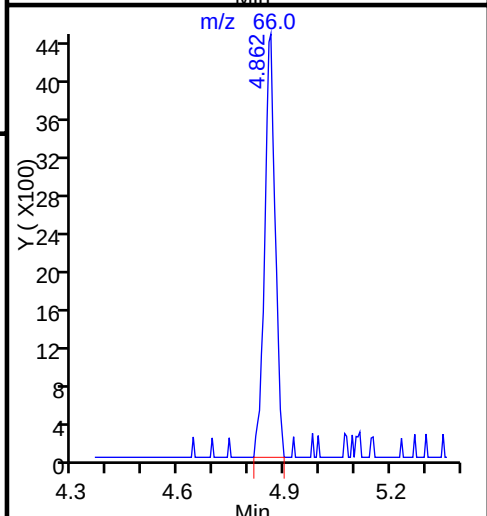
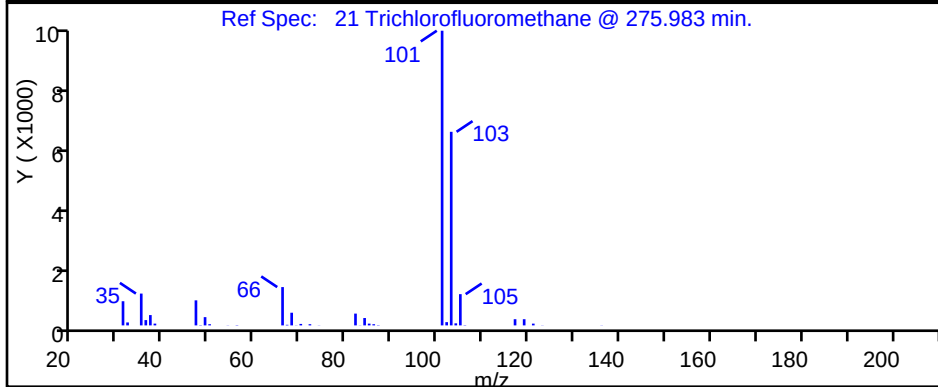
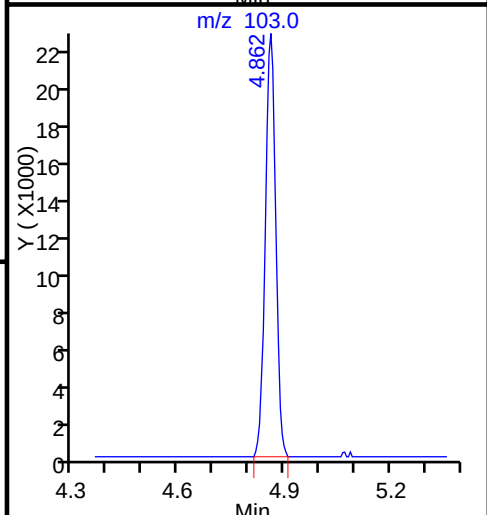
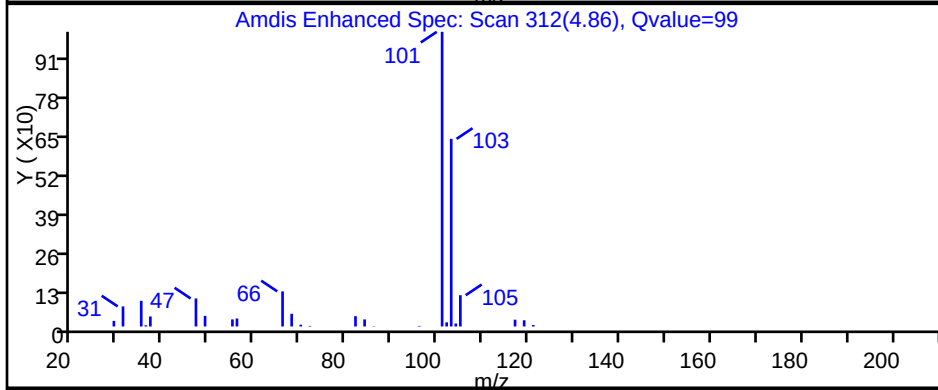
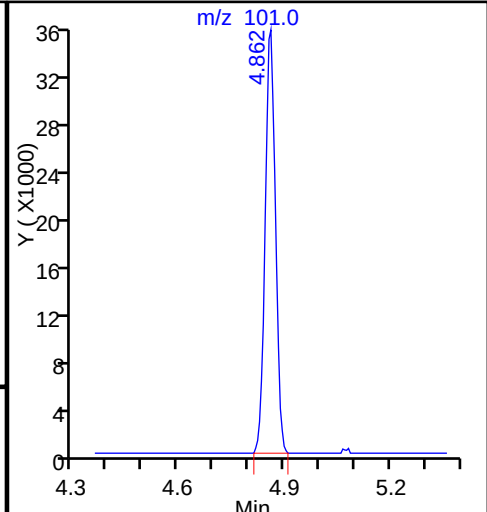
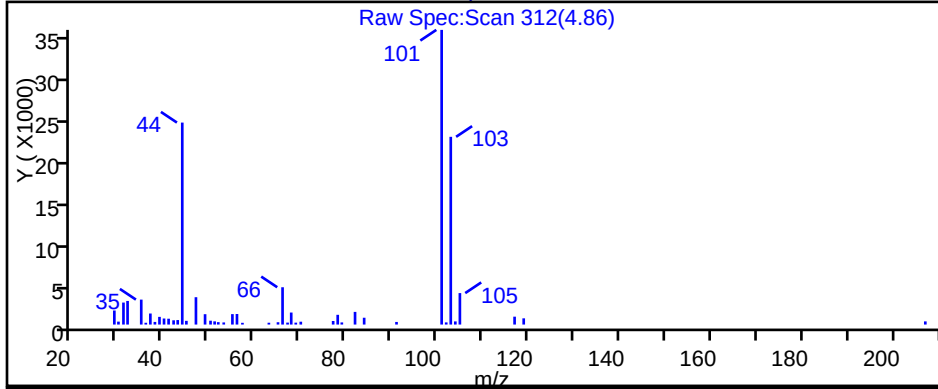
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

21 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: H23-BA-2015 Lab Sample ID: 140-2815-4

Matrix: Air Lab File ID: EC05P106.D

Analysis Method: TO 15 LL Date Collected: 02/27/2015 11:21

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 16:52

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.: 2464 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		0.080	
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	0.15		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	0.079		0.040	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	0.093		0.080	
74-87-3	Chloromethane	50.49	0.45		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: H23-BA-2015 Lab Sample ID: 140-2815-4
 Matrix: Air Lab File ID: EC05P106.D
 Analysis Method: TO 15 LL Date Collected: 02/27/2015 11:21
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 16:52
 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.: 2464 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	0.50		0.080	
64-17-5	Ethanol	46.07	6.4		0.80	
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	0.14		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.22		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: H23-BA-2015 Lab Sample ID: 140-2815-4

Matrix: Air Lab File ID: EC05P106.D

Analysis Method: TO 15 LL Date Collected: 02/27/2015 11:21

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 16:52

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.: 2464 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		0.32	
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	0.49		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	0.50		0.25	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	0.45		0.39	
74-87-3	Chloromethane	50.49	0.93		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: H23-BA-2015 Lab Sample ID: 140-2815-4
 Matrix: Air Lab File ID: EC05P106.D
 Analysis Method: TO 15 LL Date Collected: 02/27/2015 11:21
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 16:52
 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.: 2464 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	2.5		0.40	
64-17-5	Ethanol	46.07	12		1.5	
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	0.75		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.2		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P106.D
 Lims ID: 140-2815-A-4 Lab Sample ID: 140-2815-4
 Client ID: H23-BA-2015
 Sample Type: Client
 Inject. Date: 05-Mar-2015 16:52:30 ALS Bottle#: 6 Worklist Smp#: 10
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2815-a-4
 Misc. Info.: E030515,TO155,,140-0001425-010
 Operator ID: 7126 Instrument ID: ME
 Method: \\KNXCHROM\ChromData\ME\20150304-1425.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 10-Mar-2015 07:55:09 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK004

First Level Reviewer: barlozhetskayaa

Date: 05-Mar-2015 17:46:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.491	8.491	0.000	97	353005	4.00	
* 2 1,4-Difluorobenzene	114	10.728	10.729	-0.001	96	1630395	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.560	15.555	0.005	91	1499209	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.216	17.210	0.006	88	1146111	4.06	
8 Dichlorodifluoromethane	85	3.438	3.438	0.000	100	178691	0.4956	
9 Chloromethane	52	3.616	3.616	0.000	100	16610	0.4492	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.616	3.621	-0.005	37	3509	0.0154	
17 Ethanol	31	4.387	4.393	-0.006	98	266844	6.35	
21 Trichlorofluoromethane	101	4.862	4.862	0.000	100	70374	0.2187	
29 2-Methyl-2-propanol	59	5.670	5.654	0.016	85	3972	0.0192	
30 1,1,2-Trichloro-1,2,2-trif	101	5.735	5.735	0.000	96	14877	0.0653	
31 Methylene Chloride	84	5.918	5.919	-0.001	94	14409	0.1492	
39 2-Butanone (MEK)	72	7.720	7.709	0.011	93	7340	0.1590	
40 Hexane	56	7.730	7.730	0.000	60	7096	0.0705	
43 Chloroform	83	8.496	8.502	-0.006	29	24212	0.0928	
45 1,1,1-Trichloroethane	97	9.537	9.537	0.000	97	14938	0.0491	
46 1,2-Dichloroethane	62	9.666	9.655	0.011	94	5955	0.0292	
48 Benzene	78	10.157	10.157	0.000	96	46923	0.1529	
50 Carbon tetrachloride	117	10.178	10.179	-0.001	97	25535	0.0791	
53 Isooctane	57	10.944	10.944	0.000	93	10567	0.0173	
56 Trichloroethene	130	11.467	11.462	0.005	95	24128	0.1402	
65 Toluene	91	13.559	13.560	-0.001	93	40179	0.1069	
73 Tetrachloroethene	129	14.724	14.719	0.005	89	2811	0.0168	
78 m-Xylene & p-Xylene	91	16.056	16.056	0.000	97	18277	0.0486	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P106.D

Injection Date: 05-Mar-2015 16:52:30

Instrument ID: ME

Operator ID: 7126

Lims ID: 140-2815-A-4

Lab Sample ID: 140-2815-4

Worklist Smp#: 10

Client ID: H23-BA-2015

Purge Vol: 500.000 mL

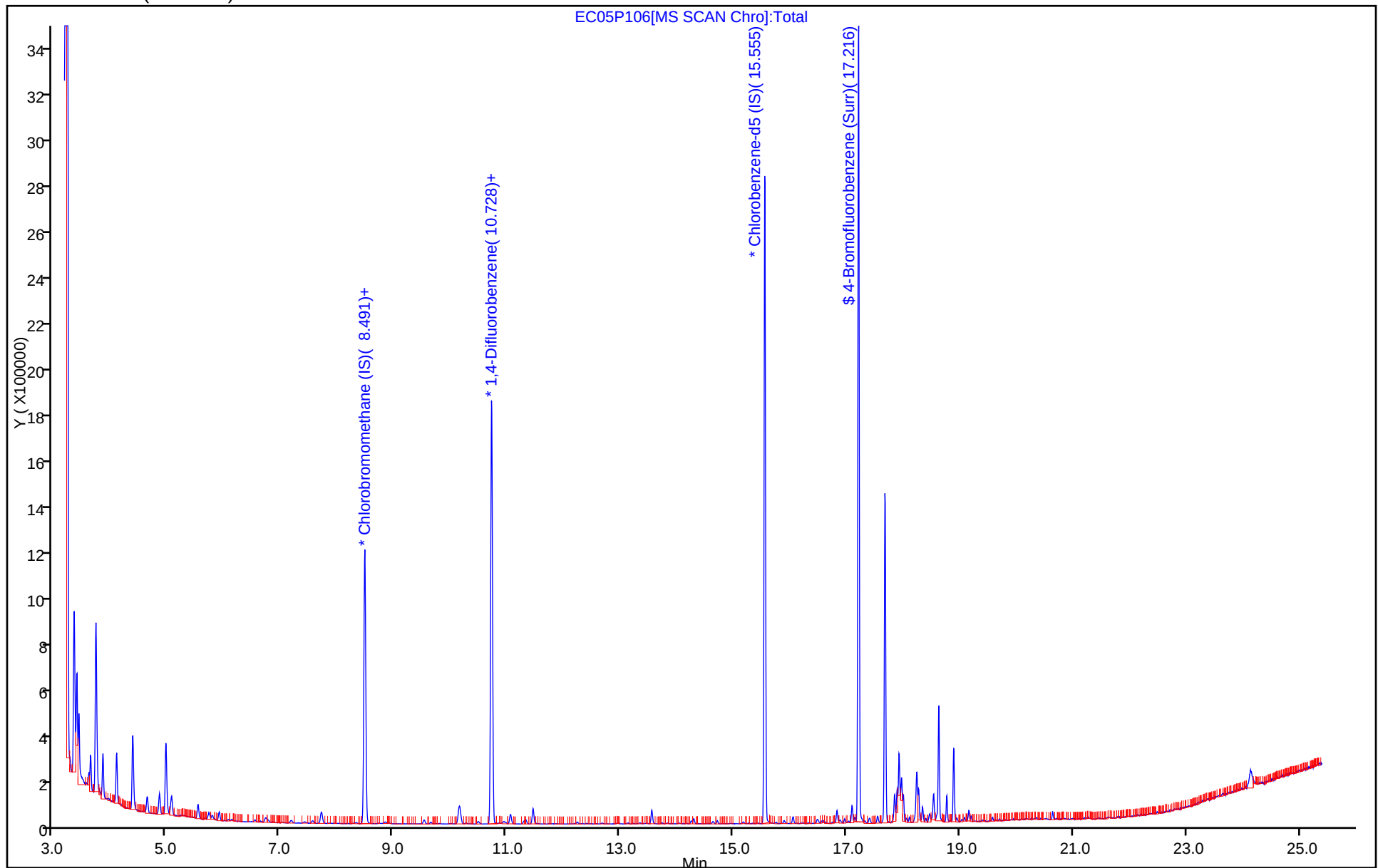
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P106.D

Injection Date: 05-Mar-2015 16:52:30

Instrument ID: ME

Lims ID: 140-2815-A-4

Lab Sample ID: 140-2815-4

Client ID: H23-BA-2015

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

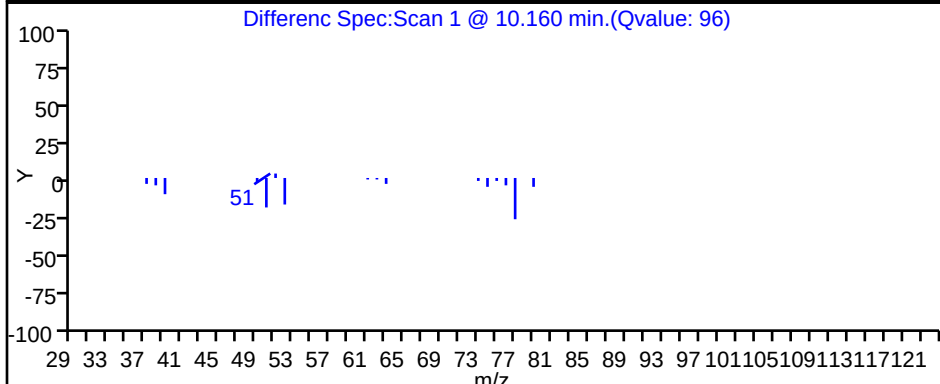
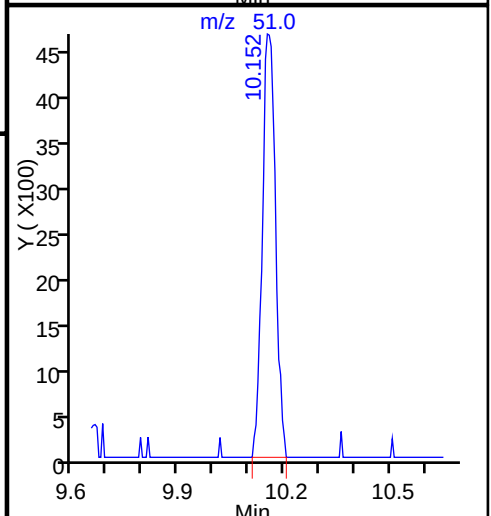
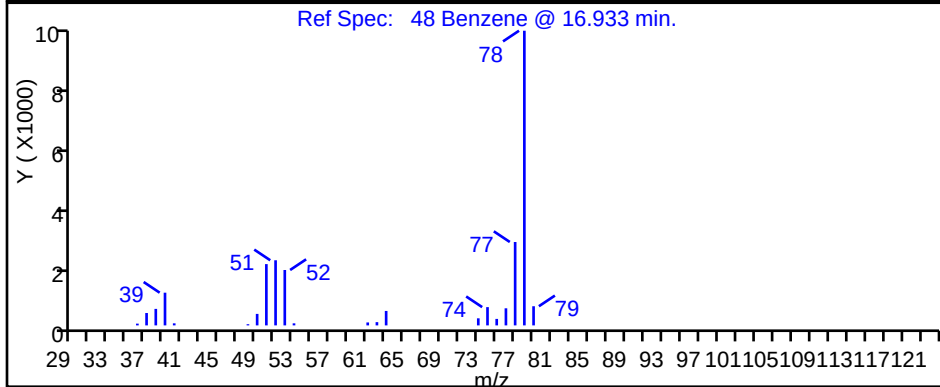
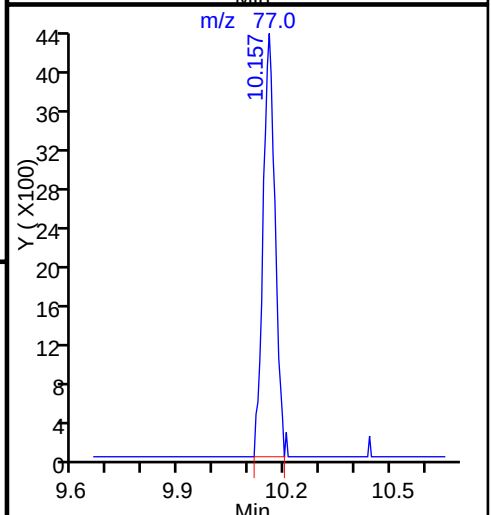
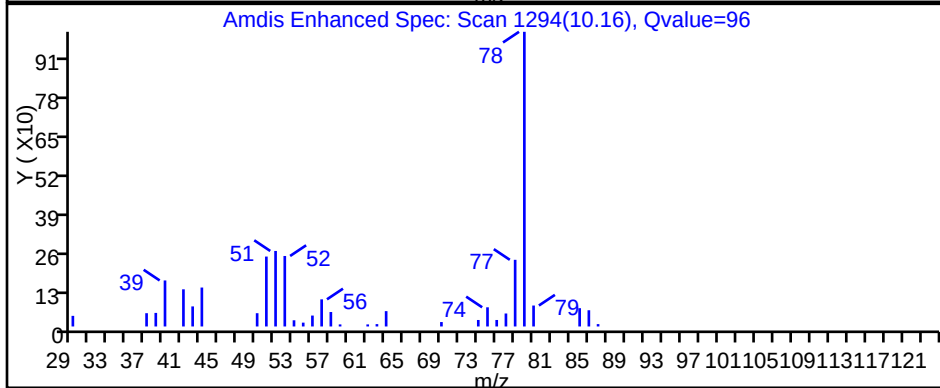
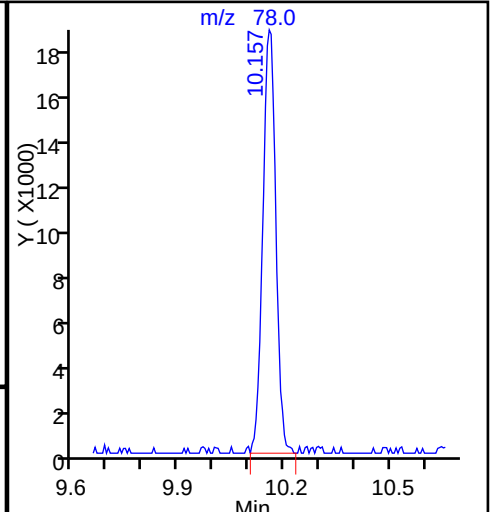
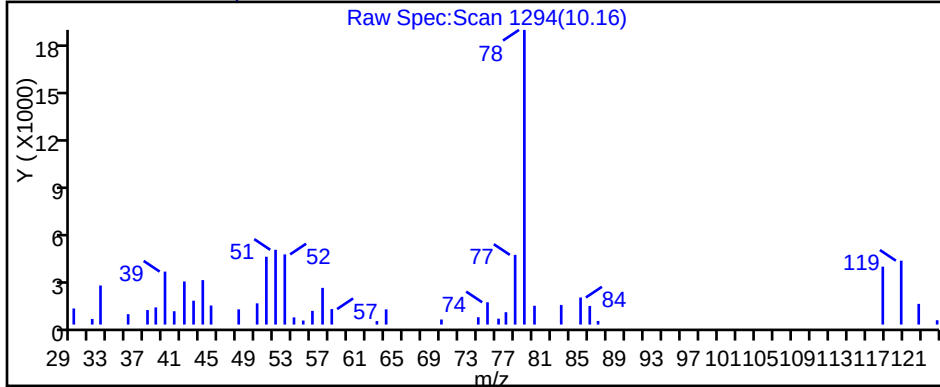
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P106.D

Injection Date: 05-Mar-2015 16:52:30

Instrument ID: ME

Lims ID: 140-2815-A-4

Lab Sample ID: 140-2815-4

Client ID: H23-BA-2015

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

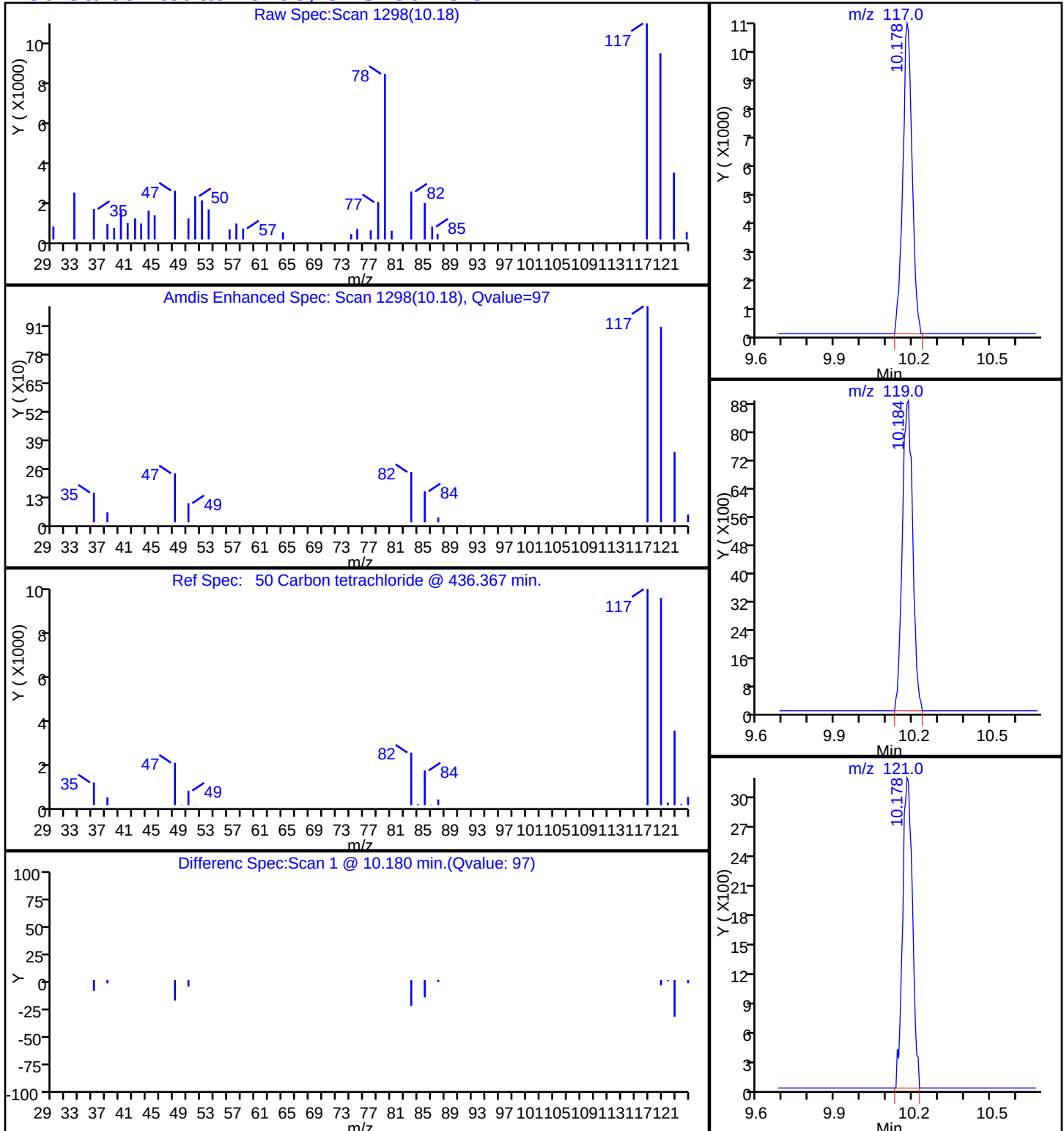
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P106.D

Injection Date: 05-Mar-2015 16:52:30

Instrument ID: ME

Lims ID: 140-2815-A-4

Lab Sample ID: 140-2815-4

Client ID: H23-BA-2015

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

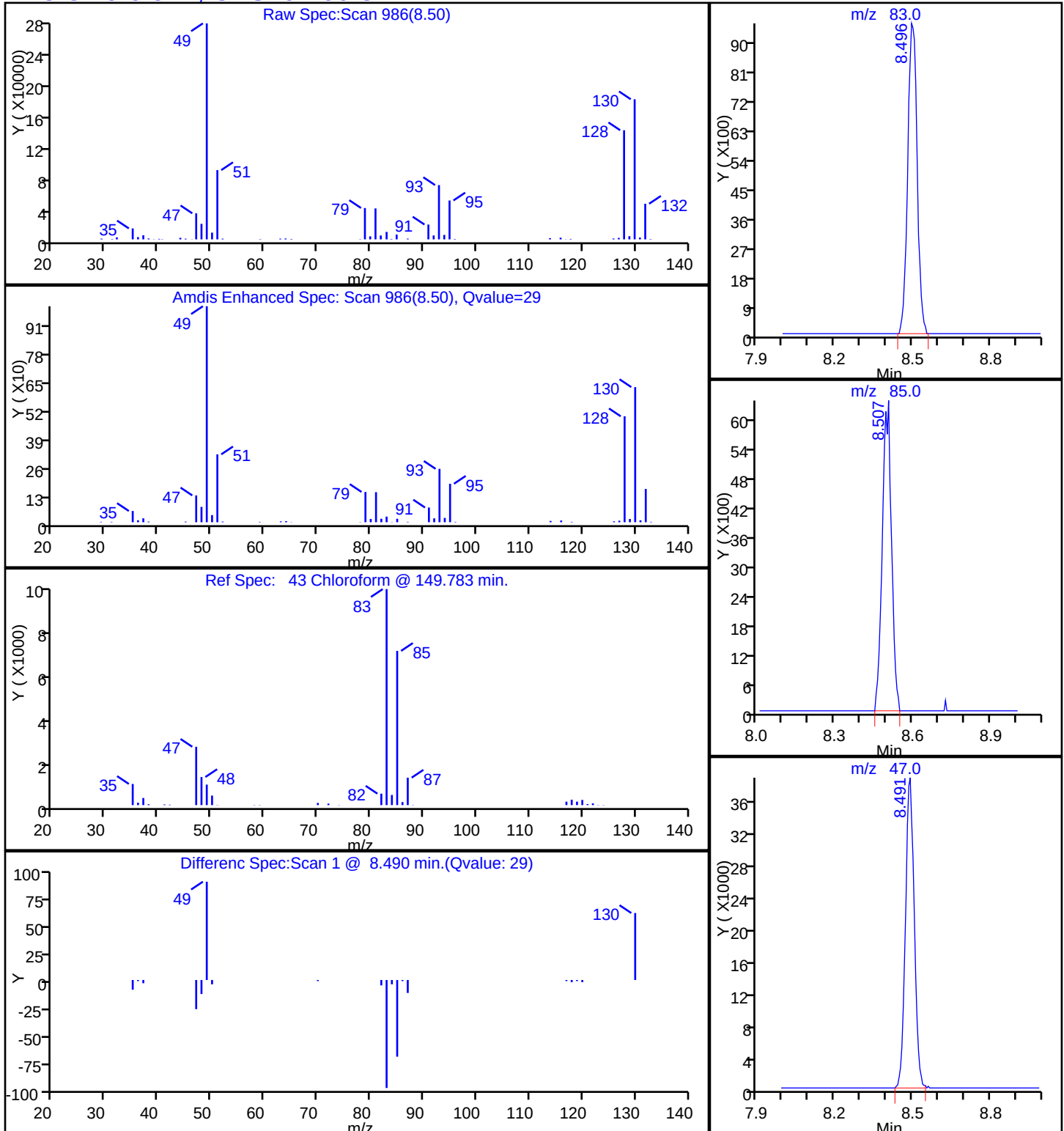
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

43 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P106.D

Injection Date: 05-Mar-2015 16:52:30

Instrument ID: ME

Lims ID: 140-2815-A-4

Lab Sample ID: 140-2815-4

Client ID: H23-BA-2015

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

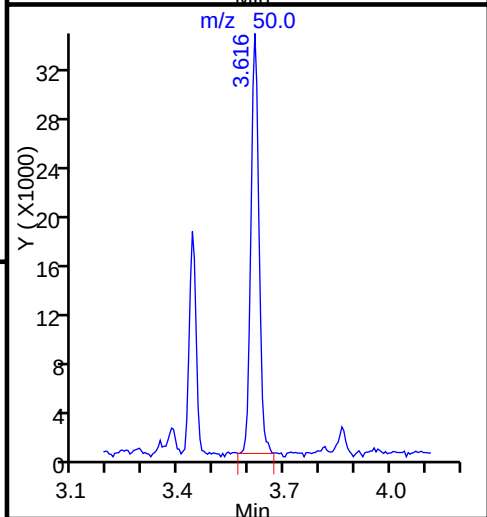
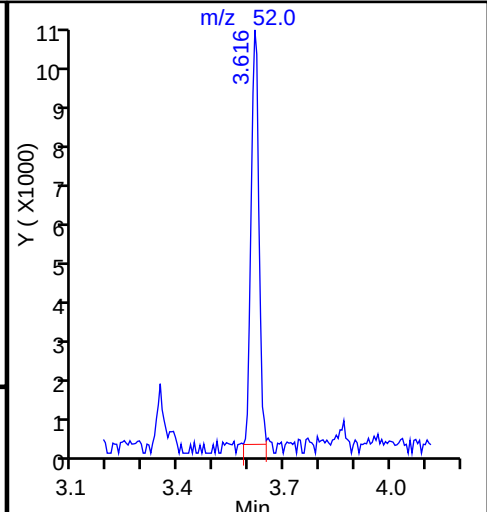
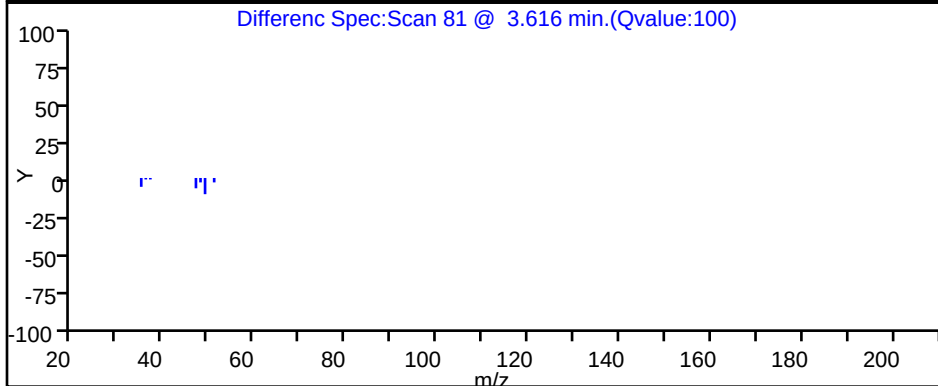
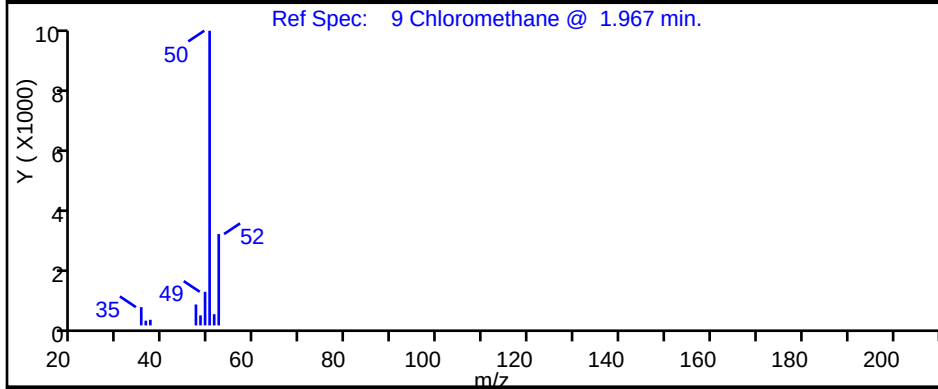
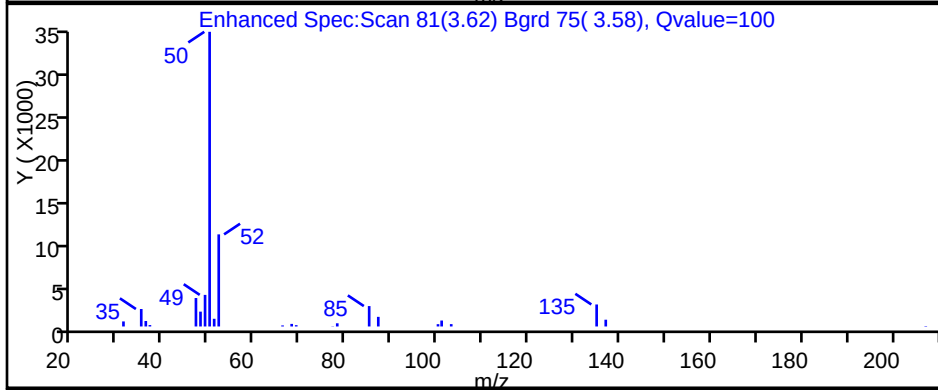
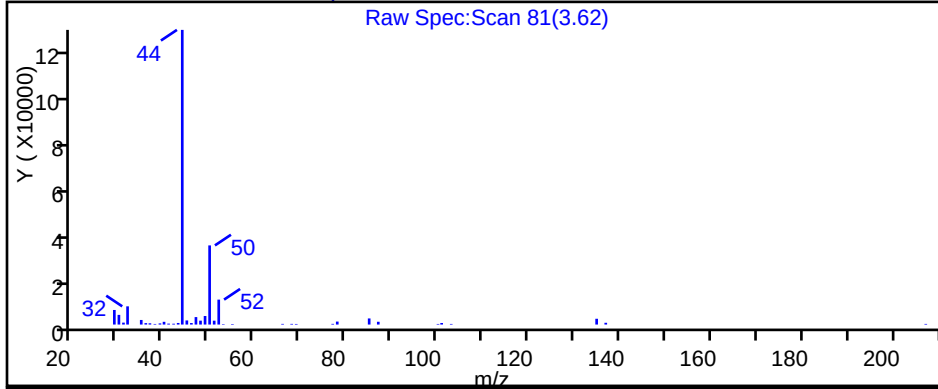
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P106.D

Injection Date: 05-Mar-2015 16:52:30

Instrument ID: ME

Lims ID: 140-2815-A-4

Lab Sample ID: 140-2815-4

Client ID: H23-BA-2015

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

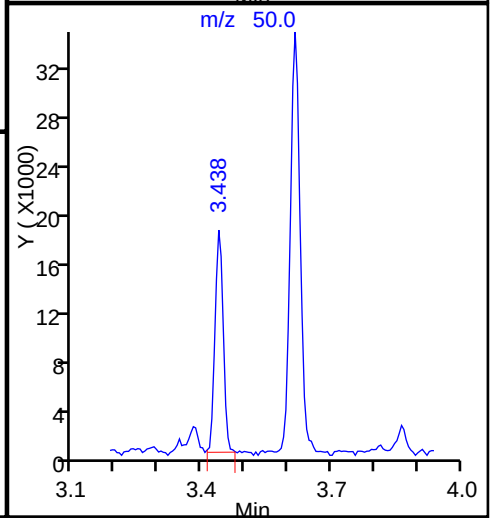
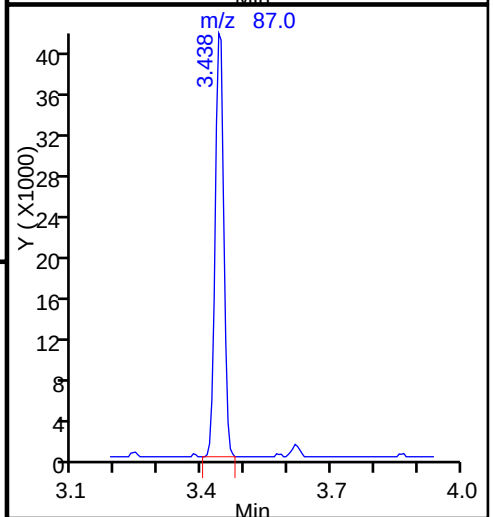
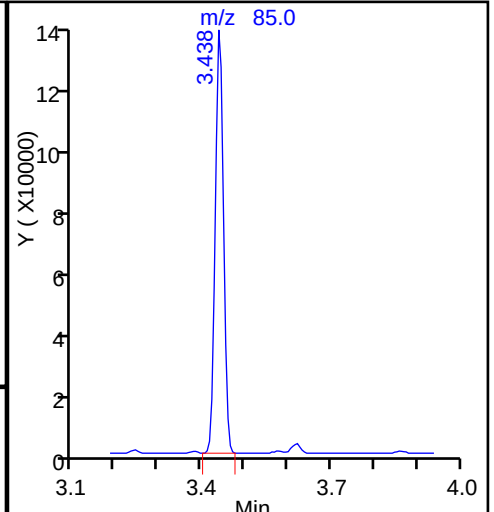
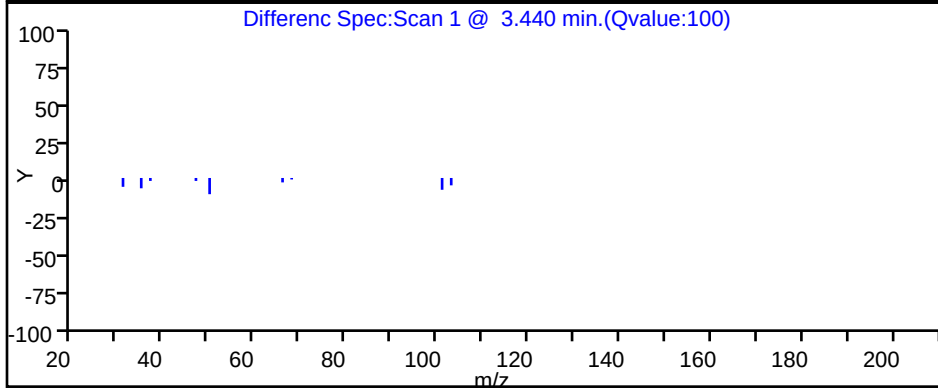
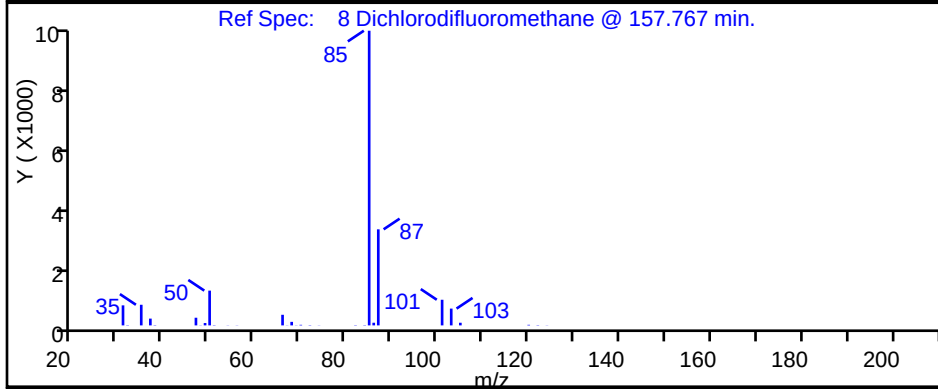
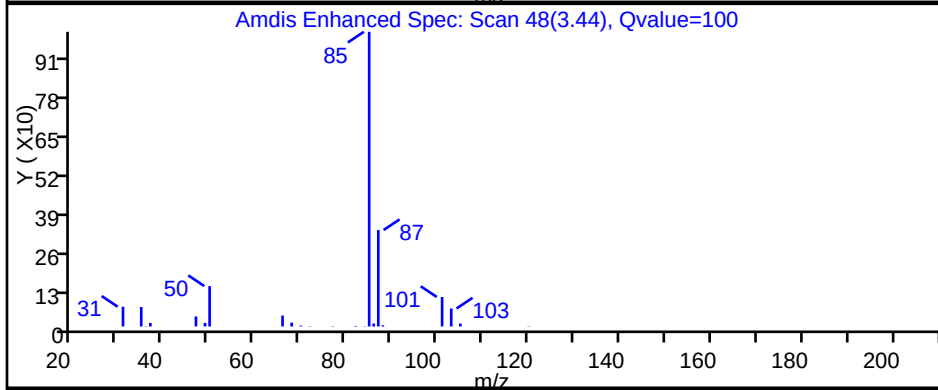
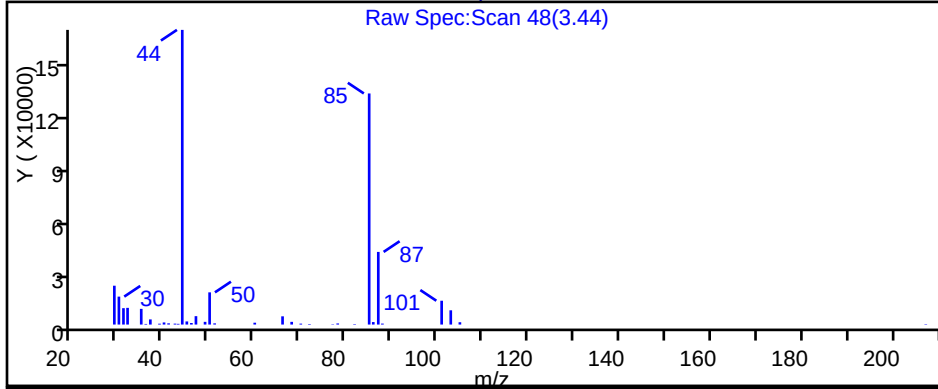
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P106.D

Injection Date: 05-Mar-2015 16:52:30

Instrument ID: ME

Lims ID: 140-2815-A-4

Lab Sample ID: 140-2815-4

Client ID: H23-BA-2015

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

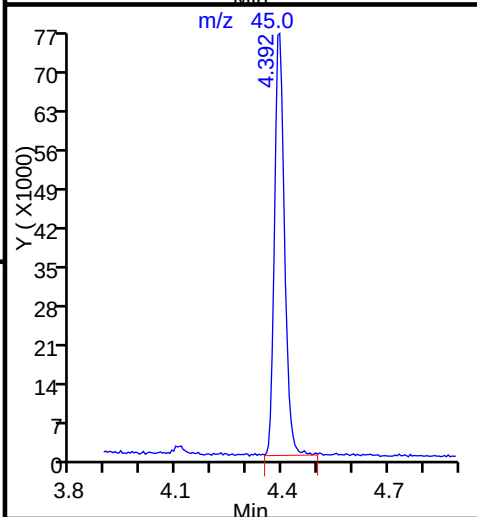
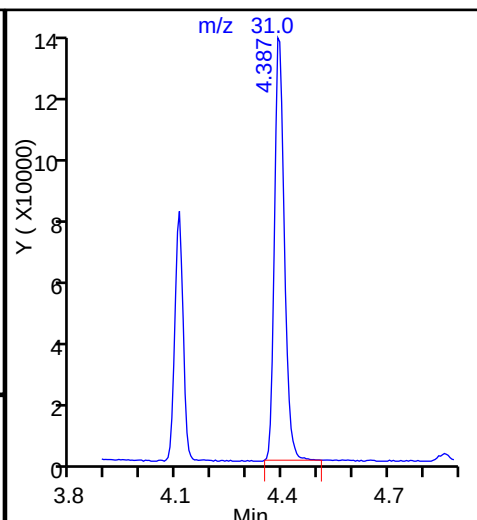
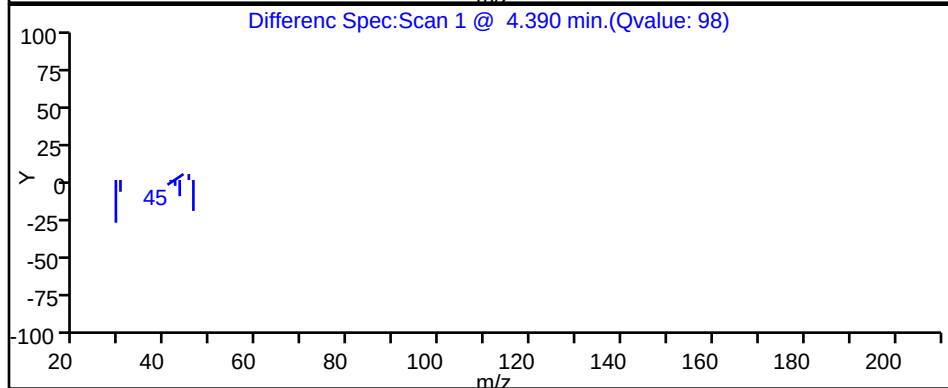
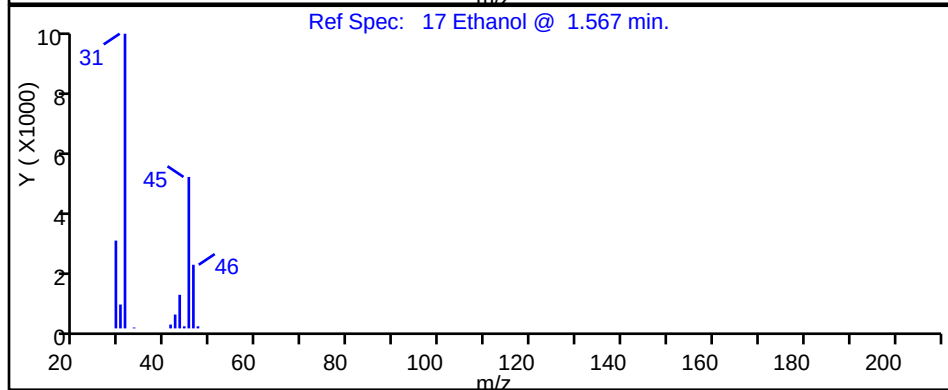
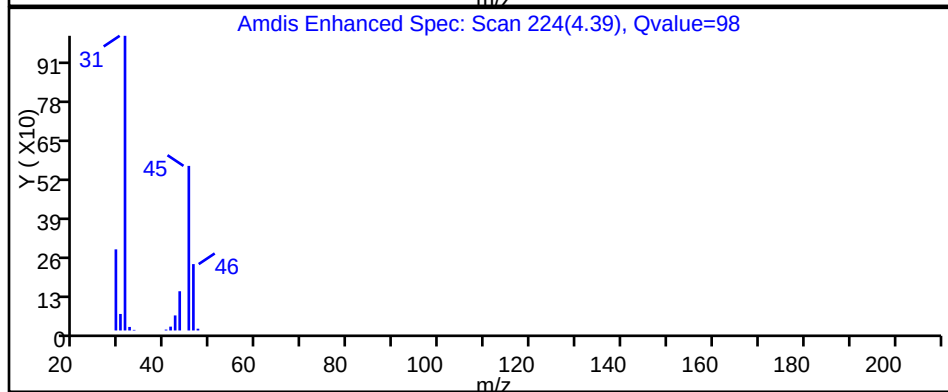
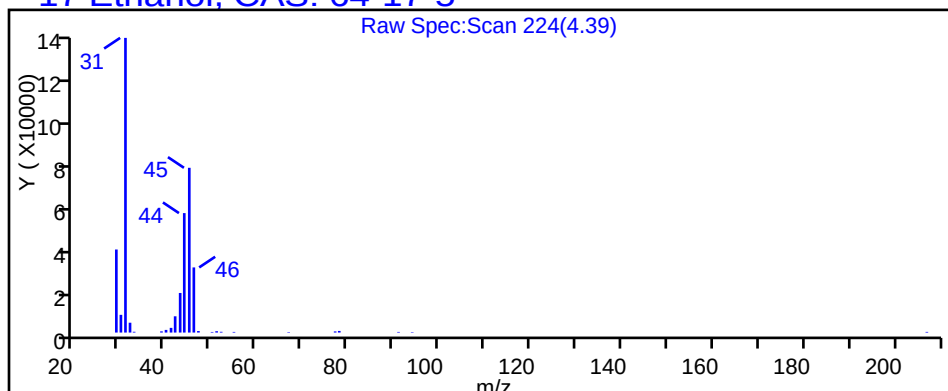
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P106.D

Injection Date: 05-Mar-2015 16:52:30

Instrument ID: ME

Lims ID: 140-2815-A-4

Lab Sample ID: 140-2815-4

Client ID: H23-BA-2015

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

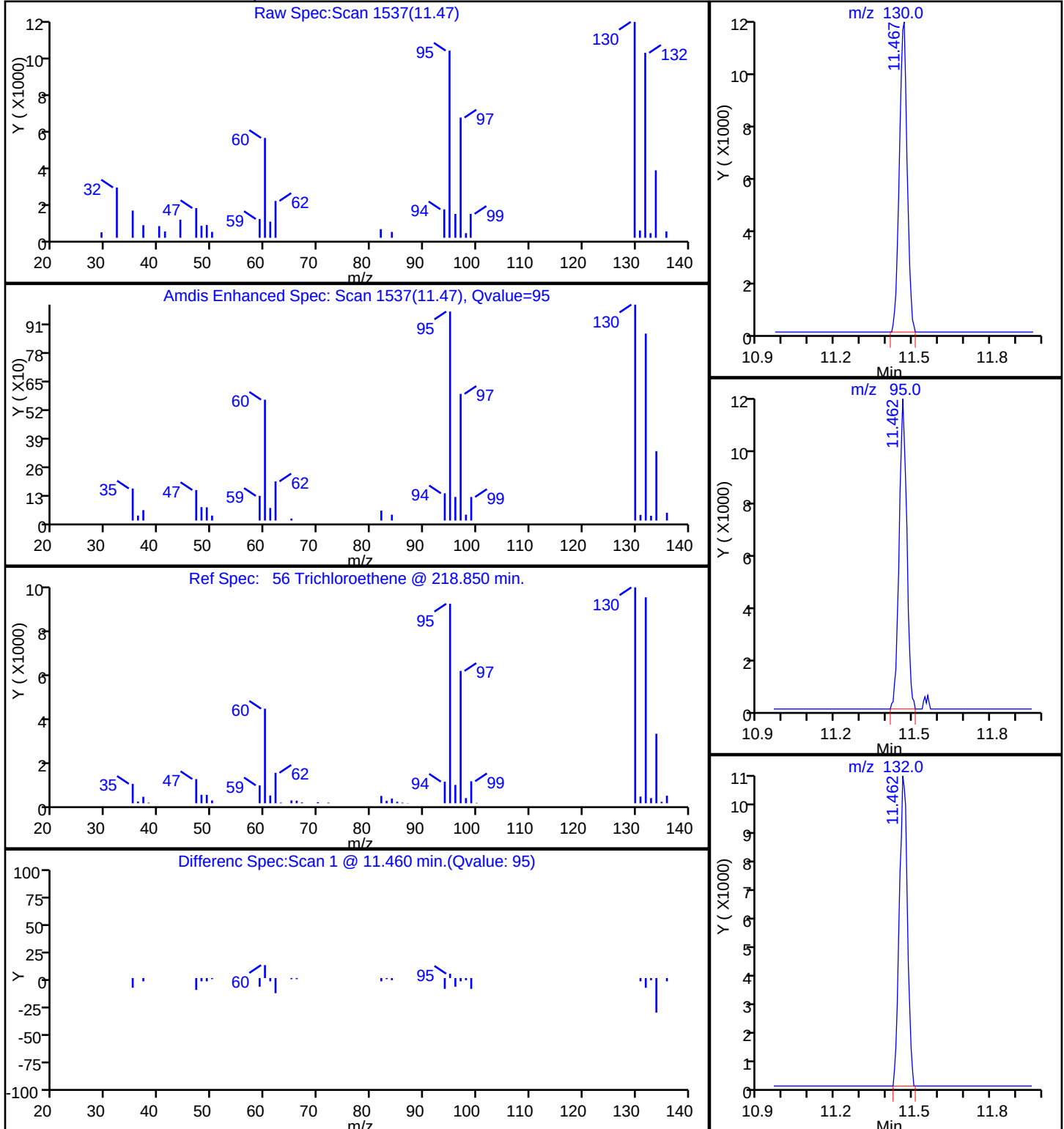
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

56 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P106.D

Injection Date: 05-Mar-2015 16:52:30

Instrument ID: ME

Lims ID: 140-2815-A-4

Lab Sample ID: 140-2815-4

Client ID: H23-BA-2015

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

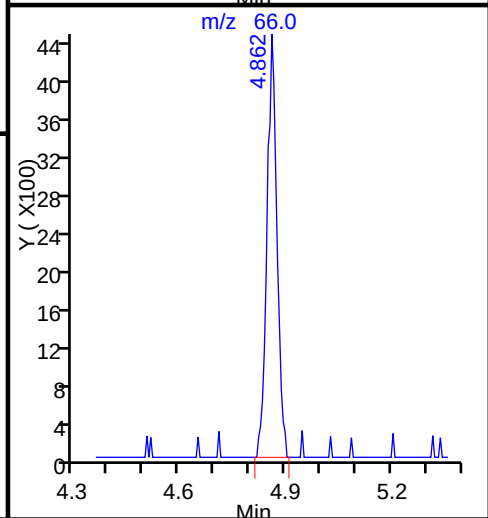
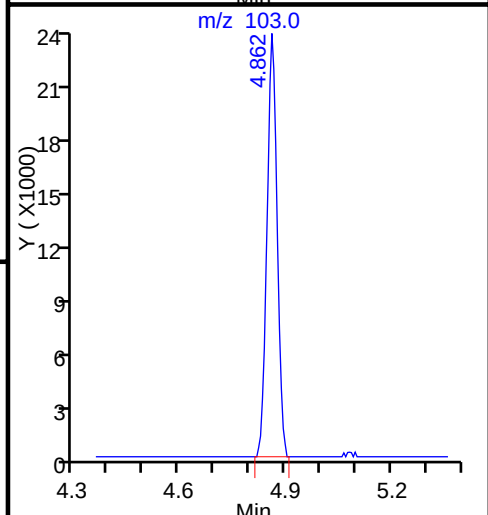
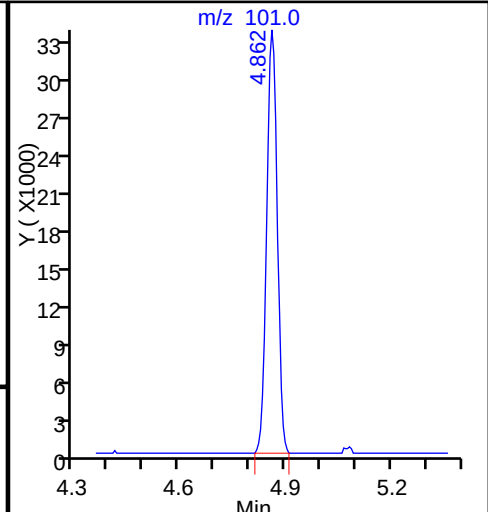
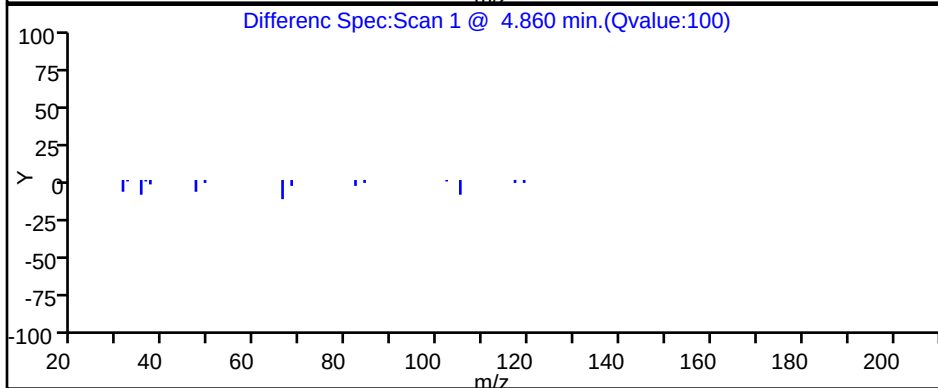
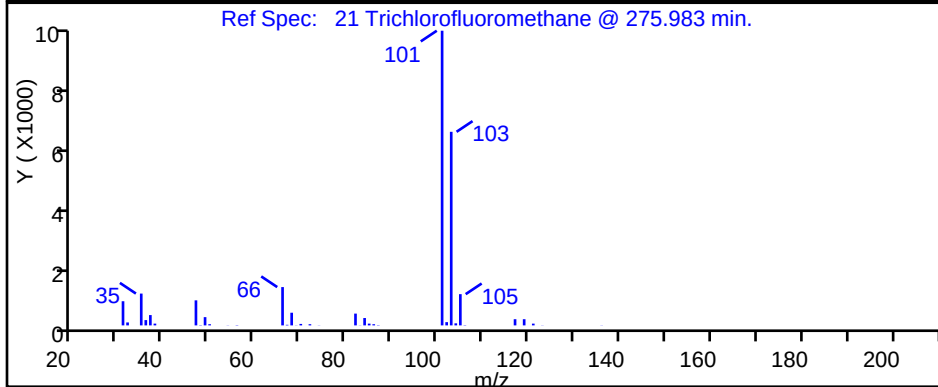
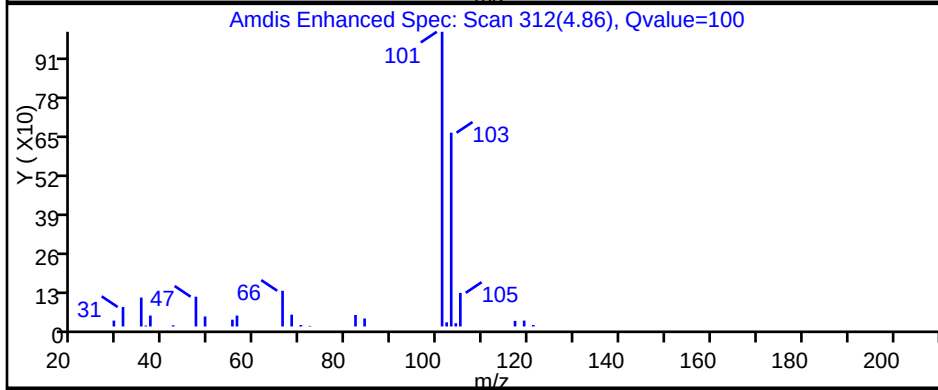
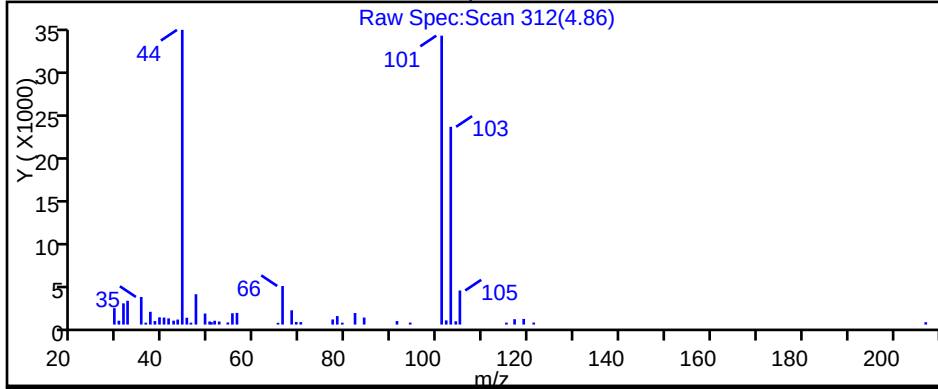
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

21 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: H23-SS-2015 Lab Sample ID: 140-2815-5

Matrix: Air Lab File ID: EC05P107.D

Analysis Method: TO 15 LL Date Collected: 02/27/2015 11:22

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 17:41

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.: 2464 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		0.080	
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	0.14		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	0.48		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		0.040	
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		0.080	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: H23-SS-2015 Lab Sample ID: 140-2815-5
 Matrix: Air Lab File ID: EC05P107.D
 Analysis Method: TO 15 LL Date Collected: 02/27/2015 11:22
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 17:41
 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.: 2464 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	0.45		0.080	
64-17-5	Ethanol	46.07	2.2		0.80	
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	0.094		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	0.12		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		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.19		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: H23-SS-2015 Lab Sample ID: 140-2815-5

Matrix: Air Lab File ID: EC05P107.D

Analysis Method: TO 15 LL Date Collected: 02/27/2015 11:22

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 17:41

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.: 2464 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		0.32	
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	0.82		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	1.4		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		0.25	
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		0.32	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: H23-SS-2015 Lab Sample ID: 140-2815-5
 Matrix: Air Lab File ID: EC05P107.D
 Analysis Method: TO 15 LL Date Collected: 02/27/2015 11:22
 Sample wt/vol: 500(mL) Date Analyzed: 03/05/2015 17:41
 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.: 2464 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	2.2		0.40	
64-17-5	Ethanol	46.07	4.1		1.5	
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	0.41		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	0.46		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		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.1		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P107.D
 Lims ID: 140-2815-A-5 Lab Sample ID: 140-2815-5
 Client ID: H23-SS-2015
 Sample Type: Client
 Inject. Date: 05-Mar-2015 17:41:30 ALS Bottle#: 7 Worklist Smp#: 11
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2815-a-5
 Misc. Info.: E030515,TO155,,140-0001425-011
 Operator ID: 7126 Instrument ID: ME
 Method: \\KNXCHROM\ChromData\ME\20150304-1425.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 10-Mar-2015 07:55:20 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK004

First Level Reviewer: barlozhetskayaa

Date: 05-Mar-2015 18:28:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.491	8.491	0.000	97	348344	4.00	
* 2 1,4-Difluorobenzene	114	10.729	10.729	0.000	96	1590863	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.555	15.555	0.000	91	1503102	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.210	17.210	0.000	85	1130221	3.99	
8 Dichlorodifluoromethane	85	3.438	3.438	0.000	99	160589	0.4513	
9 Chloromethane	52	3.616	3.616	0.000	91	2405	0.0659	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.621	0.000	73	3454	0.0153	
17 Ethanol	31	4.387	4.393	-0.006	97	89587	2.16	
21 Trichlorofluoromethane	101	4.856	4.862	-0.006	96	60743	0.1913	
29 2-Methyl-2-propanol	59	5.665	5.654	0.011	70	8647	0.0423	
30 1,1,2-Trichloro-1,2,2-trif	101	5.741	5.735	0.006	88	14196	0.0632	
31 Methylene Chloride	84	5.913	5.919	-0.006	89	16973	0.1780	
39 2-Butanone (MEK)	72	7.714	7.709	0.005	96	21957	0.4820	
40 Hexane	56	7.725	7.730	-0.005	50	7550	0.0760	
45 1,1,1-Trichloroethane	97	9.537	9.537	0.000	68	12797	0.0426	
48 Benzene	78	10.157	10.157	0.000	77	9689	0.0324	
50 Carbon tetrachloride	117	10.179	10.179	0.000	94	11565	0.0367	
62 4-Methyl-2-pentanone (MIBK	43	12.675	12.664	0.011	94	38855	0.1519	
65 Toluene	91	13.560	13.560	0.000	93	45660	0.1212	
78 m-Xylene & p-Xylene	91	16.056	16.056	0.000	96	35509	0.0943	
82 o-Xylene	91	16.585	16.585	0.000	83	11985	0.0305	
97 1,4-Dichlorobenzene	146	18.769	18.769	0.000	82	40077	0.1369	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P107.D

Injection Date: 05-Mar-2015 17:41:30

Instrument ID: ME

Operator ID: 7126

Lims ID: 140-2815-A-5

Lab Sample ID: 140-2815-5

Worklist Smp#: 11

Client ID: H23-SS-2015

Purge Vol: 500.000 mL

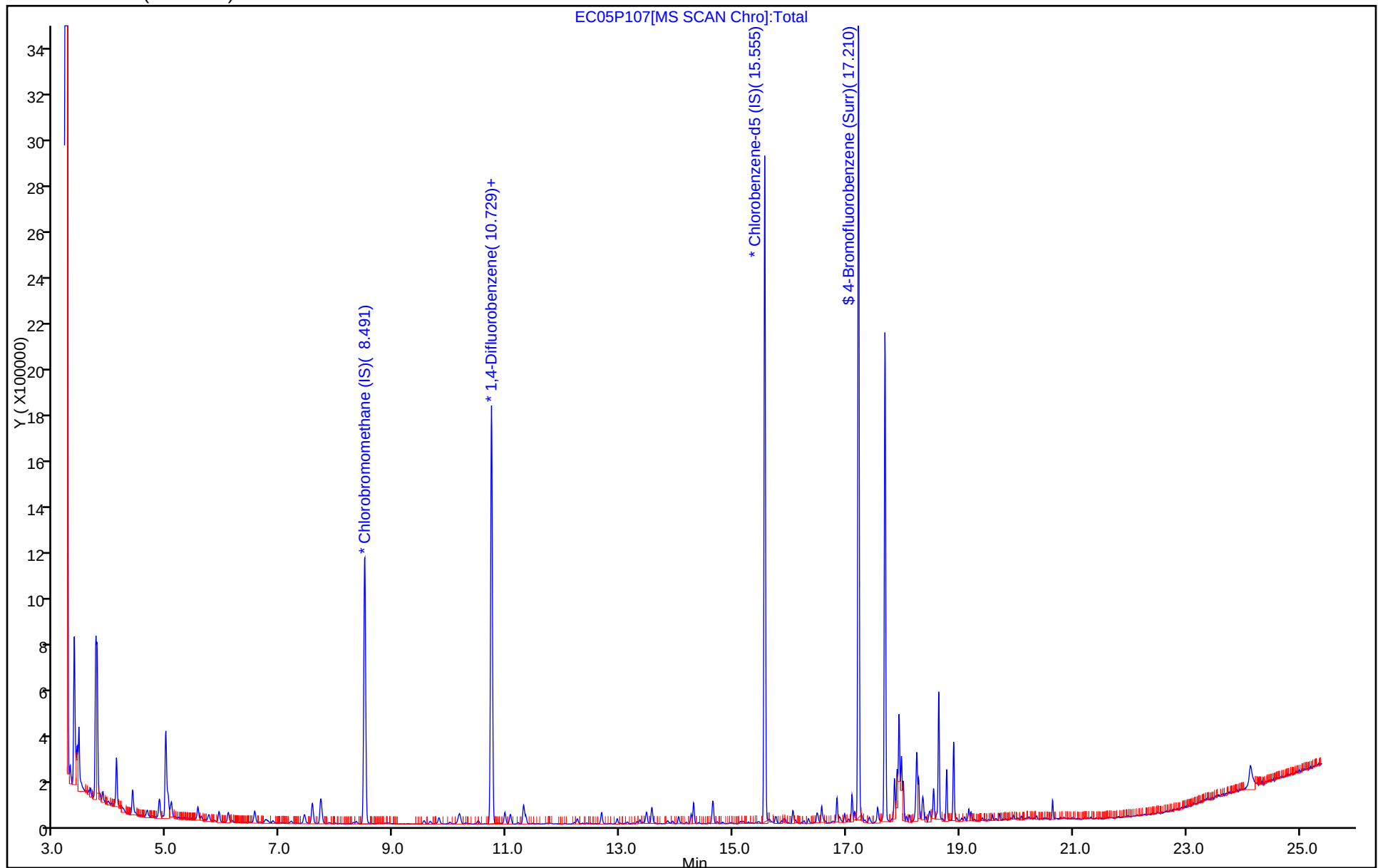
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P107.D

Injection Date: 05-Mar-2015 17:41:30

Instrument ID: ME

Lims ID: 140-2815-A-5

Lab Sample ID: 140-2815-5

Client ID: H23-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

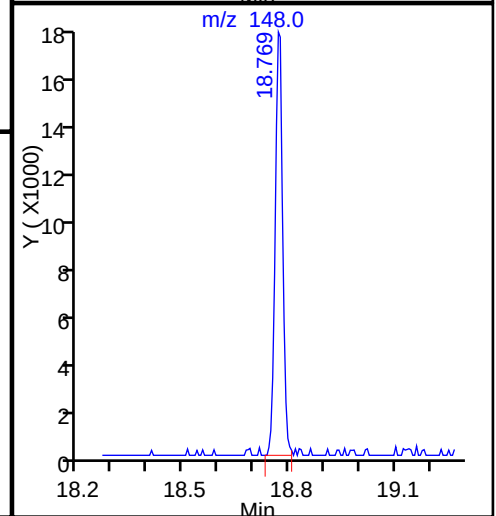
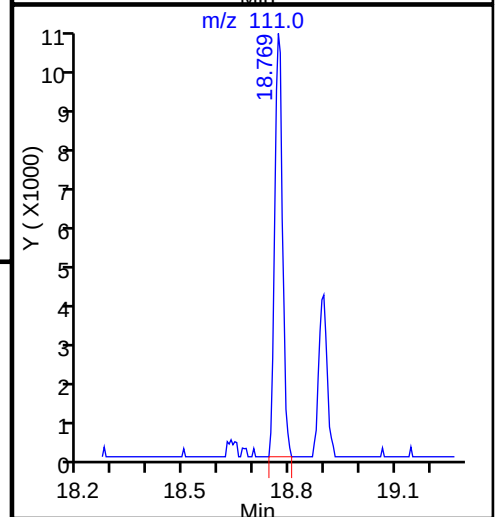
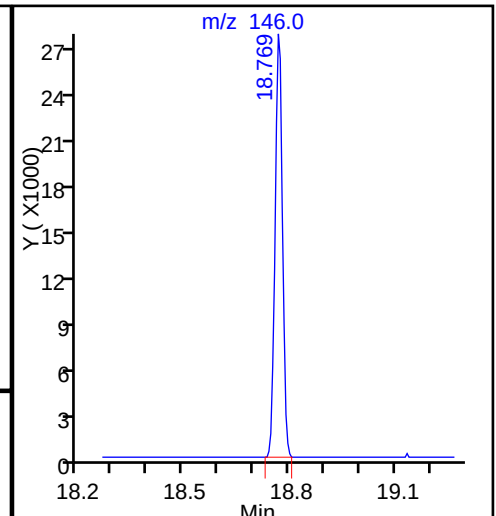
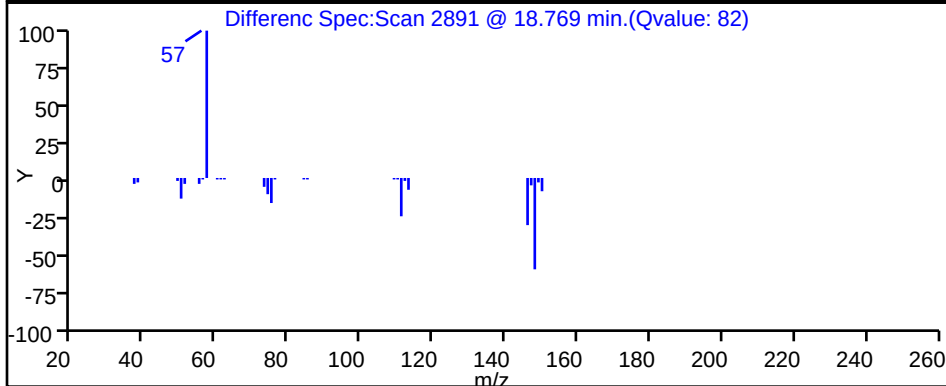
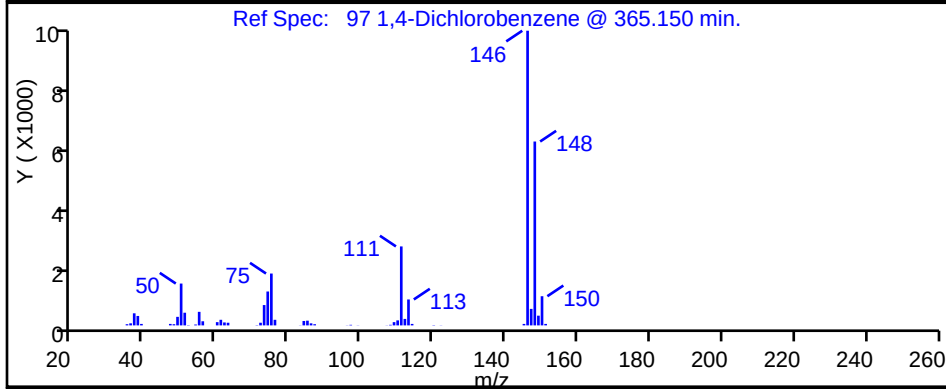
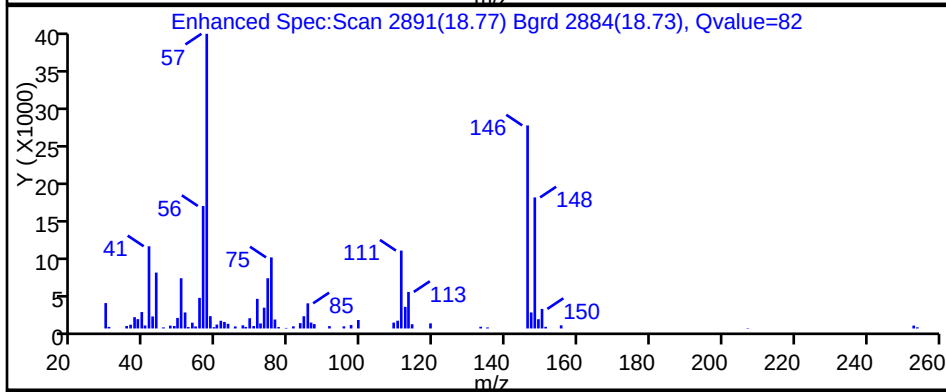
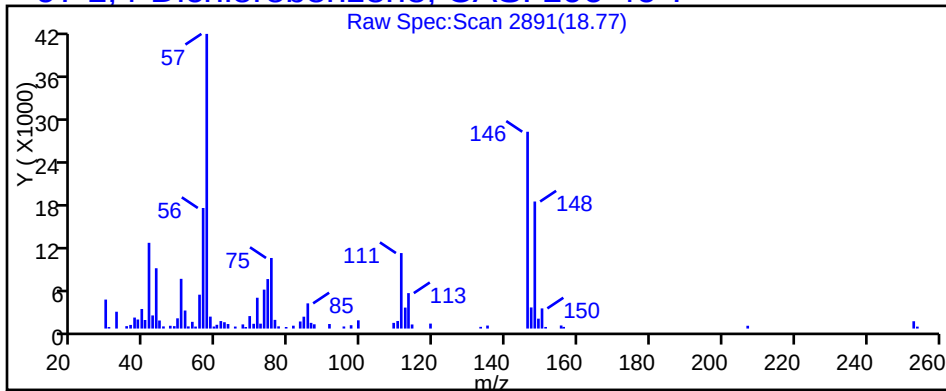
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

97 1,4-Dichlorobenzene, CAS: 106-46-7

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P107.D

Injection Date: 05-Mar-2015 17:41:30

Instrument ID: ME

Lims ID: 140-2815-A-5

Lab Sample ID: 140-2815-5

Client ID: H23-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

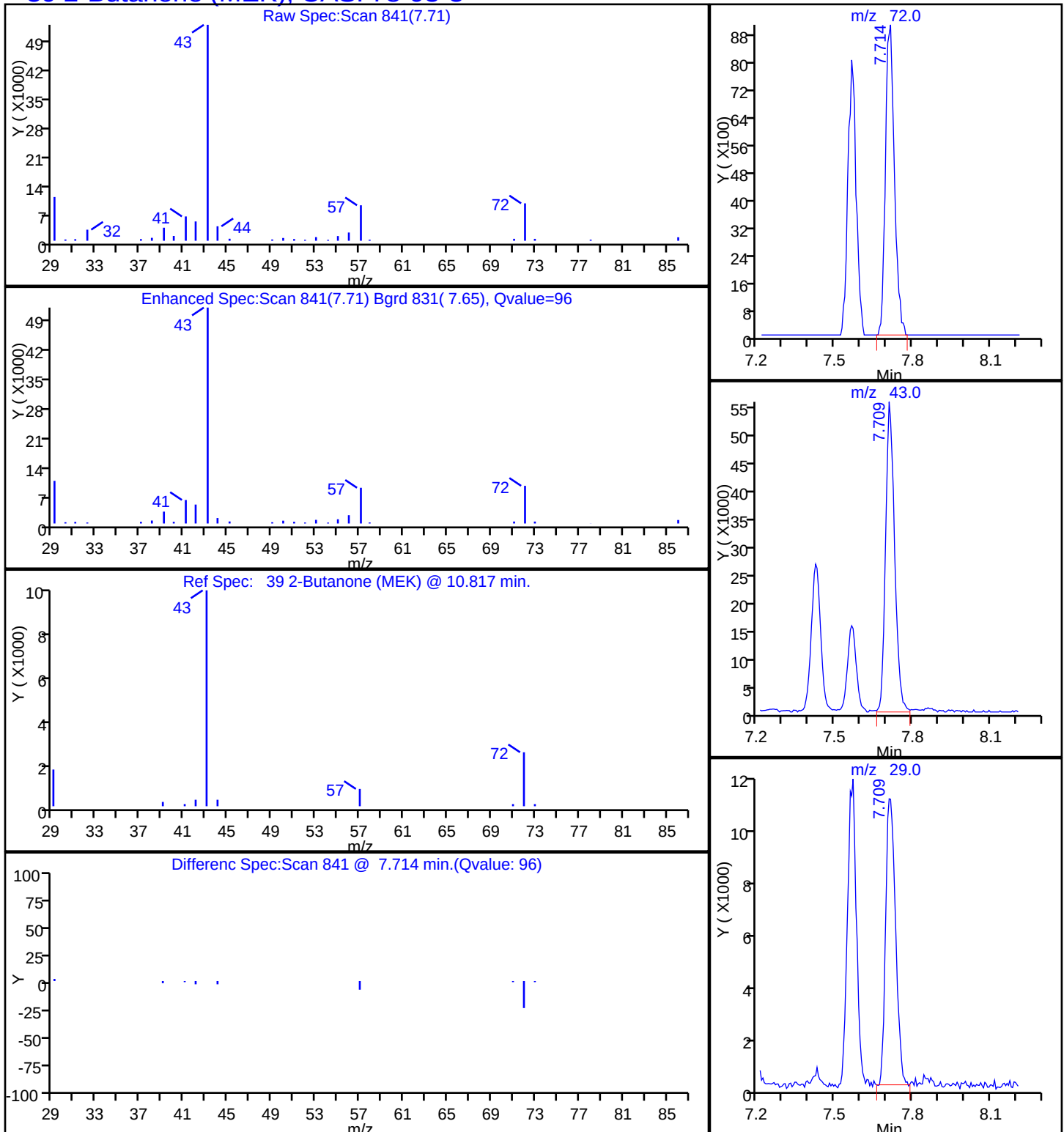
Dil. Factor: 1.0000

Method: ME_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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P107.D

Injection Date: 05-Mar-2015 17:41:30

Instrument ID: ME

Lims ID: 140-2815-A-5

Lab Sample ID: 140-2815-5

Client ID: H23-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

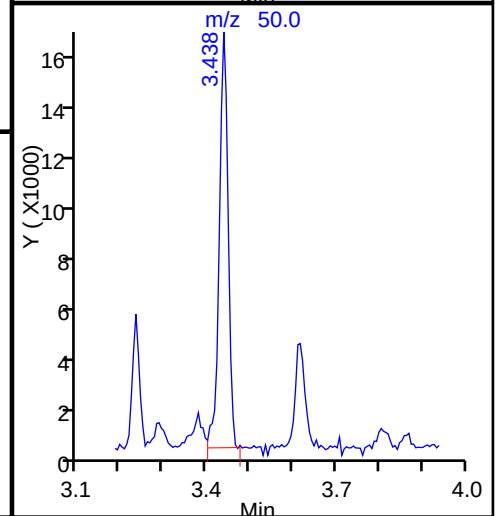
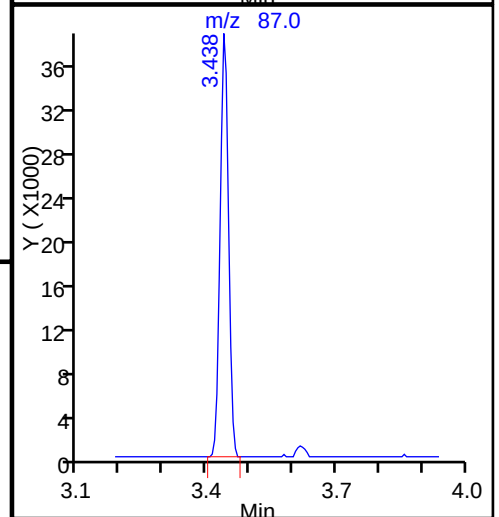
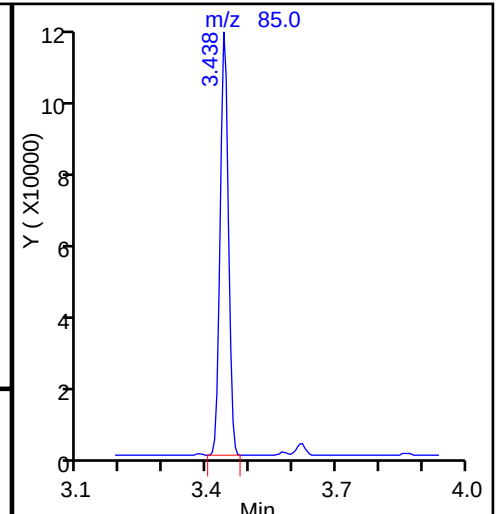
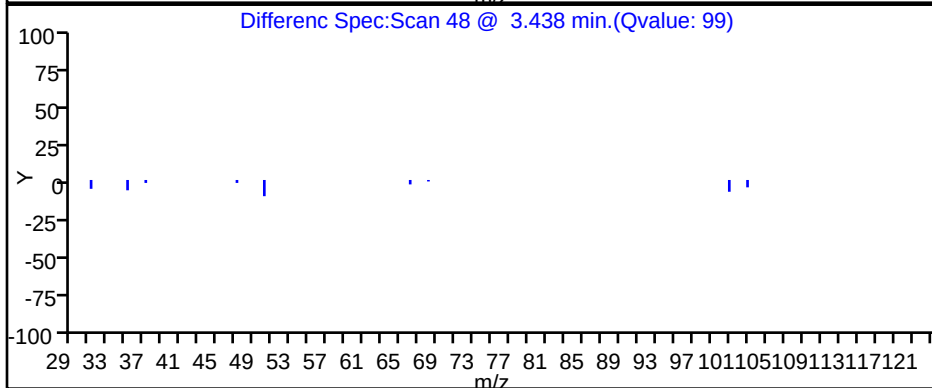
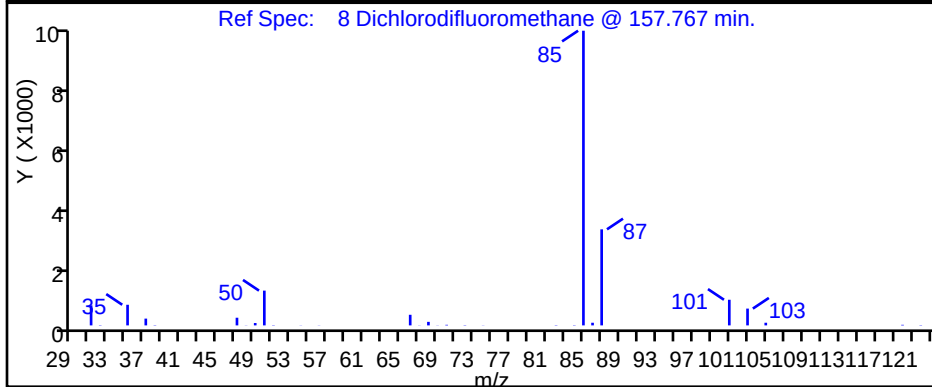
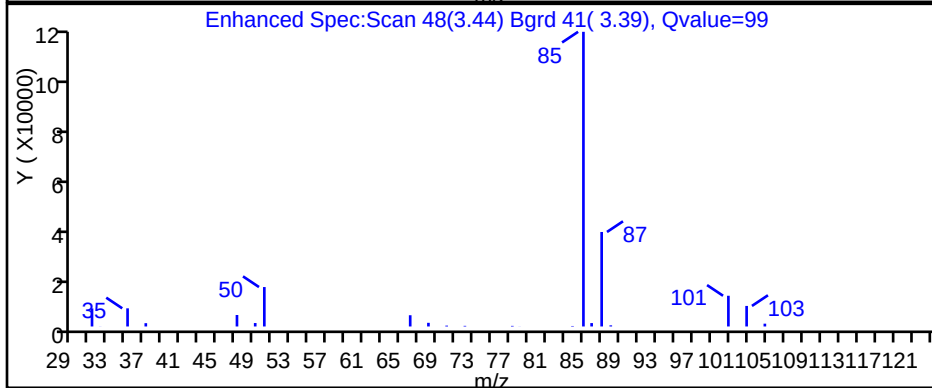
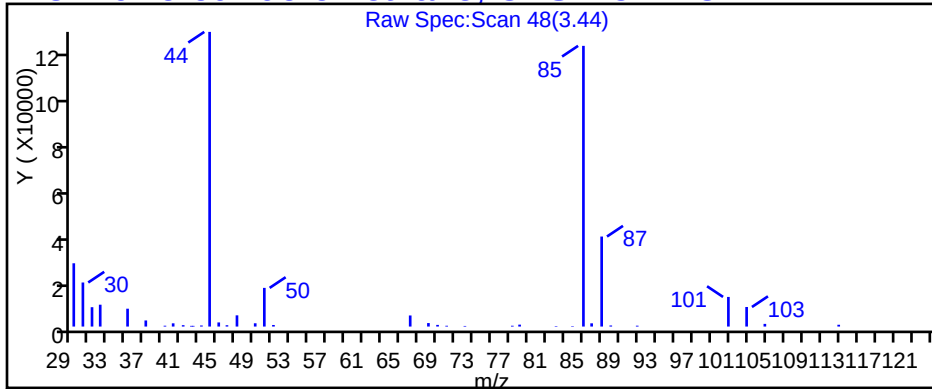
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P107.D

Injection Date: 05-Mar-2015 17:41:30

Instrument ID: ME

Lims ID: 140-2815-A-5

Lab Sample ID: 140-2815-5

Client ID: H23-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

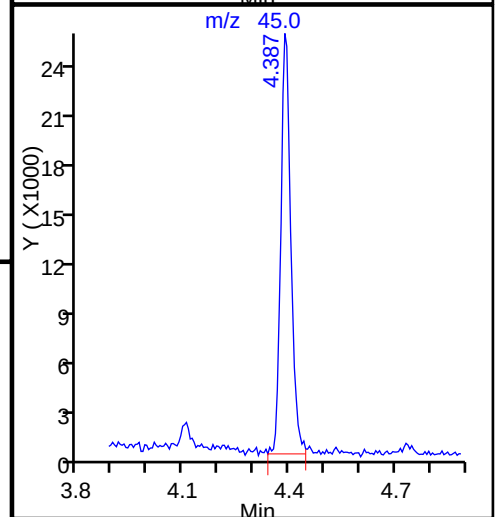
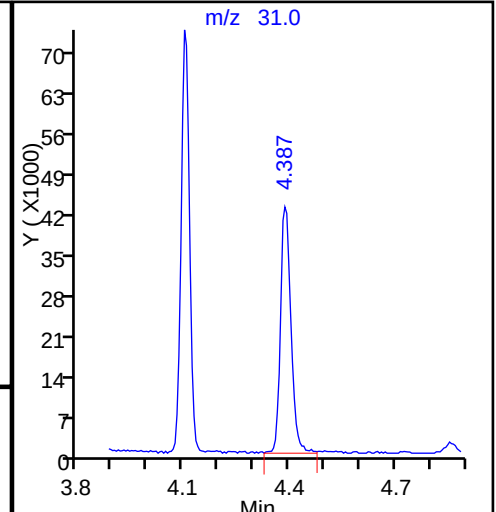
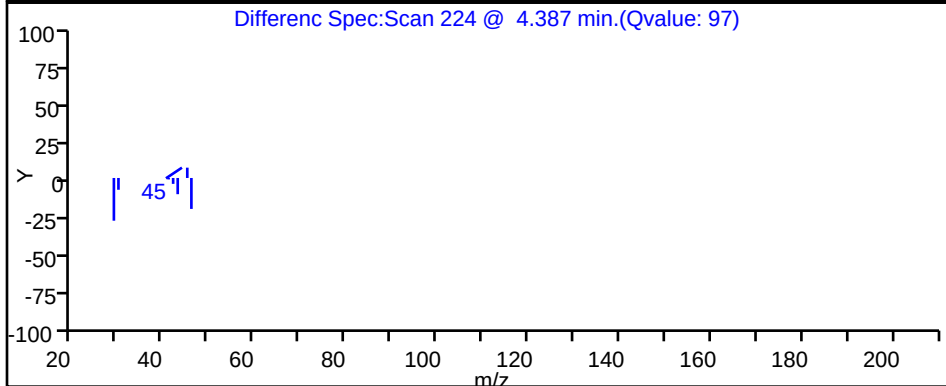
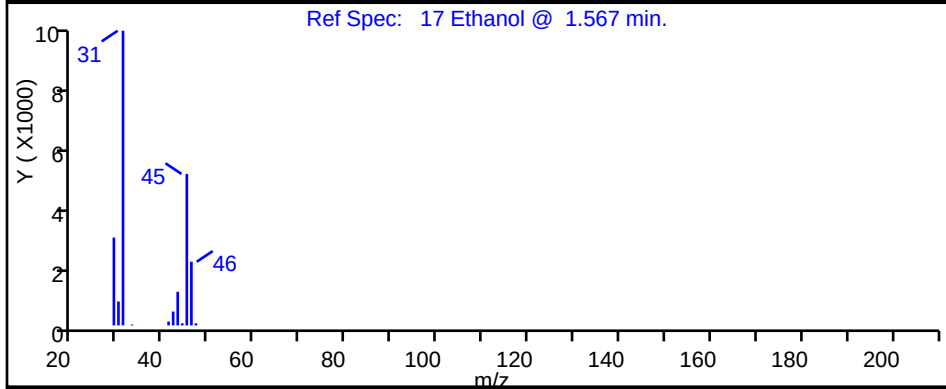
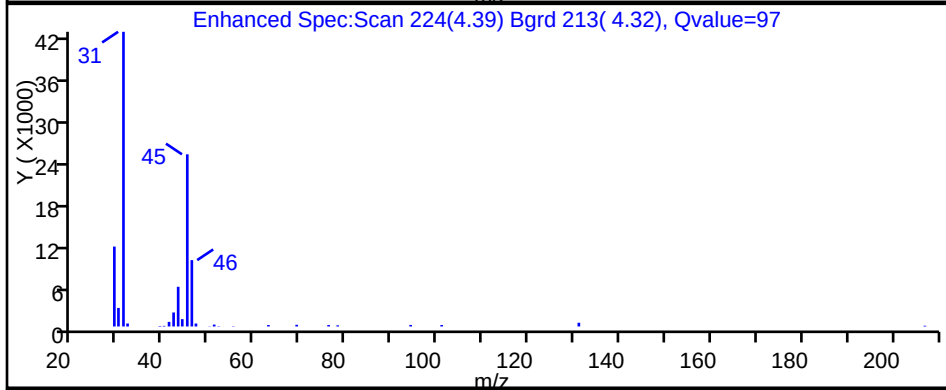
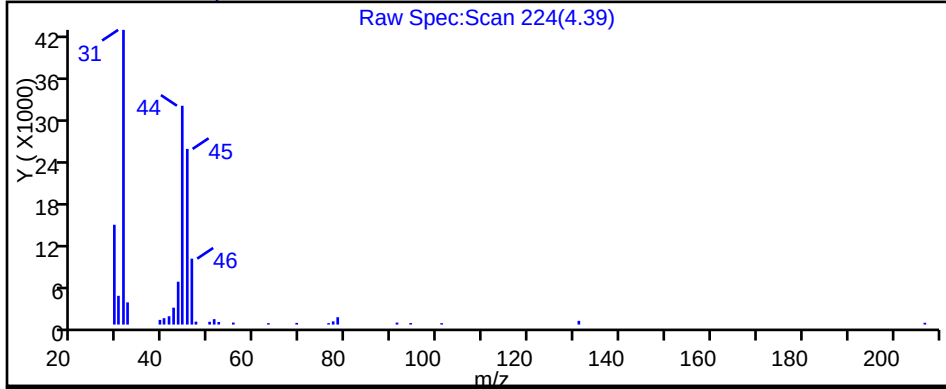
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P107.D

Injection Date: 05-Mar-2015 17:41:30

Instrument ID: ME

Lims ID: 140-2815-A-5

Lab Sample ID: 140-2815-5

Client ID: H23-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

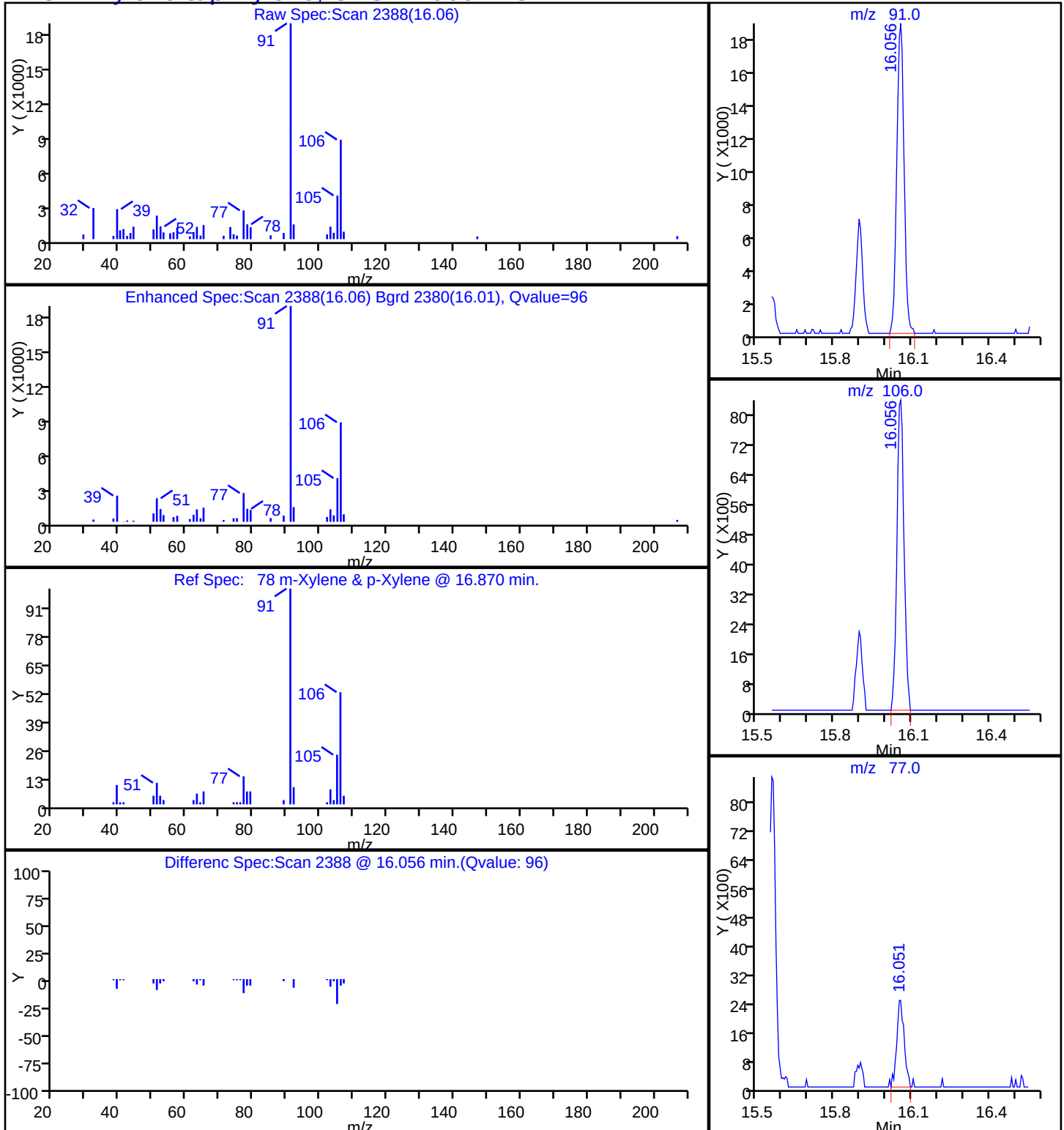
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P107.D

Injection Date: 05-Mar-2015 17:41:30

Instrument ID: ME

Lims ID: 140-2815-A-5

Lab Sample ID: 140-2815-5

Client ID: H23-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

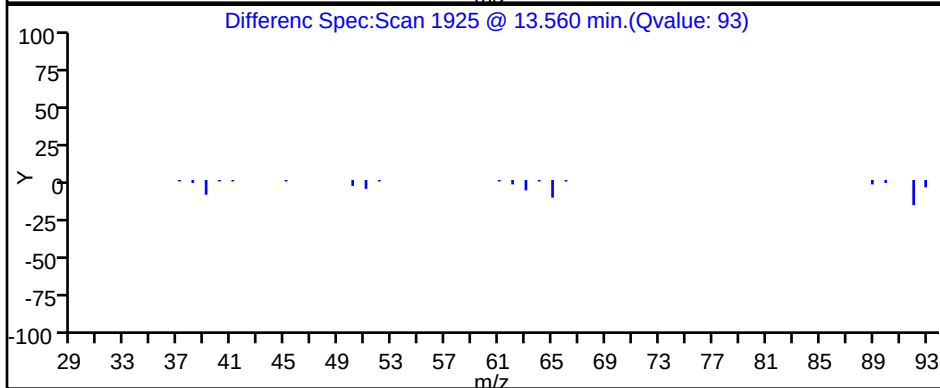
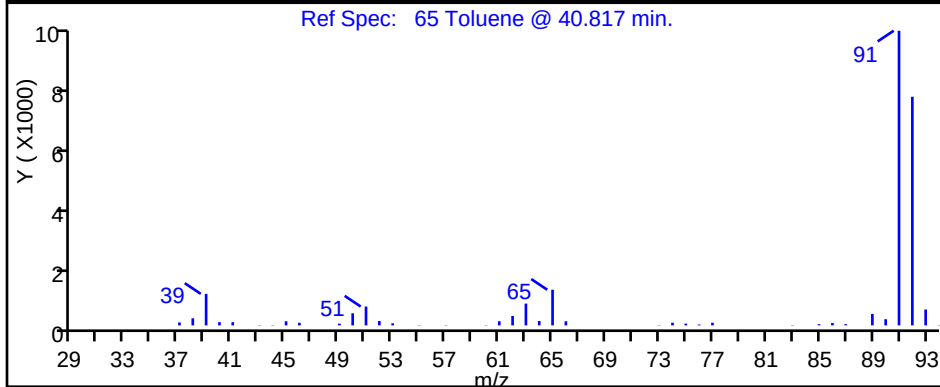
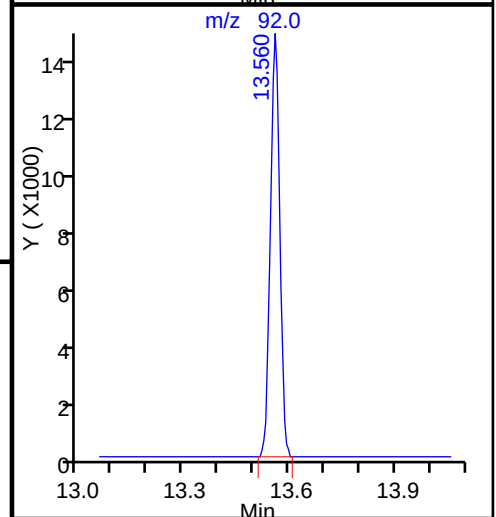
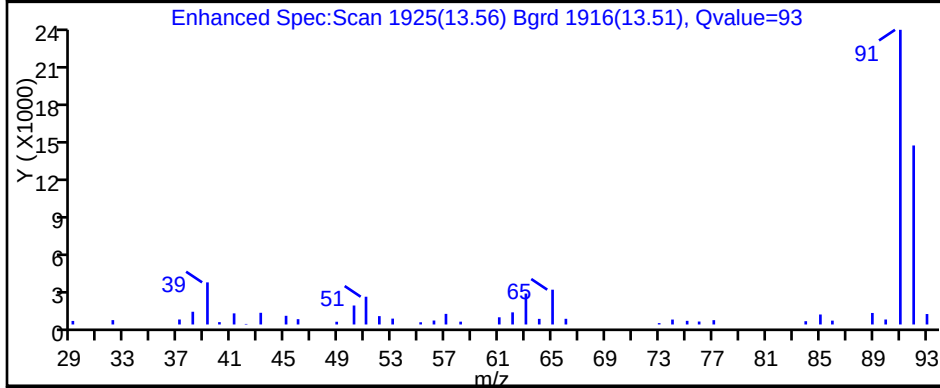
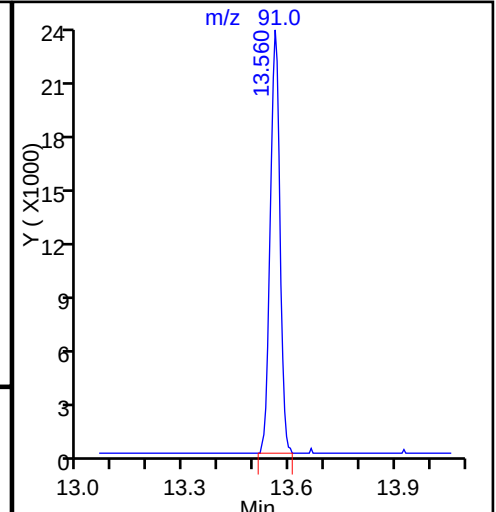
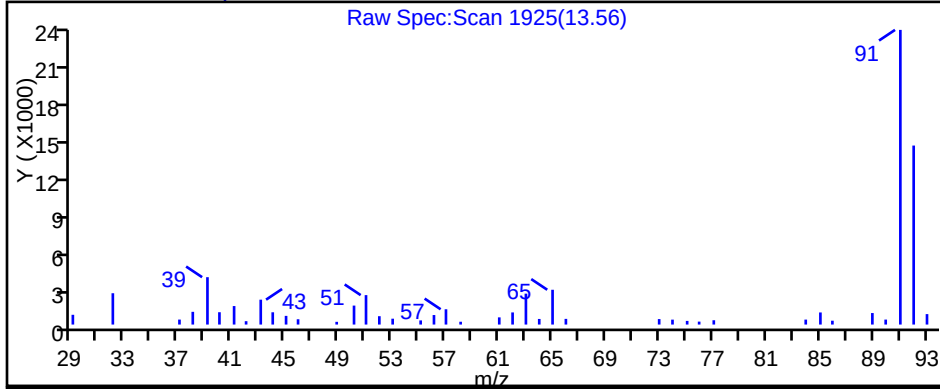
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P107.D

Injection Date: 05-Mar-2015 17:41:30

Instrument ID: ME

Lims ID: 140-2815-A-5

Lab Sample ID: 140-2815-5

Client ID: H23-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

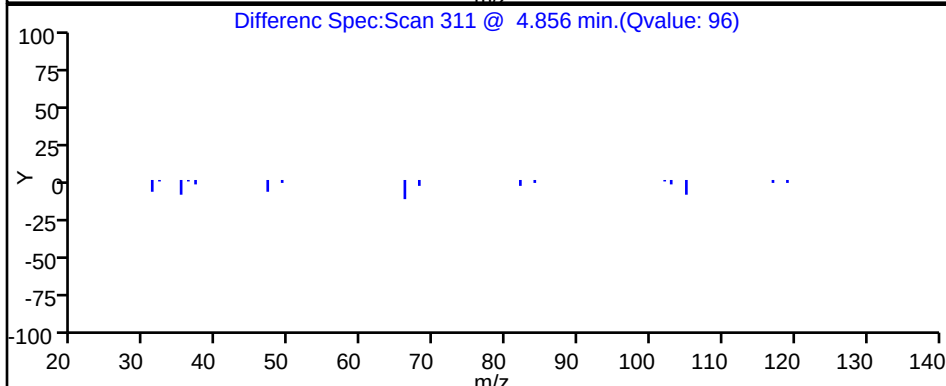
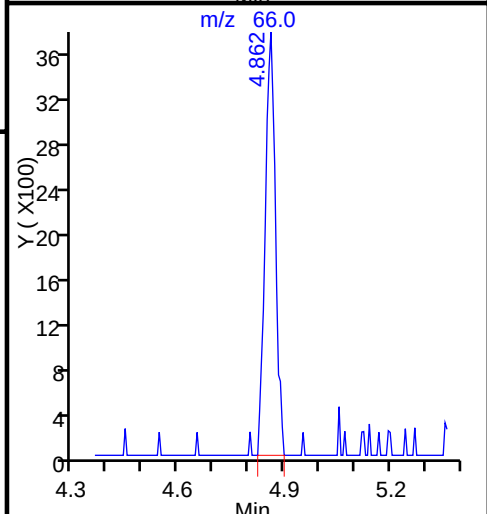
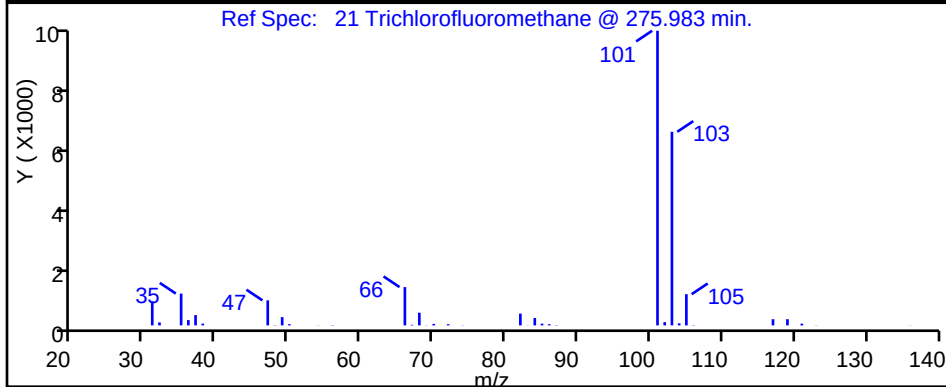
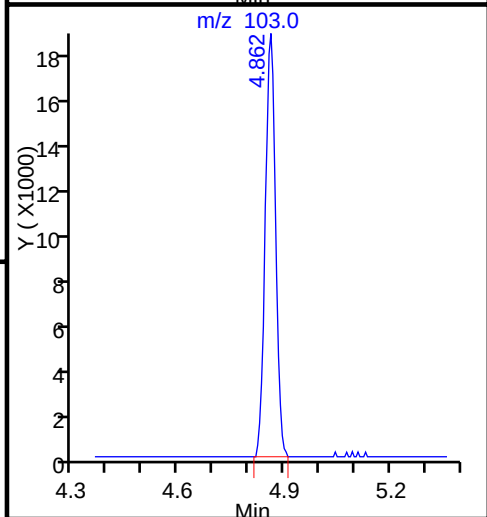
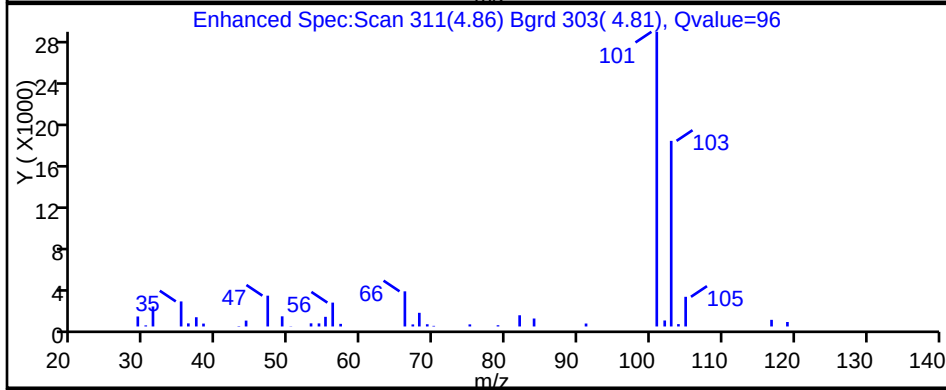
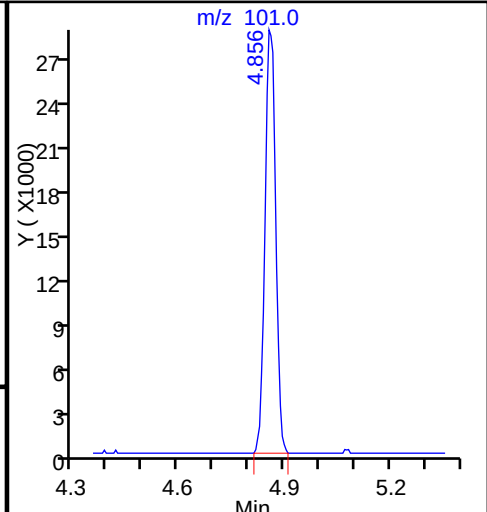
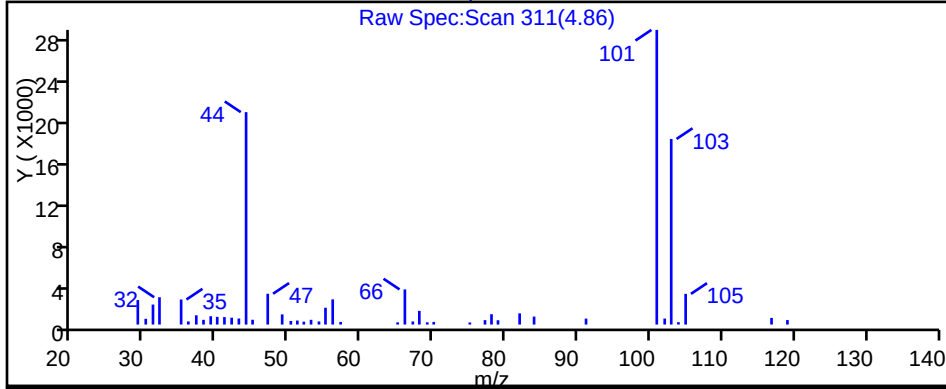
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

21 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: DUP2-2015 Lab Sample ID: 140-2815-6

Matrix: Air Lab File ID: EC05P108.D

Analysis Method: TO 15 LL Date Collected: 02/27/2015 00:00

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 18:35

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.: 2464 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		0.080	
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	0.087		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		0.040	
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		0.080	
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: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: DUP2-2015 Lab Sample ID: 140-2815-6

Matrix: Air Lab File ID: EC05P108.D

Analysis Method: TO 15 LL Date Collected: 02/27/2015 00:00

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 18:35

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.: 2464 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	0.46		0.080	
64-17-5	Ethanol	46.07	1.1		0.80	
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	0.20		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.088		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		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.19		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: DUP2-2015 Lab Sample ID: 140-2815-6

Matrix: Air Lab File ID: EC05P108.D

Analysis Method: TO 15 LL Date Collected: 02/27/2015 00:00

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 18:35

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.: 2464 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		0.32	
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	0.52		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		0.25	
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		0.32	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: DUP2-2015 Lab Sample ID: 140-2815-6
 Matrix: Air Lab File ID: EC05P108.D
 Analysis Method: TO 15 LL Date Collected: 02/27/2015 00:00
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 18:35
 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.: 2464 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	2.3		0.40	
64-17-5	Ethanol	46.07	2.0		1.5	
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	0.69		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	0.38		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		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.1		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P108.D
 Lims ID: 140-2815-A-6 Lab Sample ID: 140-2815-6
 Client ID: DUP2-2015
 Sample Type: Client
 Inject. Date: 05-Mar-2015 18:35:30 ALS Bottle#: 8 Worklist Smp#: 12
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2815-a-6
 Misc. Info.: E030515,TO155,,140-0001425-012
 Operator ID: 7126 Instrument ID: ME
 Method: \\KNXCHROM\ChromData\ME\20150304-1425.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 10-Mar-2015 07:55:31 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK004

First Level Reviewer: barlozhetskayaa

Date: 05-Mar-2015 19:39:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.491	8.491	0.000	96	347141	4.00	
* 2 1,4-Difluorobenzene	114	10.729	10.729	-0.001	96	1652100	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.560	15.555	0.005	90	1515933	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.216	17.210	0.006	87	1174350	4.11	
8 Dichlorodifluoromethane	85	3.438	3.438	0.000	100	163304	0.4606	
9 Chloromethane	52	3.611	3.616	-0.005	92	3459	0.0951	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.621	0.000	64	3226	0.0144	
17 Ethanol	31	4.387	4.393	-0.006	98	44683	1.08	
21 Trichlorofluoromethane	101	4.862	4.862	0.000	94	59998	0.1896	
29 2-Methyl-2-propanol	59	5.676	5.654	0.022	35	3982	0.0196	
30 1,1,2-Trichloro-1,2,2-trif	101	5.735	5.735	0.000	86	13441	0.0600	
31 Methylene Chloride	84	5.919	5.919	-0.001	93	18973	0.1997	
39 2-Butanone (MEK)	72	7.720	7.709	0.011	94	9701	0.2137	
40 Hexane	56	7.736	7.730	0.006	61	7037	0.0711	
45 1,1,1-Trichloroethane	97	9.537	9.537	0.000	69	13005	0.0435	
48 Benzene	78	10.157	10.157	0.000	77	11193	0.0360	
50 Carbon tetrachloride	117	10.184	10.179	0.005	91	11631	0.0355	
62 4-Methyl-2-pentanone (MIBK	43	12.675	12.664	0.011	89	17213	0.0648	
65 Toluene	91	13.560	13.560	0.000	93	42319	0.1114	
78 m-Xylene & p-Xylene	91	16.056	16.056	0.000	97	33522	0.0882	
82 o-Xylene	91	16.590	16.585	0.005	83	11819	0.0298	
93 1,2,4-Trimethylbenzene	105	18.407	18.402	0.005	80	14102	0.0327	
97 1,4-Dichlorobenzene	146	18.774	18.769	0.005	55	25659	0.0869	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P108.D

Injection Date: 05-Mar-2015 18:35:30

Instrument ID: ME

Operator ID: 7126

Lims ID: 140-2815-A-6

Lab Sample ID: 140-2815-6

Worklist Smp#: 12

Client ID: DUP2-2015

Purge Vol: 500.000 mL

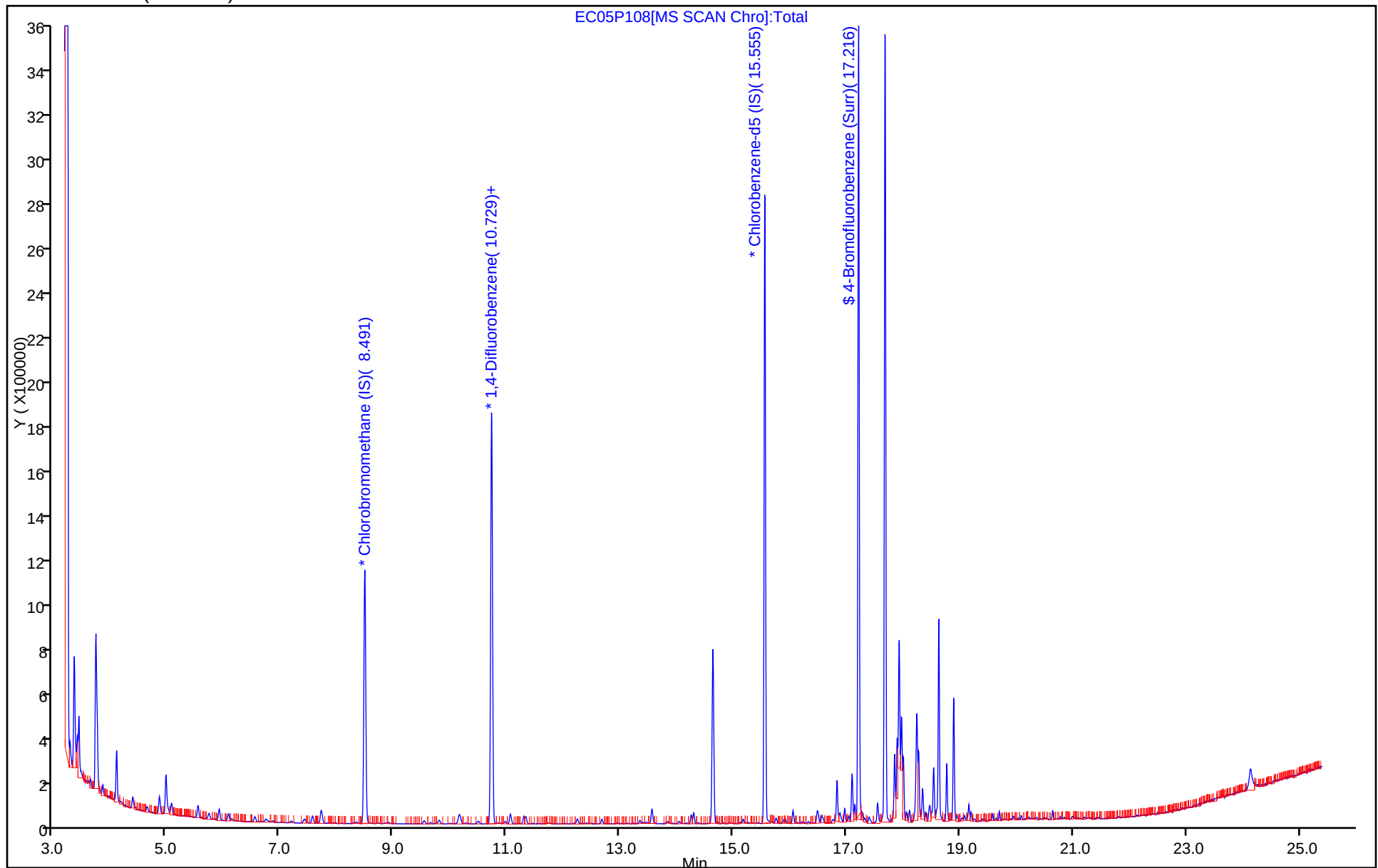
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P108.D

Injection Date: 05-Mar-2015 18:35:30

Instrument ID: ME

Lims ID: 140-2815-A-6

Lab Sample ID: 140-2815-6

Client ID: DUP2-2015

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 12

Purge Vol: 500.000 mL

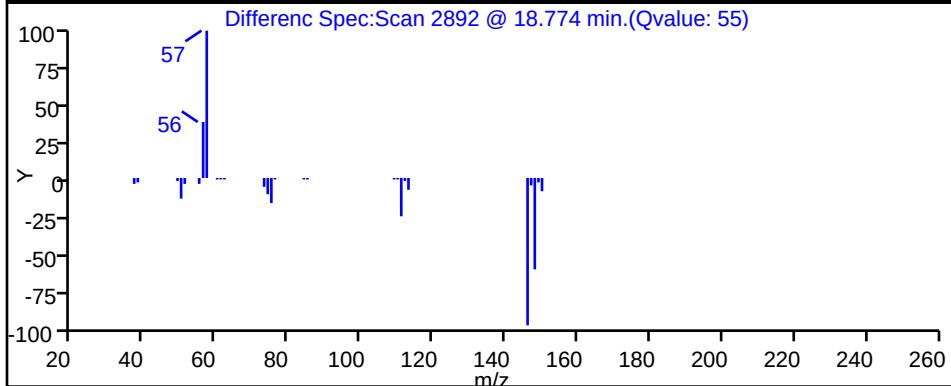
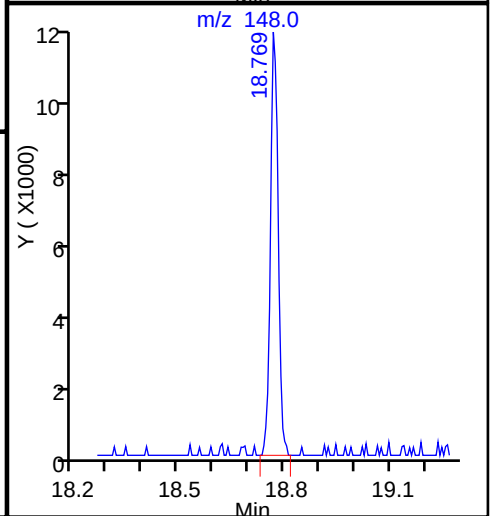
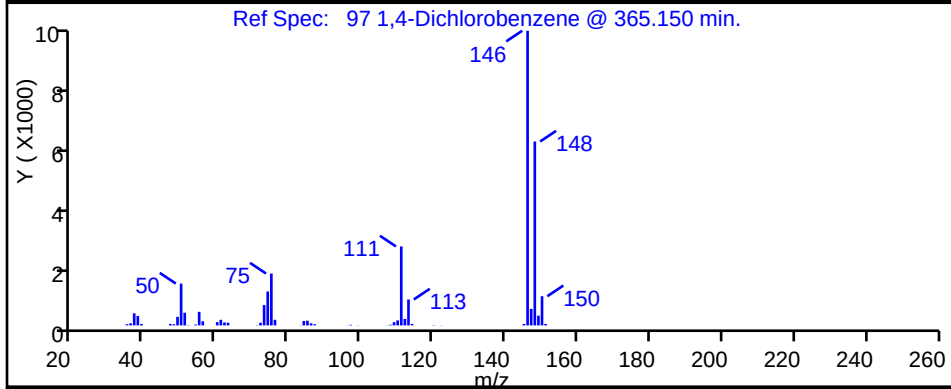
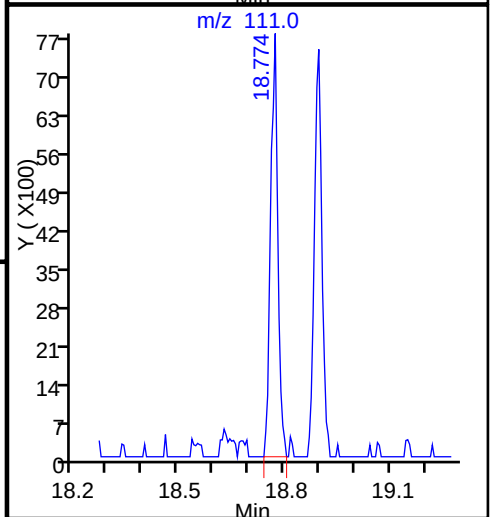
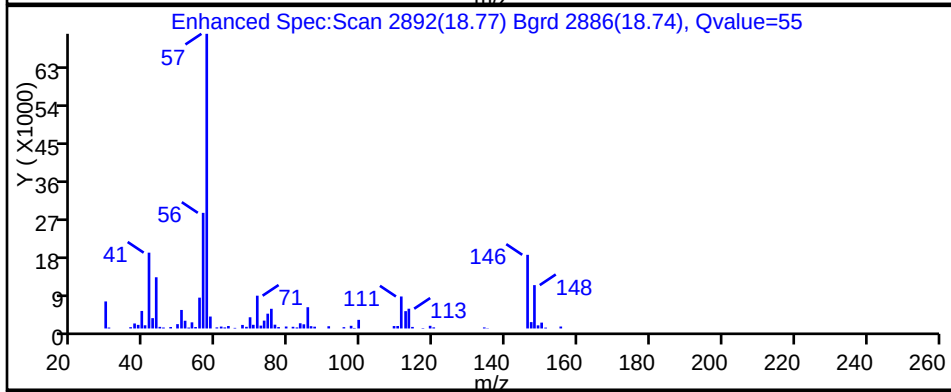
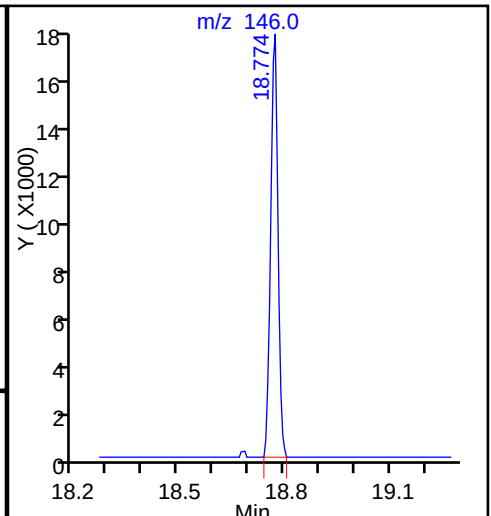
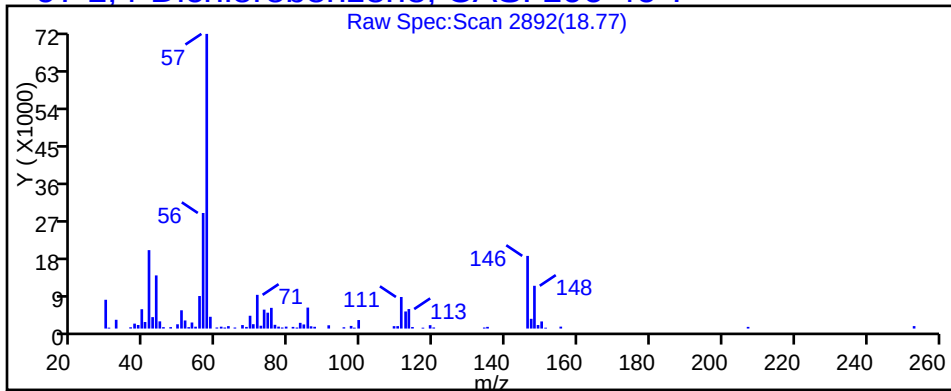
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

97 1,4-Dichlorobenzene, CAS: 106-46-7

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P108.D

Injection Date: 05-Mar-2015 18:35:30

Instrument ID: ME

Lims ID: 140-2815-A-6

Lab Sample ID: 140-2815-6

Client ID: DUP2-2015

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 12

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

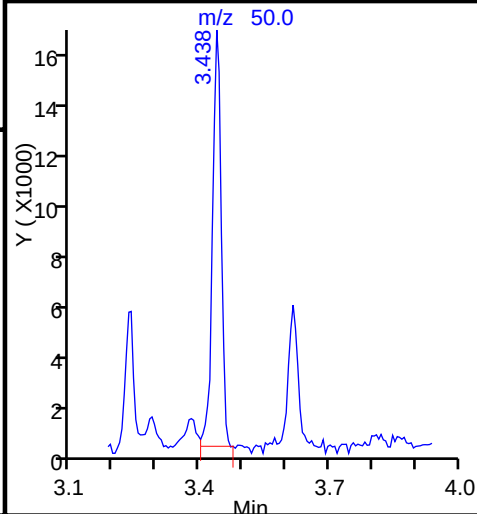
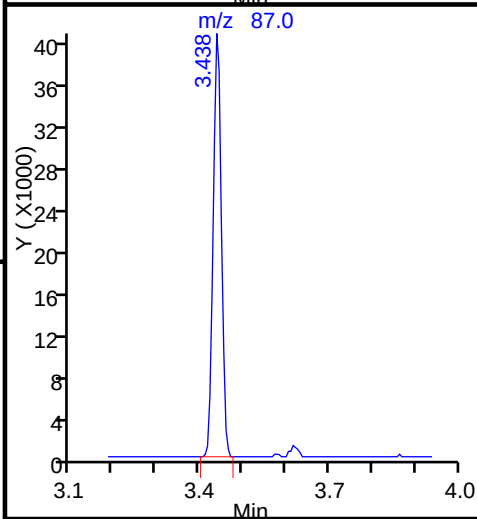
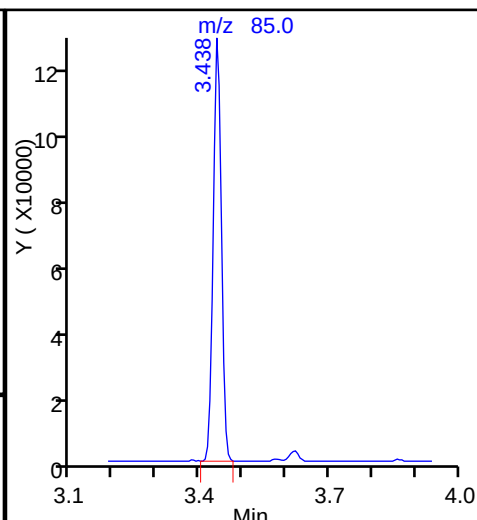
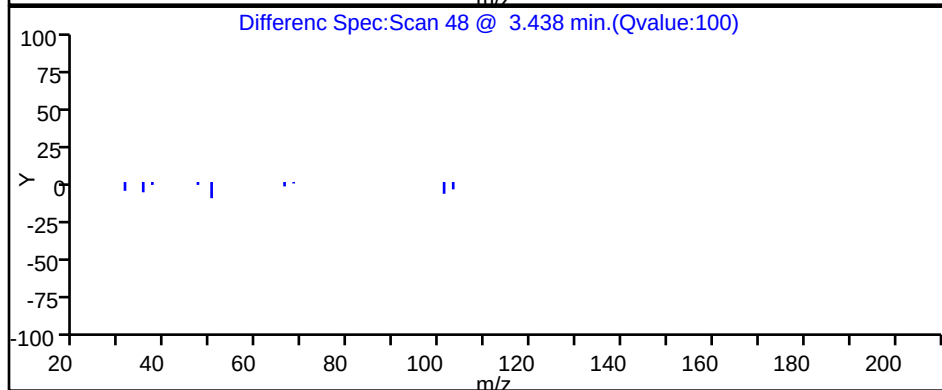
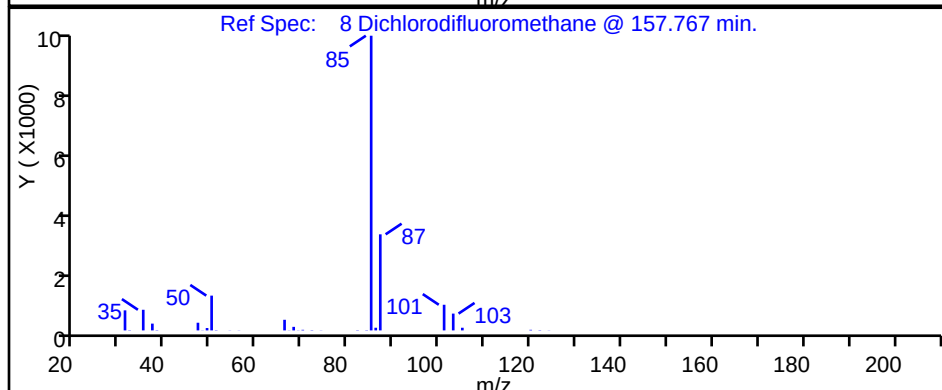
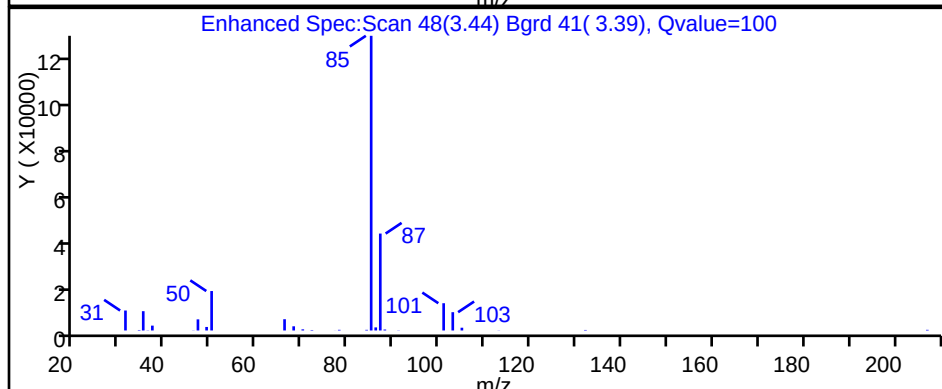
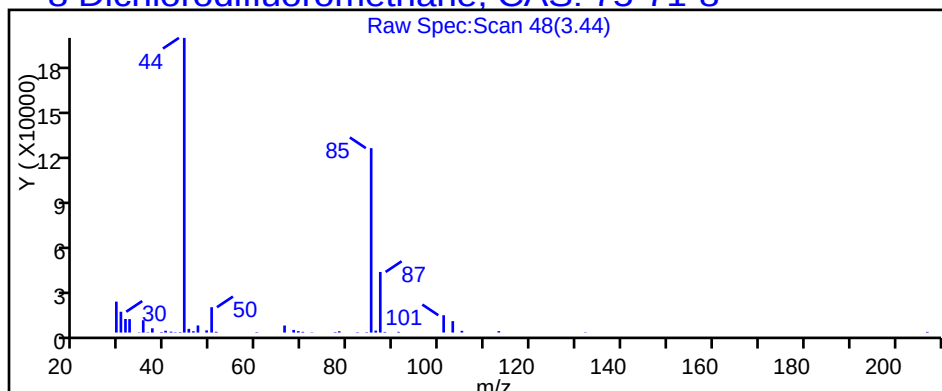
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P108.D

Injection Date: 05-Mar-2015 18:35:30

Instrument ID: ME

Lims ID: 140-2815-A-6

Lab Sample ID: 140-2815-6

Client ID: DUP2-2015

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 12

Purge Vol: 500.000 mL

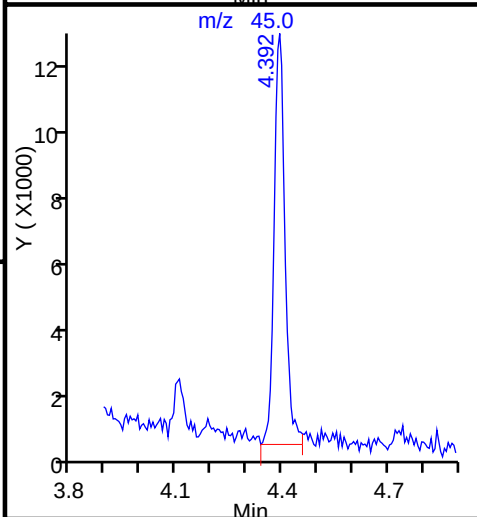
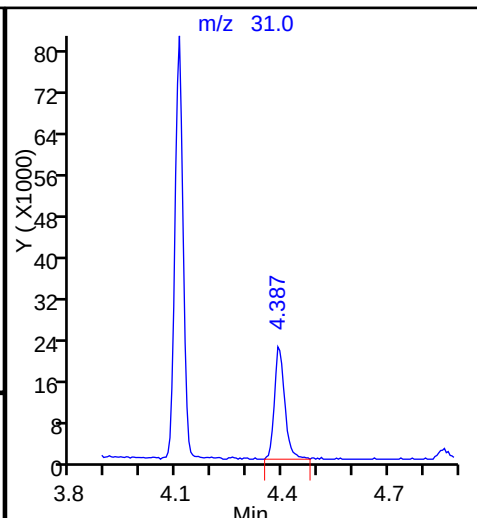
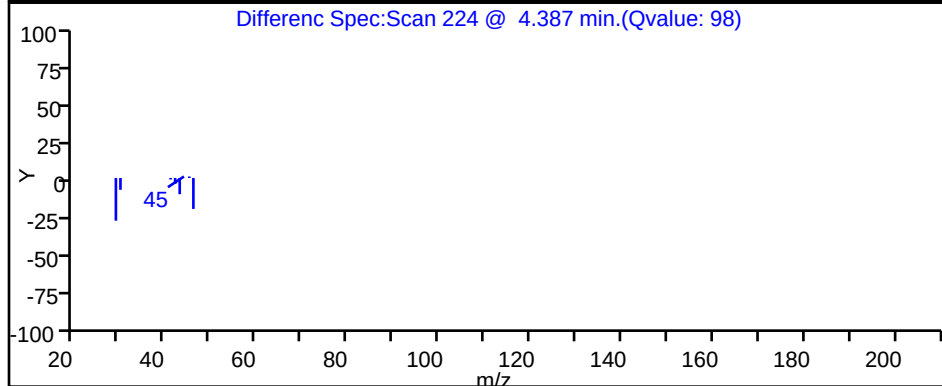
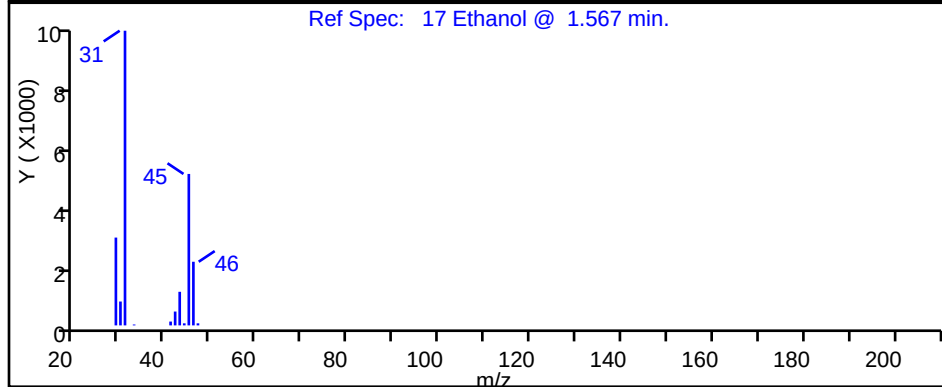
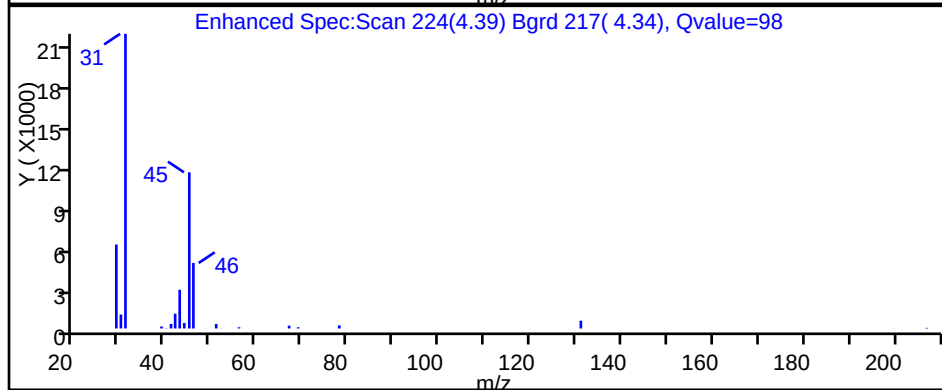
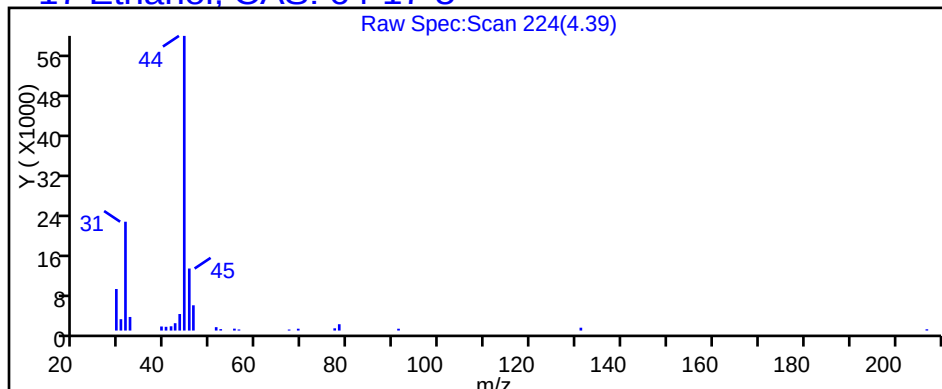
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P108.D

Injection Date: 05-Mar-2015 18:35:30

Instrument ID: ME

Lims ID: 140-2815-A-6

Lab Sample ID: 140-2815-6

Client ID: DUP2-2015

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 12

Purge Vol: 500.000 mL

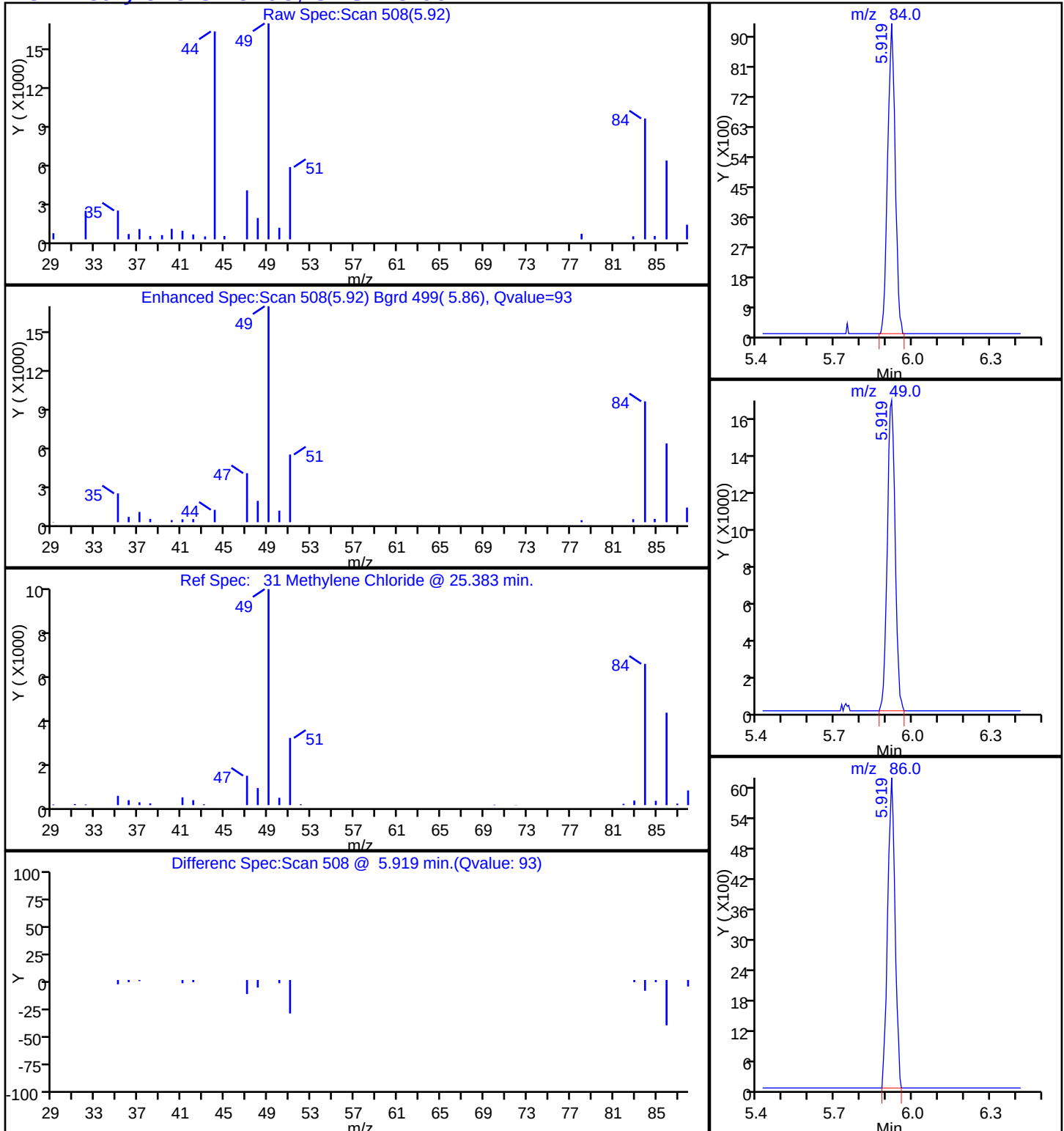
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P108.D

Injection Date: 05-Mar-2015 18:35:30

Instrument ID: ME

Lims ID: 140-2815-A-6

Lab Sample ID: 140-2815-6

Client ID: DUP2-2015

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 12

Purge Vol: 500.000 mL

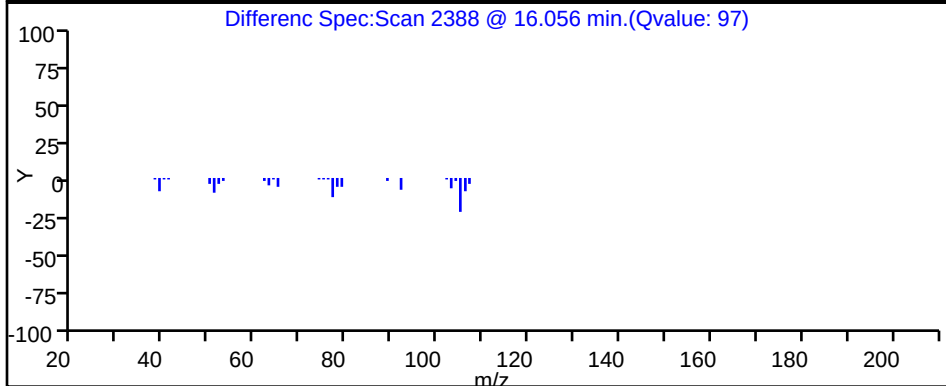
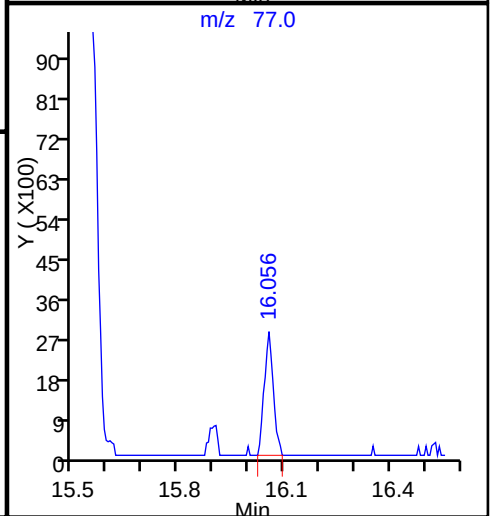
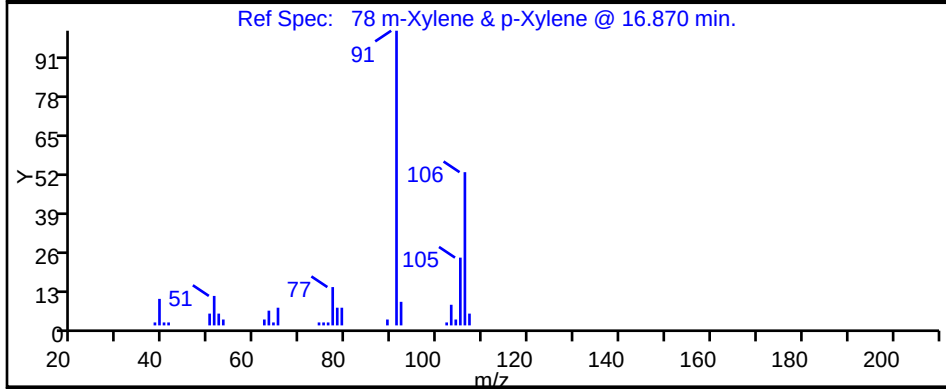
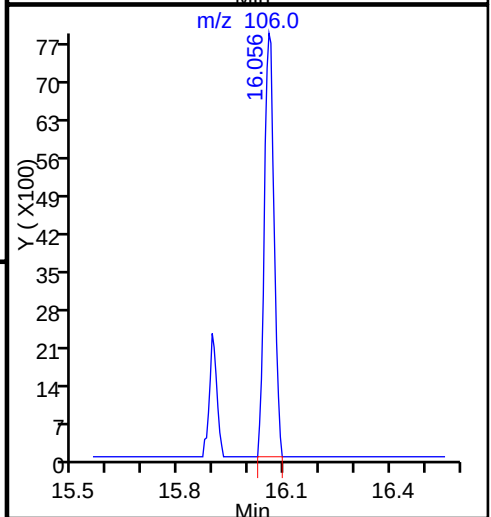
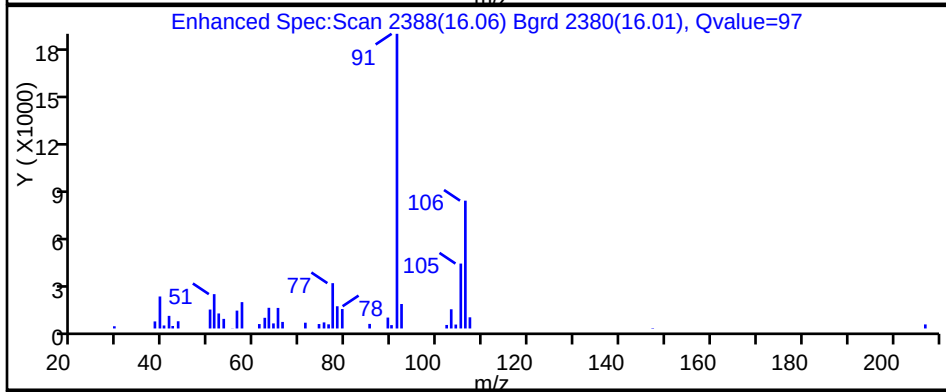
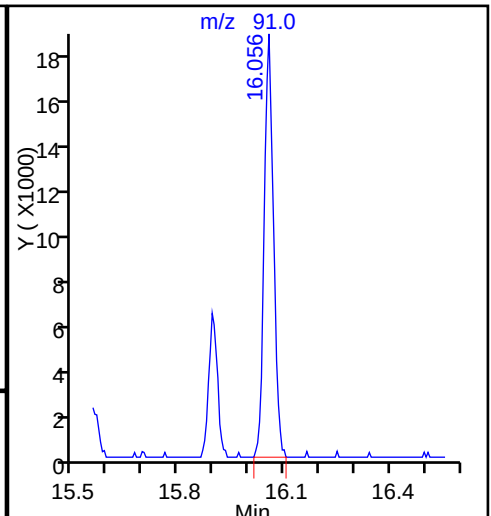
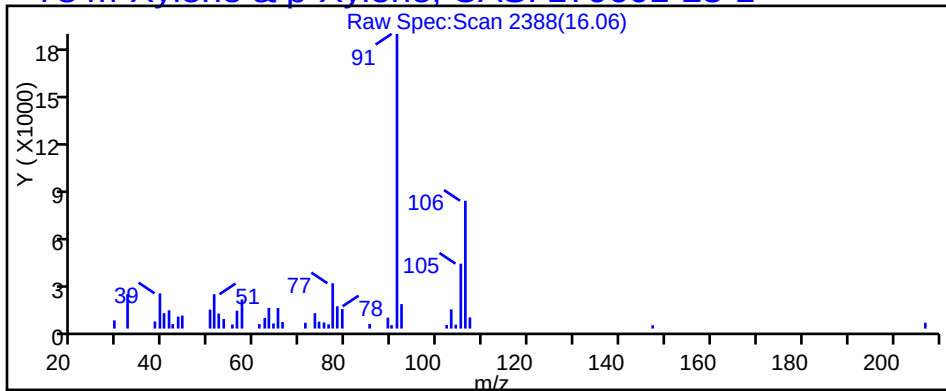
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P108.D

Injection Date: 05-Mar-2015 18:35:30

Instrument ID: ME

Lims ID: 140-2815-A-6

Lab Sample ID: 140-2815-6

Client ID: DUP2-2015

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 12

Purge Vol: 500.000 mL

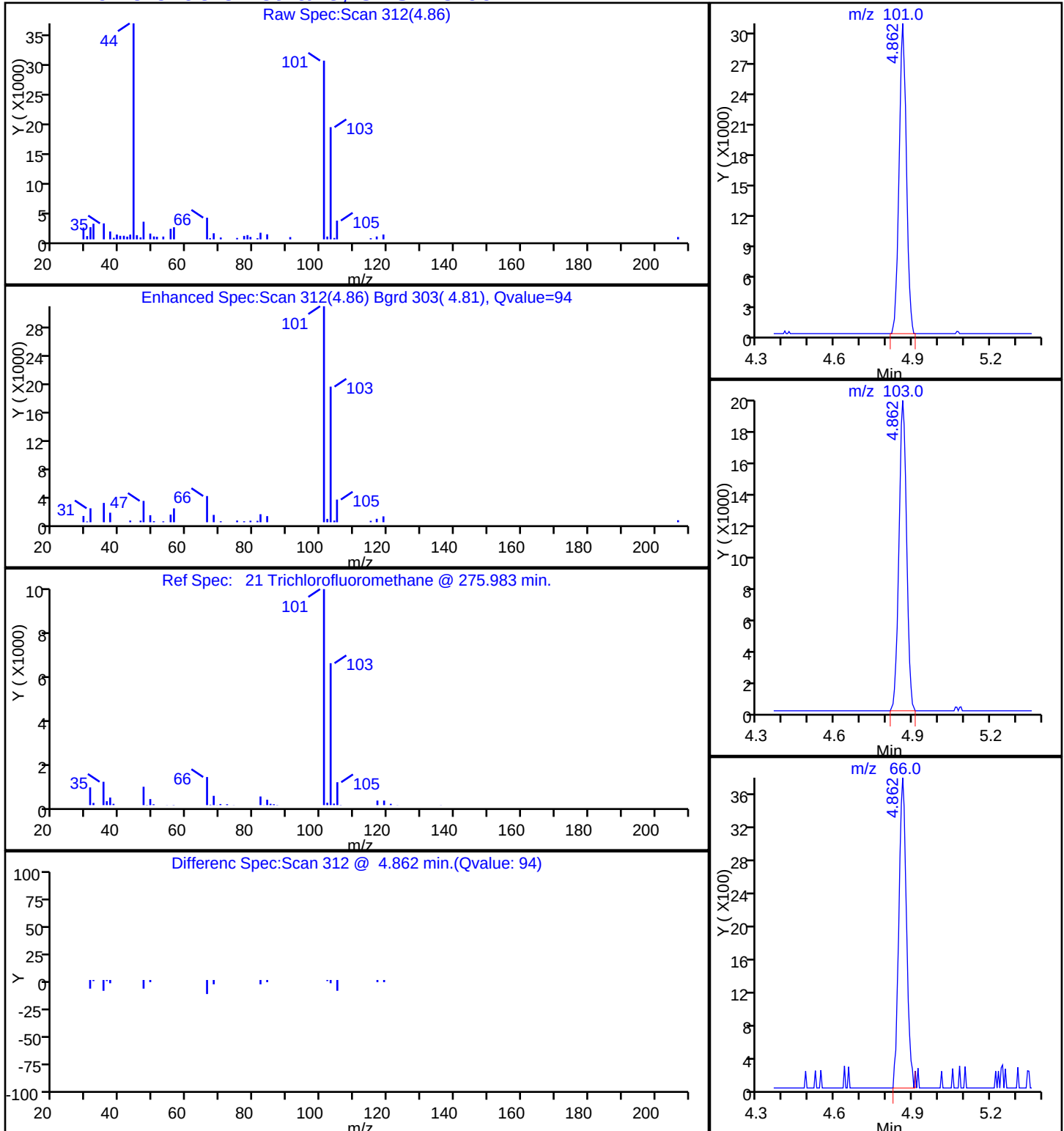
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

21 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: D2-OA-2015 Lab Sample ID: 140-2815-7

Matrix: Air Lab File ID: EC05P109.D

Analysis Method: TO 15 LL Date Collected: 02/25/2015 12:47

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 19:25

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.: 2464 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		0.080	
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	0.44		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	0.20		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	0.074		0.040	
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	0.64		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: D2-OA-2015 Lab Sample ID: 140-2815-7
 Matrix: Air Lab File ID: EC05P109.D
 Analysis Method: TO 15 LL Date Collected: 02/25/2015 12:47
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 19:25
 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.: 2464 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	0.51		0.080	
64-17-5	Ethanol	46.07	7.5		0.80	
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	0.11		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	0.18		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		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.24		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: D2-OA-2015 Lab Sample ID: 140-2815-7

Matrix: Air Lab File ID: EC05P109.D

Analysis Method: TO 15 LL Date Collected: 02/25/2015 12:47

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 19:25

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.: 2464 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		0.32	
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	1.3		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.62		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	0.46		0.25	
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	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: D2-OA-2015 Lab Sample ID: 140-2815-7
 Matrix: Air Lab File ID: EC05P109.D
 Analysis Method: TO 15 LL Date Collected: 02/25/2015 12:47
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 19:25
 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.: 2464 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	2.5		0.40	
64-17-5	Ethanol	46.07	14		1.5	
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	0.46		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	0.67		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		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.4		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P109.D
 Lims ID: 140-2815-A-7 Lab Sample ID: 140-2815-7
 Client ID: D2-OA-2015
 Sample Type: Client
 Inject. Date: 05-Mar-2015 19:25:30 ALS Bottle#: 9 Worklist Smp#: 13
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2815-a-7
 Misc. Info.: E030515,TO155,,140-0001425-013
 Operator ID: 7126 Instrument ID: ME
 Method: \\KNXCHROM\ChromData\ME\20150304-1425.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 10-Mar-2015 07:55:46 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK004

First Level Reviewer: tajh

Date: 10-Mar-2015 07:55:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.491	8.491	0.000	96	331728	4.00	
* 2 1,4-Difluorobenzene	114	10.729	10.729	0.000	96	1476827	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.555	15.555	0.000	91	1334728	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.210	17.210	0.000	85	1007080	4.01	
8 Dichlorodifluoromethane	85	3.438	3.438	0.000	96	171336	0.5057	
9 Chloromethane	52	3.616	3.616	0.000	99	22182	0.6384	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.621	0.000	26	3637	0.0169	
15 Bromomethane	94	4.171	4.177	-0.006	42	1388	0.0146	
16 Chloroethane	64	4.306	4.306	0.000	58	1613	0.0308	
17 Ethanol	31	4.393	4.393	0.000	98	296860	7.52	
21 Trichlorofluoromethane	101	4.856	4.862	-0.006	96	73732	0.2438	
29 2-Methyl-2-propanol	59	5.665	5.654	0.011	58	8997	0.0462	
30 1,1,2-Trichloro-1,2,2-trif	101	5.735	5.735	0.000	88	15338	0.0717	
31 Methylene Chloride	84	5.913	5.919	-0.006	91	15761	0.1736	
39 2-Butanone (MEK)	72	7.709	7.709	0.000	96	19233	0.4433	
40 Hexane	56	7.730	7.730	0.000	58	11014	0.1164	
43 Chloroform	83	8.491	8.502	-0.011	3	3952	0.0161	
49 Cyclohexane	69	10.141	10.152	-0.011	35	1452	0.0302	
48 Benzene	78	10.157	10.157	0.000	93	54365	0.1956	
50 Carbon tetrachloride	117	10.179	10.179	0.000	95	21589	0.0738	
53 Isooctane	57	10.939	10.944	-0.005	87	22937	0.0415	
62 4-Methyl-2-pentanone (MIBK	43	12.675	12.664	0.011	93	25525	0.1075	
65 Toluene	91	13.560	13.560	0.000	93	59533	0.1779	
76 Ethylbenzene	91	15.895	15.894	0.000	89	16983	0.0391	
78 m-Xylene & p-Xylene	91	16.056	16.056	0.000	95	35794	0.1070	
82 o-Xylene	91	16.585	16.585	0.000	90	15141	0.0433	
97 1,4-Dichlorobenzene	146	18.769	18.769	0.000	55	10977	0.0422	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P109.D

Injection Date: 05-Mar-2015 19:25:30

Instrument ID: ME

Operator ID: 7126

Lims ID: 140-2815-A-7

Lab Sample ID: 140-2815-7

Worklist Smp#: 13

Client ID: D2-OA-2015

Purge Vol: 500.000 mL

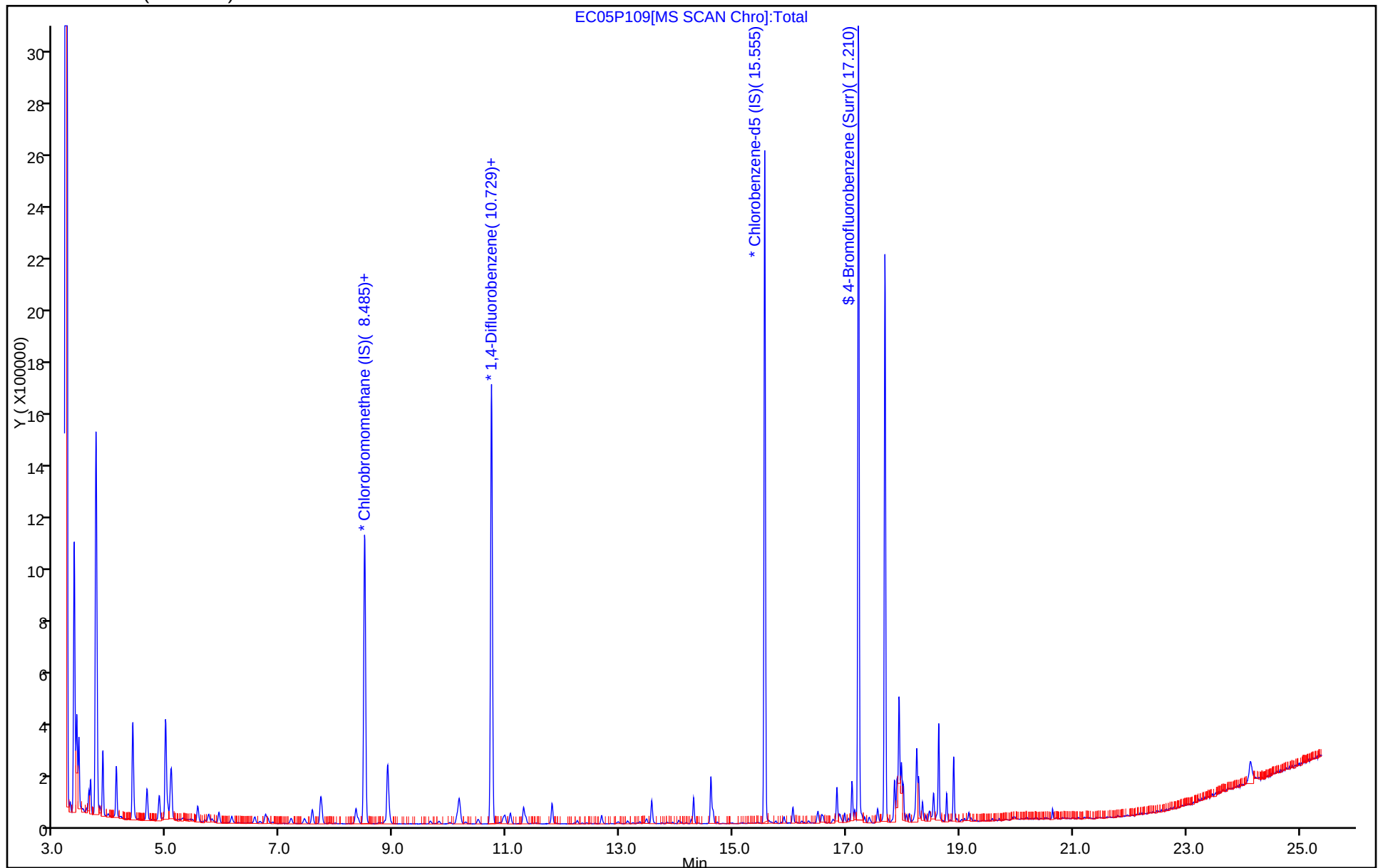
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P109.D

Injection Date: 05-Mar-2015 19:25:30

Instrument ID: ME

Lims ID: 140-2815-A-7

Lab Sample ID: 140-2815-7

Client ID: D2-OA-2015

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 13

Purge Vol: 500.000 mL

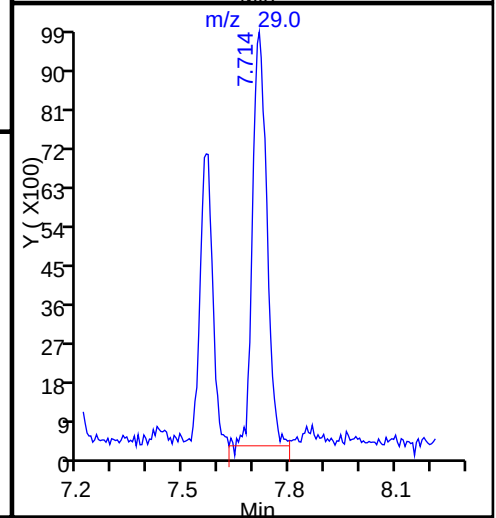
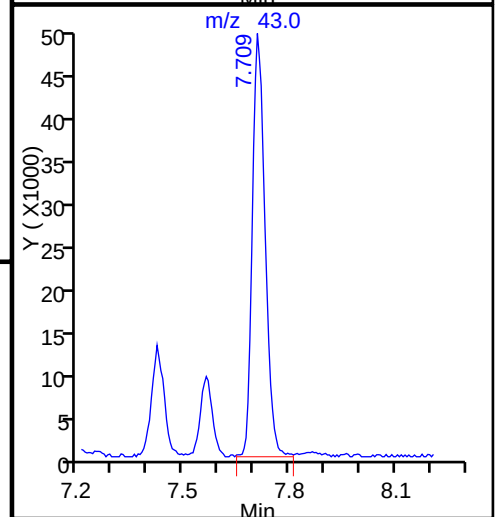
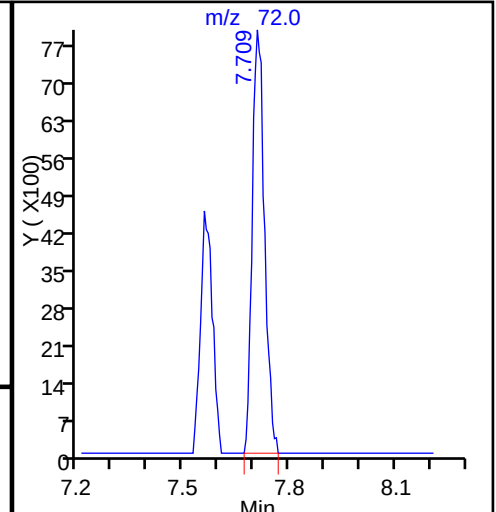
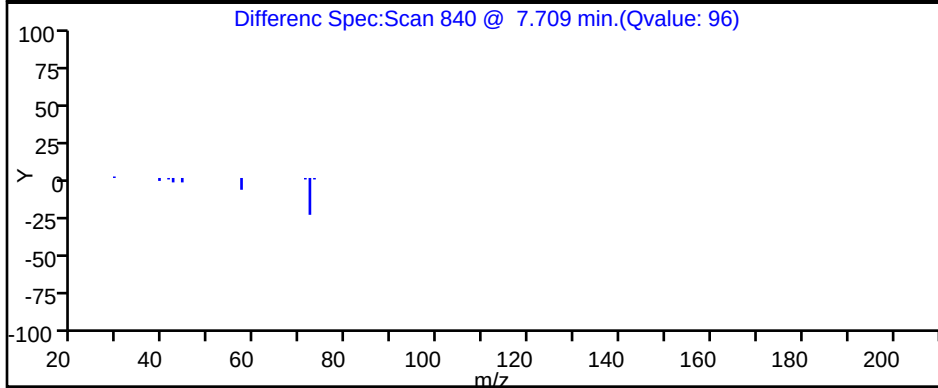
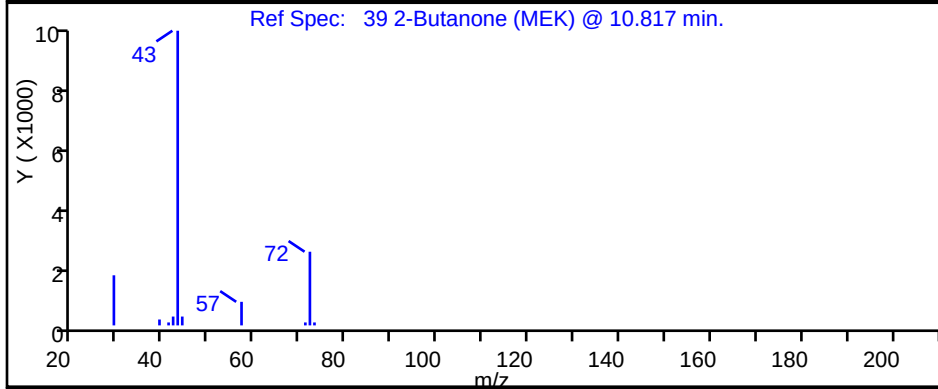
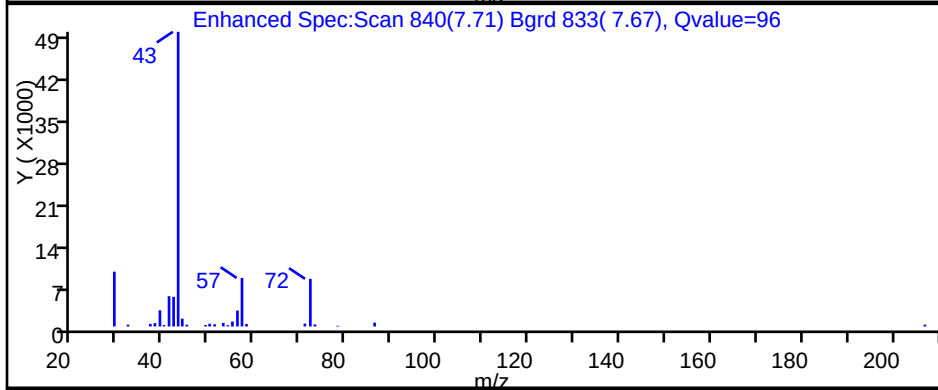
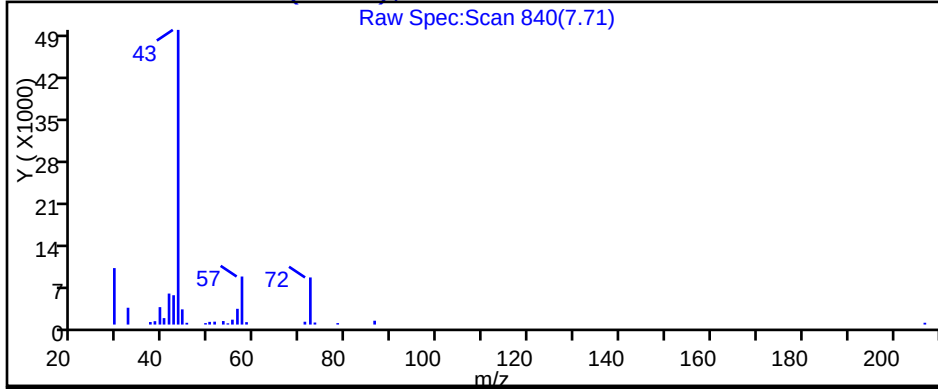
Dil. Factor: 1.0000

Method: ME_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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P109.D

Injection Date: 05-Mar-2015 19:25:30

Instrument ID: ME

Lims ID: 140-2815-A-7

Lab Sample ID: 140-2815-7

Client ID: D2-OA-2015

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 13

Purge Vol: 500.000 mL

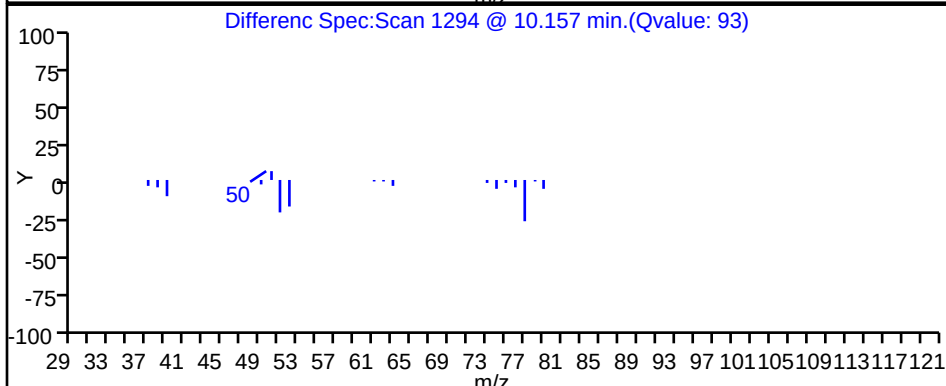
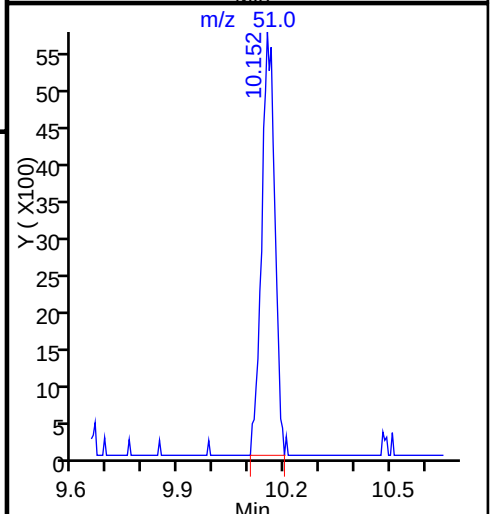
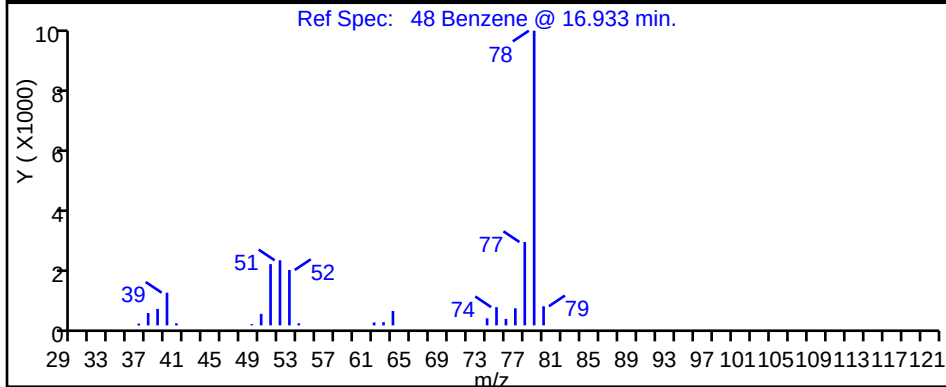
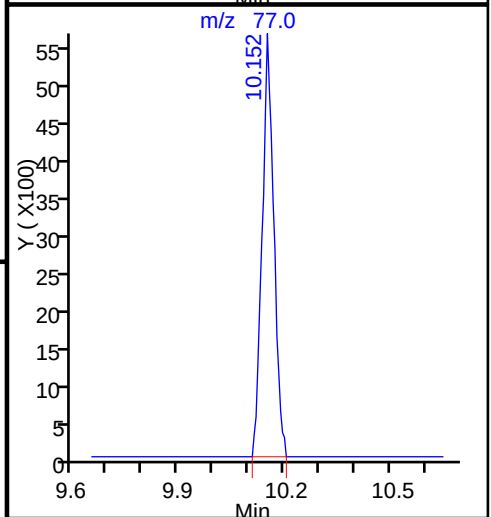
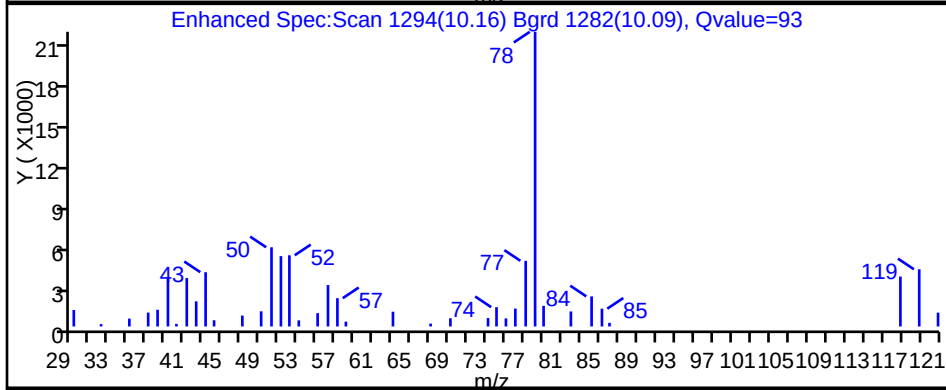
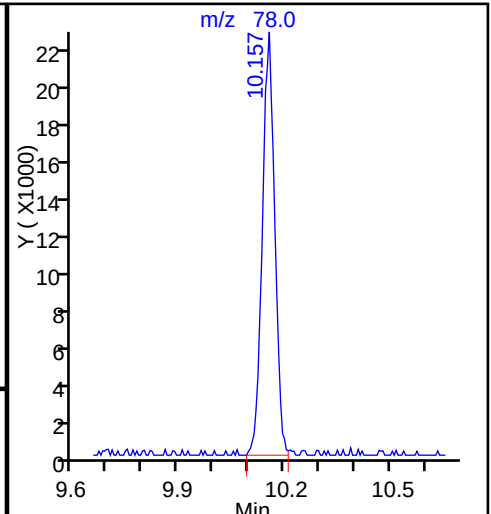
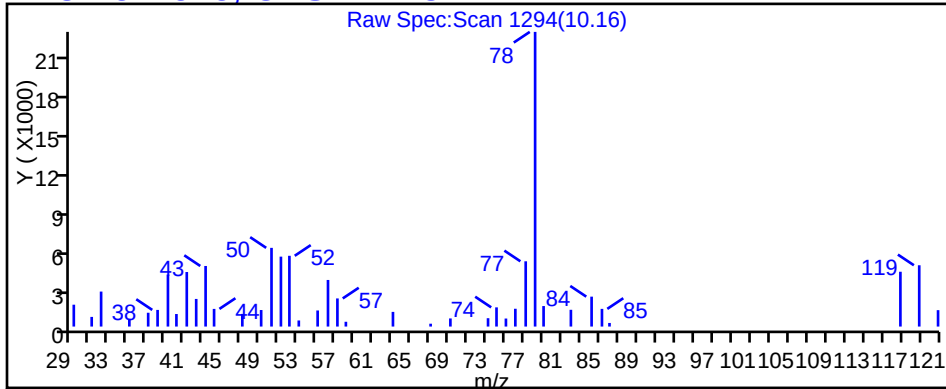
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P109.D

Injection Date: 05-Mar-2015 19:25:30

Instrument ID: ME

Lims ID: 140-2815-A-7

Lab Sample ID: 140-2815-7

Client ID: D2-OA-2015

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 13

Purge Vol: 500.000 mL

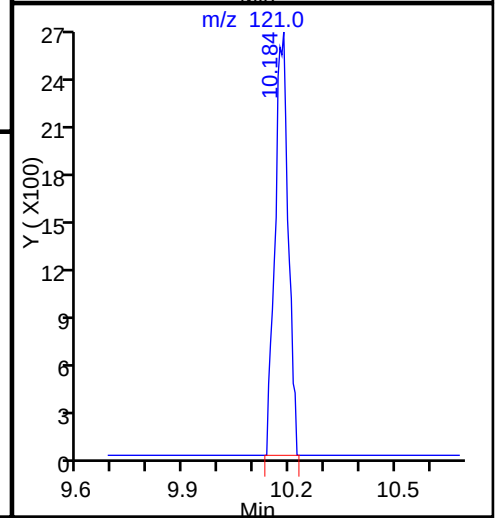
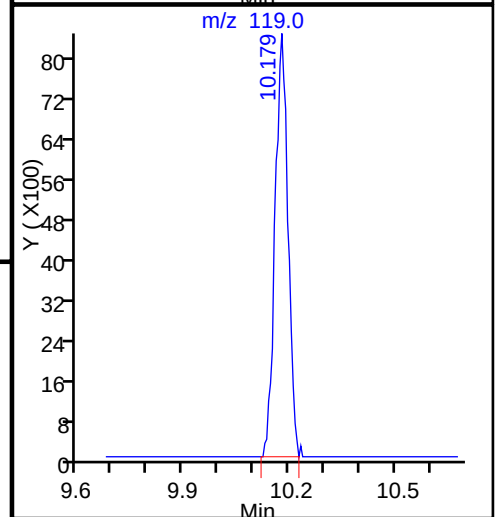
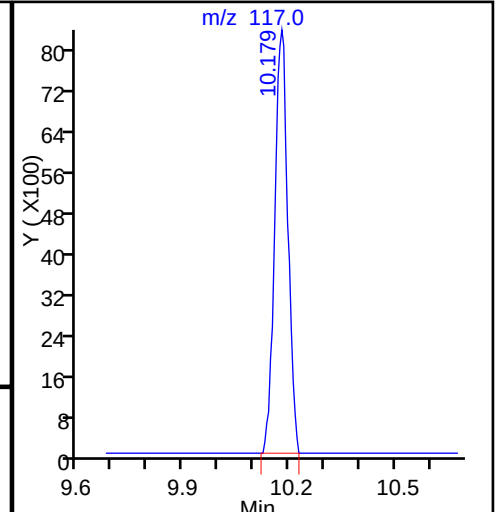
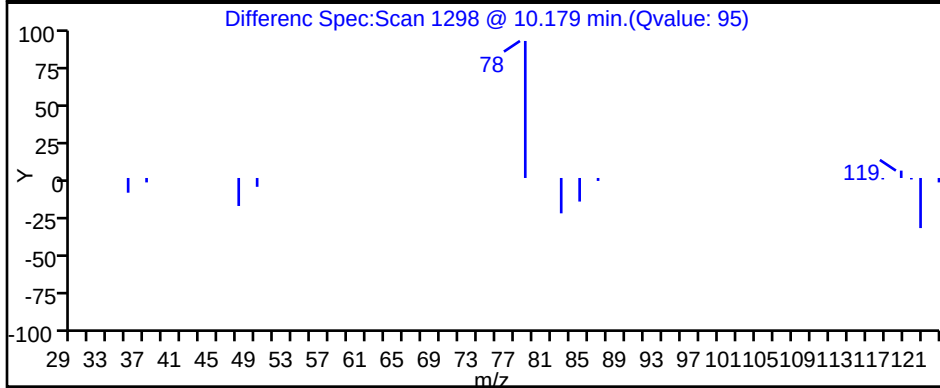
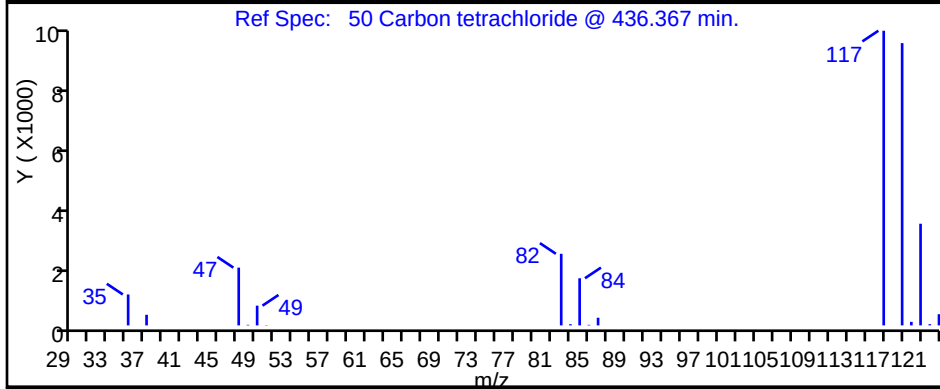
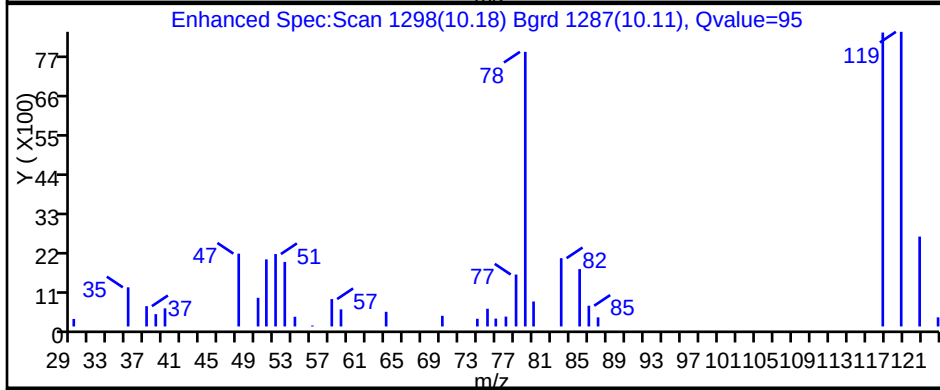
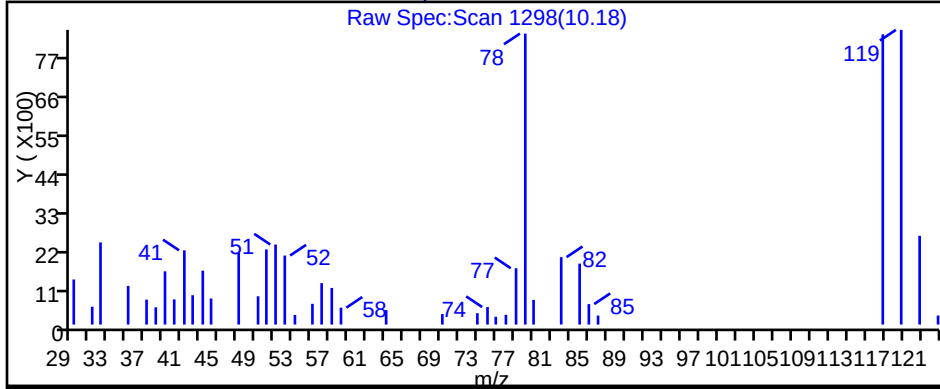
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P109.D

Injection Date: 05-Mar-2015 19:25:30

Instrument ID: ME

Lims ID: 140-2815-A-7

Lab Sample ID: 140-2815-7

Client ID: D2-OA-2015

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 13

Purge Vol: 500.000 mL

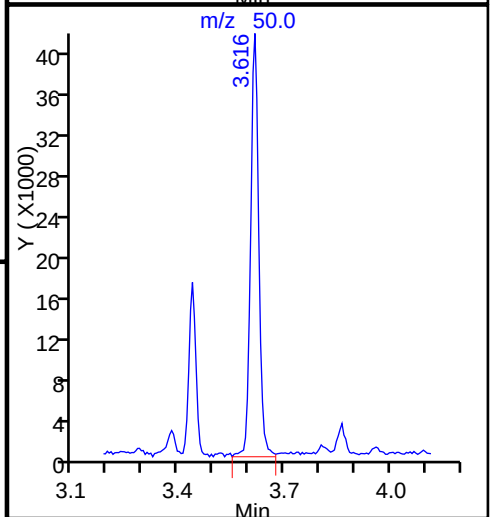
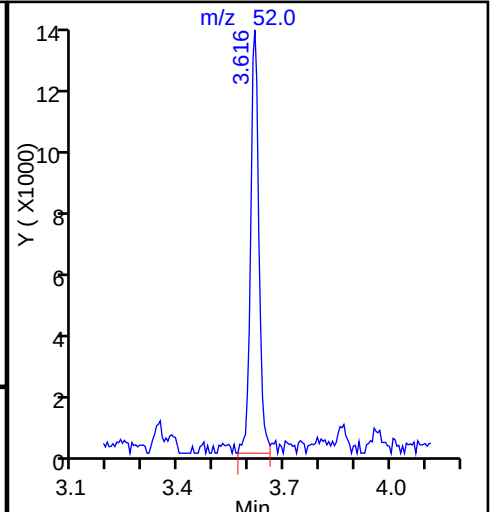
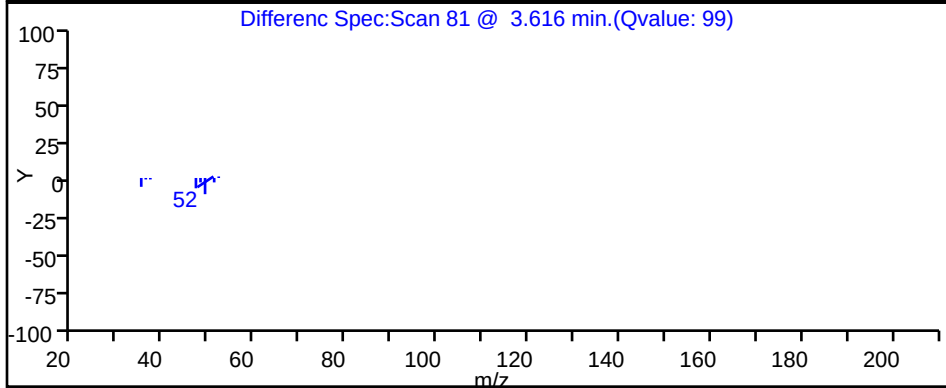
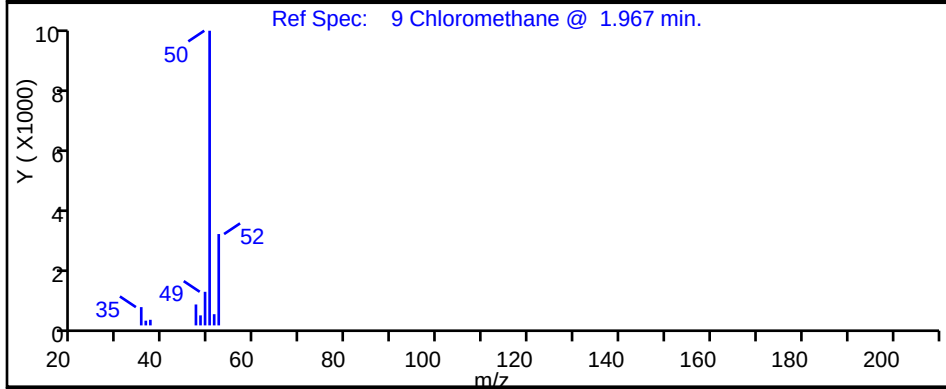
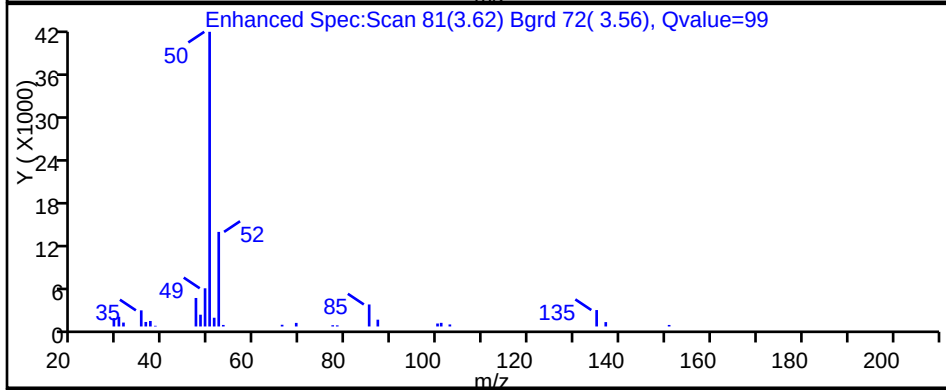
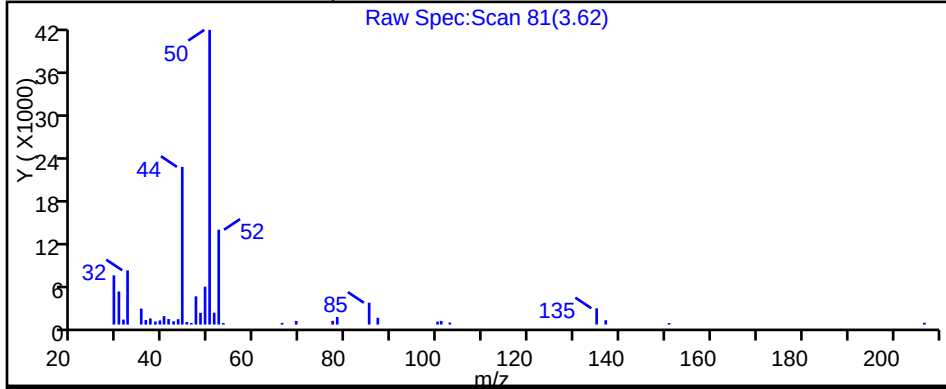
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P109.D

Injection Date: 05-Mar-2015 19:25:30

Instrument ID: ME

Lims ID: 140-2815-A-7

Lab Sample ID: 140-2815-7

Client ID: D2-OA-2015

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 13

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

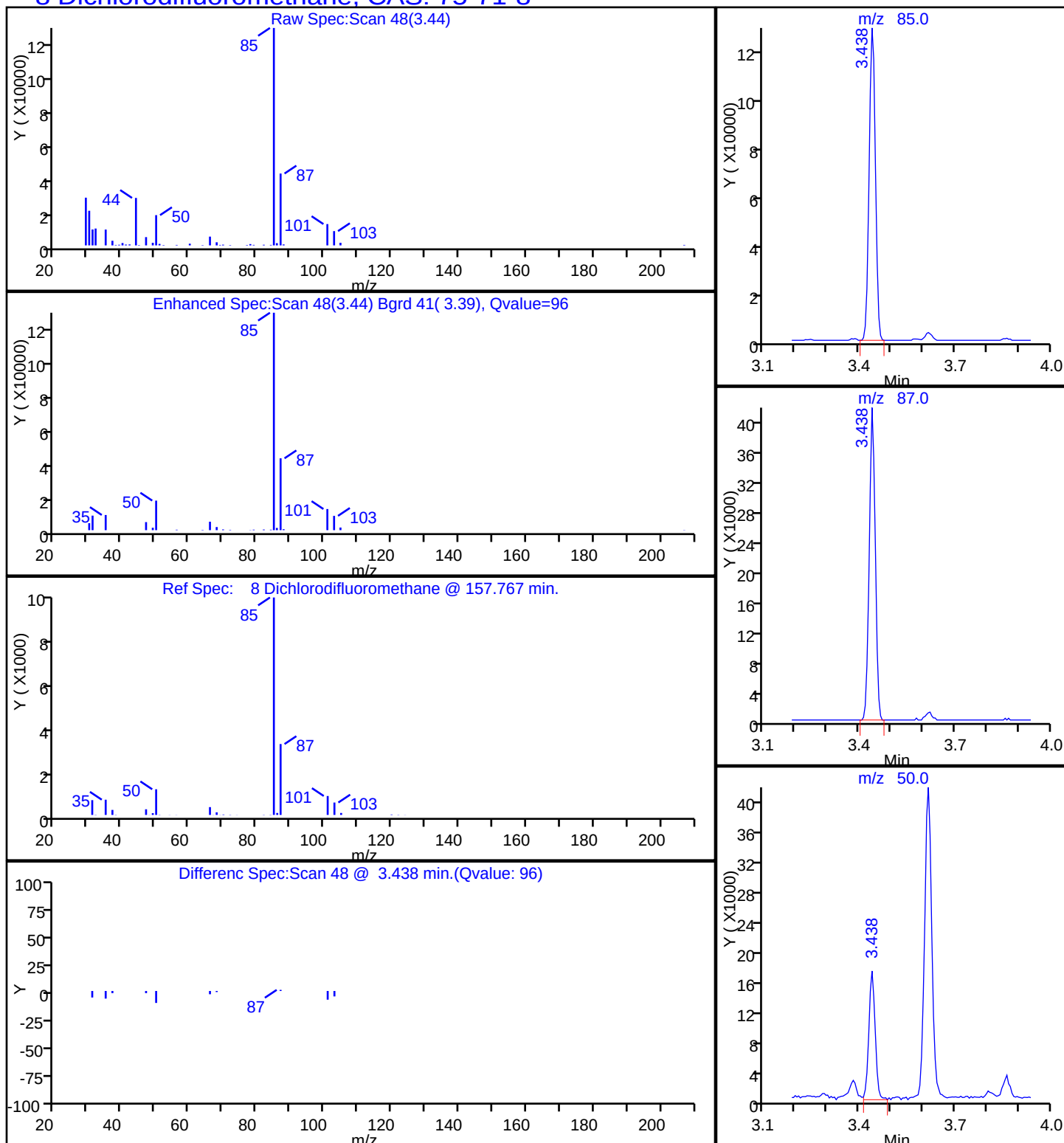
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P109.D

Injection Date: 05-Mar-2015 19:25:30

Instrument ID: ME

Lims ID: 140-2815-A-7

Lab Sample ID: 140-2815-7

Client ID: D2-OA-2015

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 13

Purge Vol: 500.000 mL

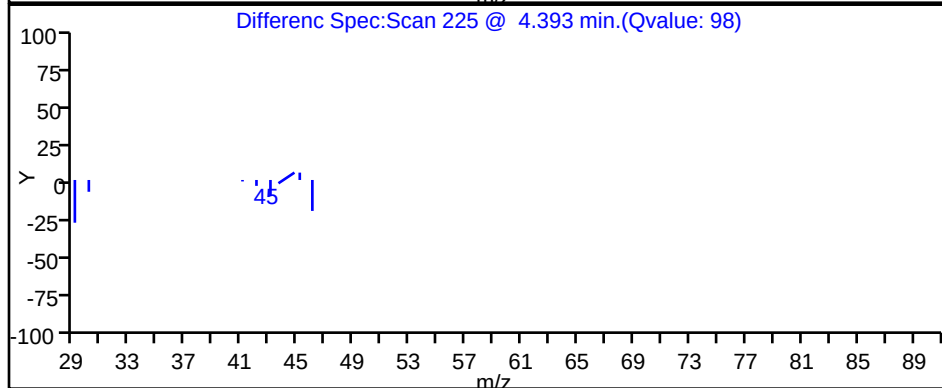
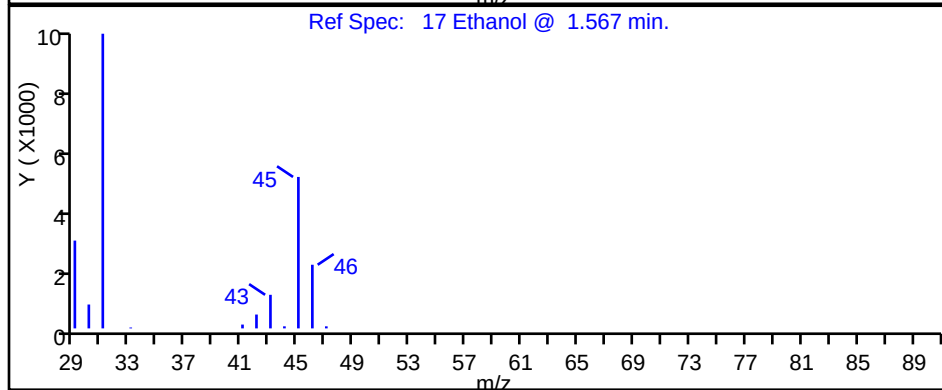
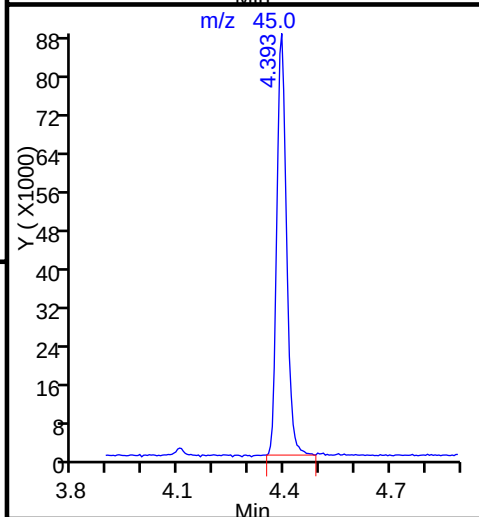
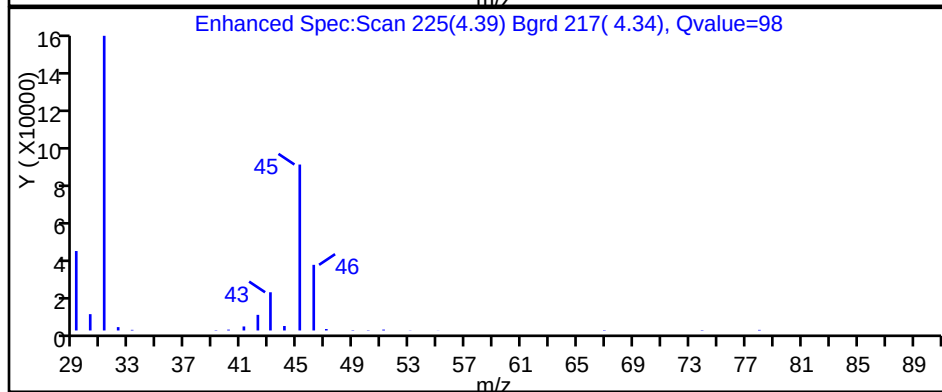
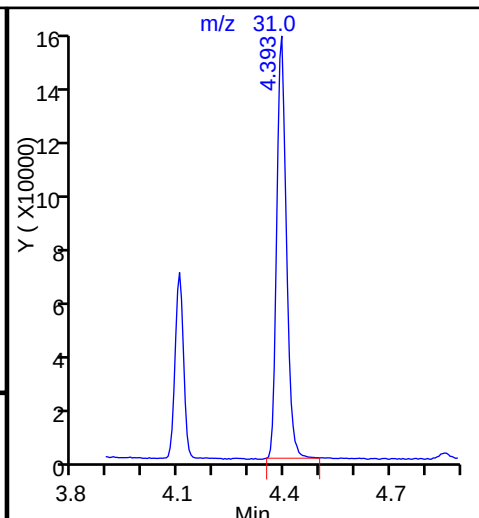
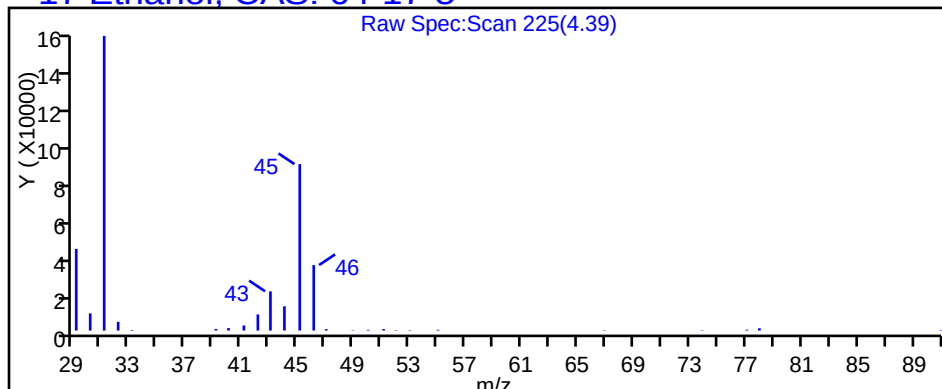
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P109.D

Injection Date: 05-Mar-2015 19:25:30

Instrument ID: ME

Lims ID: 140-2815-A-7

Lab Sample ID: 140-2815-7

Client ID: D2-OA-2015

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 13

Purge Vol: 500.000 mL

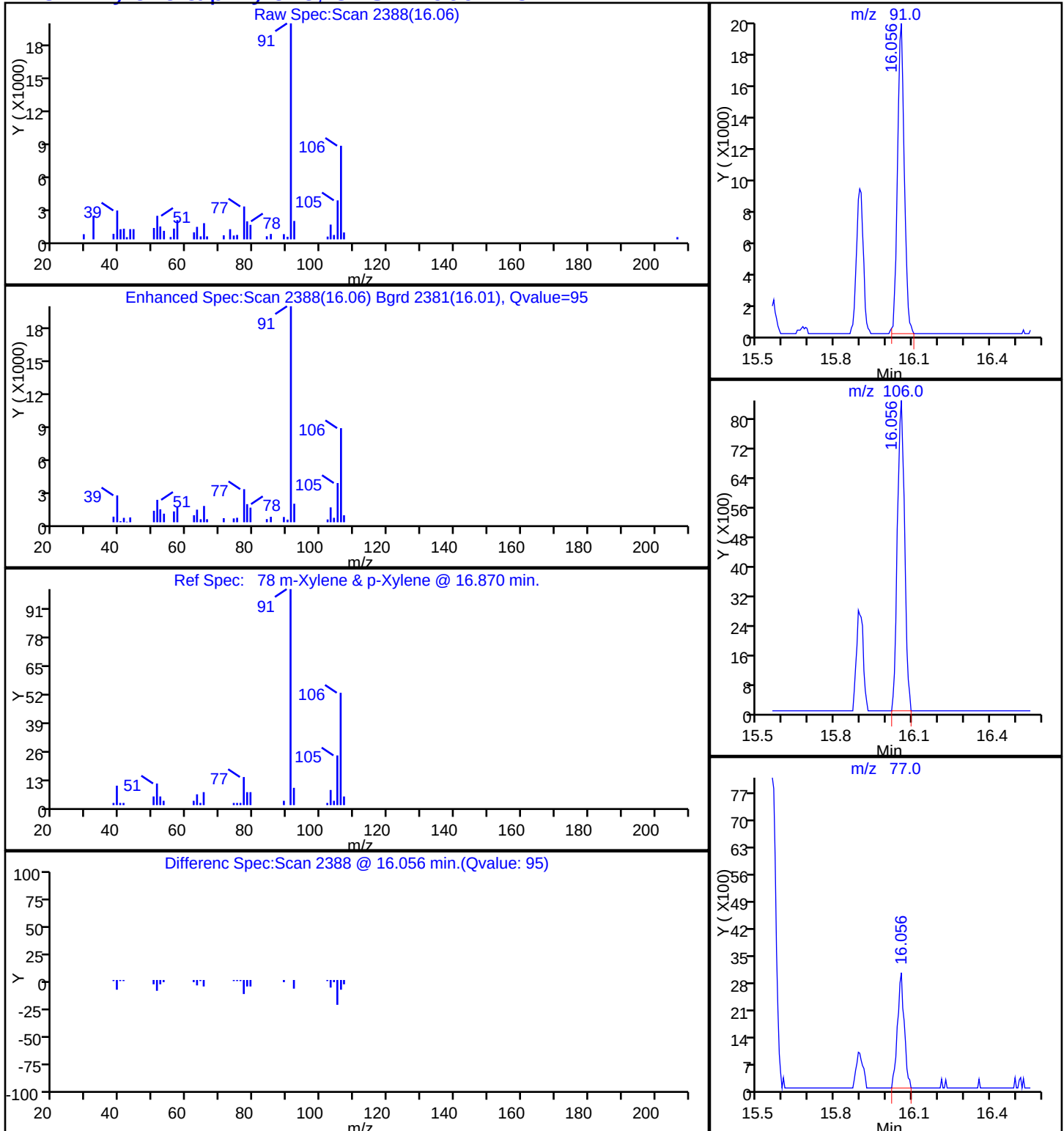
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P109.D

Injection Date: 05-Mar-2015 19:25:30

Instrument ID: ME

Lims ID: 140-2815-A-7

Lab Sample ID: 140-2815-7

Client ID: D2-OA-2015

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 13

Purge Vol: 500.000 mL

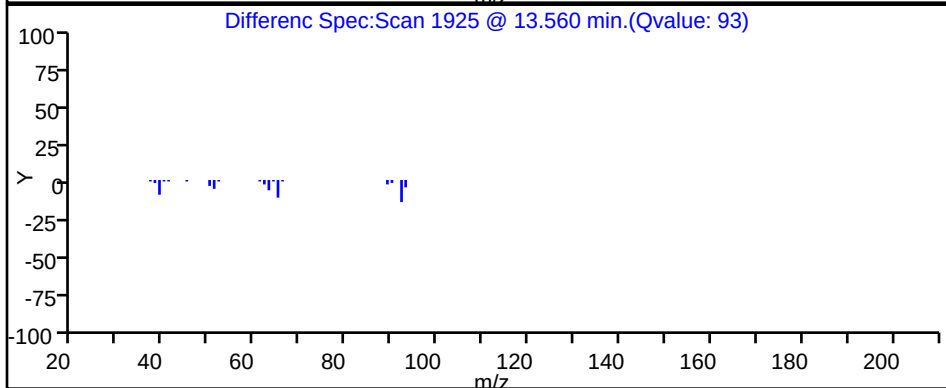
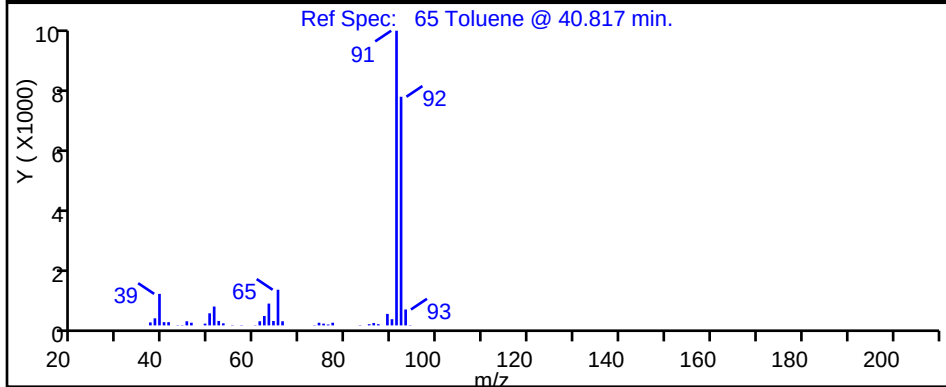
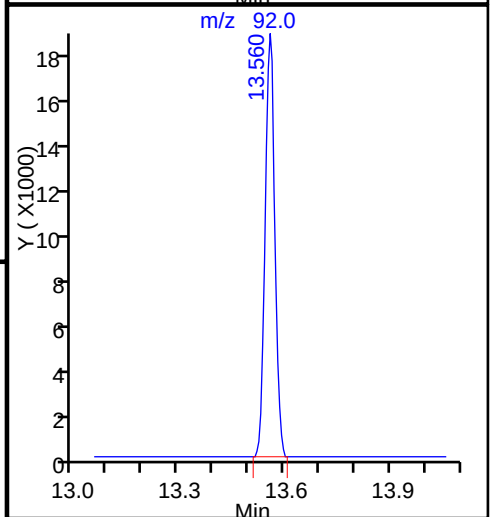
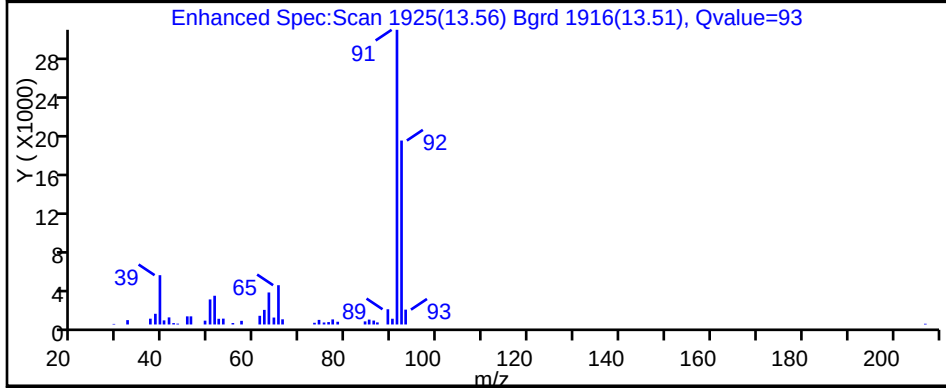
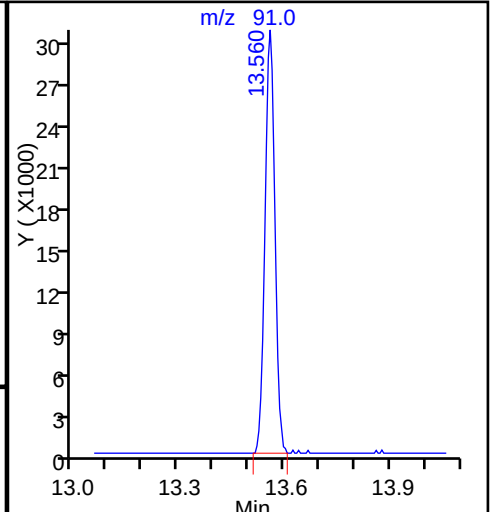
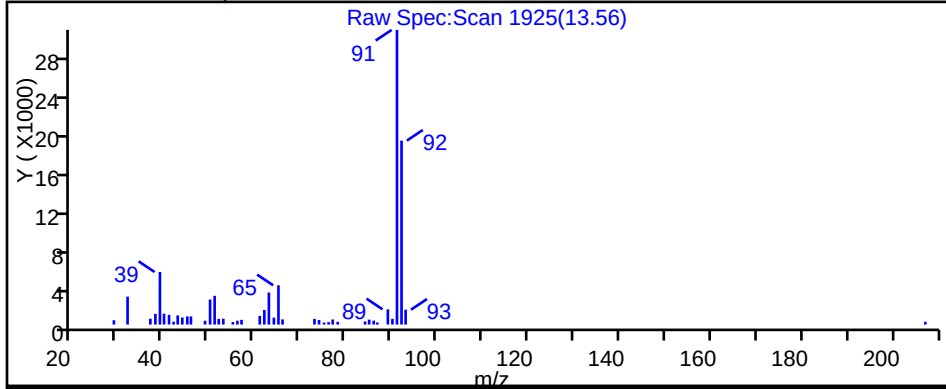
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P109.D

Injection Date: 05-Mar-2015 19:25:30

Instrument ID: ME

Lims ID: 140-2815-A-7

Lab Sample ID: 140-2815-7

Client ID: D2-OA-2015

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 13

Purge Vol: 500.000 mL

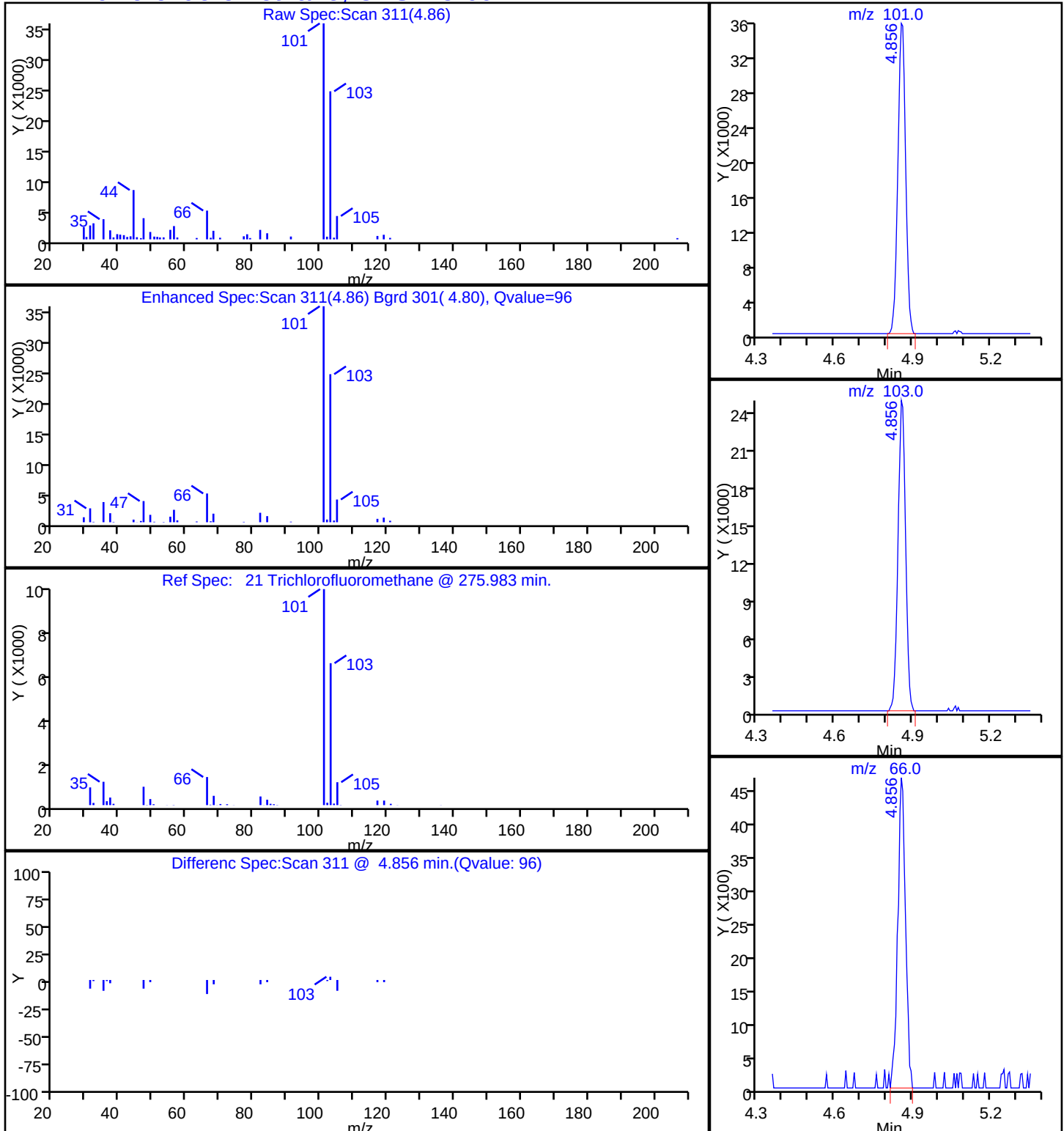
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

21 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: H28-BA-2015 Lab Sample ID: 140-2815-8

Matrix: Air Lab File ID: EC05P110.D

Analysis Method: TO 15 LL Date Collected: 02/25/2015 13:05

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 20:15

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.: 2464 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		0.080	
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	0.21		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	0.067		0.040	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	0.082		0.080	
74-87-3	Chloromethane	50.49	0.64		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: H28-BA-2015 Lab Sample ID: 140-2815-8
 Matrix: Air Lab File ID: EC05P110.D
 Analysis Method: TO 15 LL Date Collected: 02/25/2015 13:05
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 20:15
 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.: 2464 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	0.47		0.080	
64-17-5	Ethanol	46.07	230	E	0.80	
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	0.096		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	0.18		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		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.22		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: H28-BA-2015 Lab Sample ID: 140-2815-8

Matrix: Air Lab File ID: EC05P110.D

Analysis Method: TO 15 LL Date Collected: 02/25/2015 13:05

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 20:15

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.: 2464 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		0.32	
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	0.67		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		0.25	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	0.40		0.39	
74-87-3	Chloromethane	50.49	1.3		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: H28-BA-2015 Lab Sample ID: 140-2815-8
 Matrix: Air Lab File ID: EC05P110.D
 Analysis Method: TO 15 LL Date Collected: 02/25/2015 13:05
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 20:15
 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.: 2464 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	2.3		0.40	
64-17-5	Ethanol	46.07	430	E	1.5	
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	0.42		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	0.69		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		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.3		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P110.D
 Lims ID: 140-2815-A-8 Lab Sample ID: 140-2815-8
 Client ID: H28-BA-2015
 Sample Type: Client
 Inject. Date: 05-Mar-2015 20:15:30 ALS Bottle#: 10 Worklist Smp#: 14
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2815-a-8
 Misc. Info.: E030515,TO155,,140-0001425-014
 Operator ID: 7126 Instrument ID: ME
 Method: \\KNXCHROM\ChromData\ME\20150304-1425.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 10-Mar-2015 07:56:09 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK004

First Level Reviewer: tajh

Date: 06-Mar-2015 07:42:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.491	8.491	0.000	97	350078	4.00	
* 2 1,4-Difluorobenzene	114	10.728	10.729	-0.001	96	1602602	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.555	15.555	0.000	91	1473273	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.210	17.210	0.000	85	1113197	4.01	
8 Dichlorodifluoromethane	85	3.438	3.438	0.000	96	168418	0.4710	
9 Chloromethane	52	3.616	3.616	0.000	81	23312	0.6357	M
10 1,2-Dichloro-1,1,2,2-tetra	135	3.616	3.621	-0.005	28	3274	0.0145	
15 Bromomethane	94	4.177	4.177	0.000	82	2079	0.0207	
16 Chloroethane	64	4.306	4.306	0.000	70	1318	0.0239	
17 Ethanol	31	4.419	4.393	0.026	93	9413964	226.0	E
21 Trichlorofluoromethane	101	4.856	4.862	-0.006	98	71380	0.2237	
29 2-Methyl-2-propanol	59	5.692	5.654	0.038	69	8156	0.0397	
30 1,1,2-Trichloro-1,2,2-trif	101	5.730	5.735	-0.005	89	14691	0.0651	
31 Methylene Chloride	84	5.913	5.919	-0.006	93	16278	0.1699	
39 2-Butanone (MEK)	72	7.714	7.709	0.005	92	12675	0.2768	
40 Hexane	56	7.725	7.730	-0.005	61	11331	0.1135	
43 Chloroform	83	8.507	8.502	0.005	22	21286	0.0823	
49 Cyclohexane	69	10.157	10.152	0.005	32	1680	0.0322	
48 Benzene	78	10.151	10.157	-0.006	96	63667	0.2111	
50 Carbon tetrachloride	117	10.184	10.179	0.005	88	21179	0.0667	
53 Isooctane	57	10.944	10.944	0.000	91	29795	0.0497	
56 Trichloroethene	130	11.456	11.462	-0.006	74	4399	0.0260	
62 4-Methyl-2-pentanone (MIBK	43	12.675	12.664	0.011	96	31611	0.1227	
65 Toluene	91	13.559	13.560	-0.001	92	67952	0.1840	
76 Ethylbenzene	91	15.900	15.894	0.006	82	16733	0.0349	
78 m-Xylene & p-Xylene	91	16.056	16.056	0.000	95	35597	0.0964	
82 o-Xylene	91	16.590	16.585	0.005	83	14284	0.0370	
93 1,2,4-Trimethylbenzene	105	18.407	18.402	0.005	80	11410	0.0272	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P110.D

Injection Date: 05-Mar-2015 20:15:30

Instrument ID: ME

Operator ID: 7126

Lims ID: 140-2815-A-8

Lab Sample ID: 140-2815-8

Worklist Smp#: 14

Client ID: H28-BA-2015

Purge Vol: 500.000 mL

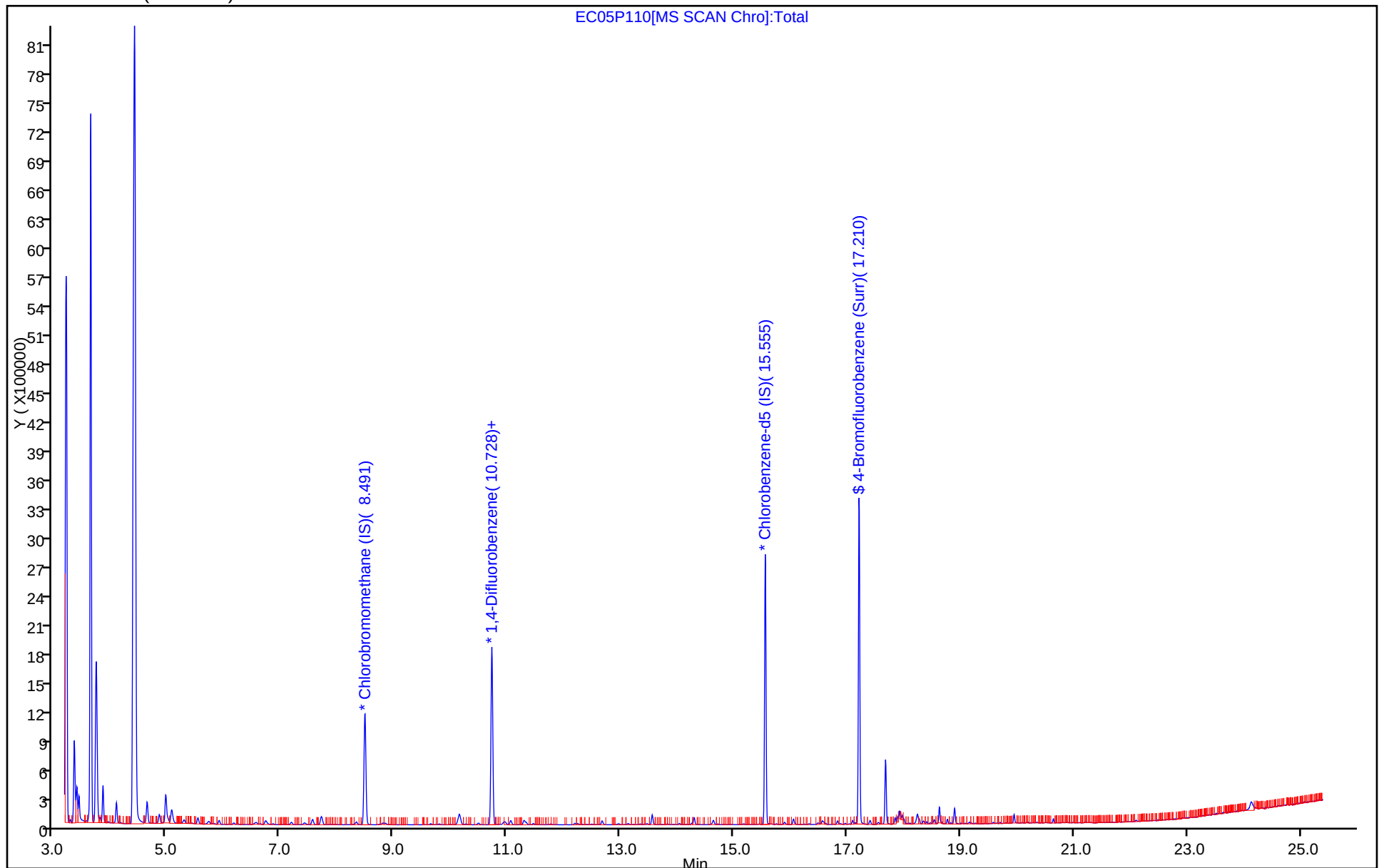
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P110.D

Injection Date: 05-Mar-2015 20:15:30

Instrument ID: ME

Lims ID: 140-2815-A-8

Lab Sample ID: 140-2815-8

Client ID: H28-BA-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

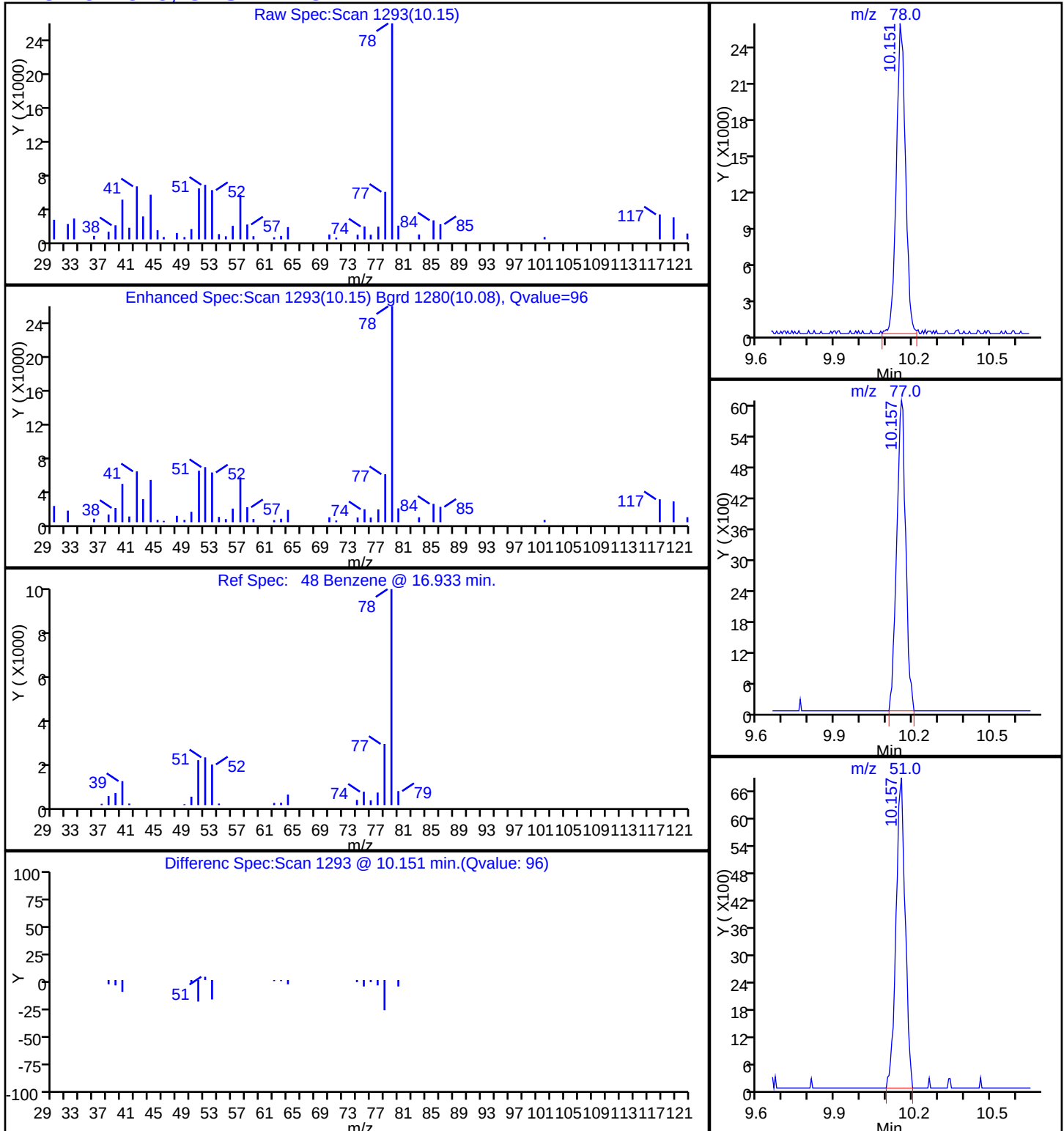
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P110.D

Injection Date: 05-Mar-2015 20:15:30

Instrument ID: ME

Lims ID: 140-2815-A-8

Lab Sample ID: 140-2815-8

Client ID: H28-BA-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

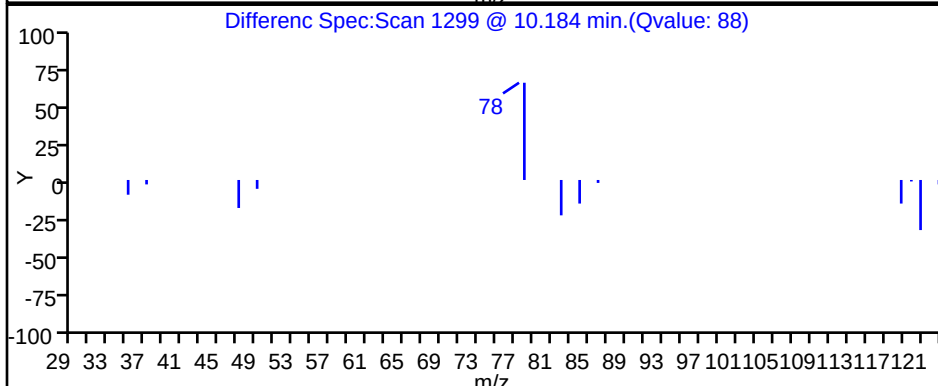
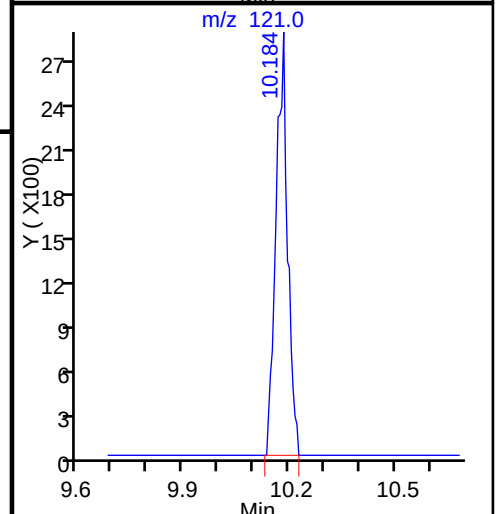
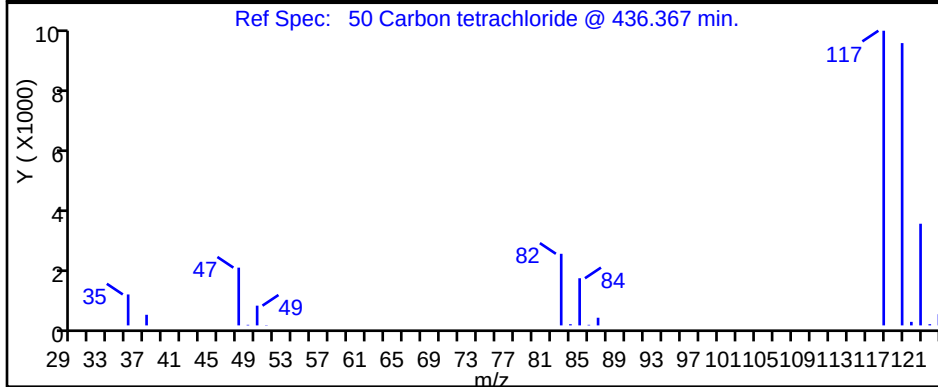
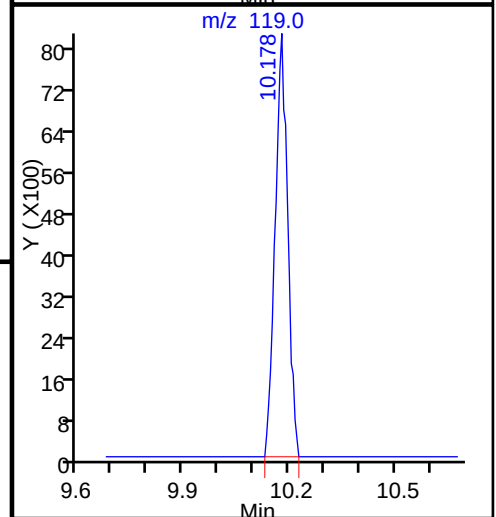
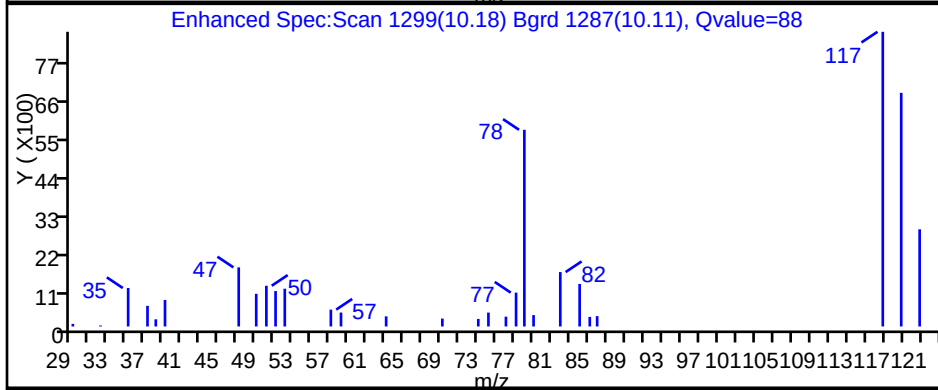
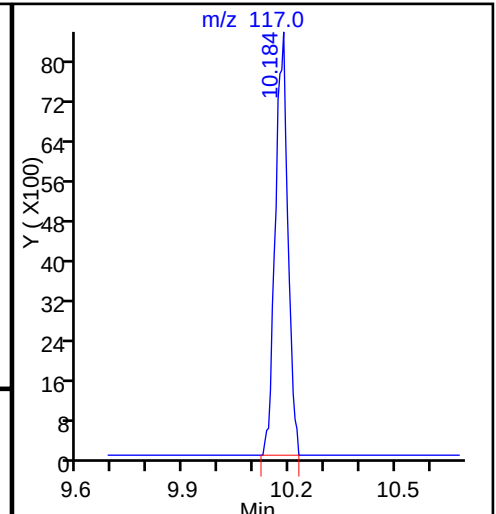
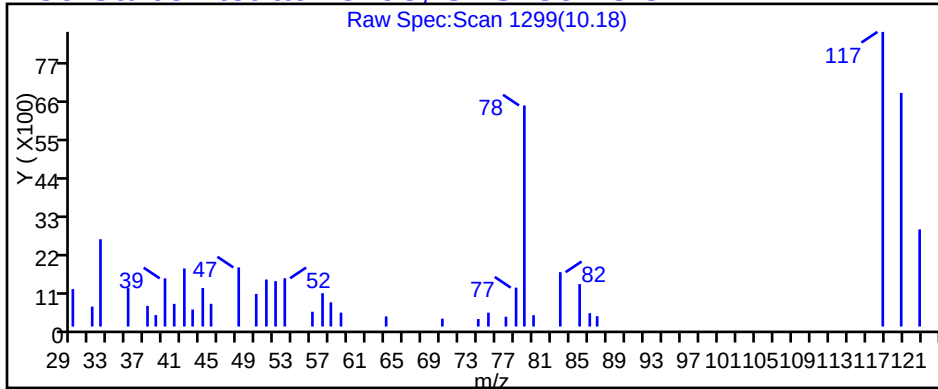
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P110.D

Injection Date: 05-Mar-2015 20:15:30

Instrument ID: ME

Lims ID: 140-2815-A-8

Lab Sample ID: 140-2815-8

Client ID: H28-BA-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

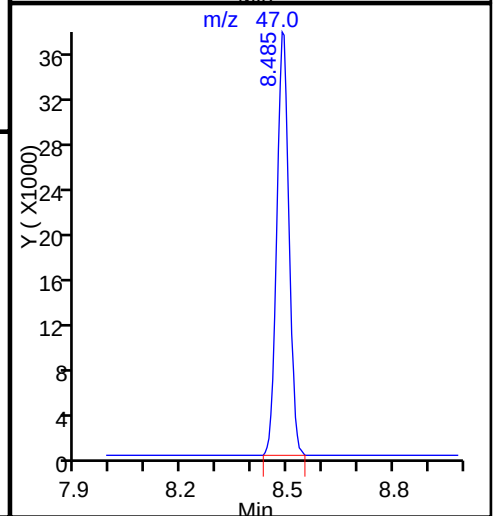
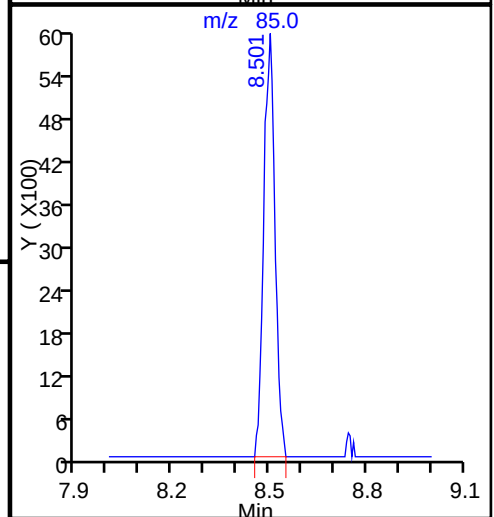
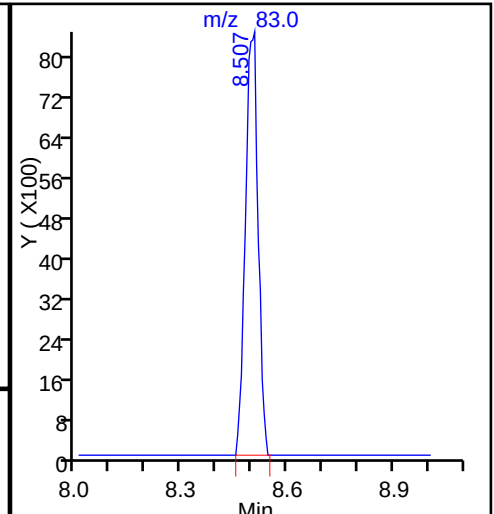
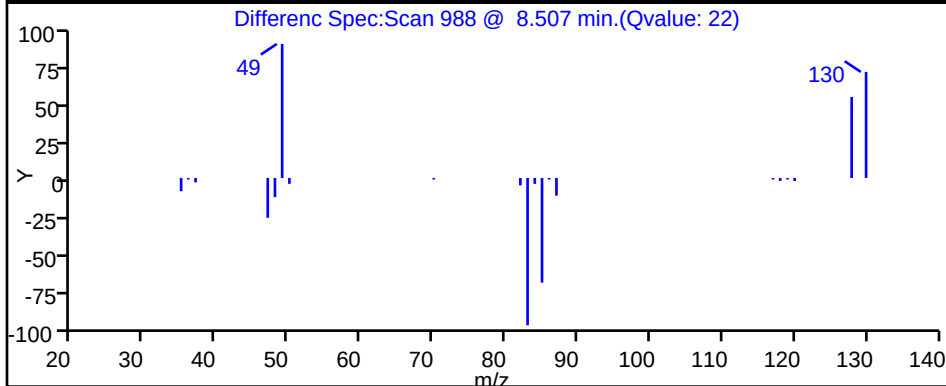
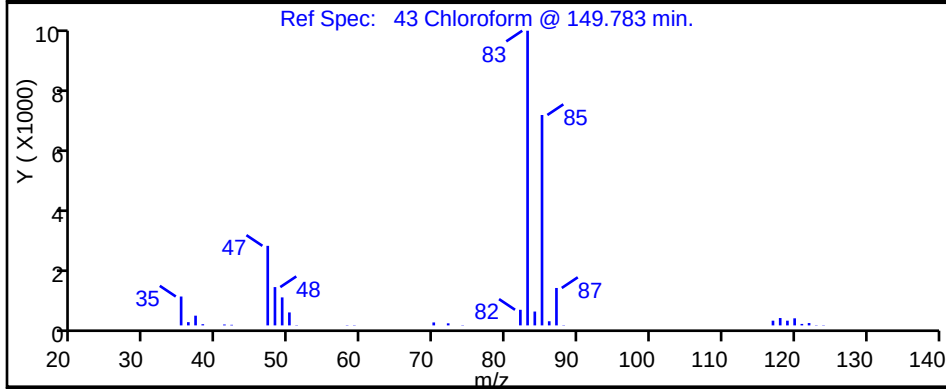
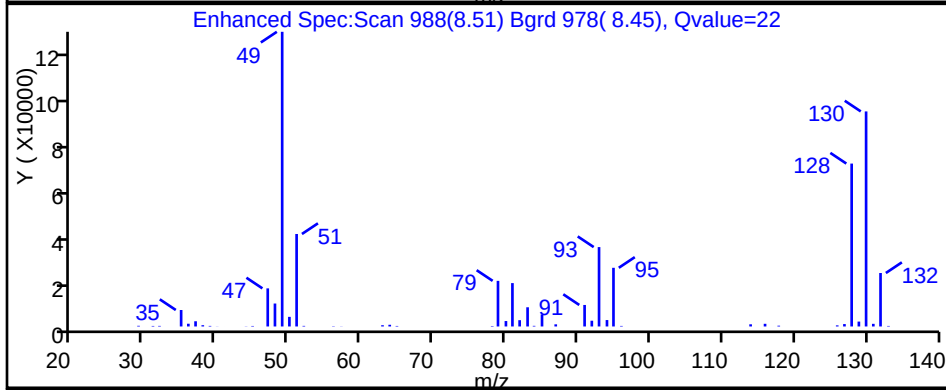
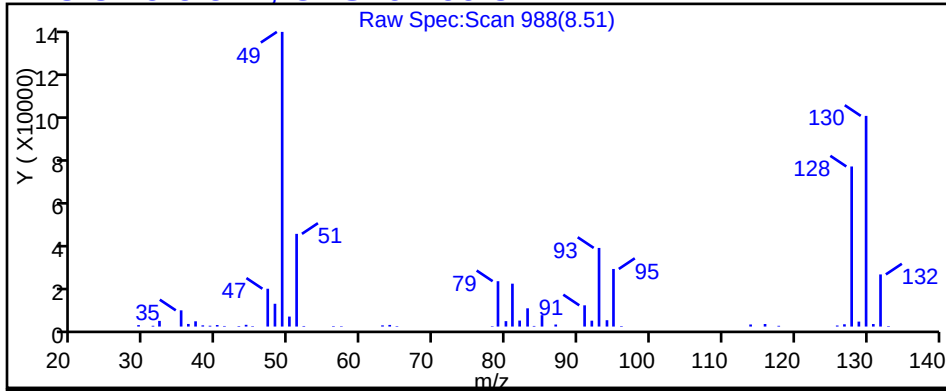
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

43 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P110.D

Injection Date: 05-Mar-2015 20:15:30

Instrument ID: ME

Lims ID: 140-2815-A-8

Lab Sample ID: 140-2815-8

Client ID: H28-BA-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

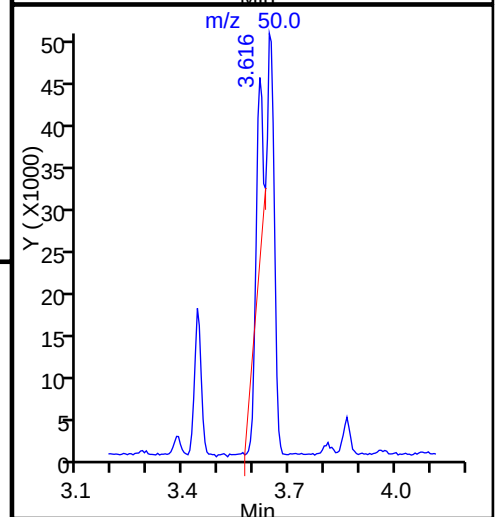
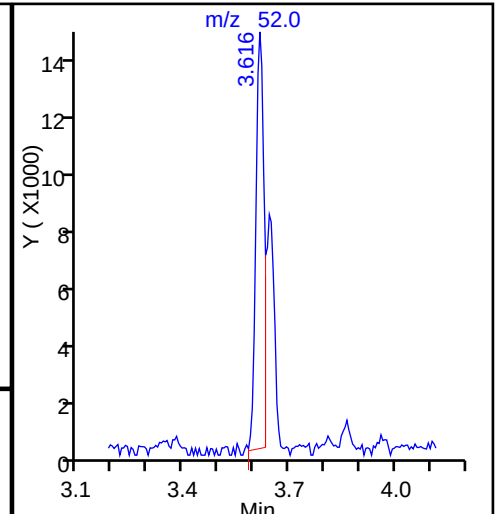
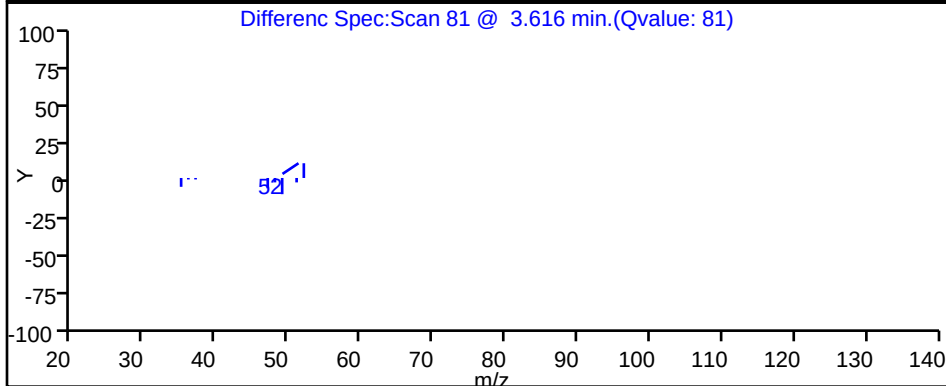
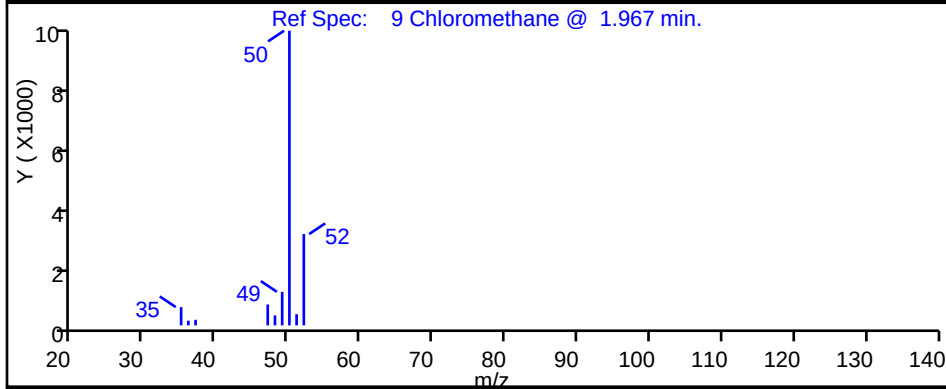
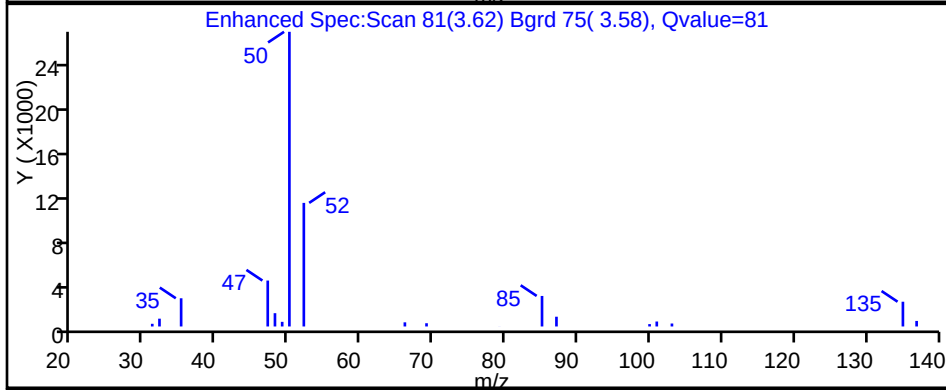
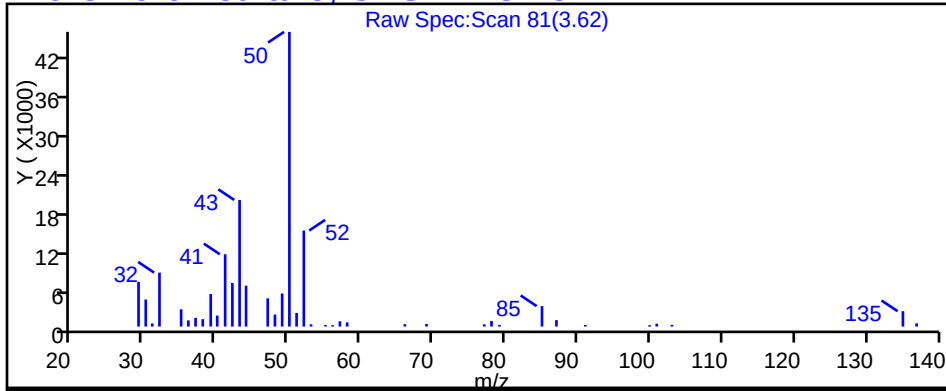
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P110.D

Injection Date: 05-Mar-2015 20:15:30

Instrument ID: ME

Lims ID: 140-2815-A-8

Lab Sample ID: 140-2815-8

Client ID: H28-BA-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

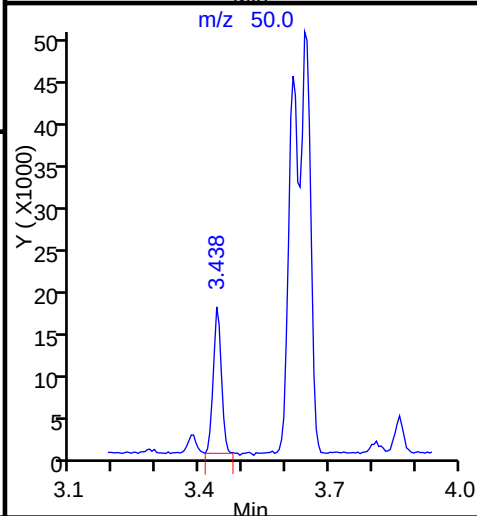
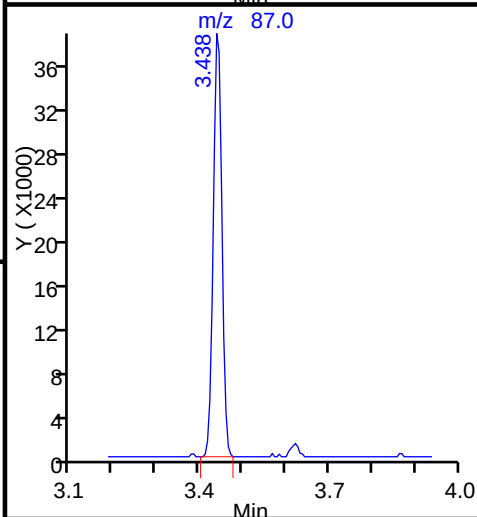
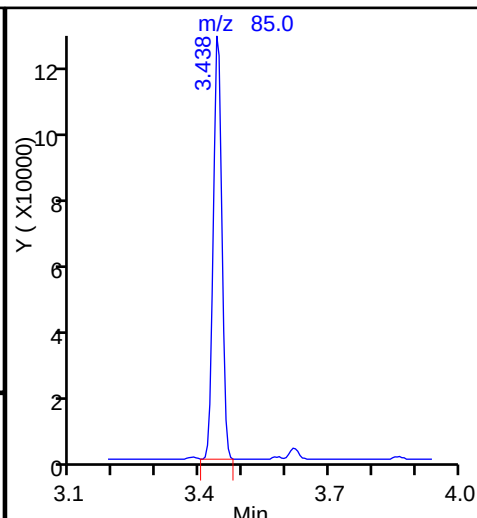
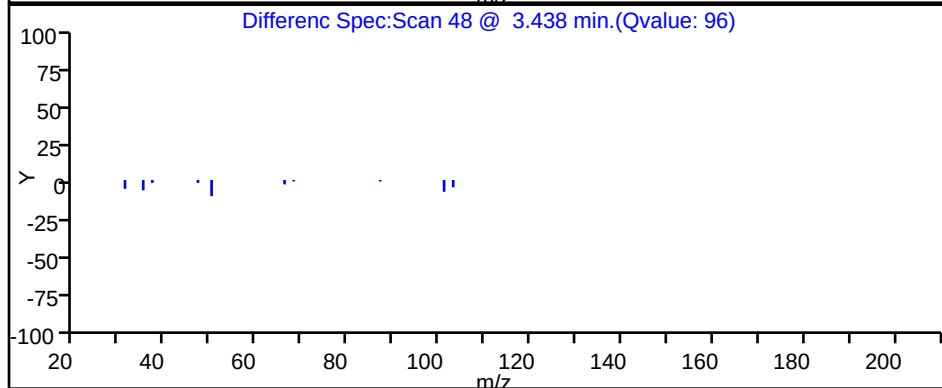
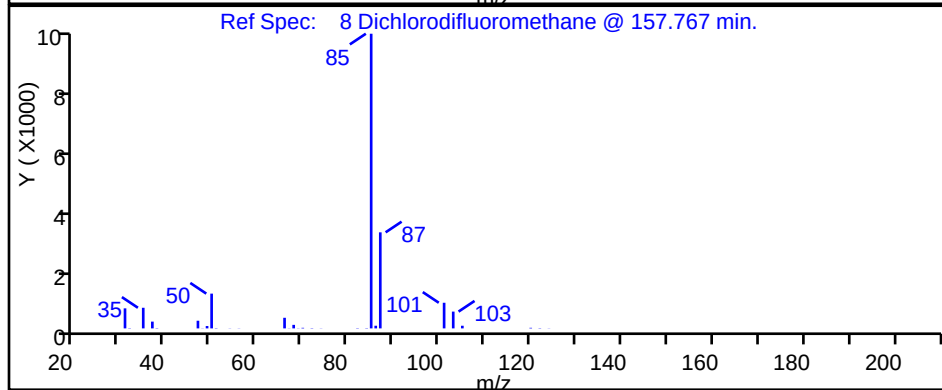
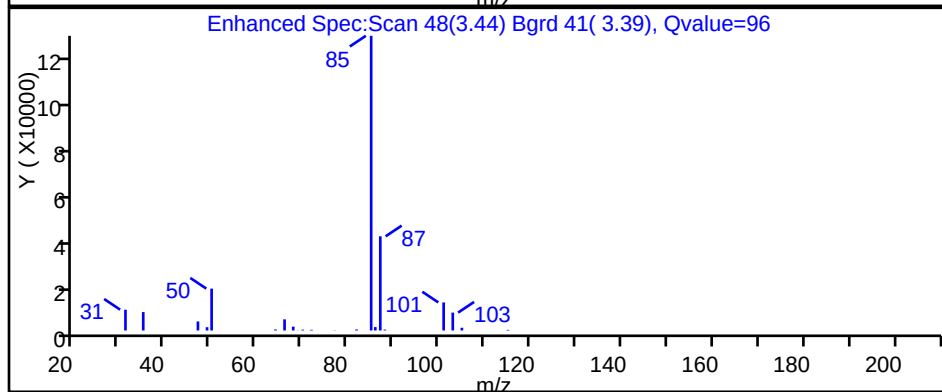
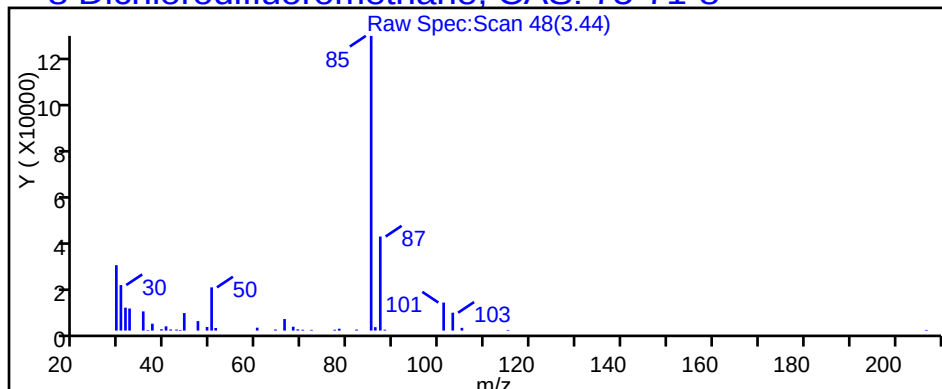
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P110.D

Injection Date: 05-Mar-2015 20:15:30

Instrument ID: ME

Lims ID: 140-2815-A-8

Lab Sample ID: 140-2815-8

Client ID: H28-BA-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

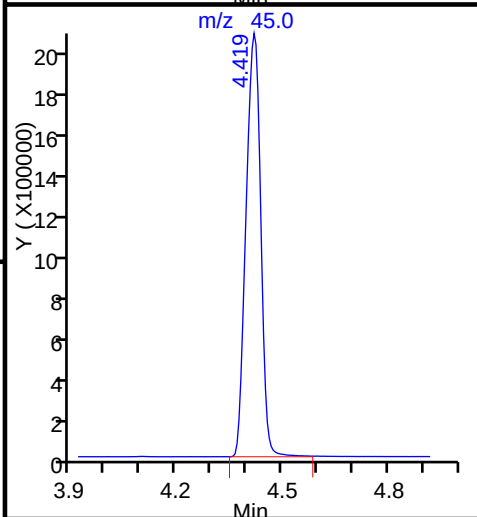
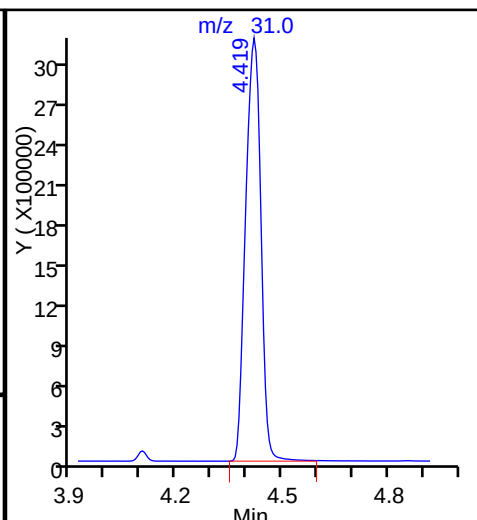
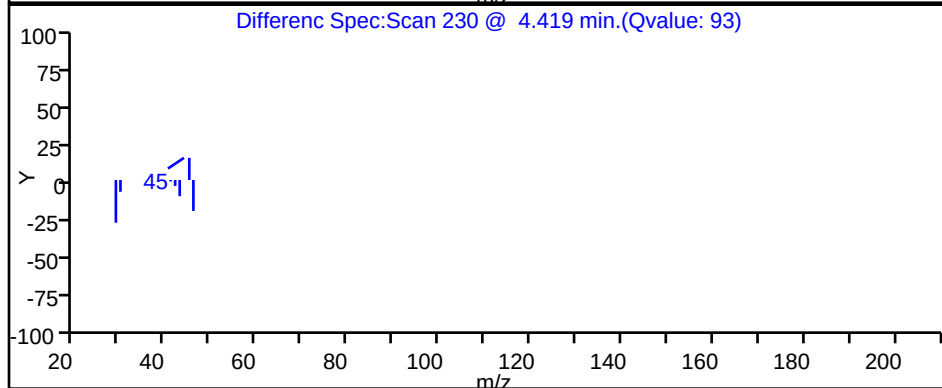
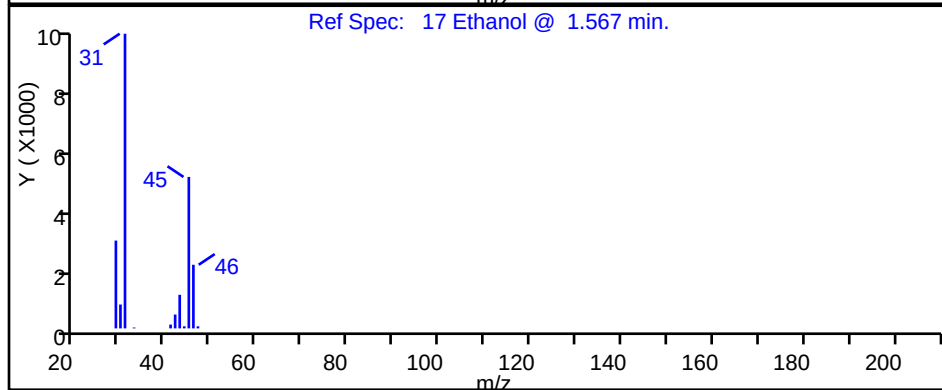
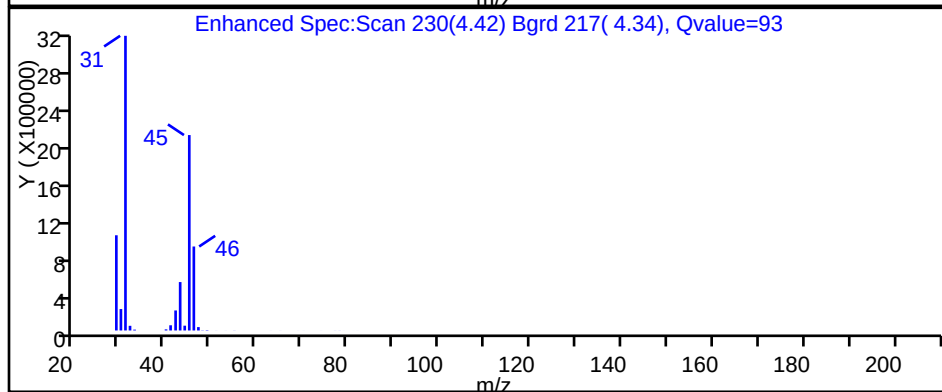
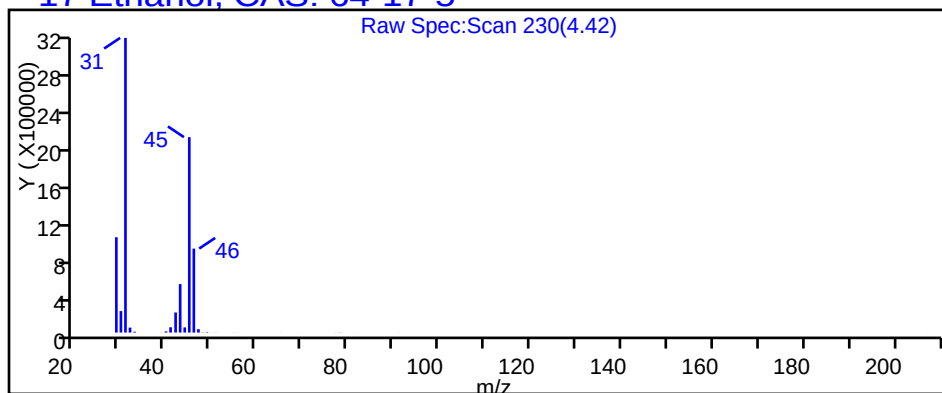
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P110.D

Injection Date: 05-Mar-2015 20:15:30

Instrument ID: ME

Lims ID: 140-2815-A-8

Lab Sample ID: 140-2815-8

Client ID: H28-BA-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

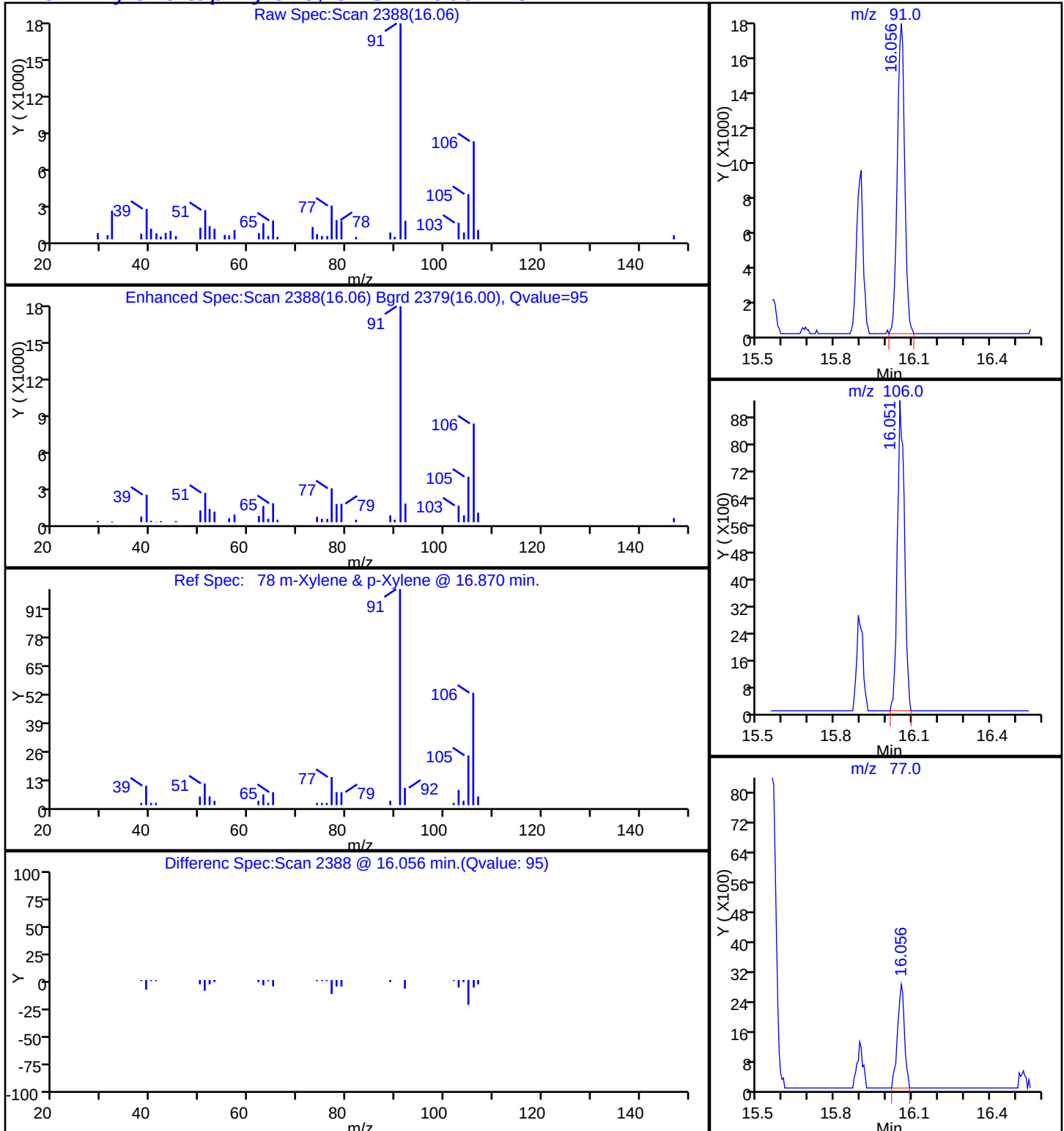
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P110.D

Injection Date: 05-Mar-2015 20:15:30

Instrument ID: ME

Lims ID: 140-2815-A-8

Lab Sample ID: 140-2815-8

Client ID: H28-BA-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

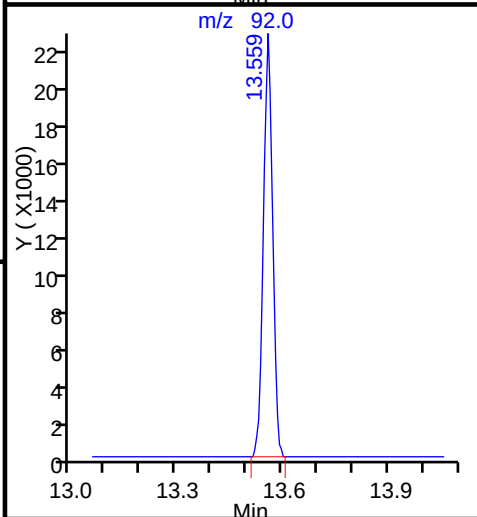
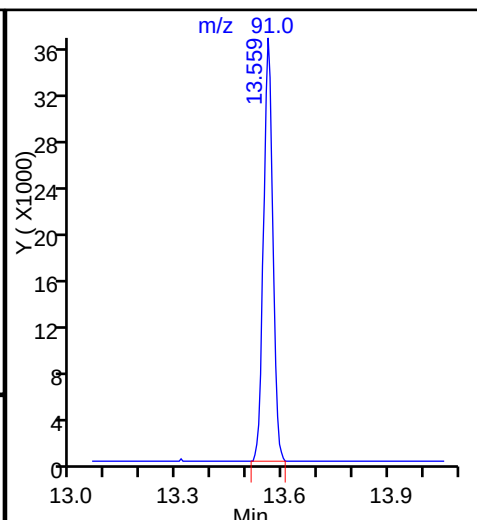
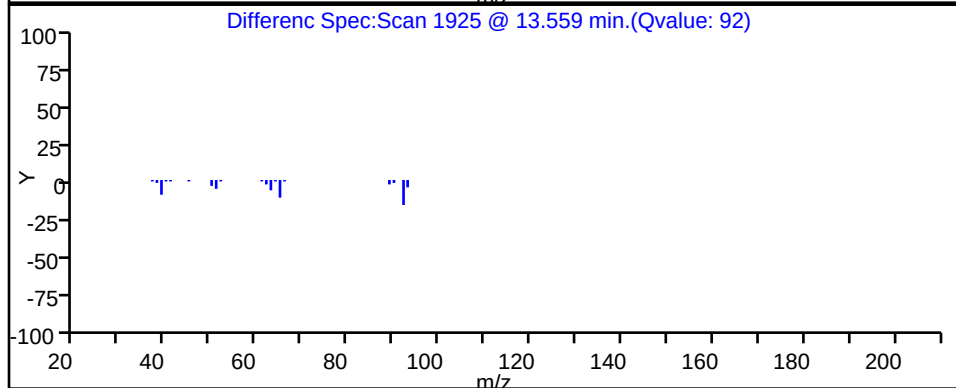
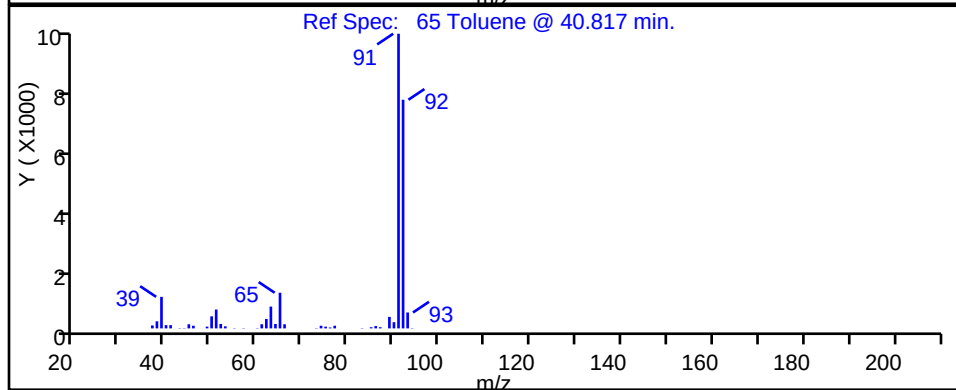
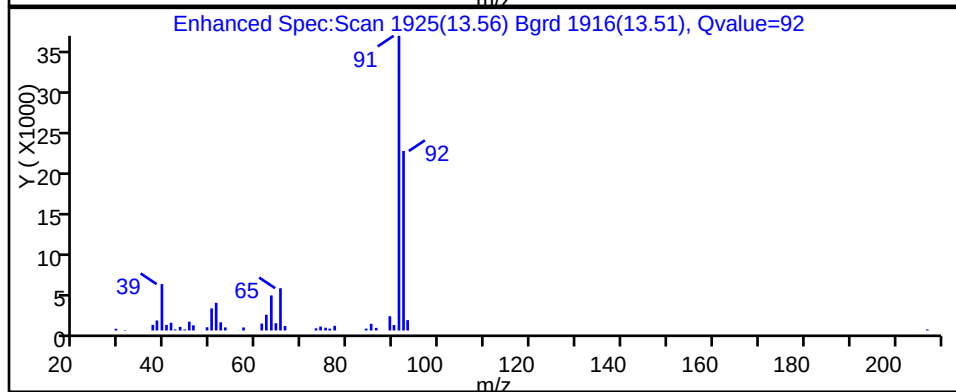
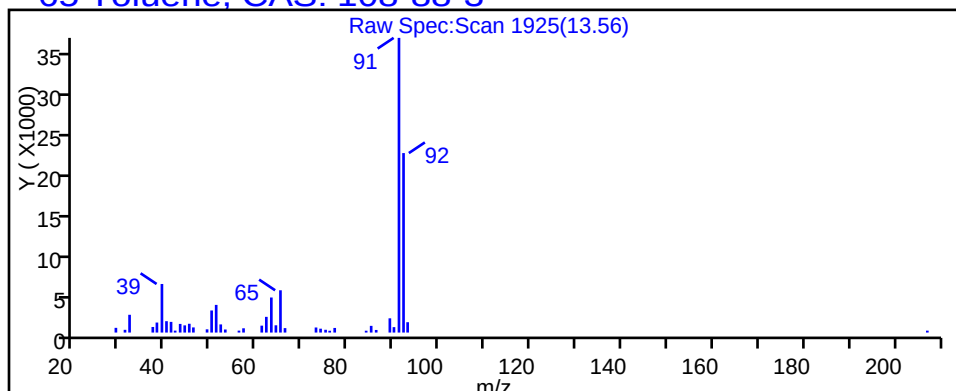
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P110.D

Injection Date: 05-Mar-2015 20:15:30

Instrument ID: ME

Lims ID: 140-2815-A-8

Lab Sample ID: 140-2815-8

Client ID: H28-BA-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

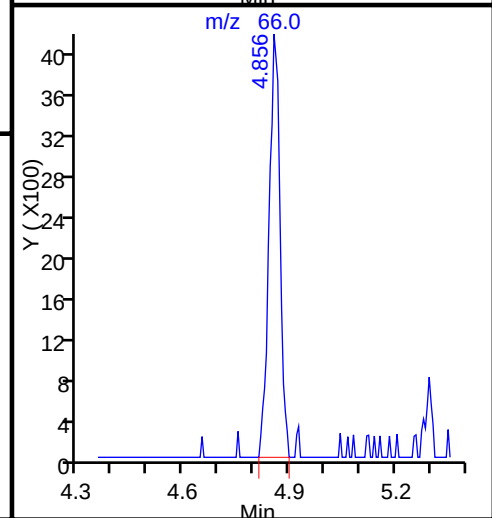
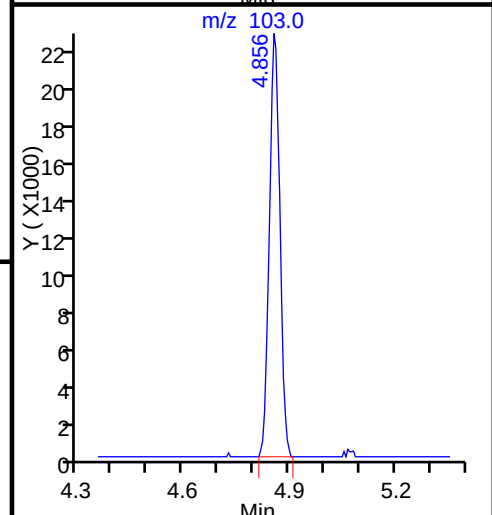
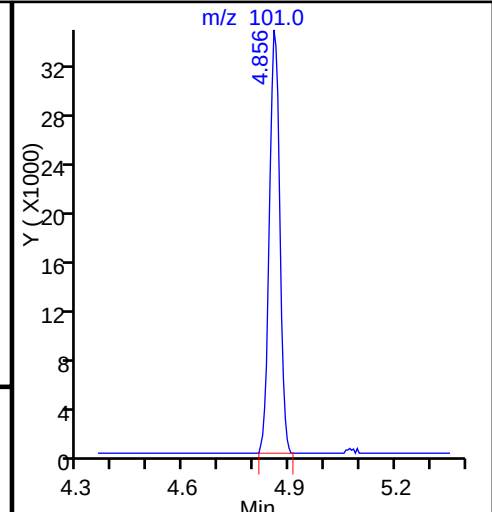
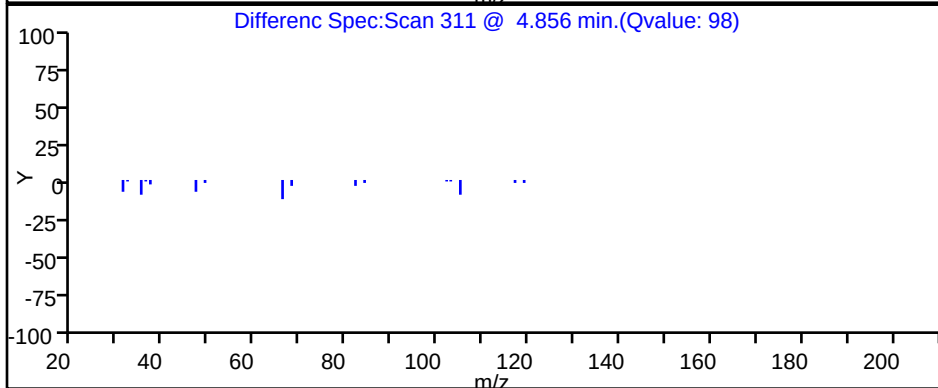
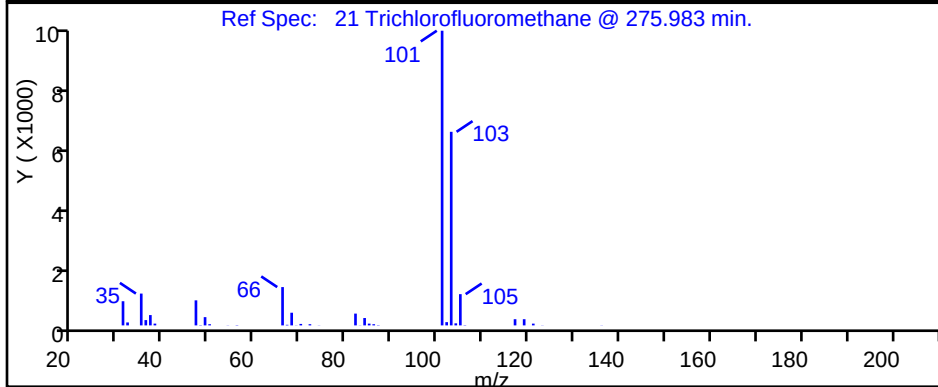
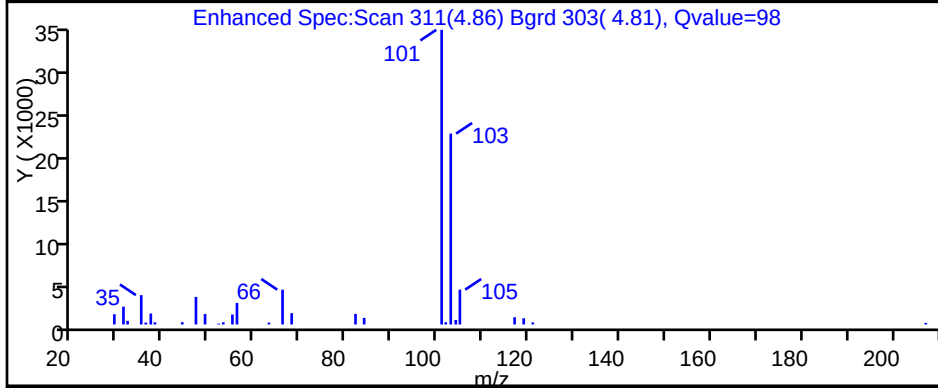
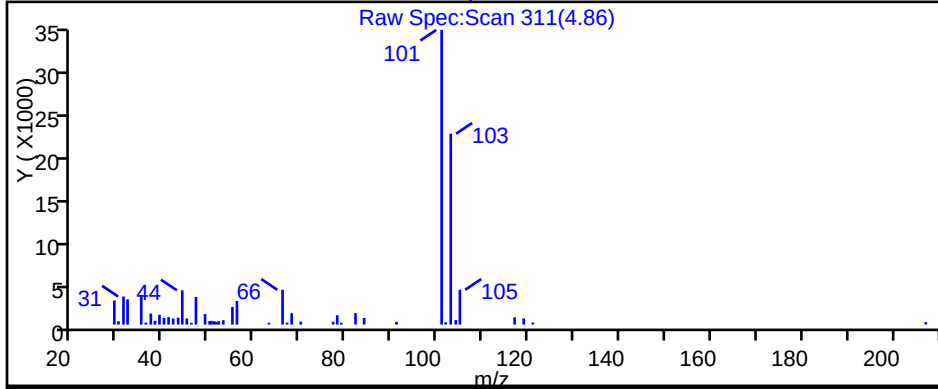
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

21 Trichlorofluoromethane, CAS: 75-69-4

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P110.D

Injection Date: 05-Mar-2015 20:15:30

Instrument ID: ME

Lims ID: 140-2815-A-8

Lab Sample ID: 140-2815-8

Client ID: H28-BA-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

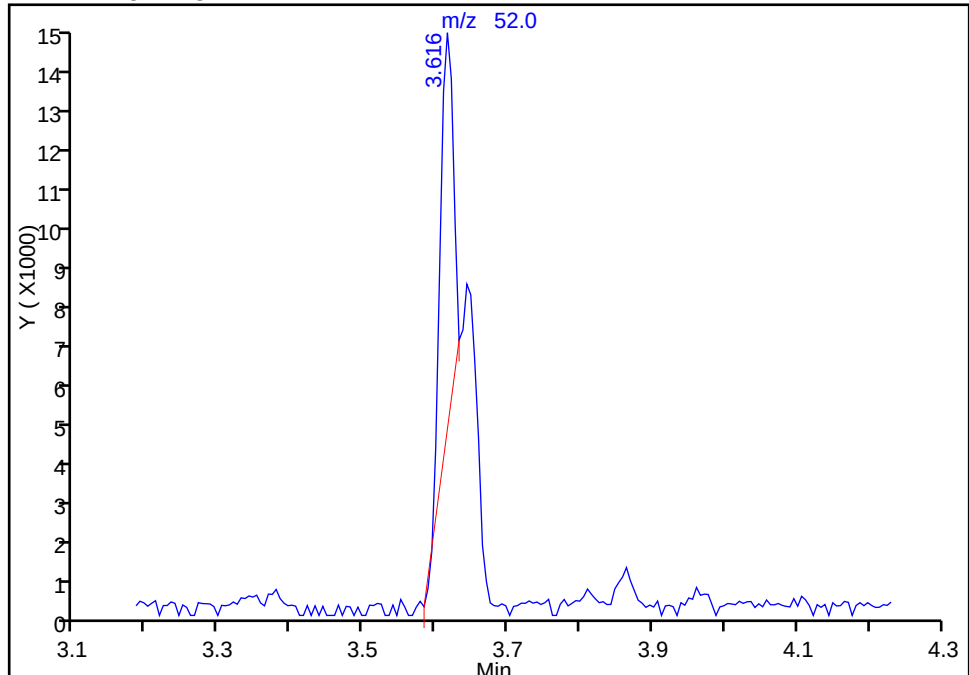
Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

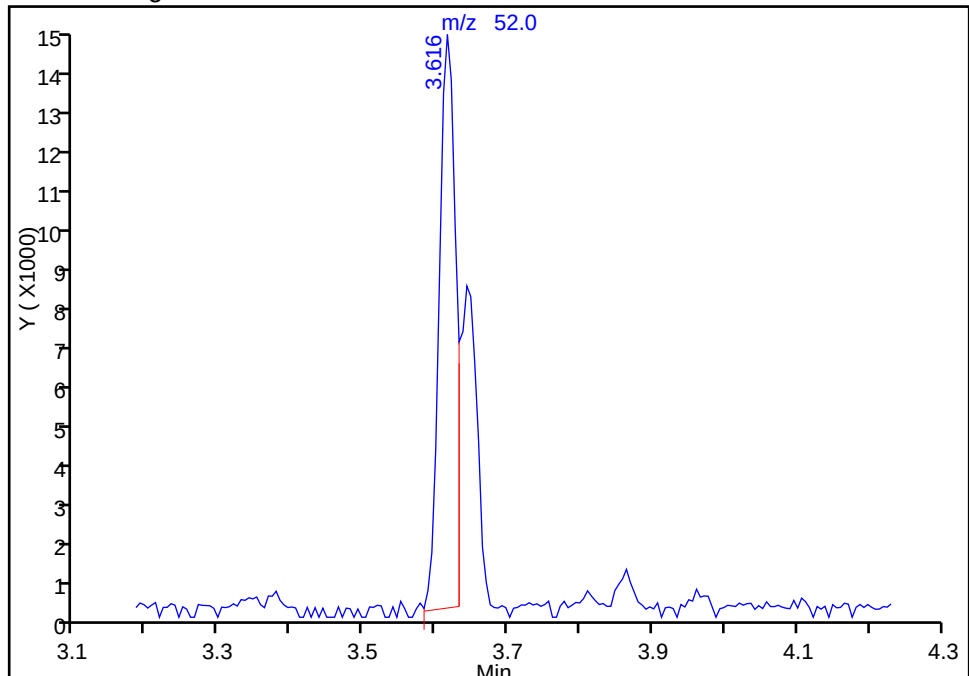
RT: 3.62
Area: 12340
Amount: 0.336510
Amount Units: ppb v/v

Processing Integration Results



RT: 3.62
Area: 23312
Amount: 0.635714
Amount Units: ppb v/v

Manual Integration Results



Reviewer: tajh, 10-Mar-2015 07:56:09

Audit Action: Manually Integrated

Audit Reason: Baseline

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1
SDG No.: _____
Client Sample ID: H28-BA-2015 DL Lab Sample ID: 140-2815-8 DL
Matrix: Air Lab File ID: EC05P110DL.D
Analysis Method: TO 15 LL Date Collected: 02/25/2015 13:05
Sample wt/vol: 50 (mL) Date Analyzed: 03/06/2015 08:03
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.: 2464 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
64-17-5	Ethanol	46.07	260	D	8.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: H28-BA-2015 DL Lab Sample ID: 140-2815-8 DL
 Matrix: Air Lab File ID: EC05P110DL.D
 Analysis Method: TO 15 LL Date Collected: 02/25/2015 13:05
 Sample wt/vol: 50 (mL) Date Analyzed: 03/06/2015 08:03
 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.: 2464 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
64-17-5	Ethanol	46.07	500	D	15	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P110DL.D
 Lims ID: 140-2815-A-8 Lab Sample ID: 140-2815-8
 Client ID: H28-BA-2015
 Sample Type: Client
 Inject. Date: 06-Mar-2015 08:03:30 ALS Bottle#: 10 Worklist Smp#: 28
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2815-a-8
 Misc. Info.: E030515,TO155,,140-0001425-028
 Operator ID: 7126 Instrument ID: ME
 Method: \\KNXCHROM\ChromData\ME\20150304-1425.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 10-Mar-2015 07:57:48 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK049

First Level Reviewer: barlozhetskayaa

Date: 12-Mar-2015 19:04:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.485	8.491	-0.006	98	329174	4.00	
* 2 1,4-Difluorobenzene	114	10.729	10.729	0.000	96	1511946	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.555	15.555	0.000	91	1346087	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.210	17.210	0.000	86	1002063	3.95	
8 Dichlorodifluoromethane	85	3.438	3.438	0.000	99	19150	0.0570	
17 Ethanol	31	4.387	4.393	-0.006	97	1036551	26.5	
21 Trichlorofluoromethane	101	4.856	4.862	-0.006	99	8071	0.0269	
31 Methylene Chloride	84	5.908	5.919	-0.011	92	6375	0.0708	
40 Hexane	56	7.720	7.730	-0.010	60	1361	0.0145	
48 Benzene	78	10.162	10.157	0.005	95	6414	0.0225	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P110DL.D

Injection Date: 06-Mar-2015 08:03:30

Instrument ID: ME

Operator ID: 7126

Lims ID: 140-2815-A-8

Lab Sample ID: 140-2815-8

Worklist Smp#: 28

Client ID: H28-BA-2015

Purge Vol: 500.000 mL

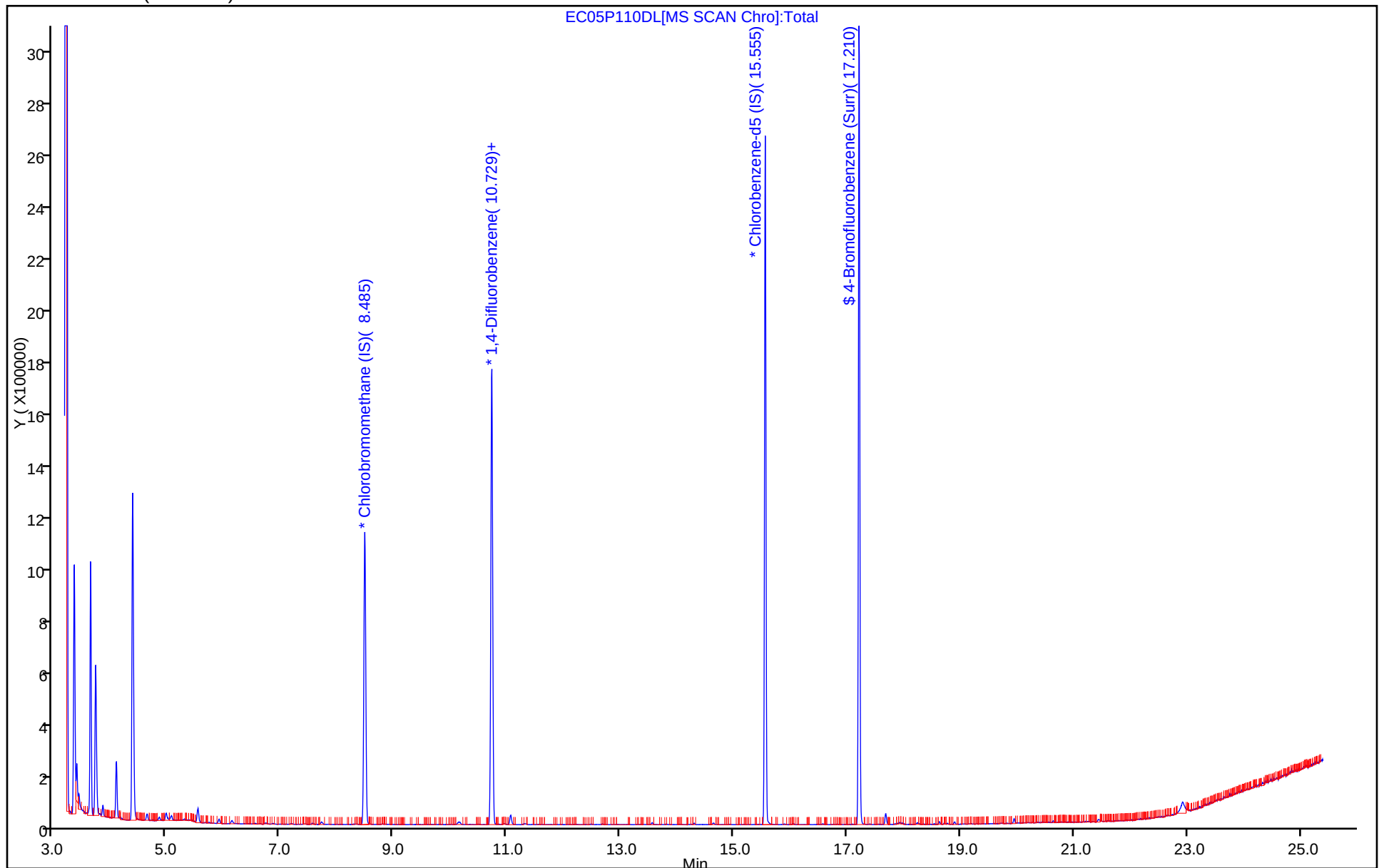
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P110DL.D

Injection Date: 06-Mar-2015 08:03:30

Instrument ID: ME

Lims ID: 140-2815-A-8

Lab Sample ID: 140-2815-8

Client ID: H28-BA-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 28

Purge Vol: 500.000 mL

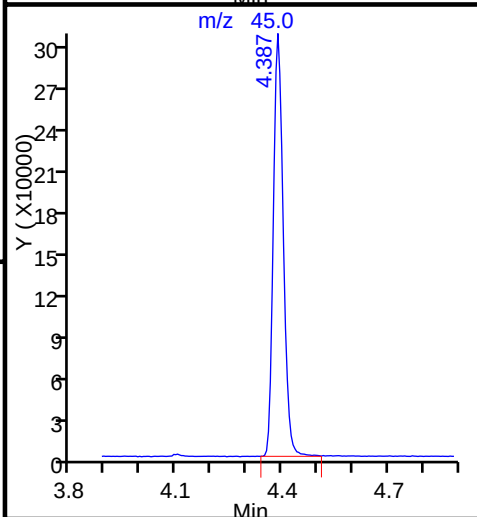
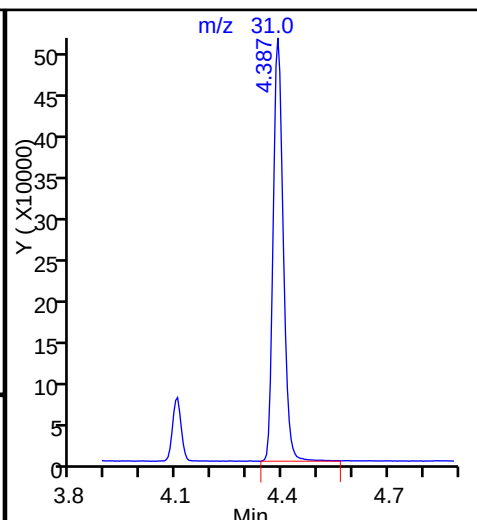
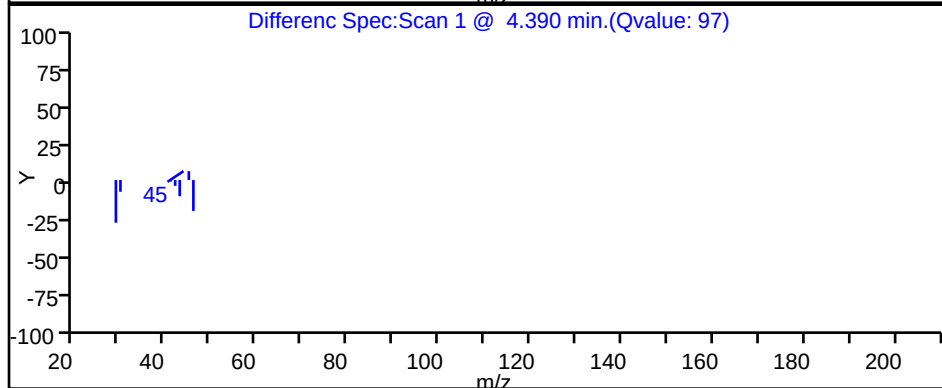
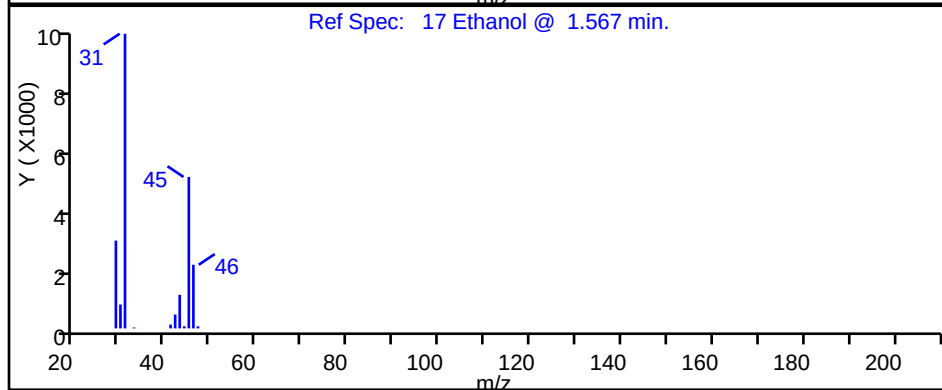
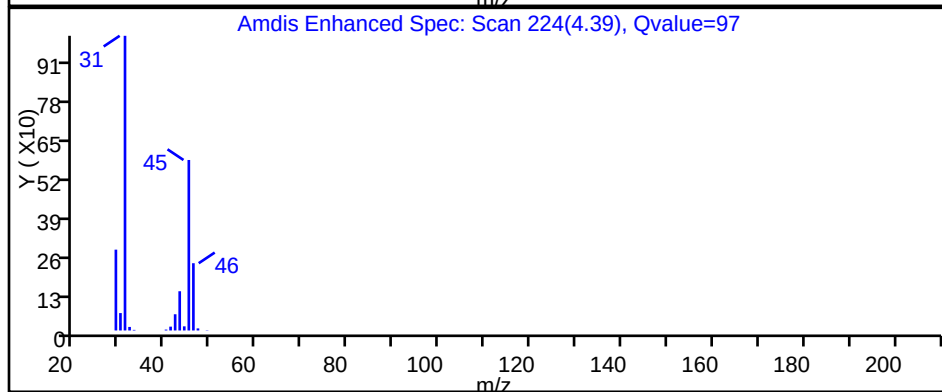
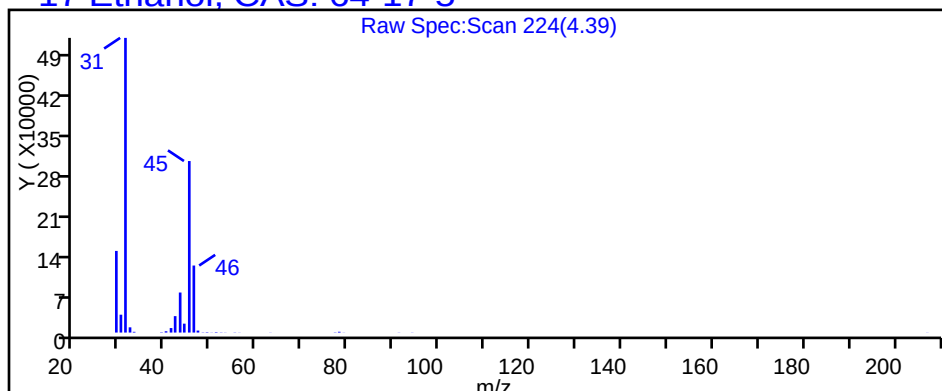
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: H28-SS-2015 Lab Sample ID: 140-2815-9

Matrix: Air Lab File ID: EC05P111.D

Analysis Method: TO 15 LL Date Collected: 02/25/2015 13:00

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 21:04

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.: 2464 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	0.46		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		0.080	
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	0.41		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	0.22		0.040	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	1.8		0.080	
74-87-3	Chloromethane	50.49	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: H28-SS-2015 Lab Sample ID: 140-2815-9
 Matrix: Air Lab File ID: EC05P111.D
 Analysis Method: TO 15 LL Date Collected: 02/25/2015 13:00
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 21:04
 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.: 2464 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	0.46		0.080	
64-17-5	Ethanol	46.07	2.0		0.80	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	0.21		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	0.16		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	0.21		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	1.1		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.22		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: H28-SS-2015 Lab Sample ID: 140-2815-9

Matrix: Air Lab File ID: EC05P111.D

Analysis Method: TO 15 LL Date Collected: 02/25/2015 13:00

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 21:04

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.: 2464 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	2.5		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		0.32	
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	1.2		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	1.4		0.25	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	9.0		0.39	
74-87-3	Chloromethane	50.49	ND		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: H28-SS-2015 Lab Sample ID: 140-2815-9
 Matrix: Air Lab File ID: EC05P111.D
 Analysis Method: TO 15 LL Date Collected: 02/25/2015 13:00
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 21:04
 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.: 2464 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	2.3		0.40	
64-17-5	Ethanol	46.07	3.8		1.5	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	0.72		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	0.69		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	0.80		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	5.8		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.2		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P111.D
 Lims ID: 140-2815-A-9 Lab Sample ID: 140-2815-9
 Client ID: H28-SS-2015
 Sample Type: Client
 Inject. Date: 05-Mar-2015 21:04:30 ALS Bottle#: 11 Worklist Smp#: 15
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2815-a-9
 Misc. Info.: E030515,TO155,,140-0001425-015
 Operator ID: 7126 Instrument ID: ME
 Method: \\KNXCHROM\ChromData\ME\20150304-1425.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 10-Mar-2015 07:56:09 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK004

First Level Reviewer: tajh

Date: 10-Mar-2015 07:56:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.486	8.491	-0.005	96	343778	4.00	
* 2 1,4-Difluorobenzene	114	10.729	10.729	0.000	96	1632277	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.555	15.555	0.000	91	1489855	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.210	17.210	0.000	86	1137985	4.06	
8 Dichlorodifluoromethane	85	3.438	3.438	0.000	99	162916	0.4640	
9 Chloromethane	52	3.616	3.616	0.000	93	5408	0.1502	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.616	3.621	-0.005	41	3149	0.0142	
15 Bromomethane	94	4.177	4.177	0.000	34	1627	0.0165	
16 Chloroethane	64	4.307	4.306	0.001	57	1449	0.0267	
17 Ethanol	31	4.387	4.393	-0.006	97	81811	2.00	
21 Trichlorofluoromethane	101	4.857	4.862	-0.005	97	67704	0.2160	
29 2-Methyl-2-propanol	59	5.671	5.654	0.017	61	5048	0.0250	
30 1,1,2-Trichloro-1,2,2-trif	101	5.730	5.735	-0.005	88	14101	0.0636	
31 Methylene Chloride	84	5.908	5.919	-0.011	89	17819	0.1894	
39 2-Butanone (MEK)	72	7.709	7.709	0.000	92	18415	0.4096	
40 Hexane	56	7.731	7.730	0.001	71	20145	0.2054	
43 Chloroform	83	8.496	8.502	-0.006	74	466613	1.84	
45 1,1,1-Trichloroethane	97	9.537	9.537	0.000	93	137276	0.4631	
46 1,2-Dichloroethane	62	9.532	9.655	-0.123	24	8793	0.0431	
49 Cyclohexane	69	10.146	10.152	-0.006	55	3231	0.0608	
48 Benzene	78	10.157	10.157	0.000	76	22624	0.0736	
50 Carbon tetrachloride	117	10.173	10.179	-0.006	98	70009	0.2166	
56 Trichloroethene	130	11.457	11.462	-0.005	96	186766	1.08	
62 4-Methyl-2-pentanone (MIBK	43	12.670	12.664	0.006	94	45130	0.1720	
65 Toluene	91	13.560	13.560	0.000	94	78795	0.2110	
73 Tetrachloroethene	129	14.719	14.719	0.000	81	5747	0.0345	
76 Ethylbenzene	91	15.895	15.894	0.001	88	20042	0.0414	
78 m-Xylene & p-Xylene	91	16.057	16.056	0.000	97	59294	0.1588	
82 o-Xylene	91	16.585	16.585	0.000	90	20515	0.0526	
93 1,2,4-Trimethylbenzene	105	18.402	18.402	0.000	74	18345	0.0432	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P111.D

Injection Date: 05-Mar-2015 21:04:30

Instrument ID: ME

Operator ID: 7126

Lims ID: 140-2815-A-9

Lab Sample ID: 140-2815-9

Worklist Smp#: 15

Client ID: H28-SS-2015

Purge Vol: 500.000 mL

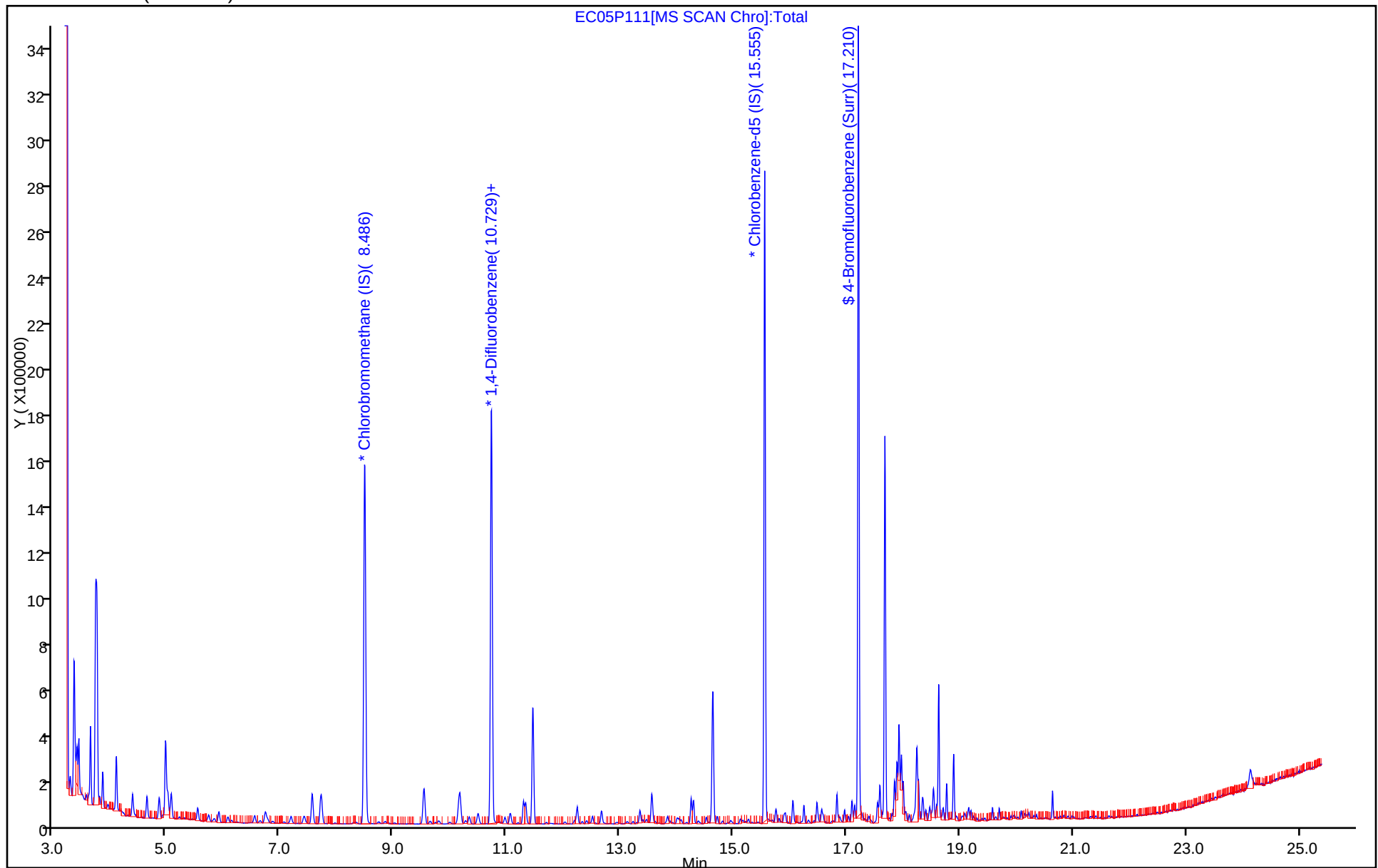
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P111.D

Injection Date: 05-Mar-2015 21:04:30

Instrument ID: ME

Lims ID: 140-2815-A-9

Lab Sample ID: 140-2815-9

Client ID: H28-SS-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 15

Purge Vol: 500.000 mL

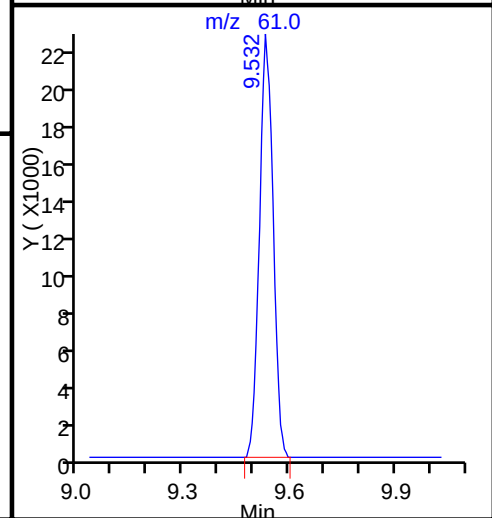
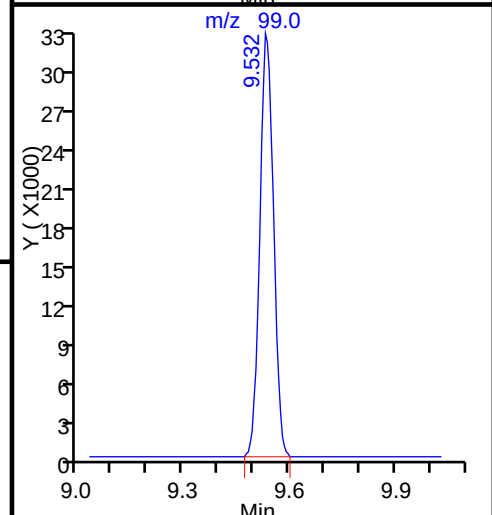
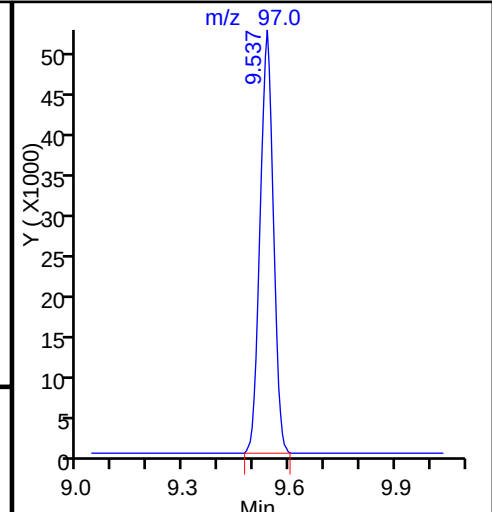
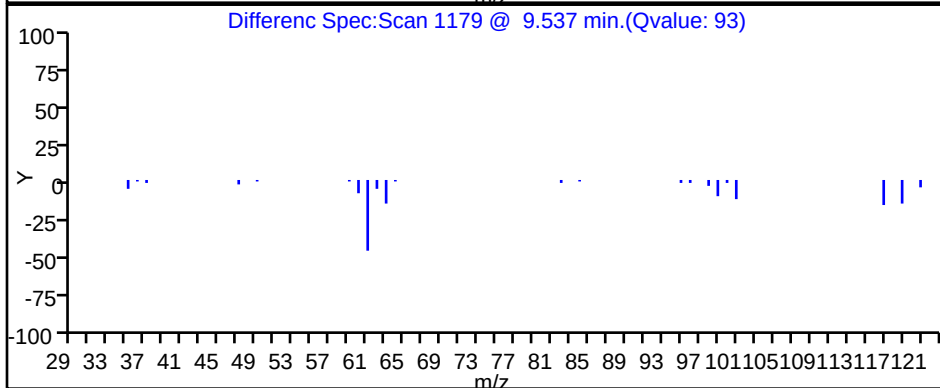
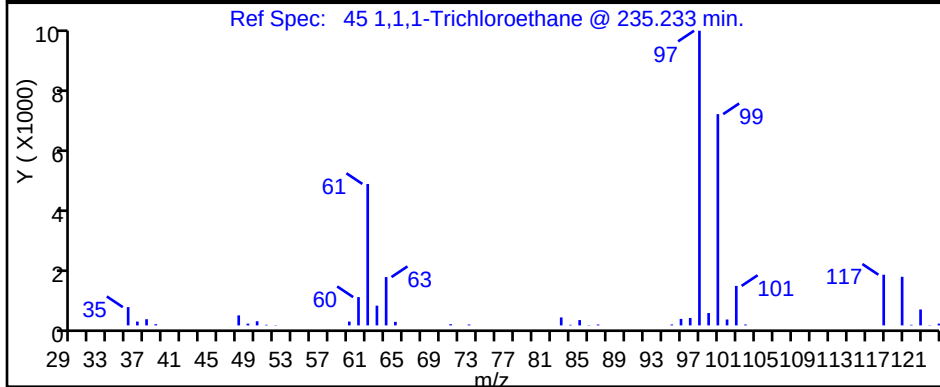
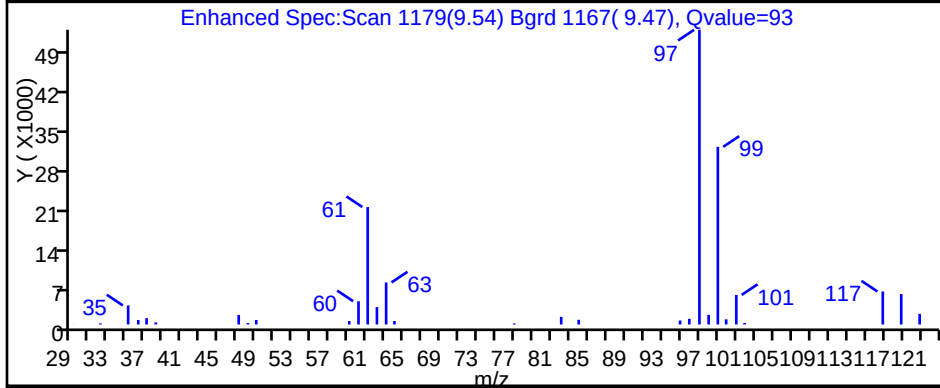
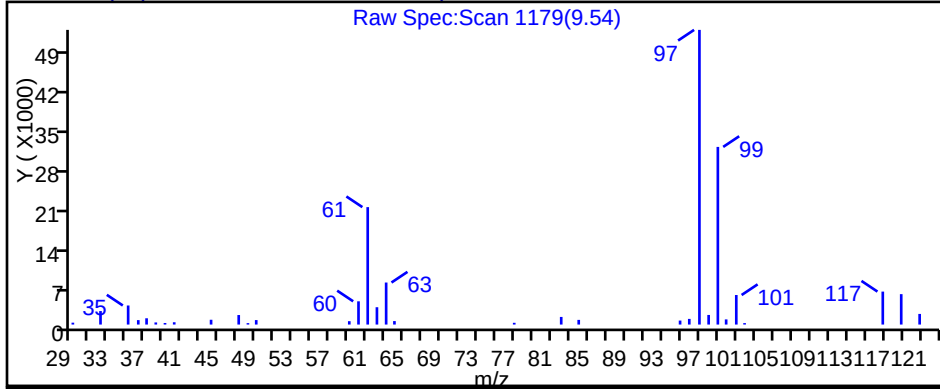
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

45 1,1,1-Trichloroethane, CAS: 71-55-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P111.D

Injection Date: 05-Mar-2015 21:04:30

Instrument ID: ME

Lims ID: 140-2815-A-9

Lab Sample ID: 140-2815-9

Client ID: H28-SS-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 15

Purge Vol: 500.000 mL

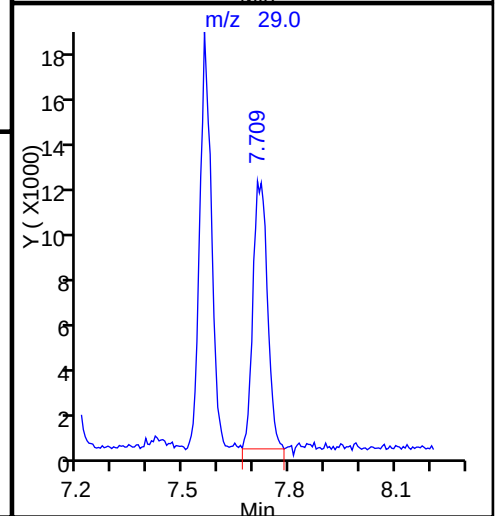
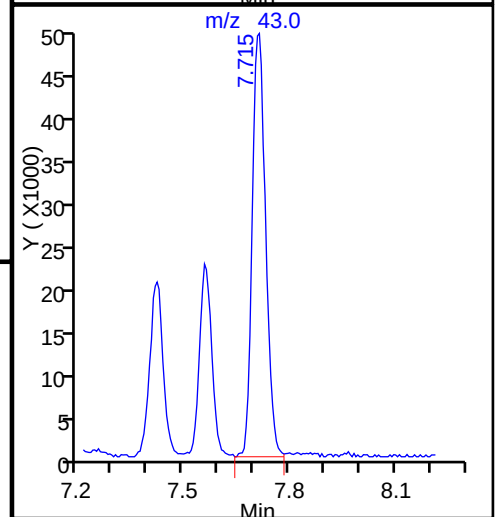
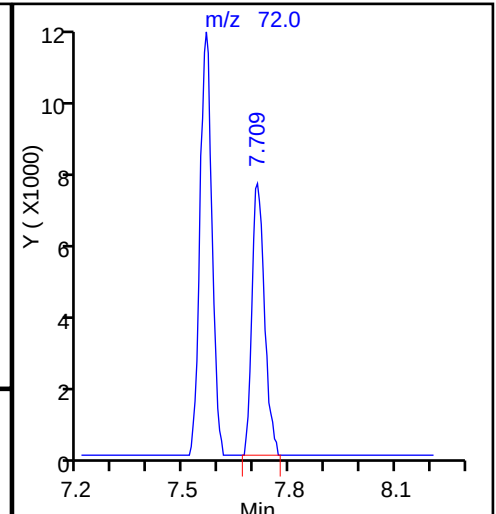
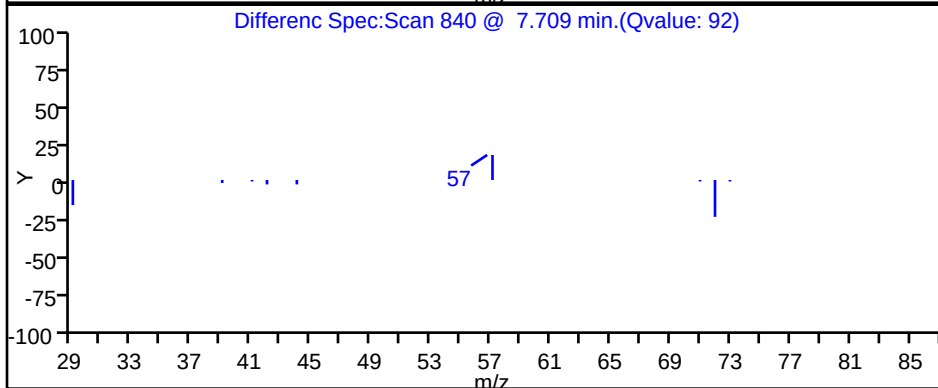
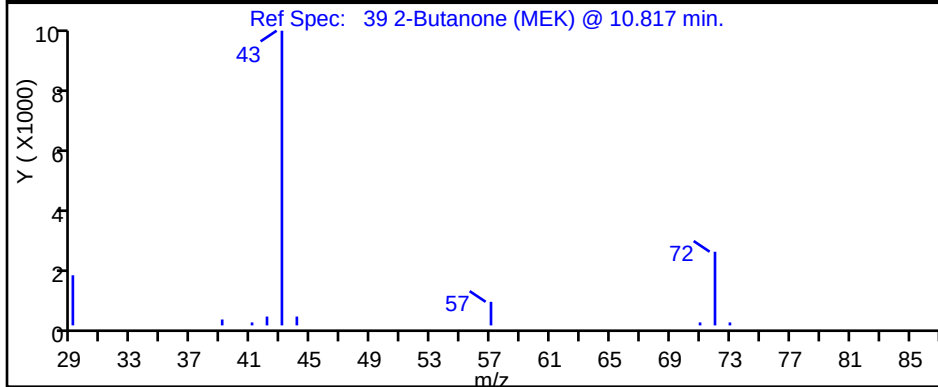
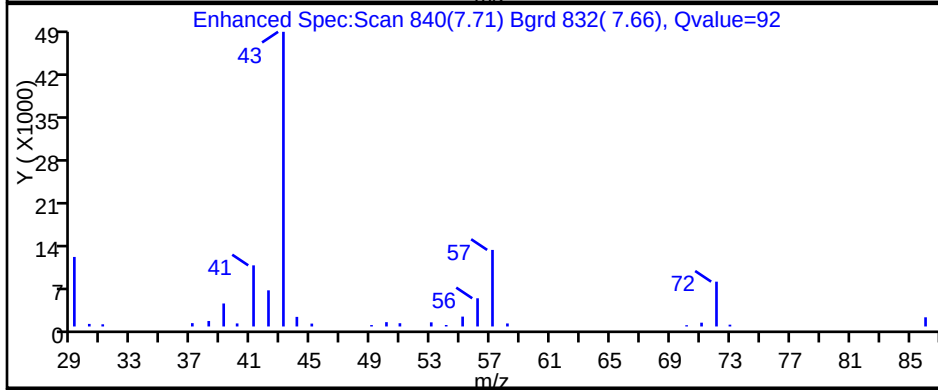
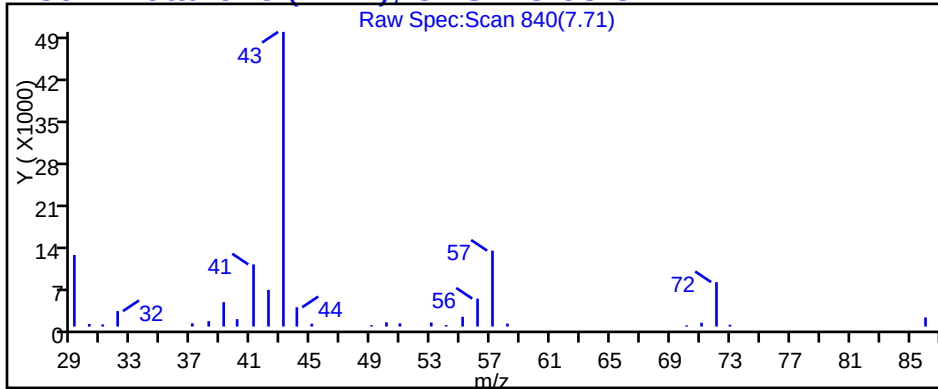
Dil. Factor: 1.0000

Method: ME_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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P111.D

Injection Date: 05-Mar-2015 21:04:30

Instrument ID: ME

Lims ID: 140-2815-A-9

Lab Sample ID: 140-2815-9

Client ID: H28-SS-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 15

Purge Vol: 500.000 mL

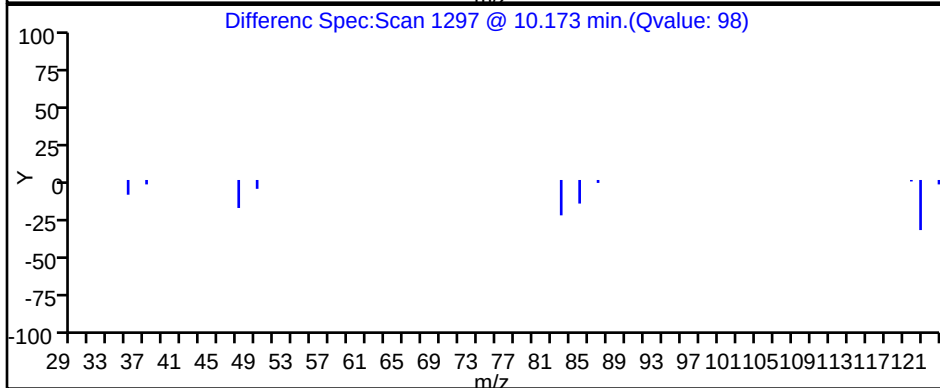
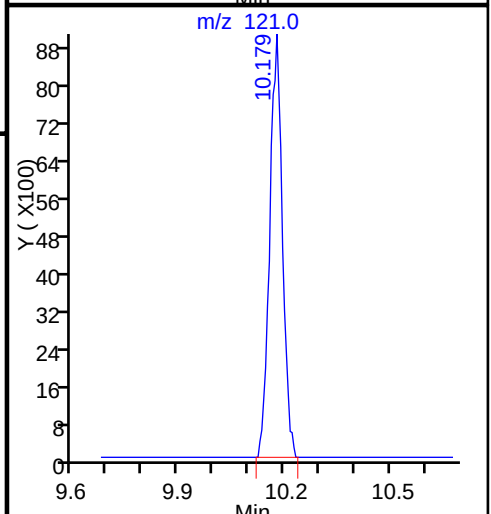
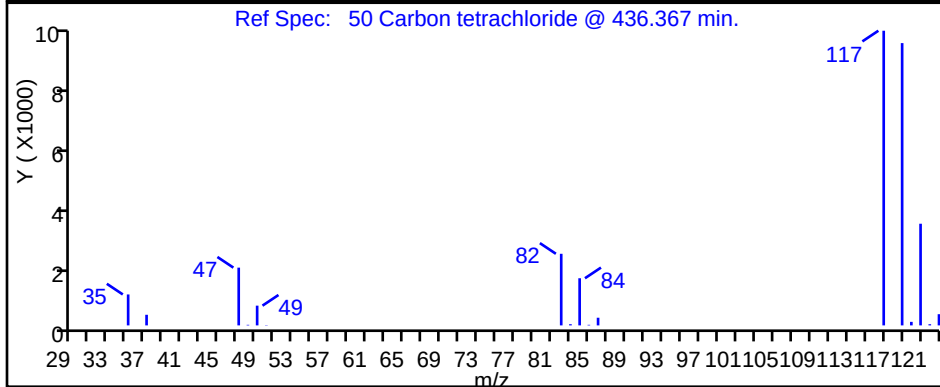
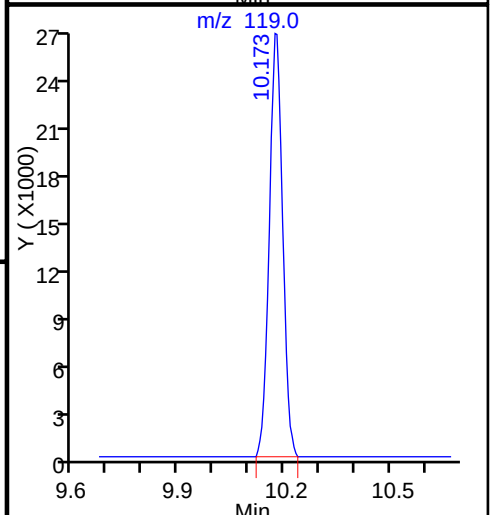
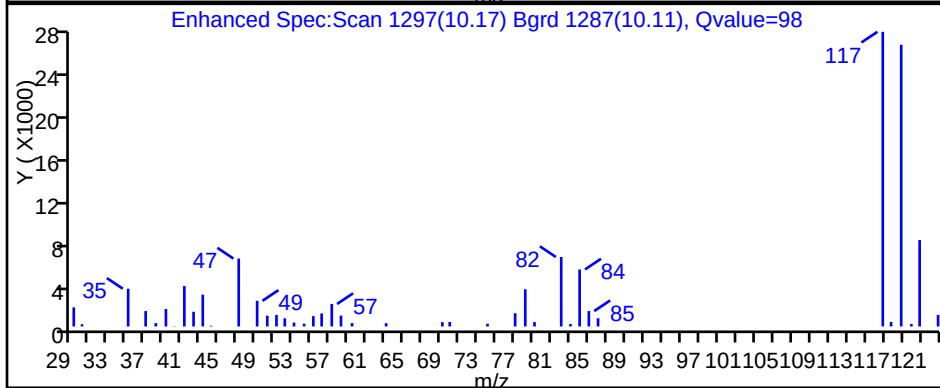
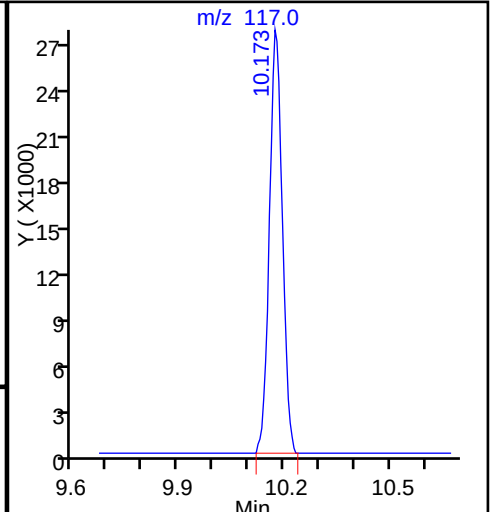
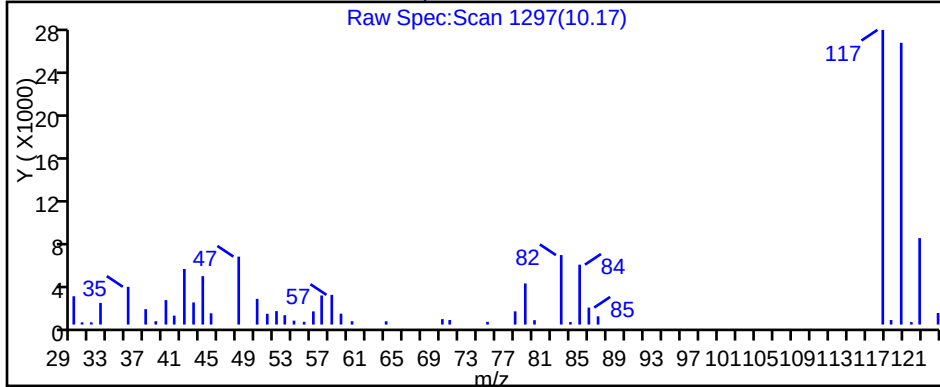
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P111.D

Injection Date: 05-Mar-2015 21:04:30

Instrument ID: ME

Lims ID: 140-2815-A-9

Lab Sample ID: 140-2815-9

Client ID: H28-SS-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 15

Purge Vol: 500.000 mL

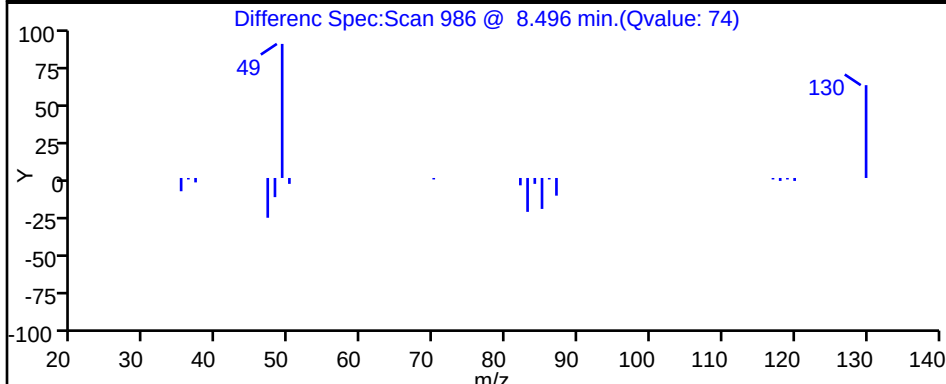
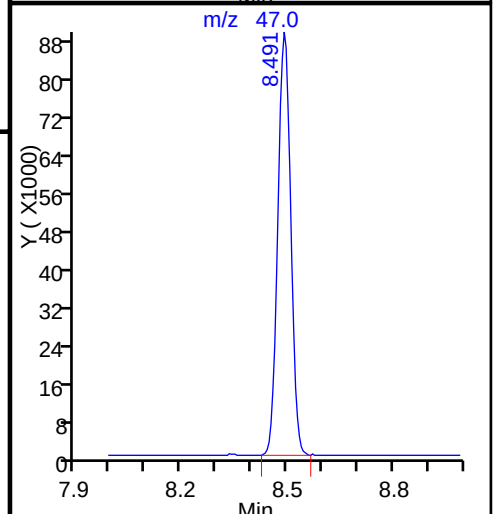
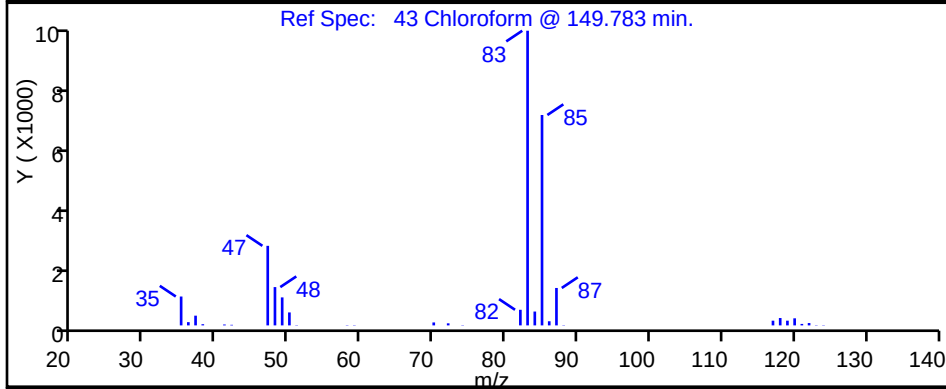
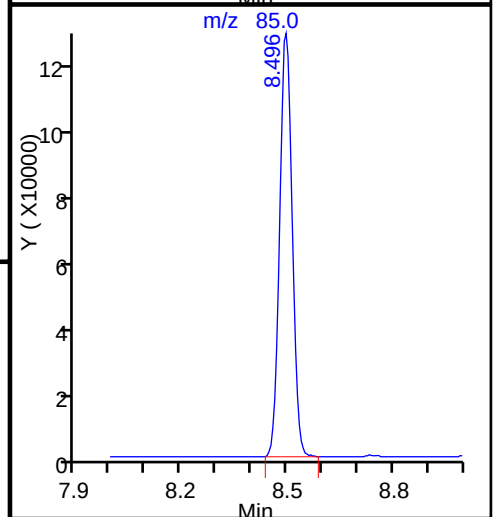
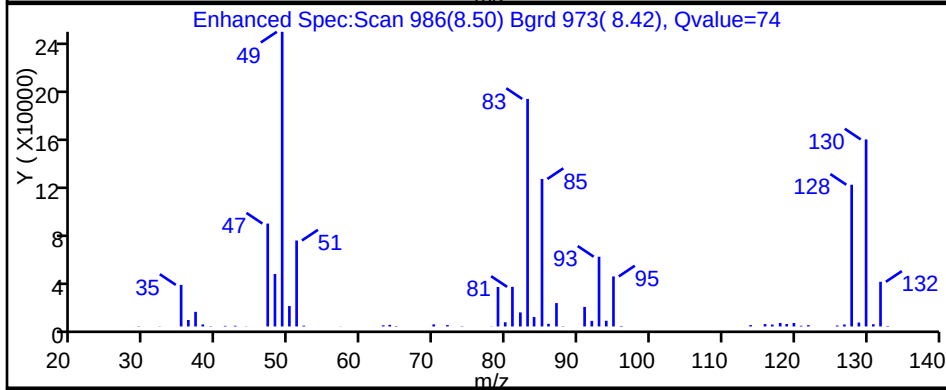
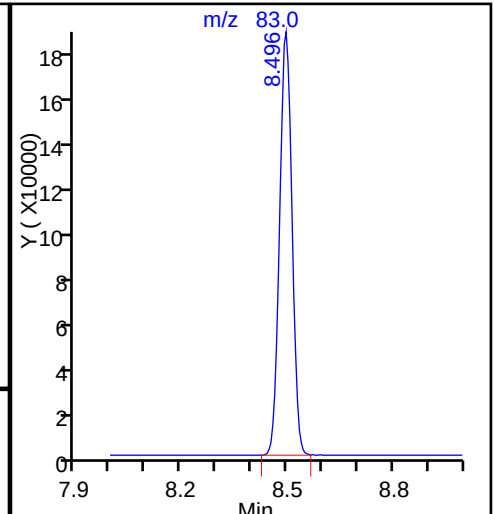
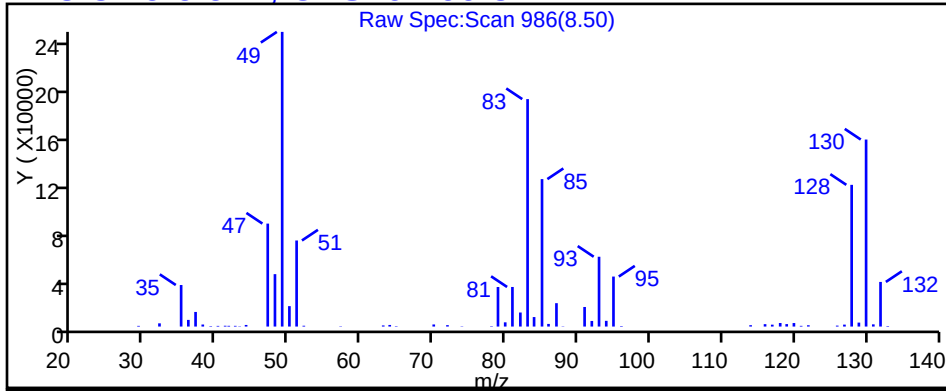
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

43 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P111.D

Injection Date: 05-Mar-2015 21:04:30

Instrument ID: ME

Lims ID: 140-2815-A-9

Lab Sample ID: 140-2815-9

Client ID: H28-SS-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 15

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

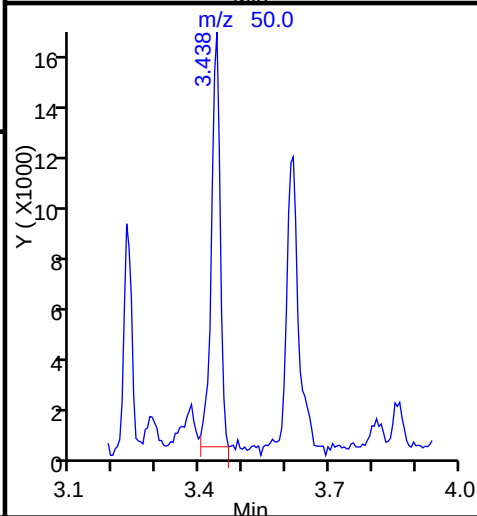
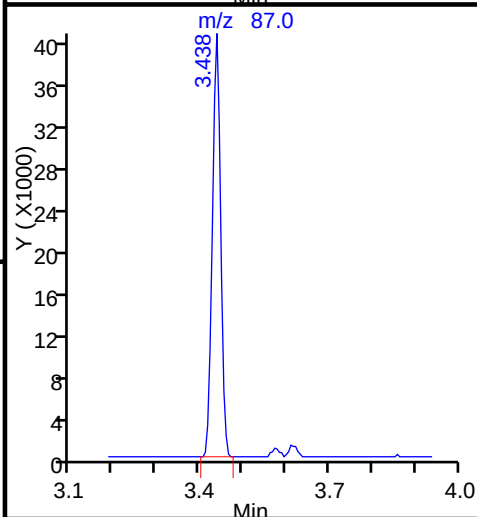
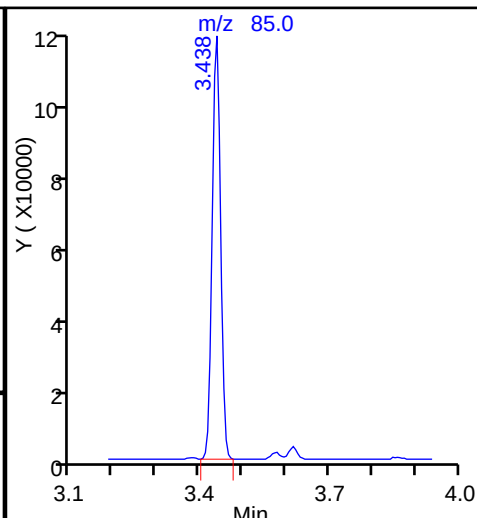
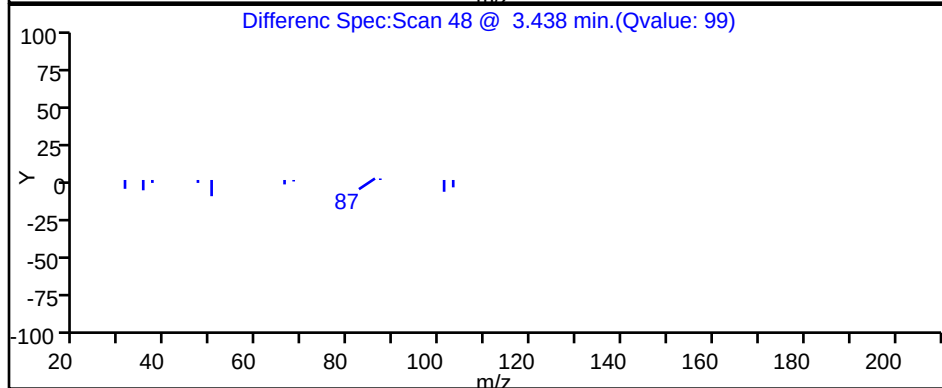
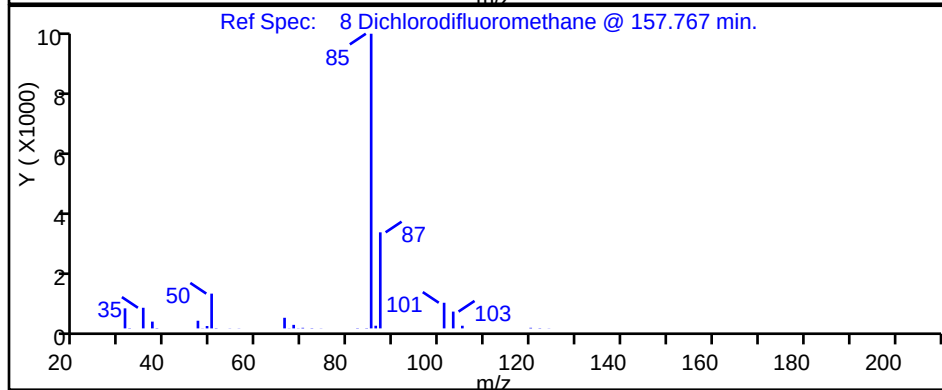
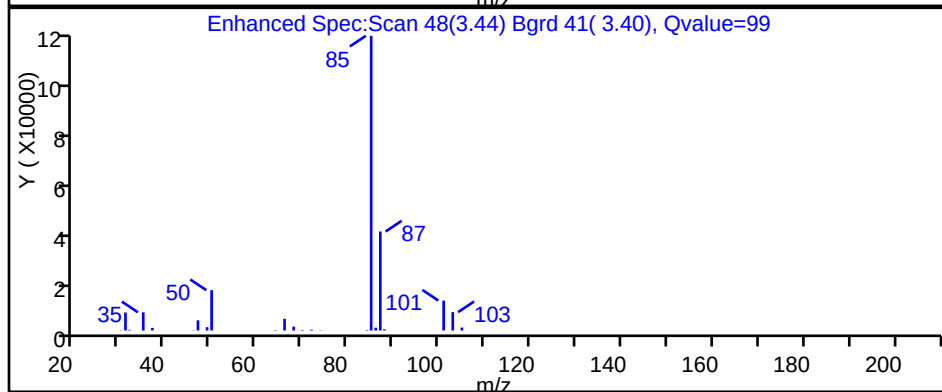
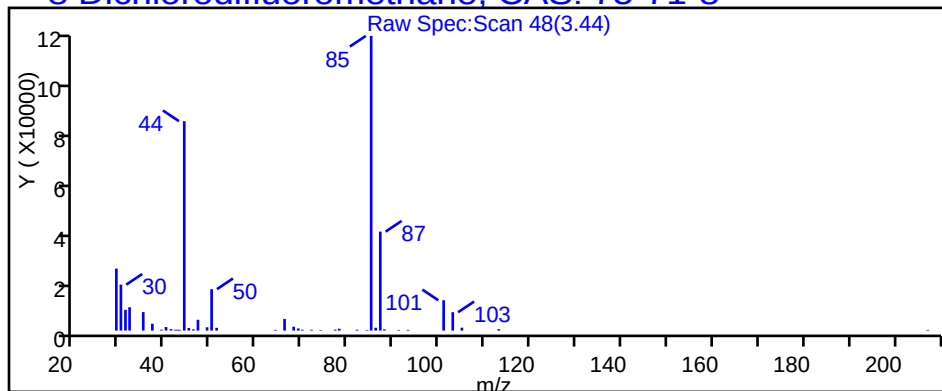
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P111.D

Injection Date: 05-Mar-2015 21:04:30

Instrument ID: ME

Lims ID: 140-2815-A-9

Lab Sample ID: 140-2815-9

Client ID: H28-SS-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 15

Purge Vol: 500.000 mL

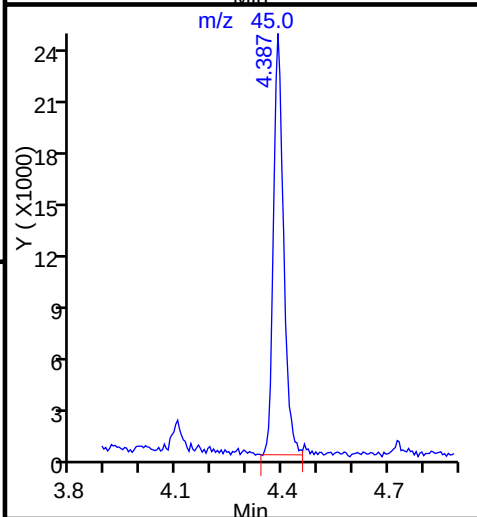
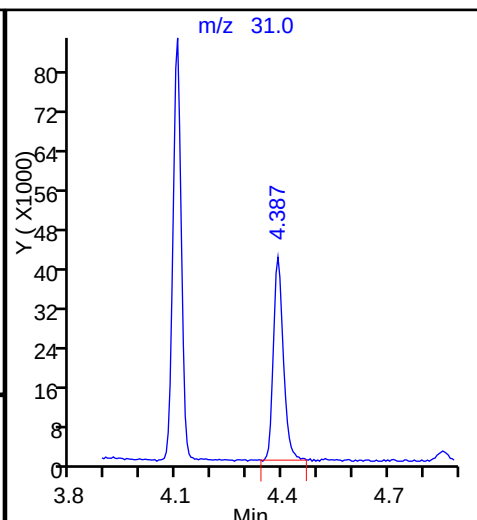
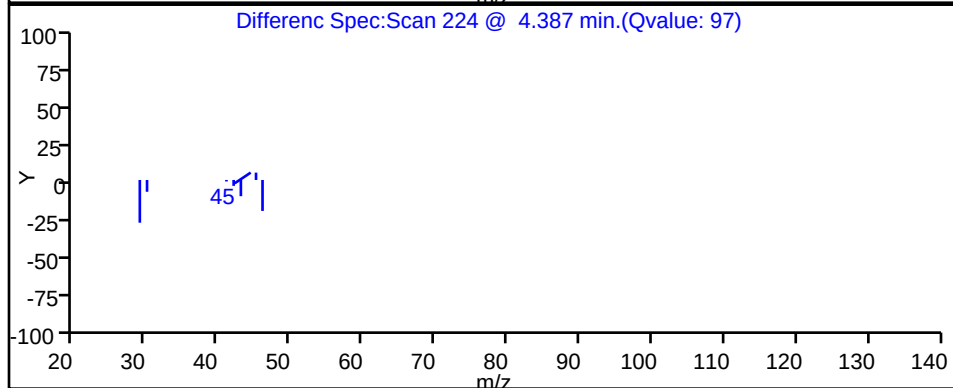
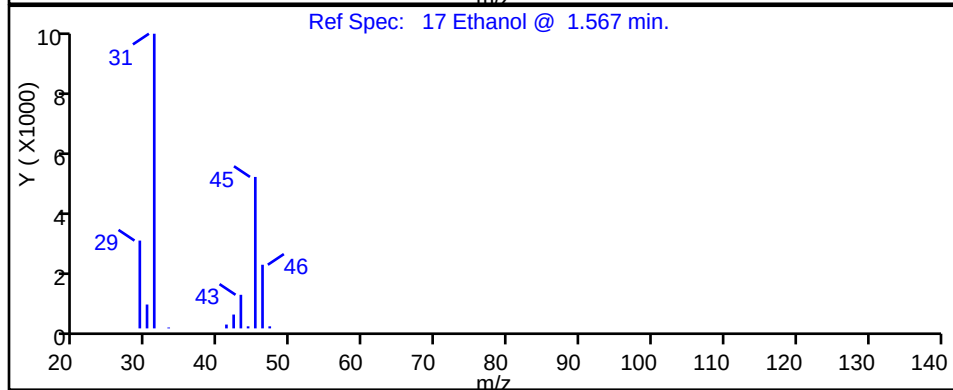
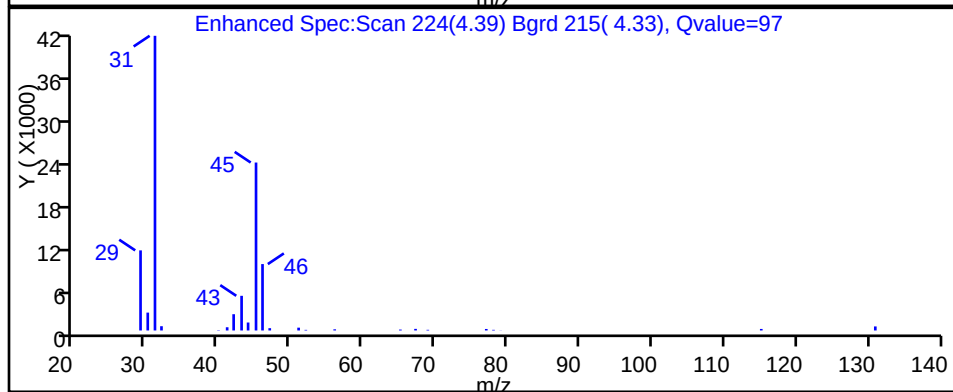
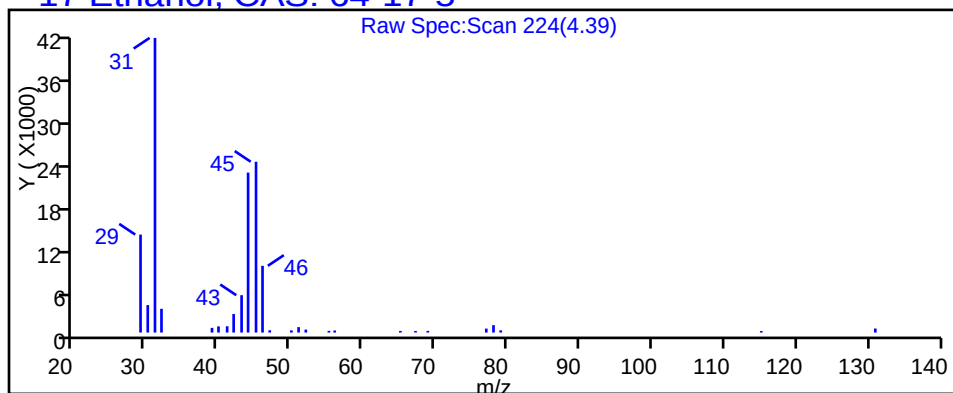
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P111.D

Injection Date: 05-Mar-2015 21:04:30

Instrument ID: ME

Lims ID: 140-2815-A-9

Lab Sample ID: 140-2815-9

Client ID: H28-SS-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 15

Purge Vol: 500.000 mL

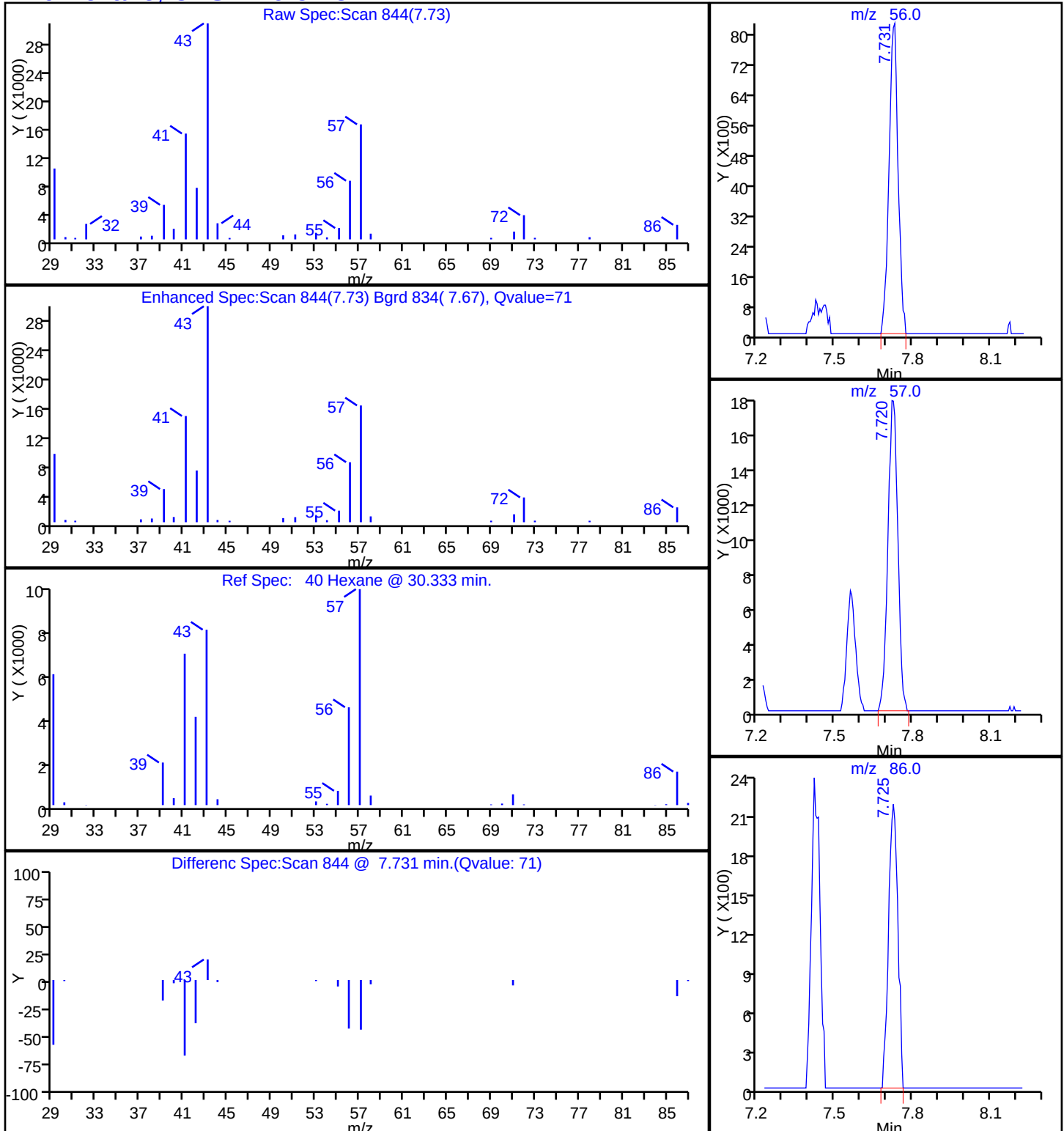
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

40 Hexane, CAS: 110-54-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P111.D

Injection Date: 05-Mar-2015 21:04:30

Instrument ID: ME

Lims ID: 140-2815-A-9

Lab Sample ID: 140-2815-9

Client ID: H28-SS-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 15

Purge Vol: 500.000 mL

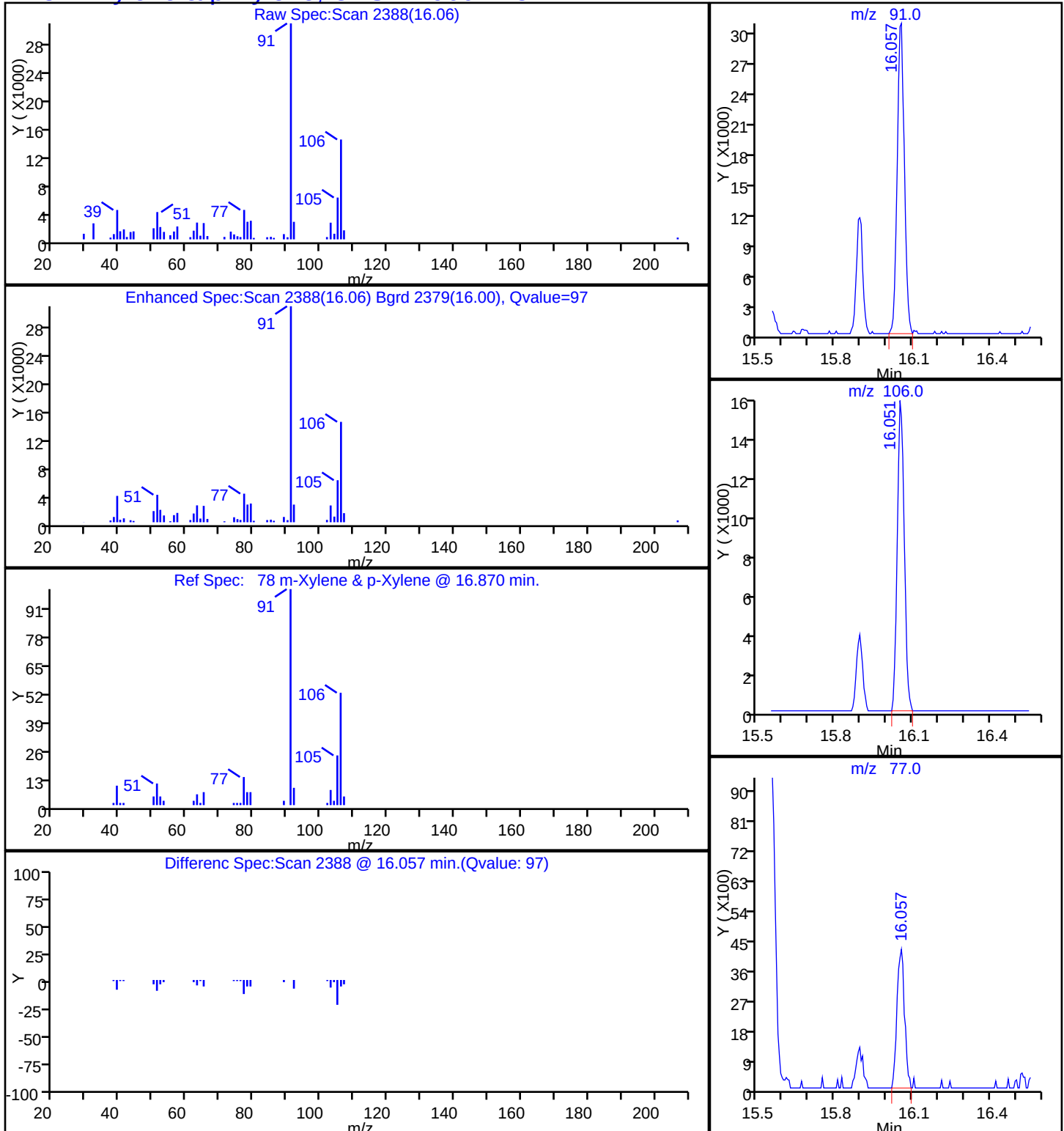
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P111.D

Injection Date: 05-Mar-2015 21:04:30

Instrument ID: ME

Lims ID: 140-2815-A-9

Lab Sample ID: 140-2815-9

Client ID: H28-SS-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 15

Purge Vol: 500.000 mL

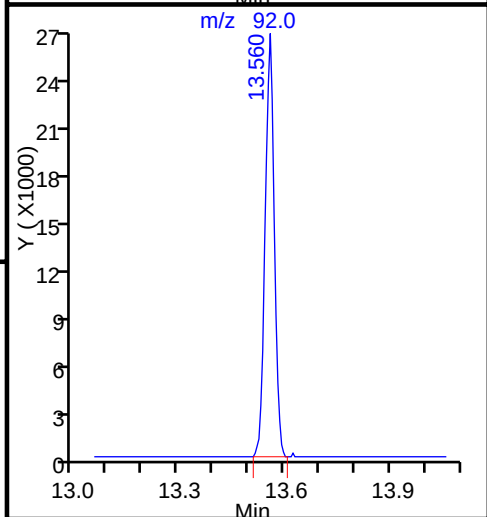
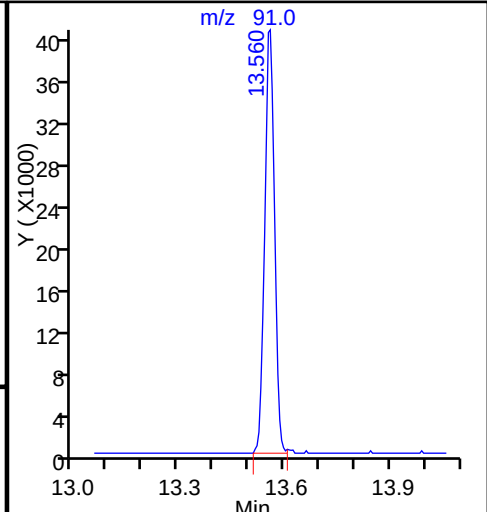
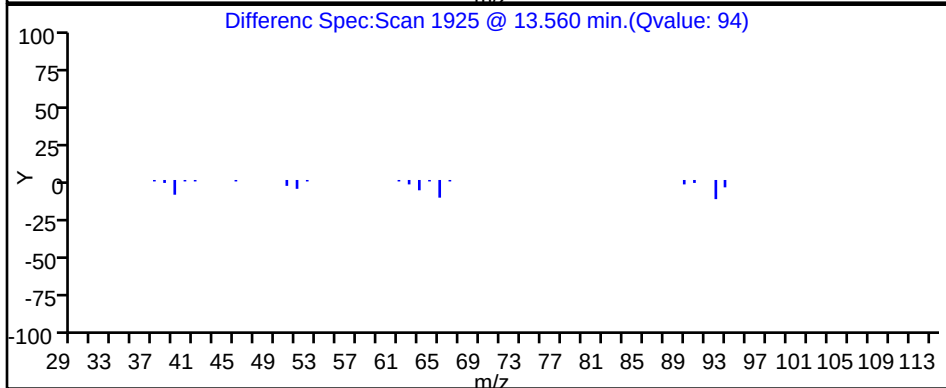
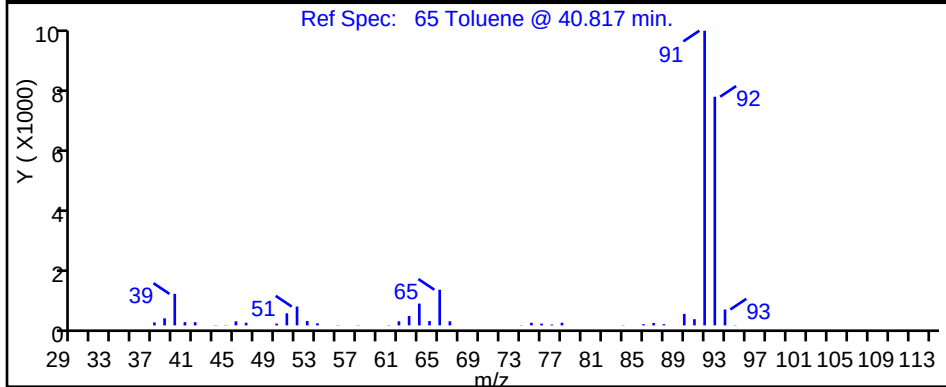
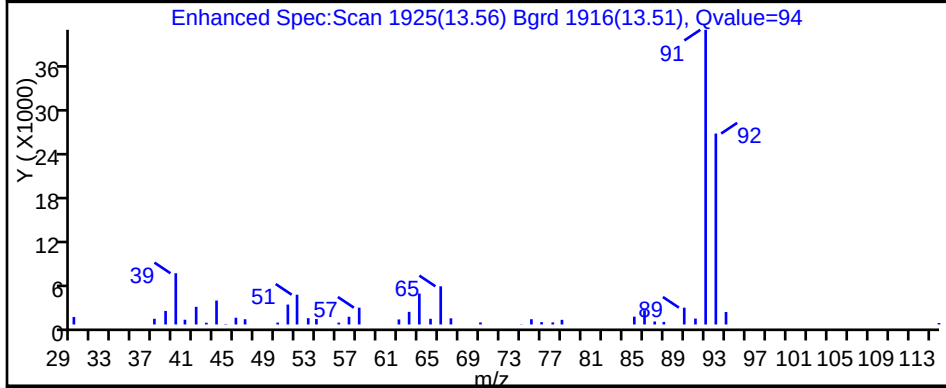
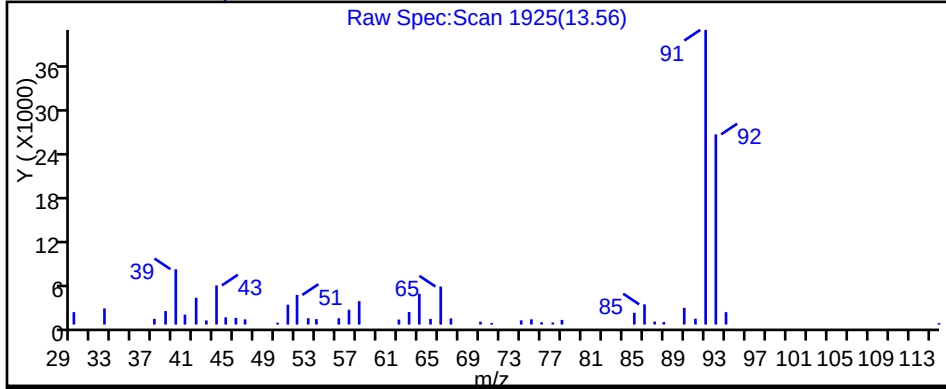
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P111.D

Injection Date: 05-Mar-2015 21:04:30

Instrument ID: ME

Lims ID: 140-2815-A-9

Lab Sample ID: 140-2815-9

Client ID: H28-SS-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 15

Purge Vol: 500.000 mL

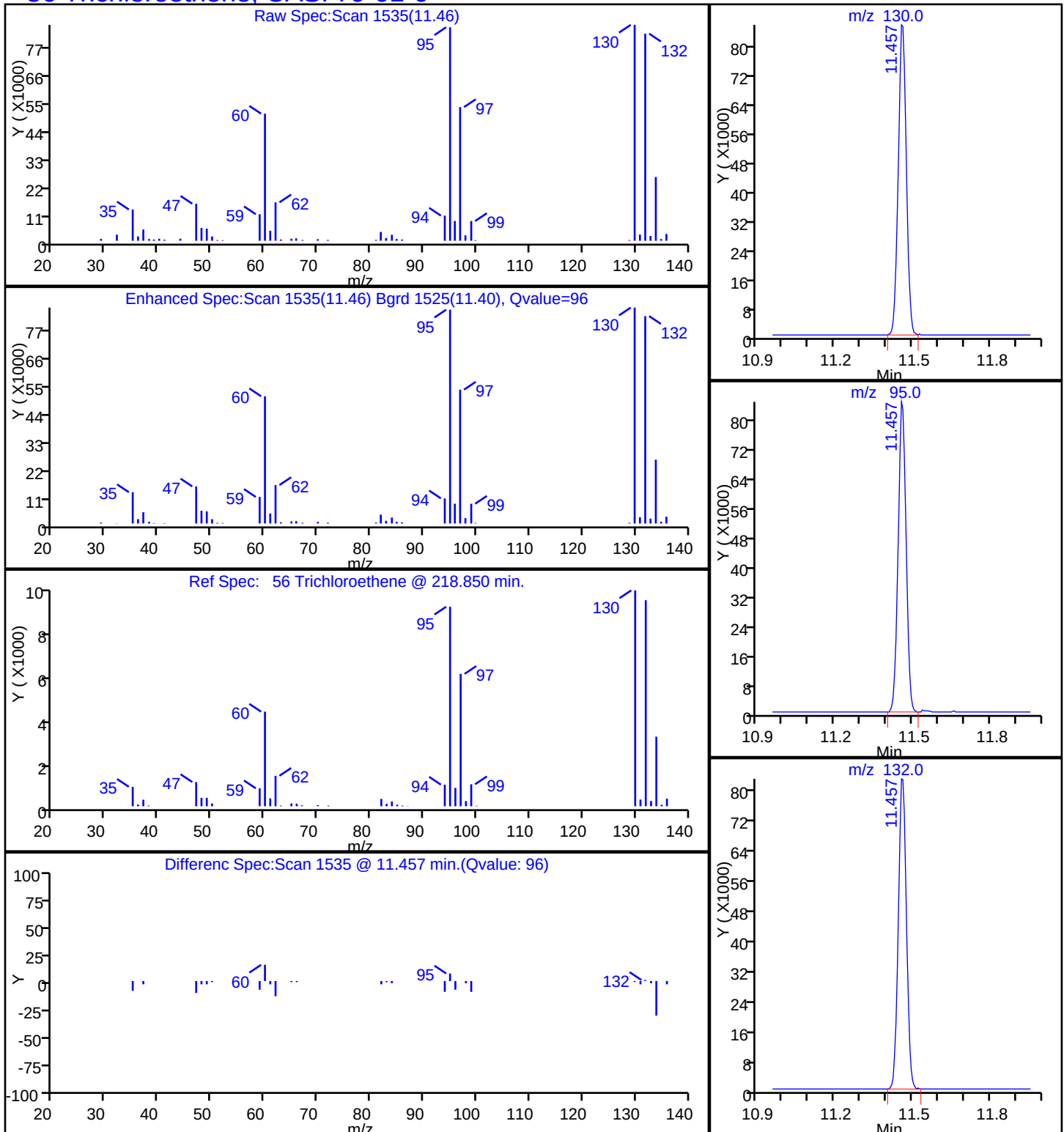
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

56 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P111.D

Injection Date: 05-Mar-2015 21:04:30

Instrument ID: ME

Lims ID: 140-2815-A-9

Lab Sample ID: 140-2815-9

Client ID: H28-SS-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 15

Purge Vol: 500.000 mL

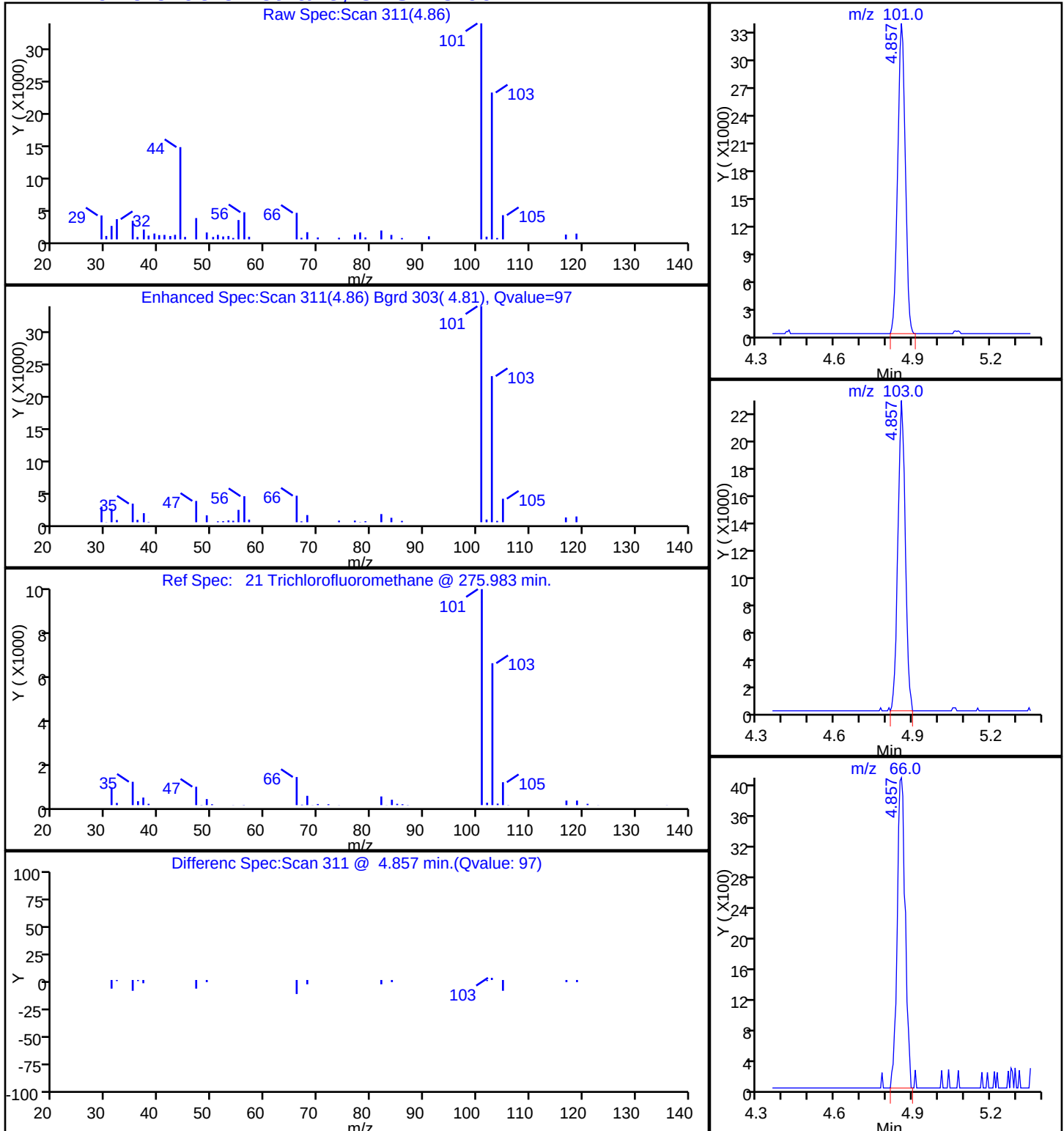
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

21 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: H3-BA-2015 Lab Sample ID: 140-2815-10

Matrix: Air Lab File ID: EC05P112.D

Analysis Method: TO 15 LL Date Collected: 02/25/2015 13:59

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 21:55

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.: 2464 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	0.10		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		0.080	
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	0.50		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	0.28		0.20	
71-43-2	Benzene	78.11	0.23		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	0.12		0.040	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	0.50		0.080	
74-87-3	Chloromethane	50.49	0.64		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: H3-BA-2015 Lab Sample ID: 140-2815-10
 Matrix: Air Lab File ID: EC05P112.D
 Analysis Method: TO 15 LL Date Collected: 02/25/2015 13:59
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 21:55
 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.: 2464 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	0.50		0.080	
64-17-5	Ethanol	46.07	8.0		0.80	
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	0.29		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.14		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	0.53		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	0.87		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.29		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: H3-BA-2015 Lab Sample ID: 140-2815-10

Matrix: Air Lab File ID: EC05P112.D

Analysis Method: TO 15 LL Date Collected: 02/25/2015 13:59

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 21:55

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.: 2464 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	0.55		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		0.32	
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	1.5		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.1		0.82	
71-43-2	Benzene	78.11	0.74		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	0.77		0.25	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	2.4		0.39	
74-87-3	Chloromethane	50.49	1.3		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: H3-BA-2015 Lab Sample ID: 140-2815-10
 Matrix: Air Lab File ID: EC05P112.D
 Analysis Method: TO 15 LL Date Collected: 02/25/2015 13:59
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 21:55
 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.: 2464 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	2.5		0.40	
64-17-5	Ethanol	46.07	15		1.5	
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	1.0		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	0.63		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	2.0		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	4.7		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.6		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P112.D
 Lims ID: 140-2815-A-10 Lab Sample ID: 140-2815-10
 Client ID: H3-BA-2015
 Sample Type: Client
 Inject. Date: 05-Mar-2015 21:55:30 ALS Bottle#: 12 Worklist Smp#: 16
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2815-a-10
 Misc. Info.: E030515,TO155,,140-0001425-016
 Operator ID: 7126 Instrument ID: ME
 Method: \\KNXCHROM\ChromData\ME\20150304-1425.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 10-Mar-2015 07:56:39 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK004

First Level Reviewer: tajh

Date: 10-Mar-2015 07:56:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.485	8.491	-0.006	97	340352	4.00	
* 2 1,4-Difluorobenzene	114	10.729	10.729	0.000	96	1486033	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.555	15.555	0.000	91	1331984	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.210	17.210	0.000	85	1020958	4.07	
8 Dichlorodifluoromethane	85	3.438	3.438	0.000	96	175264	0.5042	
9 Chloromethane	52	3.611	3.616	-0.005	100	22662	0.6356	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.621	0.000	18	3366	0.0153	
15 Bromomethane	94	4.172	4.177	-0.005	41	1504	0.0154	
17 Ethanol	31	4.387	4.393	-0.006	97	322699	7.97	
21 Trichlorofluoromethane	101	4.856	4.862	-0.006	98	90821	0.2927	
29 2-Methyl-2-propanol	59	5.654	5.654	0.000	91	25381	0.1271	
30 1,1,2-Trichloro-1,2,2-trif	101	5.735	5.735	0.000	84	14741	0.0672	
31 Methylene Chloride	84	5.913	5.919	-0.006	93	27065	0.2906	
39 2-Butanone (MEK)	72	7.709	7.709	0.000	94	22298	0.5010	
40 Hexane	56	7.730	7.730	0.000	61	11231	0.1157	
43 Chloroform	83	8.496	8.502	-0.006	41	124733	0.4958	
45 1,1,1-Trichloroethane	97	9.537	9.537	0.000	93	29571	0.1008	
46 1,2-Dichloroethane	62	9.656	9.655	0.001	38	4585	0.0247	
49 Cyclohexane	69	10.162	10.152	0.010	36	1712	0.0354	
48 Benzene	78	10.152	10.157	-0.005	96	65122	0.2328	
50 Carbon tetrachloride	117	10.173	10.179	-0.006	96	36135	0.1228	
53 Isooctane	57	10.934	10.944	-0.010	88	18684	0.0336	
56 Trichloroethene	130	11.462	11.462	0.000	96	135934	0.8667	
62 4-Methyl-2-pentanone (MIBK	43	12.670	12.664	0.006	98	65958	0.2761	
65 Toluene	91	13.560	13.560	0.000	93	178345	0.5342	
73 Tetrachloroethene	129	14.714	14.719	-0.005	79	7960	0.0535	
76 Ethylbenzene	91	15.895	15.894	0.001	92	20611	0.0476	
78 m-Xylene & p-Xylene	91	16.051	16.056	-0.005	97	48110	0.1441	
82 o-Xylene	91	16.585	16.585	0.000	87	17912	0.0514	
93 1,2,4-Trimethylbenzene	105	18.402	18.402	0.000	87	18583	0.0490	
97 1,4-Dichlorobenzene	146	18.769	18.769	0.000	52	8094	0.0312	

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P112.D

Reagents:			RT	Adj RT	Dlt RT		Response	OnCol Amt	
Compound		Sig	(min.)	(min.)	(min.)	Q	Units	only v/v	Flags
MAissur1	00002		Amount Added: 40.00				Units: mL	Run Reagent	

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P112.D

Injection Date: 05-Mar-2015 21:55:30

Instrument ID: ME

Operator ID: 7126

Lims ID: 140-2815-A-10

Lab Sample ID: 140-2815-10

Worklist Smp#: 16

Client ID: H3-BA-2015

Purge Vol: 500.000 mL

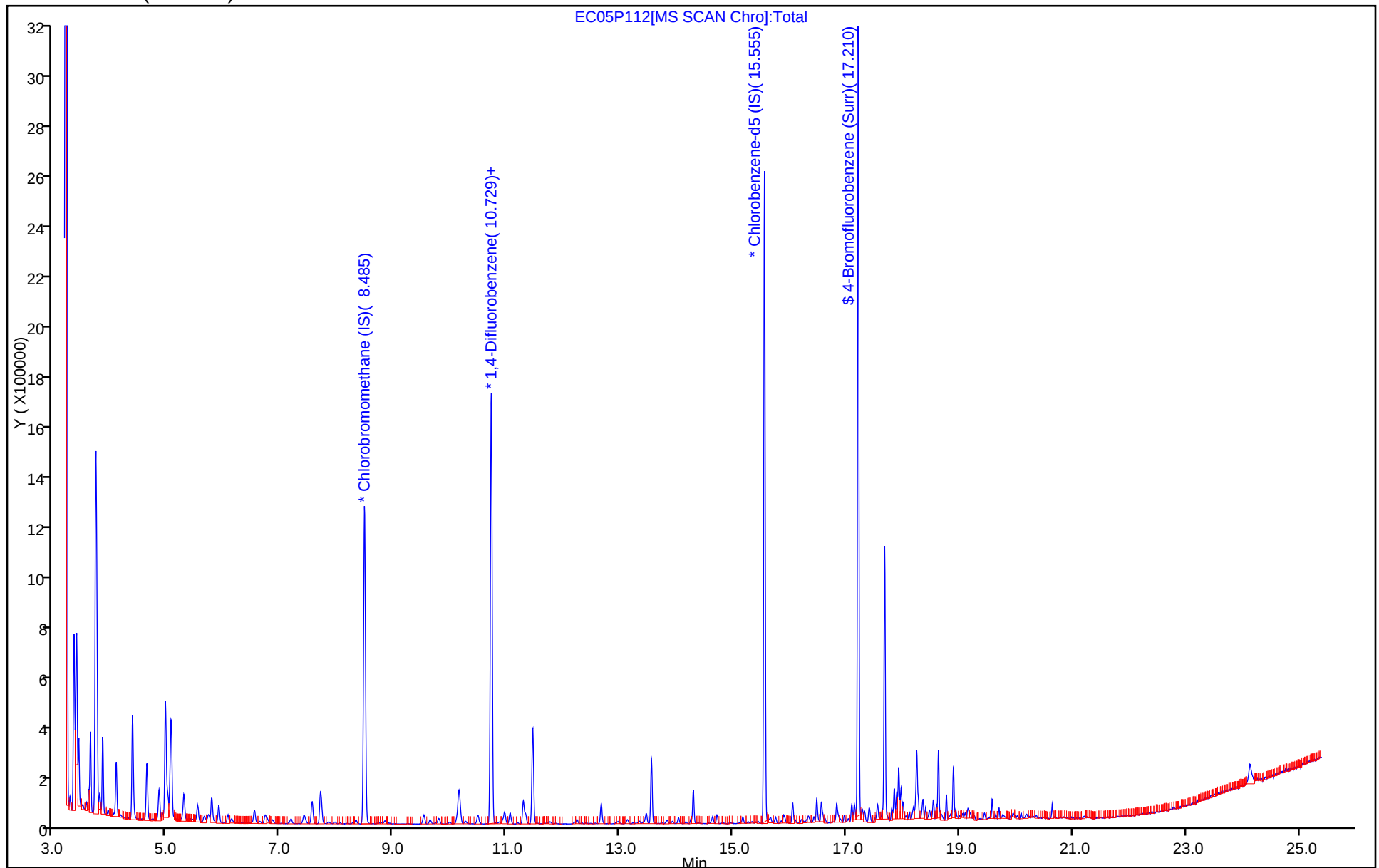
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P112.D

Injection Date: 05-Mar-2015 21:55:30

Instrument ID: ME

Lims ID: 140-2815-A-10

Lab Sample ID: 140-2815-10

Client ID: H3-BA-2015

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

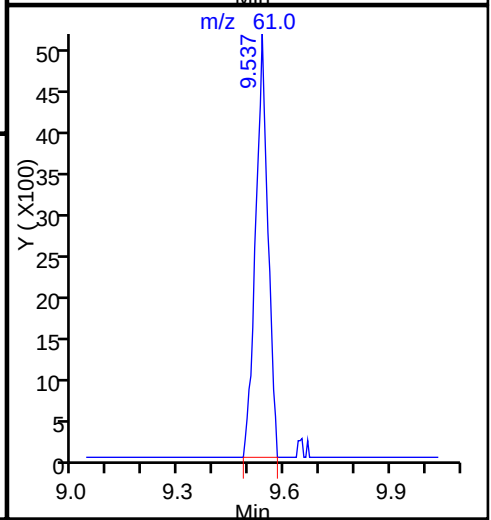
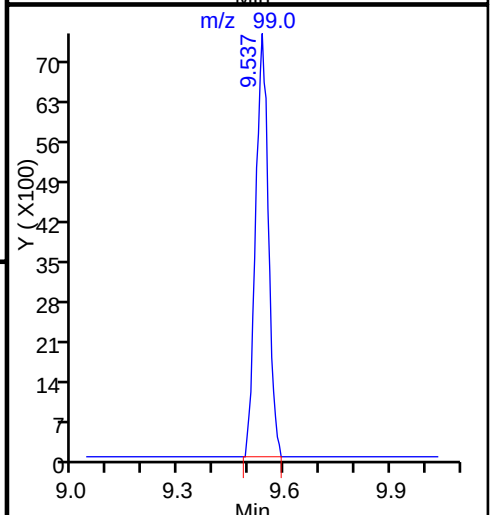
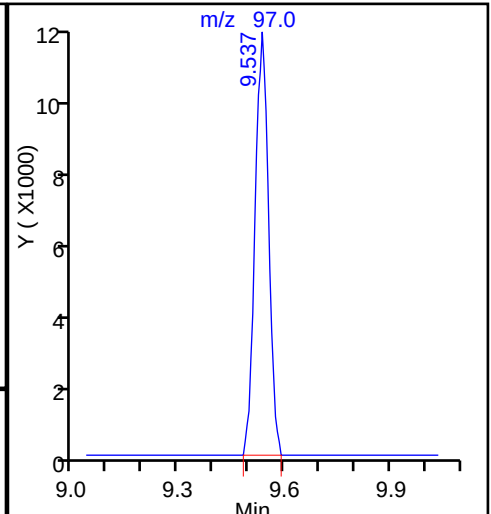
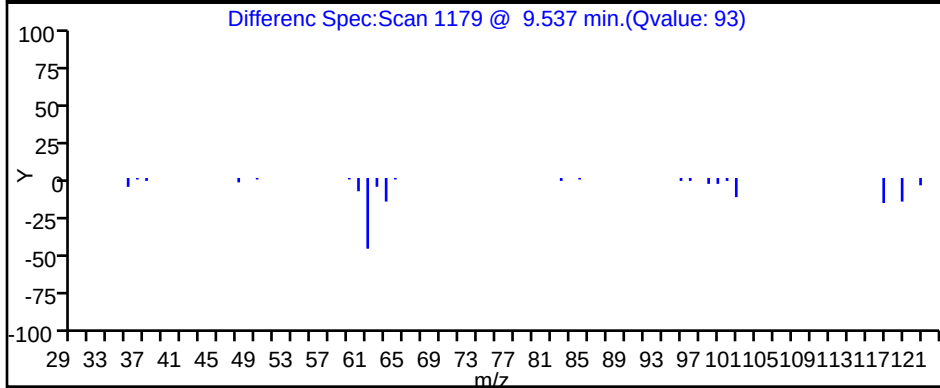
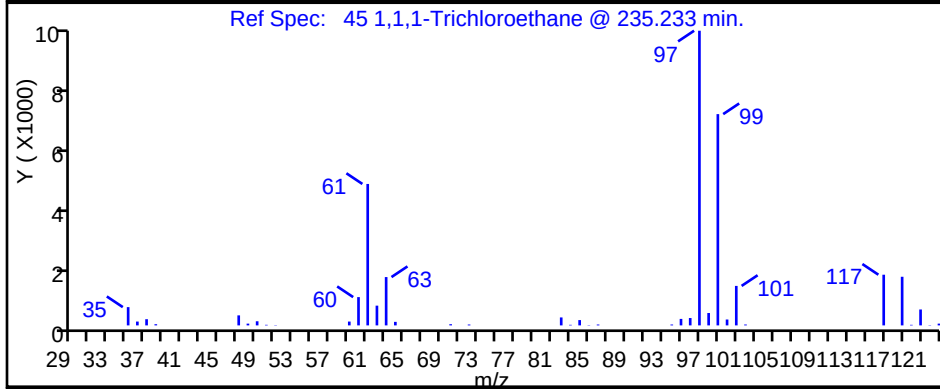
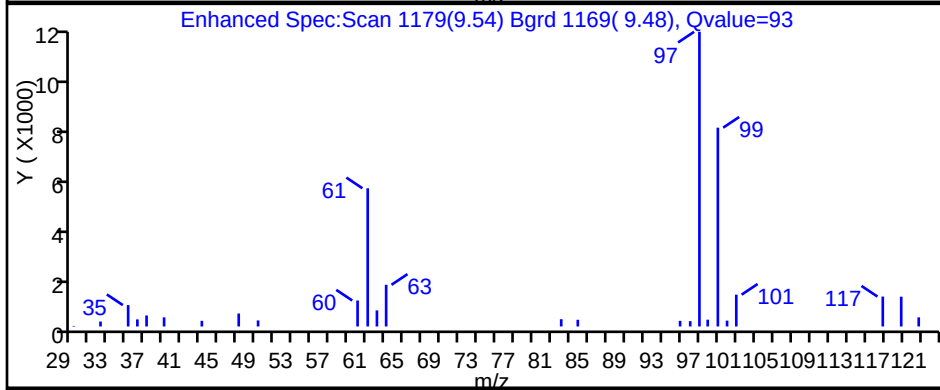
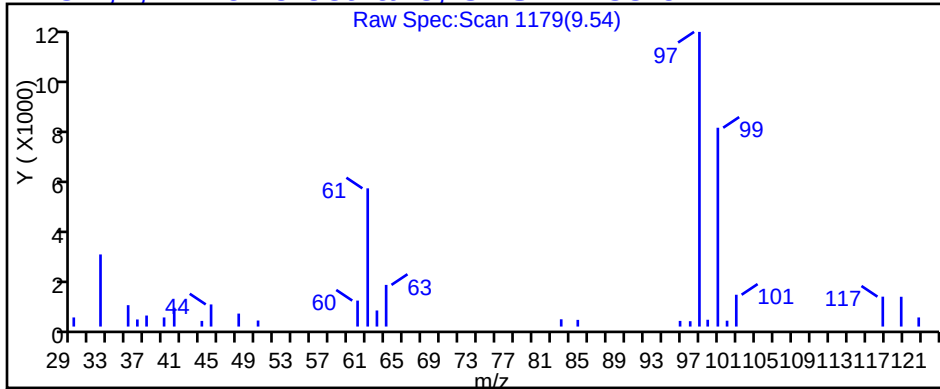
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

45 1,1,1-Trichloroethane, CAS: 71-55-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P112.D

Injection Date: 05-Mar-2015 21:55:30

Instrument ID: ME

Lims ID: 140-2815-A-10

Lab Sample ID: 140-2815-10

Client ID: H3-BA-2015

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

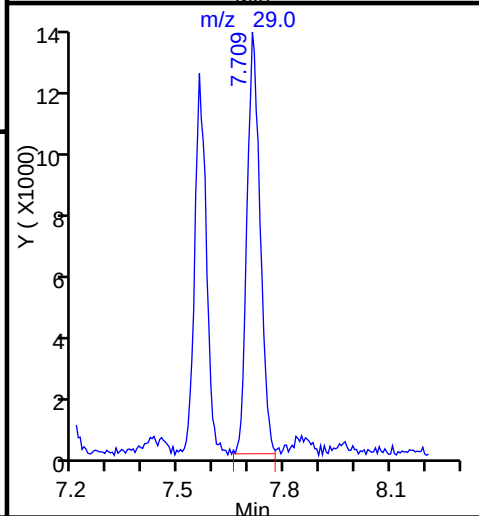
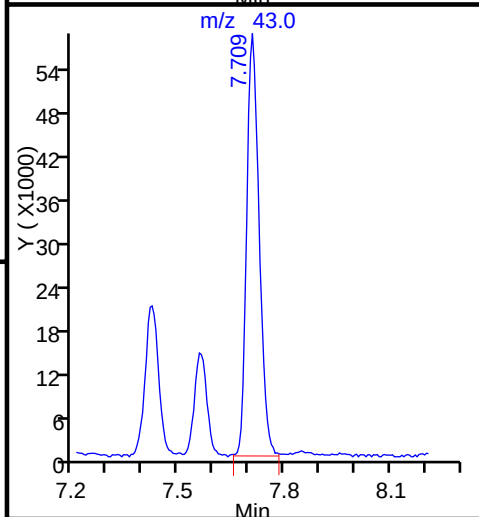
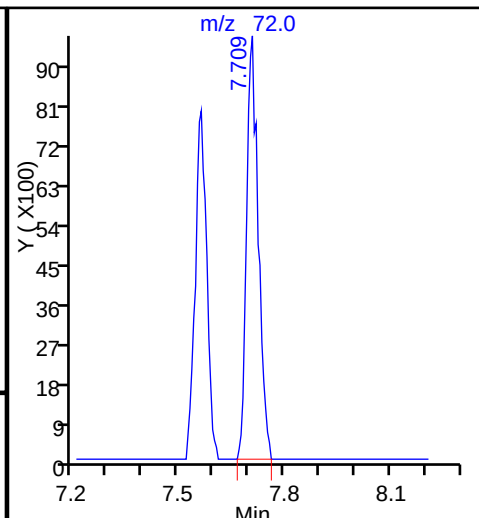
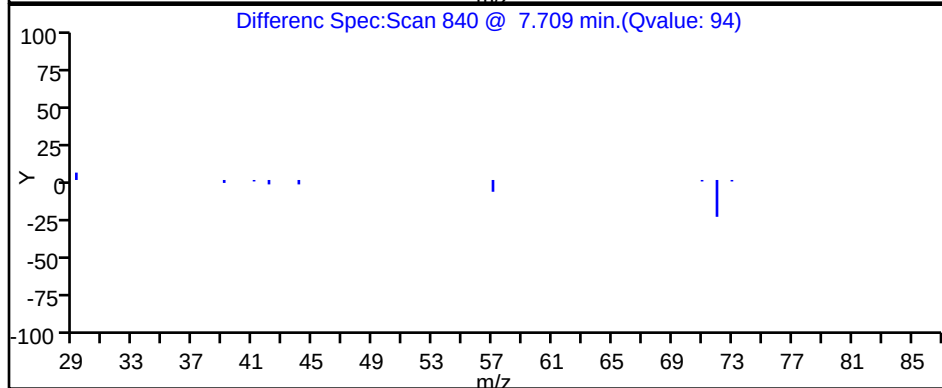
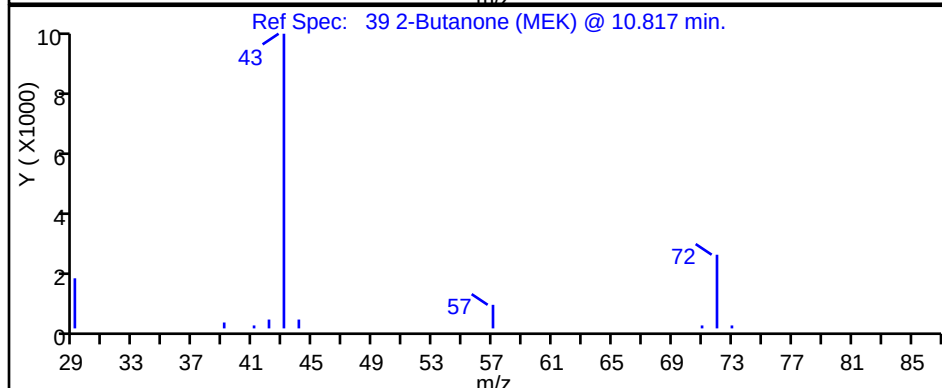
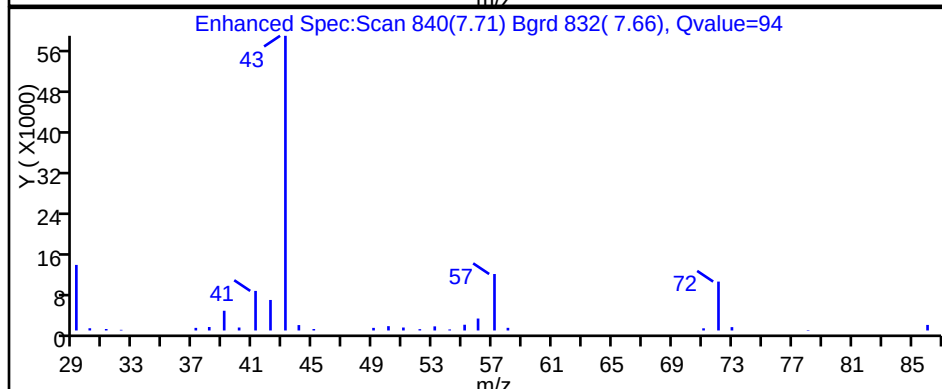
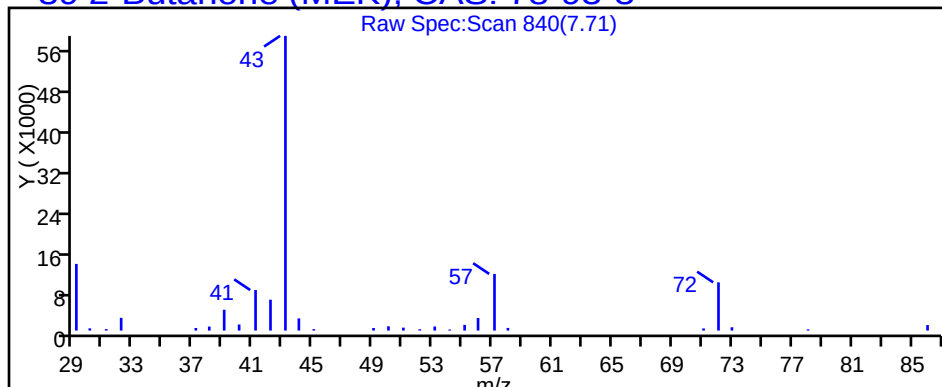
Dil. Factor: 1.0000

Method: ME_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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P112.D

Injection Date: 05-Mar-2015 21:55:30

Instrument ID: ME

Lims ID: 140-2815-A-10

Lab Sample ID: 140-2815-10

Client ID: H3-BA-2015

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

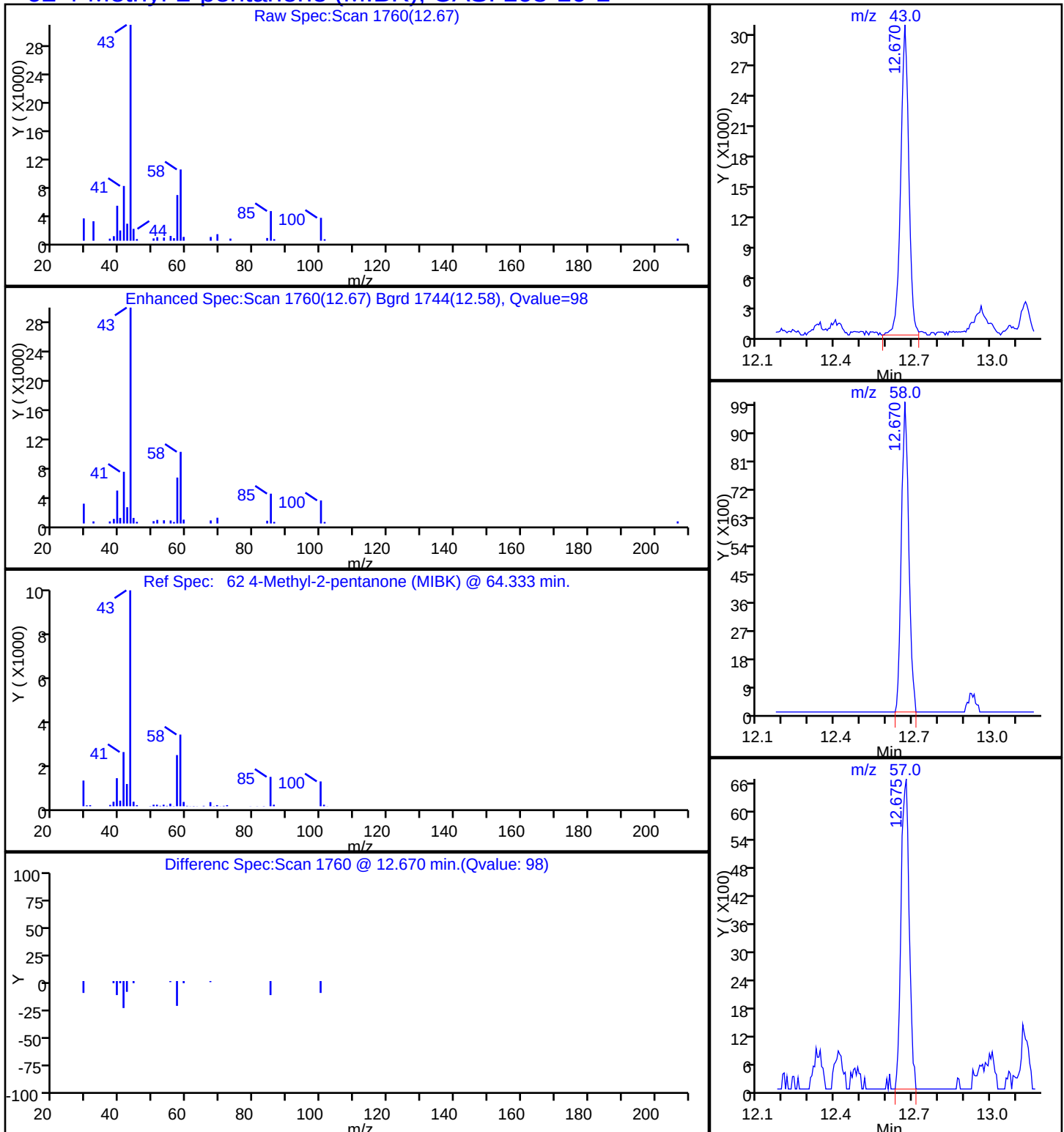
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

62 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P112.D

Injection Date: 05-Mar-2015 21:55:30

Instrument ID: ME

Lims ID: 140-2815-A-10

Lab Sample ID: 140-2815-10

Client ID: H3-BA-2015

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

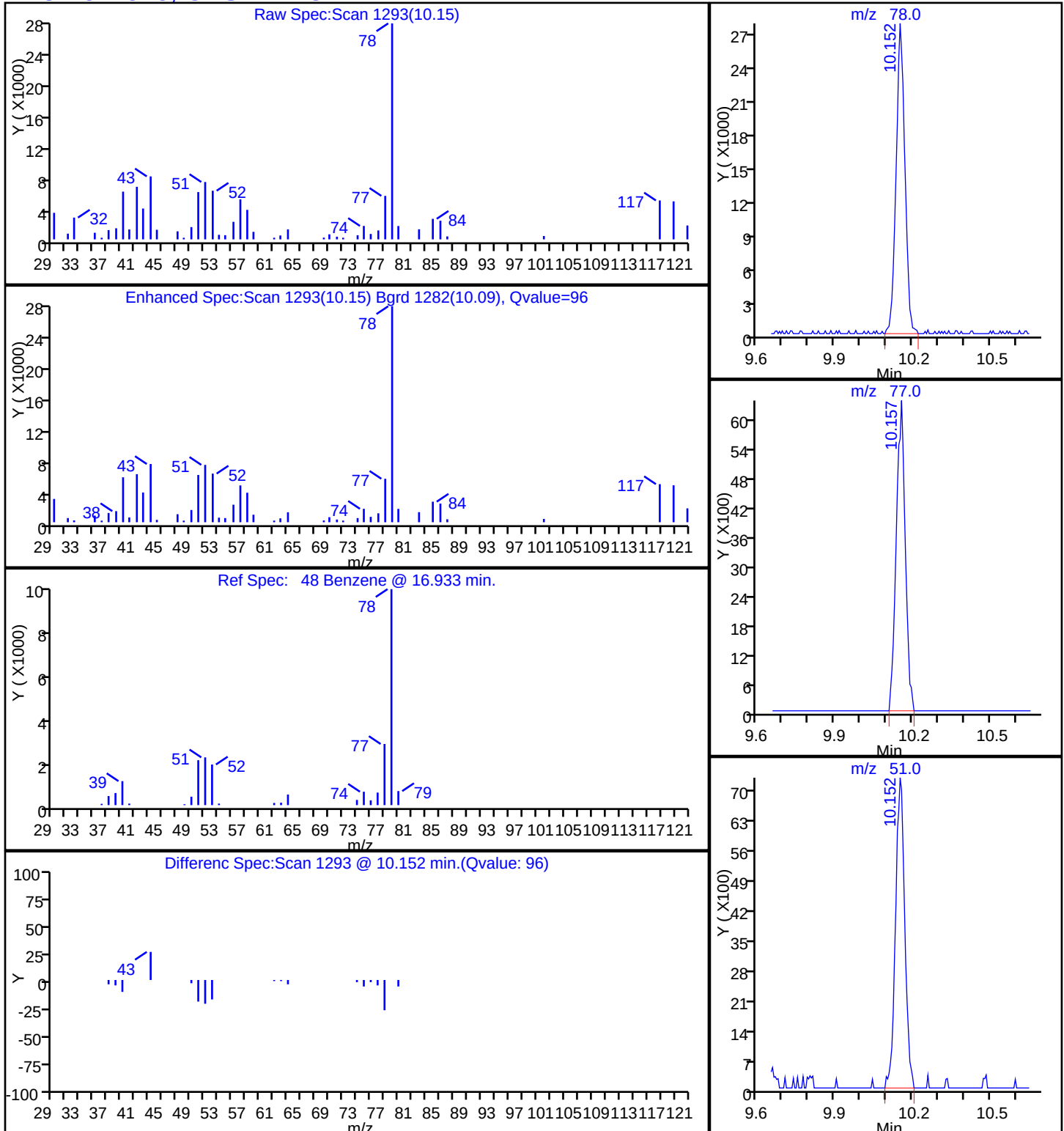
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P112.D

Injection Date: 05-Mar-2015 21:55:30

Instrument ID: ME

Lims ID: 140-2815-A-10

Lab Sample ID: 140-2815-10

Client ID: H3-BA-2015

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

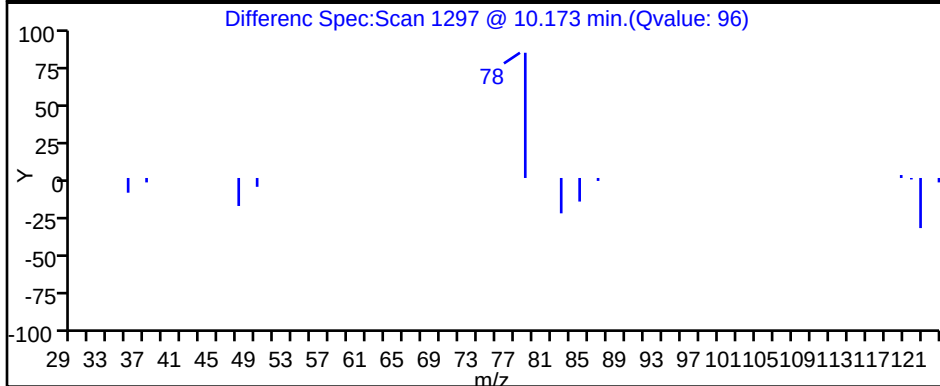
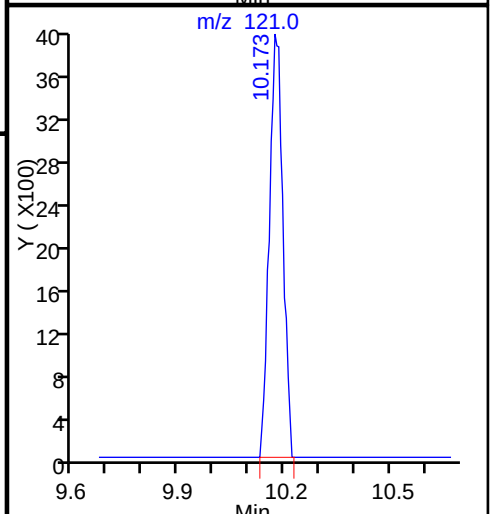
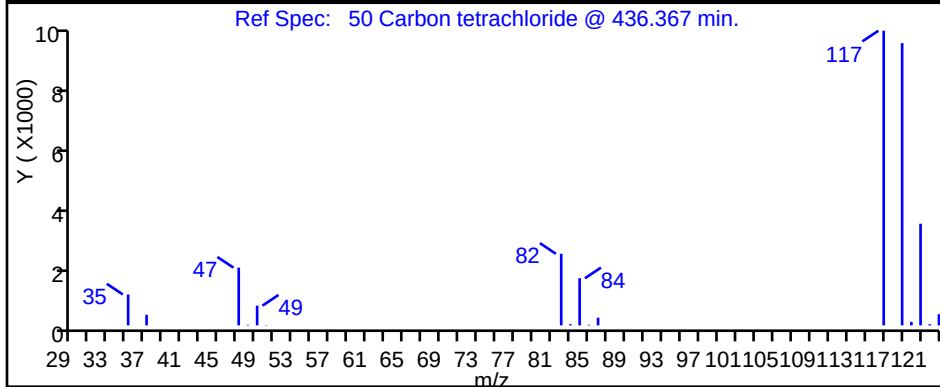
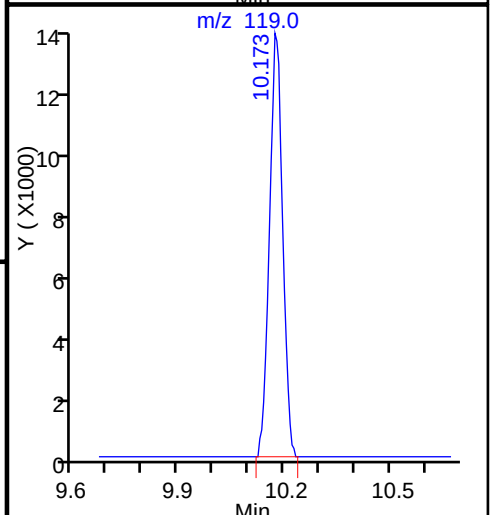
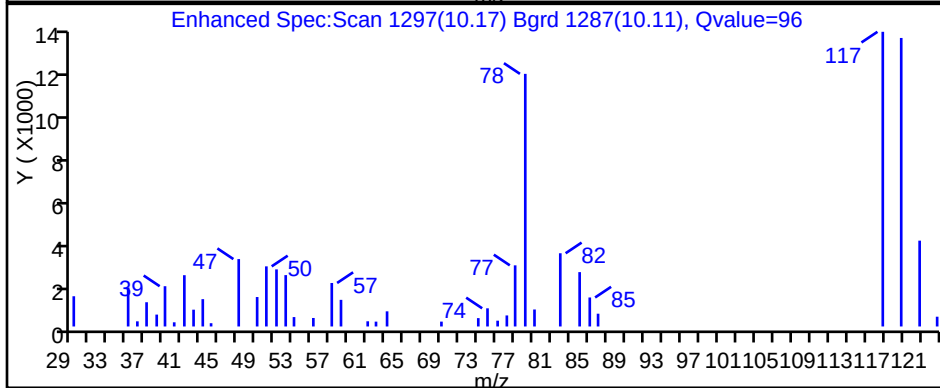
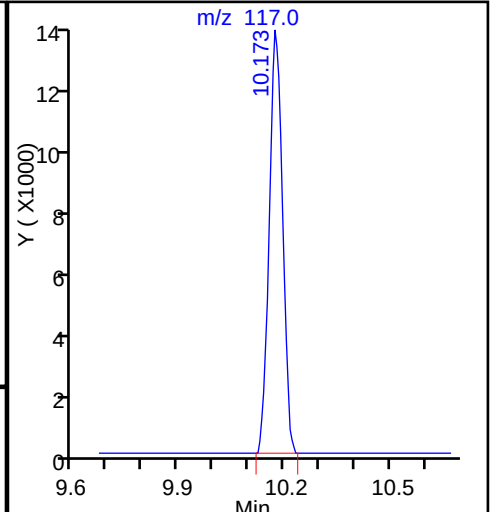
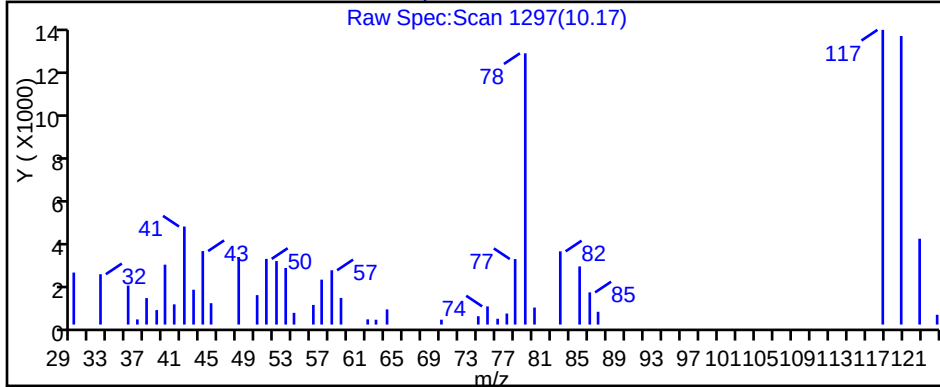
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P112.D

Injection Date: 05-Mar-2015 21:55:30

Instrument ID: ME

Lims ID: 140-2815-A-10

Lab Sample ID: 140-2815-10

Client ID: H3-BA-2015

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

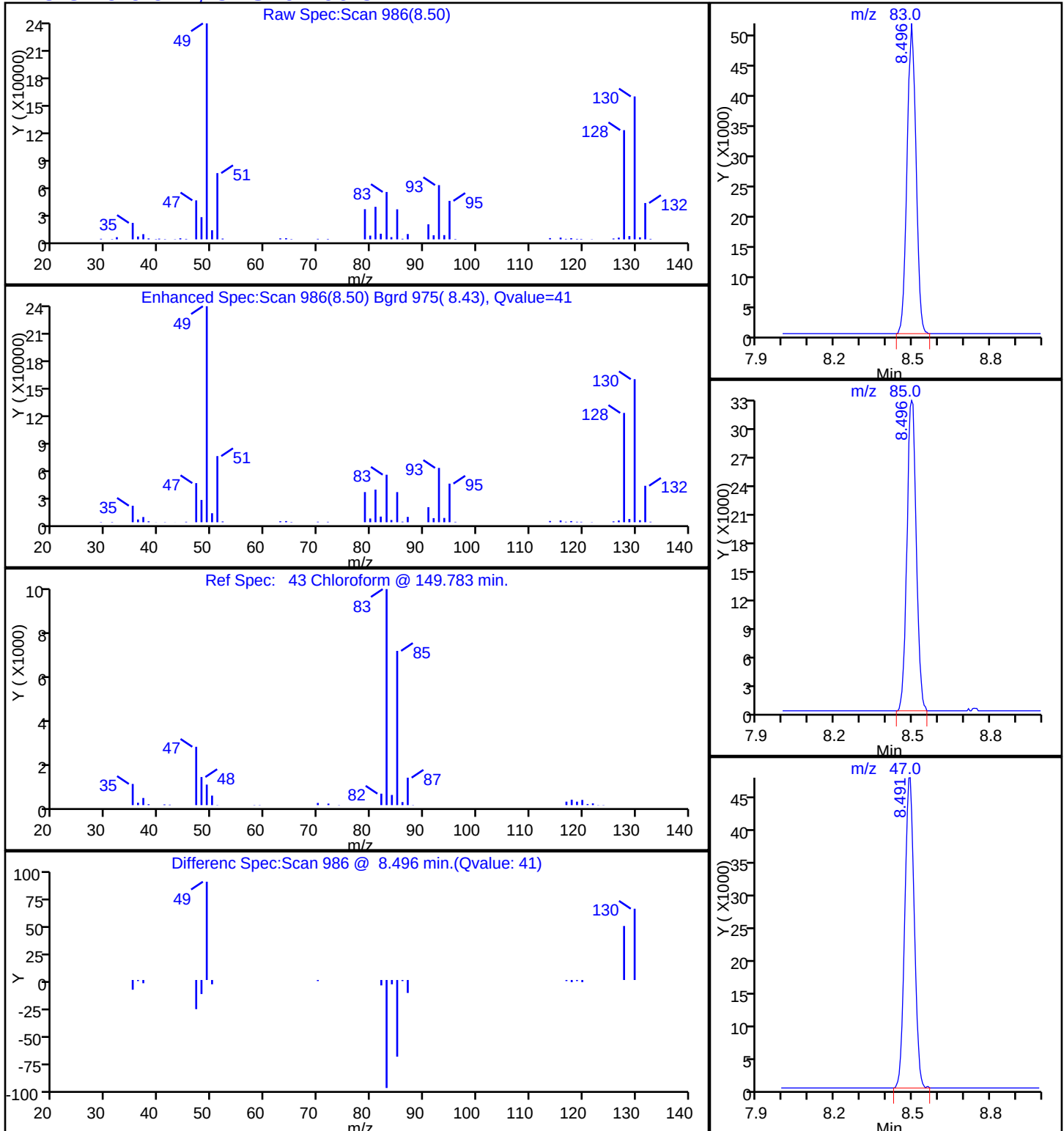
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

43 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P112.D

Injection Date: 05-Mar-2015 21:55:30

Instrument ID: ME

Lims ID: 140-2815-A-10

Lab Sample ID: 140-2815-10

Client ID: H3-BA-2015

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

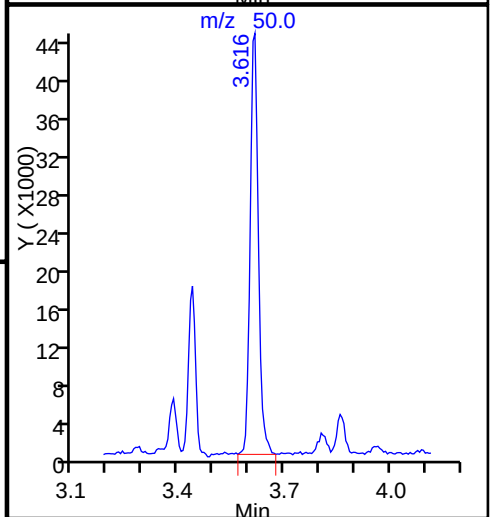
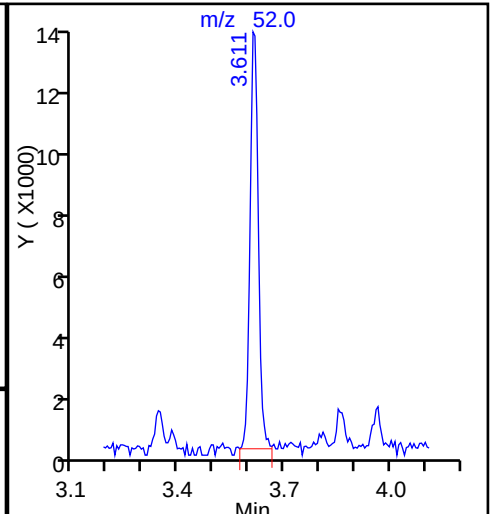
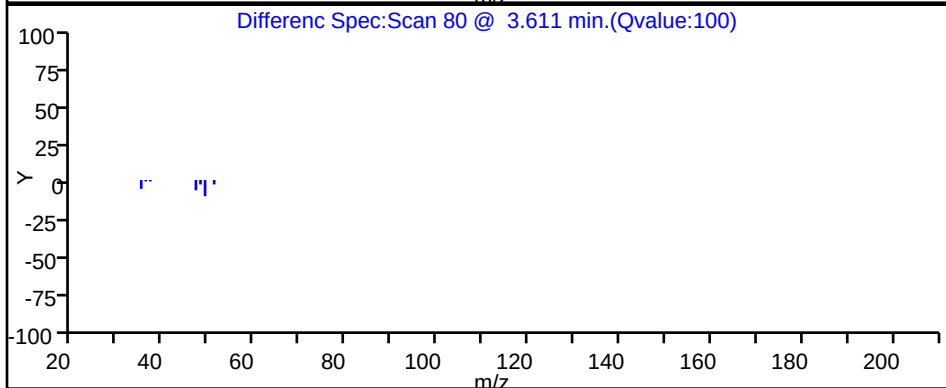
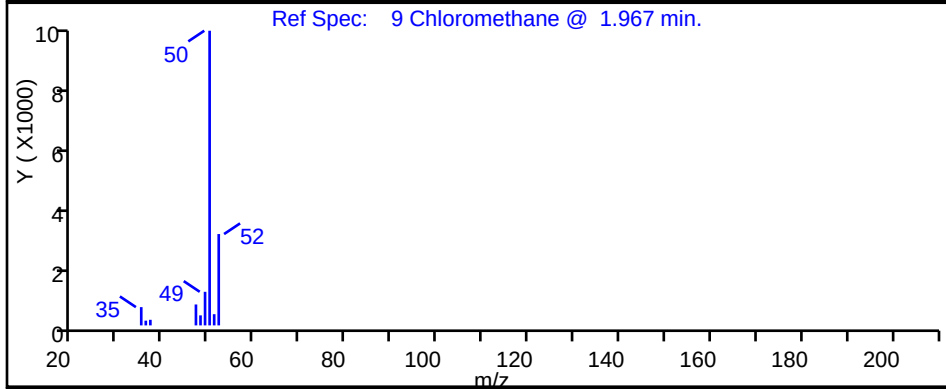
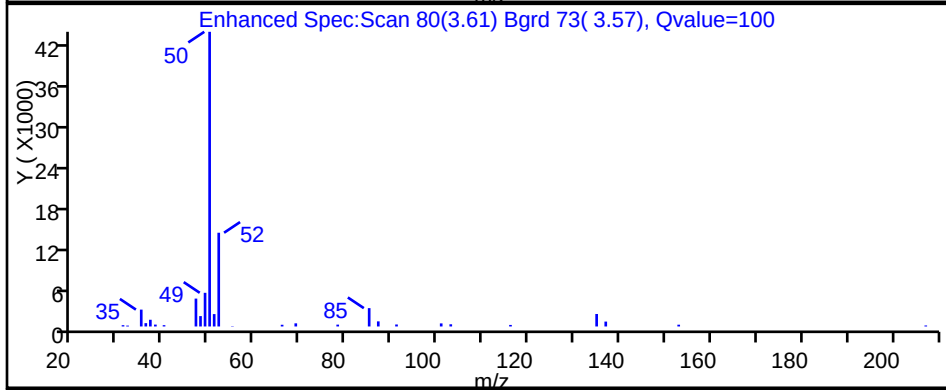
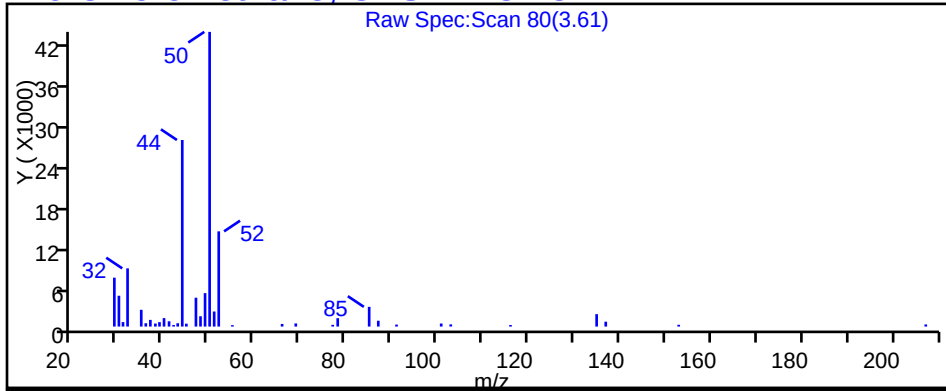
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P112.D

Injection Date: 05-Mar-2015 21:55:30

Instrument ID: ME

Lims ID: 140-2815-A-10

Lab Sample ID: 140-2815-10

Client ID: H3-BA-2015

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

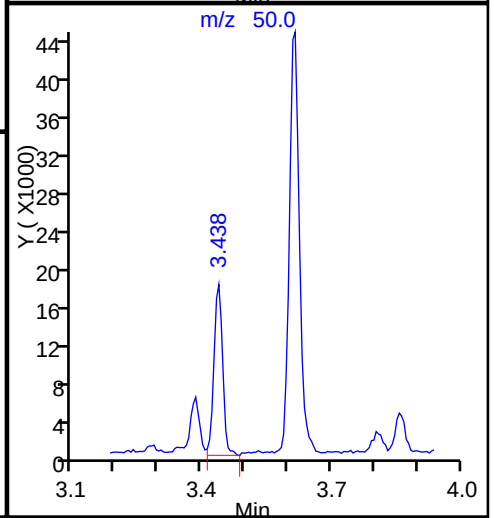
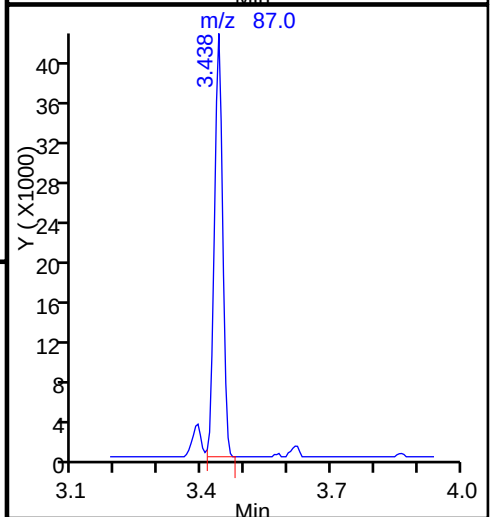
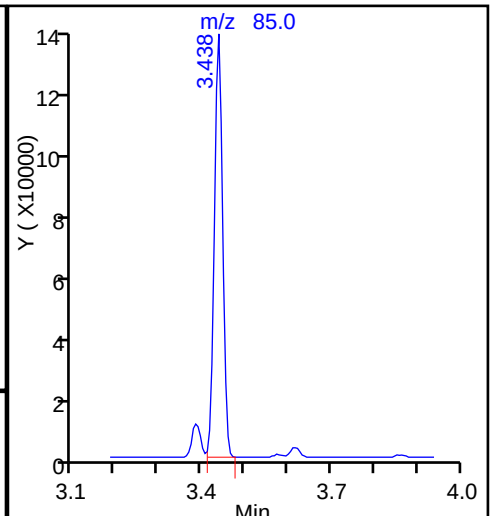
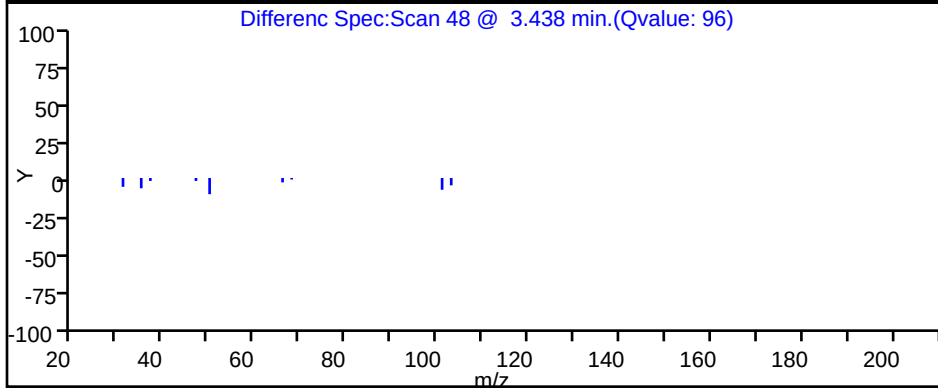
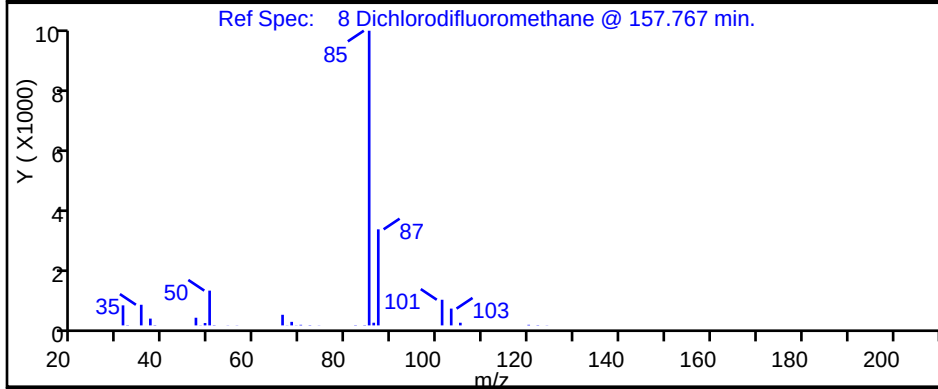
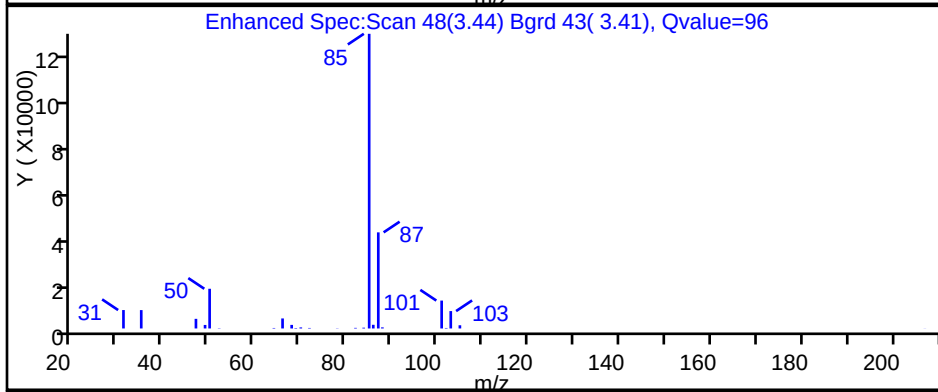
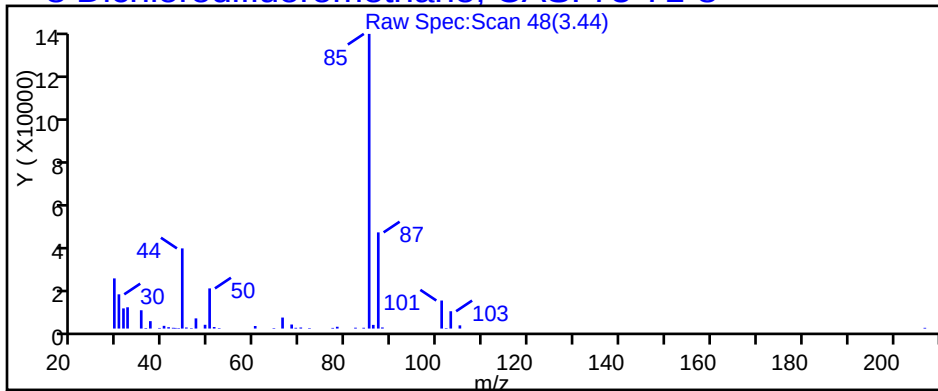
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P112.D

Injection Date: 05-Mar-2015 21:55:30

Instrument ID: ME

Lims ID: 140-2815-A-10

Lab Sample ID: 140-2815-10

Client ID: H3-BA-2015

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

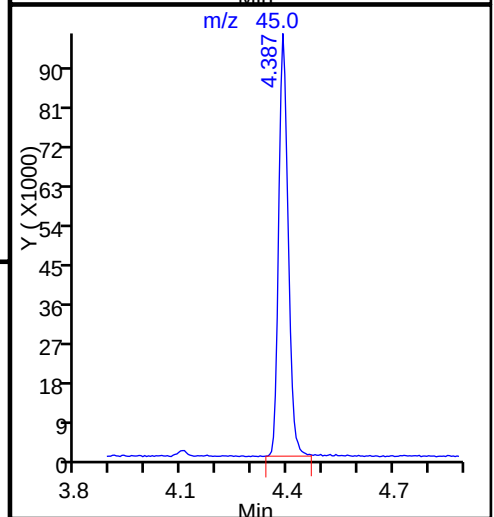
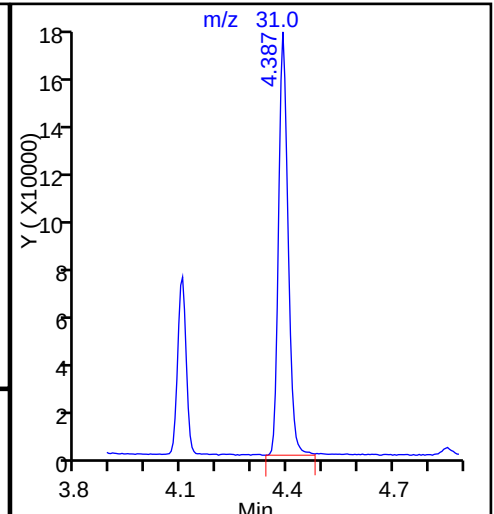
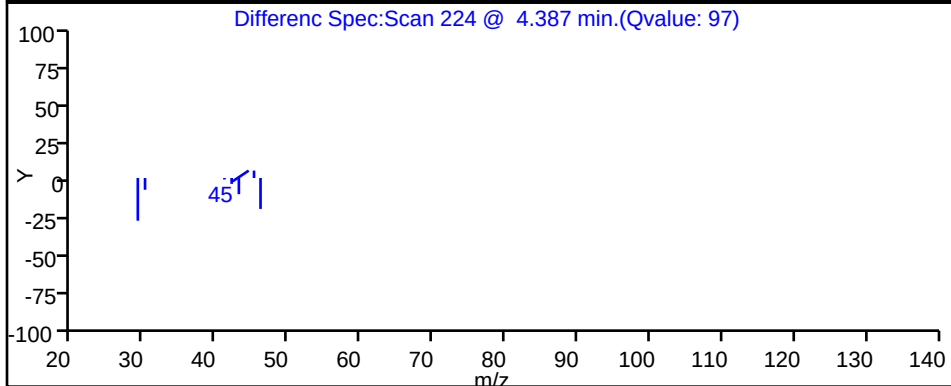
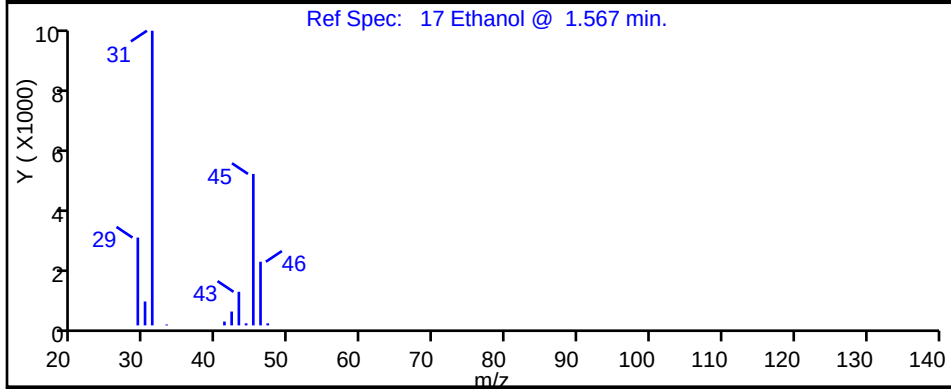
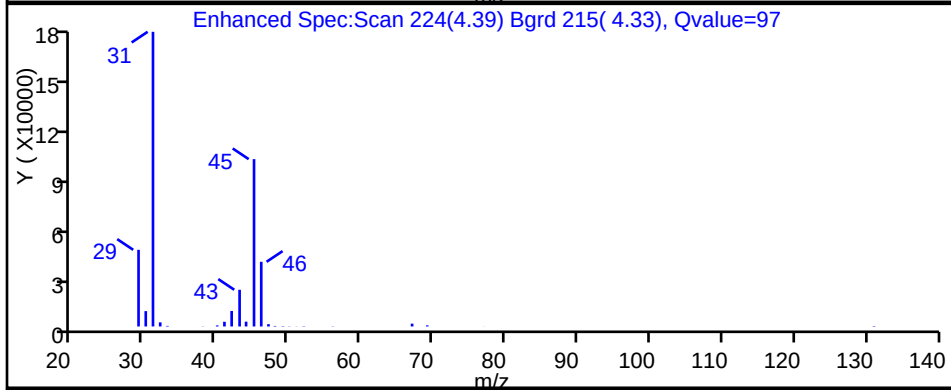
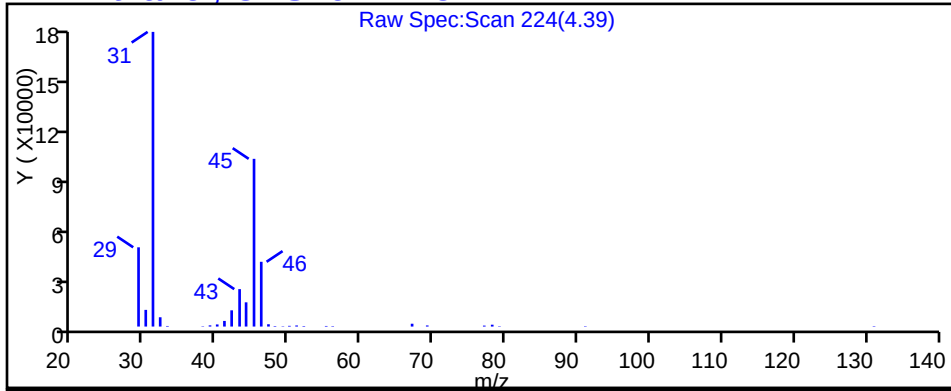
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P112.D

Injection Date: 05-Mar-2015 21:55:30

Instrument ID: ME

Lims ID: 140-2815-A-10

Lab Sample ID: 140-2815-10

Client ID: H3-BA-2015

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

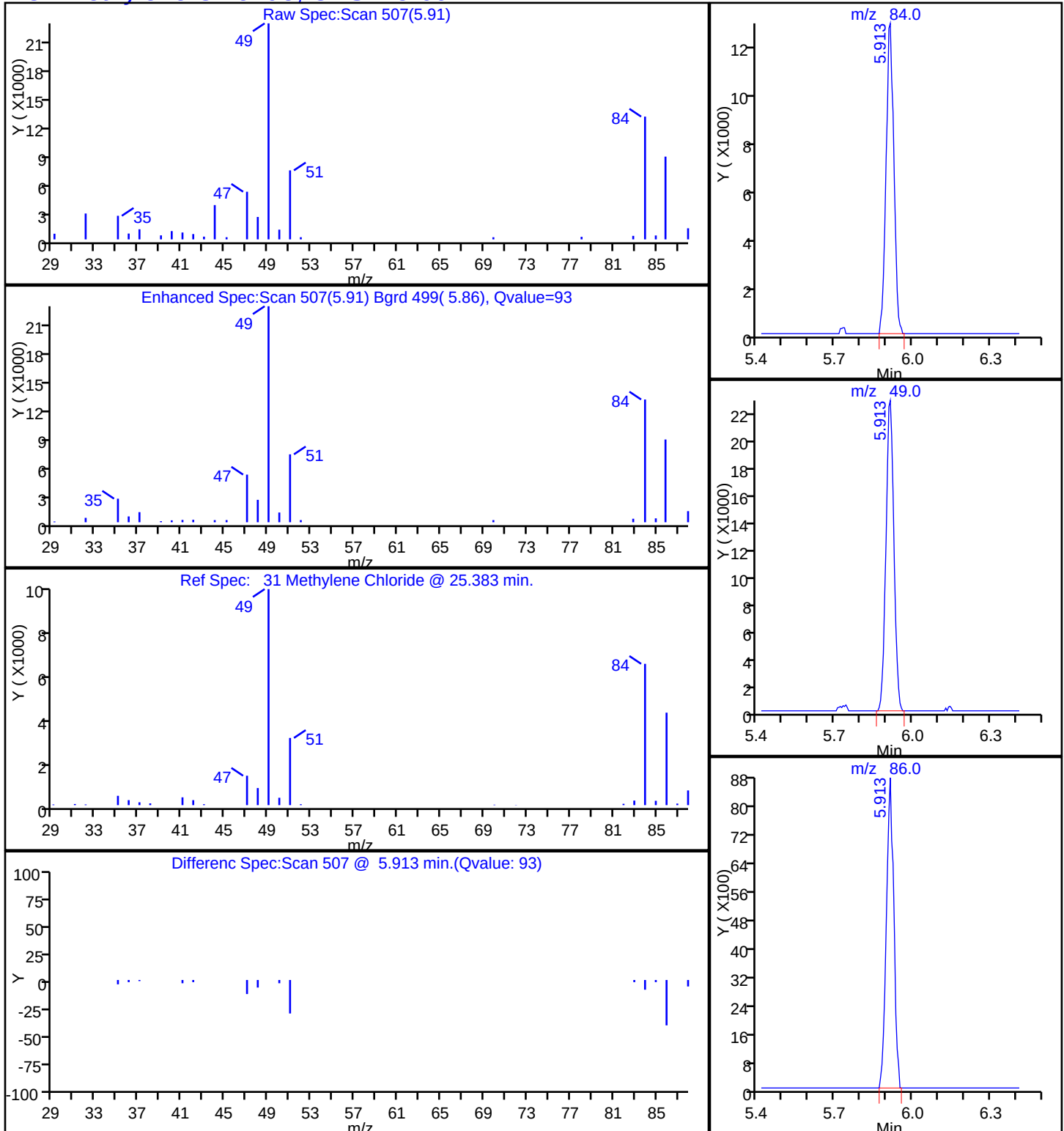
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P112.D

Injection Date: 05-Mar-2015 21:55:30

Instrument ID: ME

Lims ID: 140-2815-A-10

Lab Sample ID: 140-2815-10

Client ID: H3-BA-2015

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

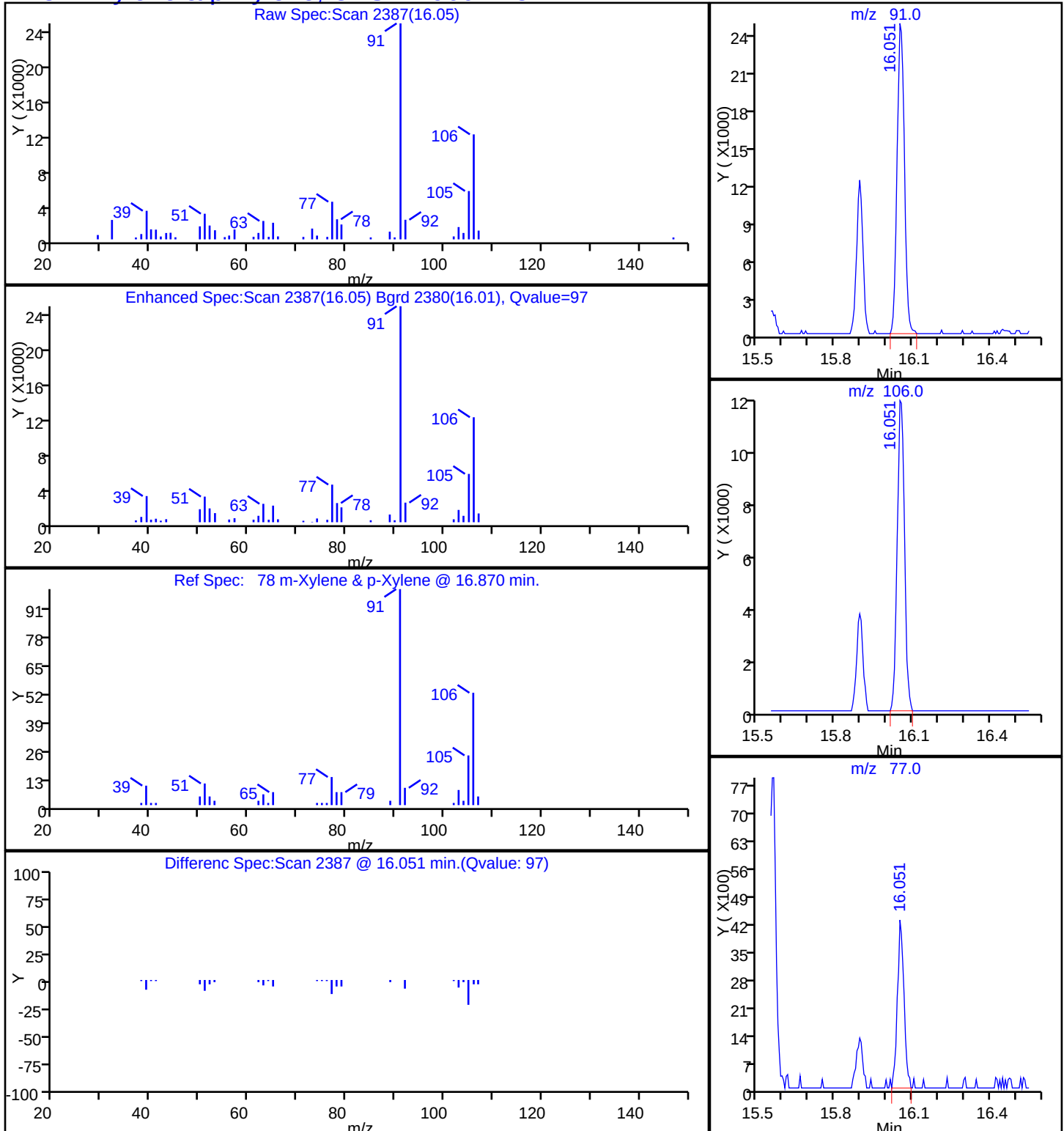
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P112.D

Injection Date: 05-Mar-2015 21:55:30

Instrument ID: ME

Lims ID: 140-2815-A-10

Lab Sample ID: 140-2815-10

Client ID: H3-BA-2015

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

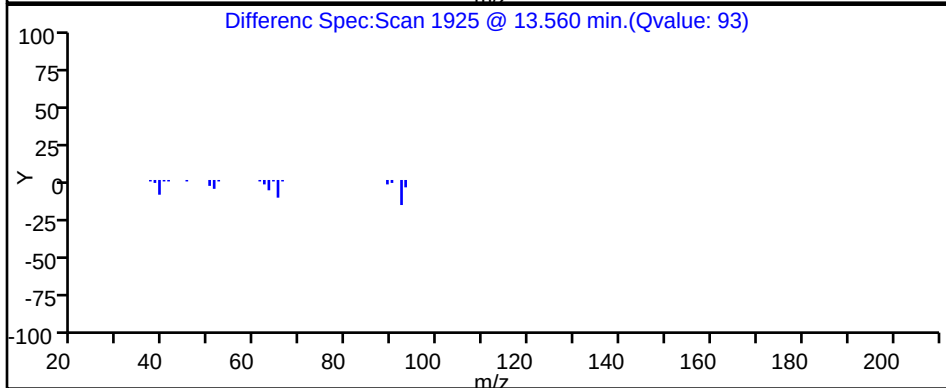
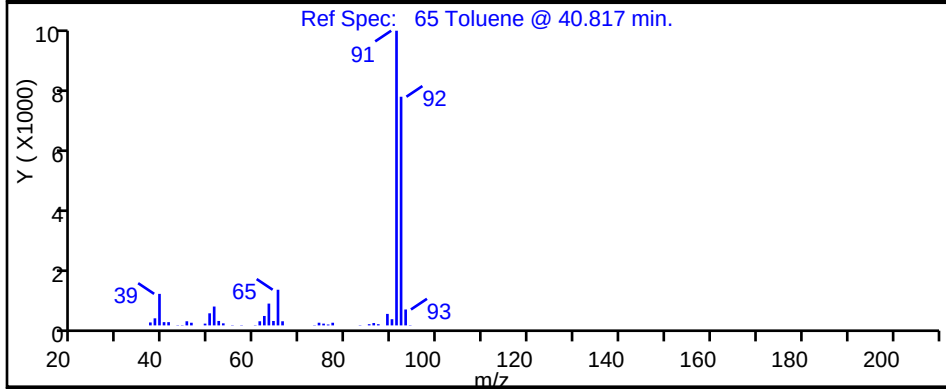
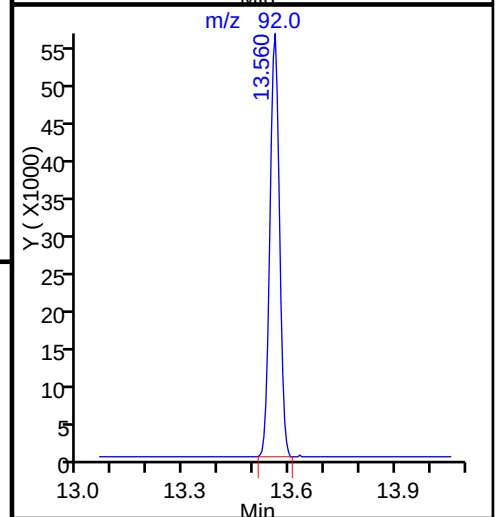
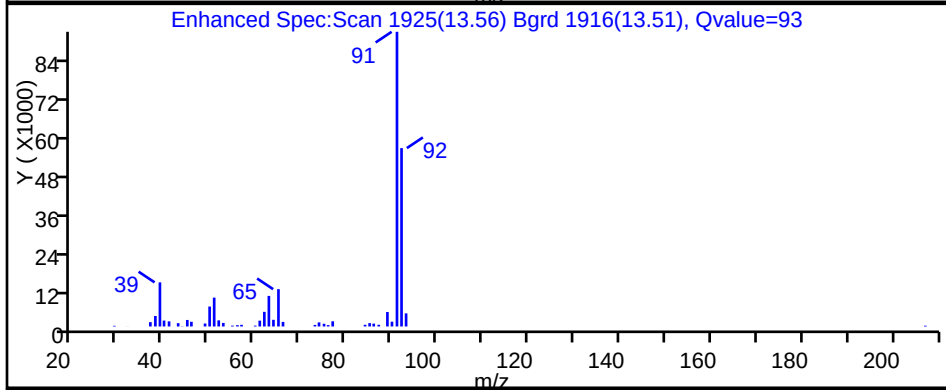
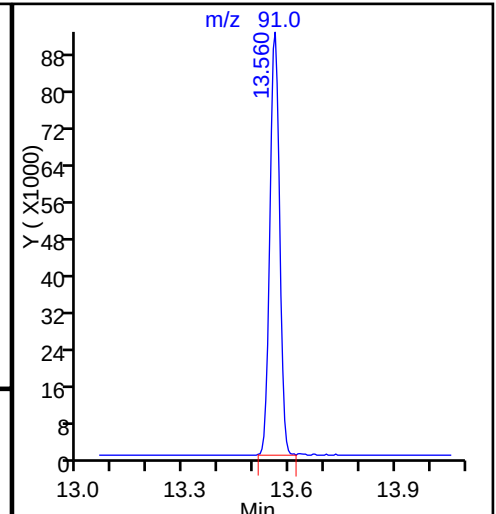
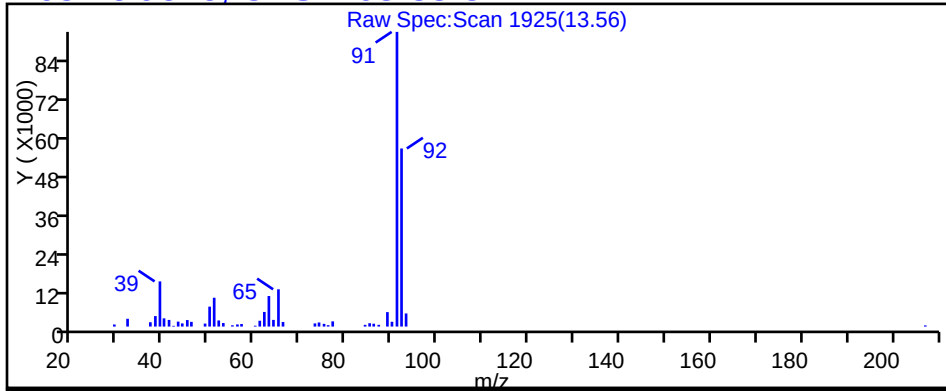
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P112.D

Injection Date: 05-Mar-2015 21:55:30

Instrument ID: ME

Lims ID: 140-2815-A-10

Lab Sample ID: 140-2815-10

Client ID: H3-BA-2015

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

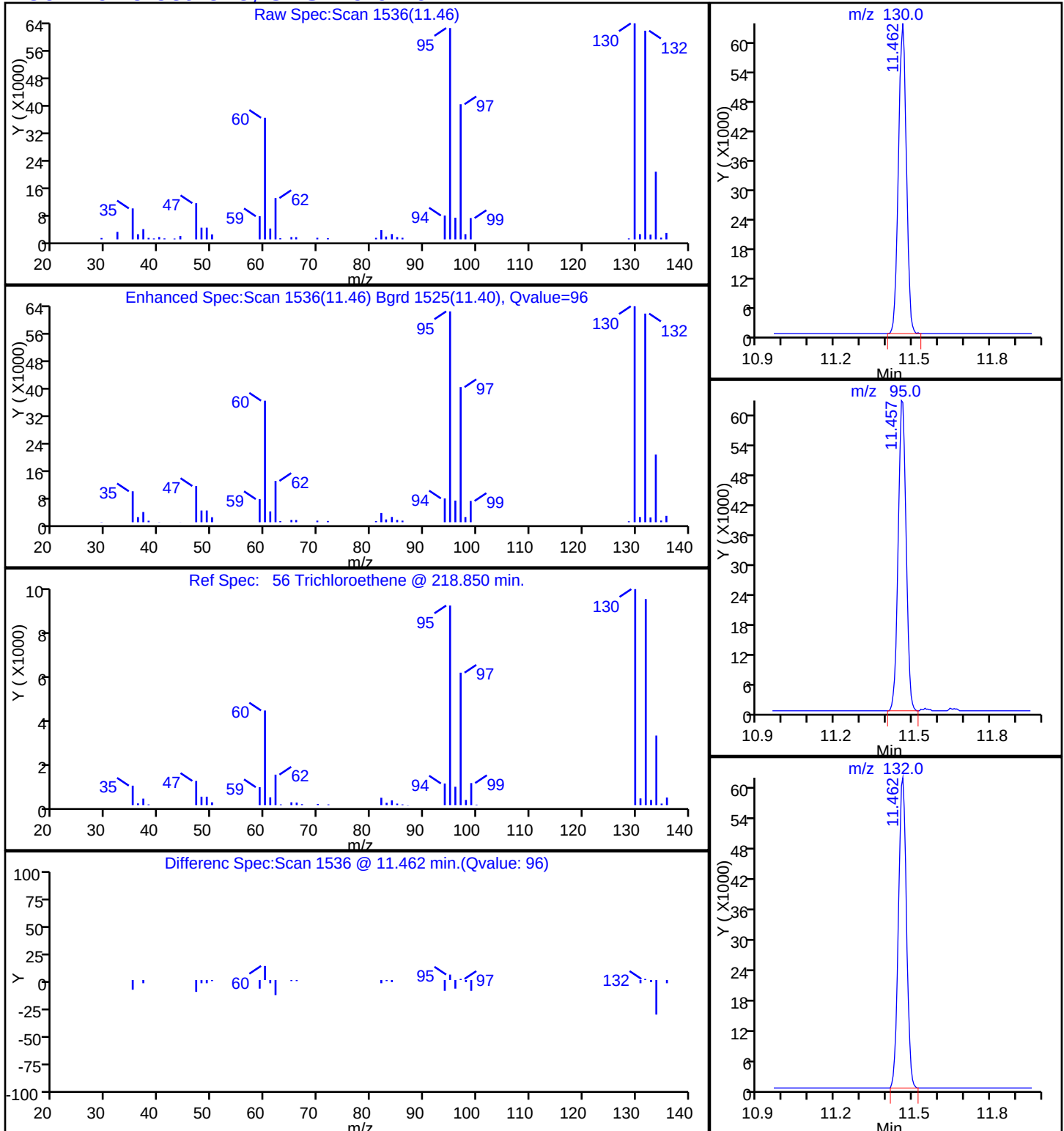
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

56 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P112.D

Injection Date: 05-Mar-2015 21:55:30

Instrument ID: ME

Lims ID: 140-2815-A-10

Lab Sample ID: 140-2815-10

Client ID: H3-BA-2015

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

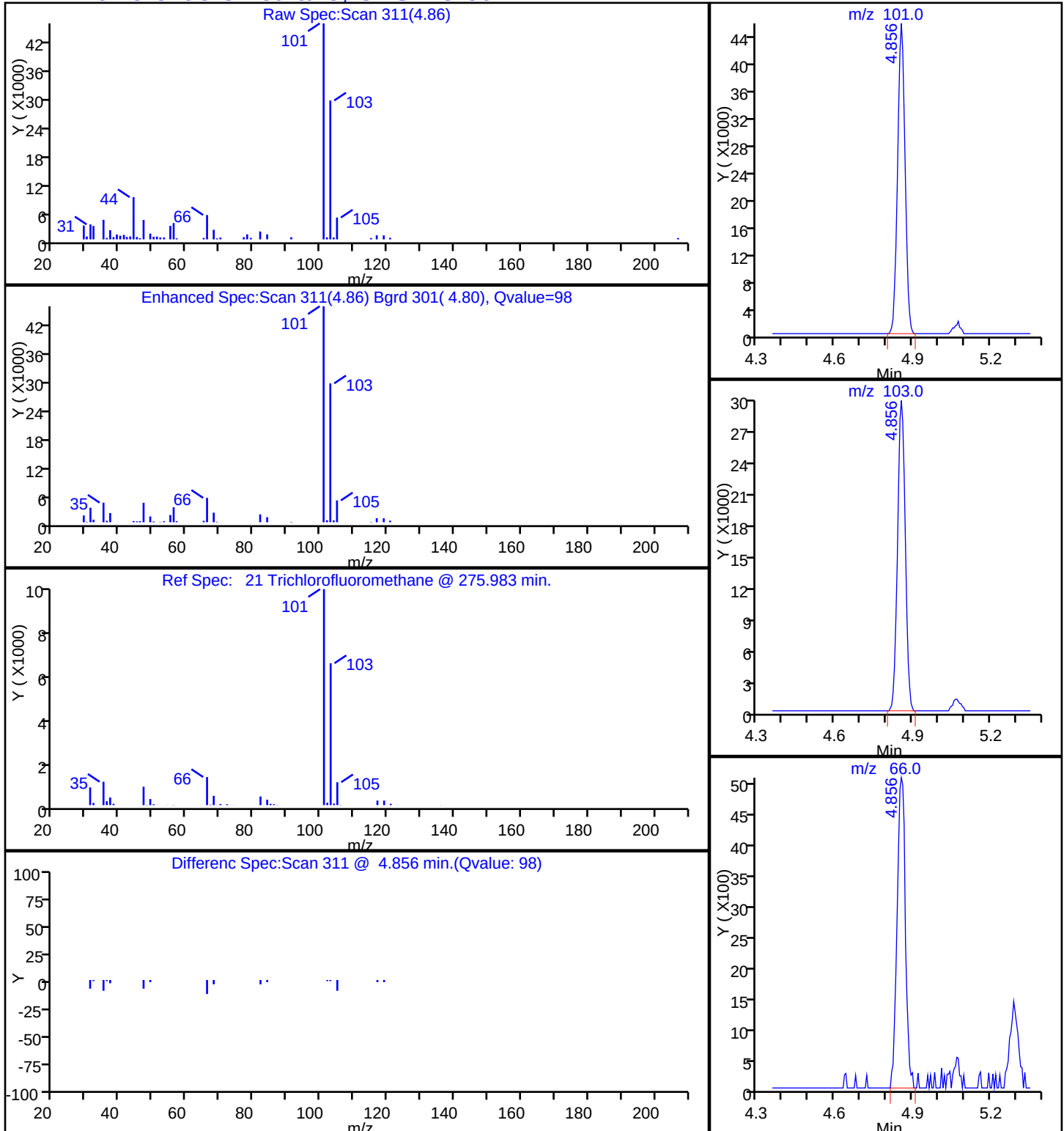
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

21 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: H3-SS-2015 Lab Sample ID: 140-2815-11

Matrix: Air Lab File ID: EC05P113.D

Analysis Method: TO 15 LL Date Collected: 02/25/2015 13:55

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 22:44

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.: 2464 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	0.13		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		0.080	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.15		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	0.15		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	0.39		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	0.24		0.20	
71-43-2	Benzene	78.11	0.16		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	0.11		0.040	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	0.36		0.080	
74-87-3	Chloromethane	50.49	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: H3-SS-2015 Lab Sample ID: 140-2815-11
 Matrix: Air Lab File ID: EC05P113.D
 Analysis Method: TO 15 LL Date Collected: 02/25/2015 13:55
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 22:44
 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.: 2464 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	0.49		0.080	
64-17-5	Ethanol	46.07	2.6		0.80	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	0.42		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	0.29		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.41		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	0.17		0.080	
108-88-3	Toluene	92.14	0.53		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	0.83		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.24		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: H3-SS-2015 Lab Sample ID: 140-2815-11

Matrix: Air Lab File ID: EC05P113.D

Analysis Method: TO 15 LL Date Collected: 02/25/2015 13:55

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 22:44

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.: 2464 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	0.70		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		0.32	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.74		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	0.73		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	1.1		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	0.99		0.82	
71-43-2	Benzene	78.11	0.52		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	0.68		0.25	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	1.8		0.39	
74-87-3	Chloromethane	50.49	ND		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: H3-SS-2015 Lab Sample ID: 140-2815-11

Matrix: Air Lab File ID: EC05P113.D

Analysis Method: TO 15 LL Date Collected: 02/25/2015 13:55

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 22:44

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.: 2464 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	2.4		0.40	
64-17-5	Ethanol	46.07	4.9		1.5	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	1.5		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	0.99		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	1.8		0.35	
95-47-6	o-Xylene	106.17	0.54		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	1.1		0.54	
108-88-3	Toluene	92.14	2.0		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	4.4		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.3		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P113.D
 Lims ID: 140-2815-A-11 Lab Sample ID: 140-2815-11
 Client ID: H3-SS-2015
 Sample Type: Client
 Inject. Date: 05-Mar-2015 22:44:30 ALS Bottle#: 13 Worklist Smp#: 17
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2815-a-11
 Misc. Info.: E030515,TO155,,140-0001425-017
 Operator ID: 7126 Instrument ID: ME
 Method: \\KNXCHROM\ChromData\ME\20150304-1425.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 10-Mar-2015 07:57:00 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK004

First Level Reviewer: tajh

Date: 10-Mar-2015 07:57:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.485	8.491	-0.006	97	334470	4.00	
* 2 1,4-Difluorobenzene	114	10.728	10.729	-0.001	96	1562854	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.555	15.555	0.000	91	1445509	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.210	17.210	0.000	86	1122510	4.12	
8 Dichlorodifluoromethane	85	3.438	3.438	0.000	96	167636	0.4907	
9 Chloromethane	52	3.616	3.616	0.000	92	2377	0.0678	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.621	0.000	65	3411	0.0158	
17 Ethanol	31	4.392	4.393	-0.001	97	104363	2.62	
21 Trichlorofluoromethane	101	4.856	4.862	-0.006	97	71989	0.2361	
29 2-Methyl-2-propanol	59	5.676	5.654	0.022	46	6784	0.0346	
30 1,1,2-Trichloro-1,2,2-trif	101	5.741	5.735	0.006	86	14693	0.0681	
31 Methylene Chloride	84	5.918	5.919	-0.001	94	26217	0.2864	
39 2-Butanone (MEK)	72	7.714	7.709	0.005	86	17021	0.3891	
40 Hexane	56	7.725	7.730	-0.005	82	40256	0.4220	
43 Chloroform	83	8.496	8.502	-0.006	37	90165	0.3647	
45 1,1,1-Trichloroethane	97	9.537	9.537	0.000	94	36791	0.1276	
49 Cyclohexane	69	10.146	10.152	-0.006	53	6720	0.1320	
48 Benzene	78	10.152	10.157	-0.005	80	47979	0.1631	
50 Carbon tetrachloride	117	10.178	10.179	-0.001	95	33391	0.1079	
56 Trichloroethene	130	11.462	11.462	0.000	95	136383	0.8268	
62 4-Methyl-2-pentanone (MIBK	43	12.675	12.664	0.011	94	60802	0.2420	
65 Toluene	91	13.559	13.560	-0.001	92	191595	0.5288	
73 Tetrachloroethene	129	14.719	14.719	0.000	93	27163	0.1681	
76 Ethylbenzene	91	15.894	15.894	0.000	95	37255	0.0793	
78 m-Xylene & p-Xylene	91	16.051	16.056	-0.005	98	149332	0.4122	
82 o-Xylene	91	16.590	16.585	0.005	95	47360	0.1252	
89 1,3,5-Trimethylbenzene	120	17.960	17.960	0.000	93	35056	0.1478	
93 1,2,4-Trimethylbenzene	105	18.402	18.402	0.000	90	61714	0.1499	
97 1,4-Dichlorobenzene	146	18.769	18.769	0.000	46	10604	0.0377	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P113.D

Injection Date: 05-Mar-2015 22:44:30

Instrument ID: ME

Operator ID: 7126

Lims ID: 140-2815-A-11

Lab Sample ID: 140-2815-11

Worklist Smp#: 17

Client ID: H3-SS-2015

Purge Vol: 500.000 mL

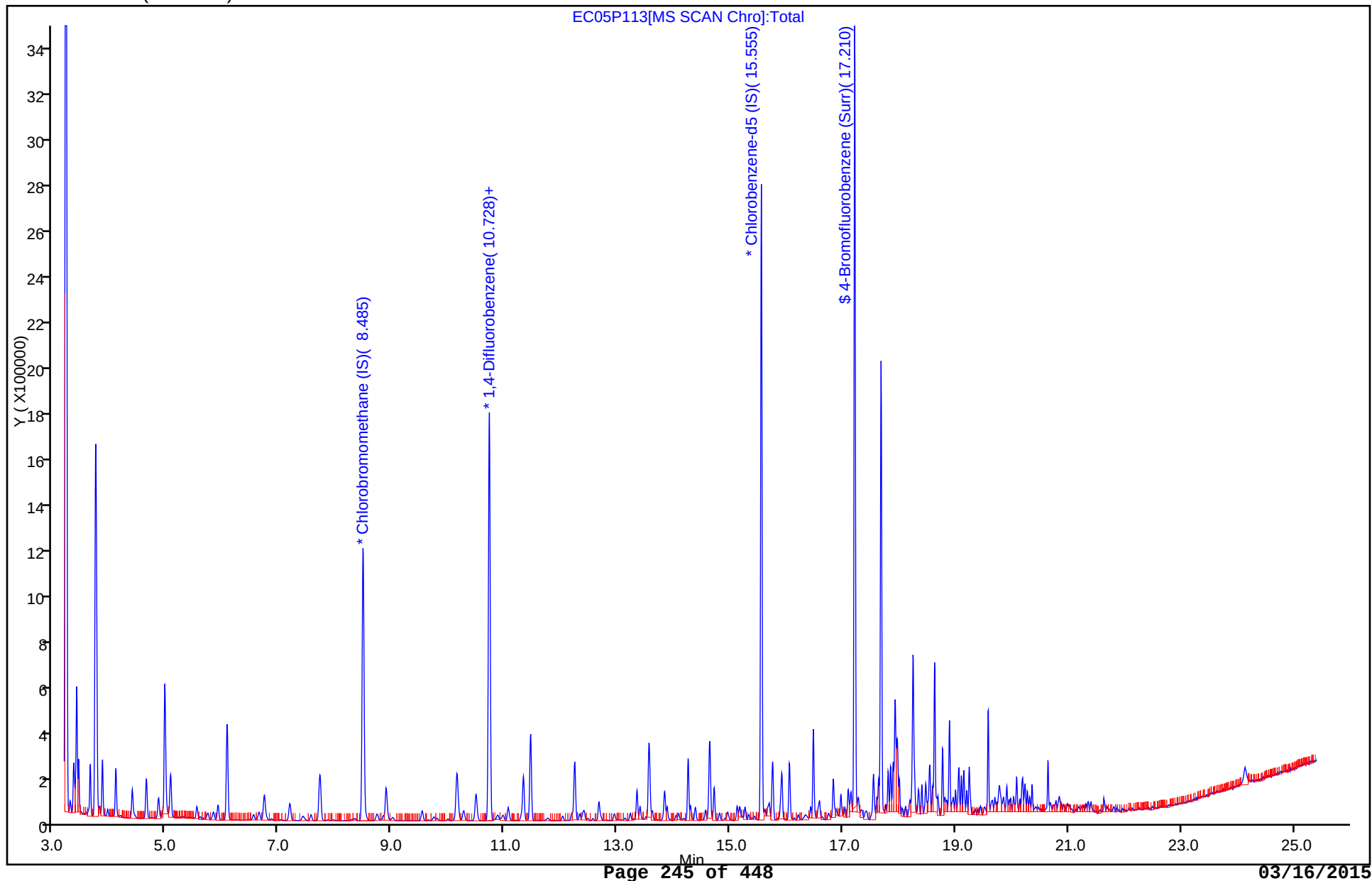
Dil. Factor: 1.0000

ALS Bottle#: 13

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P113.D

Injection Date: 05-Mar-2015 22:44:30

Instrument ID: ME

Lims ID: 140-2815-A-11

Lab Sample ID: 140-2815-11

Client ID: H3-SS-2015

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

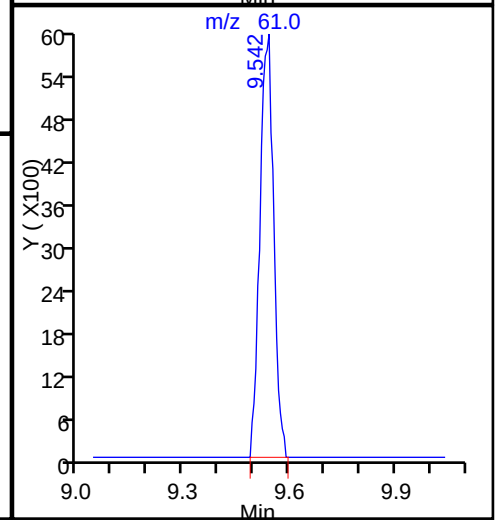
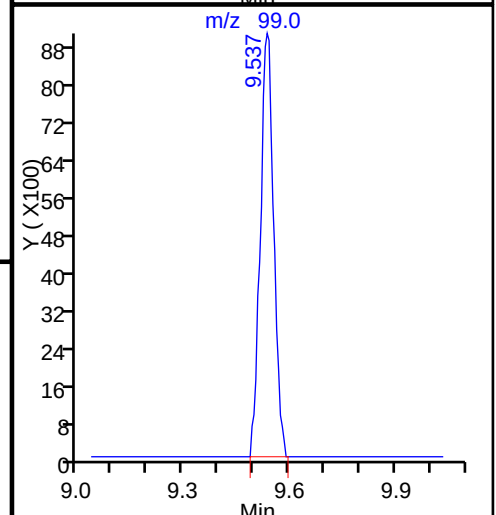
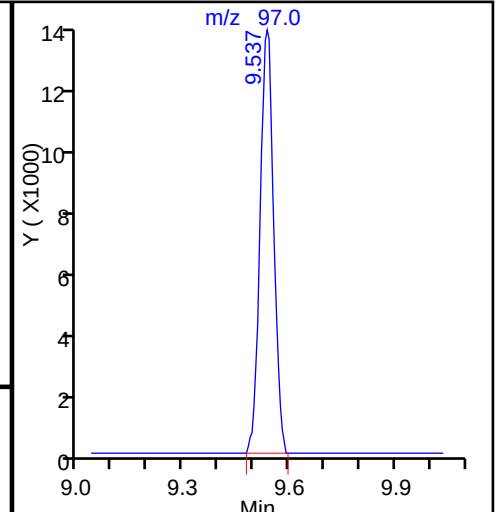
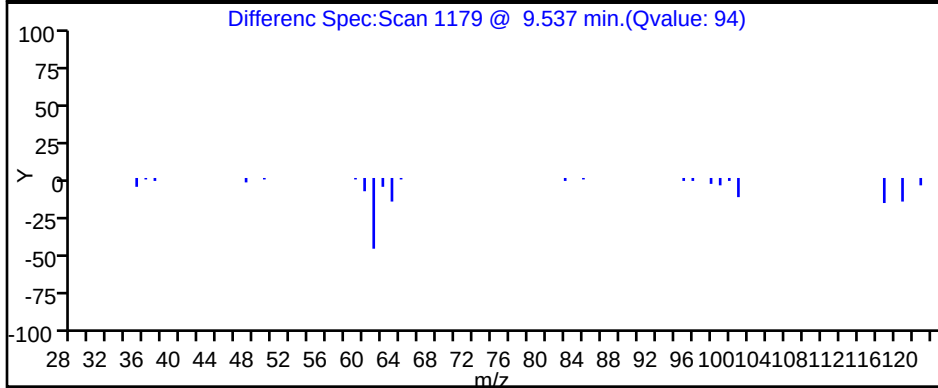
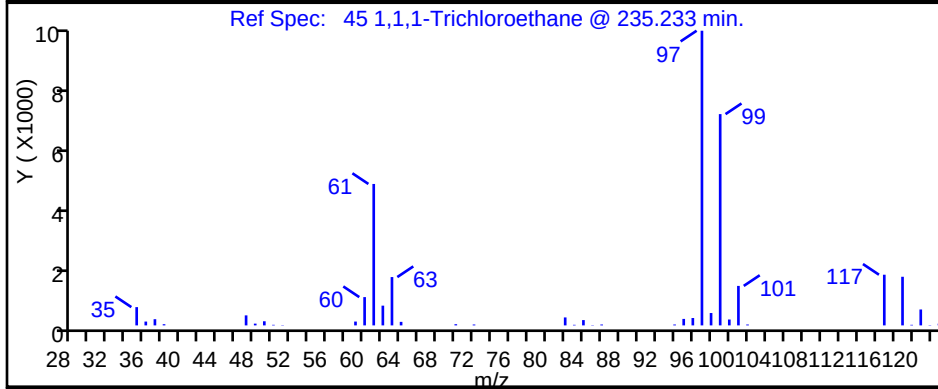
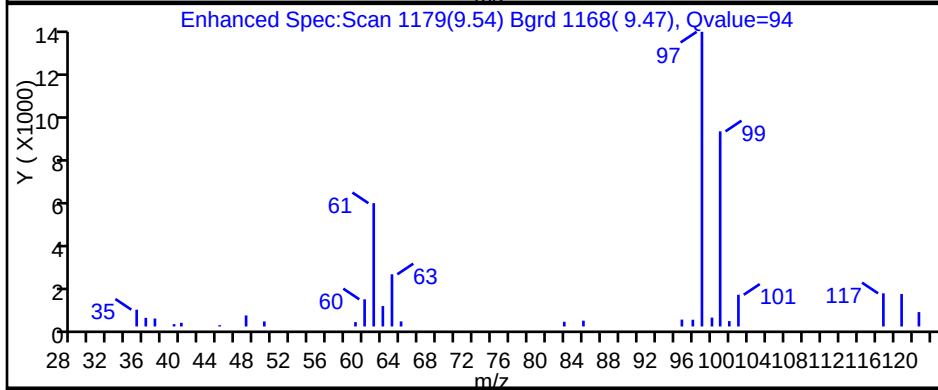
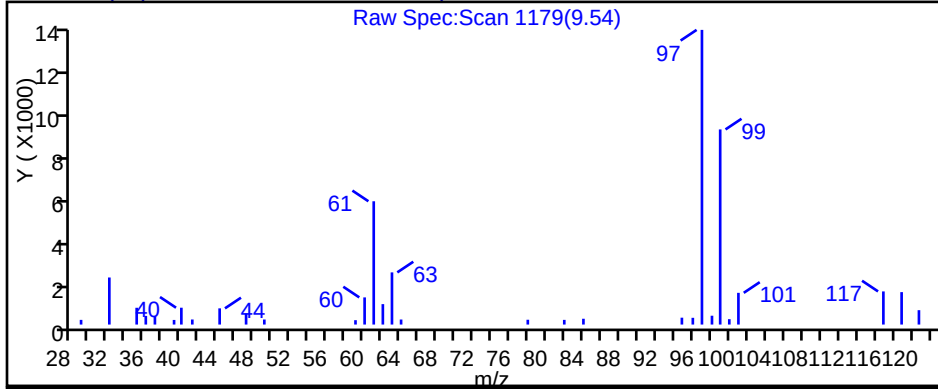
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

45 1,1,1-Trichloroethane, CAS: 71-55-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P113.D

Injection Date: 05-Mar-2015 22:44:30

Instrument ID: ME

Lims ID: 140-2815-A-11

Lab Sample ID: 140-2815-11

Client ID: H3-SS-2015

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

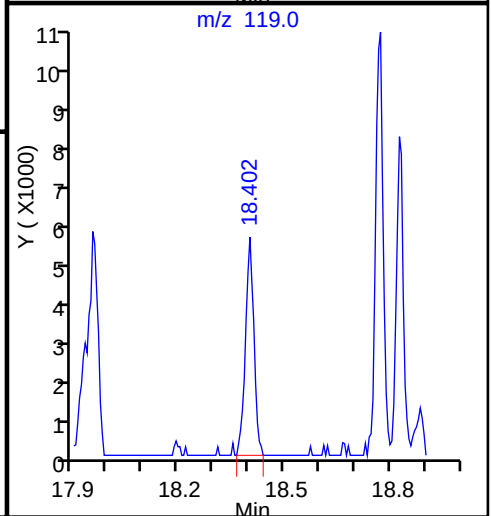
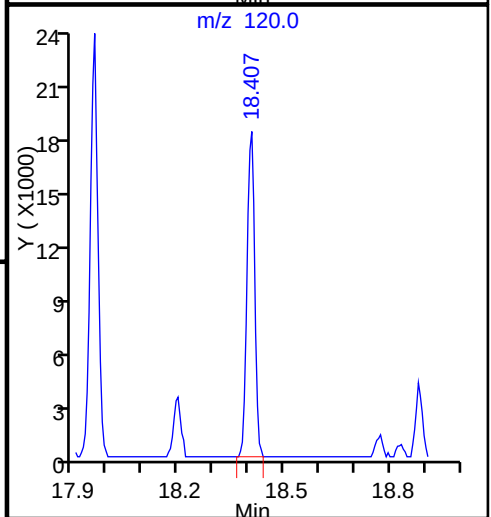
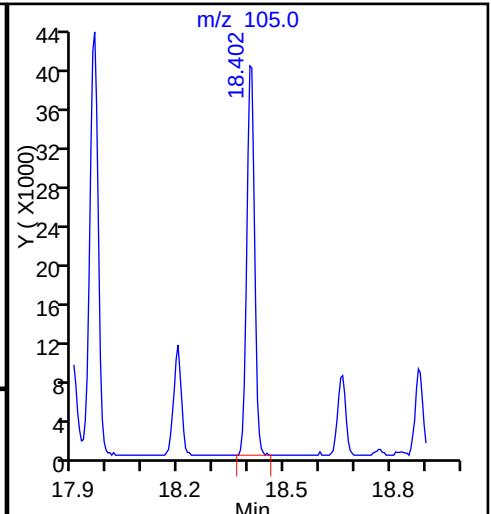
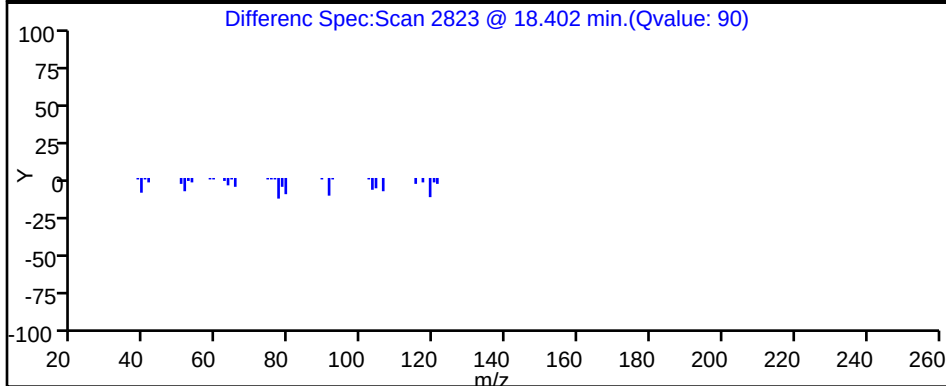
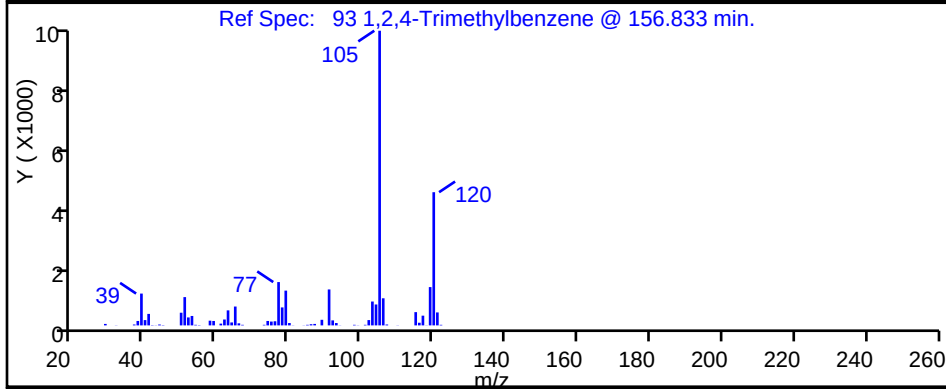
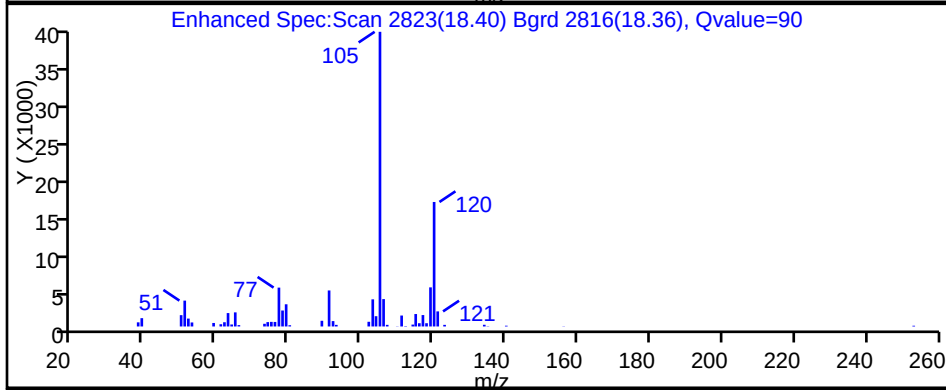
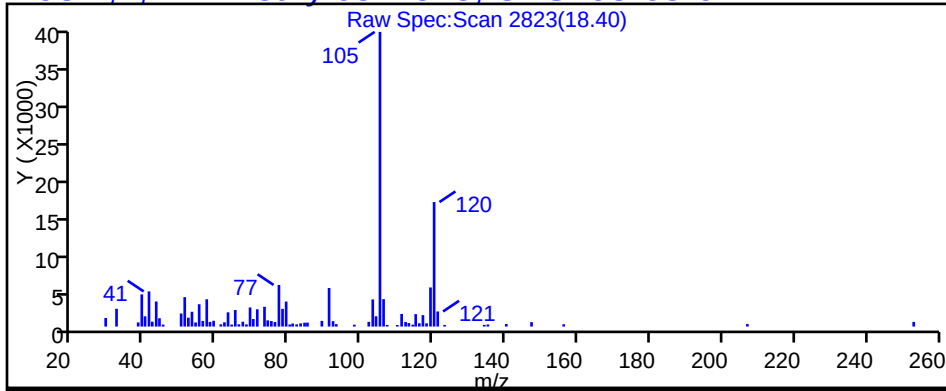
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

93 1,2,4-Trimethylbenzene, CAS: 95-63-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P113.D

Injection Date: 05-Mar-2015 22:44:30

Instrument ID: ME

Lims ID: 140-2815-A-11

Lab Sample ID: 140-2815-11

Client ID: H3-SS-2015

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

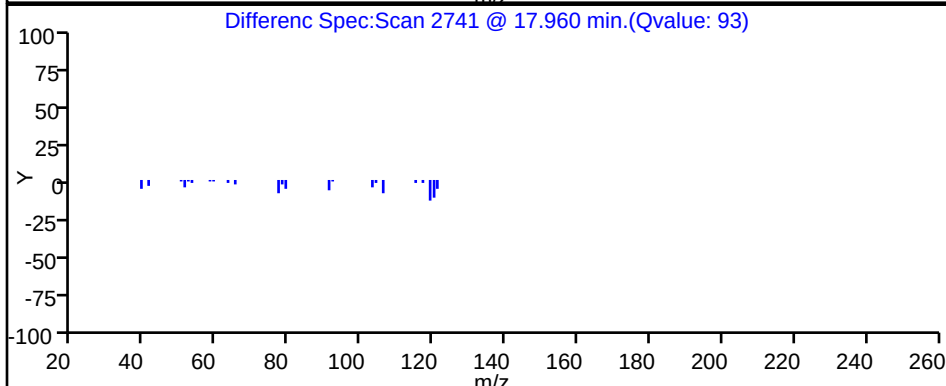
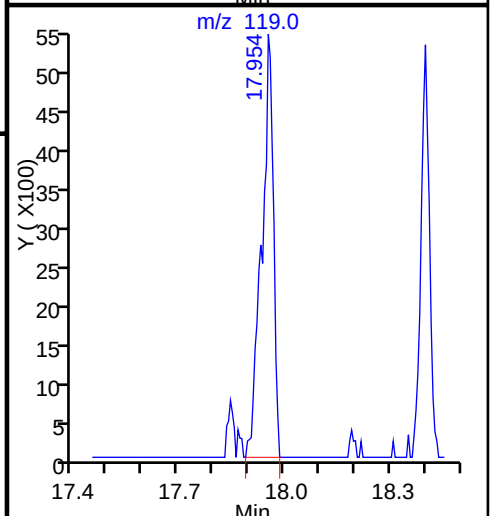
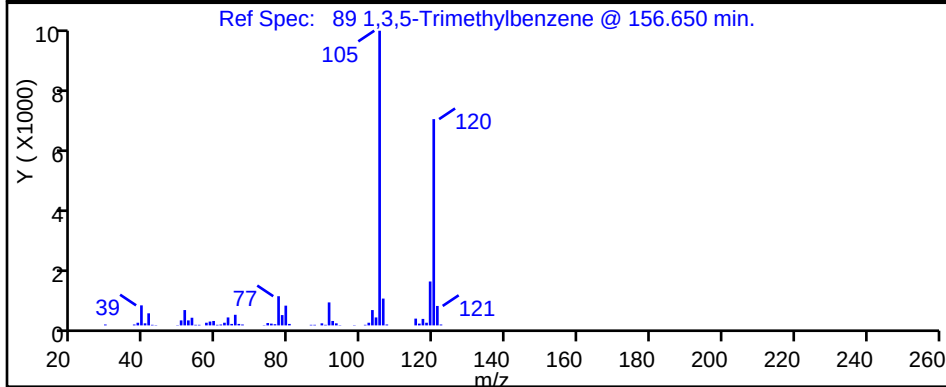
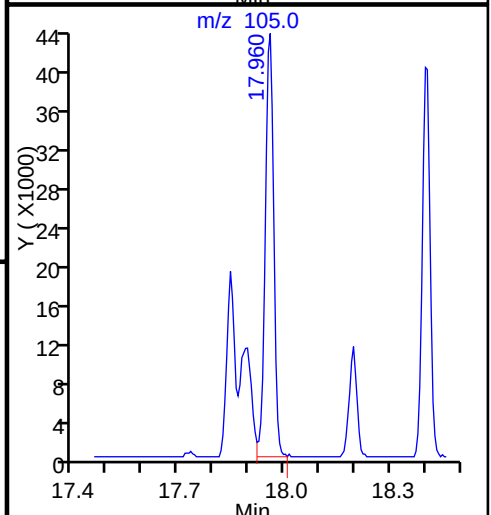
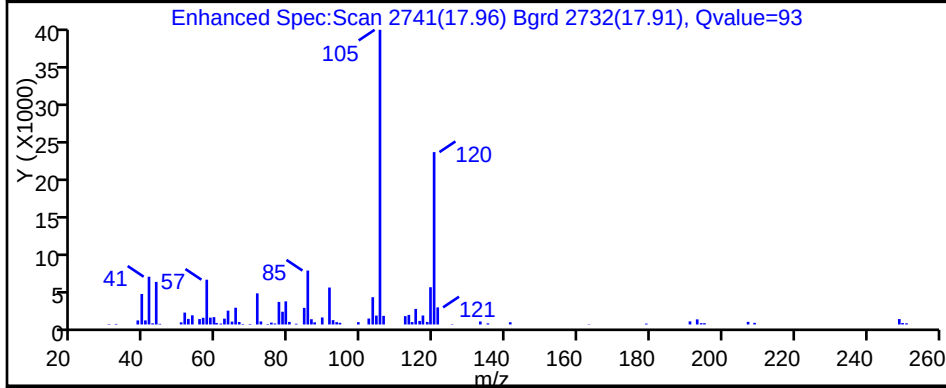
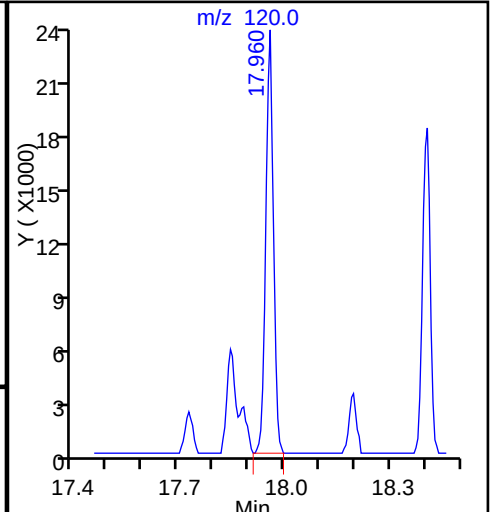
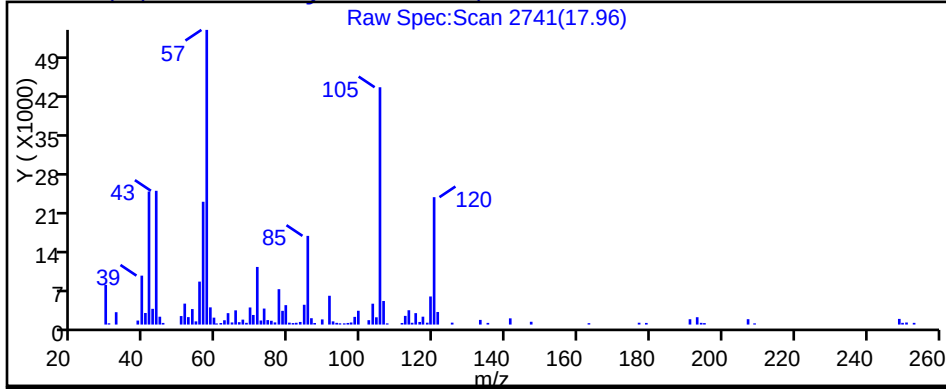
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

89 1,3,5-Trimethylbenzene, CAS: 108-67-8

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P113.D

Injection Date: 05-Mar-2015 22:44:30

Instrument ID: ME

Lims ID: 140-2815-A-11

Lab Sample ID: 140-2815-11

Client ID: H3-SS-2015

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

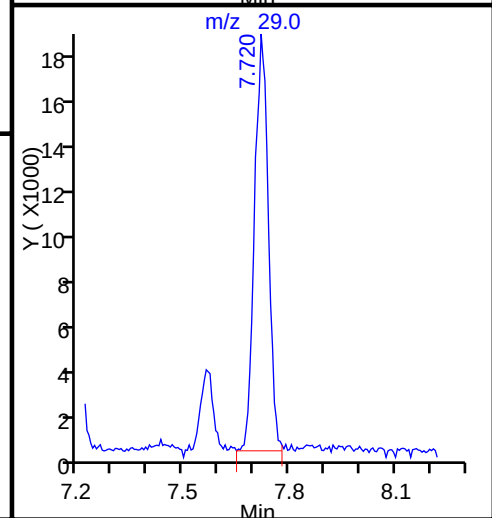
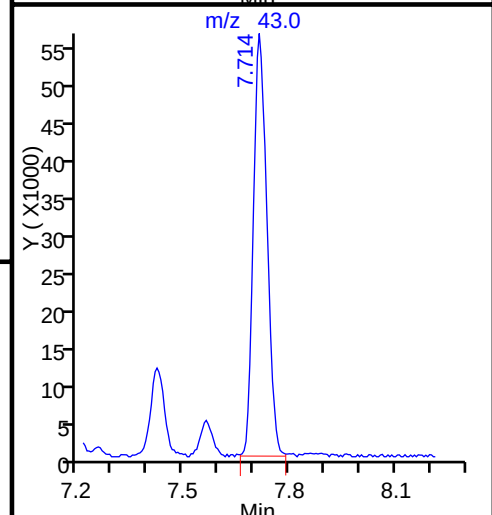
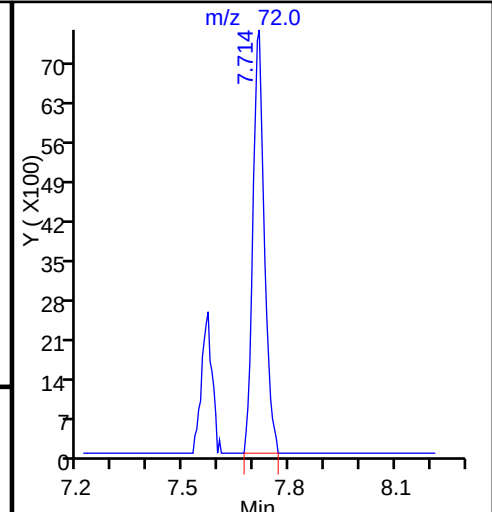
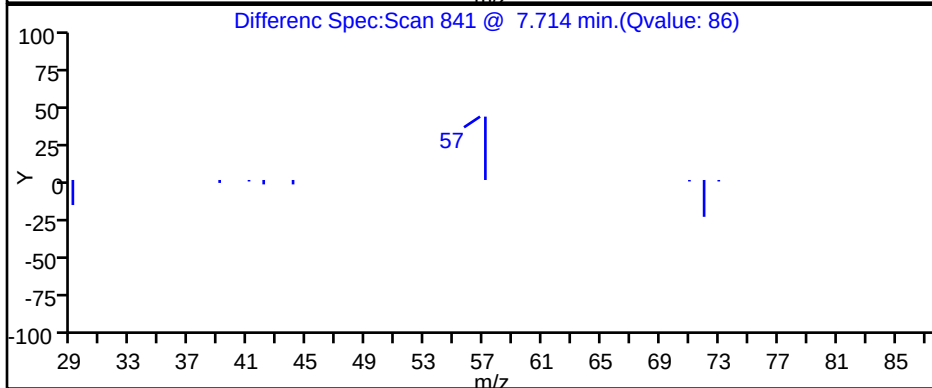
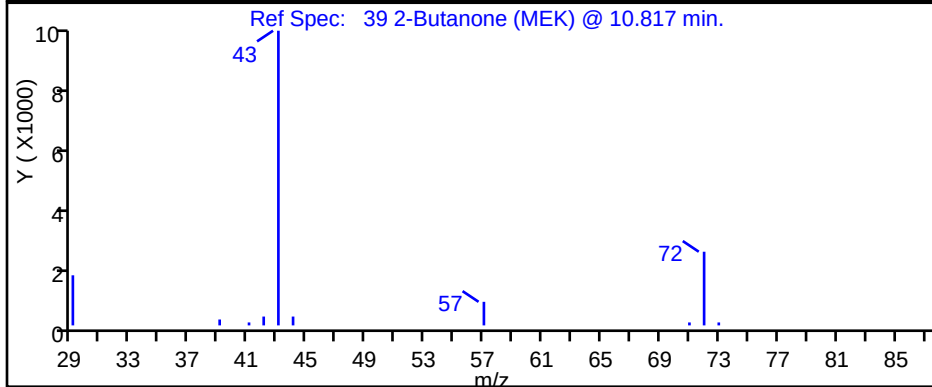
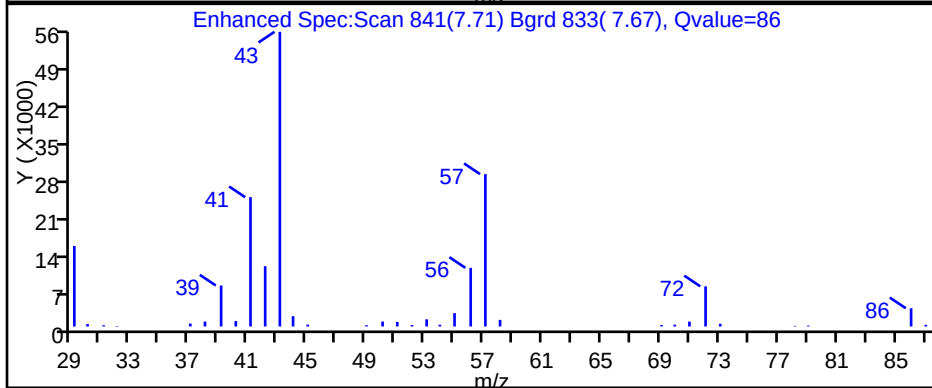
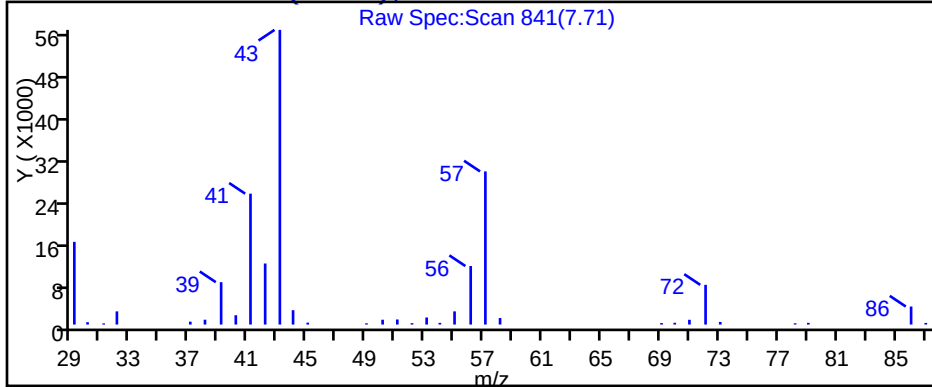
Dil. Factor: 1.0000

Method: ME_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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P113.D

Injection Date: 05-Mar-2015 22:44:30

Instrument ID: ME

Lims ID: 140-2815-A-11

Lab Sample ID: 140-2815-11

Client ID: H3-SS-2015

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

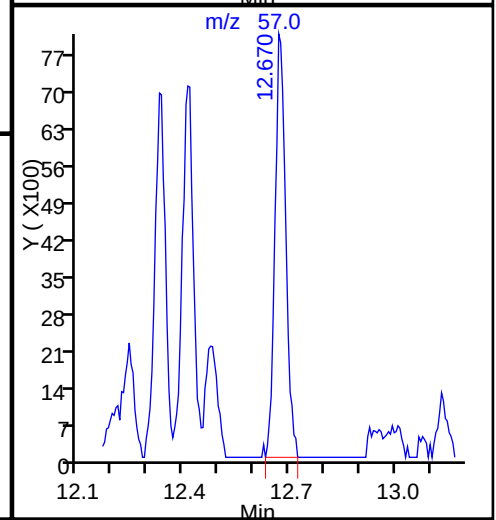
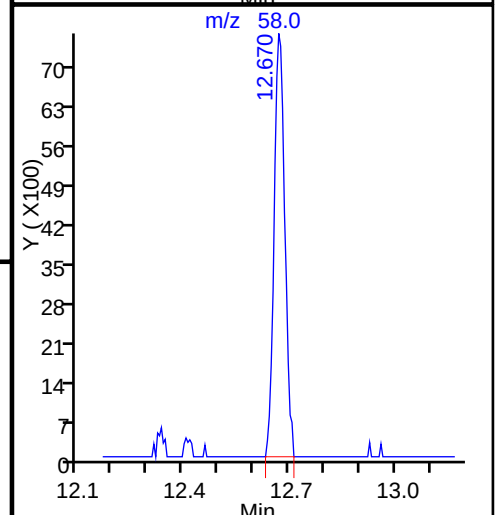
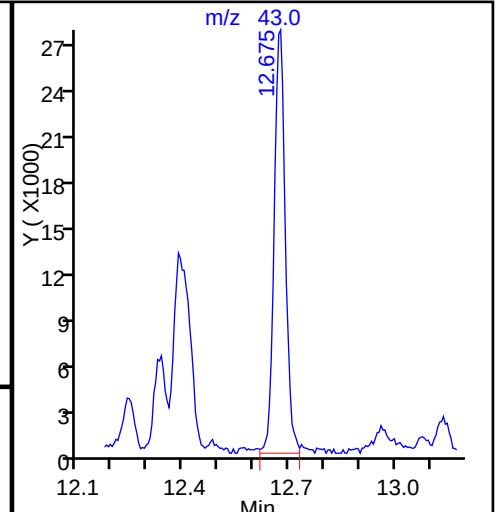
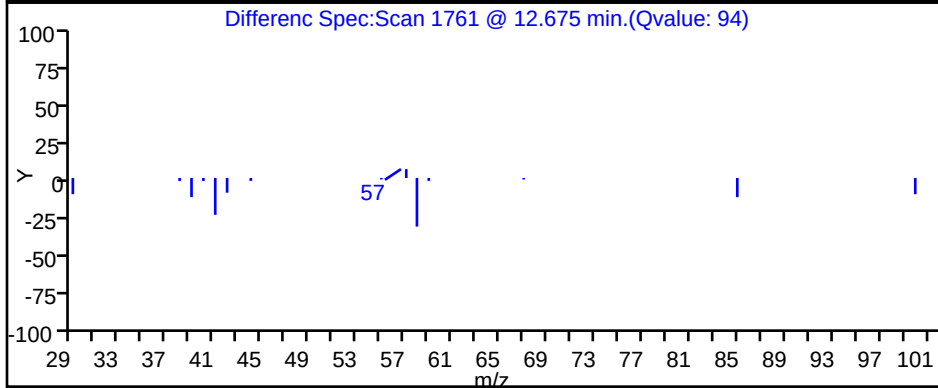
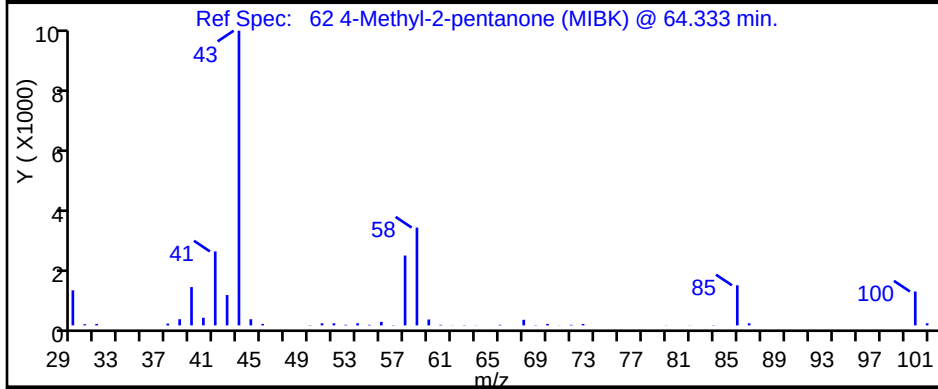
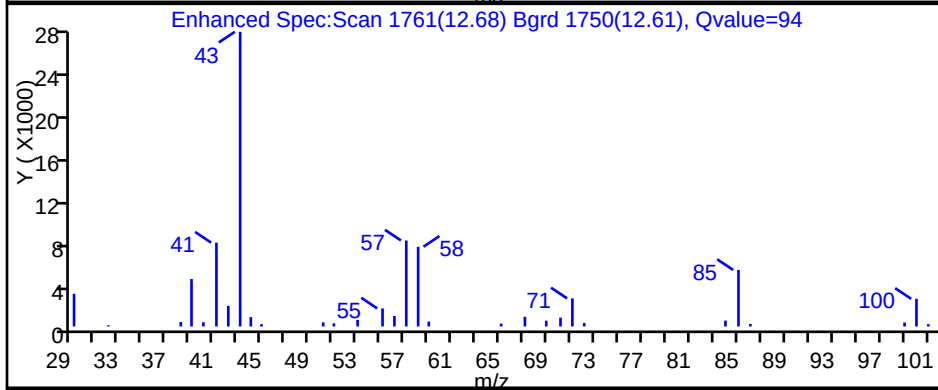
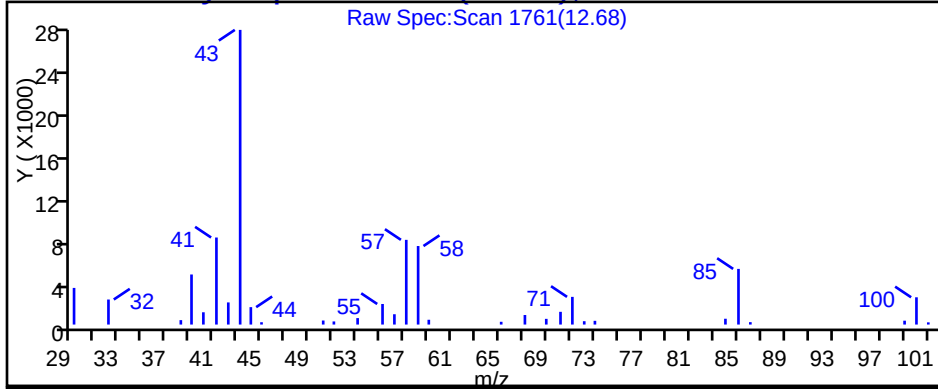
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

62 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P113.D

Injection Date: 05-Mar-2015 22:44:30

Instrument ID: ME

Lims ID: 140-2815-A-11

Lab Sample ID: 140-2815-11

Client ID: H3-SS-2015

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

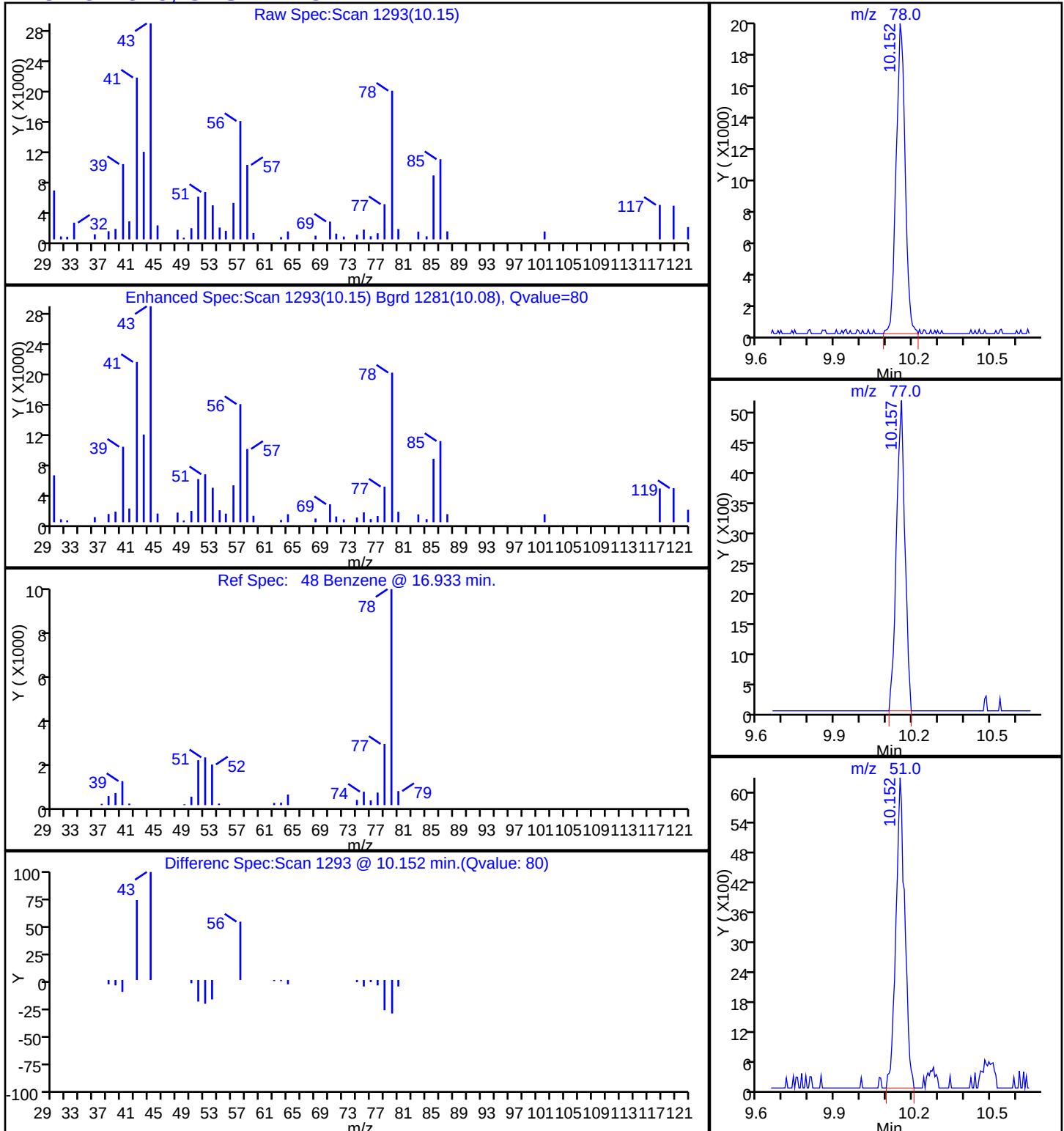
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P113.D

Injection Date: 05-Mar-2015 22:44:30

Instrument ID: ME

Lims ID: 140-2815-A-11

Lab Sample ID: 140-2815-11

Client ID: H3-SS-2015

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

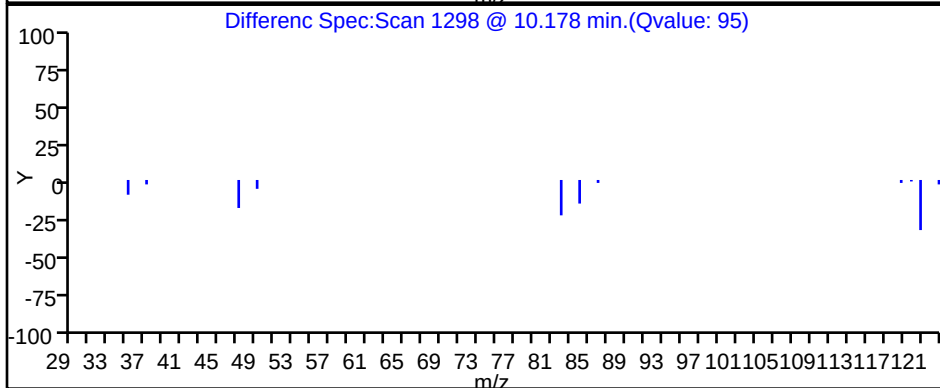
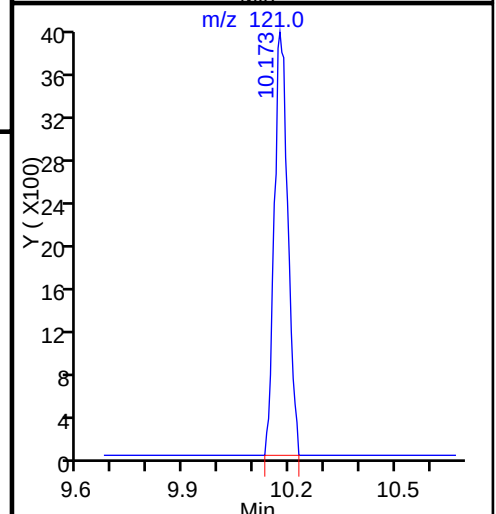
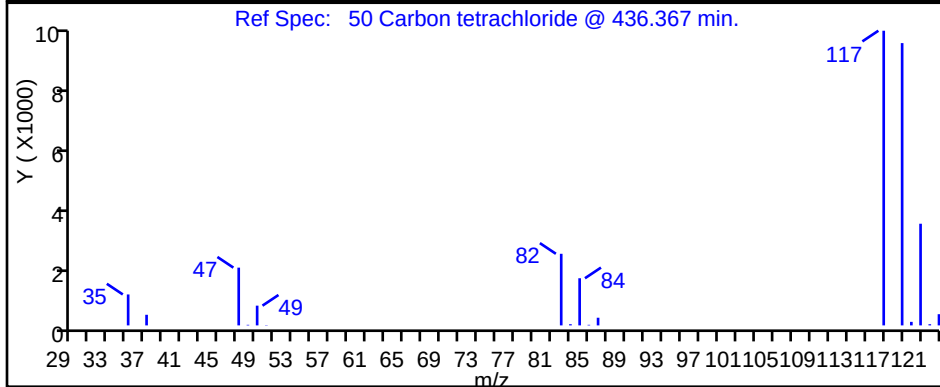
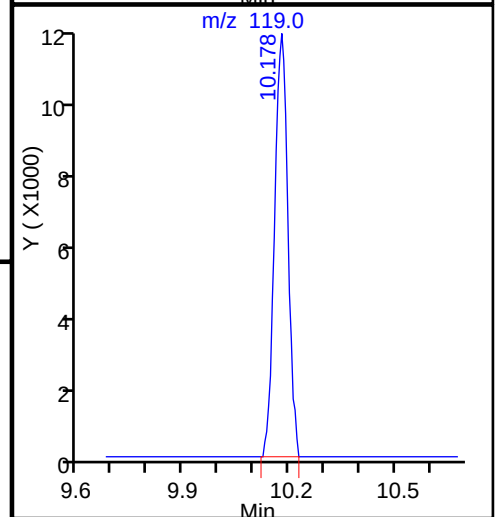
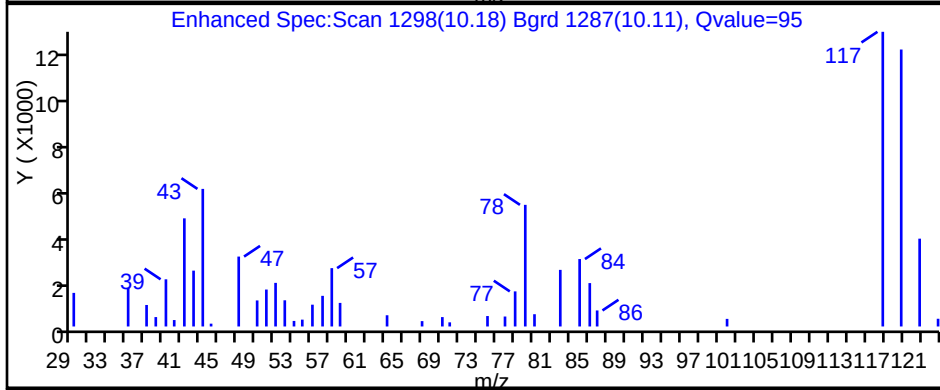
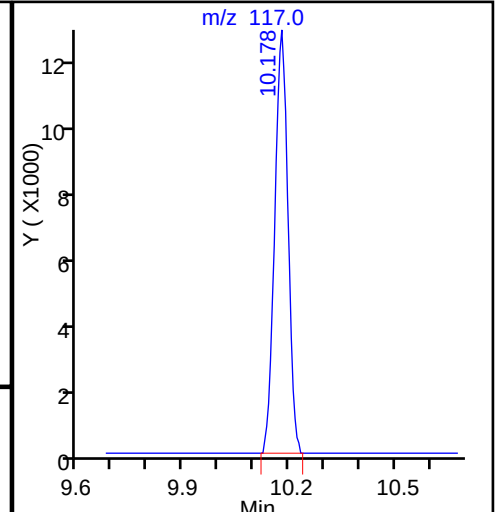
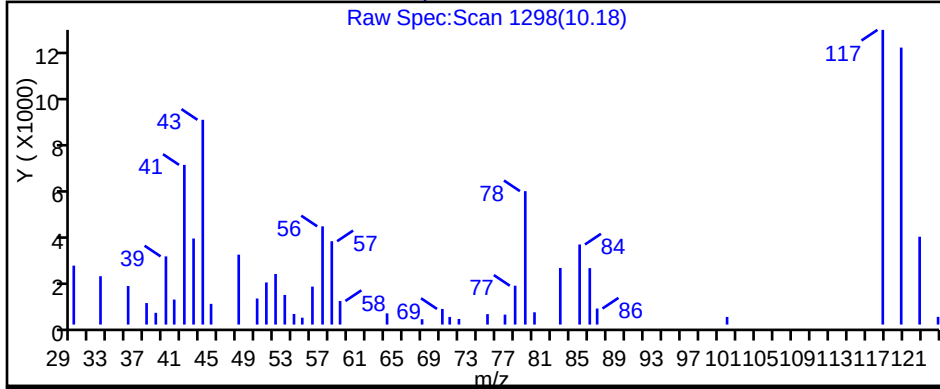
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P113.D

Injection Date: 05-Mar-2015 22:44:30

Instrument ID: ME

Lims ID: 140-2815-A-11

Lab Sample ID: 140-2815-11

Client ID: H3-SS-2015

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

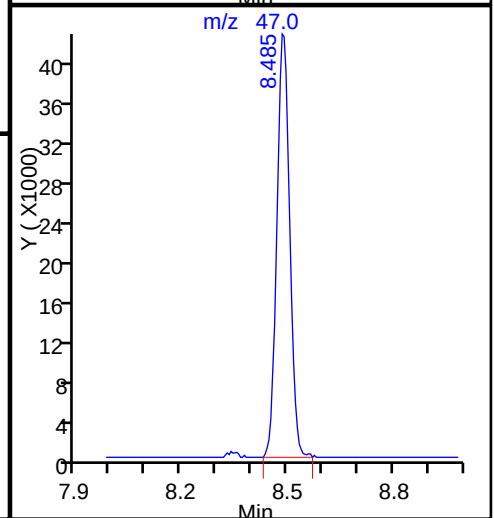
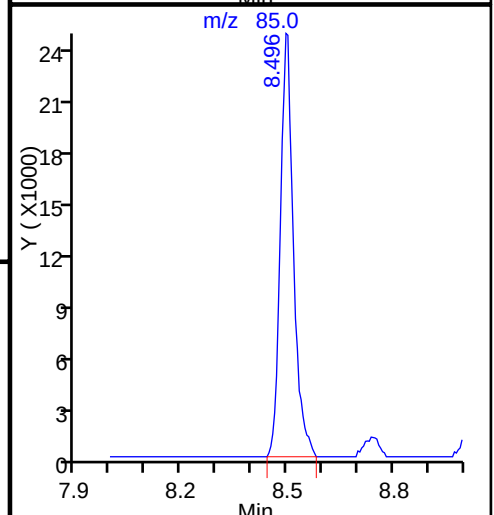
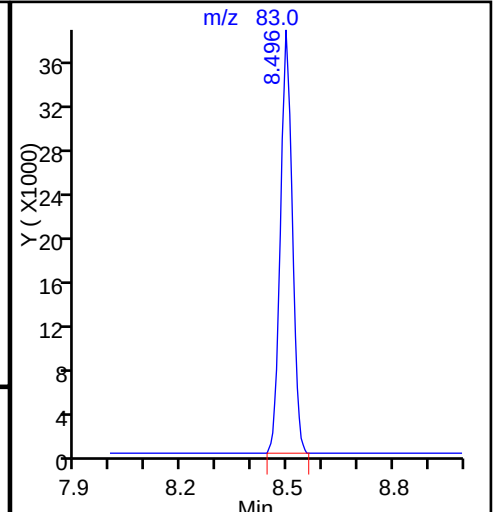
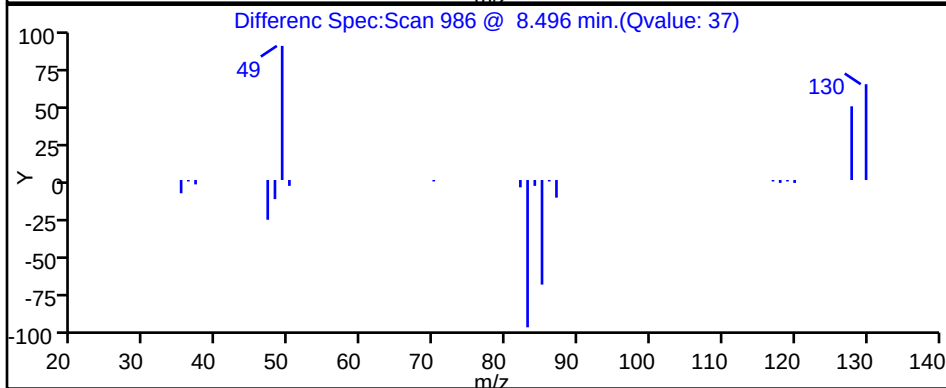
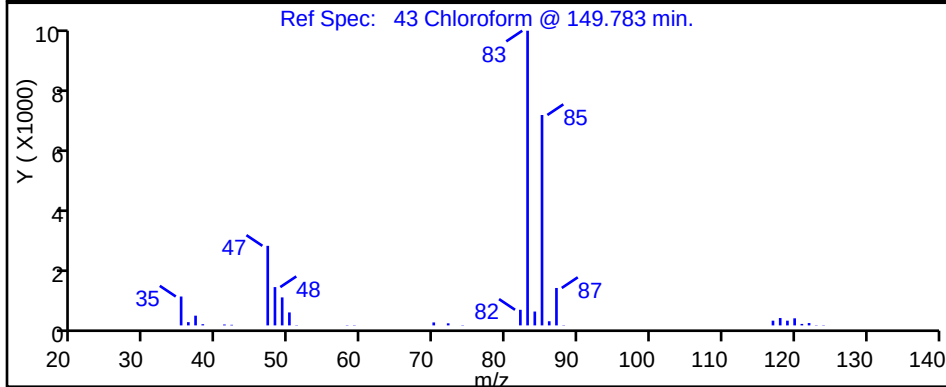
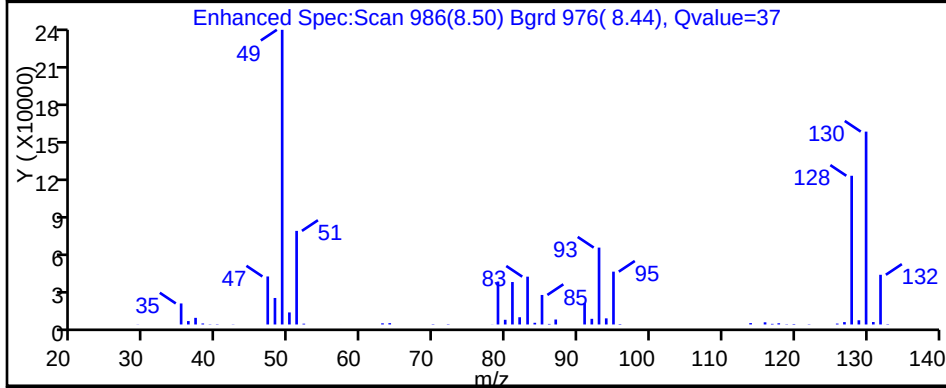
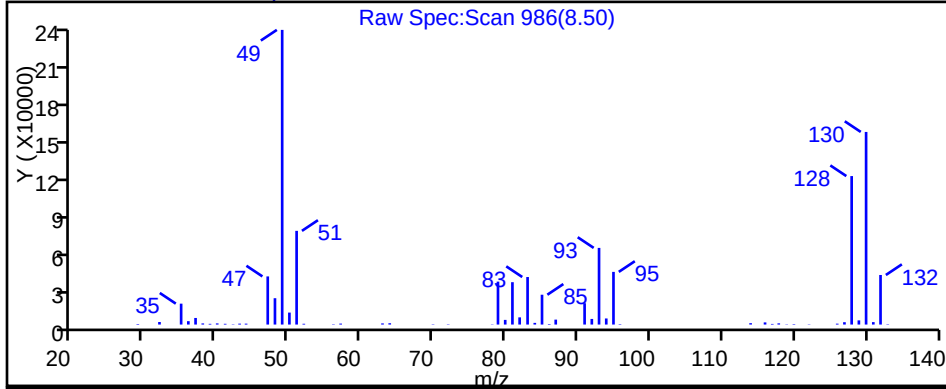
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

43 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P113.D

Injection Date: 05-Mar-2015 22:44:30

Instrument ID: ME

Lims ID: 140-2815-A-11

Lab Sample ID: 140-2815-11

Client ID: H3-SS-2015

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

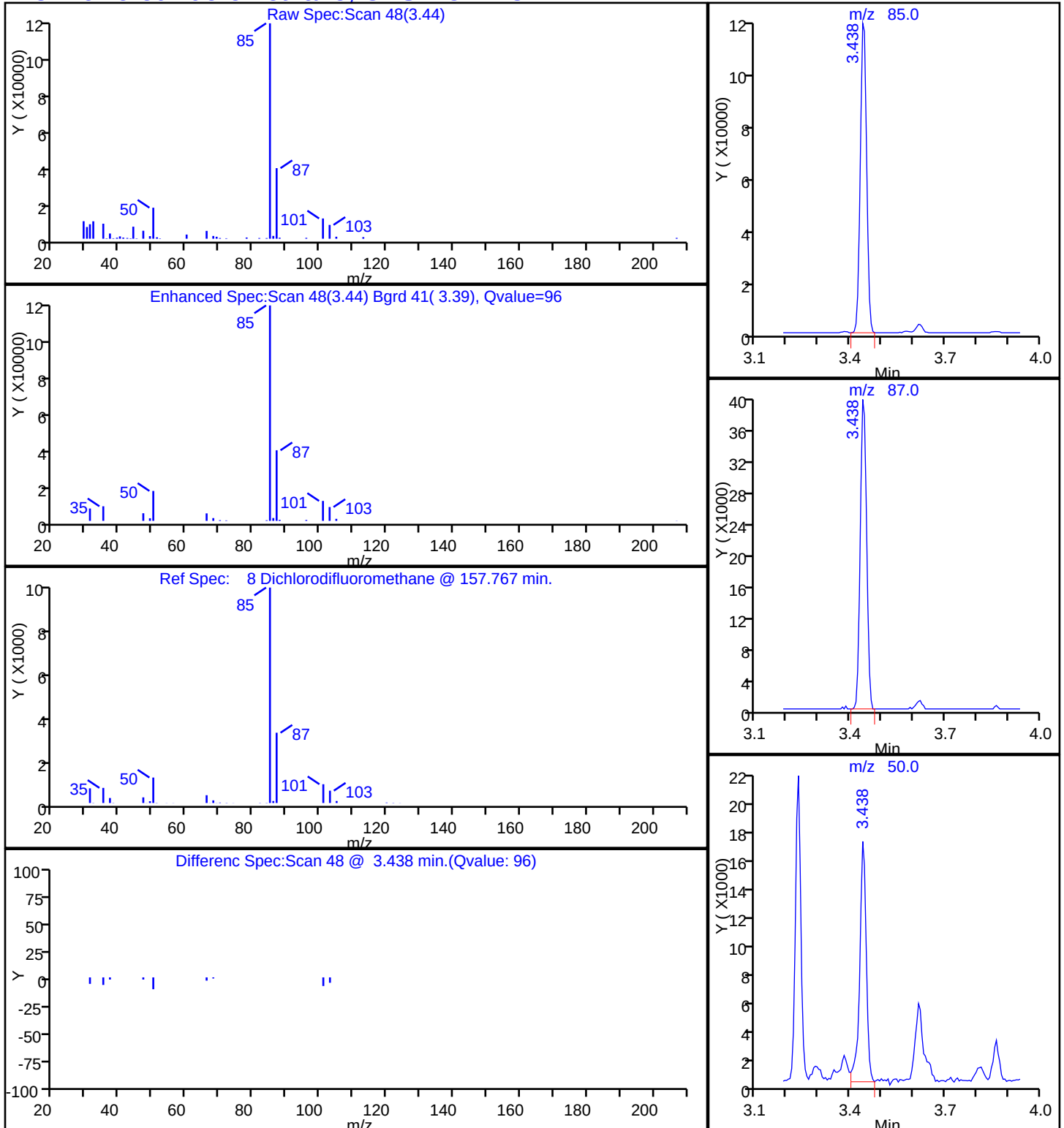
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P113.D

Injection Date: 05-Mar-2015 22:44:30

Instrument ID: ME

Lims ID: 140-2815-A-11

Lab Sample ID: 140-2815-11

Client ID: H3-SS-2015

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

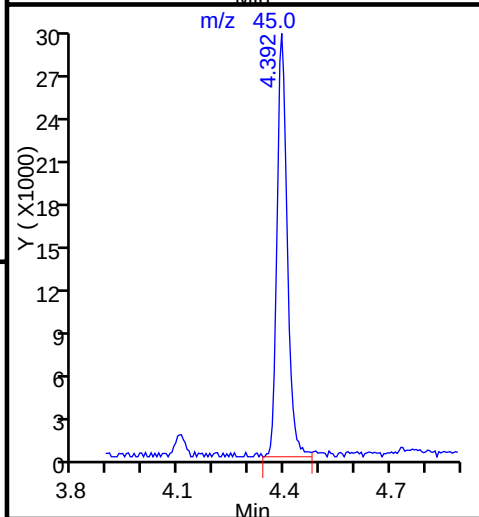
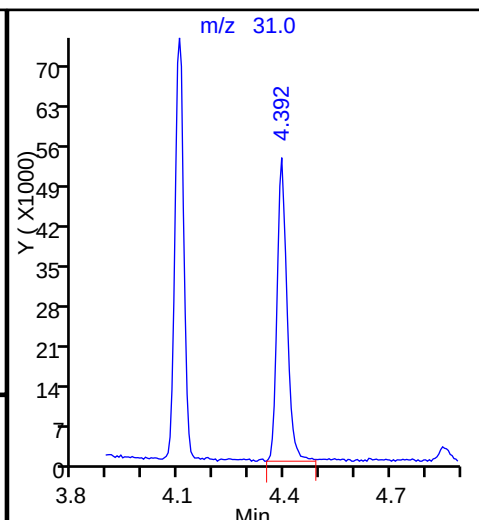
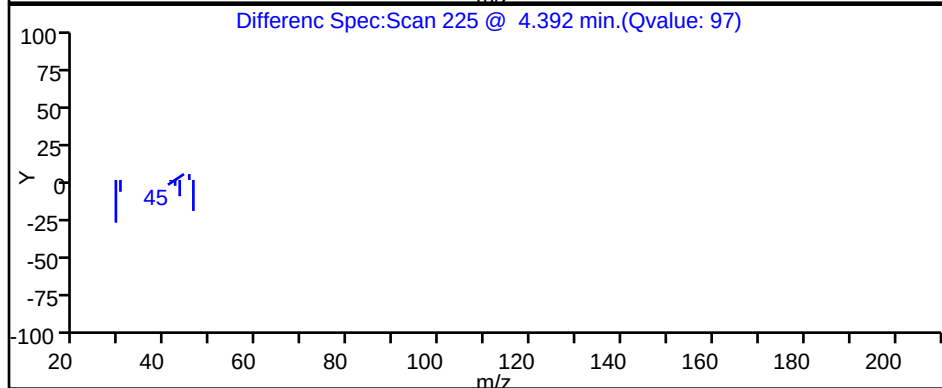
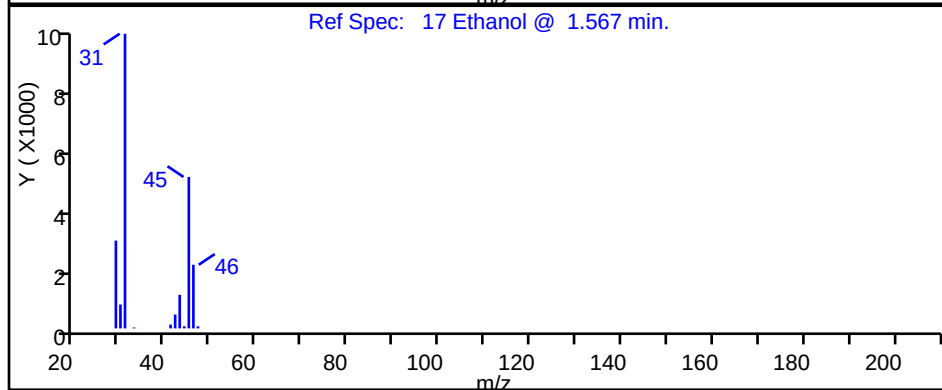
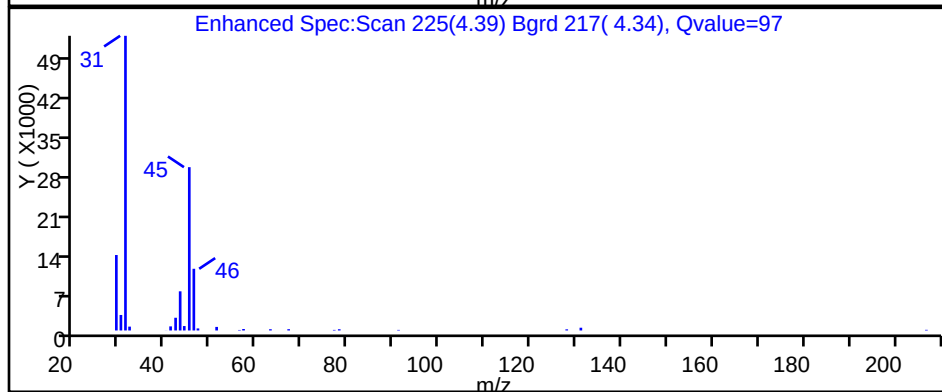
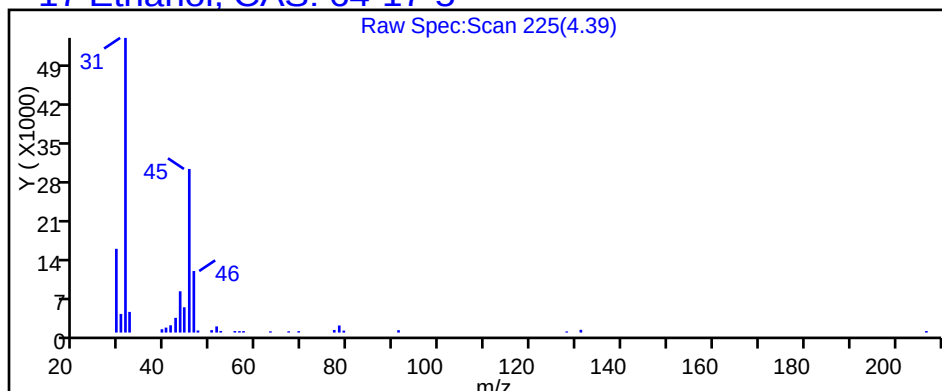
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P113.D

Injection Date: 05-Mar-2015 22:44:30

Instrument ID: ME

Lims ID: 140-2815-A-11

Lab Sample ID: 140-2815-11

Client ID: H3-SS-2015

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

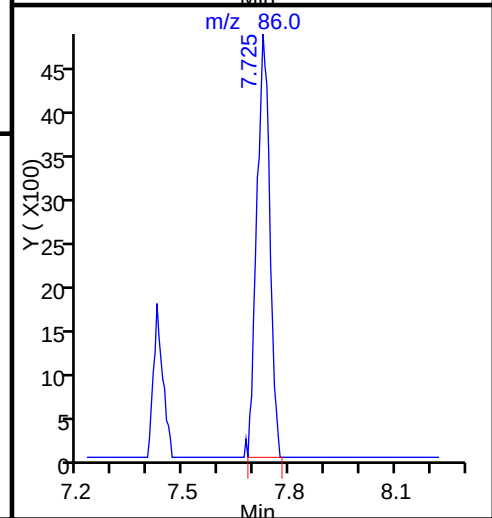
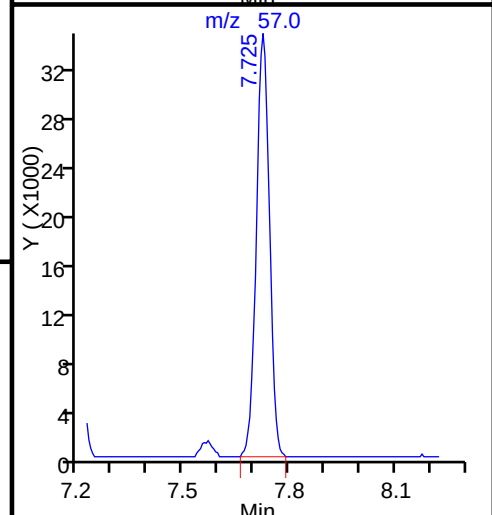
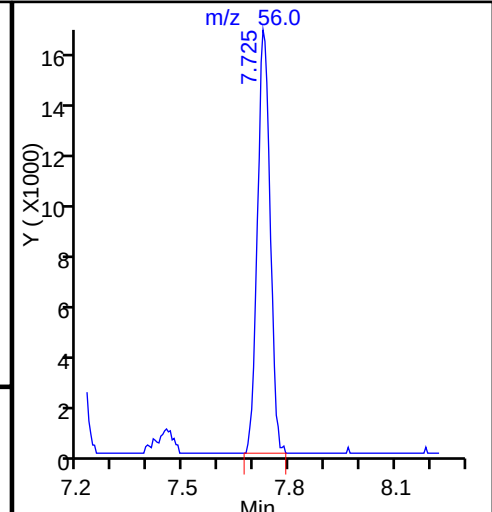
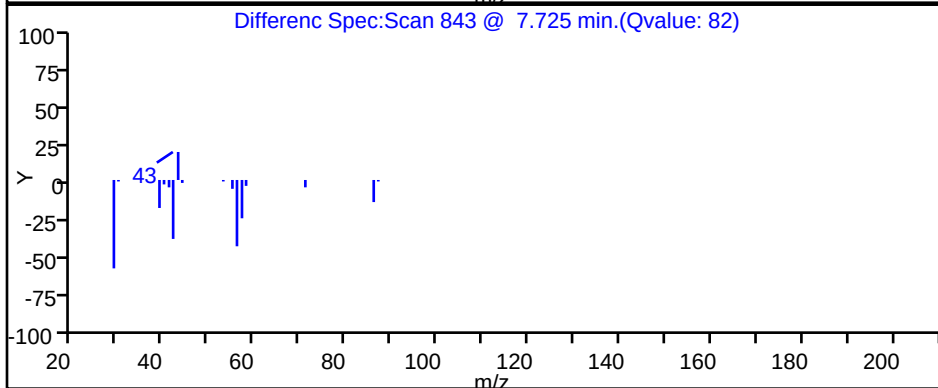
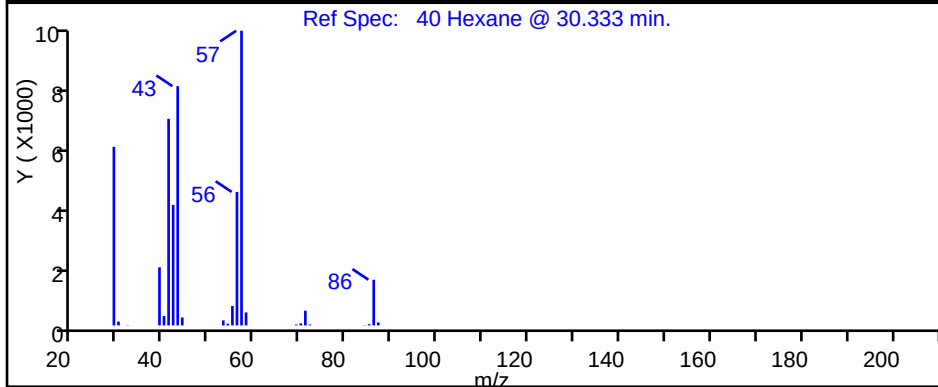
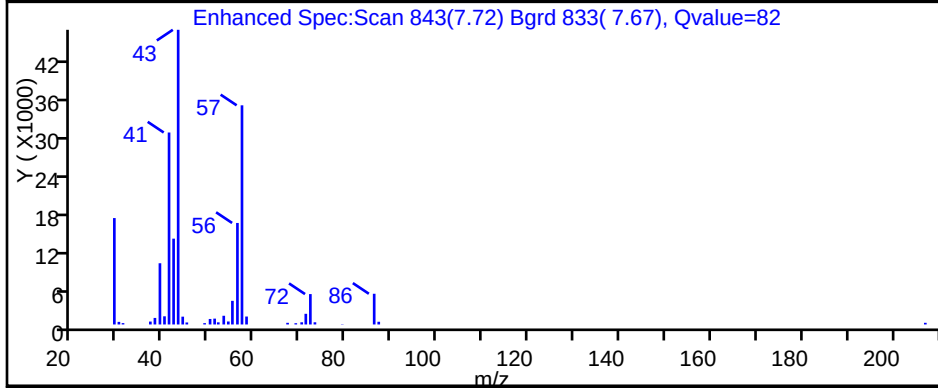
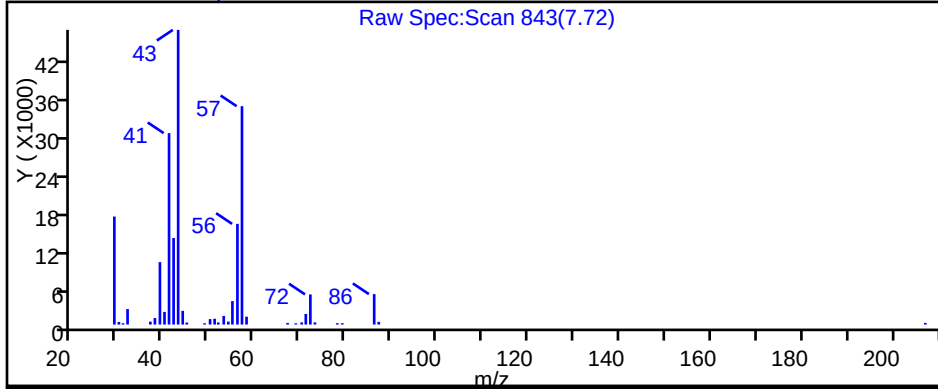
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

40 Hexane, CAS: 110-54-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P113.D

Injection Date: 05-Mar-2015 22:44:30

Instrument ID: ME

Lims ID: 140-2815-A-11

Lab Sample ID: 140-2815-11

Client ID: H3-SS-2015

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

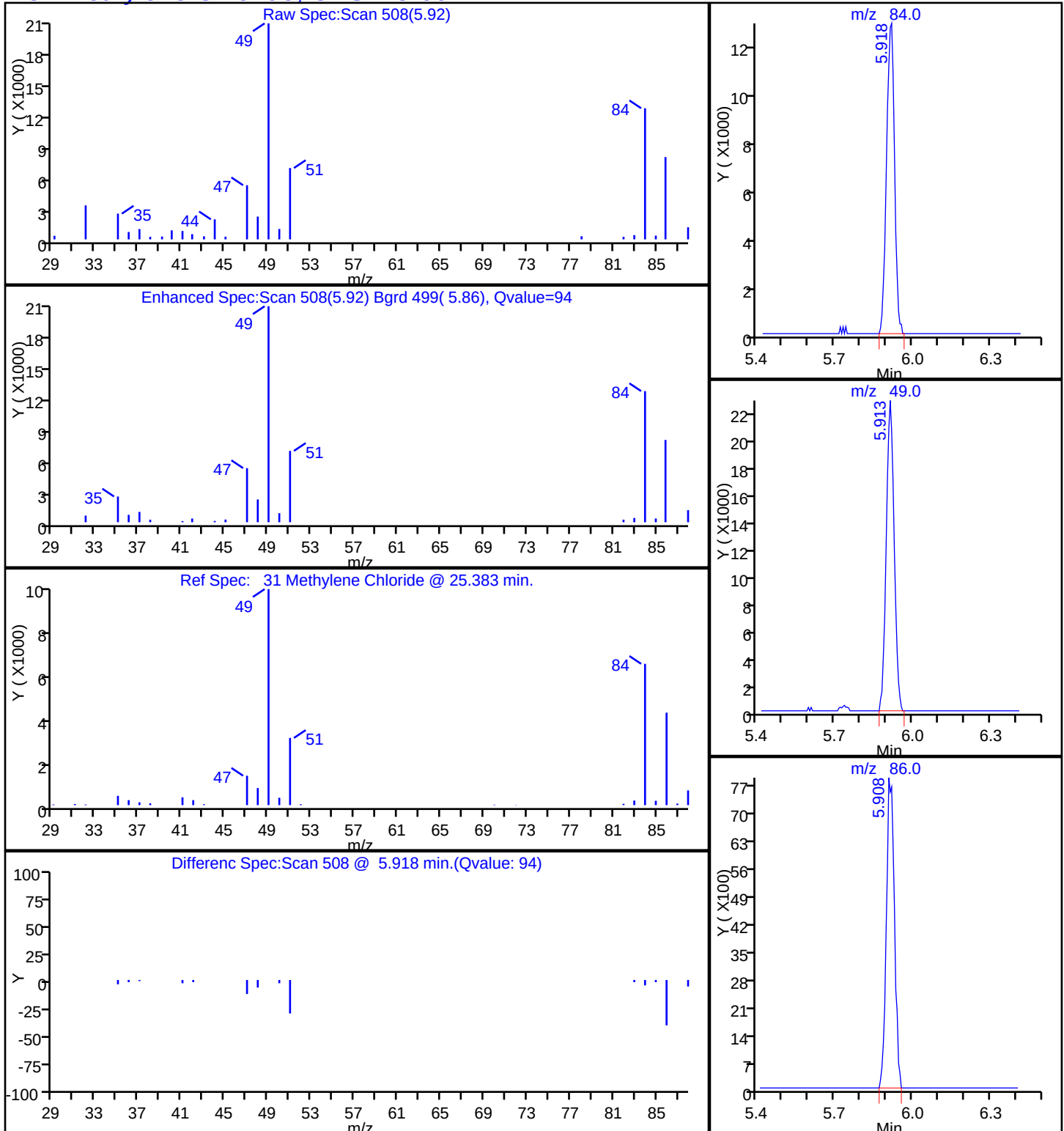
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P113.D

Injection Date: 05-Mar-2015 22:44:30

Instrument ID: ME

Lims ID: 140-2815-A-11

Lab Sample ID: 140-2815-11

Client ID: H3-SS-2015

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

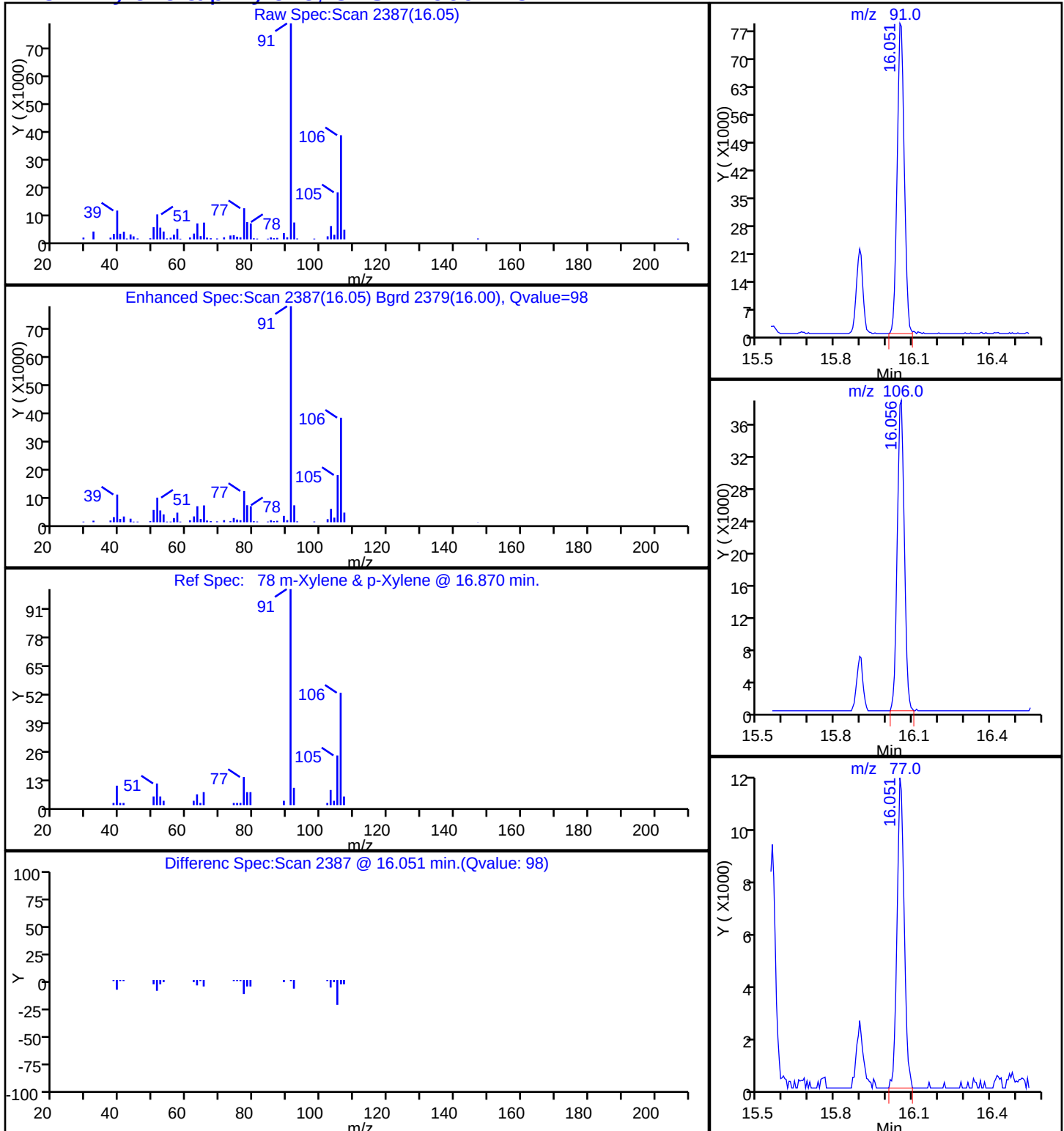
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P113.D

Injection Date: 05-Mar-2015 22:44:30

Instrument ID: ME

Lims ID: 140-2815-A-11

Lab Sample ID: 140-2815-11

Client ID: H3-SS-2015

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

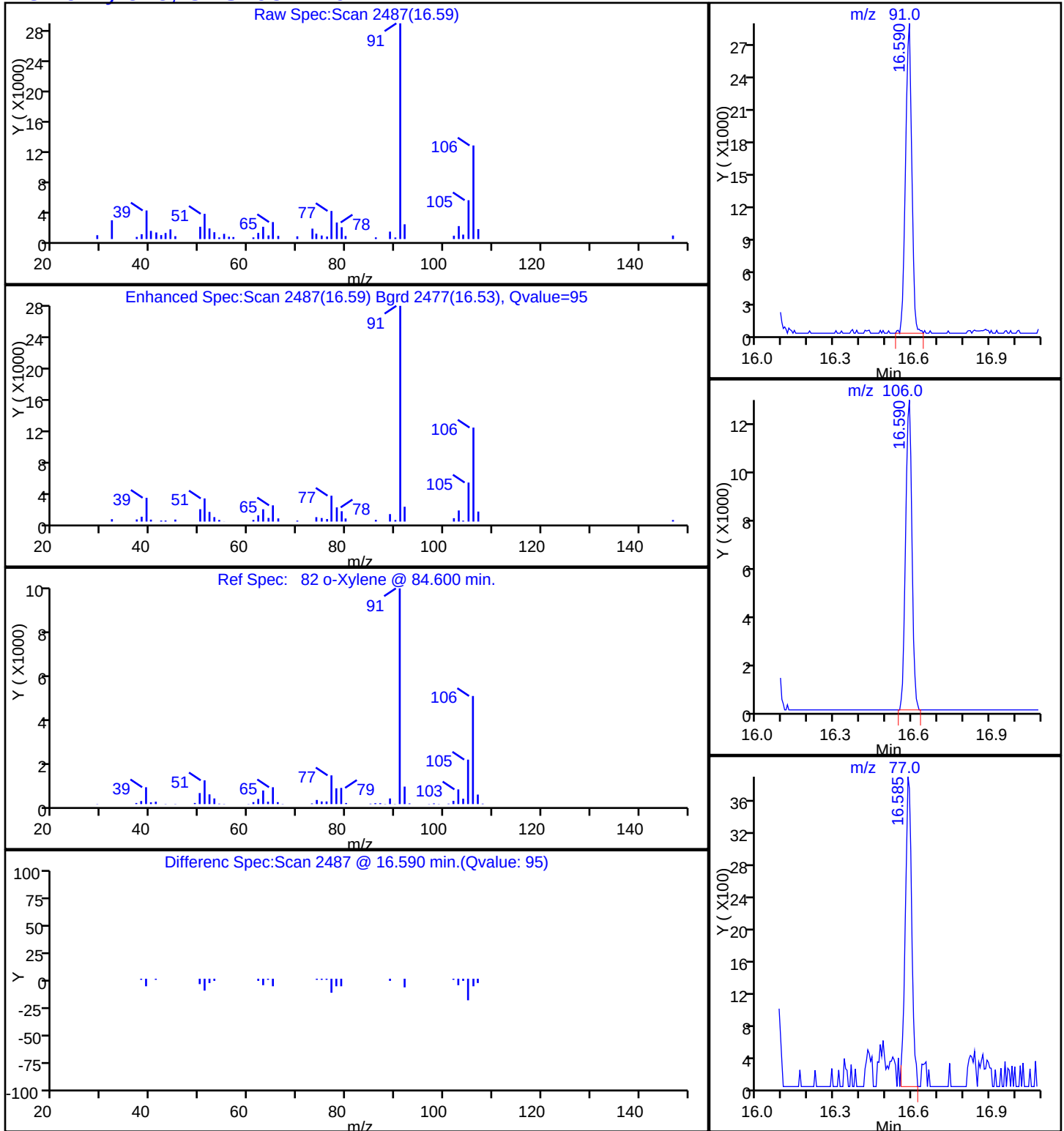
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P113.D

Injection Date: 05-Mar-2015 22:44:30

Instrument ID: ME

Lims ID: 140-2815-A-11

Lab Sample ID: 140-2815-11

Client ID: H3-SS-2015

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

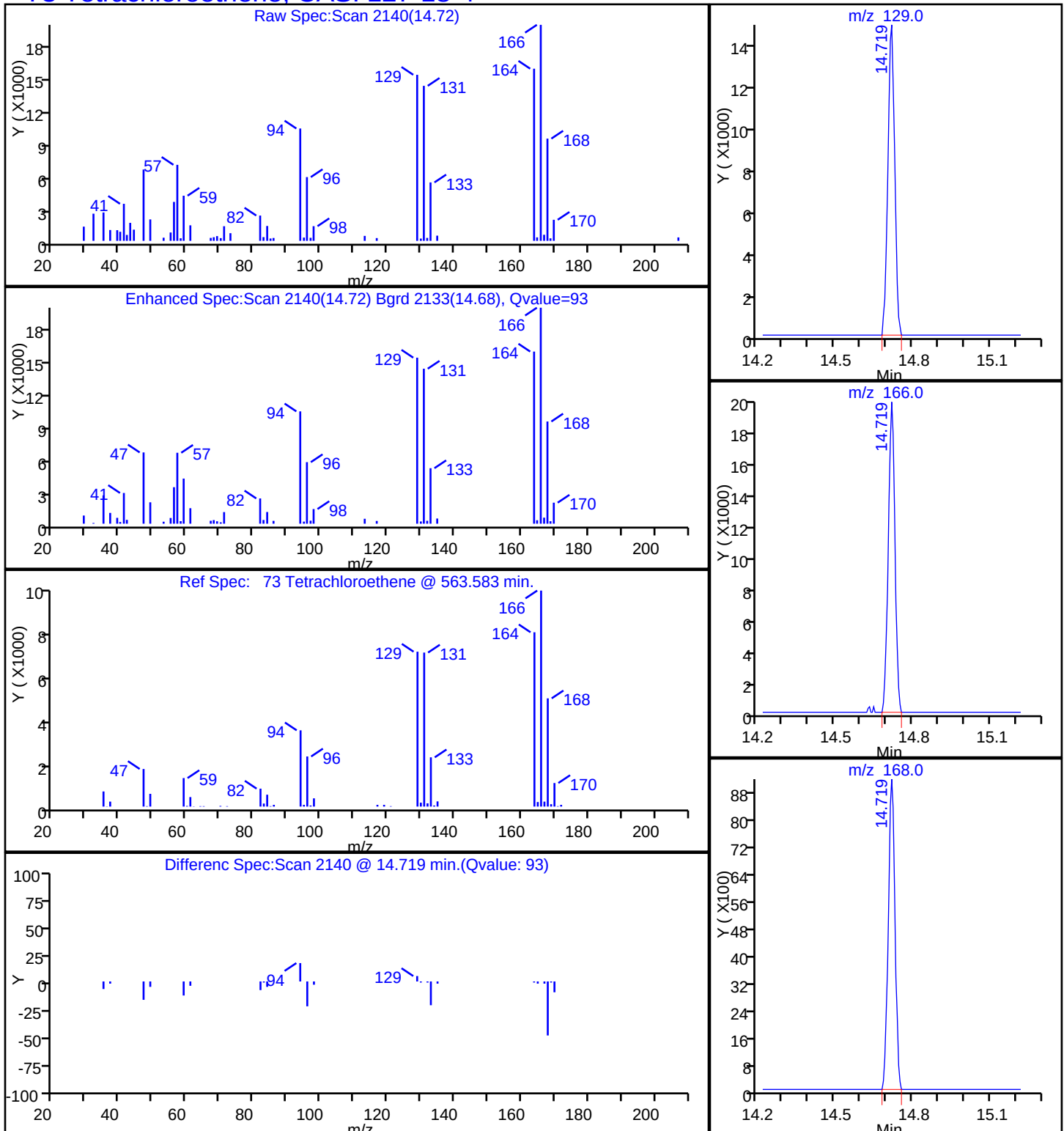
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

73 Tetrachloroethene, CAS: 127-18-4

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P113.D

Injection Date: 05-Mar-2015 22:44:30

Instrument ID: ME

Lims ID: 140-2815-A-11

Lab Sample ID: 140-2815-11

Client ID: H3-SS-2015

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

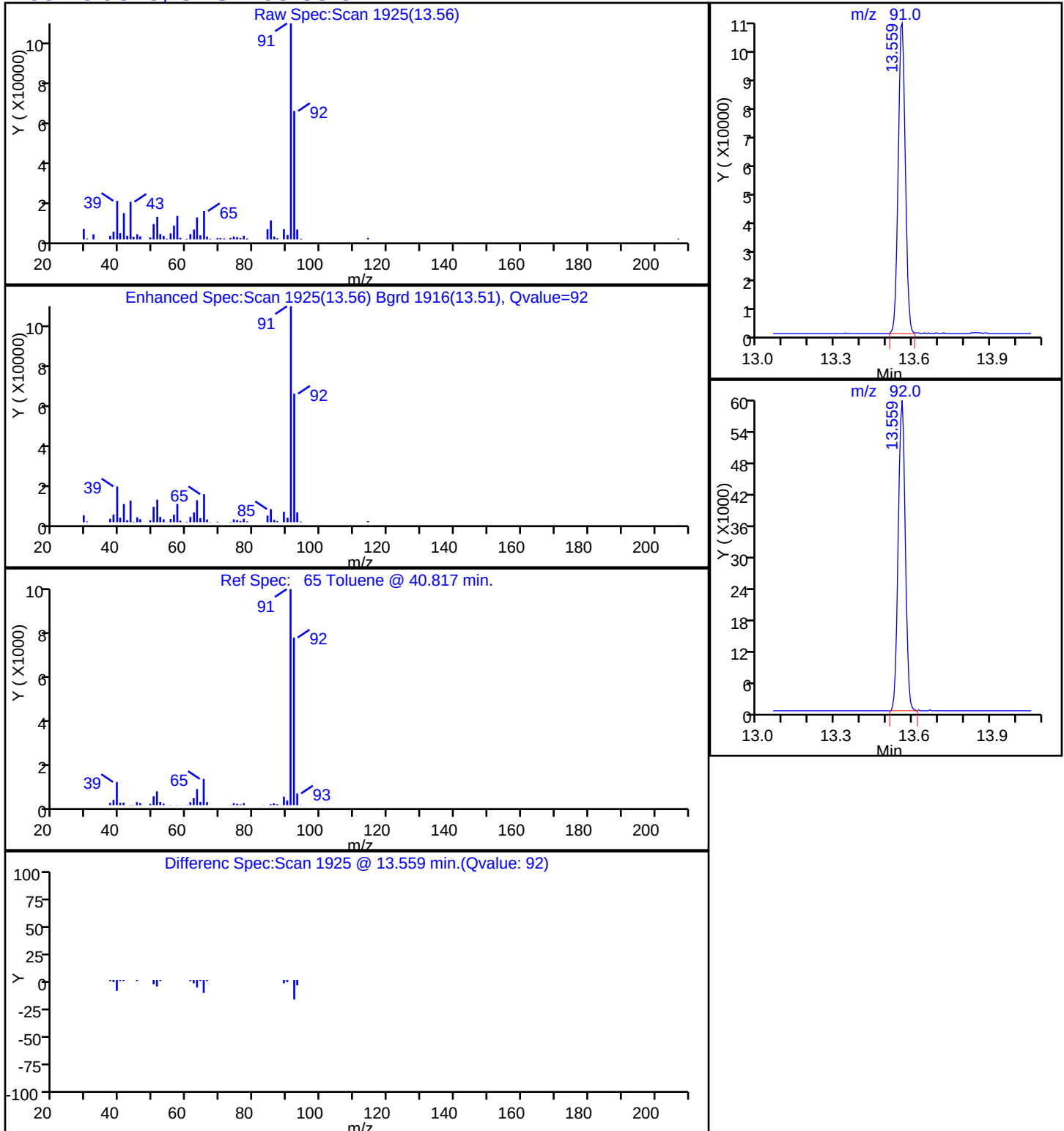
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P113.D

Injection Date: 05-Mar-2015 22:44:30

Instrument ID: ME

Lims ID: 140-2815-A-11

Lab Sample ID: 140-2815-11

Client ID: H3-SS-2015

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

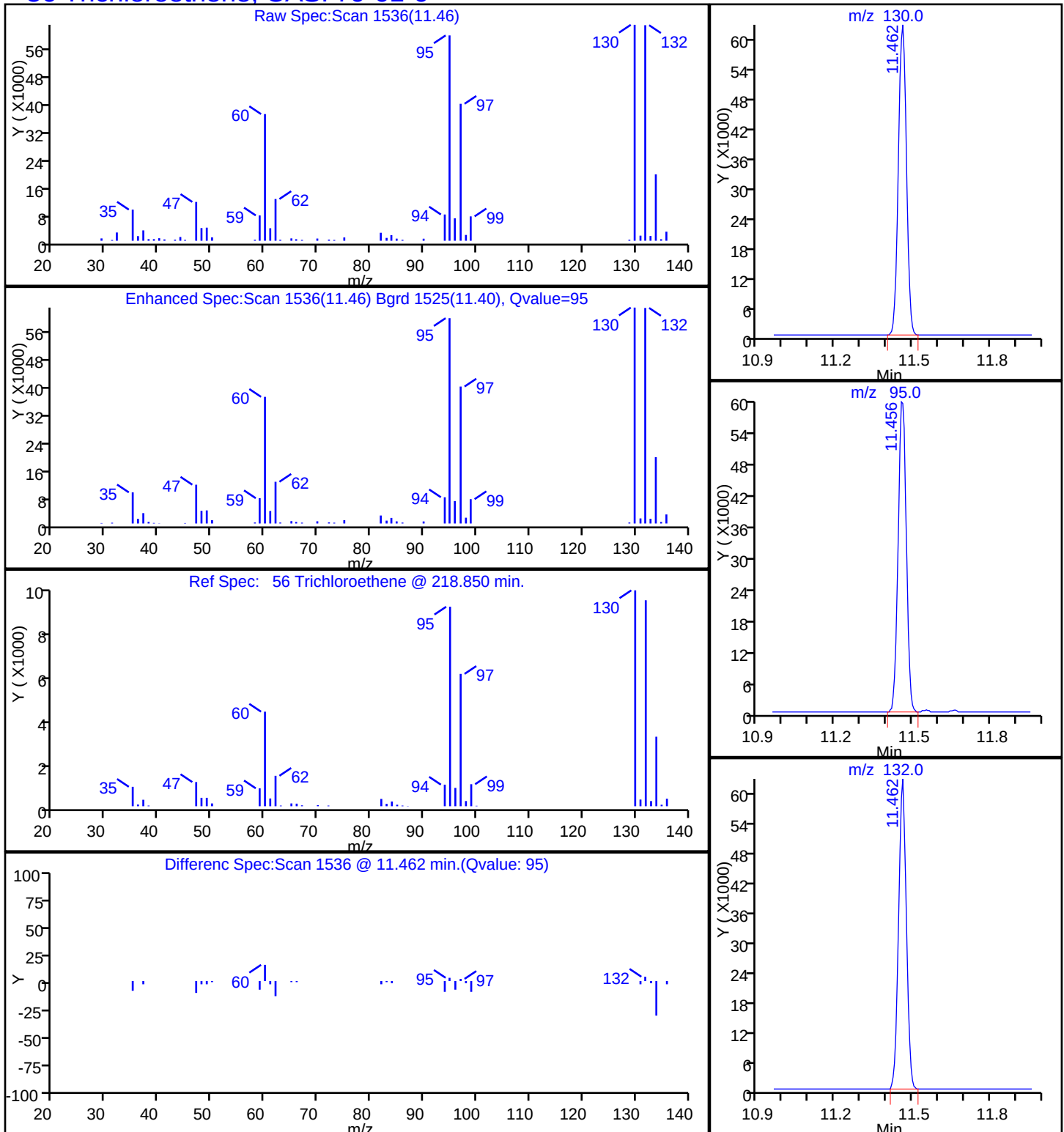
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

56 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P113.D

Injection Date: 05-Mar-2015 22:44:30

Instrument ID: ME

Lims ID: 140-2815-A-11

Lab Sample ID: 140-2815-11

Client ID: H3-SS-2015

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

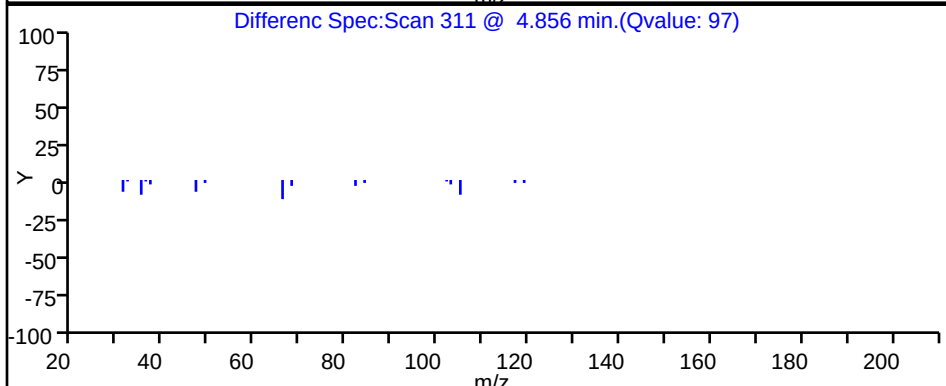
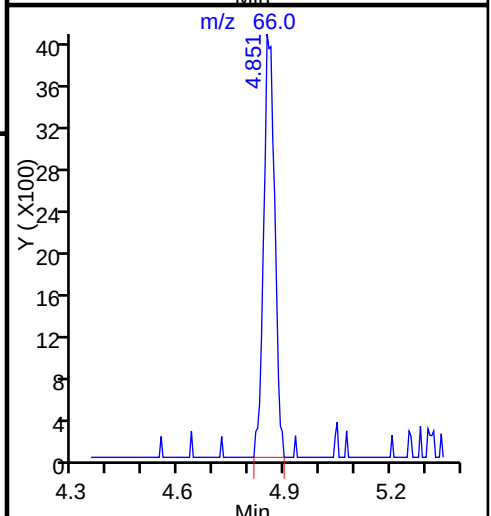
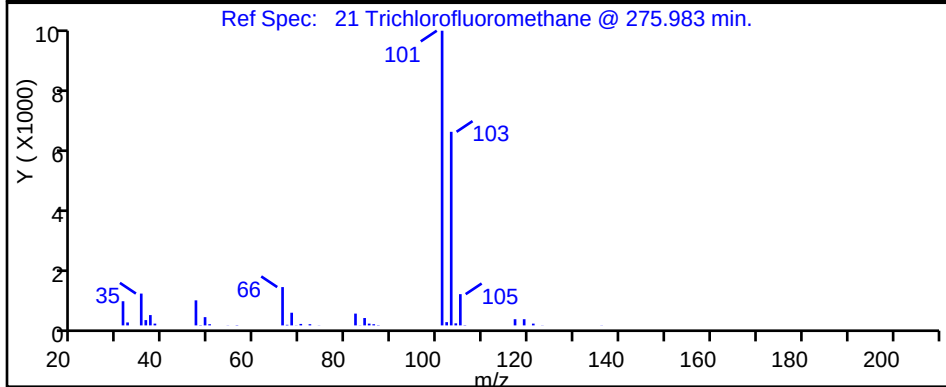
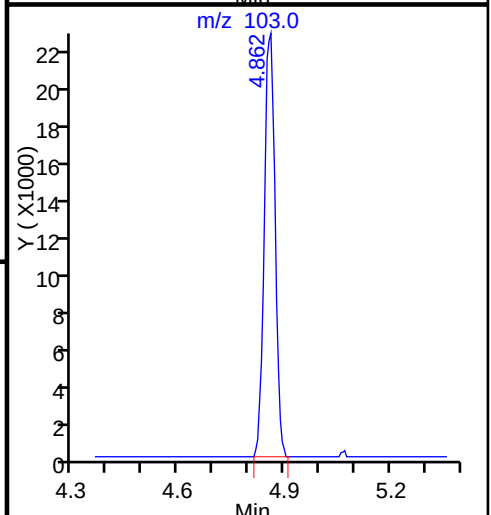
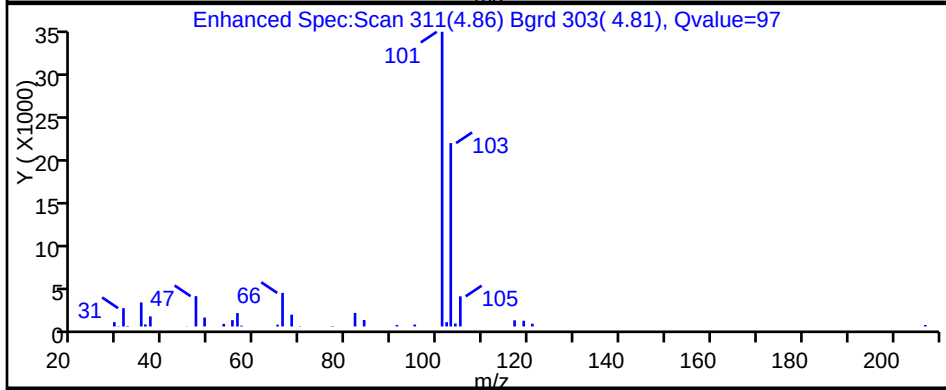
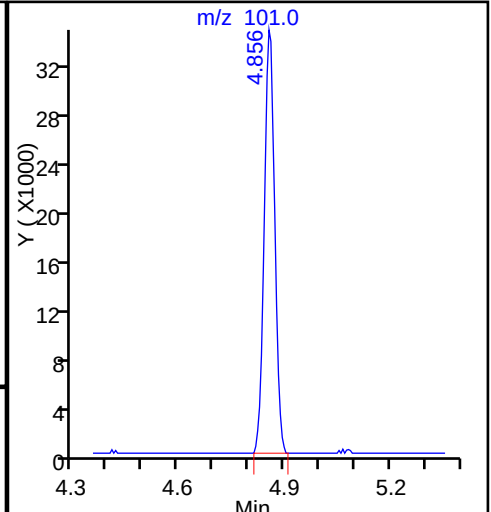
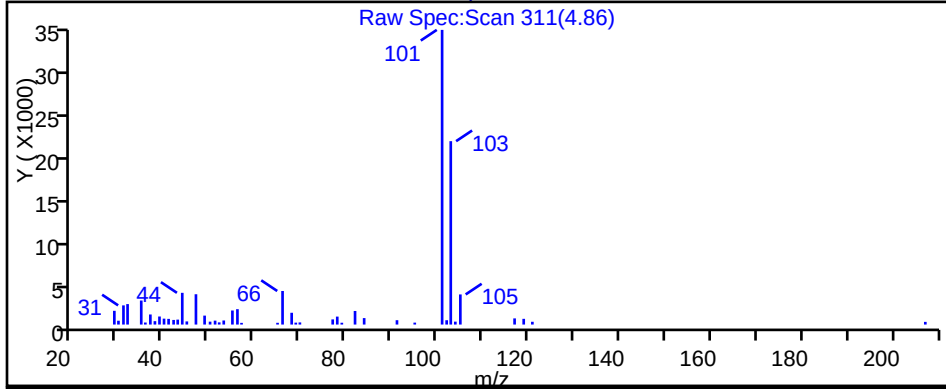
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

21 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: H15-BA2-2015 Lab Sample ID: 140-2815-12

Matrix: Air Lab File ID: EC05P114.D

Analysis Method: TO 15 LL Date Collected: 02/27/2015 08:45

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 23:33

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.: 2464 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		0.080	
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	0.32		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	0.16		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	0.068		0.040	
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	0.52		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: H15-BA2-2015 Lab Sample ID: 140-2815-12
 Matrix: Air Lab File ID: EC05P114.D
 Analysis Method: TO 15 LL Date Collected: 02/27/2015 08:45
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 23:33
 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.: 2464 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	0.47		0.080	
64-17-5	Ethanol	46.07	5.4		0.80	
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	0.13		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	0.046		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.22		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: H15-BA2-2015 Lab Sample ID: 140-2815-12

Matrix: Air Lab File ID: EC05P114.D

Analysis Method: TO 15 LL Date Collected: 02/27/2015 08:45

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 23:33

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.: 2464 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		0.32	
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	0.94		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.52		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	0.43		0.25	
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	1.1		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: H15-BA2-2015 Lab Sample ID: 140-2815-12

Matrix: Air Lab File ID: EC05P114.D

Analysis Method: TO 15 LL Date Collected: 02/27/2015 08:45

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 23:33

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.: 2464 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	2.3		0.40	
64-17-5	Ethanol	46.07	10		1.5	
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	0.48		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	0.25		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.2		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P114.D
 Lims ID: 140-2815-A-12 Lab Sample ID: 140-2815-12
 Client ID: H15-BA2-2015
 Sample Type: Client
 Inject. Date: 05-Mar-2015 23:33:30 ALS Bottle#: 14 Worklist Smp#: 18
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2815-a-12
 Misc. Info.: E030515,TO155,,140-0001425-018
 Operator ID: 7126 Instrument ID: ME
 Method: \\KNXCHROM\ChromData\ME\20150304-1425.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 10-Mar-2015 07:57:18 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK004

First Level Reviewer: tajh

Date: 10-Mar-2015 07:57:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.491	8.491	0.000	97	363148	4.00	
* 2 1,4-Difluorobenzene	114	10.729	10.729	0.000	96	1699642	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.555	15.555	0.000	91	1569828	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.210	17.210	0.000	87	1183317	4.00	
8 Dichlorodifluoromethane	85	3.438	3.438	0.000	100	174087	0.4693	
9 Chloromethane	52	3.616	3.616	0.000	99	19706	0.5180	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.621	0.000	36	3448	0.0147	
17 Ethanol	31	4.387	4.393	-0.006	98	232202	5.37	
21 Trichlorofluoromethane	101	4.856	4.862	-0.006	99	72564	0.2192	
29 2-Methyl-2-propanol	59	5.665	5.654	0.011	88	5727	0.0269	
30 1,1,2-Trichloro-1,2,2-trif	101	5.735	5.735	0.000	94	15224	0.0650	
31 Methylene Chloride	84	5.908	5.919	-0.011	94	11840	0.1191	
39 2-Butanone (MEK)	72	7.709	7.709	0.000	96	15101	0.3180	
40 Hexane	56	7.730	7.730	0.000	72	8457	0.0816	
43 Chloroform	83	8.496	8.502	-0.006	28	12734	0.0474	
49 Cyclohexane	69	10.141	10.152	-0.011	56	1129	0.0204	
48 Benzene	78	10.152	10.157	-0.005	96	52298	0.1635	
50 Carbon tetrachloride	117	10.173	10.179	-0.006	95	22753	0.0676	
53 Isooctane	57	10.934	10.944	-0.010	94	23938	0.0376	
56 Trichloroethene	130	11.457	11.462	-0.005	94	8222	0.0458	
62 4-Methyl-2-pentanone (MIBK	43	12.670	12.664	0.006	98	47827	0.1750	
65 Toluene	91	13.560	13.560	0.000	92	50542	0.1284	
78 m-Xylene & p-Xylene	91	16.051	16.056	-0.005	98	25409	0.0646	
82 o-Xylene	91	16.585	16.585	0.000	96	10981	0.0267	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P114.D

Injection Date: 05-Mar-2015 23:33:30

Instrument ID: ME

Operator ID: 7126

Lims ID: 140-2815-A-12

Lab Sample ID: 140-2815-12

Worklist Smp#: 18

Client ID: H15-BA2-2015

Purge Vol: 500.000 mL

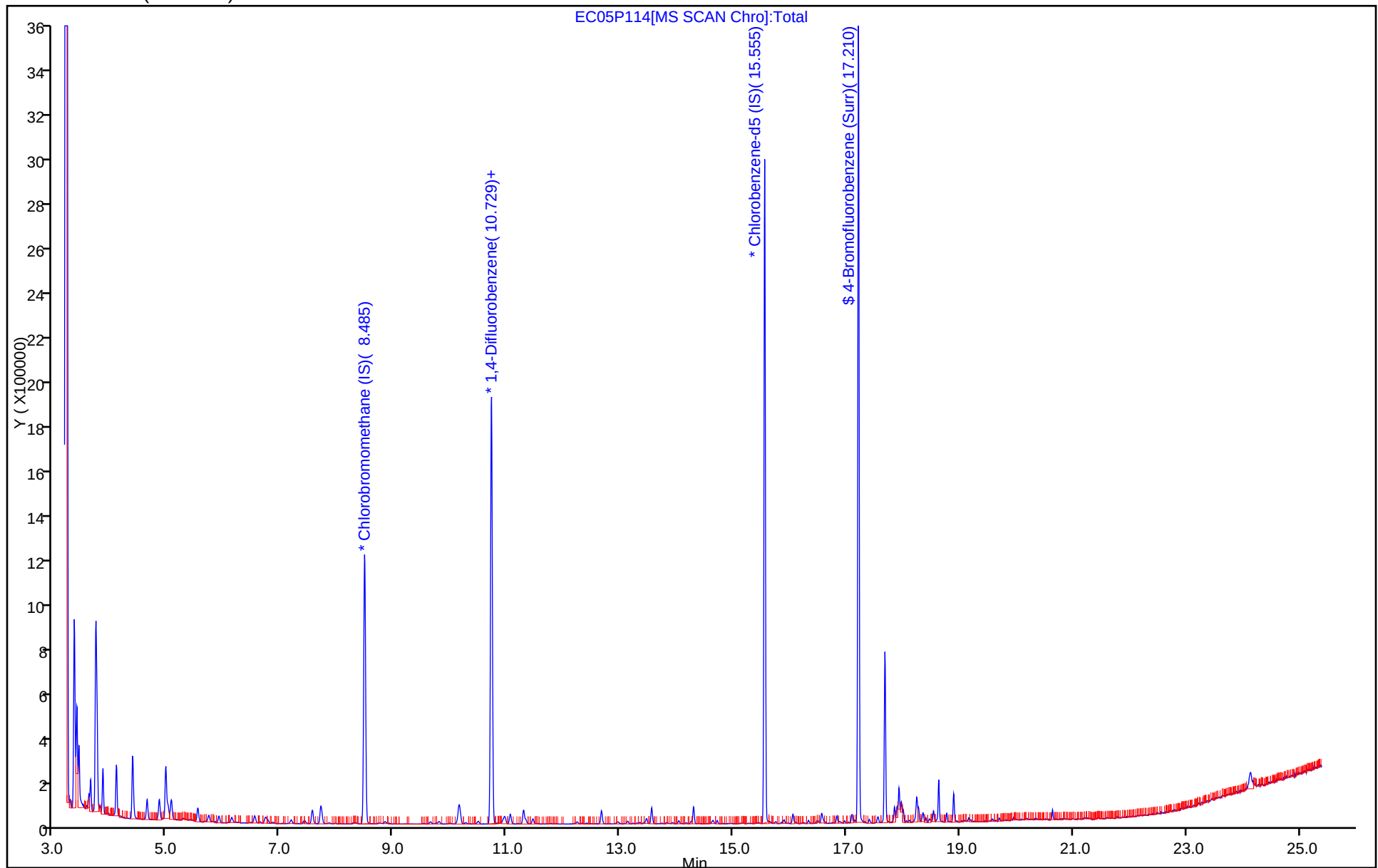
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P114.D

Injection Date: 05-Mar-2015 23:33:30

Instrument ID: ME

Lims ID: 140-2815-A-12

Lab Sample ID: 140-2815-12

Client ID: H15-BA2-2015

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

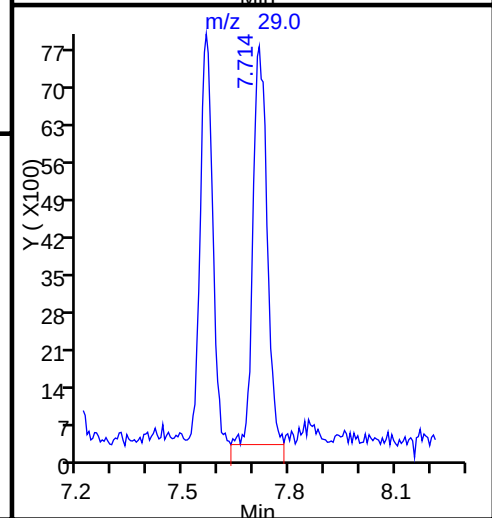
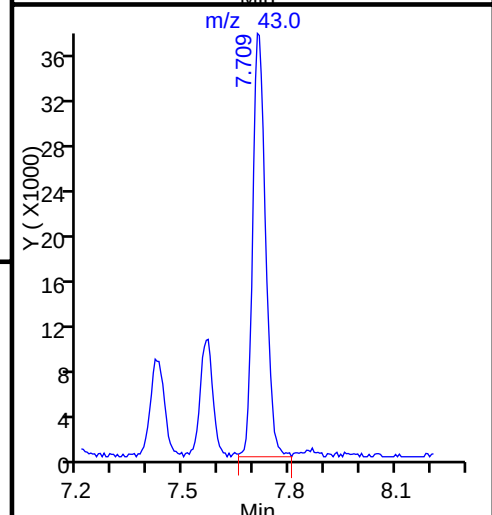
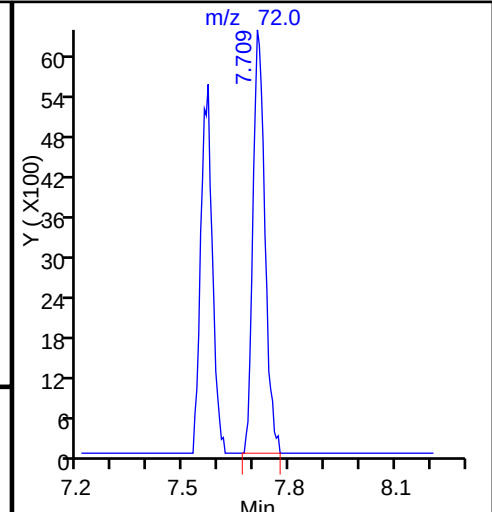
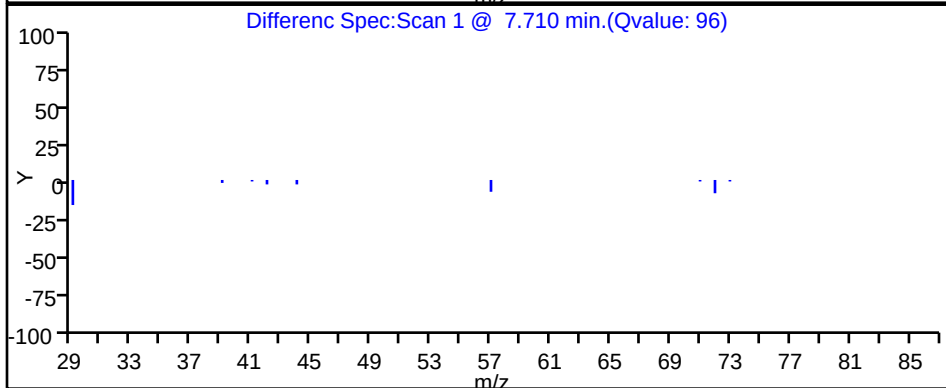
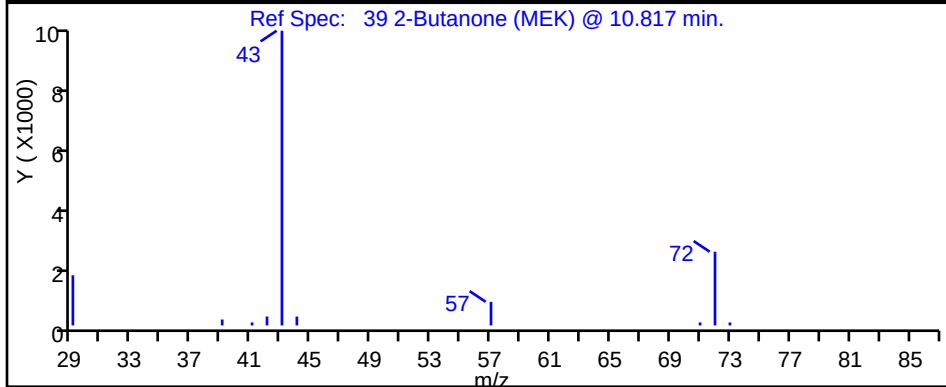
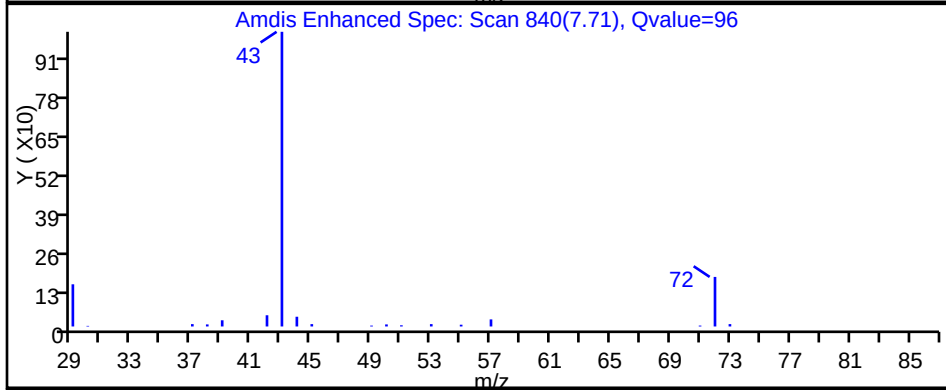
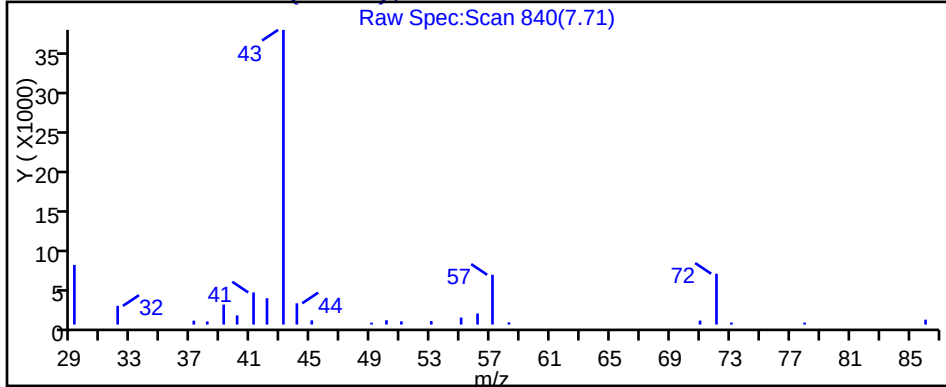
Dil. Factor: 1.0000

Method: ME_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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P114.D

Injection Date: 05-Mar-2015 23:33:30

Instrument ID: ME

Lims ID: 140-2815-A-12

Lab Sample ID: 140-2815-12

Client ID: H15-BA2-2015

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

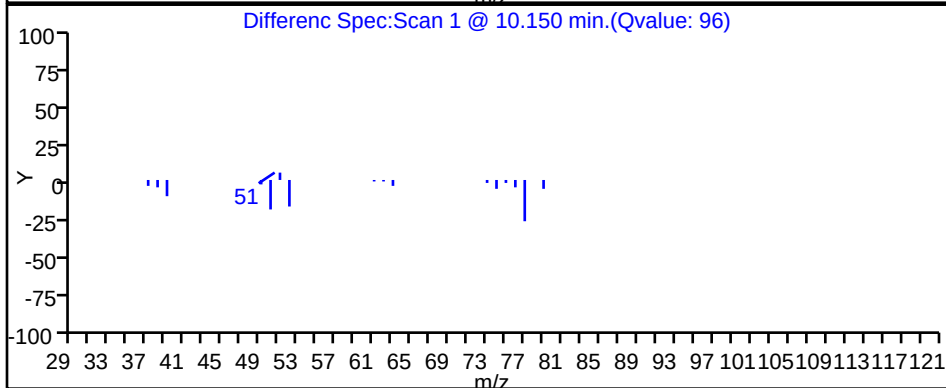
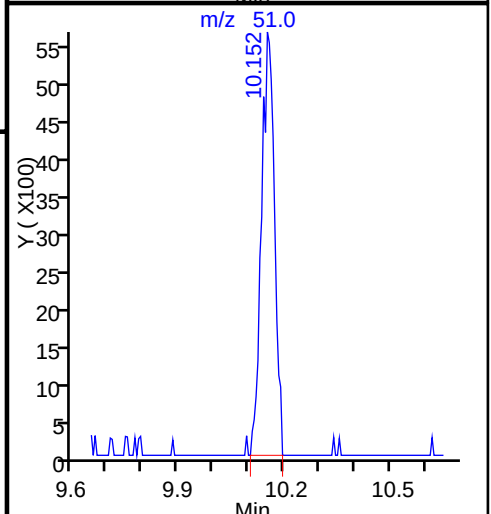
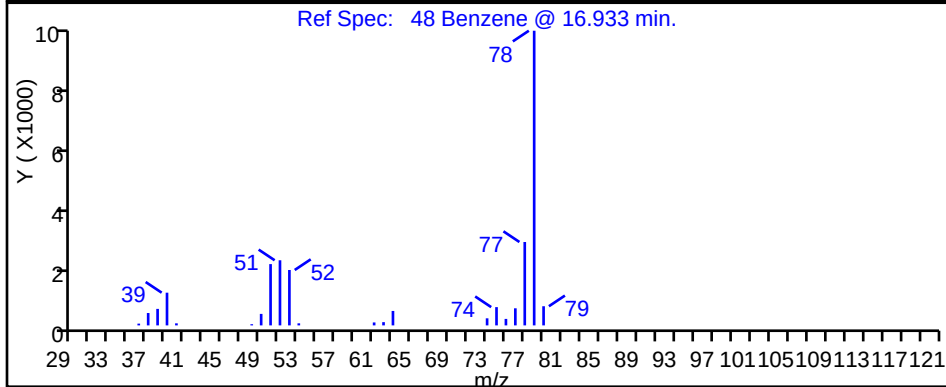
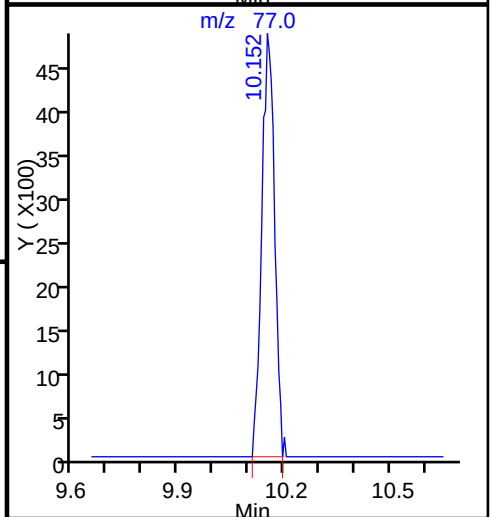
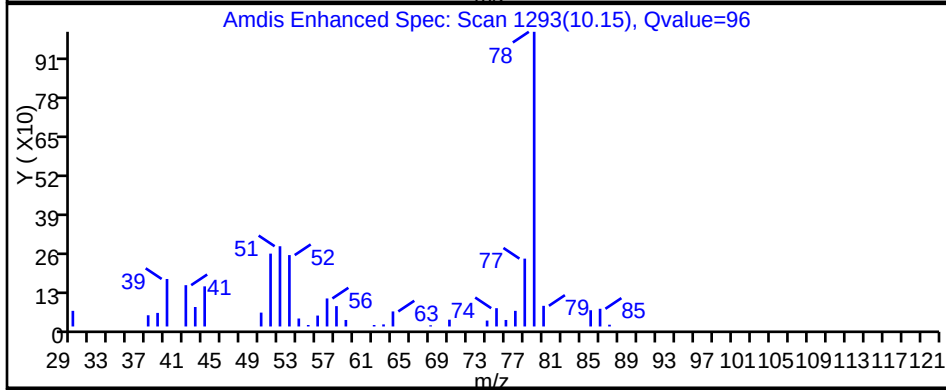
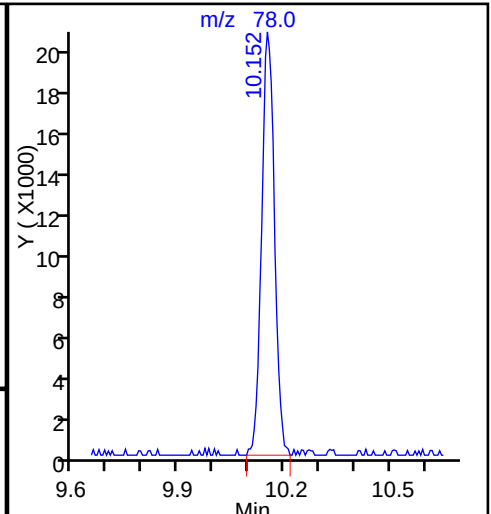
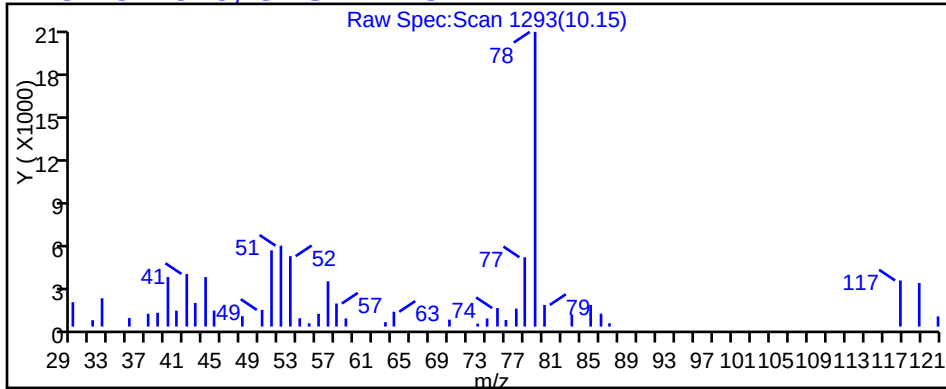
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P114.D

Injection Date: 05-Mar-2015 23:33:30

Instrument ID: ME

Lims ID: 140-2815-A-12

Lab Sample ID: 140-2815-12

Client ID: H15-BA2-2015

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

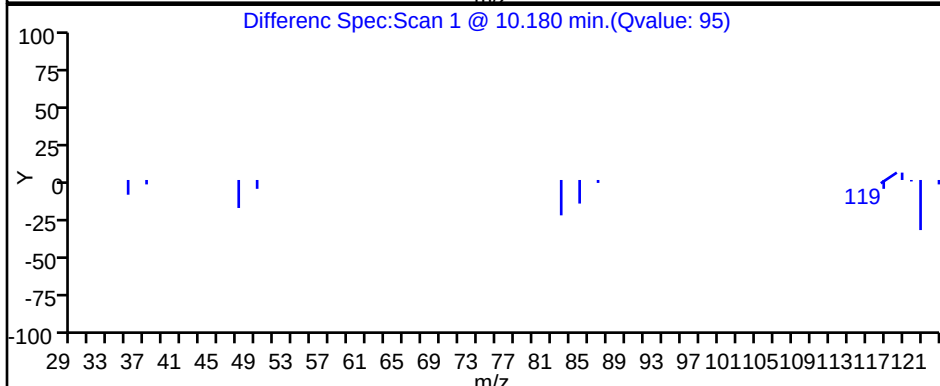
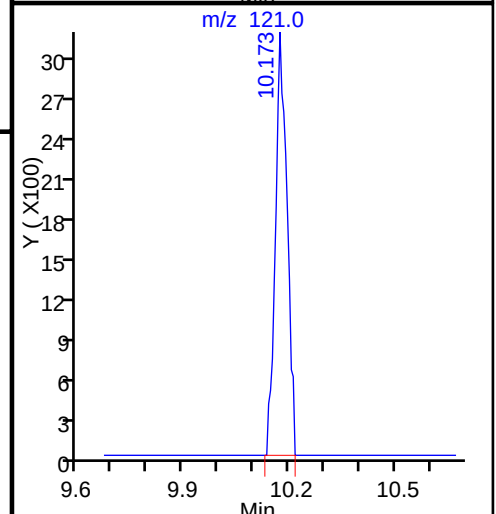
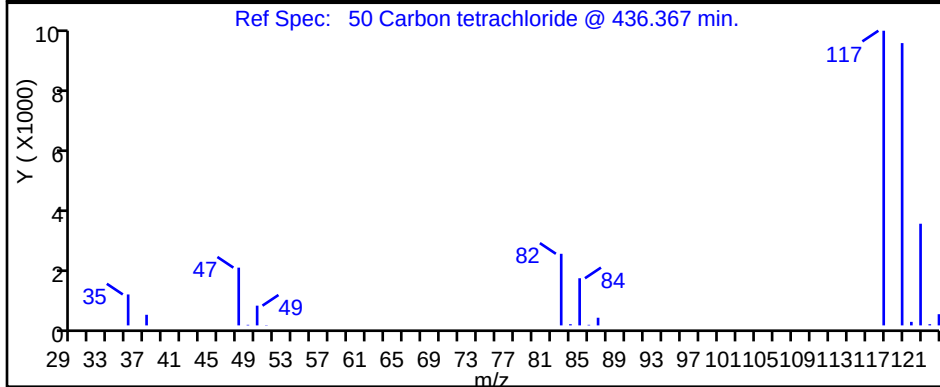
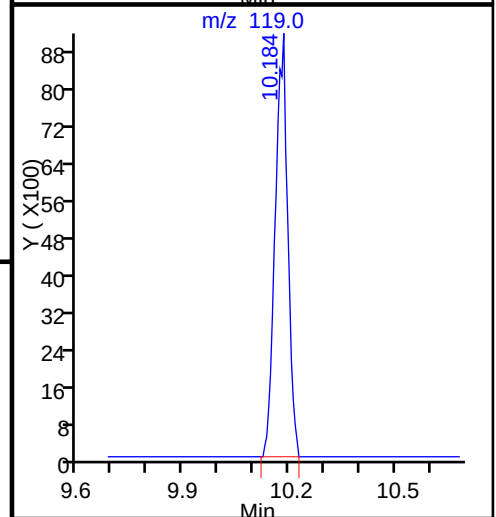
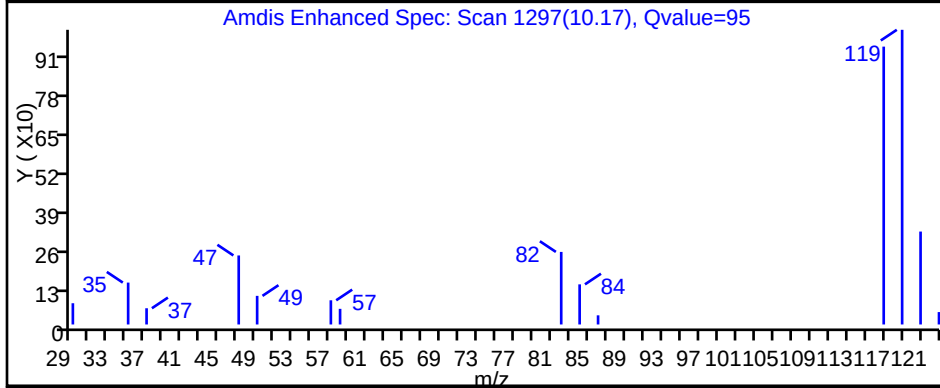
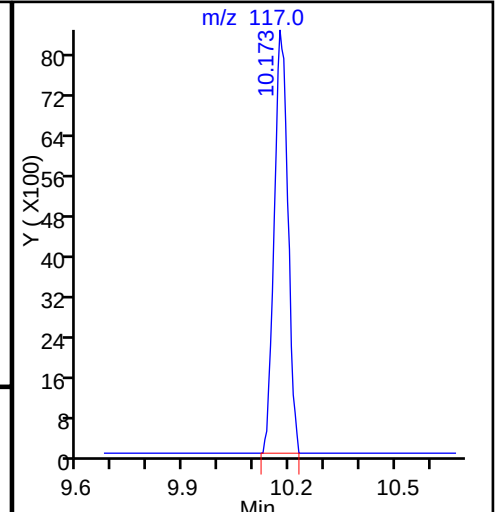
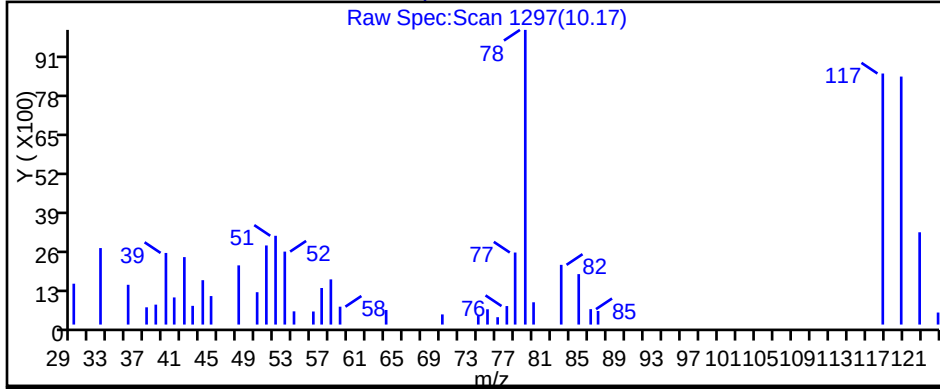
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P114.D

Injection Date: 05-Mar-2015 23:33:30

Instrument ID: ME

Lims ID: 140-2815-A-12

Lab Sample ID: 140-2815-12

Client ID: H15-BA2-2015

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

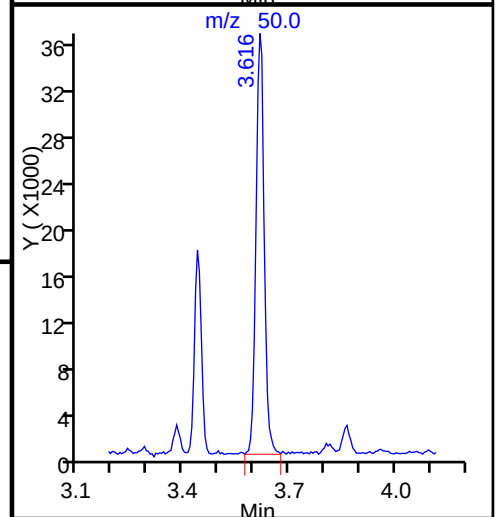
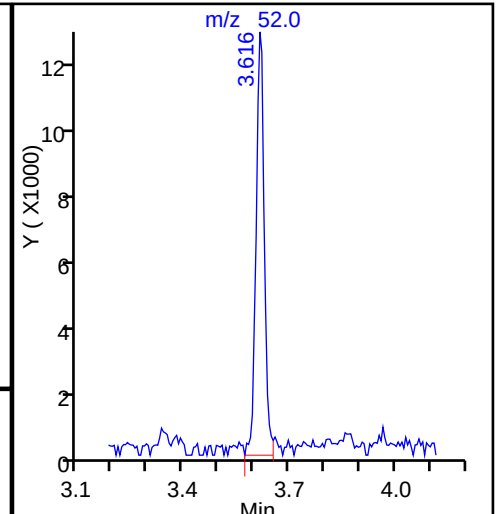
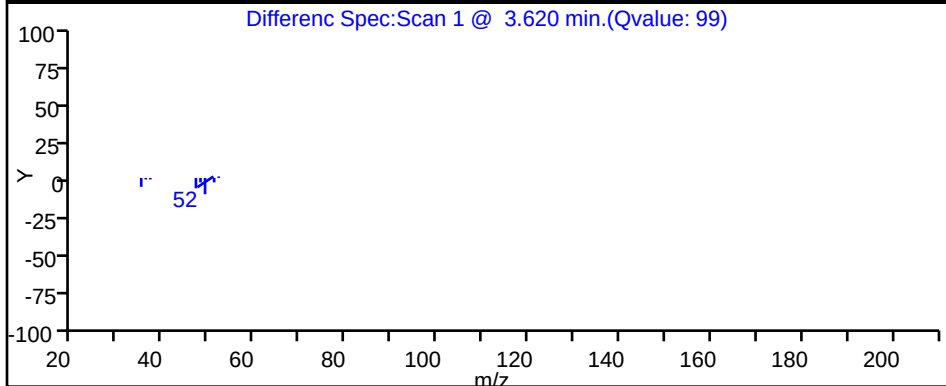
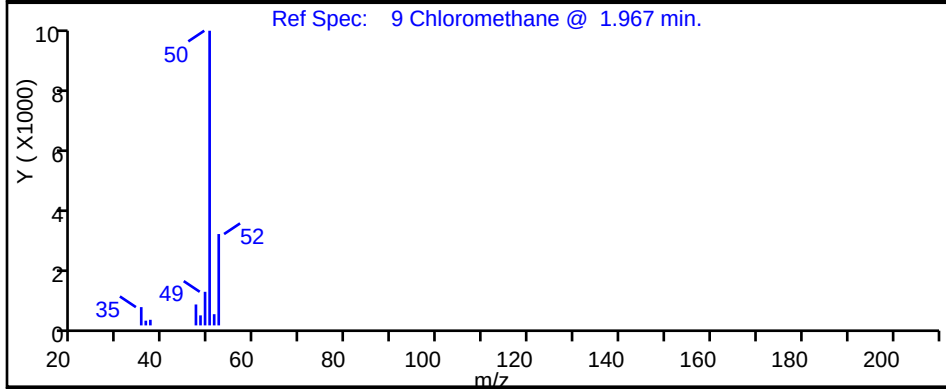
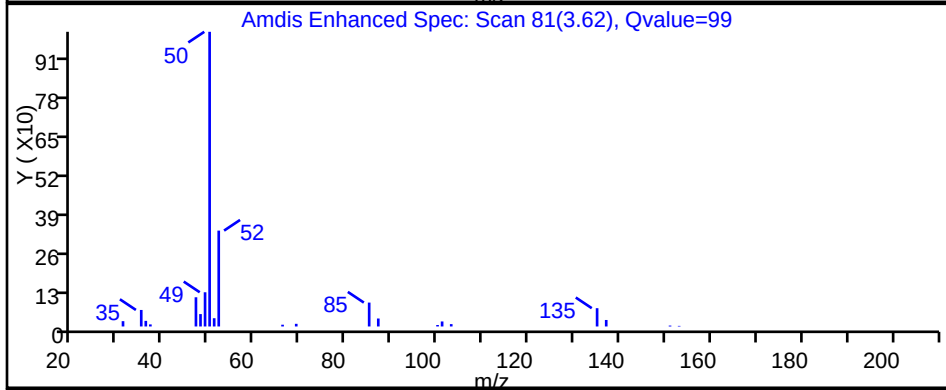
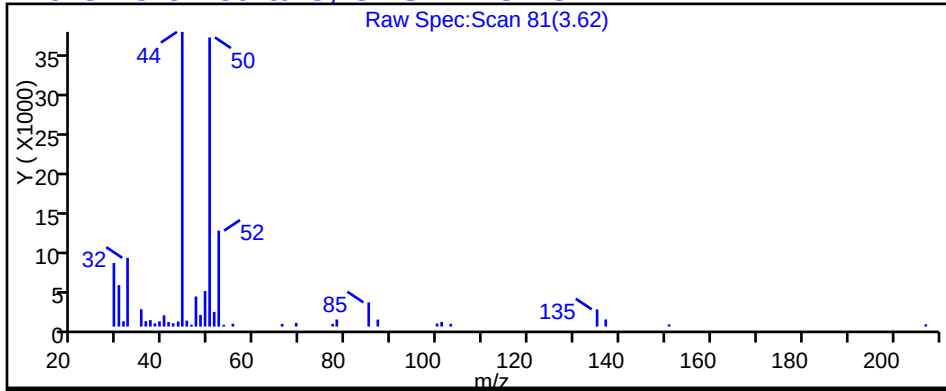
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P114.D

Injection Date: 05-Mar-2015 23:33:30

Instrument ID: ME

Lims ID: 140-2815-A-12

Lab Sample ID: 140-2815-12

Client ID: H15-BA2-2015

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

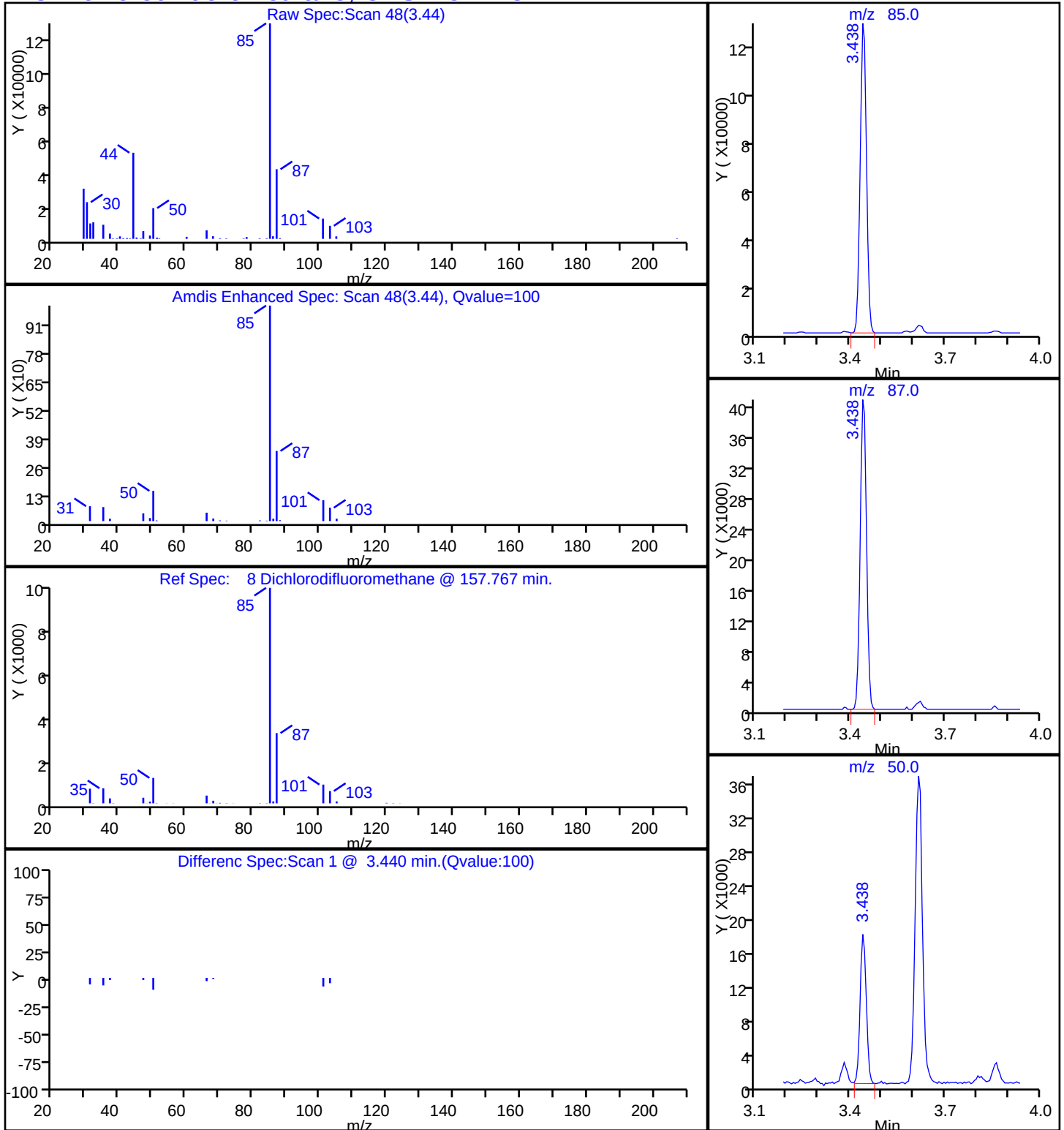
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P114.D

Injection Date: 05-Mar-2015 23:33:30

Instrument ID: ME

Lims ID: 140-2815-A-12

Lab Sample ID: 140-2815-12

Client ID: H15-BA2-2015

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

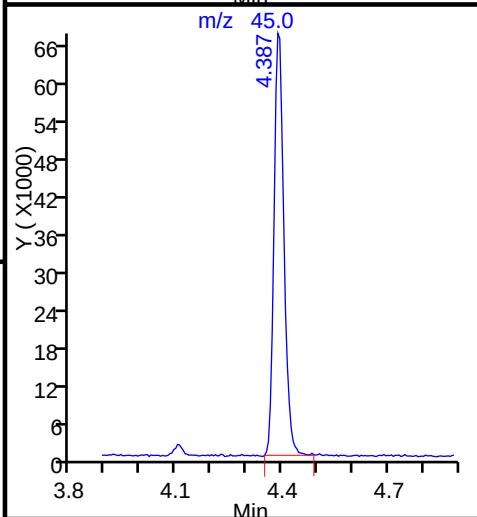
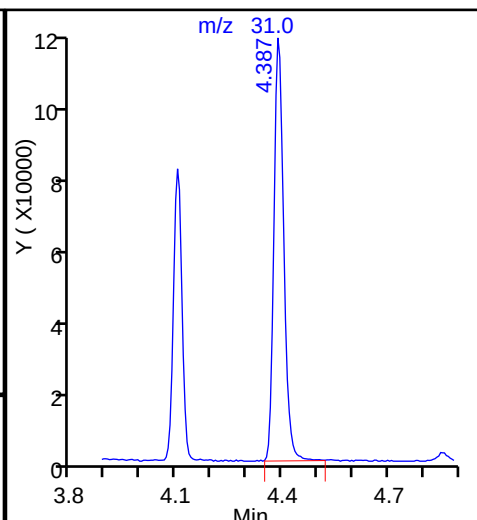
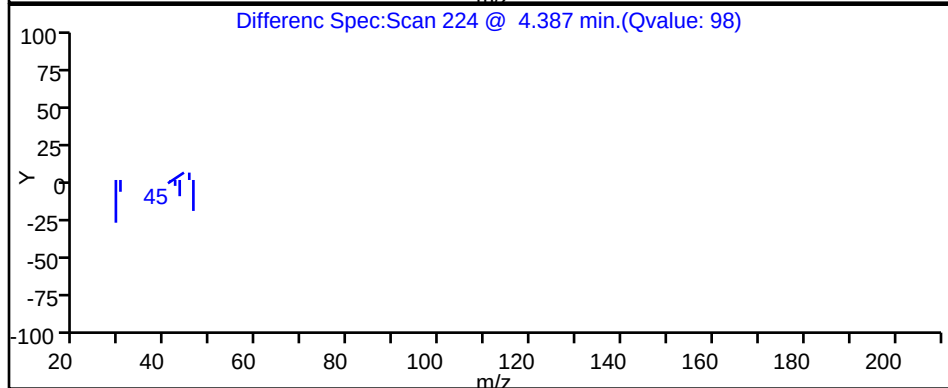
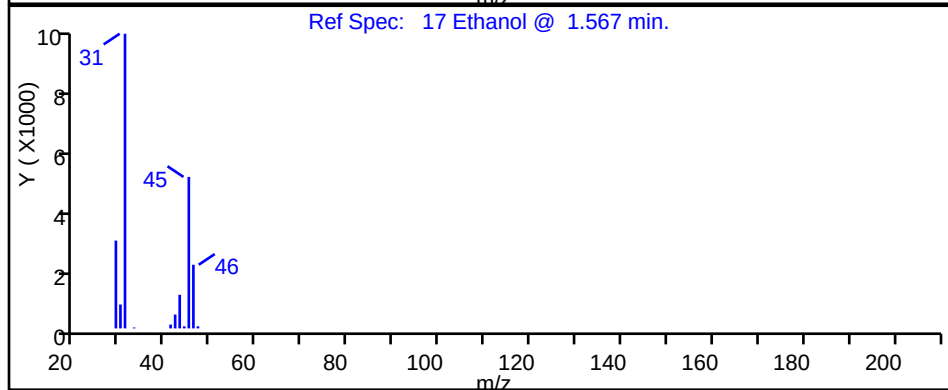
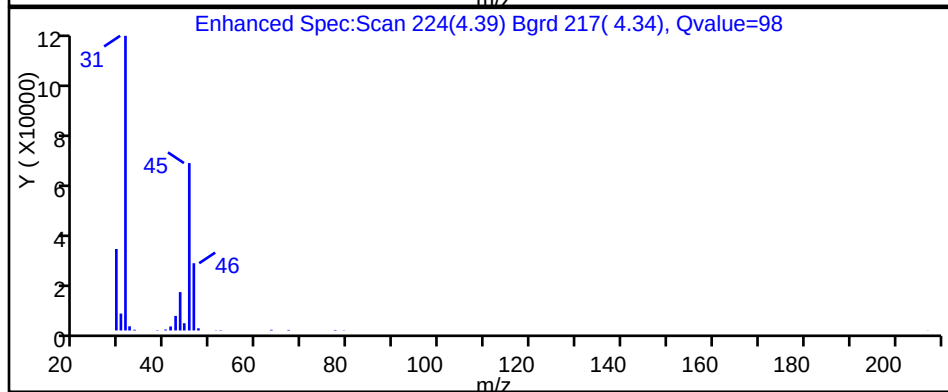
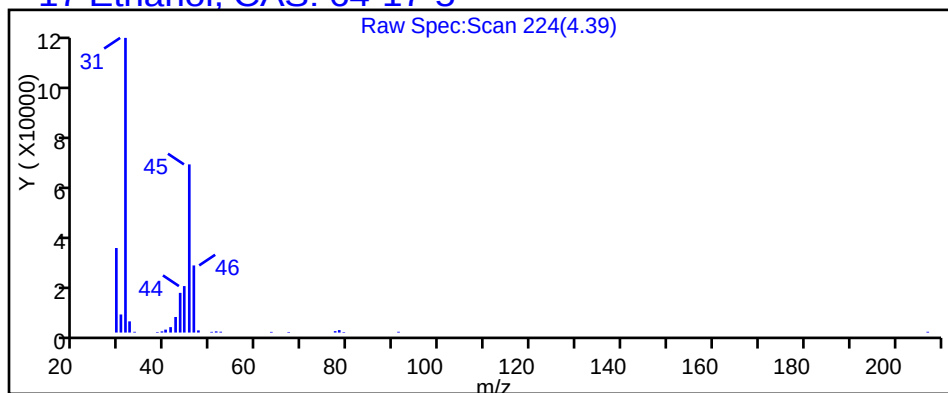
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P114.D

Injection Date: 05-Mar-2015 23:33:30

Instrument ID: ME

Lims ID: 140-2815-A-12

Lab Sample ID: 140-2815-12

Client ID: H15-BA2-2015

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

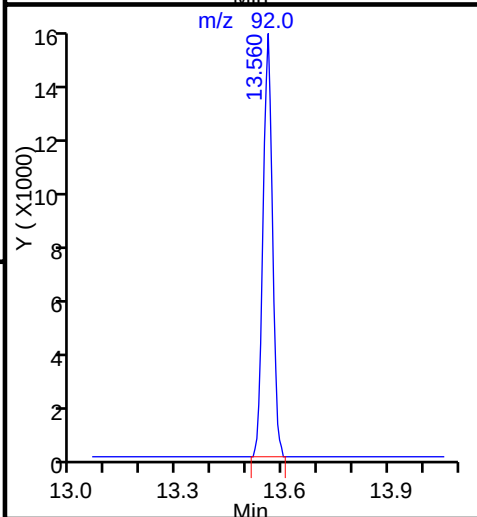
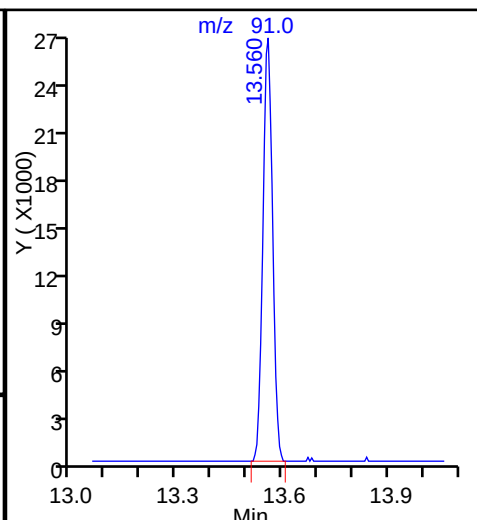
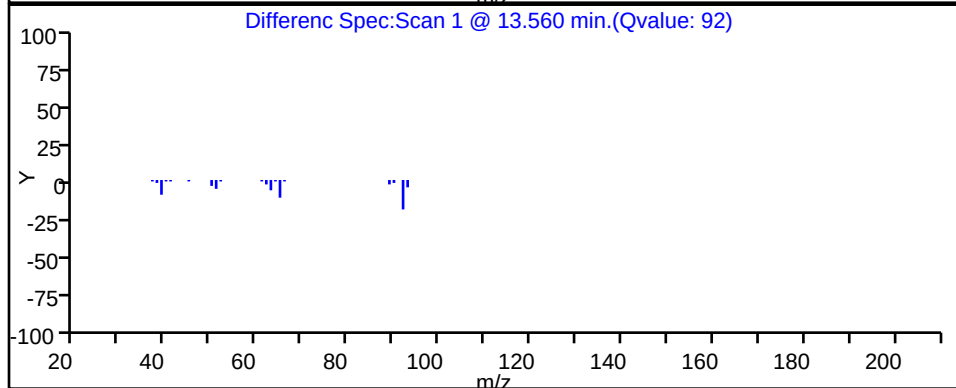
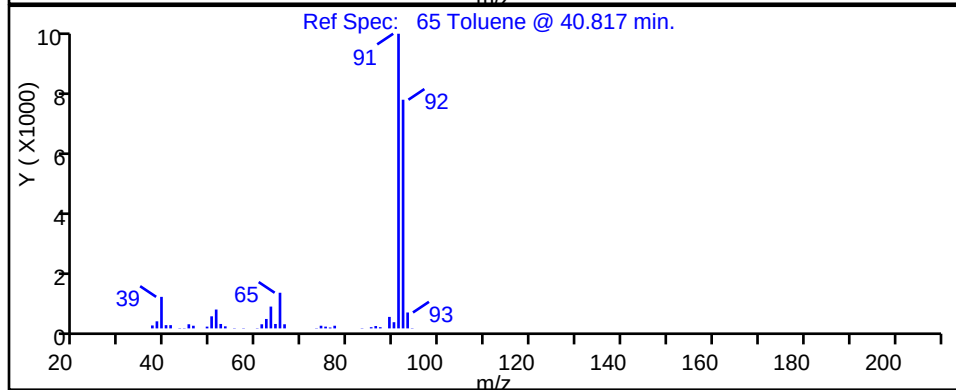
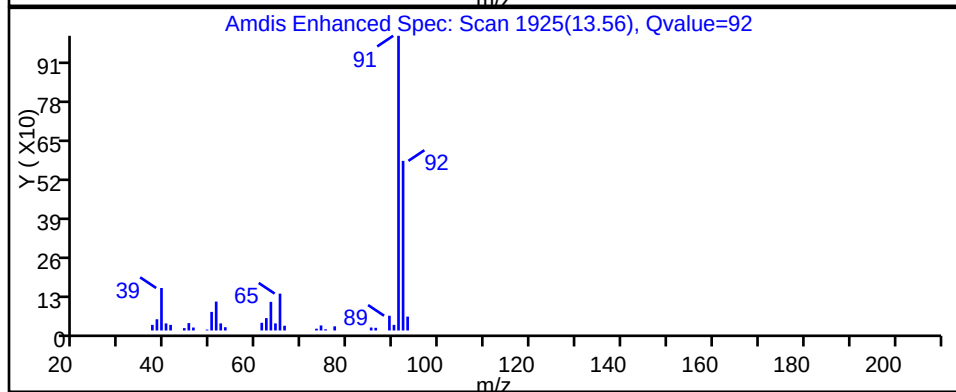
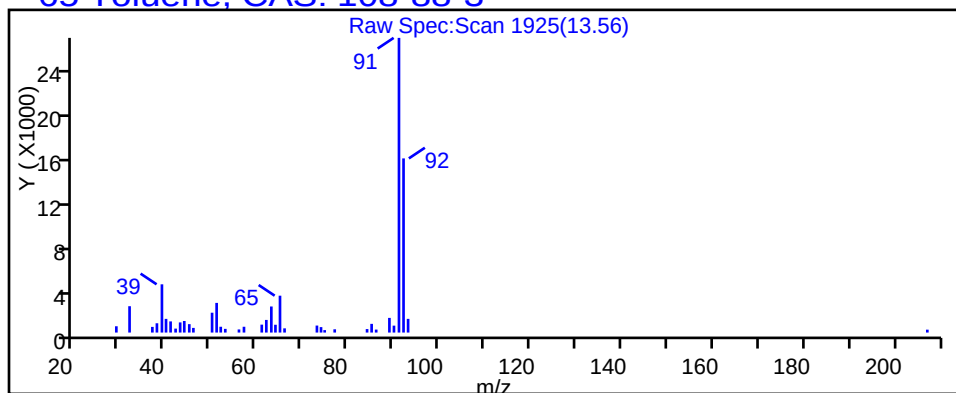
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P114.D

Injection Date: 05-Mar-2015 23:33:30

Instrument ID: ME

Lims ID: 140-2815-A-12

Lab Sample ID: 140-2815-12

Client ID: H15-BA2-2015

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

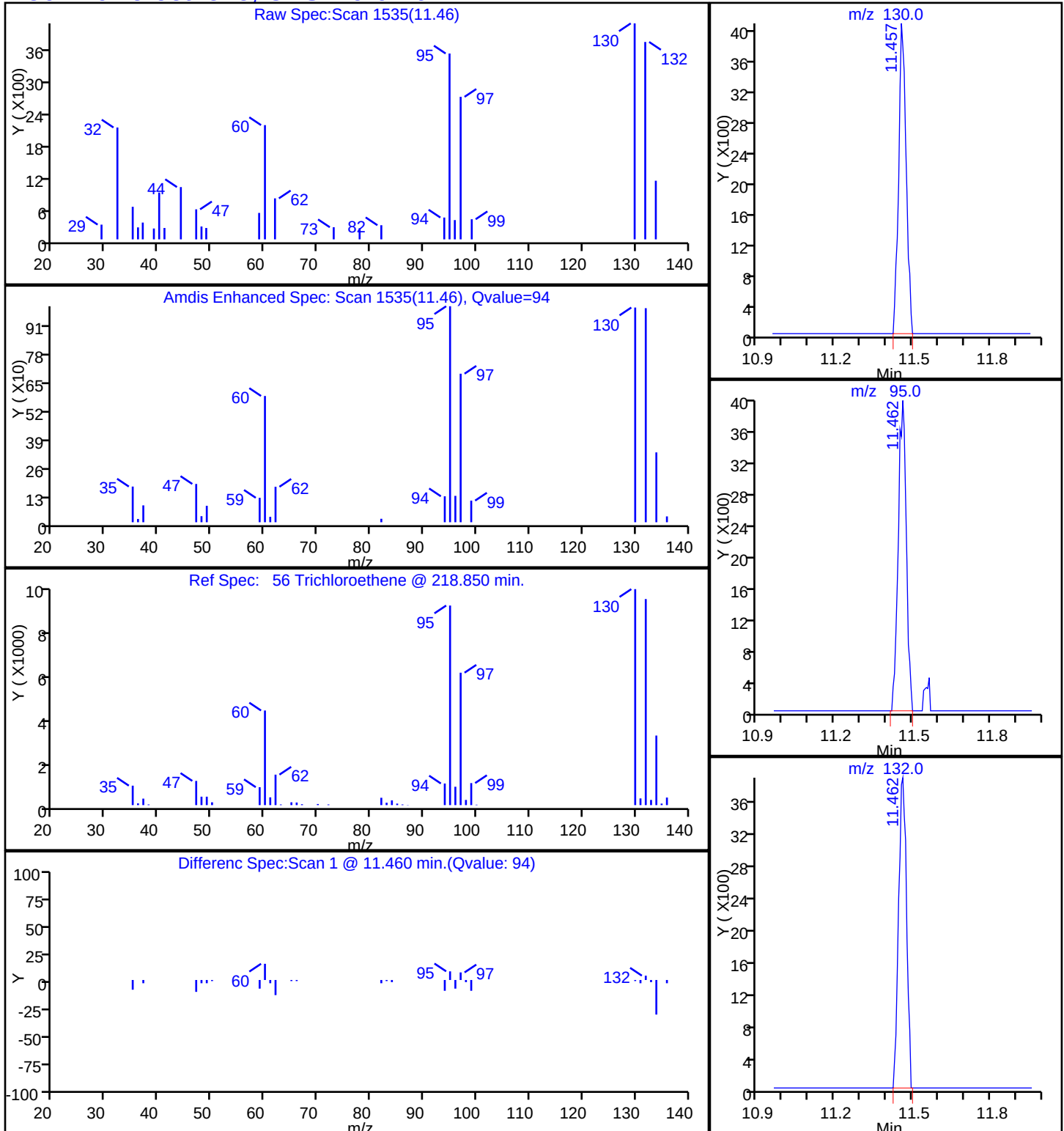
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

56 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P114.D

Injection Date: 05-Mar-2015 23:33:30

Instrument ID: ME

Lims ID: 140-2815-A-12

Lab Sample ID: 140-2815-12

Client ID: H15-BA2-2015

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

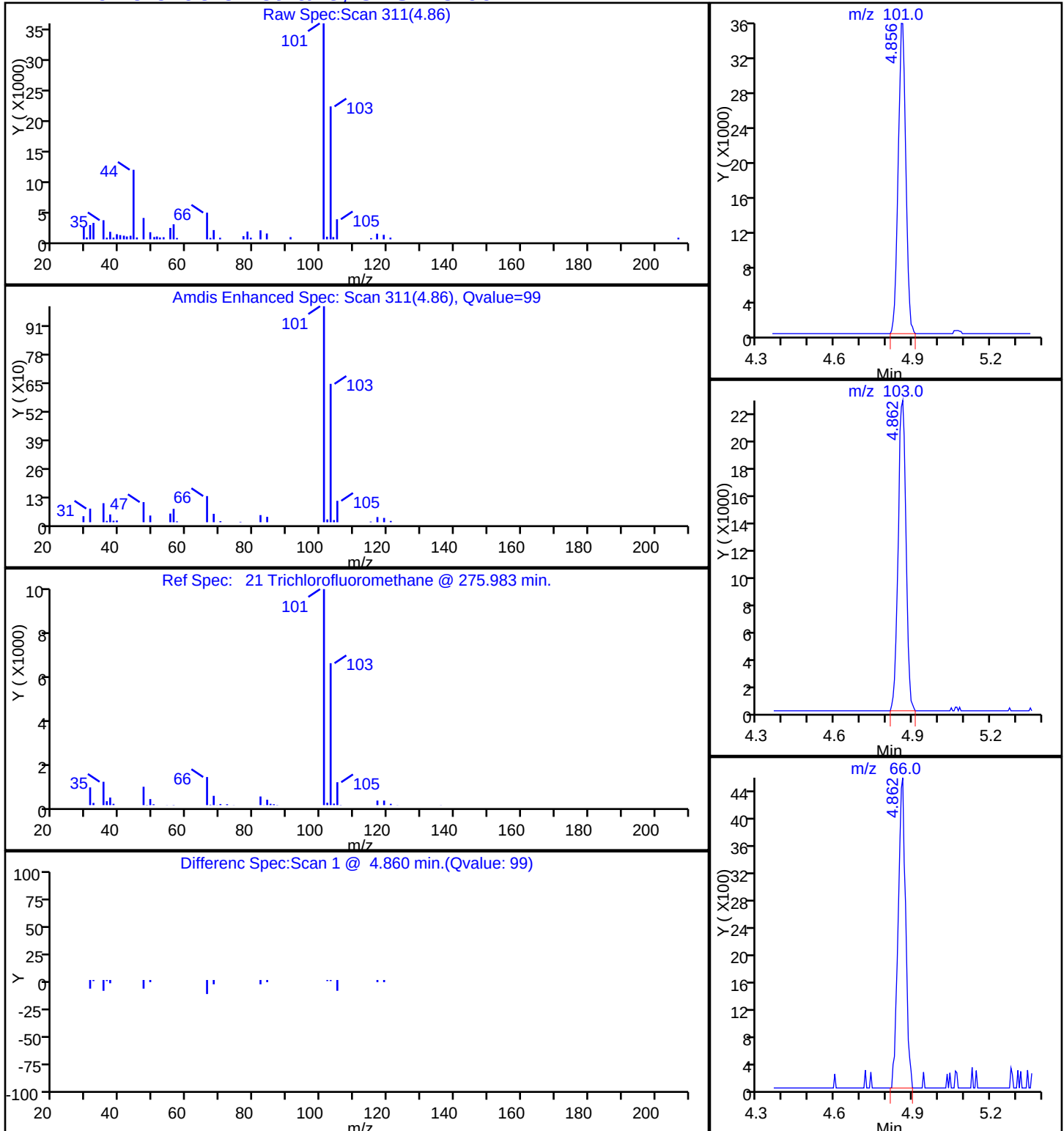
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

21 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: H2-BA-2015 Lab Sample ID: 140-2815-13

Matrix: Air Lab File ID: EC05P115.D

Analysis Method: TO 15 LL Date Collected: 02/27/2015 11:47

Sample wt/vol: 500 (mL) Date Analyzed: 03/06/2015 00:22

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.: 2464 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		0.080	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.30		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	0.090		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	0.31		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	0.23		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	0.072		0.040	
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	0.53		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: H2-BA-2015 Lab Sample ID: 140-2815-13
 Matrix: Air Lab File ID: EC05P115.D
 Analysis Method: TO 15 LL Date Collected: 02/27/2015 11:47
 Sample wt/vol: 500 (mL) Date Analyzed: 03/06/2015 00:22
 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.: 2464 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	0.49		0.080	
64-17-5	Ethanol	46.07	18		0.80	
100-41-4	Ethylbenzene	106.17	0.19		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	1.1		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	0.71		0.080	
95-47-6	o-Xylene	106.17	0.28		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	1.2		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	0.077		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.25		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: H2-BA-2015 Lab Sample ID: 140-2815-13

Matrix: Air Lab File ID: EC05P115.D

Analysis Method: TO 15 LL Date Collected: 02/27/2015 11:47

Sample wt/vol: 500 (mL) Date Analyzed: 03/06/2015 00:22

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.: 2464 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		0.32	
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	0.44		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	1.5		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	0.73		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	0.46		0.25	
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	1.1		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: H2-BA-2015 Lab Sample ID: 140-2815-13
 Matrix: Air Lab File ID: EC05P115.D
 Analysis Method: TO 15 LL Date Collected: 02/27/2015 11:47
 Sample wt/vol: 500 (mL) Date Analyzed: 03/06/2015 00:22
 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.: 2464 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	2.4		0.40	
64-17-5	Ethanol	46.07	35		1.5	
100-41-4	Ethylbenzene	106.17	0.84		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	4.0		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	3.1		0.35	
95-47-6	o-Xylene	106.17	1.2		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	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	0.41		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.4		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P115.D
 Lims ID: 140-2815-A-13 Lab Sample ID: 140-2815-13
 Client ID: H2-BA-2015
 Sample Type: Client
 Inject. Date: 06-Mar-2015 00:22:30 ALS Bottle#: 15 Worklist Smp#: 19
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2815-a-13
 Misc. Info.: E030515,TO155,,140-0001425-019
 Operator ID: 7126 Instrument ID: ME
 Method: \\KNXCHROM\ChromData\ME\20150304-1425.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 10-Mar-2015 07:57:34 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK004

First Level Reviewer: tajh

Date: 10-Mar-2015 07:57:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.485	8.491	-0.006	98	342877	4.00	
* 2 1,4-Difluorobenzene	114	10.728	10.729	-0.001	96	1567296	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.555	15.555	-0.001	91	1457588	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.210	17.210	0.000	85	1108411	4.04	
8 Dichlorodifluoromethane	85	3.438	3.438	0.000	96	172893	0.4937	
9 Chloromethane	52	3.616	3.616	0.000	100	18877	0.5256	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.621	0.000	28	3239	0.0146	
17 Ethanol	31	4.387	4.393	-0.006	97	751555	18.4	
21 Trichlorofluoromethane	101	4.856	4.862	-0.006	98	77268	0.2472	
29 2-Methyl-2-propanol	59	5.659	5.654	0.005	64	7315	0.0364	
30 1,1,2-Trichloro-1,2,2-trif	101	5.735	5.735	0.000	89	14735	0.0666	
31 Methylene Chloride	84	5.913	5.919	-0.006	92	16366	0.1744	
39 2-Butanone (MEK)	72	7.709	7.709	0.000	75	7867	0.1754	
40 Hexane	56	7.730	7.730	0.000	89	110654	1.13	
43 Chloroform	83	8.496	8.502	-0.006	15	13627	0.0538	
46 1,2-Dichloroethane	62	9.661	9.655	0.006	56	5480	0.0280	
49 Cyclohexane	69	10.141	10.152	-0.011	58	6477	0.1268	
48 Benzene	78	10.151	10.157	-0.006	93	66966	0.2270	
50 Carbon tetrachloride	117	10.173	10.179	-0.006	72	22470	0.0724	
53 Isooctane	57	10.939	10.944	-0.005	96	183131	0.3123	
56 Trichloroethene	130	11.462	11.462	0.000	89	12750	0.0771	
62 4-Methyl-2-pentanone (MIBK	43	12.680	12.664	0.016	86	6516	0.0259	
64 trans-1,3-Dichloropropene	75	13.559	13.446	0.113	6	3986	0.0221	
65 Toluene	91	13.559	13.560	-0.001	93	451129	1.23	
76 Ethylbenzene	91	15.894	15.894	0.000	99	91610	0.1933	
78 m-Xylene & p-Xylene	91	16.051	16.056	-0.005	97	260612	0.7134	
82 o-Xylene	91	16.584	16.585	-0.001	97	107120	0.2808	
89 1,3,5-Trimethylbenzene	120	17.960	17.960	0.000	91	21603	0.0903	
93 1,2,4-Trimethylbenzene	105	18.402	18.402	0.000	98	125646	0.3026	
97 1,4-Dichlorobenzene	146	18.768	18.769	-0.001	51	8468	0.0298	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P115.D

Injection Date: 06-Mar-2015 00:22:30

Instrument ID: ME

Operator ID: 7126

Lims ID: 140-2815-A-13

Lab Sample ID: 140-2815-13

Worklist Smp#: 19

Client ID: H2-BA-2015

Purge Vol: 500.000 mL

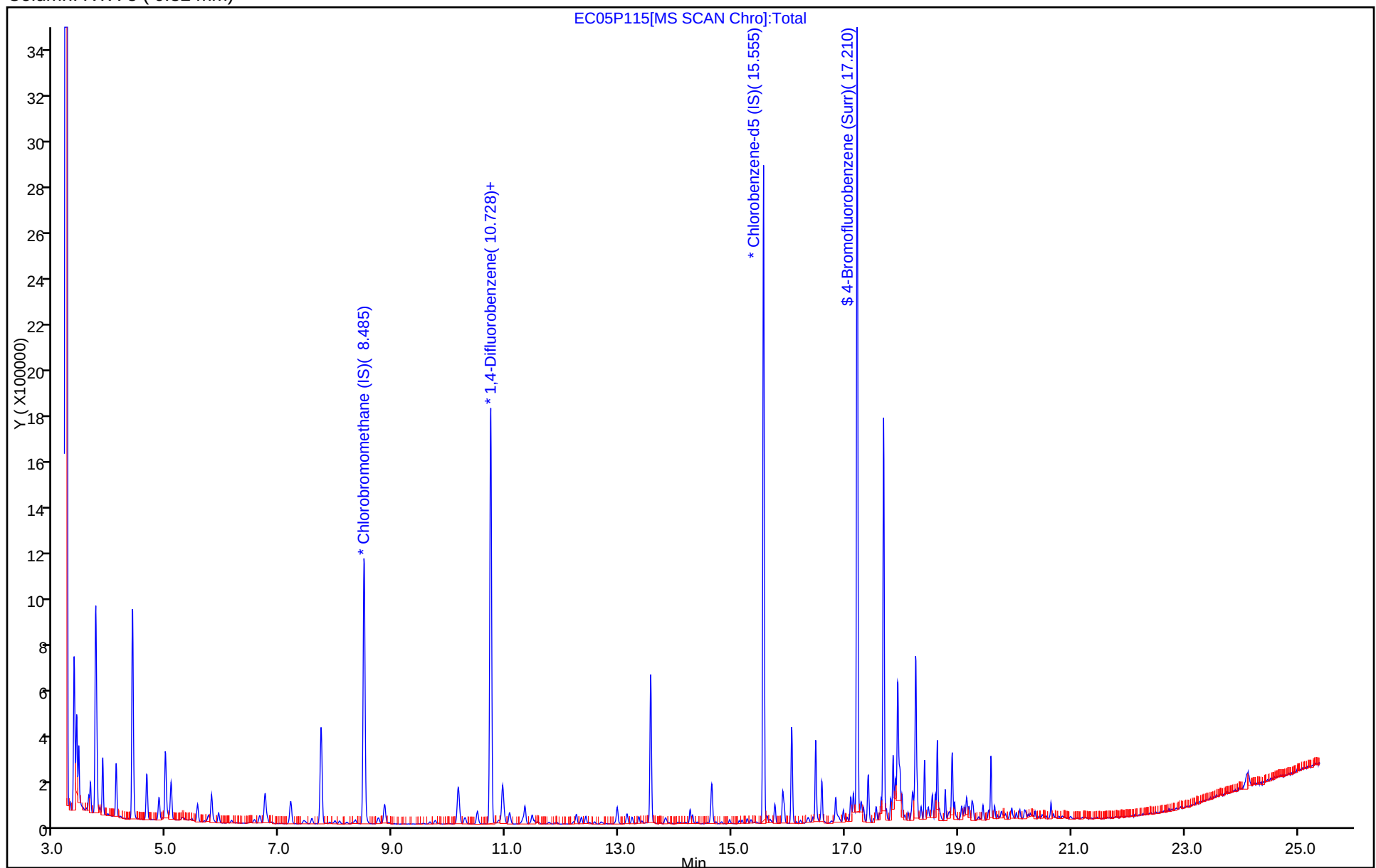
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P115.D

Injection Date: 06-Mar-2015 00:22:30

Instrument ID: ME

Lims ID: 140-2815-A-13

Lab Sample ID: 140-2815-13

Client ID: H2-BA-2015

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 19

Purge Vol: 500.000 mL

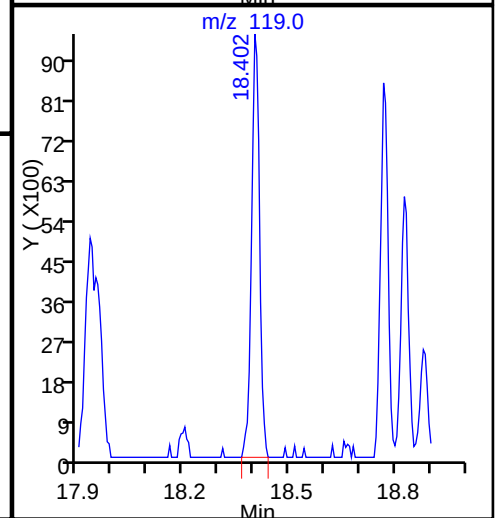
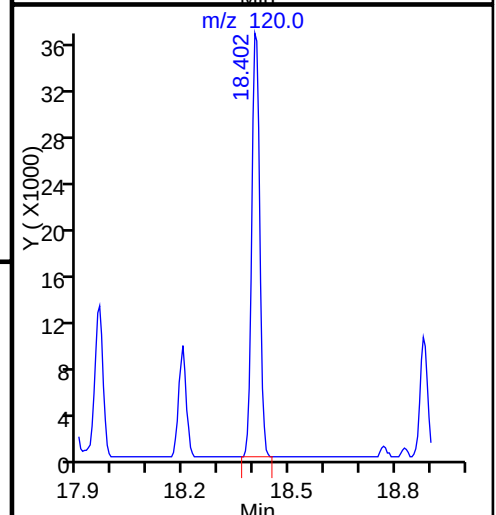
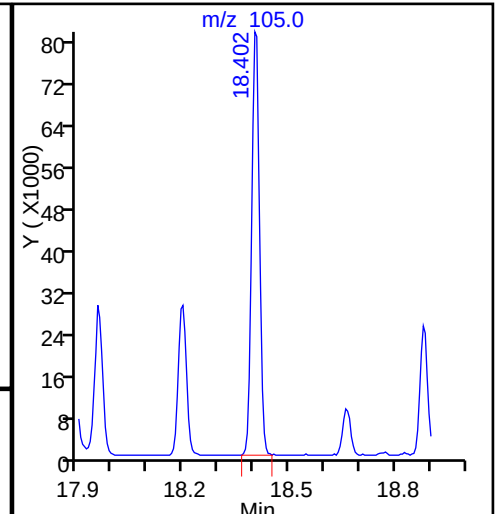
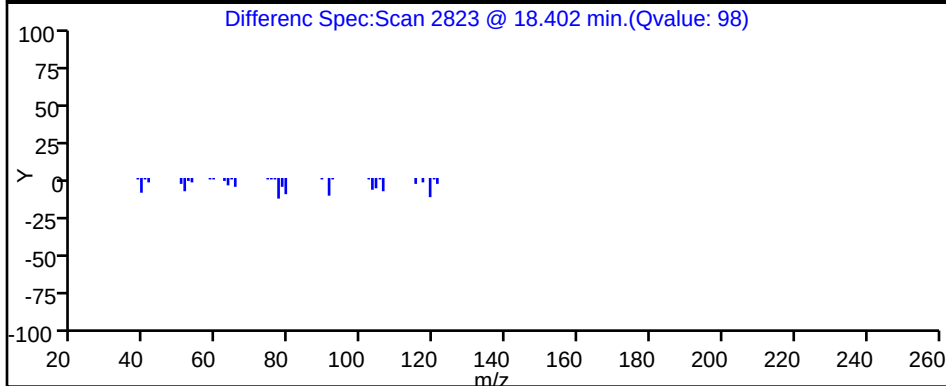
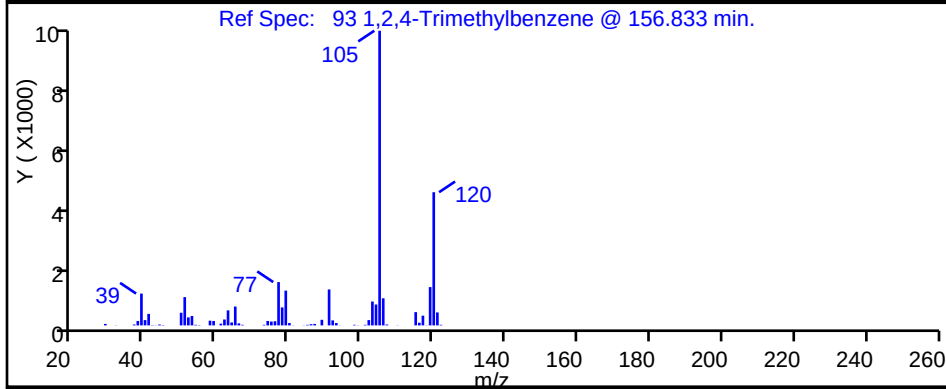
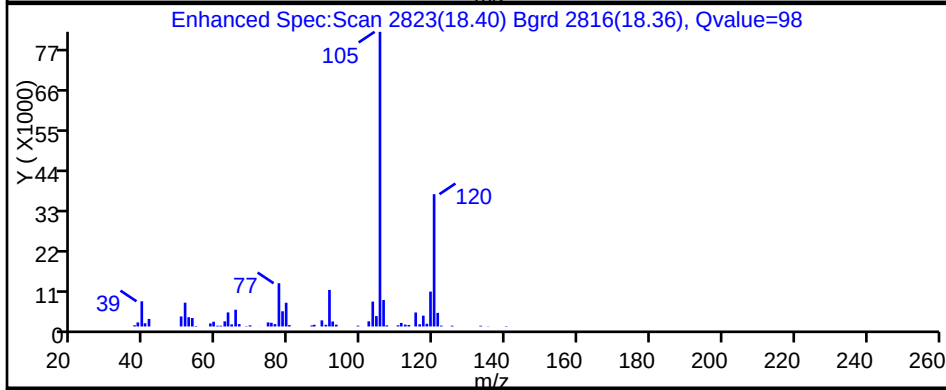
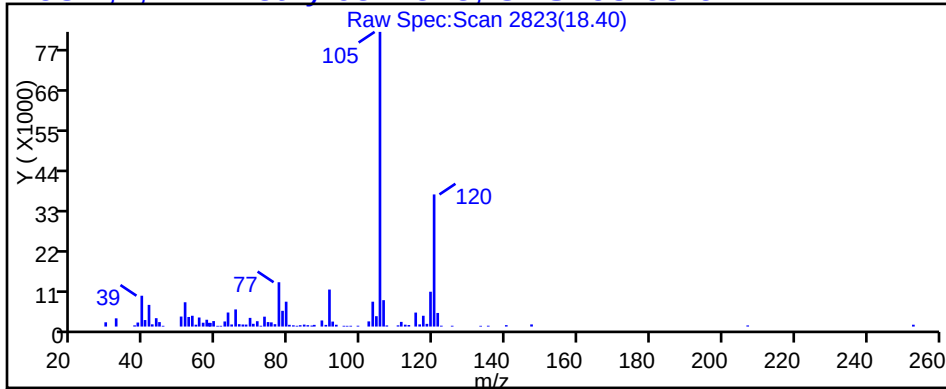
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

93 1,2,4-Trimethylbenzene, CAS: 95-63-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P115.D

Injection Date: 06-Mar-2015 00:22:30

Instrument ID: ME

Lims ID: 140-2815-A-13

Lab Sample ID: 140-2815-13

Client ID: H2-BA-2015

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 19

Purge Vol: 500.000 mL

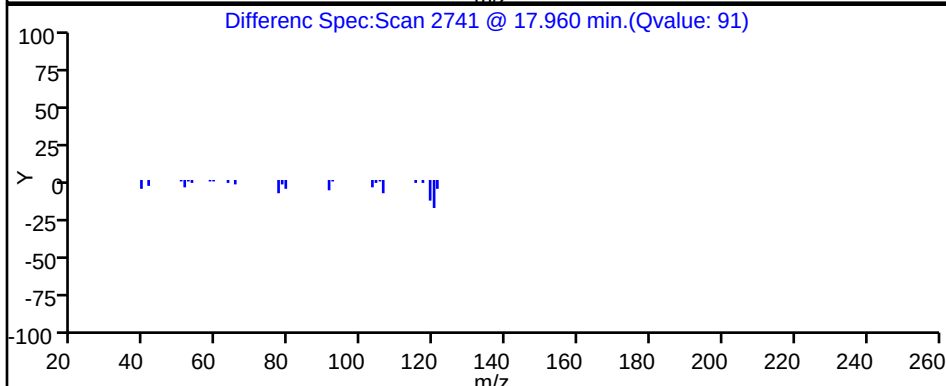
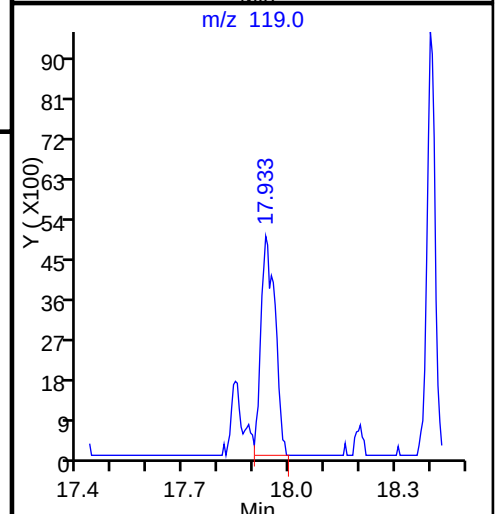
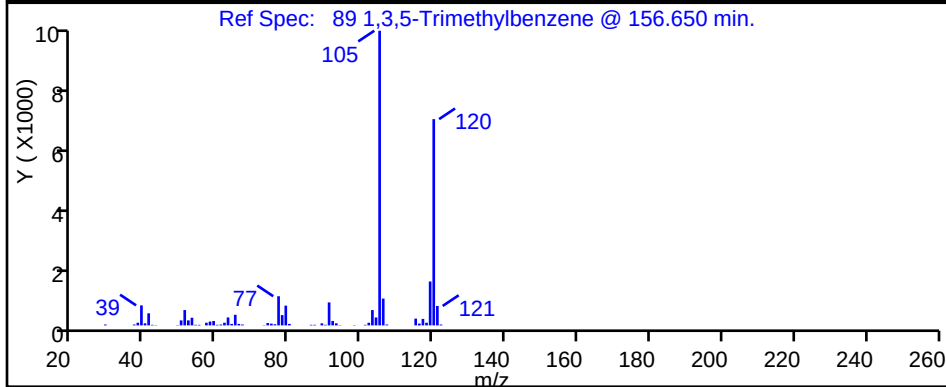
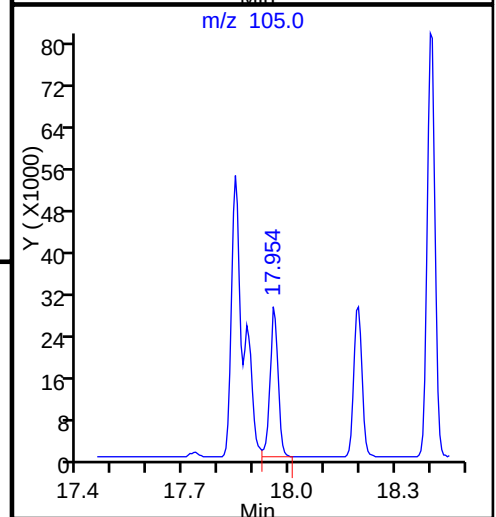
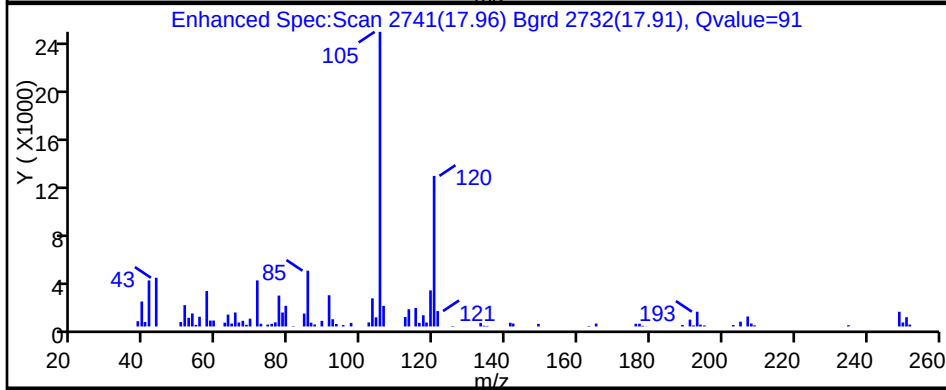
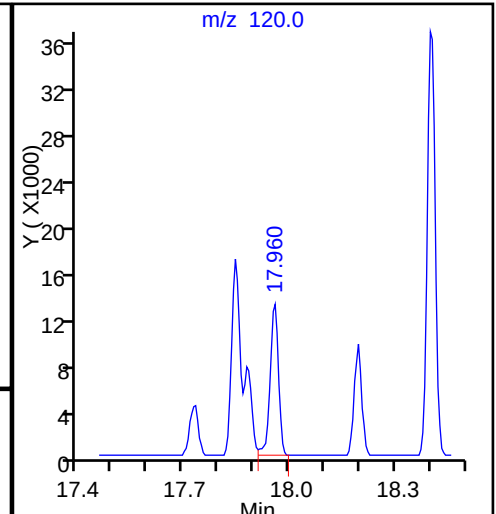
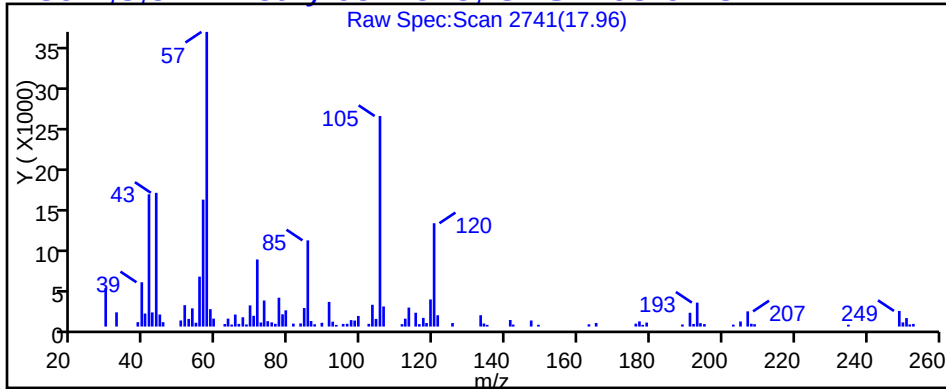
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

89 1,3,5-Trimethylbenzene, CAS: 108-67-8

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P115.D

Injection Date: 06-Mar-2015 00:22:30

Instrument ID: ME

Lims ID: 140-2815-A-13

Lab Sample ID: 140-2815-13

Client ID: H2-BA-2015

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 19

Purge Vol: 500.000 mL

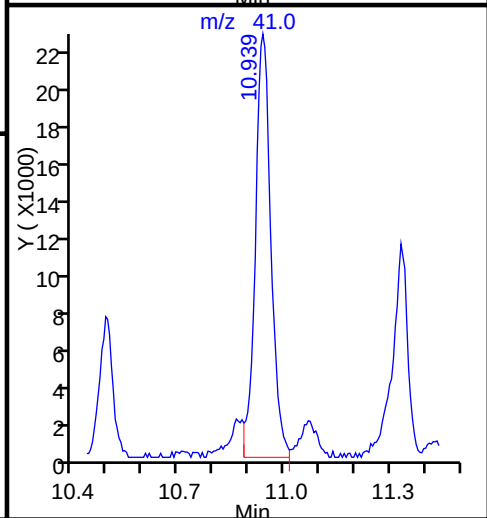
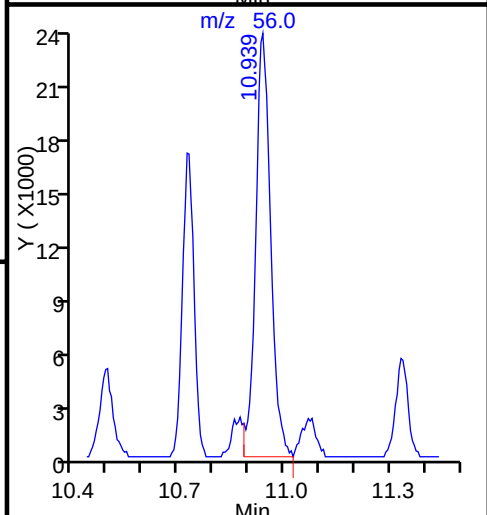
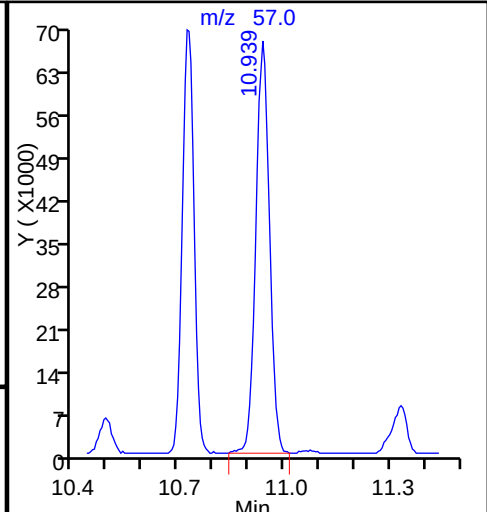
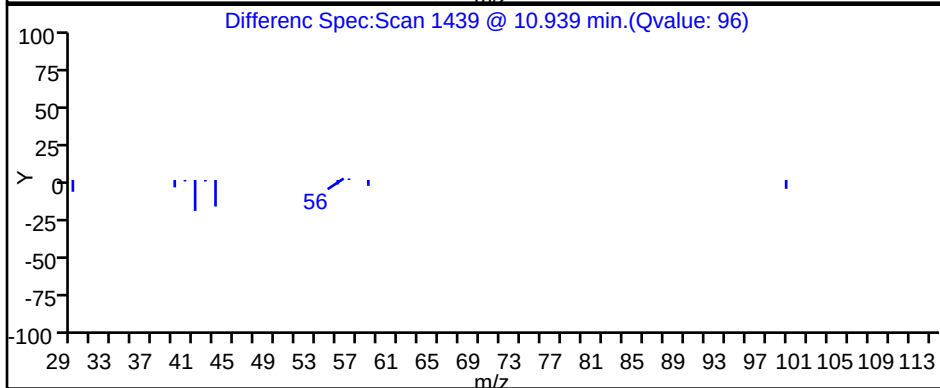
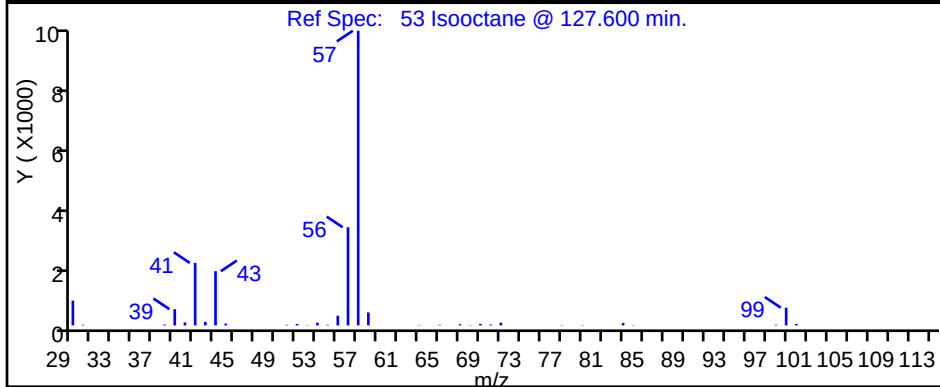
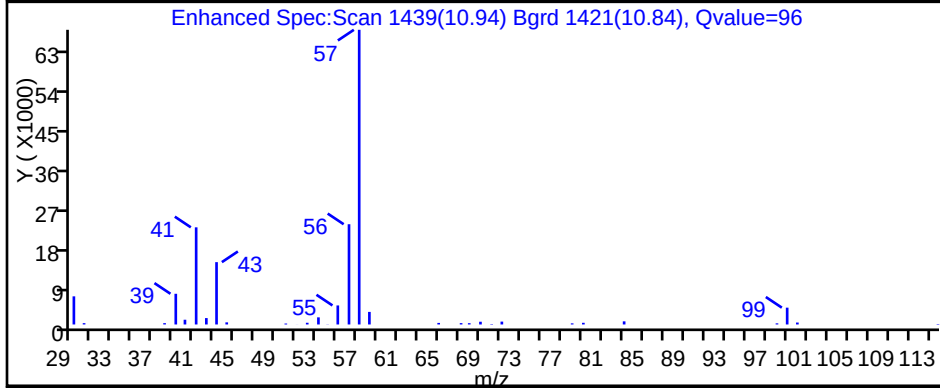
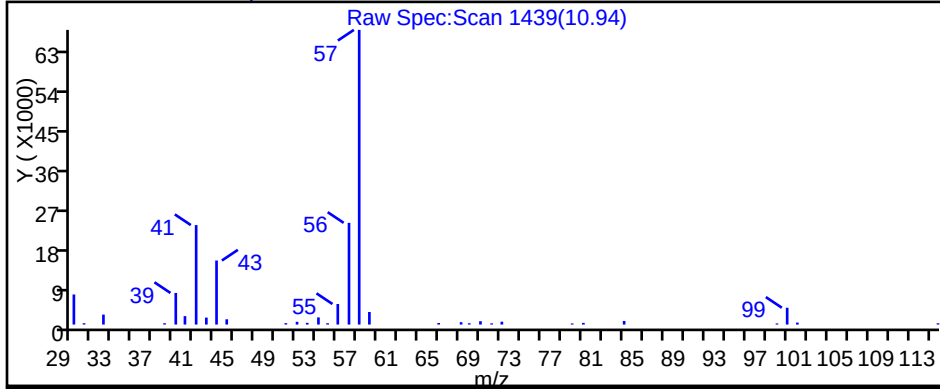
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

53 Isooctane, CAS: 540-84-1

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P115.D

Injection Date: 06-Mar-2015 00:22:30

Instrument ID: ME

Lims ID: 140-2815-A-13

Lab Sample ID: 140-2815-13

Client ID: H2-BA-2015

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 19

Purge Vol: 500.000 mL

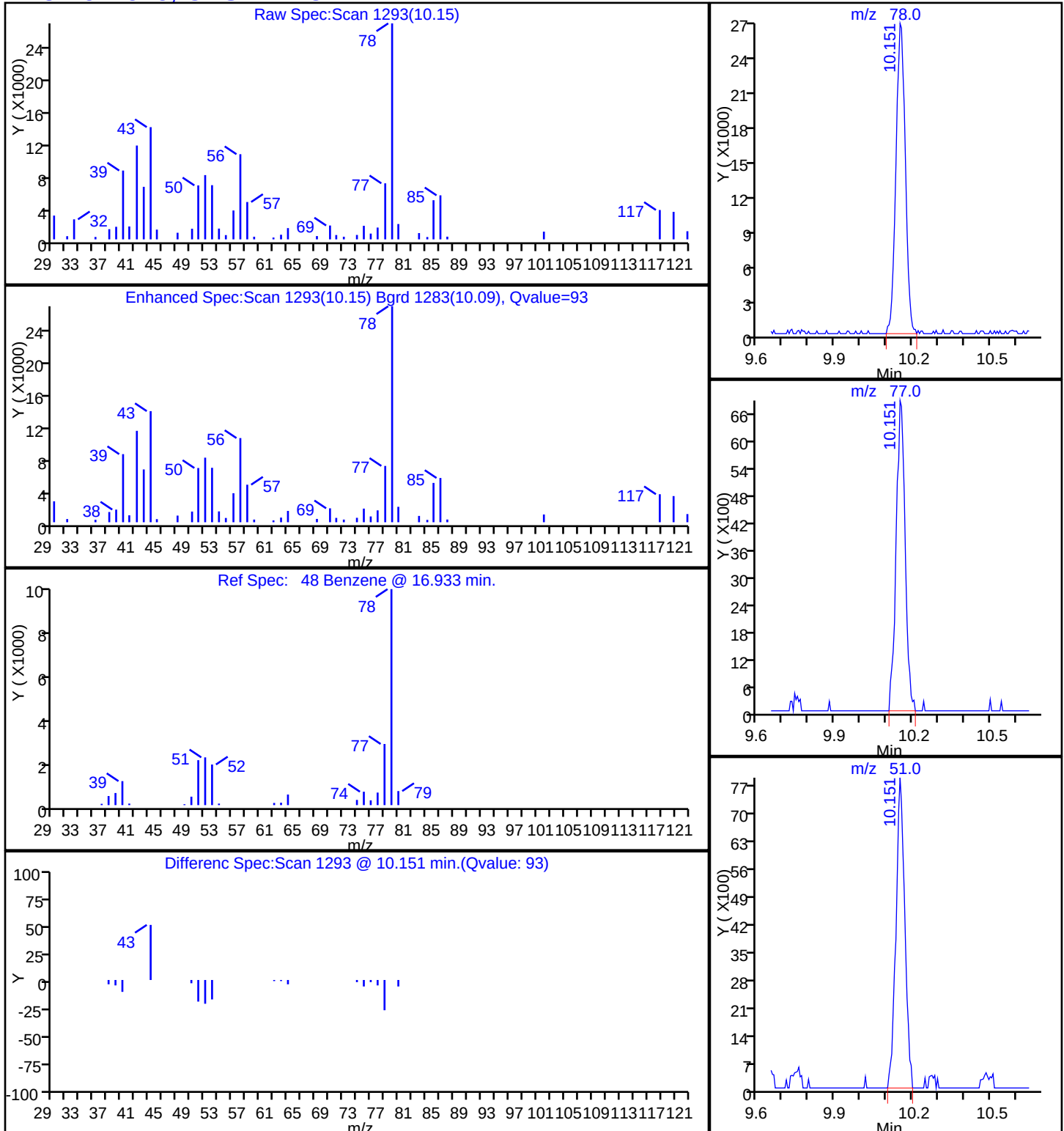
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P115.D

Injection Date: 06-Mar-2015 00:22:30

Instrument ID: ME

Lims ID: 140-2815-A-13

Lab Sample ID: 140-2815-13

Client ID: H2-BA-2015

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 19

Purge Vol: 500.000 mL

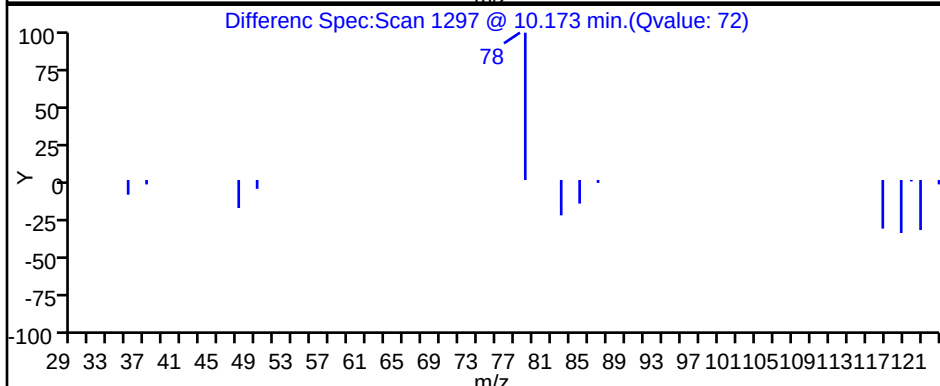
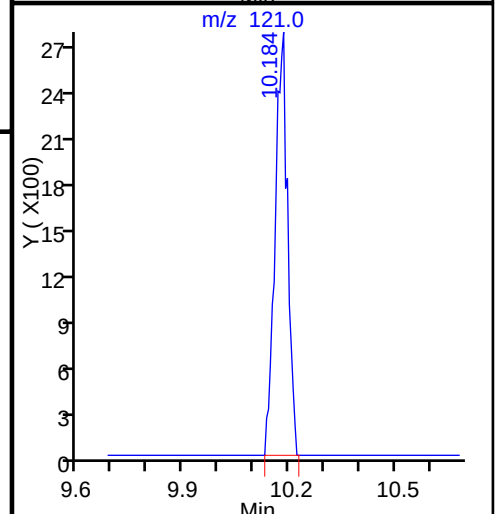
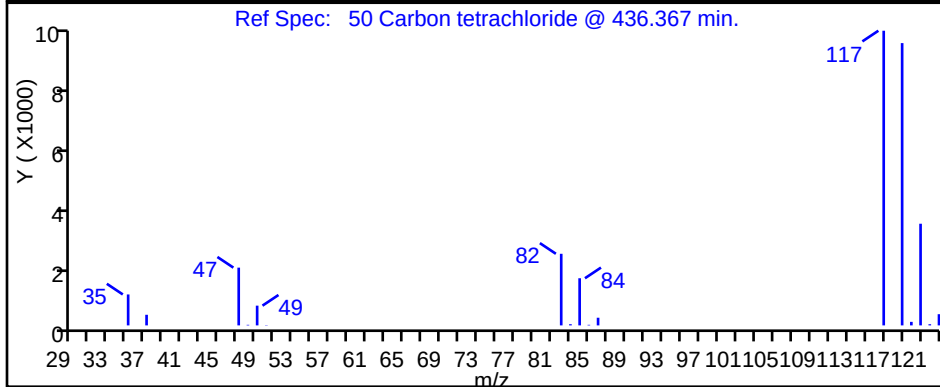
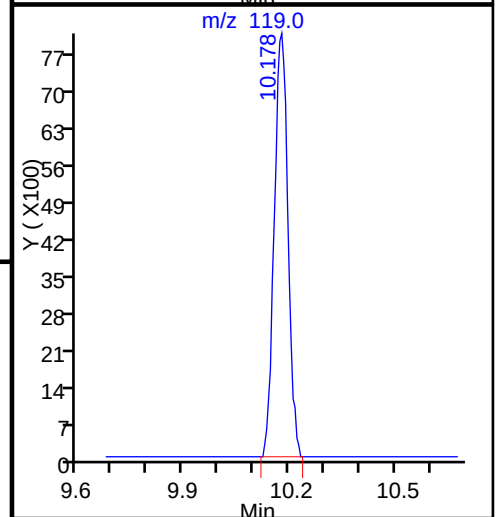
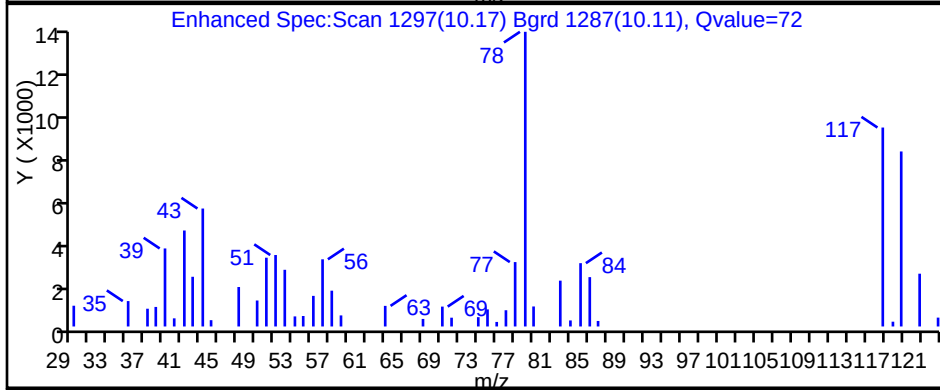
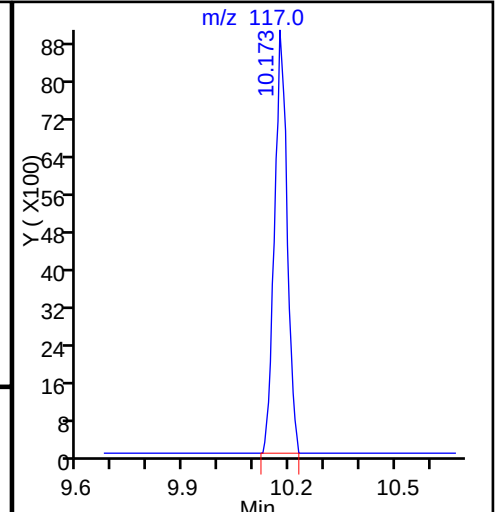
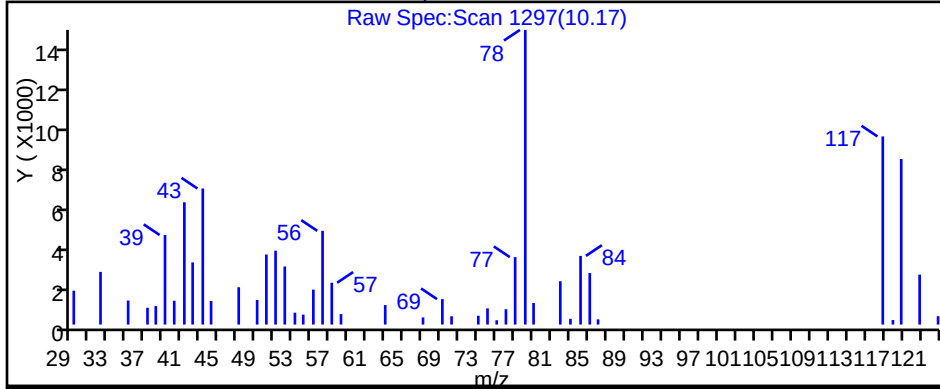
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P115.D

Injection Date: 06-Mar-2015 00:22:30

Instrument ID: ME

Lims ID: 140-2815-A-13

Lab Sample ID: 140-2815-13

Client ID: H2-BA-2015

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 19

Purge Vol: 500.000 mL

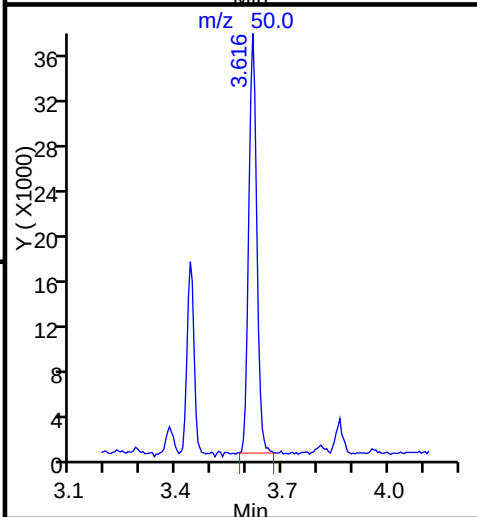
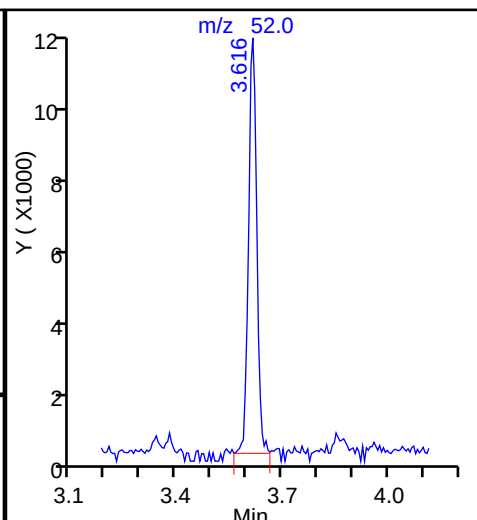
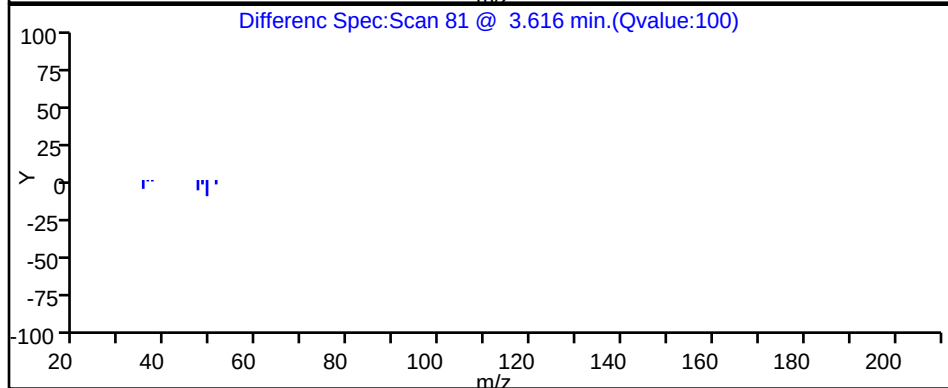
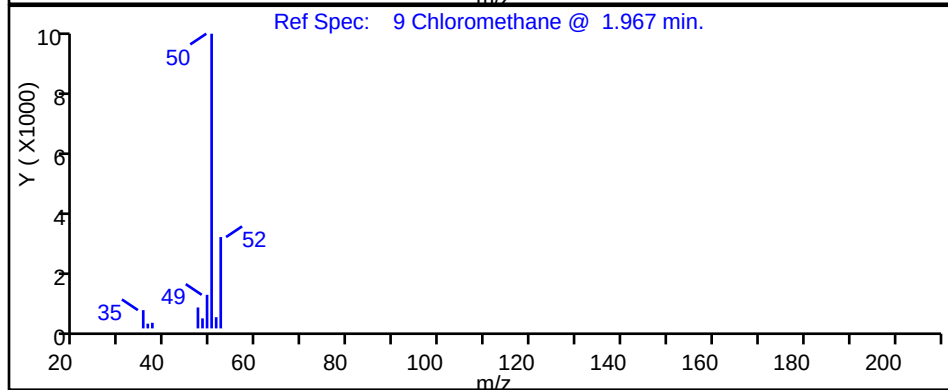
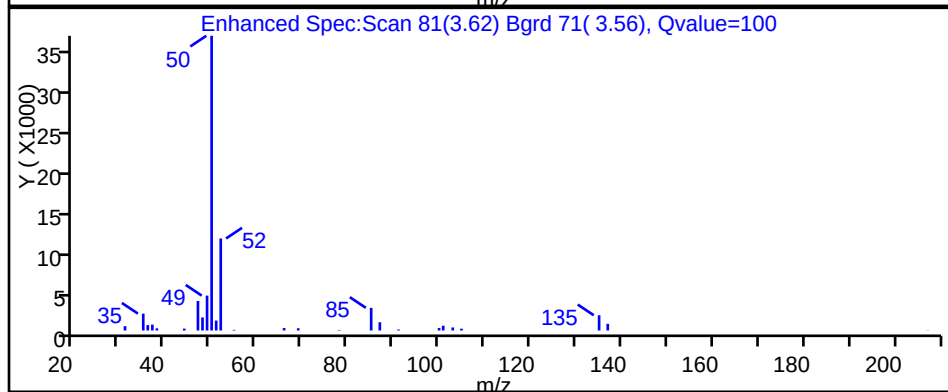
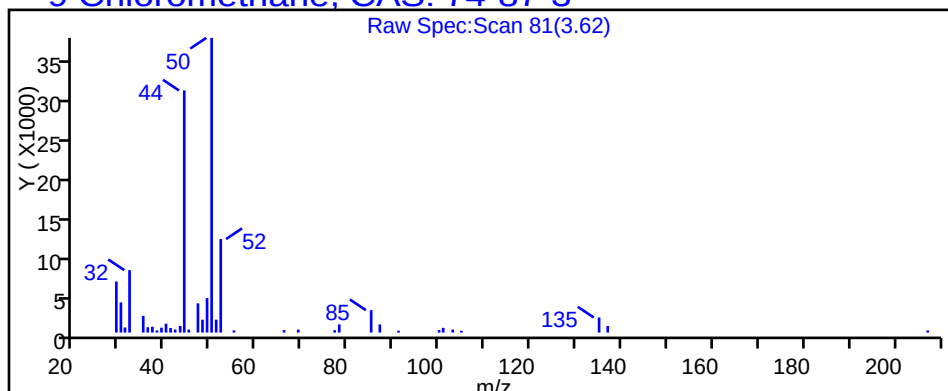
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P115.D

Injection Date: 06-Mar-2015 00:22:30

Instrument ID: ME

Lims ID: 140-2815-A-13

Lab Sample ID: 140-2815-13

Client ID: H2-BA-2015

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 19

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

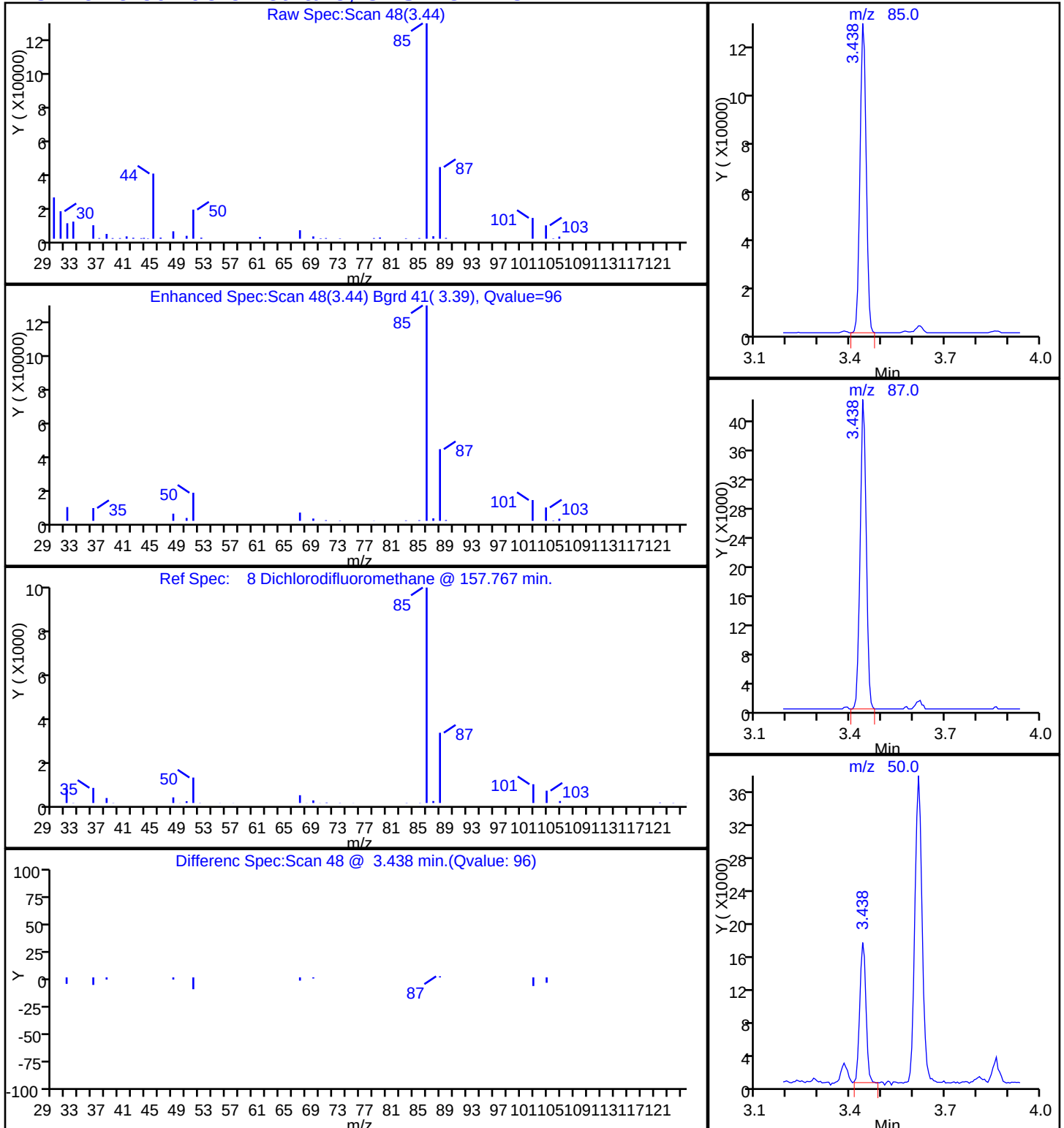
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P115.D

Injection Date: 06-Mar-2015 00:22:30

Instrument ID: ME

Lims ID: 140-2815-A-13

Lab Sample ID: 140-2815-13

Client ID: H2-BA-2015

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 19

Purge Vol: 500.000 mL

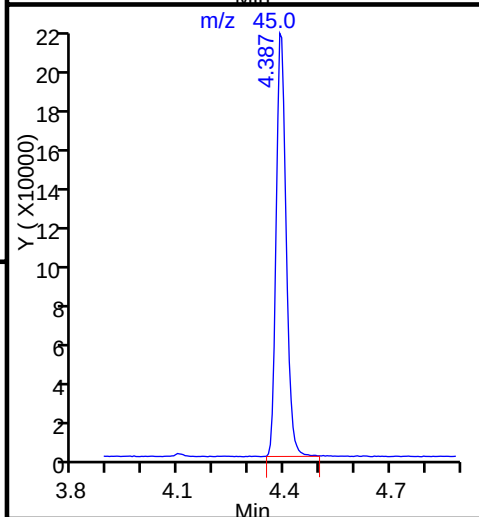
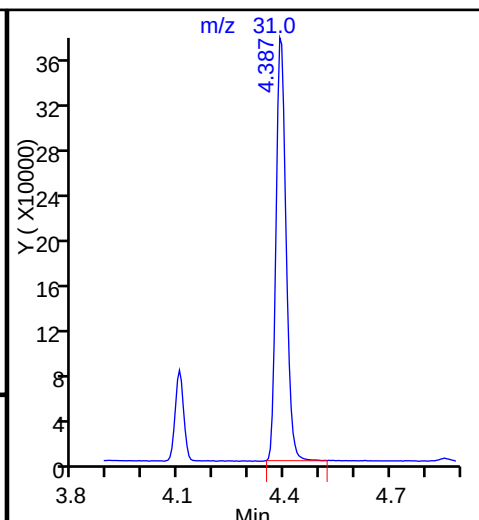
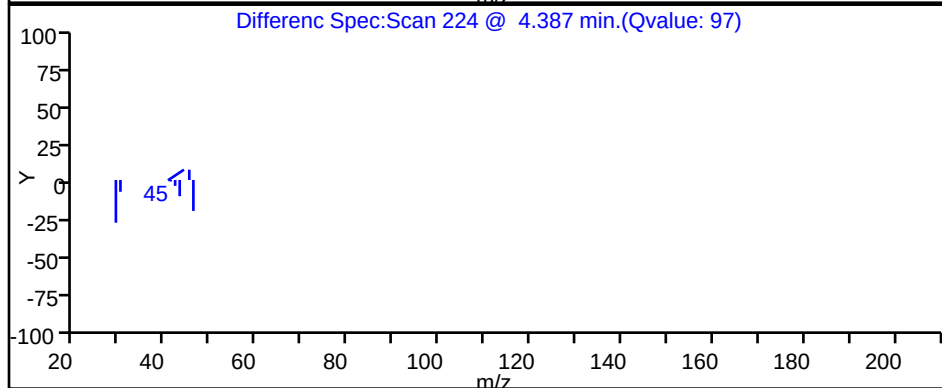
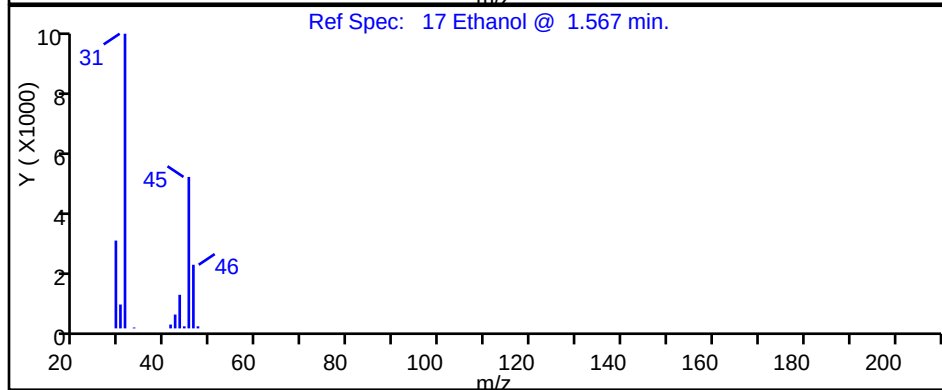
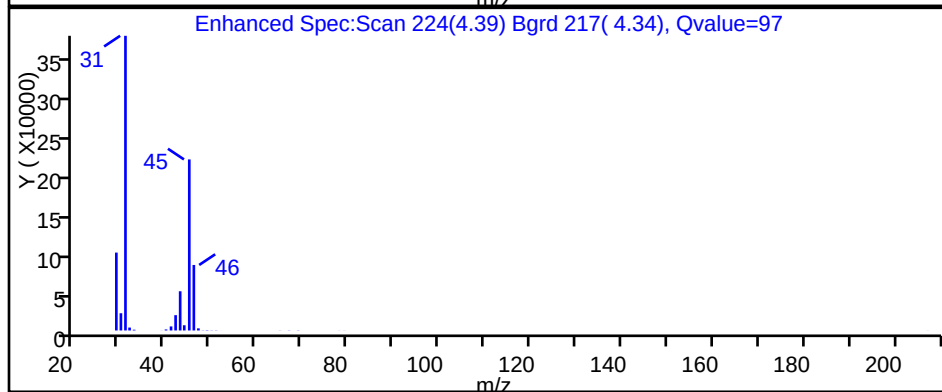
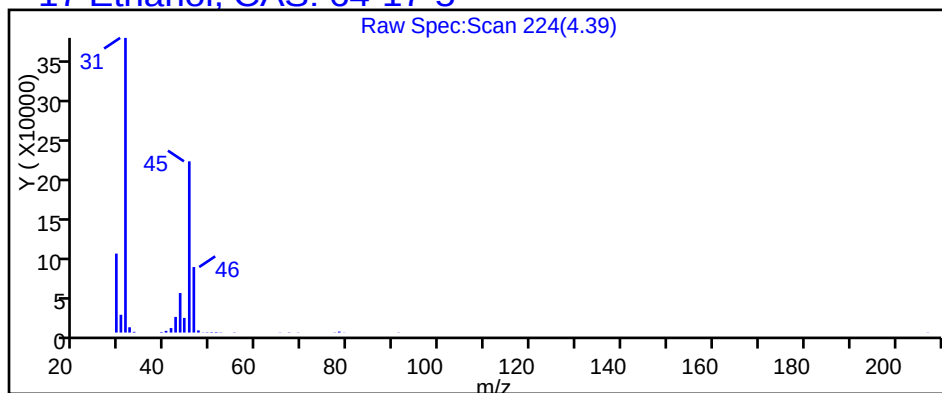
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P115.D

Injection Date: 06-Mar-2015 00:22:30

Instrument ID: ME

Lims ID: 140-2815-A-13

Lab Sample ID: 140-2815-13

Client ID: H2-BA-2015

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 19

Purge Vol: 500.000 mL

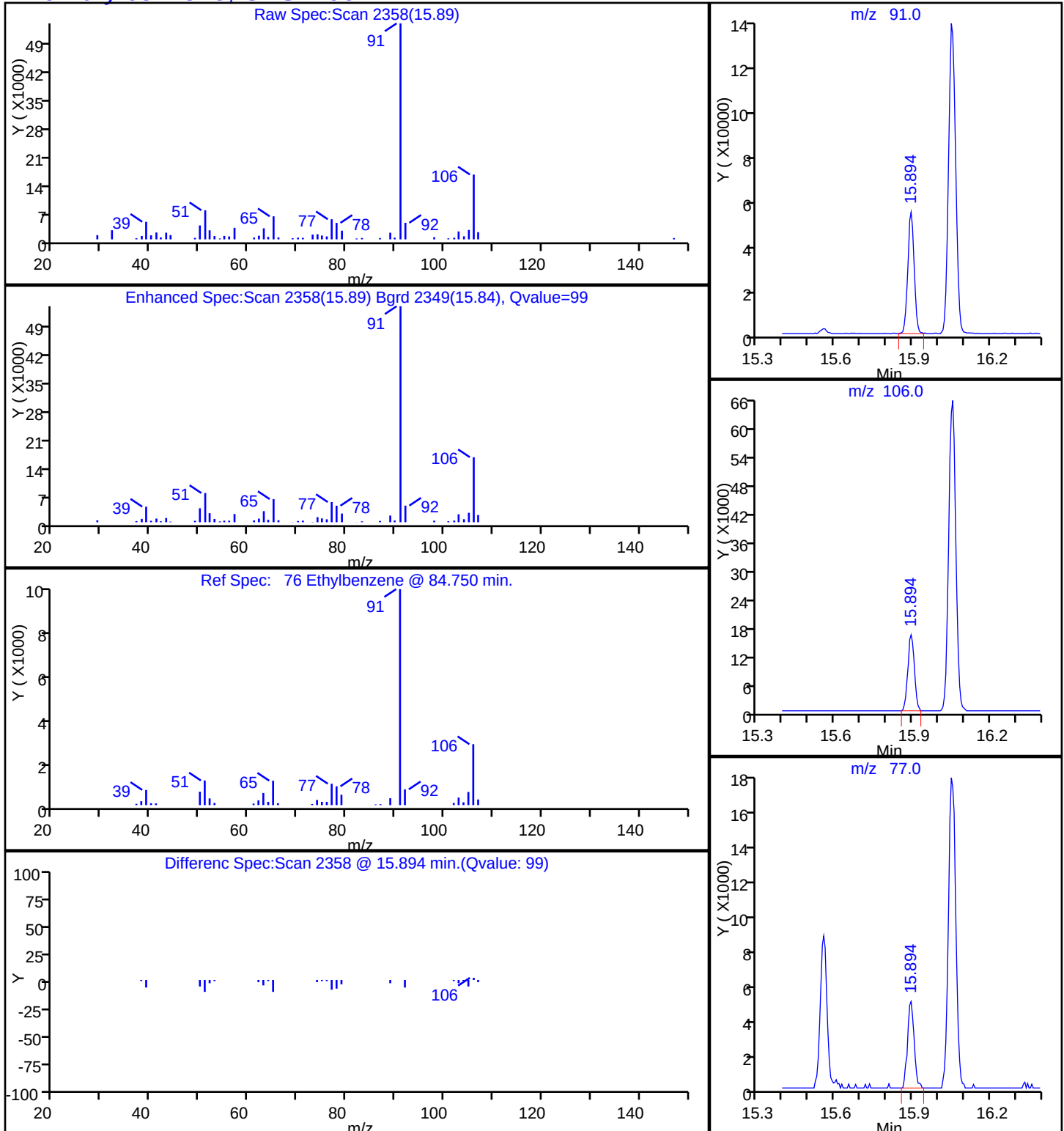
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

76 Ethylbenzene, CAS: 100-41-4

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P115.D

Injection Date: 06-Mar-2015 00:22:30

Instrument ID: ME

Lims ID: 140-2815-A-13

Lab Sample ID: 140-2815-13

Client ID: H2-BA-2015

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 19

Purge Vol: 500.000 mL

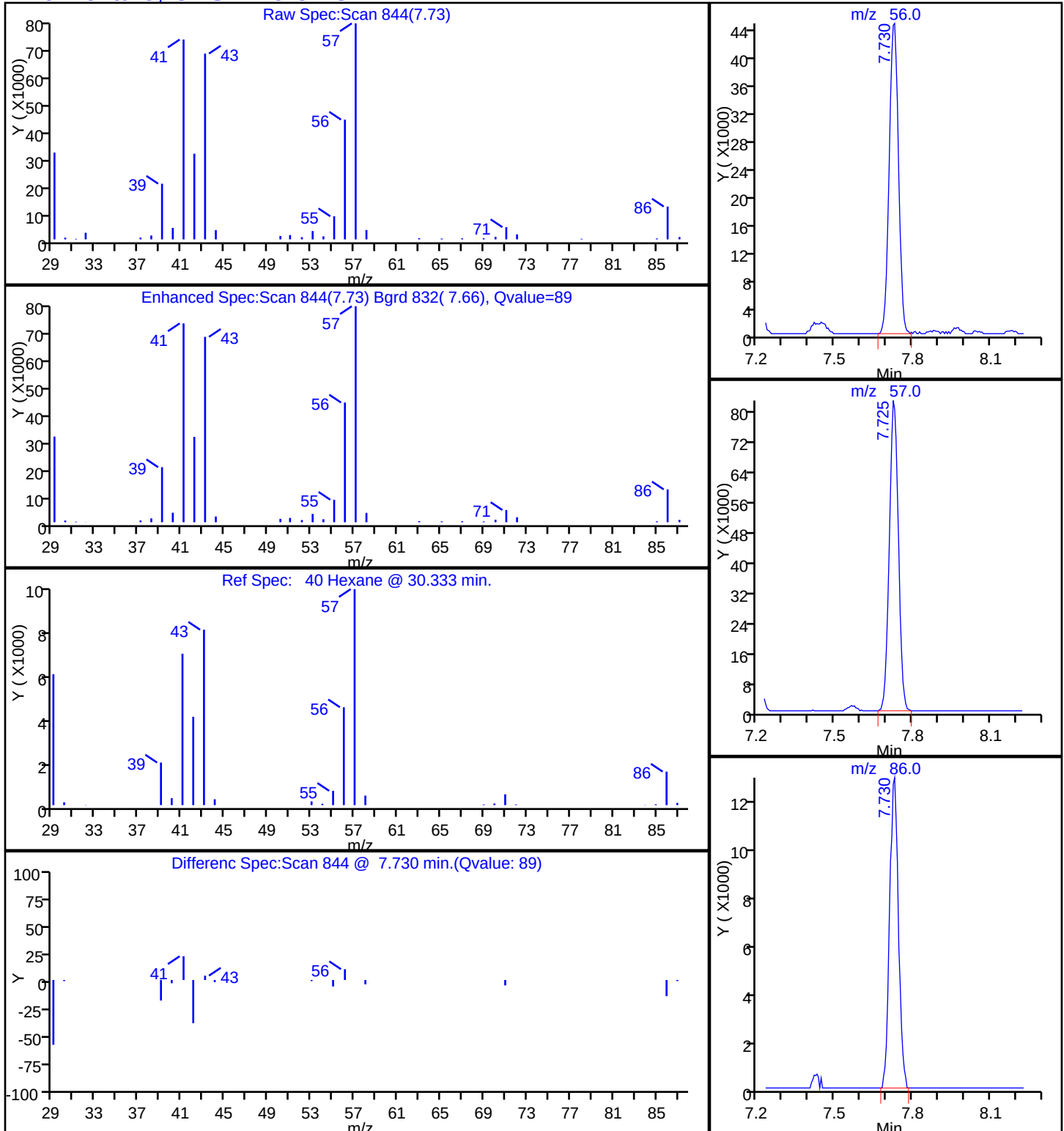
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

40 Hexane, CAS: 110-54-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P115.D

Injection Date: 06-Mar-2015 00:22:30

Instrument ID: ME

Lims ID: 140-2815-A-13

Lab Sample ID: 140-2815-13

Client ID: H2-BA-2015

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 19

Purge Vol: 500.000 mL

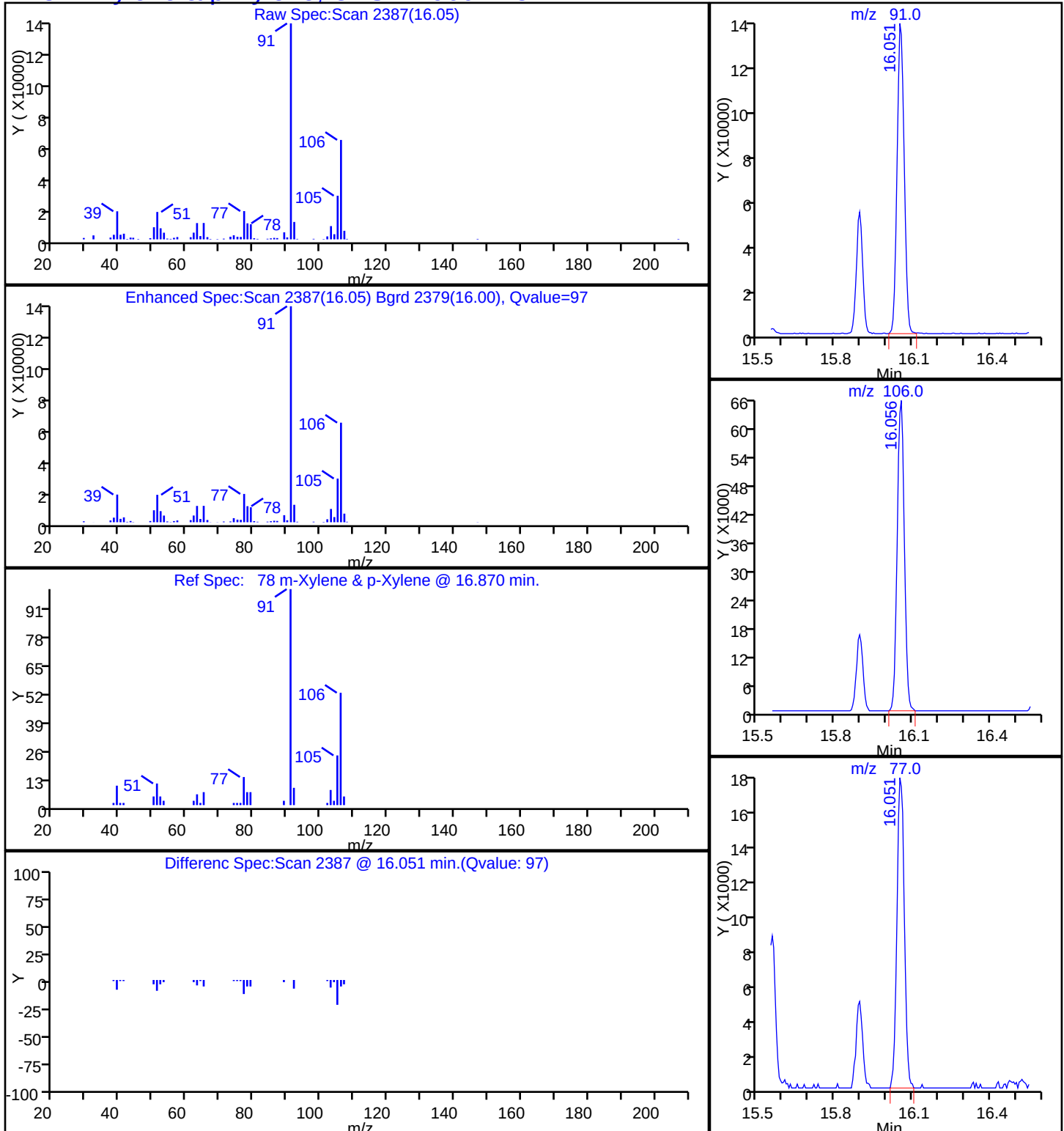
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P115.D

Injection Date: 06-Mar-2015 00:22:30

Instrument ID: ME

Lims ID: 140-2815-A-13

Lab Sample ID: 140-2815-13

Client ID: H2-BA-2015

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 19

Purge Vol: 500.000 mL

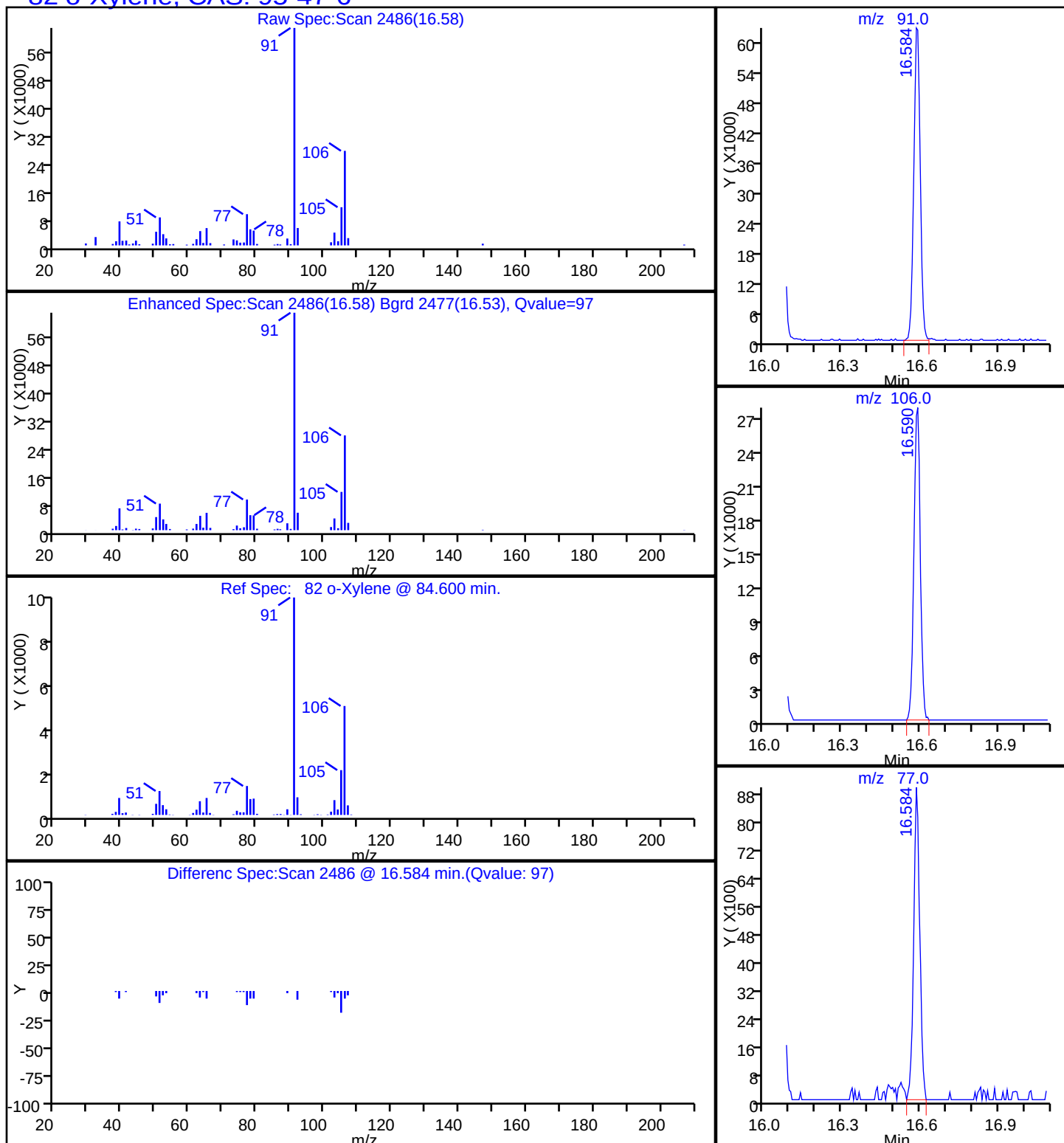
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P115.D

Injection Date: 06-Mar-2015 00:22:30

Instrument ID: ME

Lims ID: 140-2815-A-13

Lab Sample ID: 140-2815-13

Client ID: H2-BA-2015

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 19

Purge Vol: 500.000 mL

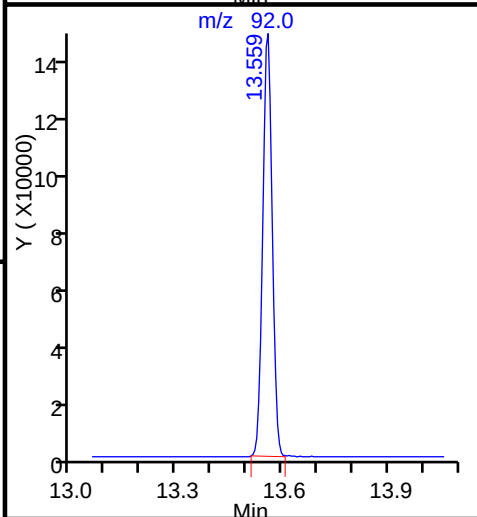
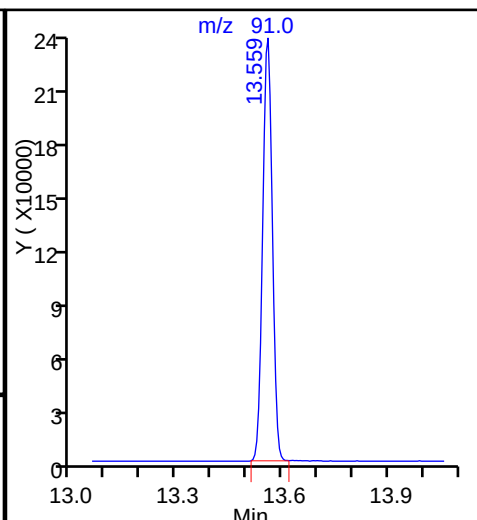
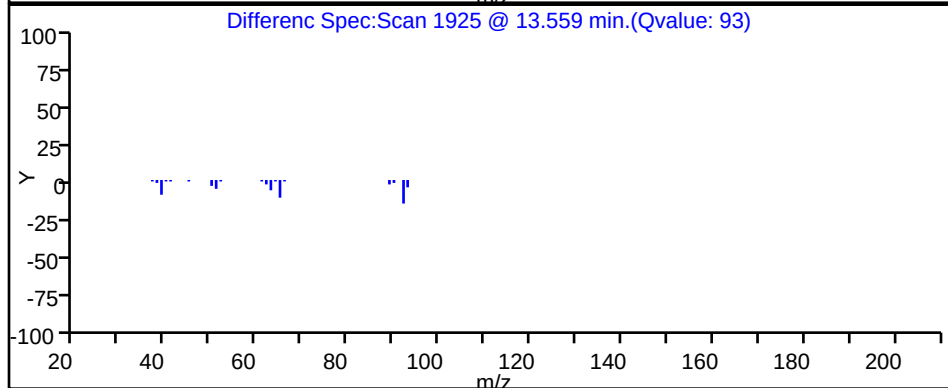
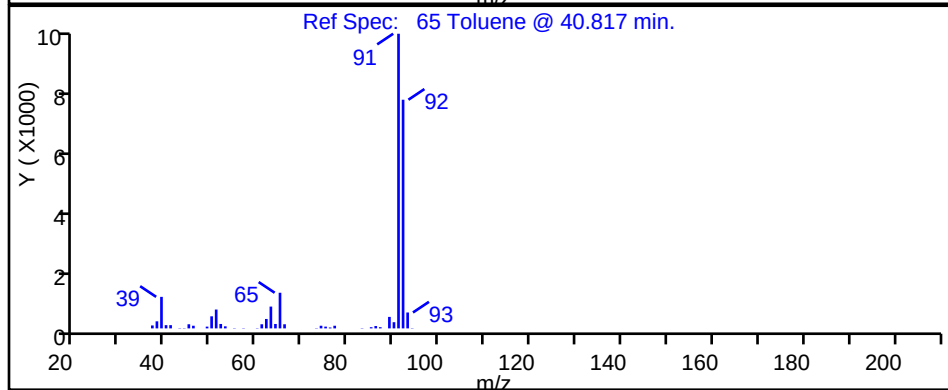
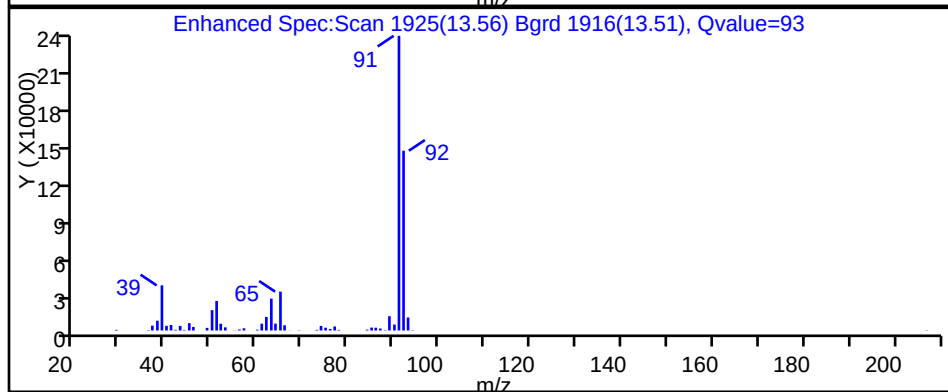
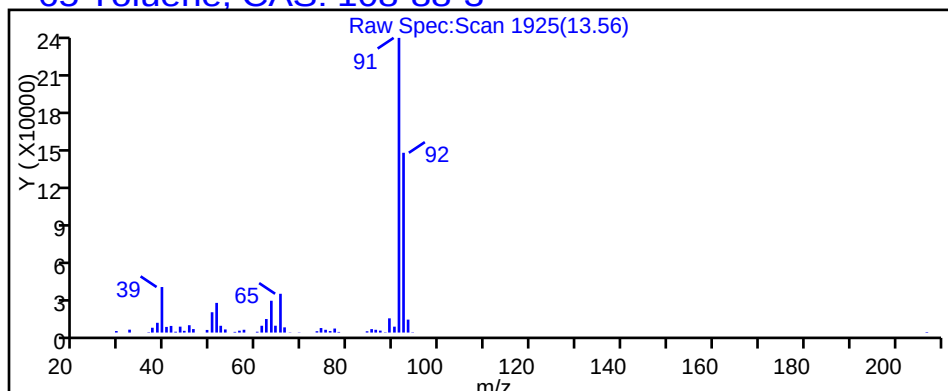
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P115.D

Injection Date: 06-Mar-2015 00:22:30

Instrument ID: ME

Lims ID: 140-2815-A-13

Lab Sample ID: 140-2815-13

Client ID: H2-BA-2015

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 19

Purge Vol: 500.000 mL

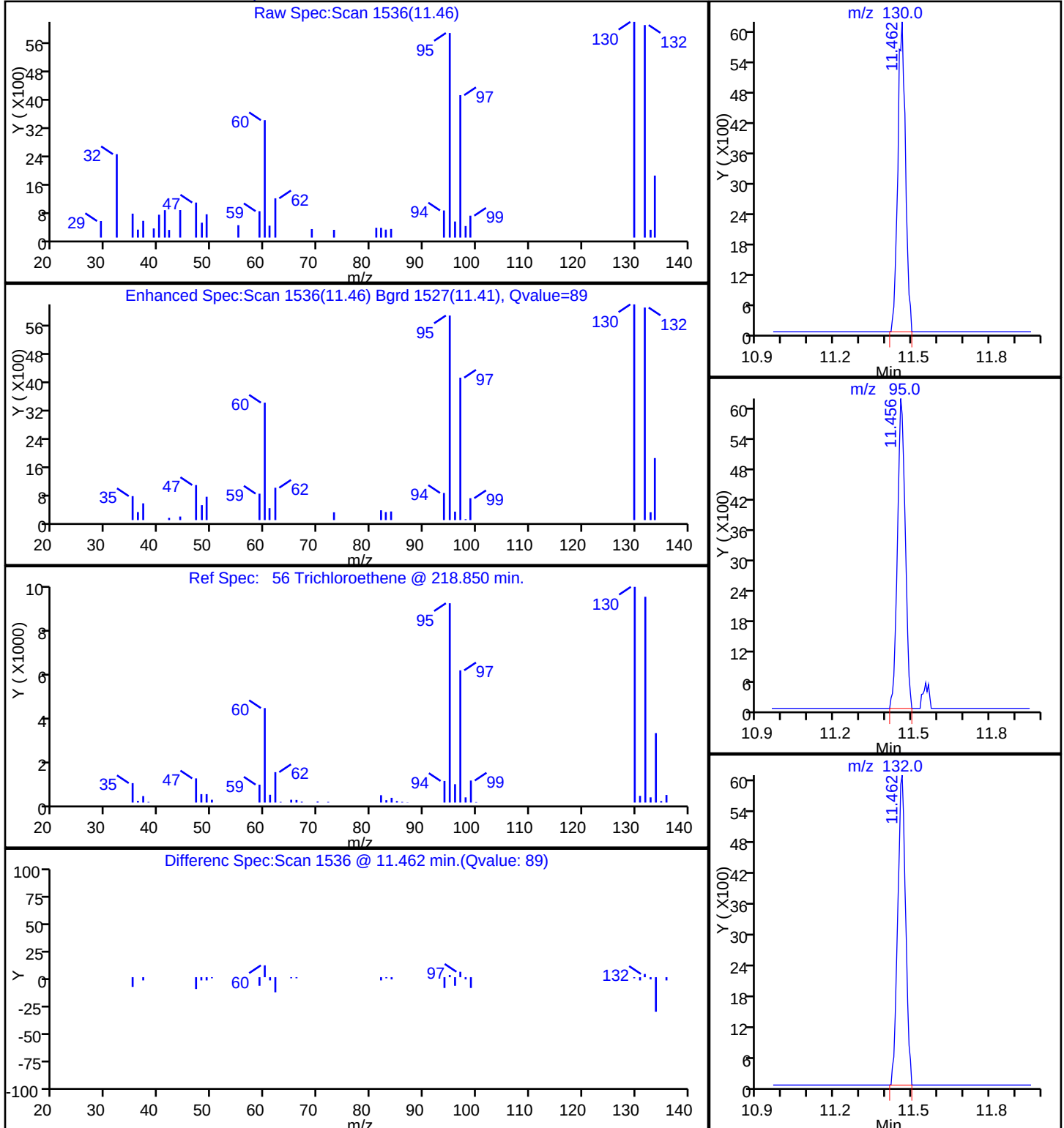
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

56 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EC05P115.D

Injection Date: 06-Mar-2015 00:22:30

Instrument ID: ME

Lims ID: 140-2815-A-13

Lab Sample ID: 140-2815-13

Client ID: H2-BA-2015

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 19

Purge Vol: 500.000 mL

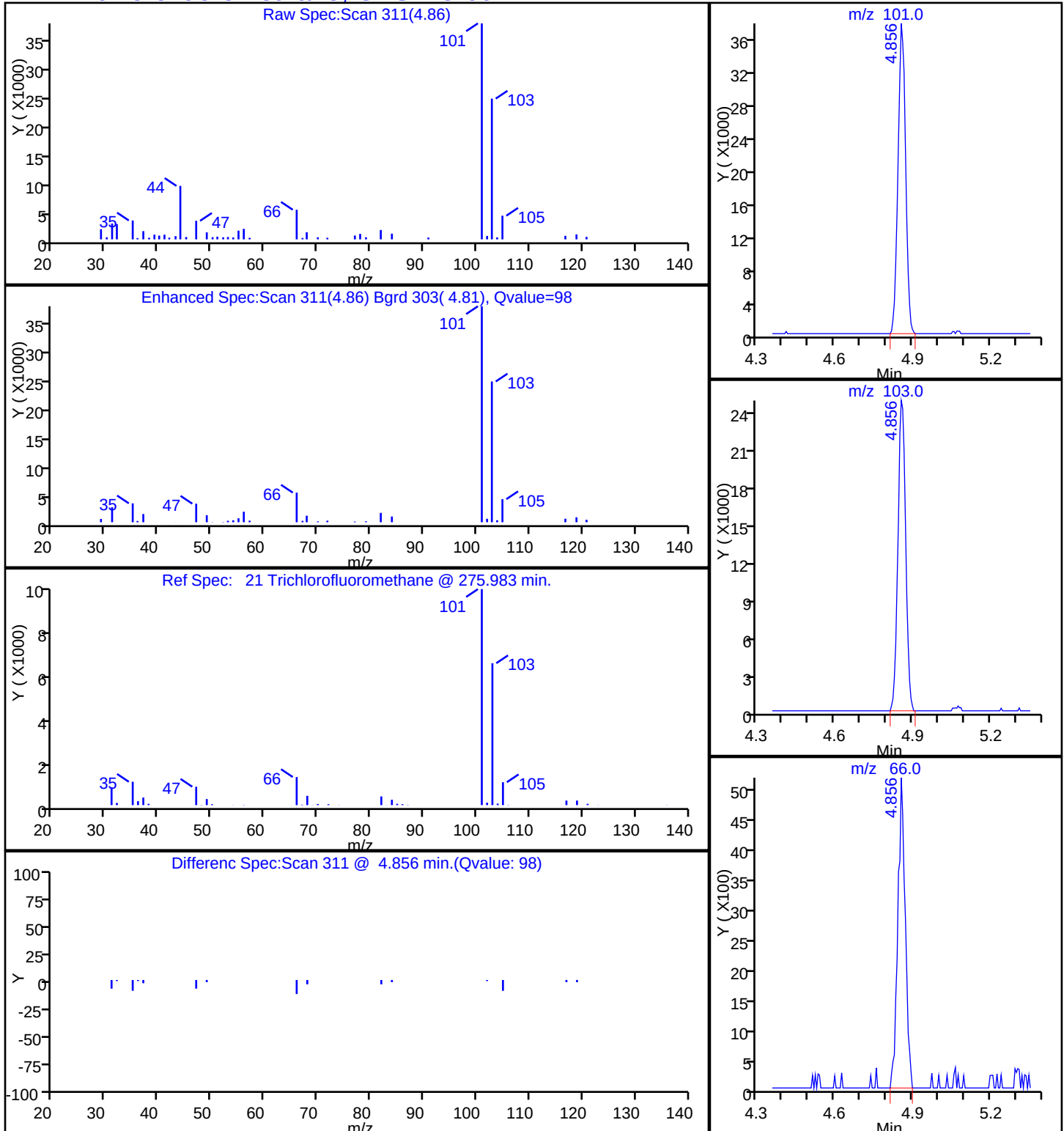
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

21 Trichlorofluoromethane, CAS: 75-69-4

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1 Analy Batch No.: 2456

SDG No.: _____

Instrument ID: ME GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 10:06 Calibration End Date: 03/03/2015 16:09 Calibration ID: 287

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-2456/2	ic 11.D
Level 2	IC 140-2456/3	ic 12.D
Level 3	IC 140-2456/4	ic 13.D
Level 4	IC 140-2456/5	ic 14.D
Level 5	IC 140-2456/6	ic 15.D
Level 6	ICIS 140-2456/7	icis 16.D
Level 7	IC 140-2456/8	ic 17.D
Level 8	IC 140-2456/9	ic 18.D
Level 9	IC 140-2456/10	ic 19.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		B	M1	M2								
Chlorodifluoromethane	+++++ 0.4370	0.5126 0.4204	0.5453 0.3896	0.4306 0.3938	0.4866	Ave		0.4520				13.0		30.0			
Propene	+++++ 1.2878	+++++ 1.2305	2.2683 1.1080	1.5072 1.0729	1.4602	Ave		1.4192				29.0		30.0			
Dichlorodifluoromethane	5.0720 3.9666	4.4487 3.7995	4.5394 3.4143	3.9809 3.1428	4.4066	Ave		4.0856				15.0		30.0			
Chloromethane	+++++ 0.4098	+++++ 0.4010	0.5354 0.3694	0.4090 0.3631	0.4453	Ave		0.4190				14.0		30.0			
1,2-Dichlorotetrafluoroethane	3.1676 2.5862	2.6362 2.4658	2.7003 2.2944	2.4566 2.2227	2.7634	Ave		2.5882				11.0		30.0			
Acetaldehyde	+++++ 0.4614	+++++ 0.4925	+++++ 0.4391	0.6046 0.3631	0.6022	Ave		0.4938				19.0		40.0			
Vinyl chloride	1.5408 1.3275	1.3821 1.2821	1.3895 1.2134	1.2467 1.2074	1.3940	Ave		1.3315				8.1		30.0			
1,3-Butadiene	+++++ 1.0928	1.1620 1.0495	1.1312 0.9946	1.0194 0.9866	1.1339	Ave		1.0713				6.4		30.0			
Butane	+++++ 2.2106	2.4871 2.1897	2.5071 1.9543	2.1944 1.8597	2.4307	Ave		2.2292				11.0		30.0			
Bromomethane	+++++ 1.1524	1.2827 1.1092	1.2065 1.0616	1.1006 1.0499	1.2031	Ave		1.1457				7.0		30.0			
Chloroethane	+++++ 0.6336	0.6959 0.6102	0.6853 0.5955	0.5844 0.5860	0.6539	Ave		0.6306				7.0		30.0			
Ethanol	+++++ 0.4789	+++++ 0.4348	0.6995 0.4147	0.4794 0.3474	0.4774	Ave		0.4760				23.0		40.0			
Vinyl bromide	+++++ 1.2201	1.2831 1.1830	1.2537 1.1343	1.1607 1.1043	1.2818	Ave		1.2026				5.6		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1 Analy Batch No.: 2456

SDG No.: _____

Instrument ID: ME GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 10:06 Calibration End Date: 03/03/2015 16:09 Calibration ID: 287

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		B	M1	M2								
2-Methylbutane	+++++ 1.5605	1.5777 1.5303	1.6928 1.4122	1.5121 1.3638	1.6864	Ave		1.5420				7.5		30.0			
Trichlorofluoromethane	4.4190 3.6351	3.7409 3.4477	4.0058 3.1563	3.6079 2.8763	3.9298	Ave		3.6465				13.0		30.0			
Acrolein	+++++ 0.4494	+++++ 0.4302	0.7076 0.4179	0.4568 0.3622	0.4001	Ave		0.4606				25.0		30.0			
Acetonitrile	+++++ 0.4817	+++++ 0.4553	0.4761 0.4529	0.3954 0.3948	0.4140	Ave		0.4386				8.4		30.0			
Acetone	+++++ 0.4788	+++++ 0.5045	+++++ 0.4924	0.6741 0.3635	0.6467	Ave		0.5267				22.0		30.0			
Isopropyl alcohol	+++++ 1.6014	1.9510 1.4929	1.9292 1.3962	1.5795 1.1697	1.6488	Ave		1.5961				16.0		30.0			
Pentane	+++++ 0.2192	+++++ 0.2166	0.2739 0.2086	0.2161 0.2073	0.2369	Ave		0.2255				10.0		30.0			
Ethyl ether	+++++ 1.1002	1.1126 1.0257	1.1576 1.0271	0.9440 0.8679	0.9577	Ave		1.0241				9.5		30.0			
1,1-Dichloroethene	+++++ 1.1317	1.2034 1.1103	1.2155 1.0694	1.0931 1.0363	1.1933	Ave		1.1316				5.9		30.0			
t-Butyl alcohol	+++++ 2.2793	2.6121 2.2220	3.0146 2.1069	2.2421 1.9610	2.3367	Ave		2.3468				14.0		30.0			
Acrylonitrile	+++++ 0.8972	1.0515 0.8452	0.9610 0.8401	0.7317 0.7522	0.7945	Ave		0.8592				13.0		30.0			
1,1,2-Trichlorotrifluoroethane	2.9575 2.5668	2.7504 2.4592	2.7537 2.3259	2.4936 2.2151	2.6971	Ave		2.5799				9.0		30.0			
Methylene Chloride	+++++ 1.0073	+++++ 1.0703	1.5265 0.9216	1.0807 0.8822	1.1741	Ave		1.0947				20.0		30.0			
3-Chloropropene	1.9521 1.5422	1.6731 1.4670	1.7135 1.3801	1.5088 1.2636	1.6410	Ave		1.5713				13.0		30.0			
Carbon disulfide	3.7091 3.1093	3.1036 3.0211	3.2259 2.8610	3.0368 2.7143	3.2994	Ave		3.1201				9.1		30.0			
trans-1,2-Dichloroethene	1.4221 1.2052	1.2156 1.1498	1.2570 1.1118	1.1309 1.0529	1.2822	Ave		1.2030				9.1		30.0			
2-Methylpentane	+++++ 3.0538	3.4537 2.8866	3.4423 2.6875	2.9606 2.4646	3.2595	Ave		3.0261				12.0		40.0			
Methyl tert-butyl ether	3.4026 3.2973	3.2906 2.9736	3.2056 3.0061	2.6630 2.4858	2.9133	Ave		3.0264				10.0		30.0			
1,1-Dichloroethane	2.8173 2.3911	2.5215 2.2799	2.6511 2.1757	2.2720 2.0157	2.5186	Ave		2.4048				10.0		30.0			
Vinyl acetate	3.7359 3.7139	3.6712 3.4354	3.6576 3.4124	2.8752 2.9120	3.1208	Ave		3.3927				10.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1 Analy Batch No.: 2456

SDG No.: _____

Instrument ID: ME GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 10:06 Calibration End Date: 03/03/2015 16:09 Calibration ID: 287

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		B	M1	M2								
2-Butanone	+++++ 0.4746	+++++ 0.4560	0.8713 0.4744	0.4999 0.3807	0.5049	Ave		0.5231				30.0		30.0			
Hexane	+++++ 1.1398	1.2018 1.1056	1.2559 1.0431	1.0935 0.9832	1.3045	Ave		1.1409				9.5		30.0			
C6 Range	+++++ 3.0312	4.4204 3.0309	4.3911 2.7804	3.0822 2.4933	3.7088	Ave		3.3673				22.0		30.0			
Isopropyl ether	4.5173 4.4152	4.6132 4.0038	4.5755 3.9823	3.6635 3.2760	4.0121	Ave		4.1177				11.0		30.0			
cis-1,2-Dichloroethene	1.4111 1.2676	1.2910 1.2162	1.3491 1.1872	1.1880 1.1351	1.3163	Ave		1.2624				7.0		30.0			
Ethyl acetate	2.8109 2.7452	2.9182 2.4144	2.8233 2.4993	2.2117 2.0040	2.4707	Ave		2.5442				12.0		30.0			
Chloroform	3.5326 2.9418	3.1493 2.7972	3.2324 2.6436	2.8056 2.4163	3.0904	Ave		2.9566				11.0		30.0			
Tert-butyl ethyl ether	3.7499 3.8663	3.6395 3.5204	3.8417 3.5210	3.0538 2.9403	3.4697	Ave		3.5114				9.3		30.0			
Tetrahydrofuran	1.6392 1.4660	1.5417 1.3177	1.5358 1.3530	1.1844 1.1157	1.2749	Ave		1.3809				13.0		30.0			
1,1,1-Trichloroethane	4.1702 3.4493	3.6165 3.2374	3.8050 3.0423	3.3023 2.7577	3.6587	Ave		3.4488				12.0		30.0			
1,2-Dichloroethane	0.5677 0.4910	0.5625 0.4815	0.5706 0.4407	0.4560 0.4055	0.5273	Ave		0.5003				12.0		30.0			
1-Butanol	+++++ 0.1144	0.1450 0.1172	0.1653 0.1054	0.1165 0.1011	0.1221	Ave		0.1234				17.0		30.0			
Cyclohexane	+++++ 0.1277	0.1459 0.1267	0.1474 0.1167	0.1241 0.1121	0.1420	Ave		0.1303				10.0		30.0			
Benzene	+++++ 0.7427	0.9054 0.7412	0.8559 0.6868	0.6836 0.6309	0.7764	Ave		0.7529				12.0		30.0			
Carbon tetrachloride	0.8814 0.8088	0.8077 0.7948	0.7969 0.7016	0.7846 0.6300	0.9240	Ave		0.7922				11.0		30.0			
2,3-Dimethylpentane	0.2111 0.1732	0.1903 0.1761	0.1941 0.1624	0.1593 0.1581	0.1931	Ave		0.1797				10.0		40.0			
Thiophene	0.5215 0.4220	0.4500 0.4279	0.4819 0.3980	0.3875 0.3741	0.4528	Ave		0.4351				11.0		40.0			
Tert-amyl methyl ether	+++++ 0.7364	0.7443 0.7166	0.7973 0.6726	0.6118 0.5674	0.7662	Ave		0.7016				11.0		30.0			
2,2,4-Trimethylpentane	1.8195 1.4464	1.6448 1.4315	1.6764 1.2730	1.4079 1.1382	1.6315	Ave		1.4966				14.0		30.0			
Heptane	0.3372 0.2707	0.2957 0.2733	0.3138 0.2559	0.2541 0.2454	0.3007	Ave		0.2830				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 INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1 Analy Batch No.: 2456

SDG No.: _____

Instrument ID: ME GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 10:06 Calibration End Date: 03/03/2015 16:09 Calibration ID: 287

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		B	M1	M2								
1,2-Dichloropropane	0.3298 0.2862	0.3233 0.2843	0.3264 0.2695	0.2579 0.2483	0.2910	Ave		0.2907				10.0		30.0			
Trichloroethene	0.5063 0.4106	0.4515 0.3984	0.4522 0.3819	0.3946 0.3531	0.4512	Ave		0.4222				11.0		30.0			
Dibromomethane	0.4366 0.3390	0.3886 0.3388	0.3993 0.3154	0.3263 0.2968	0.3792	Ave		0.3578				13.0		30.0			
Bromodichloromethane	0.7852 0.6816	0.7227 0.6796	0.7647 0.6182	0.6241 0.5664	0.7563	Ave		0.6887				11.0		30.0			
1,4-Dioxane	0.1193 0.1066	0.1245 0.1044	0.1178 0.0996	0.0975 0.0893	0.1196	Ave		0.1087				11.0		30.0			
Methyl methacrylate	0.3952 0.4049	0.4477 0.3721	0.3861 0.3768	0.3168 0.3092	0.3808	Ave		0.3766				11.0		30.0			
Methylcyclohexane	0.7309 0.5872	0.6717 0.5925	0.6693 0.5449	0.5709 0.5060	0.6695	Ave		0.6159				12.0		40.0			
4-Methyl-2-pentanone (MIBK)	++++ 0.5986	0.8187 0.5885	0.7266 0.5496	0.6643 0.4962	0.7025	Ave		0.6431				16.0		30.0			
cis-1,3-Dichloropropene	0.5371 0.4801	0.5098 0.4765	0.4969 0.4528	0.4166 0.4116	0.4939	Ave		0.4750				8.8		30.0			
trans-1,3-Dichloropropene	0.5679 0.4963	0.5088 0.5072	0.5440 0.4691	0.4073 0.4235	0.5269	Ave		0.4946				11.0		30.0			
Toluene	1.2674 0.9754	1.0798 0.9921	1.1389 0.8805	0.8725 0.7656	1.0513	Ave		1.0026				15.0		30.0			
Toluene Range	++++ 2.4051	2.7018 2.3679	2.6819 2.2319	2.1486 1.9948	2.4455	Ave		2.3722				10.0		30.0			
1,1,2-Trichloroethane	0.3115 0.2776	0.3036 0.2860	0.3140 0.2611	0.2425 0.2403	0.2985	Ave		0.2817				10.0		30.0			
2-Methylthiophene	1.0011 0.8093	0.8668 0.8267	0.9015 0.7404	0.7142 0.6551	0.8660	Ave		0.8201				13.0		40.0			
3-Methylthiophene	0.9265 0.7924	0.8377 0.8128	0.8958 0.7273	0.7068 0.6427	0.8529	Ave		0.7995				12.0		40.0			
2-Hexanone	0.3539 0.2916	0.3244 0.3121	0.3596 0.2783	0.2682 0.2636	0.3459	Ave		0.3108				12.0		30.0			
C8 Range	++++ 3.1970	3.6559 3.2713	3.6621 2.9696	2.9995 2.6907	3.5507	Ave		3.2496				11.0		30.0			
Octane	0.3952 0.3316	0.3722 0.3506	0.3720 0.3138	0.3052 0.2926	0.3730	Ave		0.3451				10.0		30.0			
Dibromochloromethane	0.8547 0.7594	0.7470 0.7927	0.8070 0.6998	0.6631 0.6231	0.8274	Ave		0.7527				10.0		30.0			
1,2-Dibromoethane	0.6329 0.5576	0.5793 0.5710	0.6300 0.5228	0.4873 0.4726	0.5960	Ave		0.5611				10.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1 Analy Batch No.: 2456

SDG No.: _____

Instrument ID: ME GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 10:06 Calibration End Date: 03/03/2015 16:09 Calibration ID: 287

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		B	M1	M2								
Tetrachloroethene	0.5509 0.4213	0.4689 0.4318	0.5105 0.3854	0.4033 0.3542	0.4986	Ave		0.4472				14.0		30.0			
Chlorobenzene	0.9922 0.8257	0.8757 0.8379	0.9409 0.7519	0.7385 0.6649	0.8915	Ave		0.8355				12.0		30.0			
2,3-Dimethylheptane	1.3100 1.0152	1.1618 1.0133	1.2288 0.8598	0.9525 0.7255	1.1325	Ave		1.0444				18.0		40.0			
Ethylbenzene	1.5099 1.3275	1.4458 1.3141	1.4968 1.1531	1.1391 0.9627	1.3575	Ave		1.3007				14.0		30.0			
2-Ethylthiophene	1.2064 1.0440	1.1123 1.0367	1.1652 0.9215	0.9030 0.7849	1.0810	Ave		1.0283				13.0		40.0			
m-Xylene & p-Xylene	1.1566 1.0435	1.1096 1.0132	1.1758 0.8636	0.9015 0.6928	1.0662	Ave		1.0025				16.0		30.0			
Nonane	0.8283 0.6948	0.7486 0.7108	0.7796 0.6296	0.6021 0.5566	0.7269	Ave		0.6975				13.0		30.0			
Bromoform	++++ 0.6641	0.5838 0.7168	0.6757 0.6434	0.5403 0.5699	0.7093	Ave		0.6379				10.0		30.0			
Styrene	0.7071 0.7731	0.7024 0.7850	0.7742 0.7304	0.6052 0.6359	0.7640	Ave		0.7197				8.9		30.0			
o-Xylene	1.1659 1.0689	1.1782 1.0619	1.2181 0.9338	0.9220 0.7865	1.0880	Ave		1.0470				13.0		30.0			
1,1,2,2-Tetrachloroethane	0.6931 0.6569	0.6906 0.6728	0.7256 0.6028	0.5331 0.5347	0.6688	Ave		0.6420				11.0		30.0			
1,2,3-Trichloropropane	0.2620 0.2462	0.2552 0.2433	0.2769 0.2281	0.2024 0.1994	0.2512	Ave		0.2405				11.0		30.0			
Isopropylbenzene	1.7450 1.5219	1.6724 1.4792	1.7177 1.2946	1.2797 1.0497	1.5290	Ave		1.4766				16.0		30.0			
Propylbenzene	0.4376 0.4176	0.4064 0.4220	0.4483 0.3959	0.3309 0.3486	0.4033	Ave		0.4012				9.7		30.0			
2-Chlorotoluene	0.4687 0.3920	0.4113 0.3976	0.4464 0.3670	0.3308 0.3303	0.4029	Ave		0.3941				12.0		30.0			
4-Ethyltoluene	1.3819 1.3854	1.3932 1.3534	1.4749 1.2122	1.0883 0.9894	1.3875	Ave		1.2962				13.0		30.0			
1,3,5-Trimethylbenzene	0.6790 0.6922	0.7141 0.6797	0.7400 0.6338	0.5445 0.5412	0.6810	Ave		0.6562				11.0		30.0			
Alpha Methyl Styrene	++++ 0.6158	++++ 0.6171	0.5792 0.5769	0.4422 0.5063	0.5904	Ave		0.5611				11.0		30.0			
Decane	0.8162 0.8428	0.8228 0.8279	0.9092 0.7287	0.6795 0.6152	0.8369	Ave		0.7866				12.0		30.0			
tert-Butylbenzene	++++ 1.3579	++++ 1.3061	1.4973 1.1592	1.0995 0.9456	1.3737	Ave		1.2485				15.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1 Analy Batch No.: 2456

SDG No.: _____

Instrument ID: ME GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 10:06 Calibration End Date: 03/03/2015 16:09 Calibration ID: 287

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		B	M1	M2								
1,2,4-Trimethylbenzene	+++++ 1.2301	1.2294 1.1782	1.3411 1.0442	0.9957 0.8492	1.2481	Ave		1.1395				14.0		30.0			
sec-Butylbenzene	+++++ 1.7149	1.7073 1.6228	1.8810 1.4041	1.3793 1.1059	1.7427	Ave		1.5698				16.0		30.0			
1,3-Dichlorobenzene	+++++ 0.8223	0.8472 0.8252	0.9228 0.7563	0.6871 0.6591	0.8654	Ave		0.7982				11.0		30.0			
Benzyl chloride	+++++ 1.0551	+++++ 1.0657	1.0309 0.9658	0.7713 0.7958	1.1087	Ave		0.9705				14.0		30.0			
1,4-Dichlorobenzene	+++++ 0.8039	0.7975 0.8095	0.9220 0.7452	0.6594 0.6500	0.8438	Ave		0.7789				12.0		30.0			
4-Isopropyltoluene	1.4388 1.4791	1.4758 1.4003	1.5878 1.2235	1.1715 0.9639	1.5249	Ave		1.3628				15.0		30.0			
1,2,3-Trimethylbenzene	+++++ 0.9368	0.9595 0.8983	1.0247 0.8001	0.7570 0.6664	0.9597	Ave		0.8753				14.0		40.0			
Butylcyclohexane	0.9453 0.8740	0.9422 0.8549	1.0284 0.7533	0.7641 0.6550	0.9125	Ave		0.8589				14.0		40.0			
Indane	+++++ 1.1249	1.1271 1.0895	1.2799 0.9735	0.9254 0.8007	1.1601	Ave		1.0601				14.0		40.0			
1,2-Dichlorobenzene	+++++ 0.7915	0.7831 0.7840	0.9027 0.7160	0.6608 0.6149	0.8358	Ave		0.7611				12.0		30.0			
Indene	0.8019 0.8560	0.7774 0.8344	0.9111 0.7636	0.6647 0.6531	0.8653	Ave		0.7919				11.0		40.0			
Butylbenzene	1.2704 1.2914	1.1694 1.2171	1.3459 1.0787	0.9836 0.8548	1.3450	Ave		1.1729				14.0		30.0			
Undecane	+++++ 0.8108	0.6508 0.7910	0.7721 0.7279	0.5612 0.5947	0.7863	Ave		0.7118				14.0		30.0			
1,2-Dimethyl-4-Ethylbenzene	1.0230 1.0572	0.9823 1.0132	1.1255 0.9089	0.8354 0.7390	1.1163	Ave		0.9779				13.0		40.0			
1,2-Dibromo-3-Chloropropane	0.3846 0.3611	0.3196 0.3812	0.3968 0.3505	0.2789 0.3128	0.4050	Ave		0.3545				12.0		30.0			
1,2,4,5-Tetramethylbenzene	1.2729 1.2432	1.0653 1.1924	1.3067 1.0488	0.9194 0.8421	1.3014	Ave		1.1325				15.0		40.0			
1,2,3,5-Tetramethylbenzene	0.8232 0.7686	0.6224 0.7328	0.7788 0.6684	0.5743 0.5649	0.8063	Ave		0.7044				14.0		40.0			
1,2,3,4-Tetramethylbenzene	1.0938 1.0100	0.9188 0.9771	1.0948 0.8772	0.7814 0.7281	1.0889	Ave		0.9522				14.0		40.0			
Dodecane	+++++ 0.4649	0.5675 0.5289	0.7073 0.4756	0.4809 0.4490	0.6792	Ave		0.5442				18.0		30.0			
1,2,4-Trichlorobenzene	+++++ 0.4244	0.4428 0.4513	0.5522 0.4430	0.3711 0.3990	0.5142	Ave		0.4497				13.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

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INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1 Analy Batch No.: 2456

SDG No.: _____

Instrument ID: ME GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 10:06 Calibration End Date: 03/03/2015 16:09 Calibration ID: 287

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Naphthalene	+++++	0.8940	1.0818	0.7764	1.1022	Ave		0.9301				13.0		30.0			
	0.8943	0.9731	0.9247	0.7943													
Benzo(b)thiophene	0.9425	0.7038	0.9152	0.6369	0.8363	Ave		0.7419				17.0		40.0			
	0.6187	0.7082	0.6919	0.6232													
Hexachlorobutadiene	0.6285	0.5380	0.6070	0.3960	0.5362	Ave		0.4989				18.0		30.0			
	0.4929	0.4828	0.4333	0.3757													
1,2,3-Trichlorobenzene	+++++	0.3836	0.4730	0.3177	0.4342	Ave		0.3709				15.0		30.0			
	0.3115	0.3613	0.3561	0.3300													
2-Methylnaphthalene	+++++	0.1625	0.2054	0.1309	0.1687	Ave		0.1470				21.0		40.0			
	0.1130	0.1410	0.1175	0.1374													
1-Methylnaphthalene	+++++	0.1621	0.2075	0.1258	0.1575	Ave		0.1415				23.0		40.0			
	0.1090	0.1326	0.1081	0.1296													
4-Bromofluorobenzene (Surr)	0.7295	0.7612	0.7695	0.7590	0.7380	Ave		0.7532				1.8		30.0			
	0.7678	0.7563	0.7495	0.7476													

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1 Analy Batch No.: 2456

SDG No.: _____

Instrument ID: ME GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 10:06 Calibration End Date: 03/03/2015 16:09 Calibration ID: 287

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-2456/2	ic 11.D
Level 2	IC 140-2456/3	ic 12.D
Level 3	IC 140-2456/4	ic 13.D
Level 4	IC 140-2456/5	ic 14.D
Level 5	IC 140-2456/6	ic 15.D
Level 6	ICIS 140-2456/7	icis 16.D
Level 7	IC 140-2456/8	ic 17.D
Level 8	IC 140-2456/9	ic 18.D
Level 9	IC 140-2456/10	ic 19.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 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Chlorodifluoromethane	CBM	Ave	+++++ 80925	3656 157789	7506 303536	15682 614250	41686	+++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Propene	CBM	Ave	+++++ 238447	+++++ 461873	31224 863279	54894 1673252	125099	+++++ 2.00	+++++ 4.00	0.159 8.00	0.400 16.0	1.00
Dichlorodifluoromethane	CBM	Ave	18414 734474	31727 1426095	62487 2660310	144991 4901458	377532	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Chloromethane	CBM	Ave	+++++ 75880	+++++ 150516	7370 287819	14897 566339	38147	+++++ 2.00	+++++ 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dichlorotetrafluoroethane	CBM	Ave	11500 478879	18801 925508	37172 1787657	89475 3466596	236758	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Acetaldehyde	CBM	Ave	+++++ 427175	+++++ 924351	+++++ 1710730	110100 2831497	257966	+++++ 9.99	+++++ 20.0	+++++ 40.0	2.00 80.0	5.01
Vinyl chloride	CBM	Ave	5594 245815	9857 481225	19127 945432	45406 1883141	119430	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,3-Butadiene	CBM	Ave	+++++ 202345	8287 393939	15571 774982	37128 1538765	97146	+++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Butane	CBM	Ave	+++++ 409333	17737 821889	34512 1522704	79925 2900462	208252	+++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Bromomethane	CBM	Ave	+++++ 213391	9148 416332	16608 827130	40085 1637373	103076	+++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Chloroethane	CBM	Ave	+++++ 117328	4963 229033	9433 464009	21285 913975	56020	+++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Ethanol	CBM	Ave	+++++ 443397	+++++ 816039	48147 1615463	87307 2708751	204494	+++++ 9.99	+++++ 20.0	0.794 40.0	2.00 80.0	5.01
Vinyl bromide	CBM	Ave	+++++ 225913	9151 444023	17258 883815	42276 1722253	109821	+++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
2-Methylbutane	CBM	Ave	+++++ 288941	11252 574389	23302 1100312	55074 2126958	144481	+++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00

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INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1 Analy Batch No.: 2456

SDG No.: _____

Instrument ID: ME GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 10:06 Calibration End Date: 03/03/2015 16:09 Calibration ID: 287

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 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Trichlorofluoromethane	CBM	Ave	16043 673090	26679 1294070	55143 2459289	131405 4485927	336686	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Acrolein	CBM	Ave	++++ 83204	++++ 161469	9741 325610	16639 564944	34280	++++ 2.00	++++ 4.00	0.159 8.00	0.400 16.0	1.00
Acetonitrile	CBM	Ave	++++ 89190	++++ 170878	6554 352875	14402 615720	35468	++++ 2.00	++++ 4.00	0.159 8.00	0.400 16.0	1.00
Acetone	CBM	Ave	++++ 265980	++++ 568130	++++ 1151145	73661 1701082	166219	++++ 5.99	++++ 12.0	++++ 24.0	1.20 48.0	3.01
Isopropyl alcohol	CBM	Ave	++++ 889632	41744 1681135	79674 3263808	172602 5472971	423815	++++ 5.99	0.239 12.0	0.476 24.0	1.20 48.0	3.01
Pentane	CBM	Ave	++++ 40595	++++ 81305	3771 162500	7869 323295	20295	++++ 2.00	++++ 4.00	0.159 8.00	0.400 16.0	1.00
Ethyl ether	CBM	Ave	++++ 203710	7935 384992	15935 800285	34384 1353622	82047	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,1-Dichloroethene	CBM	Ave	++++ 209550	8582 416744	16732 833244	39813 1616290	102239	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
t-Butyl alcohol	CBM	Ave	++++ 422054	18629 833996	41498 1641594	81662 3058405	200193	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Acrylonitrile	CBM	Ave	++++ 166132	7499 317233	13229 654585	26649 1173152	68072	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,1,2-Trichlorotrifluoroethane	CBM	Ave	10737 475287	19615 923031	37907 1812214	90823 3454662	231071	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Methylene Chloride	CBM	Ave	++++ 186512	++++ 401729	21013 718032	39362 1375830	100592	++++ 2.00	++++ 4.00	0.159 8.00	0.400 16.0	1.00
3-Chloropropene	CBM	Ave	7087 285566	11932 550611	23587 1075331	54955 1970638	140589	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Carbon disulfide	CBM	Ave	13466 575736	22134 1133961	44407 2229171	110605 4233264	282680	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
trans-1,2-Dichloroethene	CBM	Ave	5163 223155	8669 431549	17304 866236	41190 1642087	109852	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
2-Methylpentane	CBM	Ave	++++ 565462	24631 1083449	47386 2093974	107829 3843867	279254	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Methyl tert-butyl ether	CBM	Ave	12353 610541	23468 1116105	44127 2342247	96992 3876895	249597	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,1-Dichloroethane	CBM	Ave	10228 442748	17983 855728	36494 1695217	82751 3143744	215780	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Vinyl acetate	CBM	Ave	13563 687689	26182 1289436	50349 2658759	104722 4541545	267376	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
2-Butanone	CBM	Ave	++++ 87878	++++ 171154	11994 369658	18208 593780	43254	++++ 2.00	++++ 4.00	0.159 8.00	0.400 16.0	1.00
Hexane	CBM	Ave	++++ 211060	8571 414991	17288 812731	39829 1533367	111760	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00

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Instrument ID: ME GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

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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 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
C6 Range	DFB	Ave	+++++ 2600035	136729 5037378	264409 9991158	508243 17618346	1354141	+++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Isopropyl ether	CBM	Ave	16400 817547	32900 1502809	62985 3102818	133433 5109272	343735	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
cis-1,2-Dichloroethene	CBM	Ave	5123 234713	9207 456506	18571 925050	43268 1770263	112776	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Ethyl acetate	CBM	Ave	10205 508312	20812 906230	38865 1947373	80553 3125452	211676	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Chloroform	CBM	Ave	12825 544719	22460 1049916	44496 2059767	102185 3768446	264771	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Tert-butyl ethyl ether	CBM	Ave	13614 715902	25956 1321369	52883 2743408	111226 4585733	297268	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Tetrahydrofuran	CBM	Ave	5951 271450	10995 494573	21141 1054160	43138 1740068	109223	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,1,1-Trichloroethane	CBM	Ave	15140 638694	25792 1215137	52378 2370434	120276 4300857	313461	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dichloroethane	DFB	Ave	8954 421122	17399 800262	34359 1583519	75186 2865639	192523	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1-Butanol	DFB	Ave	+++++ 98156	4484 194733	9954 378852	19207 714616	44586	+++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Cyclohexane	DFB	Ave	+++++ 109548	4513 210653	8876 419453	20462 791983	51839	+++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Benzene	DFB	Ave	+++++ 637101	28004 1231788	51538 2468084	112727 4458322	283473	+++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Carbon tetrachloride	DFB	Ave	13902 693773	24983 1320993	47983 2521281	129373 4452021	337360	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
2,3-Dimethylpentane	DFB	Ave	3329 148601	5887 292677	11685 583512	26263 1117397	70487	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Thiophene	DFB	Ave	8226 361952	13919 711097	29019 1430185	63892 2643181	165330	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Tert-amyl methyl ether	CBZ	Ave	+++++ 591616	21160 1077967	42888 2292227	93593 3824675	248115	+++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
2,2,4-Trimethylpentane	DFB	Ave	28699 1240653	50874 2379139	100946 4574611	232161 8042591	595676	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Heptane	DFB	Ave	5318 232217	9145 454143	18893 919734	41900 1733886	109792	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dichloropropane	DFB	Ave	5202 245511	9999 472438	19654 968475	42535 1754270	106235	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Trichloroethene	DFB	Ave	7985 352215	13966 662052	27227 1372265	65063 2494803	164730	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Dibromomethane	DFB	Ave	6887 290789	12019 563150	24046 1133274	53803 2097510	138457	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00

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			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Bromodichloromethane	DFB	Ave	12384 584622	22353 1129467	46044 2221527	102919 4002567	276125	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,4-Dioxane	DFB	Ave	1882 91474	3851 173582	7096 357993	16082 630812	43655	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Methyl methacrylate	DFB	Ave	6234 347318	13847 618431	23251 1354096	52242 2184812	139047	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Methylcyclohexane	DFB	Ave	11529 503663	20775 984660	40303 1958218	94138 3575488	244441	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
4-Methyl-2-pentanone (MIBK)	DFB	Ave	++++ 513432	25322 978087	43751 1975097	109540 3506313	256506	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
cis-1,3-Dichloropropene	DFB	Ave	8471 411812	15768 792001	29918 1627079	68704 2908747	180334	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
trans-1,3-Dichloropropene	CBZ	Ave	7861 398741	14465 762868	29264 1598586	62315 2854902	170643	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Toluene	CBZ	Ave	17543 783674	30697 1492299	61263 3000546	133480 5160739	340457	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Toluene Range	DFB	Ave	++++ 2063006	83570 3935475	161489 8020231	354298 14095450	892885	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,1,2-Trichloroethane	CBZ	Ave	4311 222998	8632 430223	16888 889624	37093 1619633	96655	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
2-Methylthiophene	CBZ	Ave	13857 650230	24641 1243500	48493 2523293	109264 4416282	280452	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
3-Methylthiophene	CBZ	Ave	12825 636667	23816 1222636	48186 2478395	108133 4332237	276210	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
2-Hexanone	CBZ	Ave	4898 234275	9223 469437	19341 948525	41025 1776938	112023	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
C8 Range	DFB	Ave	++++ 2742252	113080 5436878	220514 10671061	494601 19012674	1296421	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Octane	CBZ	Ave	5470 266380	10582 527291	20011 1069241	46689 1972391	120793	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Dibromochloromethane	CBZ	Ave	11831 610153	21236 1192302	43410 2384775	101444 4200371	267932	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dibromoethane	CBZ	Ave	8761 448020	16470 858826	33889 1781511	74550 3185492	193008	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Tetrachloroethene	CBZ	Ave	7625 338508	13329 649488	27462 1313380	61704 2387707	161455	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Chlorobenzene	CBZ	Ave	13734 663367	24895 1260275	50610 2562312	112976 4482032	288687	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
2,3-Dimethylheptane	CBZ	Ave	18133 815669	33030 1524206	66097 2929963	145713 4890541	366742	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Ethylbenzene	CBZ	Ave	20900 1066516	41102 1976608	80513 3929689	174265 6489313	439617	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1 Analy Batch No.: 2456
SDG No.: _____
Instrument ID: ME GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/03/2015 10:06 Calibration End Date: 03/03/2015 16:09 Calibration ID: 287

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 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
2-Ethylthiophene	CBZ	Ave	16698 838808	31622 1559423	62678 3140304	138136 5291194	350080	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
m-Xylene & p-Xylene	CBZ	Ave	32019 1676676	63089 3048157	126489 5885747	275841 9340381	690561	0.0796 3.99	0.159 8.00	0.317 16.0	0.800 32.0	2.00
Nonane	CBZ	Ave	11465 558185	21283 1069228	41932 2145527	92104 3751899	235397	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Bromoform	CBZ	Ave	++++ 533528	16598 1078253	36347 2192459	82663 3841729	229701	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Styrene	CBZ	Ave	9787 621098	19969 1180744	41645 2488968	92588 4286724	247408	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
o-Xylene	CBZ	Ave	16138 858814	33494 1597239	65519 3182273	141043 5301803	352342	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,1,2,2-Tetrachloroethane	CBZ	Ave	9594 527727	19634 1011994	39029 2054392	81555 3604462	216582	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,2,3-Trichloropropane	CBZ	Ave	3627 197829	7254 365911	14895 777428	30965 1344184	81362	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Isopropylbenzene	CBZ	Ave	24154 1222754	47545 2224954	92392 4411701	195778 7076221	495147	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Propylbenzene	CBZ	Ave	6057 335528	11553 634727	24115 1349284	50623 2349724	130597	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
2-Chlorotoluene	CBZ	Ave	6487 314967	11694 598008	24013 1250634	50604 2226543	130471	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
4-Ethyltoluene	CBZ	Ave	19128 1113056	39607 2035780	79336 4130891	166494 6669337	449325	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,3,5-Trimethylbenzene	CBZ	Ave	9398 556155	20301 1022329	39806 2159984	83299 3648297	220525	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Alpha Methyl Styrene	CBZ	Ave	++++ 494752	++++ 928176	31156 1966103	67648 3412683	191188	++++ 2.00	++++ 4.00	0.159 8.00	0.400 16.0	1.00
Decane	CBZ	Ave	11297 677101	23392 1245273	48908 2483196	103948 4147161	271004	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
tert-Butylbenzene	CBZ	Ave	++++ 1090975	++++ 1964645	80540 3950337	168208 6374457	444848	++++ 2.00	++++ 4.00	0.159 8.00	0.400 16.0	1.00
1,2,4-Trimethylbenzene	CBZ	Ave	++++ 988256	34952 1772220	72139 3558593	152323 5724196	404168	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
sec-Butylbenzene	CBZ	Ave	++++ 1377767	48538 2441048	101176 4784944	211009 7454950	564356	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,3-Dichlorobenzene	CBZ	Ave	++++ 660658	24084 1241239	49639 2577503	105114 4443247	280233	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Benzyl chloride	CBZ	Ave	++++ 847722	++++ 1603027	55454 3291328	117991 5364340	359020	++++ 2.00	++++ 4.00	0.159 8.00	0.400 16.0	1.00
1,4-Dichlorobenzene	CBZ	Ave	++++ 645862	22671 1217638	49595 2539368	100870 4381940	273248	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1 Analy Batch No.: 2456

SDG No.: _____

Instrument ID: ME GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 10:06 Calibration End Date: 03/03/2015 16:09 Calibration ID: 287

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 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
4-Isopropyltoluene	CBZ	Ave	19915 1188332	41955 2106355	85406 4169394	179219 6497547	493804	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,2,3-Trimethylbenzene	CBZ	Ave	++++ 752683	27279 1351258	55118 2726703	115814 4492166	310783	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Butylcyclohexane	CBZ	Ave	13084 702226	26786 1285872	55320 2567110	116891 4415052	295512	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Indane	CBZ	Ave	++++ 903789	32041 1638727	68847 3317401	141565 5397610	375688	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dichlorobenzene	CBZ	Ave	++++ 635910	22262 1179340	48558 2440106	101085 4144980	270662	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Indene	CBZ	Ave	11099 687706	22102 1255063	49008 2602196	101687 4402278	280210	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Butylbenzene	CBZ	Ave	17584 1037572	33244 1830783	72397 3676062	150469 5762141	435550	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Undecane	CBZ	Ave	++++ 651431	18501 1189866	41531 2480404	85846 4008594	254629	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dimethyl-4-Ethylbenzene	CBZ	Ave	14160 849402	27925 1524070	60541 3097224	127806 4981755	361499	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dibromo-3-Chloropropane	CBZ	Ave	5324 290101	9086 573329	21342 1194301	42665 2108388	131149	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,2,4,5-Tetramethylbenzene	CBZ	Ave	17619 998830	30285 1793510	70286 3574261	140659 5676670	421431	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,2,3,5-Tetramethylbenzene	CBZ	Ave	11394 617547	17695 1102235	41893 2277677	87856 3808065	261121	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,2,3,4-Tetramethylbenzene	CBZ	Ave	15140 811417	26120 1469773	58889 2989257	119541 4908142	352624	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Dodecane	CBZ	Ave	++++ 373493	16133 795562	38046 1620705	73567 3026750	219944	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,2,4-Trichlorobenzene	CBZ	Ave	++++ 340943	12587 678879	29702 1509532	56773 2689576	166515	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Naphthalene	CBZ	Ave	++++ 718462	25415 1463682	58192 3151199	118773 5354184	356923	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Benzo(b)thiophene	CBZ	Ave	13046 497113	20008 1065327	49231 2357722	97438 4201330	270821	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
Hexachlorobutadiene	CBZ	Ave	8700 396030	15295 726261	32649 1476655	60586 2532644	173629	0.0398 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
1,2,3-Trichlorobenzene	CBZ	Ave	++++ 250240	10905 543466	25442 1213579	48603 2224496	140618	++++ 2.00	0.0796 4.00	0.159 8.00	0.400 16.0	1.00
2-Methylnaphthalene	CBZ	Ave	++++ 283580	14432 662881	34517 1251082	62575 2893636	170725	++++ 6.24	0.249 12.5	0.496 25.0	1.25 50.0	3.13
1-Methylnaphthalene	CBZ	Ave	++++ 273722	14404 623355	34878 1150881	60125 2730293	159385	++++ 6.24	0.249 12.5	0.496 25.0	1.25 50.0	3.13

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1 Analy Batch No.: 2456

SDG No.: _____

Instrument ID: ME GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2015 10:06 Calibration End Date: 03/03/2015 16:09 Calibration ID: 287

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9		LVL 6	LVL 7	LVL 8	LVL 9	
4-Bromofluorobenzene (Surr)	CBZ	Ave	1014289	1086965	1043206	1160885	954464	4.00	4.00	4.00	4.00	4.00
			1235349	1137376	1277124	1259897		4.00	4.00	4.00	4.00	

Curve Type Legend:

Ave = Average ISTD

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l1.D
 Lims ID: IC L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 03-Mar-2015 10:06:30 ALS Bottle#: 7 Worklist Smp#: 2
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 023287
 Misc. Info.: 140-0001421-002
 Operator ID: 7126 Instrument ID: ME
 Sublist: chrom-ME_TO15*sub4
 Method: \\KNXCHROM\ChromData\ME\20150302-1421.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 14:48:08 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK030

First Level Reviewer: barlozhetskayaa

Date: 03-Mar-2015 11:32:15

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	8.496	8.495	0.001	96	364702	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.734	10.736	-0.002	96	1584458	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.555	15.558	-0.003	90	1390471	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.210	17.213	-0.003	88	1014289	4.00	3.87	
6 Chlorodifluoromethane	67	3.379	3.383	-0.004	96	1881	0.0398	0.0456	
7 Propene	41	3.400	3.396	0.004	77	17193	0.0398	0.1329	
8 Dichlorodifluoromethane	85	3.443	3.443	0.000	100	18414	0.0398	0.0494	
9 Chloromethane	52	3.621	3.620	0.001	63	2921	0.0398	0.0765	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.622	-0.001	88	11500	0.0398	0.0487	
11 Acetaldehyde	44	3.767	3.763	0.004	87	29816	0.1991	0.6622	
12 Vinyl chloride	62	3.788	3.784	0.004	98	5594	0.0398	0.0461	
13 Butadiene	54	3.869	3.868	0.001	68	5539	0.0398	0.0567	
15 Bromomethane	94	4.182	4.179	0.003	97	5648	0.0398	0.0541	
17 Ethanol	31	4.392	4.397	-0.005	95	14274	0.1991	0.3289	
18 Vinyl bromide	106	4.603	4.603	0.000	95	5125	0.0398	0.0467	
19 2-Methylbutane	43	4.651	4.649	0.002	88	6367	0.0398	0.0453	
21 Trichlorofluoromethane	101	4.862	4.864	-0.002	98	16043	0.0398	0.0483	
23 Acetone	58	4.980	4.979	0.001	99	19554	0.1195	0.4072	
24 Isopropyl alcohol	45	5.072	5.065	0.007	79	24430	0.1195	0.1679	
26 Ethyl ether	31	5.239	5.240	-0.001	91	4113	0.0398	0.0440	
27 1,1-Dichloroethene	96	5.568	5.568	0.000	96	5208	0.0398	0.0505	
30 1,1,2-Trichloro-1,2,2-trif	101	5.735	5.738	-0.003	92	10737	0.0398	0.0456	
31 Methylene Chloride	84	5.918	5.921	-0.003	94	9253	0.0398	0.0927	
32 3-Chloro-1-propene	39	5.935	5.935	0.000	86	7087	0.0398	0.0495	
33 Carbon disulfide	76	6.086	6.082	0.004	98	13466	0.0398	0.0473	
34 trans-1,2-Dichloroethene	96	6.733	6.732	0.001	93	5163	0.0398	0.0471	
35 2-Methylpentane	43	6.738	6.744	-0.006	95	13465	0.0398	0.0488	
36 Methyl tert-butyl ether	73	6.862	6.849	0.013	93	12353	0.0398	0.0448	
37 1,1-Dichloroethane	63	7.159	7.161	-0.002	98	10228	0.0398	0.0466	
38 Vinyl acetate	43	7.261	7.262	-0.001	100	13563	0.0398	0.0438	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
39 2-Butanone (MEK)	72	7.720	7.716	0.004	96	3159	0.0398	0.0662	
40 Hexane	56	7.736	7.735	0.001	66	4856	0.0398	0.0467	
140 Isopropyl ether	45	7.897	7.893	0.004	96	16400	0.0398	0.0437	
41 cis-1,2-Dichloroethene	96	8.151	8.158	-0.007	97	5123	0.0398	0.0445	
42 Ethyl acetate	43	8.340	8.340	0.000	96	10205	0.0398	0.0440	
43 Chloroform	83	8.496	8.505	-0.009	28	12825	0.0398	0.0476	
143 Tert-butyl ethyl ether	59	8.588	8.582	0.006	95	13614	0.0398	0.0425	
44 Tetrahydrofuran	42	8.922	8.905	0.017	92	5951	0.0398	0.0473	
45 1,1,1-Trichloroethane	97	9.548	9.543	0.005	93	15140	0.0398	0.0481	
46 1,2-Dichloroethane	62	9.661	9.662	-0.001	96	8954	0.0398	0.0452	
49 Cyclohexane	69	10.168	10.159	0.009	73	2665	0.0398	0.0516	
48 Benzene	78	10.157	10.161	-0.004	97	16175	0.0398	0.0542	
50 Carbon tetrachloride	117	10.184	10.184	0.000	97	13902	0.0398	0.0443	
51 2,3-Dimethylpentane	71	10.276	10.280	-0.004	88	3329	0.0398	0.0468	
52 Thiophene	84	10.448	10.449	-0.001	96	8226	0.0398	0.0477	
141 Tert-amyl methyl ether	73	10.658	10.651	0.007	91	10274	0.0398	0.0421	
53 Isooctane	57	10.944	10.947	-0.003	97	28699	0.0398	0.0484	
54 n-Heptane	71	11.338	11.341	-0.003	93	5318	0.0398	0.0474	
55 1,2-Dichloropropane	63	11.429	11.434	-0.005	79	5202	0.0398	0.0452	
56 Trichloroethene	130	11.473	11.467	0.006	94	7985	0.0398	0.0477	
57 Dibromomethane	93	11.554	11.558	-0.004	93	6887	0.0398	0.0486	
58 Dichlorobromomethane	83	11.705	11.706	-0.002	97	12384	0.0398	0.0454	
59 1,4-Dioxane	88	11.742	11.721	0.021	88	1882	0.0398	0.0437	
60 Methyl methacrylate	41	11.802	11.802	0.000	92	6234	0.0398	0.0418	
61 Methylcyclohexane	83	12.249	12.250	-0.001	89	11529	0.0398	0.0473	
62 4-Methyl-2-pentanone (MIBK)	43	12.675	12.673	0.002	97	14904	0.0398	0.0585	
63 cis-1,3-Dichloropropene	75	12.729	12.734	-0.005	95	8471	0.0398	0.0450	
64 trans-1,3-Dichloropropene	75	13.441	13.446	-0.005	93	7861	0.0398	0.0457	
65 Toluene	91	13.559	13.562	-0.003	92	17543	0.0398	0.0503	
66 1,1,2-Trichloroethane	83	13.646	13.648	-0.002	94	4311	0.0398	0.0440	
67 2-Methylthiophene	97	13.716	13.718	-0.002	97	13857	0.0398	0.0486	
68 3-Methylthiophene	97	13.921	13.923	-0.002	99	12825	0.0398	0.0461	
69 2-Hexanone	58	14.034	14.032	0.002	90	4898	0.0398	0.0453	
70 n-Octane	85	14.255	14.260	-0.005	94	5470	0.0398	0.0456	
71 Chlorodibromomethane	129	14.352	14.356	-0.004	96	11831	0.0398	0.0452	
72 Ethylene Dibromide	107	14.649	14.651	-0.002	89	8761	0.0398	0.0449	
73 Tetrachloroethene	129	14.719	14.720	-0.001	92	7625	0.0398	0.0490	
74 Chlorobenzene	112	15.603	15.607	-0.004	96	13734	0.0398	0.0473	
75 2,3-Dimethylheptane	43	15.619	15.621	-0.002	95	18133	0.0398	0.0499	
76 Ethylbenzene	91	15.894	15.896	-0.002	98	20900	0.0398	0.0462	
77 2-Ethylthiophene	97	16.002	16.003	-0.001	99	16698	0.0398	0.0467	
78 m-Xylene & p-Xylene	91	16.056	16.060	-0.004	98	32019	0.0796	0.0919	
81 n-Nonane	57	16.477	16.479	-0.002	92	11465	0.0398	0.0473	
79 Bromoform	173	16.515	16.516	-0.002	94	8804	0.0398	0.0397	
80 Styrene	104	16.531	16.530	0.001	97	9787	0.0398	0.0391	
82 o-Xylene	91	16.590	16.591	-0.001	98	16138	0.0398	0.0443	
83 1,1,2,2-Tetrachloroethane	83	16.919	16.921	-0.002	95	9594	0.0398	0.0430	
84 1,2,3-Trichloropropane	110	17.081	17.083	-0.001	90	3627	0.0398	0.0434	
85 Isopropylbenzene	105	17.178	17.180	-0.002	89	24154	0.0398	0.0471	
86 N-Propylbenzene	120	17.722	17.728	-0.006	99	6057	0.0398	0.0434	
87 2-Chlorotoluene	126	17.776	17.776	0.000	97	6487	0.0398	0.0474	
88 4-Ethyltoluene	105	17.884	17.884	0.000	98	19128	0.0398	0.0425	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
89 1,3,5-Trimethylbenzene	120	17.954	17.960	-0.006	92	9398	0.0398	0.0412	
90 Alpha Methyl Styrene	118	18.192	18.196	-0.004	82	7305	0.0398	0.0375	
91 n-Decane	57	18.251	18.252	-0.001	91	11297	0.0398	0.0413	
92 tert-Butylbenzene	119	18.391	18.392	-0.001	92	19525	0.0398	0.0450	
93 1,2,4-Trimethylbenzene	105	18.402	18.405	-0.003	95	16810	0.0398	0.0424	
95 sec-Butylbenzene	105	18.661	18.665	-0.004	97	24113	0.0398	0.0442	
94 1,3-Dichlorobenzene	146	18.677	18.683	-0.006	97	13465	0.0398	0.0485	
96 Benzyl chloride	91	18.758	18.759	-0.001	97	14049	0.0398	0.0416	
97 1,4-Dichlorobenzene	146	18.769	18.771	-0.002	93	13549	0.0398	0.0500	
98 4-Isopropyltoluene	119	18.828	18.830	-0.002	97	19915	0.0398	0.0420	
99 1,2,3-Trimethylbenzene	105	18.882	18.884	-0.002	98	13304	0.0398	0.0437	
100 Butylcyclohexane	83	18.936	18.937	-0.001	87	13084	0.0398	0.0438	
102 2,3-Dihydroindene	117	19.130	19.134	-0.004	93	17222	0.0398	0.0467	
101 1,2-Dichlorobenzene	146	19.135	19.136	-0.001	83	11961	0.0398	0.0452	
103 Indene	116	19.265	19.266	-0.001	87	11099	0.0398	0.0403	
104 n-Butylbenzene	91	19.265	19.270	-0.005	96	17584	0.0398	0.0431	
106 Undecane	57	19.577	19.581	-0.004	89	11853	0.0398	0.0479	
105 1,2-Dimethyl-4-Ethylbenzen	119	19.642	19.644	-0.002	98	14160	0.0398	0.0417	
142 1,2-Dibromo-3-Chloropropan	157	19.745	19.747	-0.002	94	5324	0.0398	0.0432	
107 1,2,4,5-Tetramethylbenzene	119	20.030	20.032	-0.002	96	17619	0.0398	0.0448	
108 1,2,3,5-Tetramethylbenzene	119	20.084	20.085	-0.001	94	11394	0.0398	0.0465	
109 1,2,3,4-Tetramethylbenzene	119	20.483	20.484	-0.001	95	15140	0.0398	0.0457	
110 Dodecane	57	20.640	20.641	-0.001	91	11376	0.0398	0.0601	
111 1,2,4-Trichlorobenzene	180	20.845	20.846	-0.001	92	8849	0.0398	0.0566	
112 Naphthalene	128	20.985	20.988	-0.003	99	17076	0.0398	0.0528	
113 Benzo(b)thiophene	134	21.098	21.097	0.001	98	13046	0.0398	0.0506	
114 Hexachlorobutadiene	225	21.206	21.206	0.000	93	8700	0.0398	0.0502	
115 1,2,3-Trichlorobenzene	180	21.281	21.281	0.000	93	7473	0.0398	0.0580	
116 2-Methylnaphthalene	142	22.133	22.134	-0.001	97	9488	0.1244	0.1856	
117 1-Methylnaphthalene	142	22.327	22.332	-0.005	98	9851	0.1244	0.2002	
A 118 C6 Range	1	7.736	(7.693-7.779)		0	74720	0.0398	0.0560	
A 119 Toluene Range	1	13.559	(13.529-13.589)		0	50059	0.0398	0.0533	
A 120 C8 Range	1	14.255	(14.225-14.285)		0	66415	0.0398	0.0516	
S 124 Xylenes, Total	100				0		0.1195	0.1362	
S 144 1,2-Dichloroethene, Total	1				0		0.0796	0.0916	

Reagents:

CCN2C20X0.2_00001

Amount Added: 100.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l1.D

Injection Date: 03-Mar-2015 10:06:30

Instrument ID: ME

Operator ID: 7126

Lims ID: IC L1

Worklist Smp#: 2

Client ID:

Purge Vol: 500.000 mL

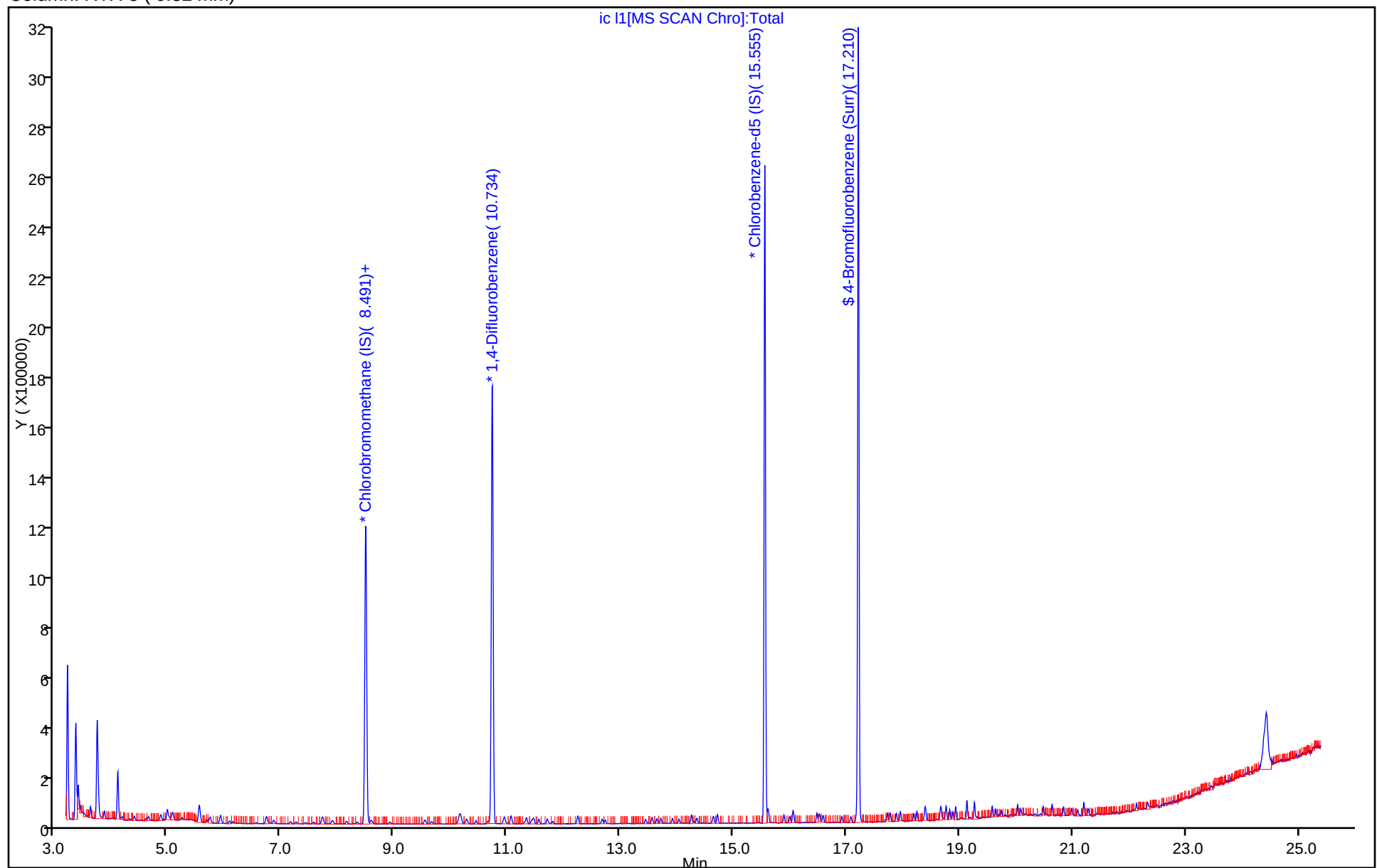
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l1.D

Injection Date: 03-Mar-2015 10:06:30

Instrument ID: ME

Lims ID: IC L1

Client ID:

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 2

Purge Vol: 500.000 mL

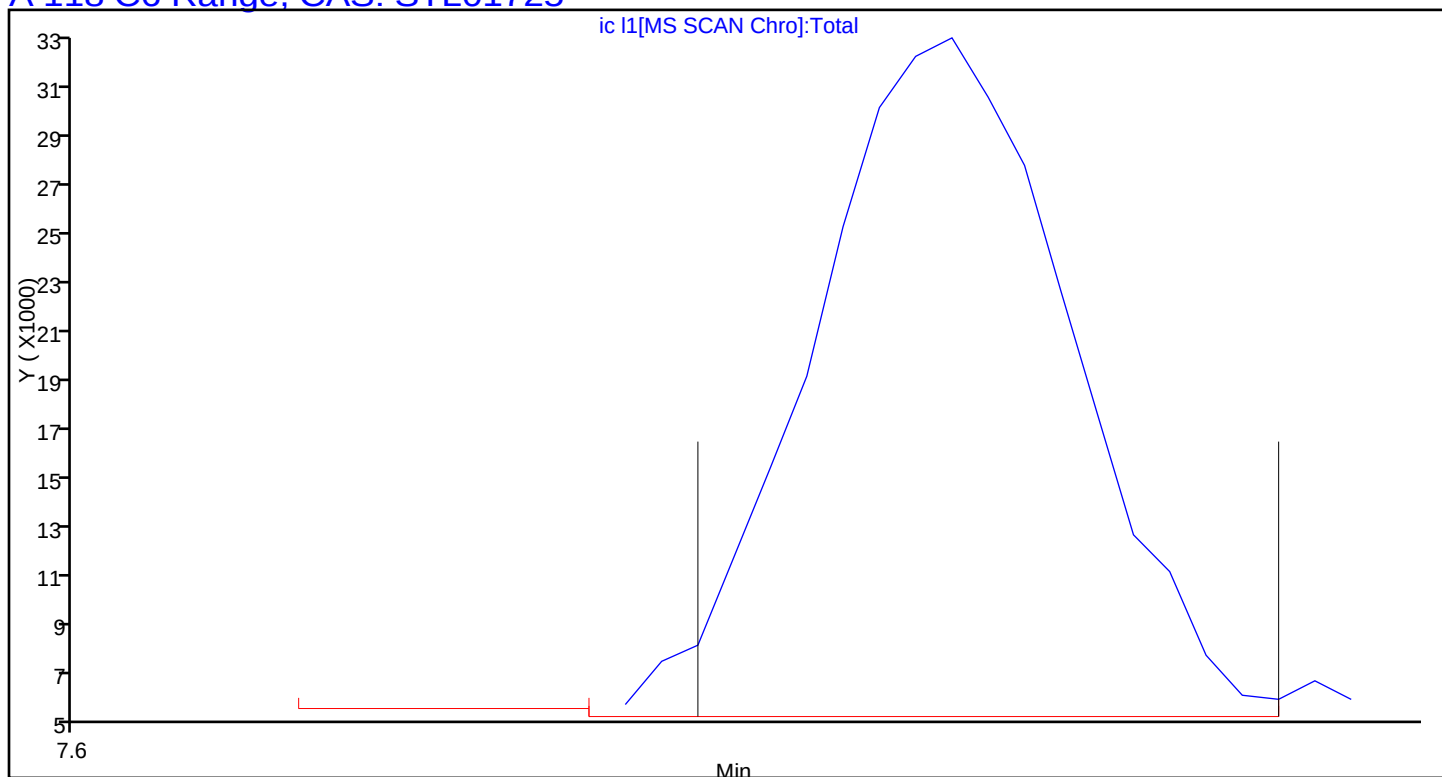
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Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l1.D

Injection Date: 03-Mar-2015 10:06:30

Instrument ID: ME

Lims ID: IC L1

Client ID:

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 2

Purge Vol: 500.000 mL

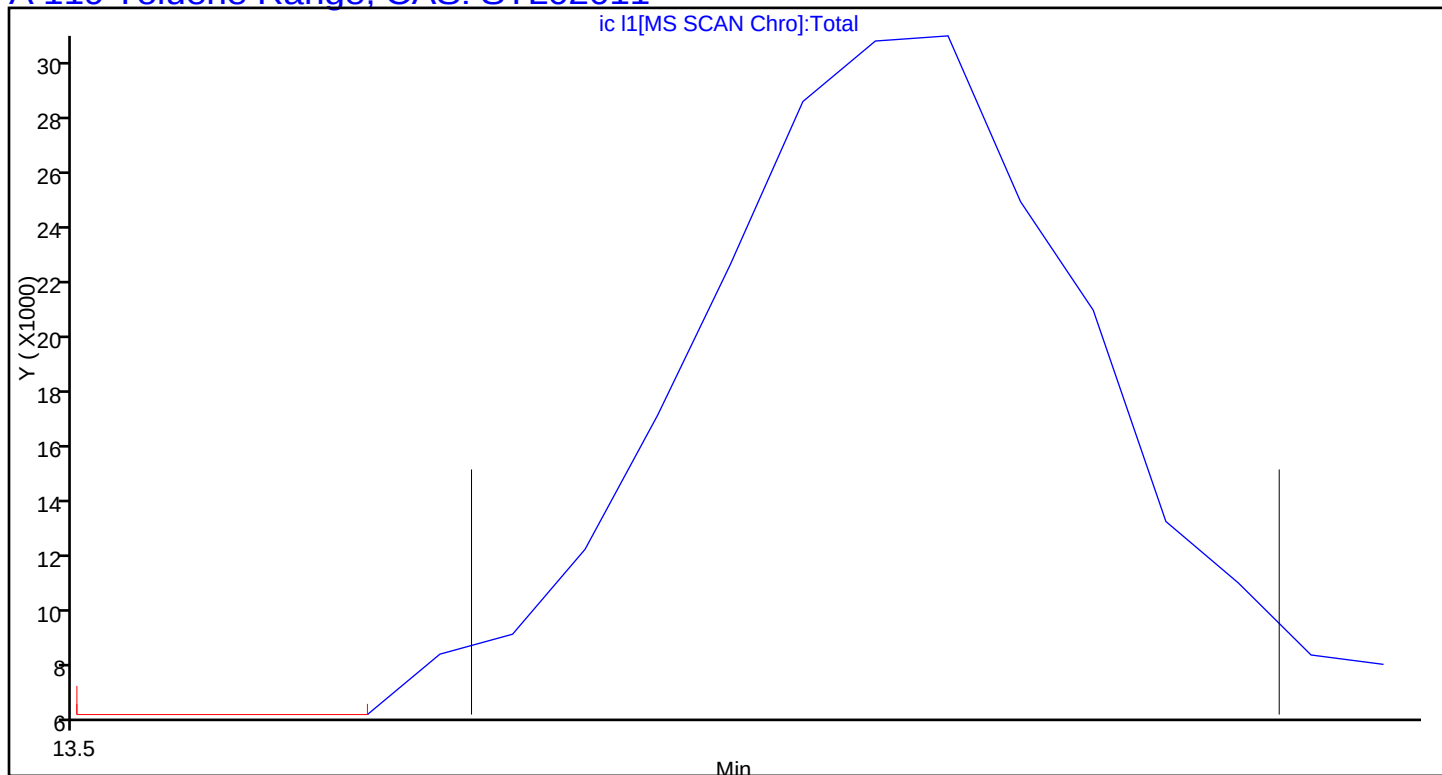
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Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 119 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l1.D

Injection Date: 03-Mar-2015 10:06:30

Instrument ID: ME

Lims ID: IC L1

Client ID:

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 2

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

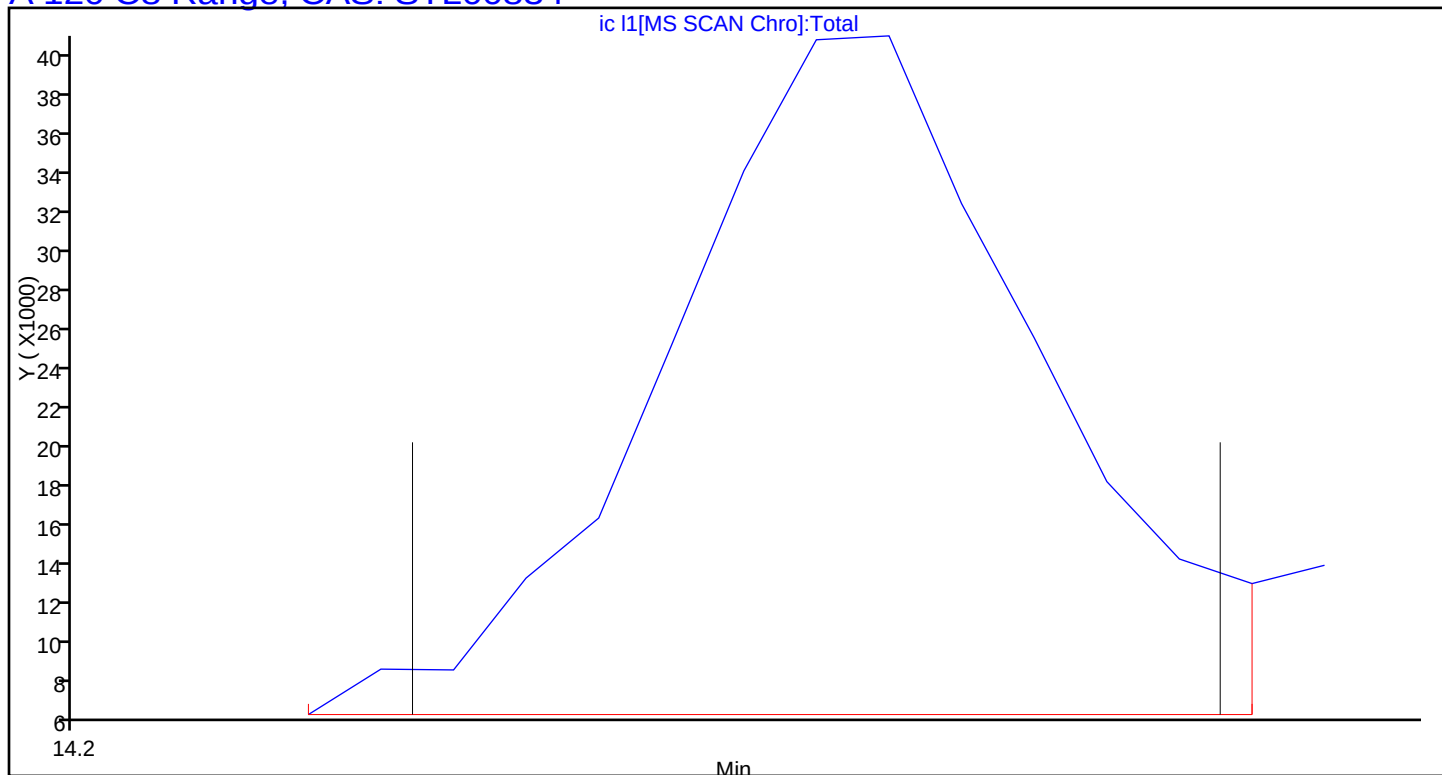
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 120 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l2.D
 Lims ID: IC L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 03-Mar-2015 10:52:30 ALS Bottle#: 7 Worklist Smp#: 3
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 023287
 Misc. Info.: 140-0001421-003
 Operator ID: 7126 Instrument ID: ME
 Sublist: chrom-ME_TO15*sub4
 Method: \\KNXCHROM\ChromData\ME\20150302-1421.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 14:48:12 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK030

First Level Reviewer: barlozhetskayaa

Date: 03-Mar-2015 11:32:53

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	8.491	8.495	-0.004	97	358211	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.734	10.736	-0.002	96	1553599	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.555	15.558	-0.003	90	1427925	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.210	17.213	-0.003	88	1086965	4.00	4.04	
6 Chlorodifluoromethane	67	3.379	3.383	-0.004	98	3656	0.0796	0.0903	
7 Propene	41	3.395	3.396	-0.001	86	22871	0.0796	0.1799	
8 Dichlorodifluoromethane	85	3.443	3.443	0.000	99	31727	0.0796	0.0867	
9 Chloromethane	52	3.616	3.620	-0.004	66	3565	0.0796	0.0950	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.622	-0.001	89	18801	0.0796	0.0811	
11 Acetaldehyde	44	3.762	3.763	-0.001	94	52707	0.3982	1.19	
12 Vinyl chloride	62	3.783	3.784	-0.001	99	9857	0.0796	0.0827	
14 Butane	43	3.864	3.868	-0.004	83	17737	0.0796	0.0888	
13 Butadiene	54	3.869	3.868	0.001	67	8287	0.0796	0.0864	
15 Bromomethane	94	4.177	4.179	-0.002	98	9148	0.0796	0.0892	
16 Chloroethane	64	4.312	4.313	-0.001	93	4963	0.0796	0.0879	
17 Ethanol	31	4.392	4.397	-0.005	97	23818	0.3982	0.5587	
18 Vinyl bromide	106	4.597	4.603	-0.006	98	9151	0.0796	0.0850	
19 2-Methylbutane	43	4.646	4.649	-0.003	91	11252	0.0796	0.0815	
21 Trichlorofluoromethane	101	4.862	4.864	-0.002	99	26679	0.0796	0.0817	
20 Acrolein	56	4.867	4.871	-0.004	37	7407	0.0796	0.1796	
22 Acetonitrile	40	4.937	4.938	-0.001	91	3509	0.0796	0.0893	
23 Acetone	58	4.980	4.979	0.001	99	36788	0.2389	0.7800	
24 Isopropyl alcohol	45	5.061	5.065	-0.004	93	41744	0.2389	0.2921	
25 Pentane	72	5.072	5.081	-0.009	96	1533	0.0796	0.0759	
26 Ethyl ether	31	5.244	5.240	0.004	91	7935	0.0796	0.0865	
27 1,1-Dichloroethene	96	5.568	5.568	0.000	92	8582	0.0796	0.0847	
29 2-Methyl-2-propanol	59	5.670	5.663	0.007	93	18629	0.0796	0.0886	
28 Acrylonitrile	53	5.670	5.673	-0.003	62	7499	0.0796	0.0975	
30 1,1,2-Trichloro-1,2,2-trif	101	5.735	5.738	-0.003	96	19615	0.0796	0.0849	
31 Methylene Chloride	84	5.918	5.921	-0.003	94	12411	0.0796	0.1266	

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	5.929	5.935	-0.006	80	11932	0.0796	0.0848	
33 Carbon disulfide	76	6.080	6.082	-0.002	99	22134	0.0796	0.0792	
34 trans-1,2-Dichloroethene	96	6.727	6.732	-0.005	95	8669	0.0796	0.0805	
35 2-Methylpentane	43	6.743	6.744	-0.001	95	24631	0.0796	0.0909	
36 Methyl tert-butyl ether	73	6.857	6.849	0.008	94	23468	0.0796	0.0866	
37 1,1-Dichloroethane	63	7.153	7.161	-0.008	99	17983	0.0796	0.0835	
38 Vinyl acetate	43	7.261	7.262	-0.001	100	26182	0.0796	0.0862	
39 2-Butanone (MEK)	72	7.725	7.716	0.009	96	6311	0.0796	0.1347	
40 Hexane	56	7.730	7.735	-0.005	73	8571	0.0796	0.0839	
140 Isopropyl ether	45	7.897	7.893	0.004	96	32900	0.0796	0.0892	
41 cis-1,2-Dichloroethene	96	8.151	8.158	-0.007	98	9207	0.0796	0.0814	
42 Ethyl acetate	43	8.345	8.340	0.005	97	20812	0.0796	0.0913	
43 Chloroform	83	8.501	8.505	-0.004	44	22460	0.0796	0.0848	
143 Tert-butyl ethyl ether	59	8.588	8.582	0.006	97	25956	0.0796	0.0825	
44 Tetrahydrofuran	42	8.917	8.905	0.012	90	10995	0.0796	0.0889	
45 1,1,1-Trichloroethane	97	9.537	9.543	-0.006	94	25792	0.0796	0.0835	
46 1,2-Dichloroethane	62	9.655	9.662	-0.007	97	17399	0.0796	0.0895	
47 n-Butanol	31	10.125	10.114	0.010	73	4484	0.0796	0.0936	
49 Cyclohexane	69	10.157	10.159	-0.002	70	4513	0.0796	0.0892	
48 Benzene	78	10.157	10.161	-0.004	95	28004	0.0796	0.0958	
50 Carbon tetrachloride	117	10.178	10.184	-0.006	96	24983	0.0796	0.0812	
51 2,3-Dimethylpentane	71	10.270	10.280	-0.010	90	5887	0.0796	0.0843	
52 Thiophene	84	10.443	10.449	-0.006	96	13919	0.0796	0.0824	
141 Tert-amyl methyl ether	73	10.653	10.651	0.002	93	21160	0.0796	0.0845	
53 Isooctane	57	10.944	10.947	-0.003	96	50874	0.0796	0.0875	
54 n-Heptane	71	11.338	11.341	-0.003	91	9145	0.0796	0.0832	
55 1,2-Dichloropropane	63	11.435	11.434	0.001	79	9999	0.0796	0.0885	
56 Trichloroethene	130	11.462	11.467	-0.005	96	13966	0.0796	0.0852	
57 Dibromomethane	93	11.553	11.558	-0.005	94	12019	0.0796	0.0865	
58 Dichlorobromomethane	83	11.699	11.706	-0.007	98	22353	0.0796	0.0836	
59 1,4-Dioxane	88	11.726	11.721	0.005	81	3851	0.0796	0.0912	
60 Methyl methacrylate	41	11.796	11.802	-0.006	91	13847	0.0796	0.0947	
61 Methylcyclohexane	83	12.249	12.250	-0.001	88	20775	0.0796	0.0868	
62 4-Methyl-2-pentanone (MIBK)	43	12.675	12.673	0.002	98	25322	0.0796	0.1014	
63 cis-1,3-Dichloropropene	75	12.734	12.734	0.000	97	15768	0.0796	0.0855	
64 trans-1,3-Dichloropropene	75	13.441	13.446	-0.005	96	14465	0.0796	0.0819	
65 Toluene	91	13.559	13.562	-0.003	93	30697	0.0796	0.0858	
66 1,1,2-Trichloroethane	83	13.646	13.648	-0.002	96	8632	0.0796	0.0859	
67 2-Methylthiophene	97	13.716	13.718	-0.002	98	24641	0.0796	0.0842	
68 3-Methylthiophene	97	13.921	13.923	-0.002	99	23816	0.0796	0.0835	
69 2-Hexanone	58	14.034	14.032	0.002	92	9223	0.0796	0.0831	
70 n-Octane	85	14.255	14.260	-0.005	95	10582	0.0796	0.0859	
71 Chlorodibromomethane	129	14.352	14.356	-0.004	98	21236	0.0796	0.0790	
72 Ethylene Dibromide	107	14.649	14.651	-0.002	98	16470	0.0796	0.0822	
73 Tetrachloroethene	129	14.719	14.720	-0.001	94	13329	0.0796	0.0835	
74 Chlorobenzene	112	15.603	15.607	-0.004	92	24895	0.0796	0.0835	
75 2,3-Dimethylheptane	43	15.619	15.621	-0.002	94	33030	0.0796	0.0886	
76 Ethylbenzene	91	15.894	15.896	-0.002	99	41102	0.0796	0.0885	
77 2-Ethylthiophene	97	16.002	16.003	-0.001	98	31622	0.0796	0.0861	
78 m-Xylene & p-Xylene	91	16.056	16.060	-0.004	99	63089	0.1593	0.1763	
81 n-Nonane	57	16.477	16.479	-0.002	93	21283	0.0796	0.0855	
79 Bromoform	173	16.514	16.516	-0.002	94	16598	0.0796	0.0729	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
80 Styrene	104	16.525	16.530	-0.005	98	19969	0.0796	0.0777	
82 o-Xylene	91	16.585	16.591	-0.006	98	33494	0.0796	0.0896	
83 1,1,2,2-Tetrachloroethane	83	16.919	16.921	-0.002	97	19634	0.0796	0.0857	
84 1,2,3-Trichloropropane	110	17.081	17.083	-0.001	91	7254	0.0796	0.0845	
85 Isopropylbenzene	105	17.178	17.180	-0.002	90	47545	0.0796	0.0902	
86 N-Propylbenzene	120	17.728	17.728	0.000	99	11553	0.0796	0.0807	
87 2-Chlorotoluene	126	17.771	17.776	-0.005	97	11694	0.0796	0.0831	
88 4-Ethyltoluene	105	17.884	17.884	0.000	98	39607	0.0796	0.0856	
89 1,3,5-Trimethylbenzene	120	17.960	17.960	0.000	93	20301	0.0796	0.0867	
90 Alpha Methyl Styrene	118	18.192	18.196	-0.004	84	14043	0.0796	0.0701	
91 n-Decane	57	18.251	18.252	-0.001	89	23392	0.0796	0.0833	
92 tert-Butylbenzene	119	18.391	18.392	-0.001	92	39372	0.0796	0.0883	
93 1,2,4-Trimethylbenzene	105	18.402	18.405	-0.003	96	34952	0.0796	0.0859	
95 sec-Butylbenzene	105	18.661	18.665	-0.004	98	48538	0.0796	0.0866	
94 1,3-Dichlorobenzene	146	18.682	18.683	-0.001	98	24084	0.0796	0.0845	
96 Benzyl chloride	91	18.758	18.759	-0.001	97	25932	0.0796	0.0749	
97 1,4-Dichlorobenzene	146	18.768	18.771	-0.003	90	22671	0.0796	0.0815	
98 4-Isopropyltoluene	119	18.828	18.830	-0.002	97	41955	0.0796	0.0862	
99 1,2,3-Trimethylbenzene	105	18.882	18.884	-0.002	99	27279	0.0796	0.0873	
100 Butylcyclohexane	83	18.936	18.937	-0.001	87	26786	0.0796	0.0874	
102 2,3-Dihydroindene	117	19.130	19.134	-0.004	93	32041	0.0796	0.0847	
101 1,2-Dichlorobenzene	146	19.135	19.136	-0.001	84	22262	0.0796	0.0819	
103 Indene	116	19.265	19.266	-0.001	89	22102	0.0796	0.0782	
104 n-Butylbenzene	91	19.270	19.270	0.000	98	33244	0.0796	0.0794	
106 Undecane	57	19.577	19.581	-0.004	90	18501	0.0796	0.0728	
105 1,2-Dimethyl-4-Ethylbenzen	119	19.642	19.644	-0.002	98	27925	0.0796	0.0800	
142 1,2-Dibromo-3-Chloropropan	157	19.745	19.747	-0.003	92	9086	0.0796	0.0718	
107 1,2,4,5-Tetramethylbenzene	119	20.030	20.032	-0.002	97	30285	0.0796	0.0749	
108 1,2,3,5-Tetramethylbenzene	119	20.084	20.085	-0.001	94	17695	0.0796	0.0704	
109 1,2,3,4-Tetramethylbenzene	119	20.483	20.484	-0.001	96	26120	0.0796	0.0768	
110 Dodecane	57	20.640	20.641	-0.001	89	16133	0.0796	0.0831	
111 1,2,4-Trichlorobenzene	180	20.845	20.846	-0.001	94	12587	0.0796	0.0784	
112 Naphthalene	128	20.985	20.988	-0.003	99	25415	0.0796	0.0765	
113 Benzo(b)thiophene	134	21.098	21.097	0.001	99	20008	0.0796	0.0755	
114 Hexachlorobutadiene	225	21.206	21.206	0.000	92	15295	0.0796	0.0859	
115 1,2,3-Trichlorobenzene	180	21.281	21.281	0.000	93	10905	0.0796	0.0824	
116 2-Methylnaphthalene	142	22.133	22.134	-0.001	99	14432	0.2489	0.2750	
117 1-Methylnaphthalene	142	22.333	22.332	0.001	96	14404	0.2489	0.2851	
A 118 C6 Range	1	7.730	(7.682-7.779)		0	136729	0.0796	0.1045	
A 119 Toluene Range	1	13.559	(13.529-13.589)		0	83570	0.0796	0.0907	
A 120 C8 Range	1	14.255	(14.225-14.285)		0	113080	0.0796	0.0896	
S 124 Xylenes, Total	100				0		0.2389	0.2659	
S 144 1,2-Dichloroethene, Total	1				0		0.1593	0.1619	

Reagents:

CCN2C20X0.2_00001

Amount Added: 200.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l2.D

Injection Date: 03-Mar-2015 10:52:30

Instrument ID: ME

Operator ID: 7126

Lims ID: IC L2

Worklist Smp#: 3

Client ID:

Purge Vol: 500.000 mL

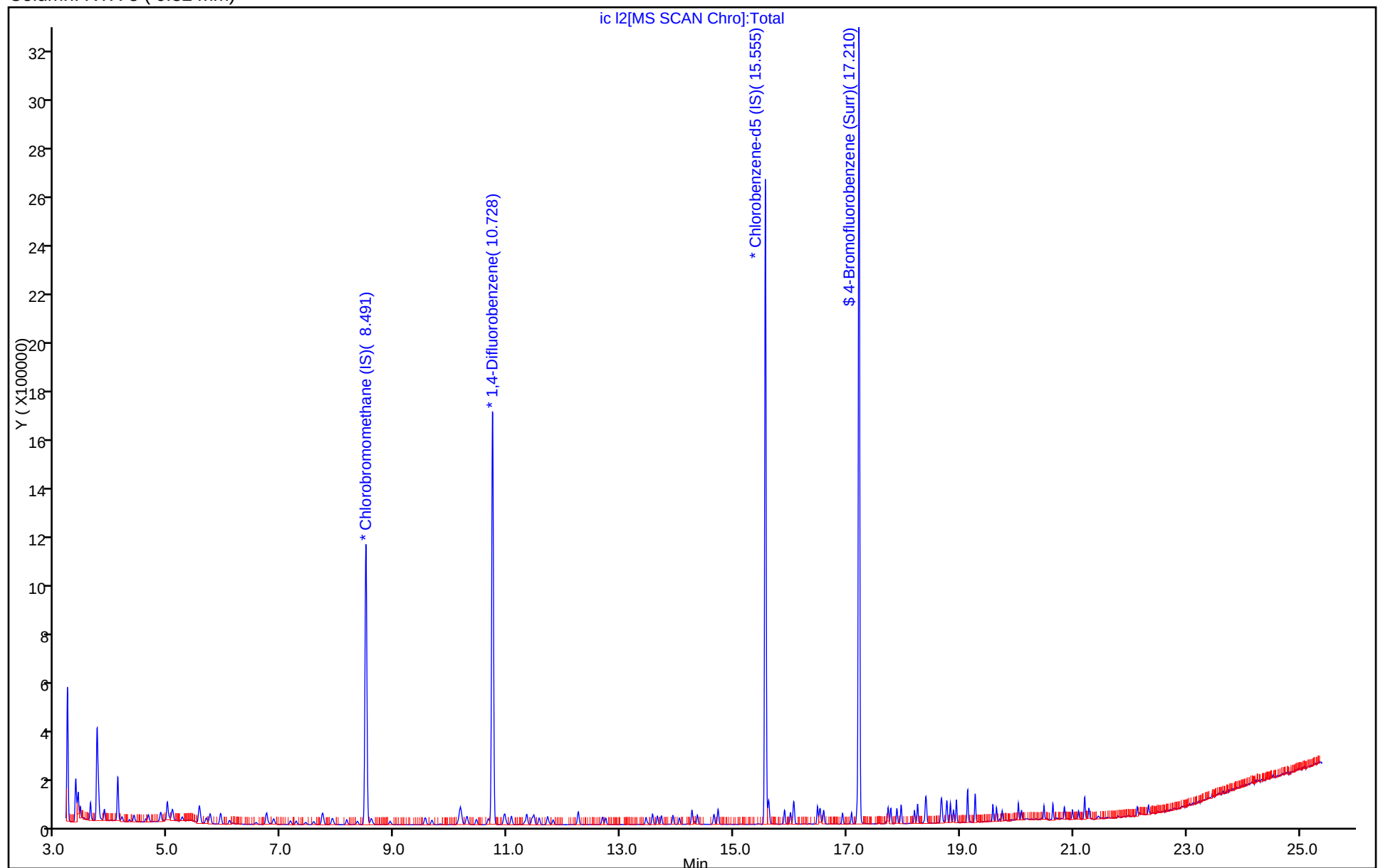
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I2.D

Injection Date: 03-Mar-2015 10:52:30

Instrument ID: ME

Lims ID: IC L2

Client ID:

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 3

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

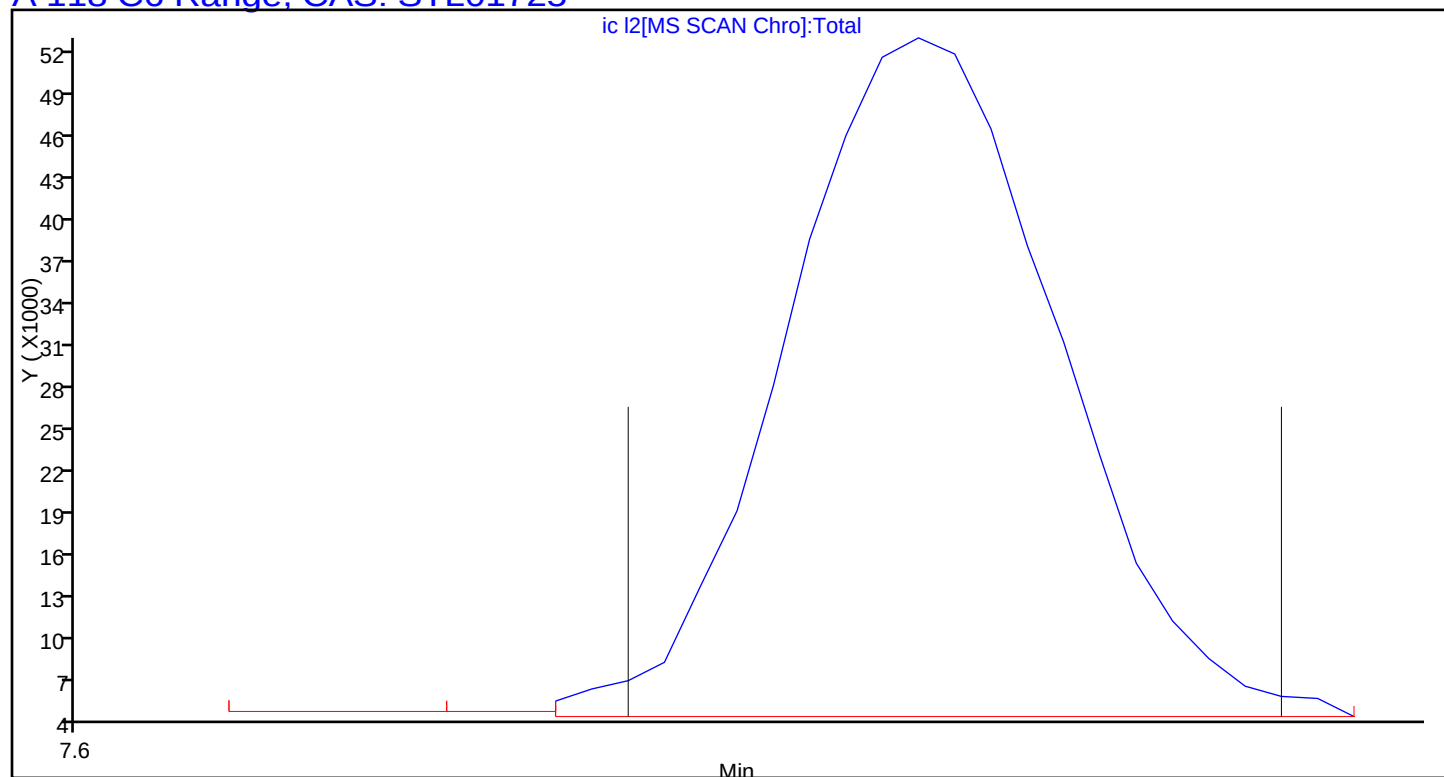
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I2.D

Injection Date: 03-Mar-2015 10:52:30

Instrument ID: ME

Lims ID: IC L2

Client ID:

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 3

Purge Vol: 500.000 mL

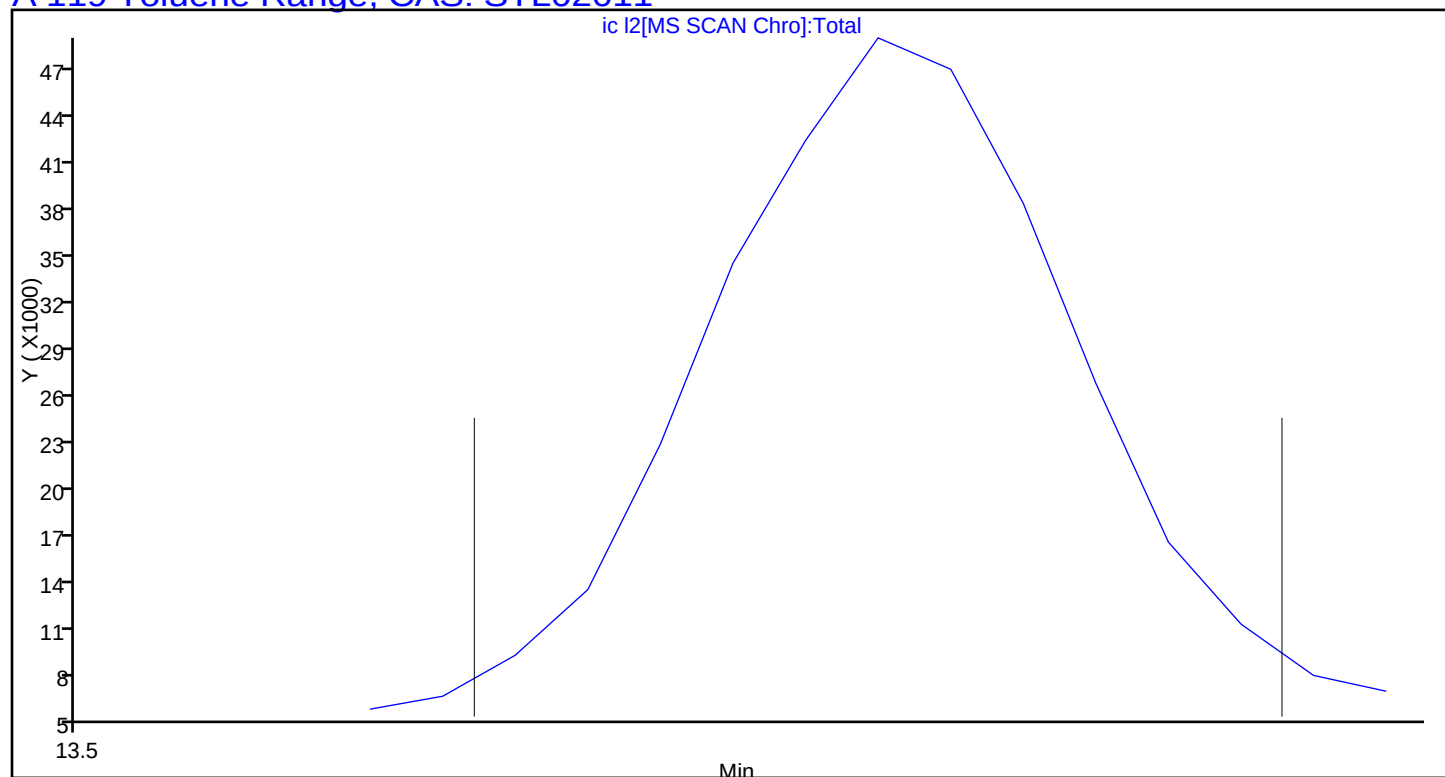
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 119 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I2.D

Injection Date: 03-Mar-2015 10:52:30

Instrument ID: ME

Lims ID: IC L2

Client ID:

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 3

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

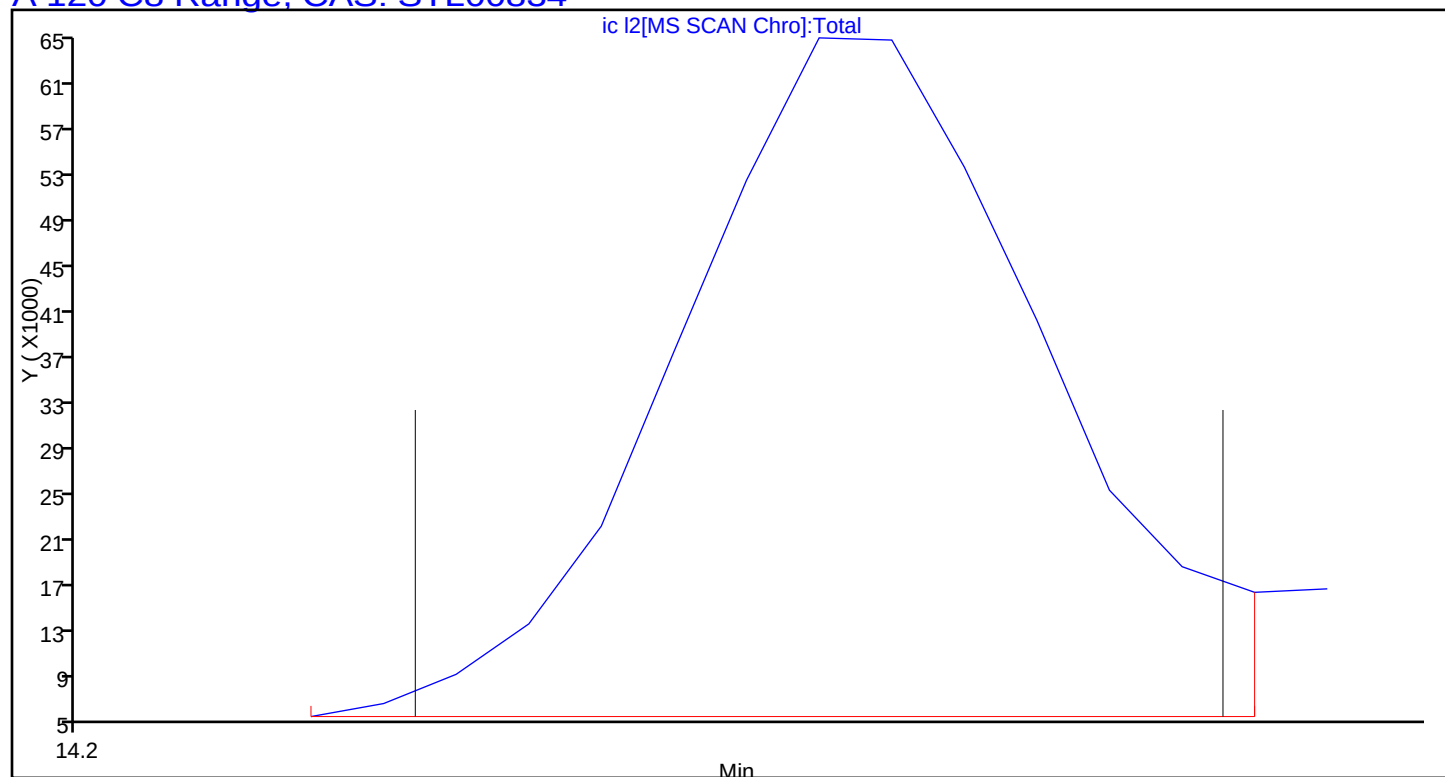
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 120 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l3.D
 Lims ID: IC L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 03-Mar-2015 11:36:30 ALS Bottle#: 8 Worklist Smp#: 4
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 023286
 Misc. Info.: 140-0001421-004
 Operator ID: 7126 Instrument ID: ME
 Sublist: chrom-ME_TO15*sub4
 Method: \\KNXCHROM\ChromData\ME\20150302-1421.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 14:48:15 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK030

First Level Reviewer: barlozhetskayaa

Date: 03-Mar-2015 12:19:49

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	8.491	8.495	-0.004	96	346940	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.734	10.736	-0.002	96	1517612	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.555	15.558	-0.003	90	1355682	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.210	17.213	-0.003	88	1043206	4.00	4.09	
6 Chlorodifluoromethane	67	3.384	3.383	0.001	97	7506	0.1587	0.1915	
7 Propene	41	3.400	3.396	0.004	90	31224	0.1587	0.2537	
8 Dichlorodifluoromethane	85	3.443	3.443	0.000	100	62487	0.1587	0.1763	
9 Chloromethane	52	3.616	3.620	-0.004	65	7370	0.1587	0.2028	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.627	3.622	0.005	89	37172	0.1587	0.1656	
11 Acetaldehyde	44	3.762	3.763	-0.001	97	95362	0.7935	2.23	
12 Vinyl chloride	62	3.783	3.784	-0.001	99	19127	0.1587	0.1656	
14 Butane	43	3.869	3.868	0.001	85	34512	0.1587	0.1785	
13 Butadiene	54	3.864	3.868	-0.004	65	15571	0.1587	0.1676	
15 Bromomethane	94	4.177	4.179	-0.002	97	16608	0.1587	0.1671	
16 Chloroethane	64	4.312	4.313	-0.001	94	9433	0.1587	0.1725	
17 Ethanol	31	4.392	4.397	-0.005	98	48147	0.7935	1.17	
18 Vinyl bromide	106	4.597	4.603	-0.006	98	17258	0.1587	0.1654	
19 2-Methylbutane	43	4.651	4.649	0.002	90	23302	0.1587	0.1742	
21 Trichlorofluoromethane	101	4.867	4.864	0.003	99	55143	0.1587	0.1743	
20 Acrolein	56	4.872	4.871	0.001	35	9741	0.1587	0.2438	
22 Acetonitrile	40	4.932	4.938	-0.006	97	6554	0.1587	0.1723	
23 Acetone	58	4.975	4.979	-0.004	98	64113	0.4762	1.40	
24 Isopropyl alcohol	45	5.056	5.065	-0.009	94	79674	0.4762	0.5755	
25 Pentane	72	5.083	5.081	0.002	98	3771	0.1587	0.1928	
26 Ethyl ether	31	5.244	5.240	0.004	94	15935	0.1587	0.1794	
27 1,1-Dichloroethene	96	5.563	5.568	-0.005	94	16732	0.1587	0.1705	
29 2-Methyl-2-propanol	59	5.660	5.663	-0.003	96	41498	0.1587	0.2039	
28 Acrylonitrile	53	5.665	5.673	-0.008	93	13229	0.1587	0.1775	
30 1,1,2-Trichloro-1,2,2-trif	101	5.741	5.738	0.003	96	37907	0.1587	0.1694	
31 Methylene Chloride	84	5.919	5.921	-0.003	94	21013	0.1587	0.2213	

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	5.935	5.935	0.000	95	23587	0.1587	0.1731	
33 Carbon disulfide	76	6.080	6.082	-0.002	99	44407	0.1587	0.1641	
34 trans-1,2-Dichloroethene	96	6.727	6.732	-0.005	95	17304	0.1587	0.1658	
35 2-Methylpentane	43	6.744	6.744	0.000	95	47386	0.1587	0.1805	
36 Methyl tert-butyl ether	73	6.851	6.849	0.002	95	44127	0.1587	0.1681	
37 1,1-Dichloroethane	63	7.159	7.161	-0.002	99	36494	0.1587	0.1750	
38 Vinyl acetate	43	7.261	7.262	-0.001	100	50349	0.1587	0.1711	
39 2-Butanone (MEK)	72	7.709	7.716	-0.007	97	11994	0.1587	0.2643	
40 Hexane	56	7.730	7.735	-0.005	75	17288	0.1587	0.1747	
140 Isopropyl ether	45	7.892	7.893	-0.001	96	62985	0.1587	0.1764	
41 cis-1,2-Dichloroethene	96	8.156	8.158	-0.002	99	18571	0.1587	0.1696	
42 Ethyl acetate	43	8.340	8.340	0.000	97	38865	0.1587	0.1761	
43 Chloroform	83	8.501	8.505	-0.004	30	44496	0.1587	0.1735	
143 Tert-butyl ethyl ether	59	8.582	8.582	0.000	96	52883	0.1587	0.1736	
44 Tetrahydrofuran	42	8.911	8.905	0.006	91	21141	0.1587	0.1765	
45 1,1,1-Trichloroethane	97	9.542	9.543	-0.001	95	52378	0.1587	0.1751	
46 1,2-Dichloroethane	62	9.655	9.662	-0.007	97	34359	0.1587	0.1810	
47 n-Butanol	31	10.114	10.114	0.000	86	9954	0.1587	0.2126	
49 Cyclohexane	69	10.157	10.159	-0.002	73	8876	0.1587	0.1795	
48 Benzene	78	10.157	10.161	-0.004	95	51538	0.1587	0.1804	
50 Carbon tetrachloride	117	10.178	10.184	-0.006	96	47983	0.1587	0.1596	
51 2,3-Dimethylpentane	71	10.281	10.280	0.001	88	11685	0.1587	0.1714	
52 Thiophene	84	10.443	10.449	-0.006	97	29019	0.1587	0.1758	
141 Tert-amyl methyl ether	73	10.653	10.651	0.002	94	42888	0.1587	0.1804	
53 Isooctane	57	10.944	10.947	-0.003	97	100946	0.1587	0.1778	
54 n-Heptane	71	11.338	11.341	-0.003	93	18893	0.1587	0.1760	
55 1,2-Dichloropropane	63	11.430	11.434	-0.004	78	19654	0.1587	0.1782	
56 Trichloroethene	130	11.462	11.467	-0.005	95	27227	0.1587	0.1700	
57 Dibromomethane	93	11.554	11.558	-0.004	95	24046	0.1587	0.1771	
58 Dichlorobromomethane	83	11.705	11.706	-0.001	99	46044	0.1587	0.1762	
59 1,4-Dioxane	88	11.726	11.721	0.005	98	7096	0.1587	0.1720	
60 Methyl methacrylate	41	11.802	11.802	0.000	92	23251	0.1587	0.1627	
61 Methylcyclohexane	83	12.249	12.250	-0.001	89	40303	0.1587	0.1725	
62 4-Methyl-2-pentanone (MIBK)	43	12.675	12.673	0.002	99	43751	0.1587	0.1793	
63 cis-1,3-Dichloropropene	75	12.729	12.734	-0.005	96	29918	0.1587	0.1660	
64 trans-1,3-Dichloropropene	75	13.446	13.446	0.000	96	29264	0.1587	0.1746	
65 Toluene	91	13.560	13.562	-0.002	93	61263	0.1587	0.1803	
66 1,1,2-Trichloroethane	83	13.646	13.648	-0.002	96	16888	0.1587	0.1769	
67 2-Methylthiophene	97	13.716	13.718	-0.002	98	48493	0.1587	0.1745	
68 3-Methylthiophene	97	13.921	13.923	-0.002	99	48186	0.1587	0.1778	
69 2-Hexanone	58	14.034	14.032	0.002	91	19341	0.1587	0.1836	
70 n-Octane	85	14.261	14.260	0.001	95	20011	0.1587	0.1711	
71 Chlorodibromomethane	129	14.352	14.356	-0.004	98	43410	0.1587	0.1702	
72 Ethylene Dibromide	107	14.649	14.651	-0.002	100	33889	0.1587	0.1782	
73 Tetrachloroethene	129	14.719	14.720	-0.001	94	27462	0.1587	0.1812	
74 Chlorobenzene	112	15.603	15.607	-0.004	92	50610	0.1587	0.1787	
75 2,3-Dimethylheptane	43	15.619	15.621	-0.002	95	66097	0.1587	0.1867	
76 Ethylbenzene	91	15.894	15.896	-0.002	99	80513	0.1587	0.1826	
77 2-Ethylthiophene	97	16.002	16.003	-0.001	99	62678	0.1587	0.1798	
78 m-Xylene & p-Xylene	91	16.056	16.060	-0.004	98	126489	0.3174	0.3723	
81 n-Nonane	57	16.477	16.479	-0.002	93	41932	0.1587	0.1774	
79 Bromoform	173	16.515	16.516	-0.001	95	36347	0.1587	0.1681	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
80 Styrene	104	16.525	16.530	-0.005	99	41645	0.1587	0.1707	
82 o-Xylene	91	16.590	16.591	-0.001	98	65519	0.1587	0.1846	
83 1,1,2,2-Tetrachloroethane	83	16.919	16.921	-0.002	97	39029	0.1587	0.1794	
84 1,2,3-Trichloropropane	110	17.081	17.083	-0.001	93	14895	0.1587	0.1827	
85 Isopropylbenzene	105	17.178	17.180	-0.002	96	92392	0.1587	0.1846	
86 N-Propylbenzene	120	17.728	17.728	0.000	99	24115	0.1587	0.1774	
87 2-Chlorotoluene	126	17.776	17.776	0.000	98	24013	0.1587	0.1798	
88 4-Ethyltoluene	105	17.879	17.884	-0.005	98	79336	0.1587	0.1806	
89 1,3,5-Trimethylbenzene	120	17.954	17.960	-0.006	93	39806	0.1587	0.1790	
90 Alpha Methyl Styrene	118	18.197	18.196	0.001	89	31156	0.1587	0.1638	
91 n-Decane	57	18.251	18.252	-0.001	89	48908	0.1587	0.1835	
92 tert-Butylbenzene	119	18.391	18.392	-0.001	92	80540	0.1587	0.1903	
93 1,2,4-Trimethylbenzene	105	18.402	18.405	-0.003	96	72139	0.1587	0.1868	
95 sec-Butylbenzene	105	18.666	18.665	0.001	98	101176	0.1587	0.1902	
94 1,3-Dichlorobenzene	146	18.682	18.683	-0.001	98	49639	0.1587	0.1835	
96 Benzyl chloride	91	18.758	18.759	-0.001	97	55454	0.1587	0.1686	
97 1,4-Dichlorobenzene	146	18.769	18.771	-0.002	92	49595	0.1587	0.1879	
98 4-Isopropyltoluene	119	18.828	18.830	-0.002	97	85406	0.1587	0.1849	
99 1,2,3-Trimethylbenzene	105	18.882	18.884	-0.002	99	55118	0.1587	0.1858	
100 Butylcyclohexane	83	18.936	18.937	-0.001	88	55320	0.1587	0.1900	
102 2,3-Dihydroindene	117	19.130	19.134	-0.004	93	68847	0.1587	0.1916	
101 1,2-Dichlorobenzene	146	19.135	19.136	-0.001	84	48558	0.1587	0.1882	
103 Indene	116	19.265	19.266	-0.001	89	49008	0.1587	0.1826	
104 n-Butylbenzene	91	19.270	19.270	0.000	98	72397	0.1587	0.1821	
106 Undecane	57	19.577	19.581	-0.004	91	41531	0.1587	0.1721	
105 1,2-Dimethyl-4-Ethylbenzen	119	19.642	19.644	-0.002	98	60541	0.1587	0.1827	
142 1,2-Dibromo-3-Chloropropan	157	19.750	19.747	0.003	94	21342	0.1587	0.1776	
107 1,2,4,5-Tetramethylbenzene	119	20.030	20.032	-0.002	96	70286	0.1587	0.1831	
108 1,2,3,5-Tetramethylbenzene	119	20.084	20.085	-0.001	95	41893	0.1587	0.1755	
109 1,2,3,4-Tetramethylbenzene	119	20.483	20.484	-0.001	97	58889	0.1587	0.1825	
110 Dodecane	57	20.640	20.641	-0.001	91	38046	0.1587	0.2063	
111 1,2,4-Trichlorobenzene	180	20.845	20.846	-0.001	94	29702	0.1587	0.1949	
112 Naphthalene	128	20.985	20.988	-0.003	99	58192	0.1587	0.1846	
113 Benzo(b)thiophene	134	21.093	21.097	-0.004	99	49231	0.1587	0.1958	
114 Hexachlorobutadiene	225	21.206	21.206	0.000	92	32649	0.1587	0.1931	
115 1,2,3-Trichlorobenzene	180	21.281	21.281	0.000	95	25442	0.1587	0.2024	
116 2-Methylnaphthalene	142	22.133	22.134	-0.001	99	34517	0.4959	0.6927	
117 1-Methylnaphthalene	142	22.333	22.332	0.001	99	34878	0.4959	0.7271	
A 118 C6 Range	1	7.725	(7.671-7.779)		0	264409	0.1587	0.2070	
A 119 Toluene Range	1	13.560	(13.530-13.590)		0	161489	0.1587	0.1794	
A 120 C8 Range	1	14.254	(14.231-14.291)		0	220514	0.1587	0.1789	
S 124 Xylenes, Total	100				0		0.4761	0.5569	
S 144 1,2-Dichloroethene, Total	1				0		0.3174	0.3354	

Reagents:

CCN2C10X0.4_00001

Amount Added: 200.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l3.D

Injection Date: 03-Mar-2015 11:36:30

Instrument ID: ME

Operator ID: 7126

Lims ID: IC L3

Worklist Smp#: 4

Client ID:

Purge Vol: 500.000 mL

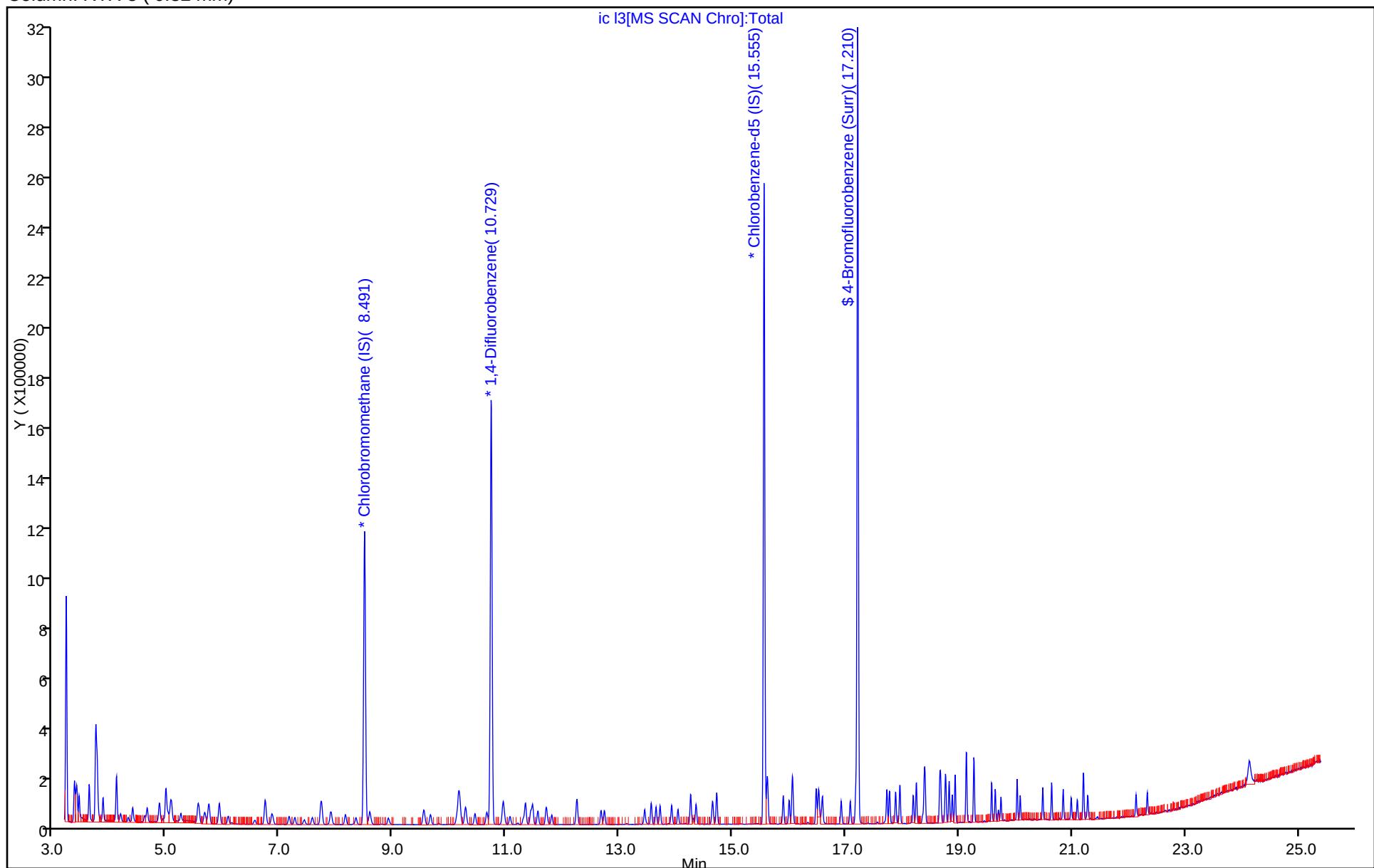
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I3.D

Injection Date: 03-Mar-2015 11:36:30

Instrument ID: ME

Lims ID: IC L3

Client ID:

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 4

Purge Vol: 500.000 mL

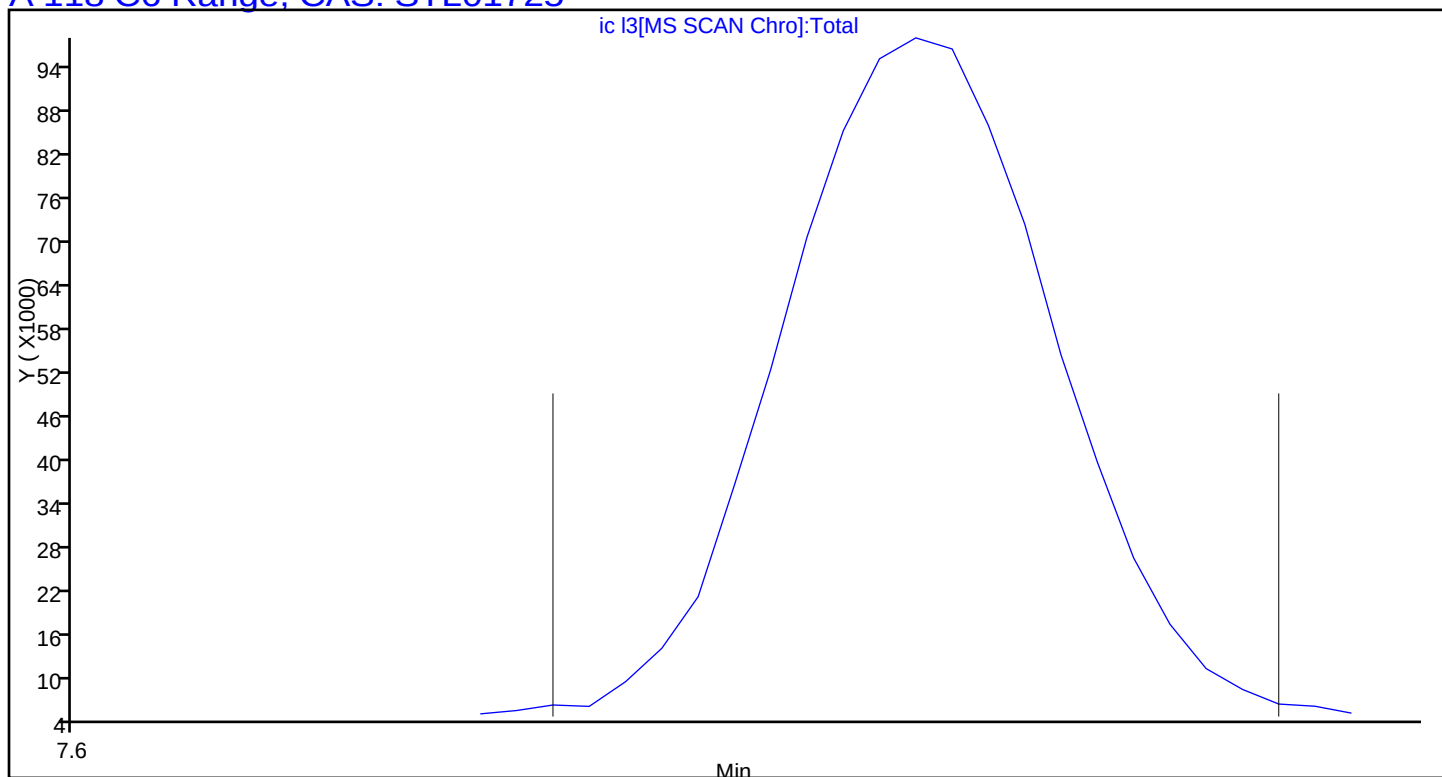
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I3.D

Injection Date: 03-Mar-2015 11:36:30

Instrument ID: ME

Lims ID: IC L3

Client ID:

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 4

Purge Vol: 500.000 mL

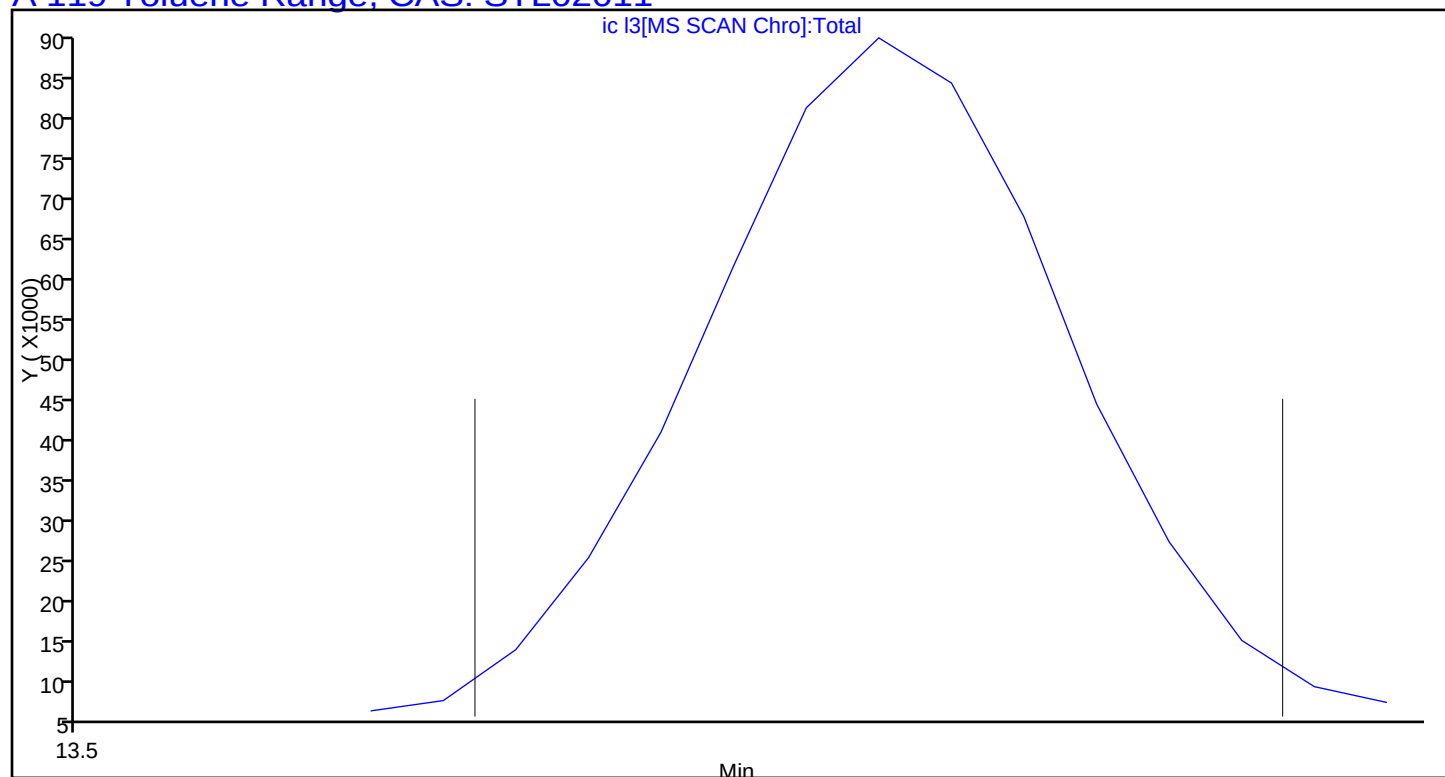
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 119 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I3.D

Injection Date: 03-Mar-2015 11:36:30

Instrument ID: ME

Lims ID: IC L3

Client ID:

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 4

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

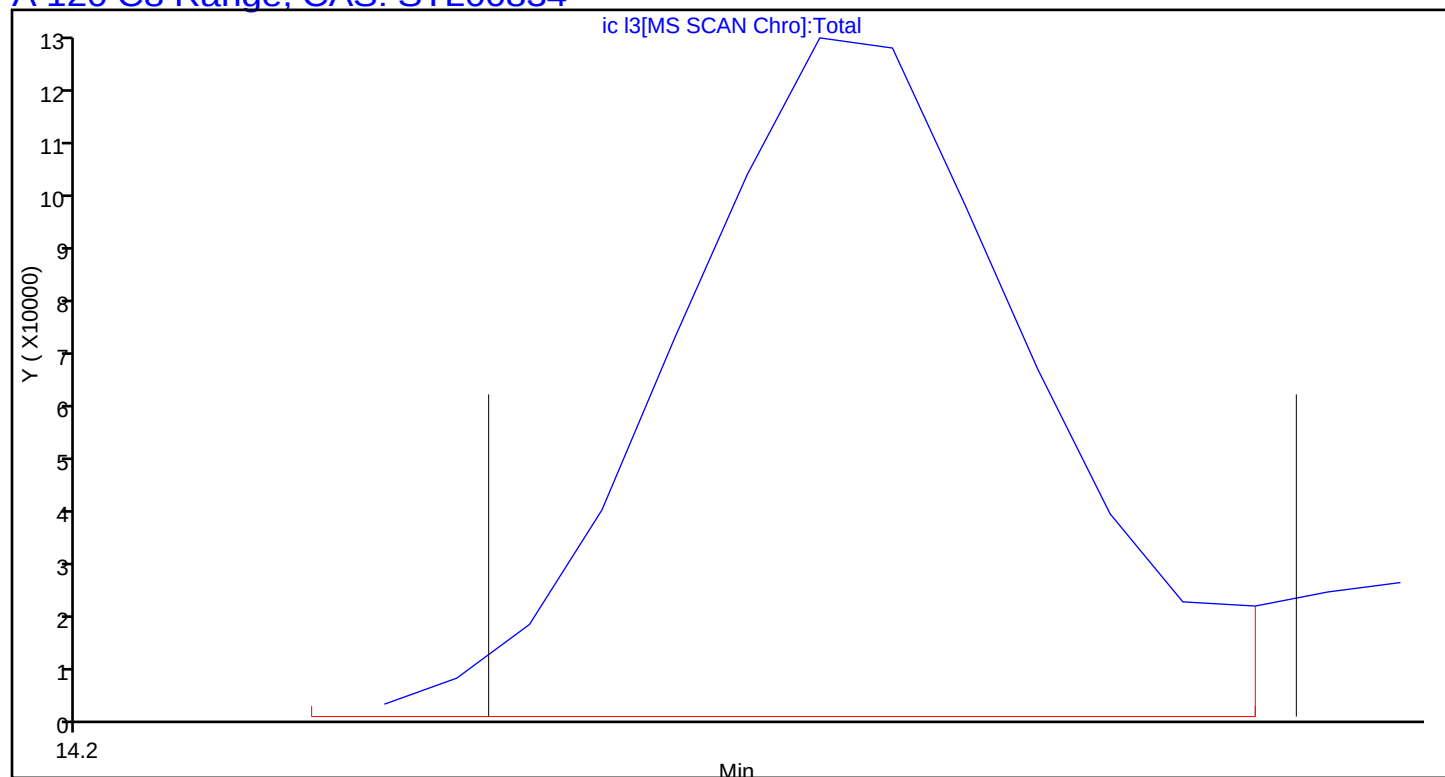
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 120 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l4.D
 Lims ID: IC L4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 03-Mar-2015 12:22:30 ALS Bottle#: 9 Worklist Smp#: 5
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 023285
 Misc. Info.: 140-0001421-005
 Operator ID: 7126 Instrument ID: ME
 Sublist: chrom-ME_TO15*sub4
 Method: \\KNXCHROM\ChromData\ME\20150302-1421.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 14:48:18 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK030

First Level Reviewer: barlozhetskayaa

Date: 03-Mar-2015 13:31:20

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	8.496	8.495	0.001	98	364122	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.734	10.736	-0.002	96	1648528	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.560	15.558	0.002	90	1529409	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.216	17.213	0.003	89	1160885	4.00	4.03	
6 Chlorodifluoromethane	67	3.384	3.383	0.001	97	15682	0.4001	0.3811	
7 Propene	41	3.395	3.396	-0.001	96	54894	0.4001	0.4249	
8 Dichlorodifluoromethane	85	3.443	3.443	0.000	100	144991	0.4001	0.3898	
9 Chloromethane	52	3.621	3.620	0.001	61	14897	0.4001	0.3906	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.622	-0.001	88	89475	0.4001	0.3798	
11 Acetaldehyde	44	3.762	3.763	-0.001	97	110100	2.00	2.45	
12 Vinyl chloride	62	3.783	3.784	-0.001	99	45406	0.4001	0.3746	
14 Butane	43	3.869	3.868	0.001	84	79925	0.4001	0.3939	
13 Butadiene	54	3.869	3.868	0.001	67	37128	0.4001	0.3807	
15 Bromomethane	94	4.177	4.179	-0.002	98	40085	0.4001	0.3843	
16 Chloroethane	64	4.312	4.313	-0.001	91	21285	0.4001	0.3708	
17 Ethanol	31	4.392	4.397	-0.005	97	87307	2.00	2.01	
18 Vinyl bromide	106	4.603	4.603	0.000	98	42276	0.4001	0.3862	
19 2-Methylbutane	43	4.646	4.649	-0.003	91	55074	0.4001	0.3924	
21 Trichlorofluoromethane	101	4.862	4.864	-0.002	100	131405	0.4001	0.3959	
20 Acrolein	56	4.872	4.871	0.001	33	16639	0.4001	0.3968	
22 Acetonitrile	40	4.932	4.938	-0.006	96	14402	0.4001	0.3607	
23 Acetone	58	4.975	4.979	-0.004	99	73661	1.20	1.54	
24 Isopropyl alcohol	45	5.056	5.065	-0.009	96	172602	1.20	1.19	
25 Pentane	72	5.083	5.081	0.002	97	7869	0.4001	0.3833	
26 Ethyl ether	31	5.239	5.240	-0.001	94	34384	0.4001	0.3688	
27 1,1-Dichloroethene	96	5.568	5.568	0.000	93	39813	0.4001	0.3865	
29 2-Methyl-2-propanol	59	5.660	5.663	-0.003	96	81662	0.4001	0.3823	
28 Acrylonitrile	53	5.670	5.673	-0.003	93	26649	0.4001	0.3407	
30 1,1,2-Trichloro-1,2,2-trif	101	5.741	5.738	0.003	97	90823	0.4001	0.3867	
31 Methylene Chloride	84	5.918	5.921	-0.003	93	39362	0.4001	0.3950	

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	5.935	5.935	0.000	96	54955	0.4001	0.3842	
33 Carbon disulfide	76	6.080	6.082	-0.002	99	110605	0.4001	0.3894	
34 trans-1,2-Dichloroethene	96	6.727	6.732	-0.005	94	41190	0.4001	0.3761	
35 2-Methylpentane	43	6.744	6.744	0.000	95	107829	0.4001	0.3914	
36 Methyl tert-butyl ether	73	6.851	6.849	0.002	96	96992	0.4001	0.3521	
37 1,1-Dichloroethane	63	7.159	7.161	-0.002	100	82751	0.4001	0.3780	
38 Vinyl acetate	43	7.261	7.262	-0.001	100	104722	0.4001	0.3391	
39 2-Butanone (MEK)	72	7.720	7.716	0.004	97	18208	0.4001	0.3824	
40 Hexane	56	7.730	7.735	-0.005	86	39829	0.4001	0.3835	
140 Isopropyl ether	45	7.892	7.893	-0.001	96	133433	0.4001	0.3560	
41 cis-1,2-Dichloroethene	96	8.156	8.158	-0.002	98	43268	0.4001	0.3765	
42 Ethyl acetate	43	8.340	8.340	0.000	97	80553	0.4001	0.3478	
43 Chloroform	83	8.507	8.505	0.002	96	102185	0.4001	0.3797	
143 Tert-butyl ethyl ether	59	8.582	8.582	0.000	97	111226	0.4001	0.3480	
44 Tetrahydrofuran	42	8.906	8.905	0.001	91	43138	0.4001	0.3432	
45 1,1,1-Trichloroethane	97	9.542	9.543	-0.001	95	120276	0.4001	0.3831	
46 1,2-Dichloroethane	62	9.661	9.662	-0.001	98	75186	0.4001	0.3646	
47 n-Butanol	31	10.119	10.114	0.005	86	19207	0.4001	0.3777	
49 Cyclohexane	69	10.162	10.159	0.003	73	20462	0.4001	0.3809	
48 Benzene	78	10.162	10.161	0.001	95	112727	0.4001	0.3633	
50 Carbon tetrachloride	117	10.184	10.184	0.000	98	129373	0.4001	0.3963	
51 2,3-Dimethylpentane	71	10.281	10.280	0.001	89	26263	0.4001	0.3545	
52 Thiophene	84	10.448	10.449	-0.001	98	63892	0.4001	0.3563	
141 Tert-amyl methyl ether	73	10.653	10.651	0.002	95	93593	0.4001	0.3489	
53 Isooctane	57	10.944	10.947	-0.003	97	232161	0.4001	0.3764	
54 n-Heptane	71	11.343	11.341	0.002	94	41900	0.4001	0.3593	
55 1,2-Dichloropropane	63	11.435	11.434	0.001	81	42535	0.4001	0.3550	
56 Trichloroethene	130	11.462	11.467	-0.005	97	65063	0.4001	0.3739	
57 Dibromomethane	93	11.559	11.558	0.001	96	53803	0.4001	0.3649	
58 Dichlorobromomethane	83	11.704	11.706	-0.002	99	102919	0.4001	0.3626	
59 1,4-Dioxane	88	11.715	11.721	-0.006	96	16082	0.4001	0.3588	
60 Methyl methacrylate	41	11.802	11.802	0.000	91	52242	0.4001	0.3366	
61 Methylcyclohexane	83	12.249	12.250	-0.001	89	94138	0.4001	0.3709	
62 4-Methyl-2-pentanone (MIBK)	43	12.675	12.673	0.002	99	109540	0.4001	0.4133	
63 cis-1,3-Dichloropropene	75	12.734	12.734	0.000	97	68704	0.4001	0.3509	
64 trans-1,3-Dichloropropene	75	13.446	13.446	0.000	96	62315	0.4001	0.3295	
65 Toluene	91	13.559	13.562	-0.003	93	133480	0.4001	0.3482	
66 1,1,2-Trichloroethane	83	13.646	13.648	-0.002	96	37093	0.4001	0.3444	
67 2-Methylthiophene	97	13.716	13.718	-0.002	98	109264	0.4001	0.3484	
68 3-Methylthiophene	97	13.921	13.923	-0.002	99	108133	0.4001	0.3538	
69 2-Hexanone	58	14.034	14.032	0.002	91	41025	0.4001	0.3452	
70 n-Octane	85	14.260	14.260	0.000	95	46689	0.4001	0.3538	
71 Chlorodibromomethane	129	14.352	14.356	-0.004	98	101444	0.4001	0.3525	
72 Ethylene Dibromide	107	14.649	14.651	-0.002	98	74550	0.4001	0.3475	
73 Tetrachloroethene	129	14.719	14.720	-0.001	94	61704	0.4001	0.3609	
74 Chlorobenzene	112	15.609	15.607	0.002	92	112976	0.4001	0.3537	
75 2,3-Dimethylheptane	43	15.619	15.621	-0.002	95	145713	0.4001	0.3649	
76 Ethylbenzene	91	15.894	15.896	-0.002	99	174265	0.4001	0.3504	
77 2-Ethylthiophene	97	16.002	16.003	-0.001	99	138136	0.4001	0.3513	
78 m-Xylene & p-Xylene	91	16.056	16.060	-0.004	98	275841	0.8002	0.7196	
81 n-Nonane	57	16.477	16.479	-0.002	94	92104	0.4001	0.3454	
79 Bromoform	173	16.514	16.516	-0.002	95	82663	0.4001	0.3389	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
80 Styrene	104	16.531	16.530	0.001	98	92588	0.4001	0.3365	
82 o-Xylene	91	16.590	16.591	-0.001	98	141043	0.4001	0.3523	
83 1,1,2,2-Tetrachloroethane	83	16.919	16.921	-0.002	98	81555	0.4001	0.3322	
84 1,2,3-Trichloropropane	110	17.081	17.083	-0.001	93	30965	0.4001	0.3367	
85 Isopropylbenzene	105	17.178	17.180	-0.002	97	195778	0.4001	0.3468	
86 N-Propylbenzene	120	17.728	17.728	0.000	99	50623	0.4001	0.3300	
87 2-Chlorotoluene	126	17.776	17.776	0.000	98	50604	0.4001	0.3358	
88 4-Ethyltoluene	105	17.884	17.884	0.000	99	166494	0.4001	0.3359	
89 1,3,5-Trimethylbenzene	120	17.960	17.960	0.000	93	83299	0.4001	0.3320	
90 Alpha Methyl Styrene	118	18.197	18.196	0.001	86	67648	0.4001	0.3153	
91 n-Decane	57	18.251	18.252	-0.001	89	103948	0.4001	0.3456	
92 tert-Butylbenzene	119	18.391	18.392	-0.001	92	168208	0.4001	0.3524	
93 1,2,4-Trimethylbenzene	105	18.402	18.405	-0.003	96	152323	0.4001	0.3496	
95 sec-Butylbenzene	105	18.666	18.665	0.001	97	211009	0.4001	0.3516	
94 1,3-Dichlorobenzene	146	18.682	18.683	-0.001	98	105114	0.4001	0.3444	
96 Benzyl chloride	91	18.758	18.759	-0.001	97	117991	0.4001	0.3180	
97 1,4-Dichlorobenzene	146	18.769	18.771	-0.003	92	100870	0.4001	0.3387	
98 4-Isopropyltoluene	119	18.828	18.830	-0.002	97	179219	0.4001	0.3439	
99 1,2,3-Trimethylbenzene	105	18.882	18.884	-0.002	99	115814	0.4001	0.3460	
100 Butylcyclohexane	83	18.936	18.937	-0.001	88	116891	0.4001	0.3560	
102 2,3-Dihydroindene	117	19.135	19.134	0.001	92	141565	0.4001	0.3492	
101 1,2-Dichlorobenzene	146	19.135	19.136	-0.001	83	101085	0.4001	0.3474	
103 Indene	116	19.265	19.266	-0.001	89	101687	0.4001	0.3358	
104 n-Butylbenzene	91	19.270	19.270	0.000	98	150469	0.4001	0.3355	
106 Undecane	57	19.583	19.581	0.002	93	85846	0.4001	0.3154	
105 1,2-Dimethyl-4-Ethylbenzen	119	19.642	19.644	-0.002	98	127806	0.4001	0.3418	
142 1,2-Dibromo-3-Chloropropan	157	19.745	19.747	-0.002	94	42665	0.4001	0.3148	
107 1,2,4,5-Tetramethylbenzene	119	20.030	20.032	-0.002	97	140659	0.4001	0.3248	
108 1,2,3,5-Tetramethylbenzene	119	20.084	20.085	-0.001	95	87856	0.4001	0.3262	
109 1,2,3,4-Tetramethylbenzene	119	20.483	20.484	-0.001	97	119541	0.4001	0.3283	
110 Dodecane	57	20.640	20.641	-0.001	91	73567	0.4001	0.3536	
111 1,2,4-Trichlorobenzene	180	20.845	20.846	-0.001	94	56773	0.4001	0.3302	
112 Naphthalene	128	20.990	20.988	0.002	99	118773	0.4001	0.3340	
113 Benzo(b)thiophene	134	21.098	21.097	0.001	99	97438	0.4001	0.3435	
114 Hexachlorobutadiene	225	21.206	21.206	0.000	93	60586	0.4001	0.3176	
115 1,2,3-Trichlorobenzene	180	21.281	21.281	0.000	94	48603	0.4001	0.3427	
116 2-Methylnaphthalene	142	22.133	22.134	-0.001	100	62575	1.25	1.11	
117 1-Methylnaphthalene	142	22.333	22.332	0.001	99	60125	1.25	1.11	
A 118 C6 Range	1	7.730	(7.676-7.784)		0	508243	0.4001	0.3662	
A 119 Toluene Range	1	13.559	(13.529-13.589)		0	354298	0.4001	0.3624	
A 120 C8 Range	1	14.260	(14.230-14.290)		0	494601	0.4001	0.3693	
S 124 Xylenes, Total	100				0		1.20	1.07	
S 144 1,2-Dichloroethene, Total	1				0		0.8002	0.7526	

Reagents:

CCN2C20X1.0_00001

Amount Added: 200.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I4.D

Injection Date: 03-Mar-2015 12:22:30

Instrument ID: ME

Operator ID: 7126

Lims ID: IC L4

Worklist Smp#: 5

Client ID:

Purge Vol: 500.000 mL

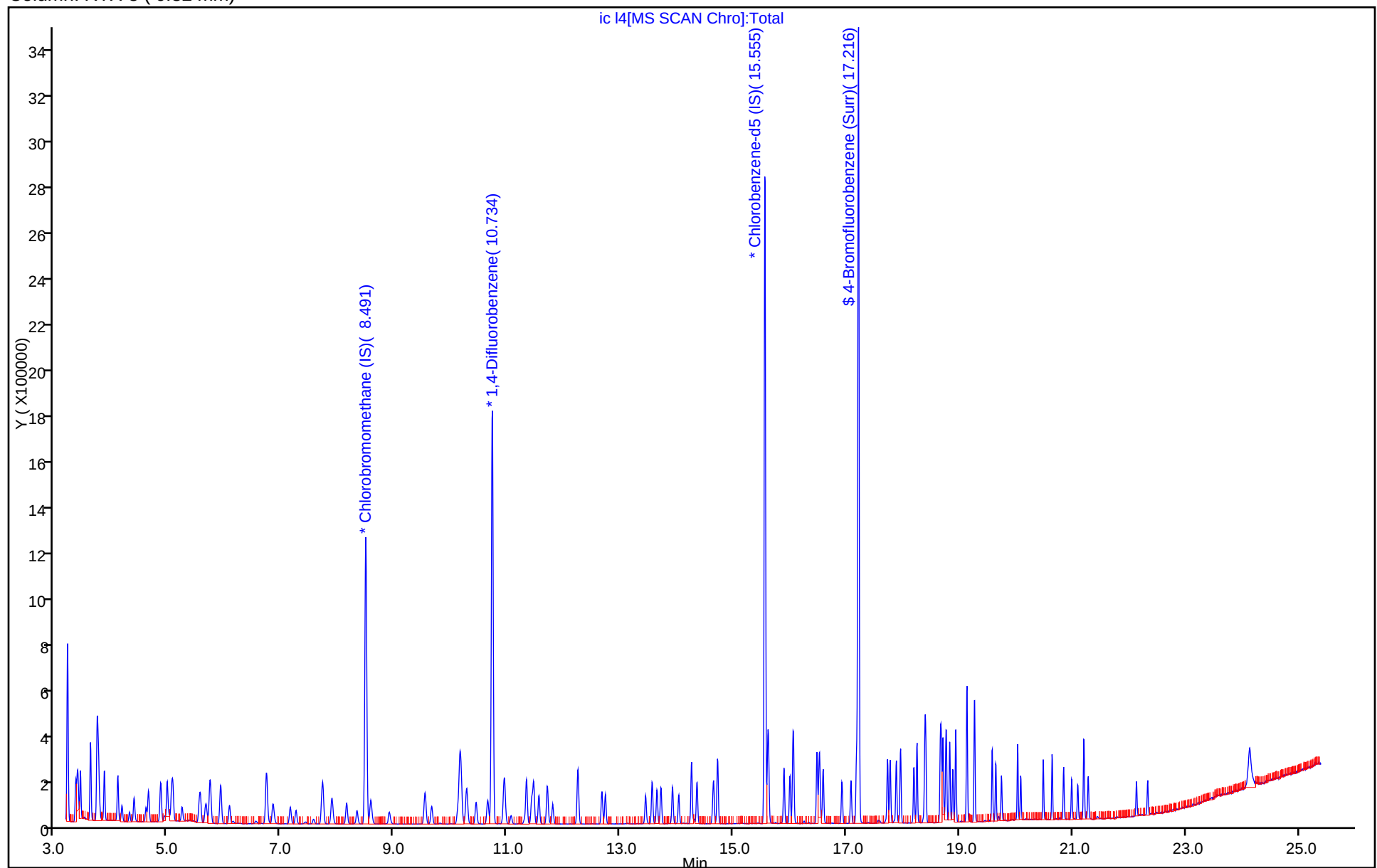
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I4.D

Injection Date: 03-Mar-2015 12:22:30

Instrument ID: ME

Lims ID: IC L4

Client ID:

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 5

Purge Vol: 500.000 mL

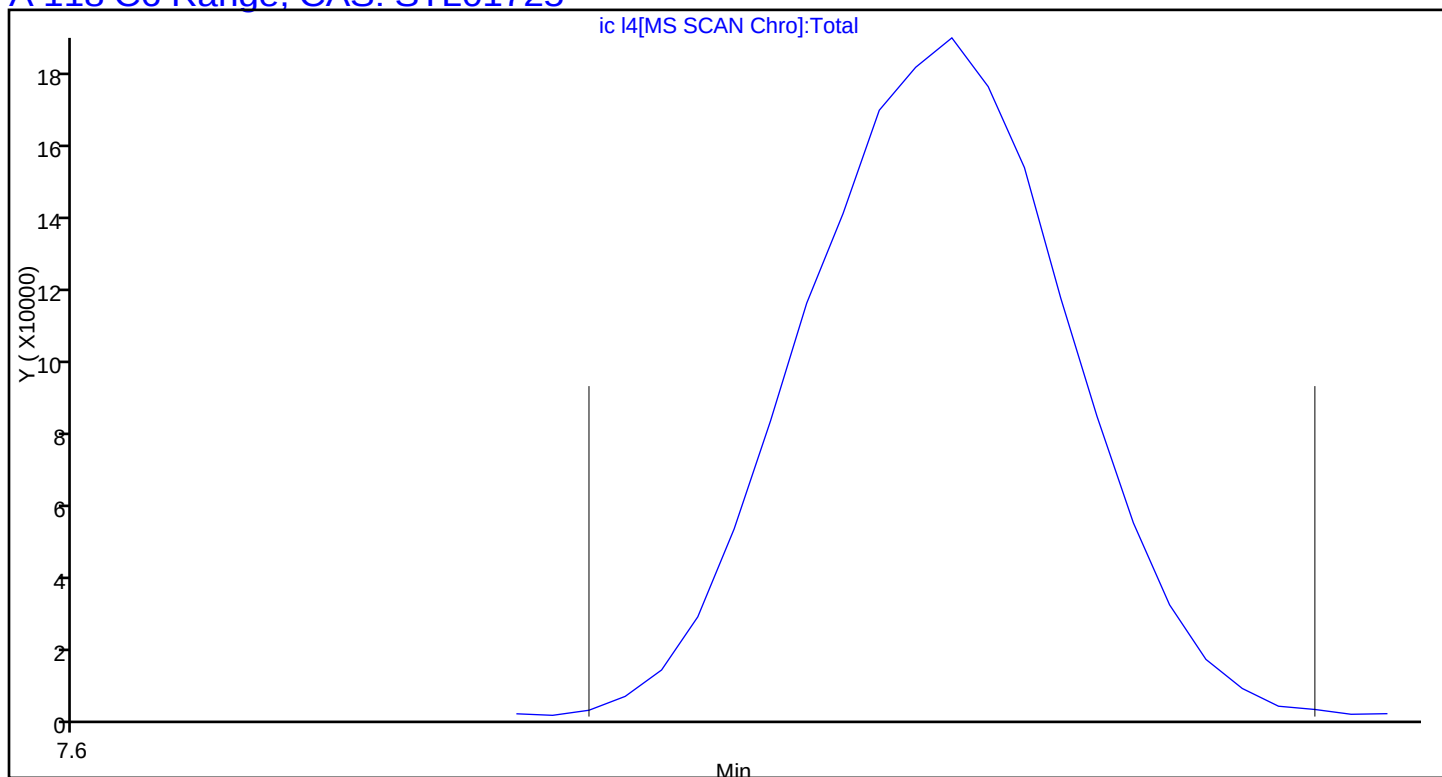
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I4.D

Injection Date: 03-Mar-2015 12:22:30

Instrument ID: ME

Lims ID: IC L4

Client ID:

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 5

Purge Vol: 500.000 mL

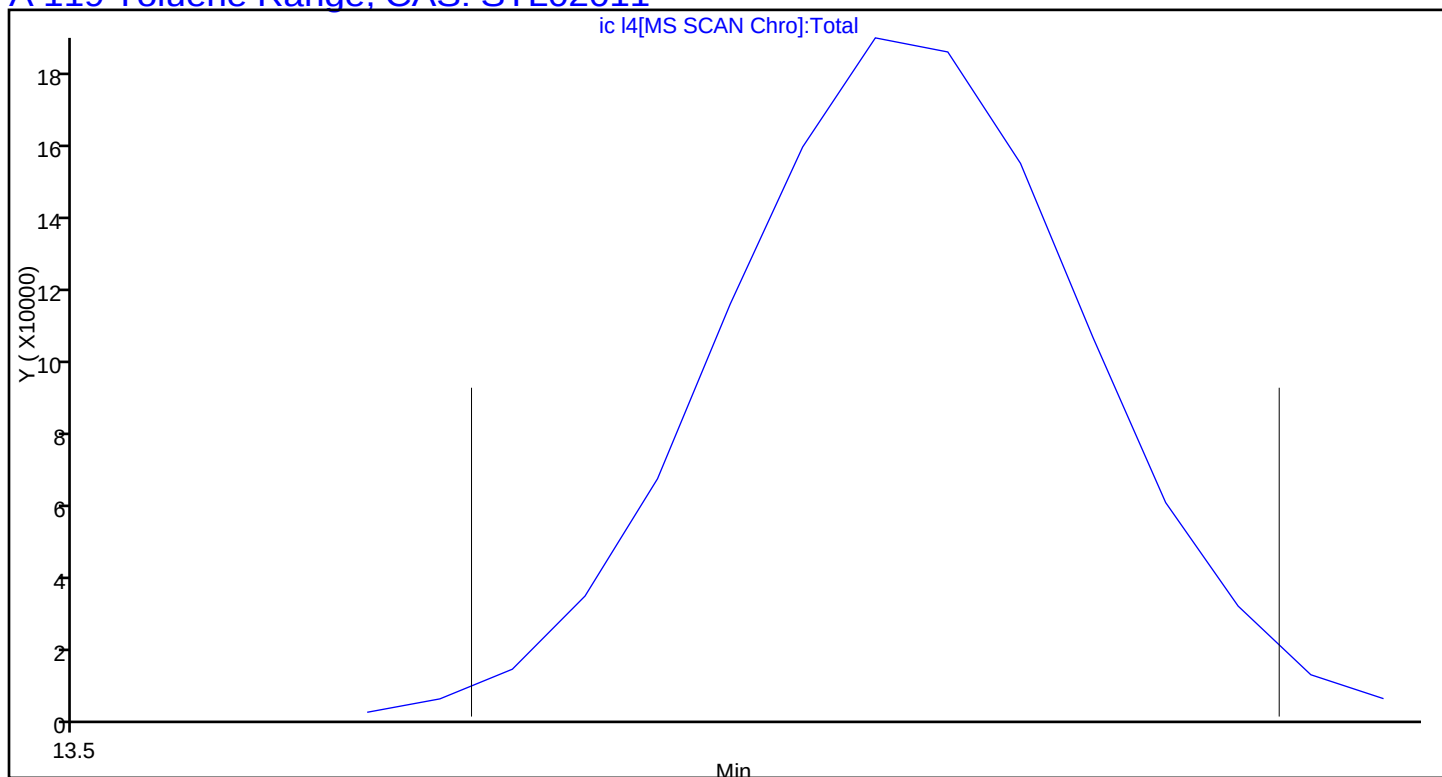
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 119 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I4.D

Injection Date: 03-Mar-2015 12:22:30

Instrument ID: ME

Lims ID: IC L4

Client ID:

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 5

Purge Vol: 500.000 mL

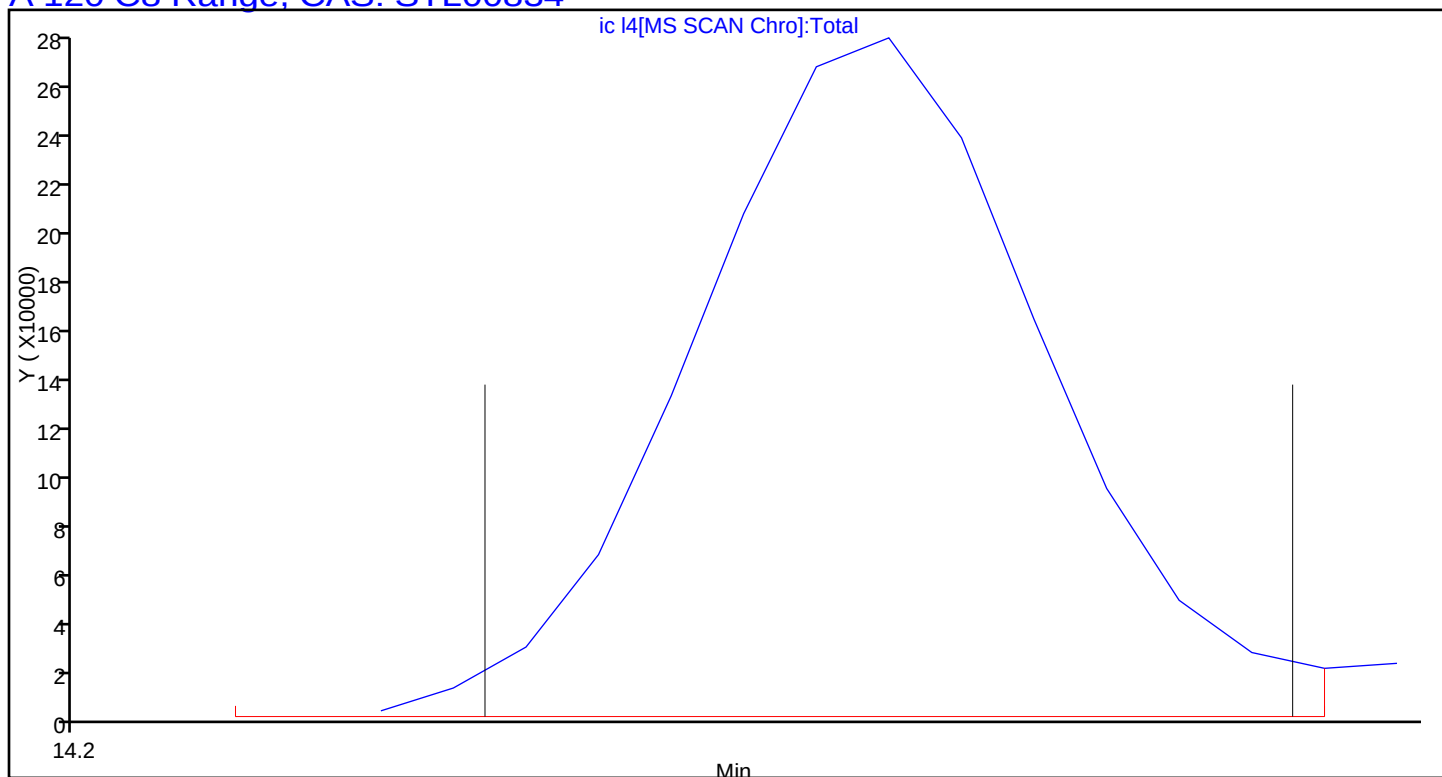
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 120 C8 Range, CAS: STL00834

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I5.D
 Lims ID: IC L5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 03-Mar-2015 13:07:30 ALS Bottle#: 10 Worklist Smp#: 6
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 023284
 Misc. Info.: 140-0001421-006
 Operator ID: 7126 Instrument ID: ME
 Sublist: chrom-ME_TO15*sub4
 Method: \\KNXCHROM\ChromData\ME\20150302-1421.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 14:48:21 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK030

First Level Reviewer: barlozhetskayaa

Date: 03-Mar-2015 14:06:38

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	8.496	8.495	0.001	96	342153	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.734	10.736	-0.002	93	1458138	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.560	15.558	0.002	79	1293268	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.210	17.213	-0.003	86	954464	4.00	3.92	
6 Chlorodifluoromethane	67	3.384	3.383	0.001	94	41686	1.00	1.08	
7 Propene	41	3.395	3.396	-0.001	92	125099	1.00	1.03	
8 Dichlorodifluoromethane	85	3.443	3.443	0.000	99	377532	1.00	1.08	
9 Chloromethane	52	3.621	3.620	0.001	61	38147	1.00	1.06	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.622	-0.001	88	236758	1.00	1.07	
11 Acetaldehyde	44	3.762	3.763	-0.001	94	257966	5.01	6.11	
12 Vinyl chloride	62	3.783	3.784	-0.001	99	119430	1.00	1.05	
14 Butane	43	3.869	3.868	0.001	84	208252	1.00	1.09	
13 Butadiene	54	3.869	3.868	0.001	67	97146	1.00	1.06	
15 Bromomethane	94	4.177	4.179	-0.002	98	103076	1.00	1.05	
16 Chloroethane	64	4.312	4.313	-0.001	91	56020	1.00	1.04	
17 Ethanol	31	4.392	4.397	-0.005	97	204494	5.01	5.02	
18 Vinyl bromide	106	4.603	4.603	0.000	96	109821	1.00	1.07	
19 2-Methylbutane	43	4.651	4.649	0.002	90	144481	1.00	1.10	
21 Trichlorofluoromethane	101	4.867	4.864	0.003	98	336686	1.00	1.08	
20 Acrolein	56	4.867	4.871	-0.004	21	34280	1.00	0.8701	
22 Acetonitrile	40	4.937	4.938	-0.001	91	35468	1.00	0.9454	
23 Acetone	58	4.980	4.979	0.001	57	166219	3.01	3.69	
24 Isopropyl alcohol	45	5.056	5.065	-0.009	97	423815	3.01	3.10	
25 Pentane	72	5.077	5.081	-0.004	96	20295	1.00	1.05	
26 Ethyl ether	31	5.239	5.240	-0.001	94	82047	1.00	0.9366	
27 1,1-Dichloroethene	96	5.568	5.568	0.000	88	102239	1.00	1.06	
29 2-Methyl-2-propanol	59	5.649	5.663	-0.014	96	200193	1.00	1.00	
28 Acrylonitrile	53	5.670	5.673	-0.003	78	68072	1.00	0.9262	
30 1,1,2-Trichloro-1,2,2-trif	101	5.735	5.738	-0.003	96	231071	1.00	1.05	
31 Methylene Chloride	84	5.924	5.921	0.003	90	100592	1.00	1.07	

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	5.935	5.935	0.000	90	140589	1.00	1.05	
33 Carbon disulfide	76	6.080	6.082	-0.002	99	282680	1.00	1.06	
34 trans-1,2-Dichloroethene	96	6.733	6.732	0.001	88	109852	1.00	1.07	
35 2-Methylpentane	43	6.744	6.744	0.000	95	279254	1.00	1.08	
36 Methyl tert-butyl ether	73	6.846	6.849	-0.003	95	249597	1.00	0.9642	
37 1,1-Dichloroethane	63	7.159	7.161	-0.002	99	215780	1.00	1.05	
38 Vinyl acetate	43	7.261	7.262	-0.001	100	267376	1.00	0.9213	
39 2-Butanone (MEK)	72	7.714	7.716	-0.002	90	43254	1.00	0.9666	
40 Hexane	56	7.736	7.735	0.001	87	111760	1.00	1.15	
140 Isopropyl ether	45	7.892	7.893	-0.001	96	343735	1.00	0.9759	
41 cis-1,2-Dichloroethene	96	8.156	8.158	-0.002	98	112776	1.00	1.04	
42 Ethyl acetate	43	8.334	8.340	-0.006	97	211676	1.00	0.9727	
43 Chloroform	83	8.501	8.505	-0.004	44	264771	1.00	1.05	
143 Tert-butyl ethyl ether	59	8.582	8.582	0.000	96	297268	1.00	0.9897	
44 Tetrahydrofuran	42	8.900	8.905	-0.005	90	109223	1.00	0.9247	
45 1,1,1-Trichloroethane	97	9.542	9.543	-0.001	94	313461	1.00	1.06	
46 1,2-Dichloroethane	62	9.661	9.662	-0.001	97	192523	1.00	1.06	
47 n-Butanol	31	10.114	10.114	0.000	82	44586	1.00	0.99	
49 Cyclohexane	69	10.157	10.159	-0.002	77	51839	1.00	1.09	
48 Benzene	78	10.157	10.161	-0.004	94	283473	1.00	1.03	
50 Carbon tetrachloride	117	10.184	10.184	0.000	97	337360	1.00	1.17	
51 2,3-Dimethylpentane	71	10.281	10.280	0.001	89	70487	1.00	1.08	
52 Thiophene	84	10.448	10.449	-0.001	98	165330	1.00	1.04	
141 Tert-amyl methyl ether	73	10.648	10.651	-0.003	80	248115	1.00	1.09	
53 Isooctane	57	10.944	10.947	-0.003	97	595676	1.00	1.09	
54 n-Heptane	71	11.338	11.341	-0.003	94	109792	1.00	1.06	
55 1,2-Dichloropropane	63	11.435	11.434	0.001	80	106235	1.00	1.00	
56 Trichloroethene	130	11.467	11.467	0.000	97	164730	1.00	1.07	
57 Dibromomethane	93	11.559	11.558	0.001	95	138457	1.00	1.06	
58 Dichlorobromomethane	83	11.705	11.706	-0.002	98	276125	1.00	1.10	
59 1,4-Dioxane	88	11.710	11.721	-0.011	33	43655	1.00	1.10	
60 Methyl methacrylate	41	11.802	11.802	0.000	84	139047	1.00	1.01	
61 Methylcyclohexane	83	12.249	12.250	-0.001	88	244441	1.00	1.09	
62 4-Methyl-2-pentanone (MIBK)	43	12.670	12.673	-0.003	96	256506	1.00	1.09	
63 cis-1,3-Dichloropropene	75	12.734	12.734	0.000	97	180334	1.00	1.04	
64 trans-1,3-Dichloropropene	75	13.446	13.446	0.000	96	170643	1.00	1.07	
65 Toluene	91	13.559	13.562	-0.003	93	340457	1.00	1.05	
66 1,1,2-Trichloroethane	83	13.646	13.648	-0.002	89	96655	1.00	1.06	
67 2-Methylthiophene	97	13.716	13.718	-0.002	98	280452	1.00	1.06	
68 3-Methylthiophene	97	13.921	13.923	-0.002	99	276210	1.00	1.07	
69 2-Hexanone	58	14.029	14.032	-0.003	91	112023	1.00	1.11	
70 n-Octane	85	14.261	14.260	0.000	95	120793	1.00	1.08	
71 Chlorodibromomethane	129	14.358	14.356	0.002	96	267932	1.00	1.10	
72 Ethylene Dibromide	107	14.649	14.651	-0.002	97	193008	1.00	1.06	
73 Tetrachloroethene	129	14.719	14.720	-0.001	94	161455	1.00	1.12	
74 Chlorobenzene	112	15.609	15.607	0.002	76	288687	1.00	1.07	
75 2,3-Dimethylheptane	43	15.619	15.621	-0.002	92	366742	1.00	1.09	
76 Ethylbenzene	91	15.894	15.896	-0.002	99	439617	1.00	1.05	
77 2-Ethylthiophene	97	16.002	16.003	-0.001	78	350080	1.00	1.05	
78 m-Xylene & p-Xylene	91	16.062	16.060	0.002	99	690561	2.00	2.13	
81 n-Nonane	57	16.477	16.479	-0.002	93	235397	1.00	1.04	
79 Bromoform	173	16.515	16.516	-0.002	95	229701	1.00	1.11	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
80 Styrene	104	16.531	16.530	0.001	80	247408	1.00	1.06	
82 o-Xylene	91	16.590	16.591	-0.001	95	352342	1.00	1.04	
83 1,1,2,2-Tetrachloroethane	83	16.919	16.921	-0.002	98	216582	1.00	1.04	
84 1,2,3-Trichloropropane	110	17.081	17.083	-0.001	93	81362	1.00	1.05	
85 Isopropylbenzene	105	17.178	17.180	-0.002	97	495147	1.00	1.04	
86 N-Propylbenzene	120	17.728	17.728	0.000	90	130597	1.00	1.01	
87 2-Chlorotoluene	126	17.776	17.776	0.000	72	130471	1.00	1.02	
88 4-Ethyltoluene	105	17.884	17.884	0.000	98	449325	1.00	1.07	
89 1,3,5-Trimethylbenzene	120	17.960	17.960	0.000	92	220525	1.00	1.04	
90 Alpha Methyl Styrene	118	18.197	18.196	0.001	84	191188	1.00	1.05	
91 n-Decane	57	18.251	18.252	-0.001	89	271004	1.00	1.07	
92 tert-Butylbenzene	119	18.391	18.392	-0.001	86	444848	1.00	1.10	
93 1,2,4-Trimethylbenzene	105	18.402	18.405	-0.003	91	404168	1.00	1.10	
95 sec-Butylbenzene	105	18.666	18.665	0.001	97	564356	1.00	1.11	
94 1,3-Dichlorobenzene	146	18.682	18.683	-0.001	99	280233	1.00	1.09	
96 Benzyl chloride	91	18.758	18.759	-0.001	97	359020	1.00	1.14	
97 1,4-Dichlorobenzene	146	18.769	18.771	-0.002	92	273248	1.00	1.09	
98 4-Isopropyltoluene	119	18.828	18.830	-0.002	86	493804	1.00	1.12	
99 1,2,3-Trimethylbenzene	105	18.882	18.884	-0.002	93	310783	1.00	1.10	
100 Butylcyclohexane	83	18.936	18.937	-0.001	86	295512	1.00	1.06	
102 2,3-Dihydroindene	117	19.135	19.134	0.001	90	375688	1.00	1.10	
101 1,2-Dichlorobenzene	146	19.135	19.136	-0.001	84	270662	1.00	1.10	
103 Indene	116	19.265	19.266	-0.001	79	280210	1.00	1.09	
104 n-Butylbenzene	91	19.270	19.270	0.000	96	435550	1.00	1.15	
106 Undecane	57	19.583	19.581	0.002	93	254629	1.00	1.11	
105 1,2-Dimethyl-4-Ethylbenzen	119	19.642	19.644	-0.002	96	361499	1.00	1.14	
142 1,2-Dibromo-3-Chloropropan	157	19.745	19.747	-0.002	95	131149	1.00	1.14	
107 1,2,4,5-Tetramethylbenzene	119	20.030	20.032	-0.002	96	421431	1.00	1.15	
108 1,2,3,5-Tetramethylbenzene	119	20.084	20.085	-0.001	94	261121	1.00	1.15	
109 1,2,3,4-Tetramethylbenzene	119	20.483	20.484	-0.001	96	352624	1.00	1.15	
110 Dodecane	57	20.640	20.641	-0.001	91	219944	1.00	1.25	
111 1,2,4-Trichlorobenzene	180	20.845	20.846	-0.001	95	166515	1.00	1.15	
112 Naphthalene	128	20.990	20.988	0.002	99	356923	1.00	1.19	
113 Benzo(b)thiophene	134	21.098	21.097	0.001	99	270821	1.00	1.13	
114 Hexachlorobutadiene	225	21.206	21.206	0.000	84	173629	1.00	1.08	
115 1,2,3-Trichlorobenzene	180	21.281	21.281	0.000	94	140618	1.00	1.17	
116 2-Methylnaphthalene	142	22.133	22.134	-0.001	100	170725	3.13	3.59	
117 1-Methylnaphthalene	142	22.333	22.332	0.001	99	159385	3.13	3.48	
A 118 C6 Range	1	7.736	(7.676-7.795)		0	1354141	1.00	1.10	
A 119 Toluene Range	1	13.559	(13.529-13.589)		0	892885	1.00	1.03	
A 120 C8 Range	1	14.261	(14.231-14.291)		0	1296421	1.00	1.09	
S 124 Xylenes, Total	100				0		3.00	3.17	
S 144 1,2-Dichloroethene, Total	1				0		2.00	2.11	

Reagents:

CCN2C00X2.5_00001

Amount Added: 200.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I5.D

Injection Date: 03-Mar-2015 13:07:30

Instrument ID: ME

Operator ID: 7126

Lims ID: IC L5

Worklist Smp#: 6

Client ID:

Purge Vol: 500.000 mL

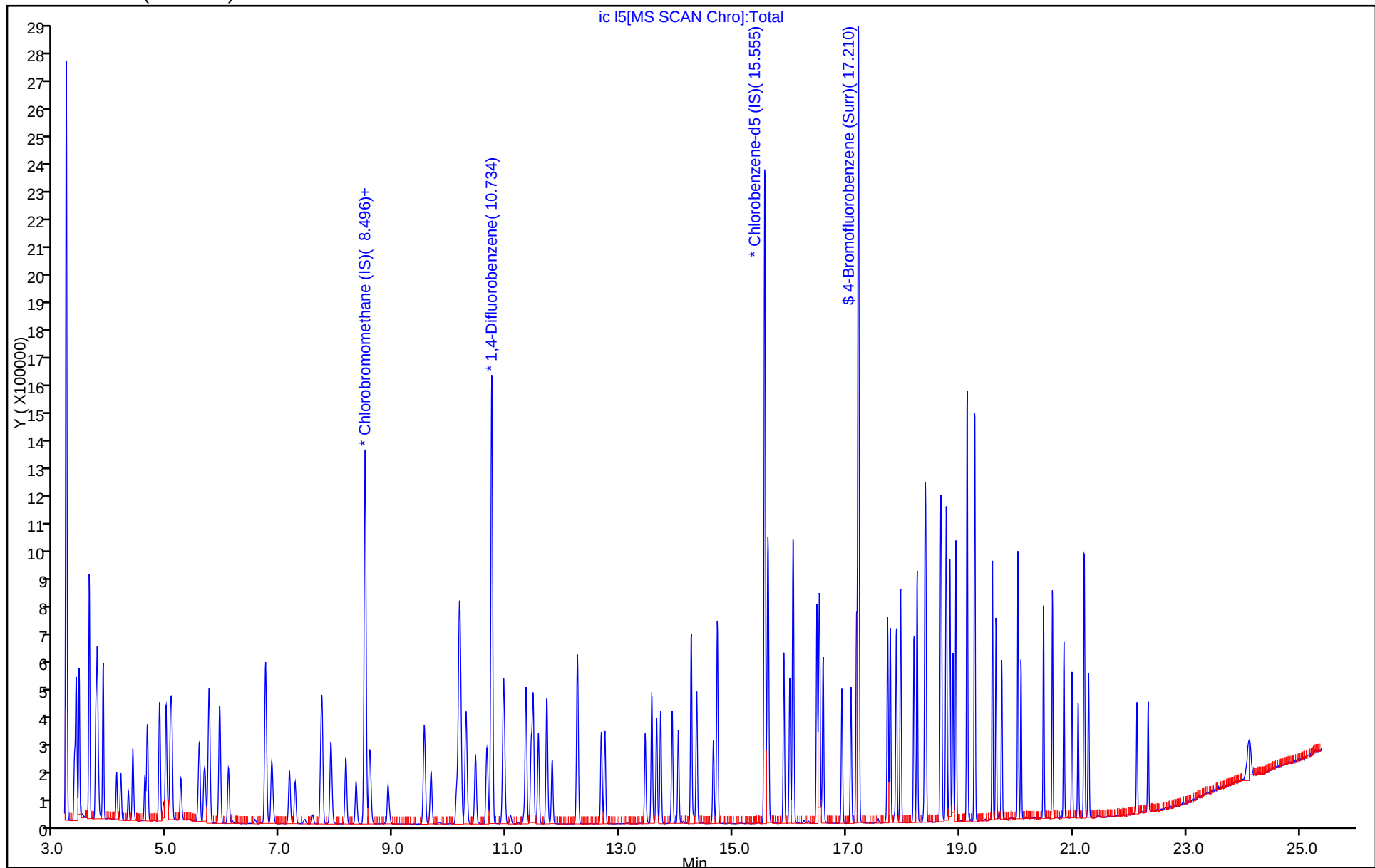
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I5.D

Injection Date: 03-Mar-2015 13:07:30

Instrument ID: ME

Lims ID: IC L5

Client ID:

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 6

Purge Vol: 500.000 mL

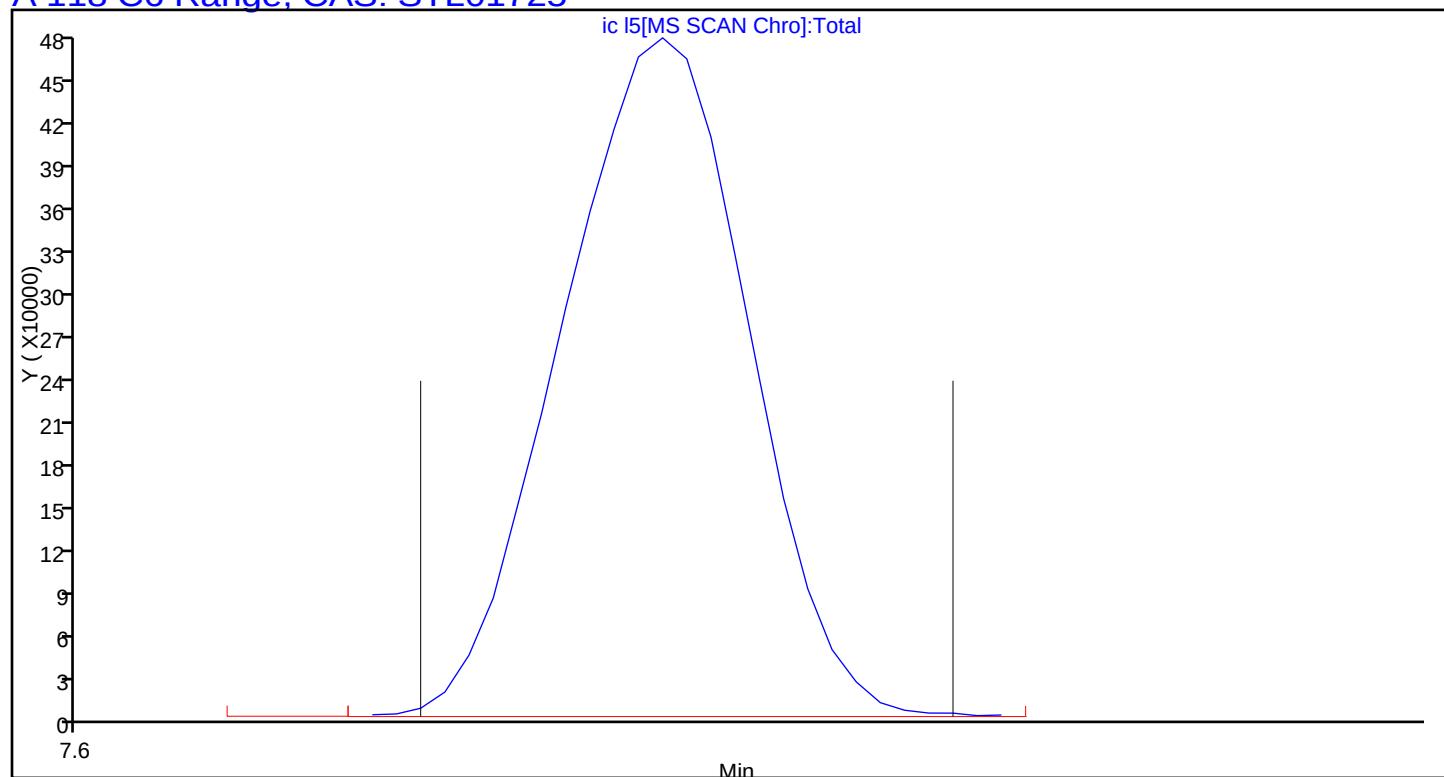
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I5.D

Injection Date: 03-Mar-2015 13:07:30

Instrument ID: ME

Lims ID: IC L5

Client ID:

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 6

Purge Vol: 500.000 mL

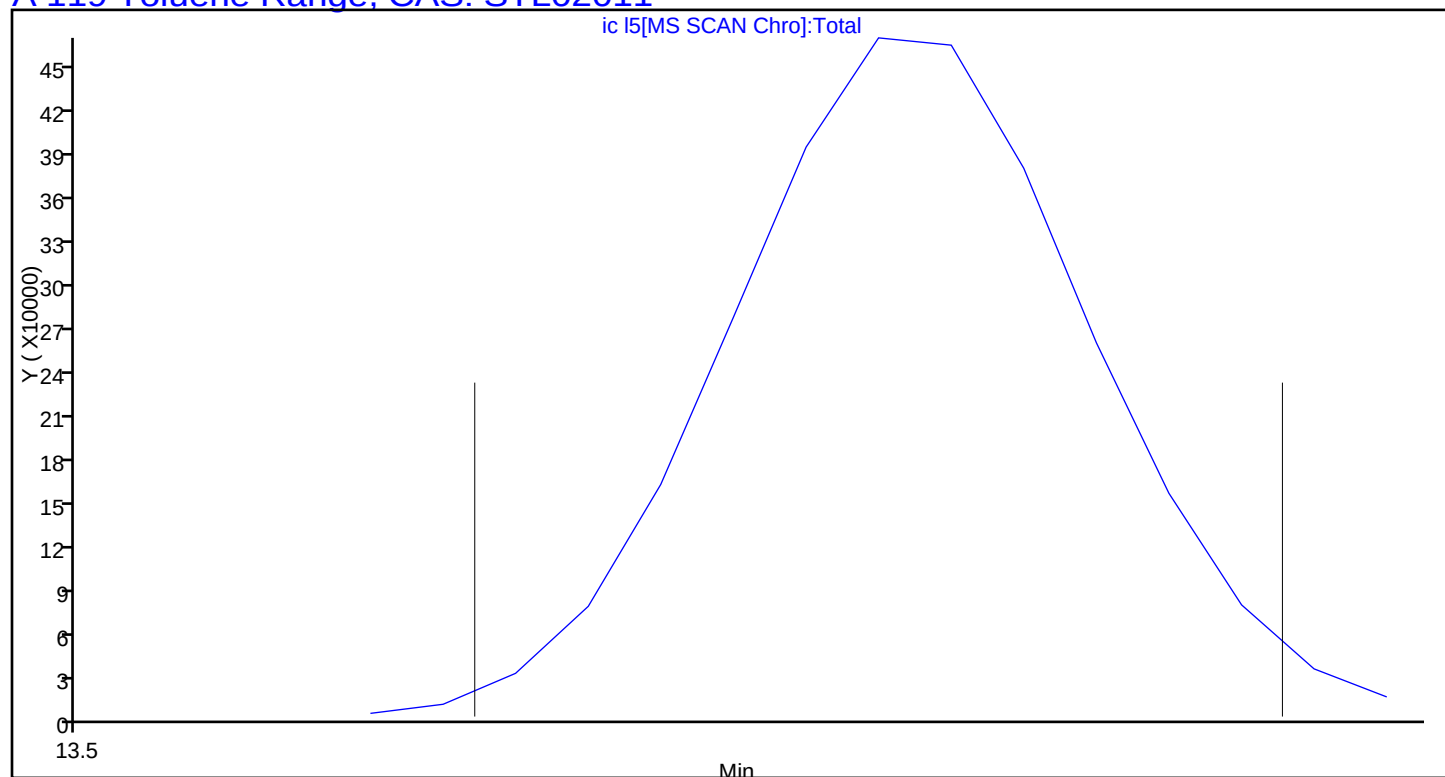
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 119 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I5.D

Injection Date: 03-Mar-2015 13:07:30

Instrument ID: ME

Lims ID: IC L5

Client ID:

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 6

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

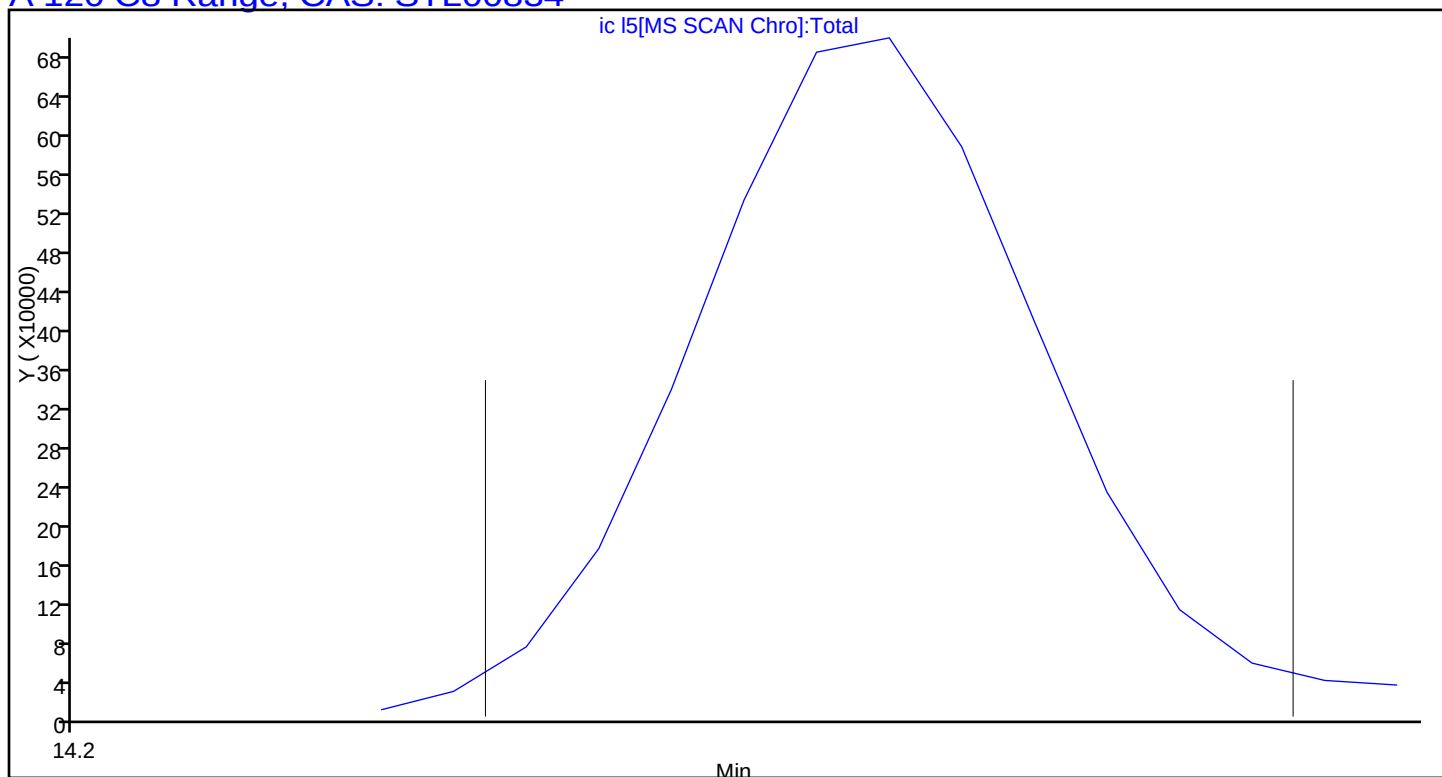
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 120 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\icis I6.D
 Lims ID: ICIS L6
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 03-Mar-2015 13:52:30 ALS Bottle#: 11 Worklist Smp#: 7
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 023283
 Misc. Info.: 140-0001421-007
 Operator ID: 7126 Instrument ID: ME
 Sublist: chrom-ME_TO15*sub4
 Method: \\KNXCHROM\ChromData\ME\20150302-1421.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 14:48:25 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK030

First Level Reviewer: barlozhetskayaa

Date: 03-Mar-2015 14:33:22

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	8.491	8.495	-0.004	96	370824	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.734	10.736	-0.002	93	1717824	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.560	15.558	0.002	74	1608985	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.216	17.213	0.003	89	1235349	4.00	4.08	
6 Chlorodifluoromethane	67	3.384	3.383	0.001	94	80925	2.00	1.93	
7 Propene	41	3.395	3.396	-0.001	95	238447	2.00	1.81	
8 Dichlorodifluoromethane	85	3.443	3.443	0.000	99	734474	2.00	1.94	
9 Chloromethane	52	3.621	3.620	0.001	59	75880	2.00	1.95	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.622	-0.001	88	478879	2.00	2.00	
11 Acetaldehyde	44	3.762	3.763	-0.001	95	427175	9.99	9.33	
12 Vinyl chloride	62	3.783	3.784	-0.001	99	245815	2.00	1.99	
14 Butane	43	3.864	3.868	-0.004	84	409333	2.00	1.98	
13 Butadiene	54	3.864	3.868	-0.004	68	202345	2.00	2.04	
15 Bromomethane	94	4.177	4.179	-0.002	99	213391	2.00	2.01	
16 Chloroethane	64	4.312	4.313	-0.001	93	117328	2.00	2.01	
17 Ethanol	31	4.392	4.397	-0.005	97	443397	9.99	10.0	
18 Vinyl bromide	106	4.603	4.603	0.000	96	225913	2.00	2.03	
19 2-Methylbutane	43	4.646	4.649	-0.003	90	288941	2.00	2.02	
21 Trichlorofluoromethane	101	4.862	4.864	-0.002	99	673090	2.00	1.99	
20 Acrolein	56	4.867	4.871	-0.004	19	83204	2.00	1.95	
22 Acetonitrile	40	4.937	4.938	-0.001	99	89190	2.00	2.19	
23 Acetone	58	4.975	4.979	-0.004	83	265980	5.99	5.45	
24 Isopropyl alcohol	45	5.056	5.065	-0.009	98	889632	5.99	6.01	
25 Pentane	72	5.077	5.081	-0.004	95	40595	2.00	1.94	
26 Ethyl ether	31	5.239	5.240	-0.001	95	203710	2.00	2.15	
27 1,1-Dichloroethene	96	5.568	5.568	0.000	89	209550	2.00	2.00	
29 2-Methyl-2-propanol	59	5.649	5.663	-0.014	96	422054	2.00	1.94	
28 Acrylonitrile	53	5.670	5.673	-0.003	87	166132	2.00	2.09	
30 1,1,2-Trichloro-1,2,2-trif	101	5.735	5.738	-0.003	97	475287	2.00	1.99	
31 Methylene Chloride	84	5.919	5.921	-0.003	91	186512	2.00	1.84	

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	5.935	5.935	0.000	92	285566	2.00	1.96	
33 Carbon disulfide	76	6.080	6.082	-0.002	99	575736	2.00	1.99	
34 trans-1,2-Dichloroethene	96	6.733	6.732	0.001	86	223155	2.00	2.00	
35 2-Methylpentane	43	6.744	6.744	0.000	94	565462	2.00	2.02	
36 Methyl tert-butyl ether	73	6.841	6.849	-0.008	97	610541	2.00	2.18	
37 1,1-Dichloroethane	63	7.159	7.161	-0.002	99	442748	2.00	1.99	
38 Vinyl acetate	43	7.256	7.262	-0.006	100	687689	2.00	2.19	
39 2-Butanone (MEK)	72	7.709	7.716	-0.007	93	87878	2.00	1.81	
40 Hexane	56	7.736	7.735	0.001	88	211060	2.00	2.00	
140 Isopropyl ether	45	7.887	7.893	-0.006	96	817547	2.00	2.14	
41 cis-1,2-Dichloroethene	96	8.156	8.158	-0.002	98	234713	2.00	2.01	
42 Ethyl acetate	43	8.334	8.340	-0.006	97	508312	2.00	2.16	
43 Chloroform	83	8.501	8.505	-0.004	63	544719	2.00	1.99	
143 Tert-butyl ethyl ether	59	8.577	8.582	-0.005	96	715902	2.00	2.20	
44 Tetrahydrofuran	42	8.895	8.905	-0.010	91	271450	2.00	2.12	
45 1,1,1-Trichloroethane	97	9.542	9.543	-0.001	87	638694	2.00	2.00	
46 1,2-Dichloroethane	62	9.661	9.662	-0.001	96	421122	2.00	1.96	
47 n-Butanol	31	10.103	10.114	-0.011	86	98156	2.00	1.85	
49 Cyclohexane	69	10.152	10.159	-0.007	77	109548	2.00	1.96	
48 Benzene	78	10.162	10.161	0.001	95	637101	2.00	1.97	
50 Carbon tetrachloride	117	10.184	10.184	0.000	97	693773	2.00	2.04	
51 2,3-Dimethylpentane	71	10.281	10.280	0.001	90	148601	2.00	1.93	
52 Thiophene	84	10.448	10.449	-0.001	97	361952	2.00	1.94	
141 Tert-amyl methyl ether	73	10.648	10.651	-0.003	88	591616	2.00	2.10	
53 Isooctane	57	10.944	10.947	-0.003	97	1240653	2.00	1.93	
54 n-Heptane	71	11.338	11.341	-0.003	94	232217	2.00	1.91	
55 1,2-Dichloropropane	63	11.430	11.434	-0.004	81	245511	2.00	1.97	
56 Trichloroethene	130	11.467	11.467	0.000	97	352215	2.00	1.94	
57 Dibromomethane	93	11.559	11.558	0.001	95	290789	2.00	1.89	
58 Dichlorobromomethane	83	11.705	11.706	-0.001	98	584622	2.00	1.98	
59 1,4-Dioxane	88	11.715	11.721	-0.006	36	91474	2.00	1.96	
60 Methyl methacrylate	41	11.802	11.802	0.000	92	347318	2.00	2.15	
61 Methylcyclohexane	83	12.249	12.250	-0.001	88	503663	2.00	1.90	
62 4-Methyl-2-pentanone (MIBK)	43	12.670	12.673	-0.003	96	513432	2.00	1.86	
63 cis-1,3-Dichloropropene	75	12.734	12.734	0.000	97	411812	2.00	2.02	
64 trans-1,3-Dichloropropene	75	13.446	13.446	0.000	97	398741	2.00	2.00	
65 Toluene	91	13.565	13.562	0.003	92	783674	2.00	1.94	
66 1,1,2-Trichloroethane	83	13.646	13.648	-0.002	88	222998	2.00	1.97	
67 2-Methylthiophene	97	13.716	13.718	-0.002	98	650230	2.00	1.97	
68 3-Methylthiophene	97	13.921	13.923	-0.002	99	636667	2.00	1.98	
69 2-Hexanone	58	14.029	14.032	-0.003	92	234275	2.00	1.87	
70 n-Octane	85	14.261	14.260	0.000	95	266380	2.00	1.92	
71 Chlorodibromomethane	129	14.358	14.356	0.002	97	610153	2.00	2.02	
72 Ethylene Dibromide	107	14.649	14.651	-0.002	97	448020	2.00	1.99	
73 Tetrachloroethene	129	14.719	14.720	-0.001	94	338508	2.00	1.88	
74 Chlorobenzene	112	15.609	15.607	0.002	83	663367	2.00	1.97	
75 2,3-Dimethylheptane	43	15.619	15.621	-0.002	93	815669	2.00	1.94	
76 Ethylbenzene	91	15.894	15.896	-0.002	99	1066516	2.00	2.04	
77 2-Ethylthiophene	97	16.002	16.003	-0.001	62	838808	2.00	2.03	
78 m-Xylene & p-Xylene	91	16.062	16.060	0.002	99	1676676	3.99	4.16	
81 n-Nonane	57	16.477	16.479	-0.002	93	558185	2.00	1.99	
79 Bromoform	173	16.515	16.516	-0.001	95	533528	2.00	2.08	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
80 Styrene	104	16.531	16.530	0.001	91	621098	2.00	2.15	
82 o-Xylene	91	16.590	16.591	-0.001	96	858814	2.00	2.04	
83 1,1,2,2-Tetrachloroethane	83	16.919	16.921	-0.002	98	527727	2.00	2.04	
84 1,2,3-Trichloropropane	110	17.081	17.083	-0.001	93	197829	2.00	2.04	
85 Isopropylbenzene	105	17.178	17.180	-0.002	92	1222754	2.00	2.06	
86 N-Propylbenzene	120	17.728	17.728	0.000	89	335528	2.00	2.08	
87 2-Chlorotoluene	126	17.776	17.776	0.000	72	314967	2.00	1.99	
88 4-Ethyltoluene	105	17.884	17.884	0.000	97	1113056	2.00	2.13	
89 1,3,5-Trimethylbenzene	120	17.960	17.960	0.000	92	556155	2.00	2.11	
90 Alpha Methyl Styrene	118	18.197	18.196	0.001	83	494752	2.00	2.19	
91 n-Decane	57	18.251	18.252	-0.001	89	677101	2.00	2.14	
92 tert-Butylbenzene	119	18.391	18.392	-0.001	90	1090975	2.00	2.17	
93 1,2,4-Trimethylbenzene	105	18.407	18.405	0.002	95	988256	2.00	2.16	
95 sec-Butylbenzene	105	18.666	18.665	0.001	97	1377767	2.00	2.18	
94 1,3-Dichlorobenzene	146	18.682	18.683	-0.001	98	660658	2.00	2.06	
96 Benzyl chloride	91	18.758	18.759	-0.001	97	847722	2.00	2.17	
97 1,4-Dichlorobenzene	146	18.769	18.771	-0.002	92	645862	2.00	2.06	
98 4-Isopropyltoluene	119	18.828	18.830	-0.002	91	1188332	2.00	2.17	
99 1,2,3-Trimethylbenzene	105	18.882	18.884	-0.002	84	752683	2.00	2.14	
100 Butylcyclohexane	83	18.936	18.937	-0.001	87	702226	2.00	2.03	
102 2,3-Dihydroindene	117	19.135	19.134	0.001	89	903789	2.00	2.12	
101 1,2-Dichlorobenzene	146	19.135	19.136	-0.001	82	635910	2.00	2.08	
103 Indene	116	19.265	19.266	-0.001	82	687706	2.00	2.16	
104 n-Butylbenzene	91	19.270	19.270	0.000	96	1037572	2.00	2.20	
106 Undecane	57	19.583	19.581	0.002	94	651431	2.00	2.28	
105 1,2-Dimethyl-4-Ethylbenzen	119	19.647	19.644	0.003	95	849402	2.00	2.16	
142 1,2-Dibromo-3-Chloropropan	157	19.745	19.747	-0.002	96	290101	2.00	2.03	
107 1,2,4,5-Tetramethylbenzene	119	20.030	20.032	-0.002	96	998830	2.00	2.19	
108 1,2,3,5-Tetramethylbenzene	119	20.084	20.085	-0.001	95	617547	2.00	2.18	
109 1,2,3,4-Tetramethylbenzene	119	20.483	20.484	-0.001	97	811417	2.00	2.12	
110 Dodecane	57	20.640	20.641	-0.001	91	373493	2.00	1.71	
111 1,2,4-Trichlorobenzene	180	20.845	20.846	-0.001	94	340943	2.00	1.88	
112 Naphthalene	128	20.990	20.988	0.002	98	718462	2.00	1.92	
113 Benzo(b)thiophene	134	21.098	21.097	0.001	99	497113	2.00	1.67	
114 Hexachlorobutadiene	225	21.206	21.206	0.000	84	396030	2.00	1.97	
115 1,2,3-Trichlorobenzene	180	21.281	21.281	0.000	94	250240	2.00	1.68	
116 2-Methylnaphthalene	142	22.133	22.134	-0.001	100	283580	6.24	4.79	
117 1-Methylnaphthalene	142	22.333	22.332	0.001	99	273722	6.24	4.81	
A 118 C6 Range	1	7.736	(7.666-7.806)		0	2600035	2.00	1.80	
A 119 Toluene Range	1	13.565	(13.535-13.595)		0	2063006	2.00	2.03	
A 120 C8 Range	1	14.261	(14.231-14.291)		0	2742252	2.00	1.96	
S 124 Xylenes, Total	100				0		5.99	6.20	
S 144 1,2-Dichloroethene, Total	1				0		3.99	4.01	

Reagents:

CCN2C00X05_00001

Amount Added: 200.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\icis I6.D

Injection Date: 03-Mar-2015 13:52:30

Instrument ID: ME

Operator ID: 7126

Lims ID: ICIS L6

Worklist Smp#: 7

Client ID:

Purge Vol: 500.000 mL

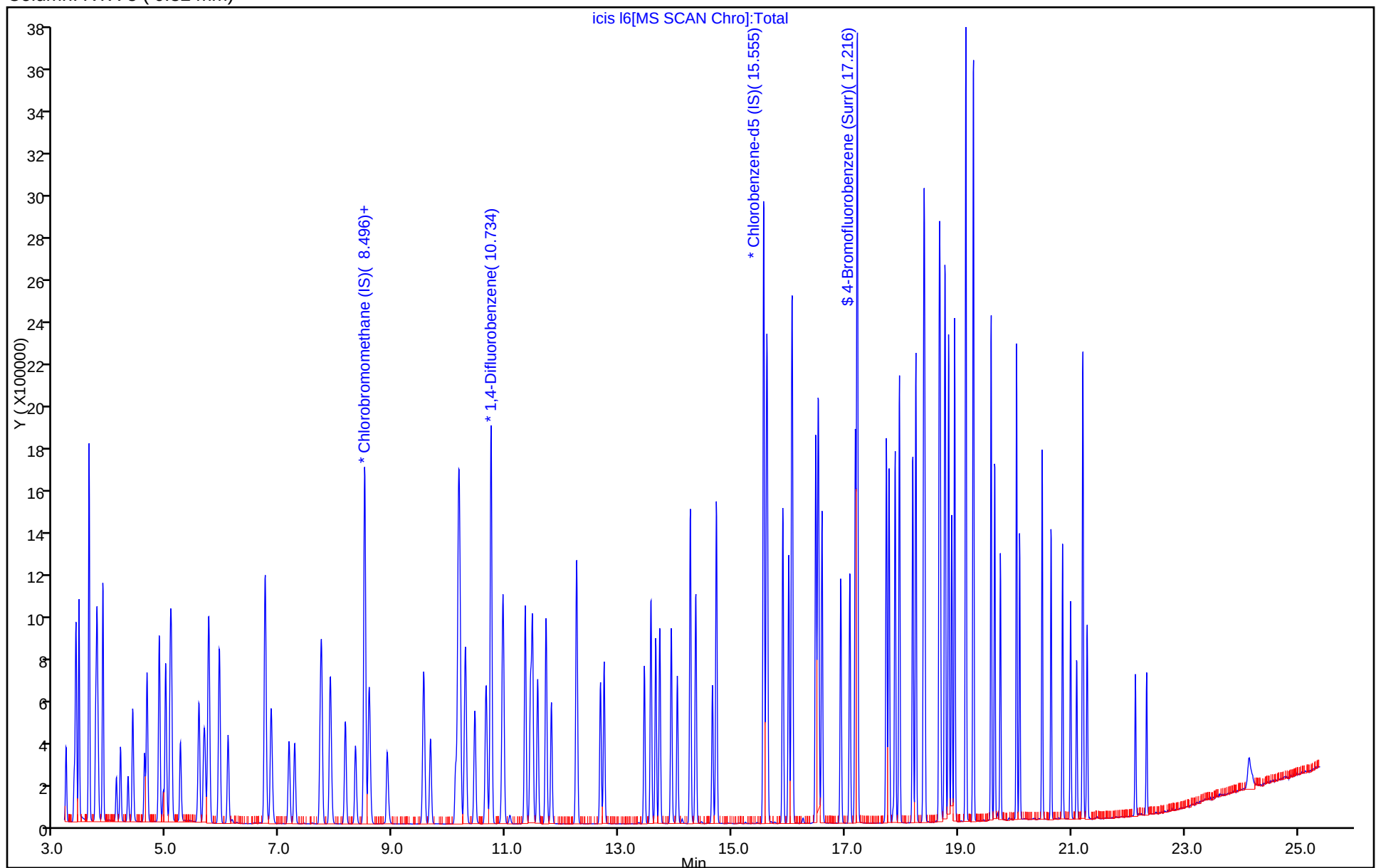
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\icis I6.D

Injection Date: 03-Mar-2015 13:52:30

Instrument ID: ME

Lims ID: ICIS L6

Client ID:

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 7

Purge Vol: 500.000 mL

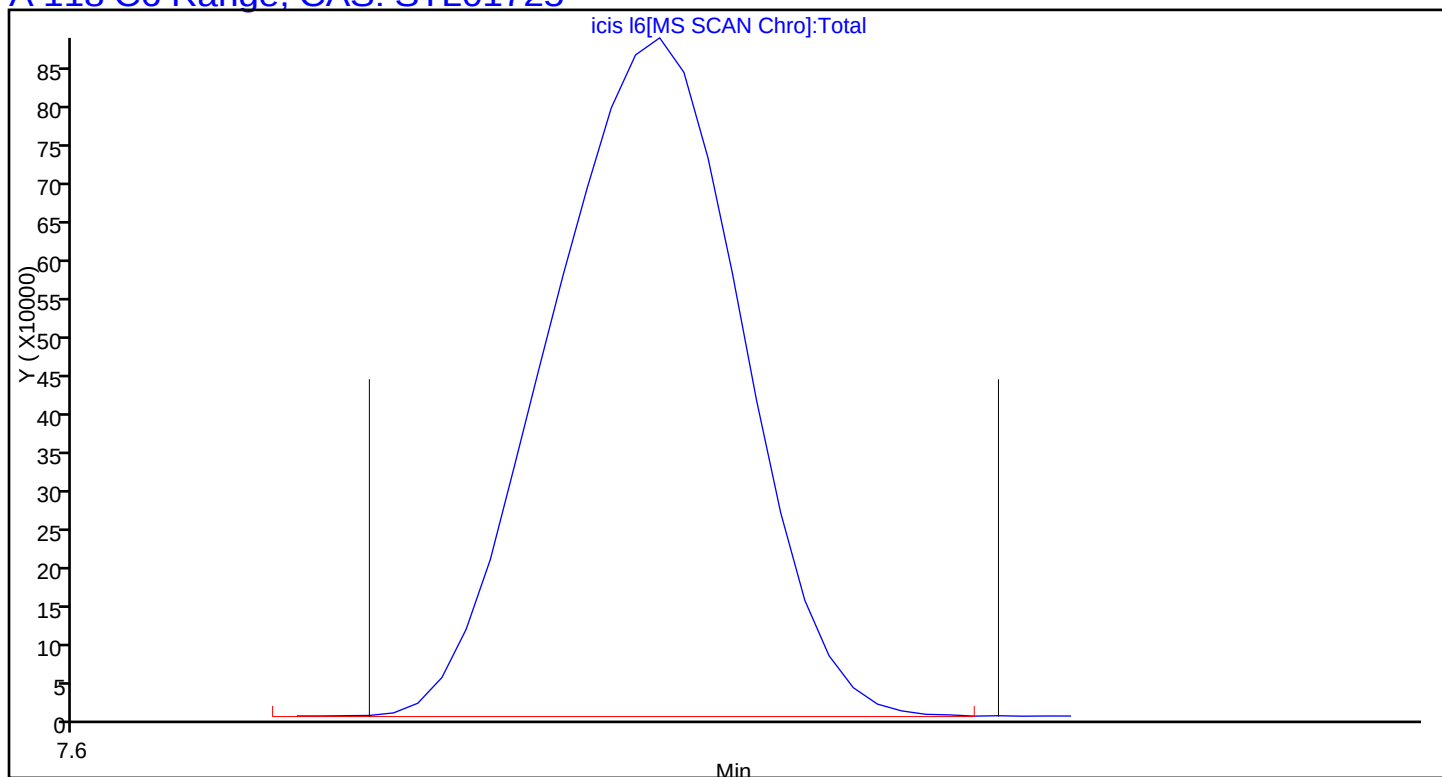
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\icis I6.D

Injection Date: 03-Mar-2015 13:52:30

Instrument ID: ME

Lims ID: ICIS L6

Client ID:

Operator ID: 7126

ALS Bottle#:

11

Worklist Smp#:

7

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: ME_TO15

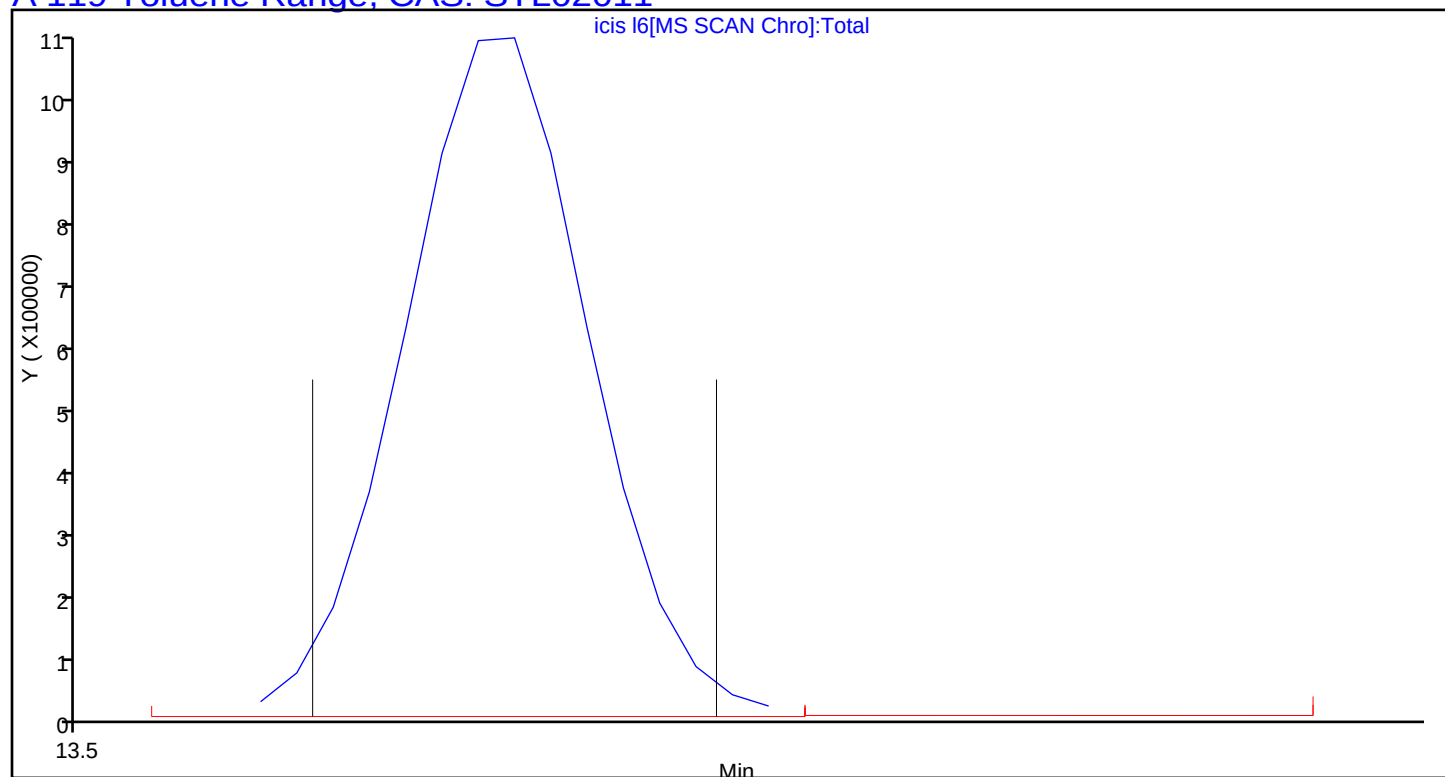
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

A 119 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\icis I6.D

Injection Date: 03-Mar-2015 13:52:30

Instrument ID: ME

Lims ID: ICIS L6

Client ID:

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 7

Purge Vol: 500.000 mL

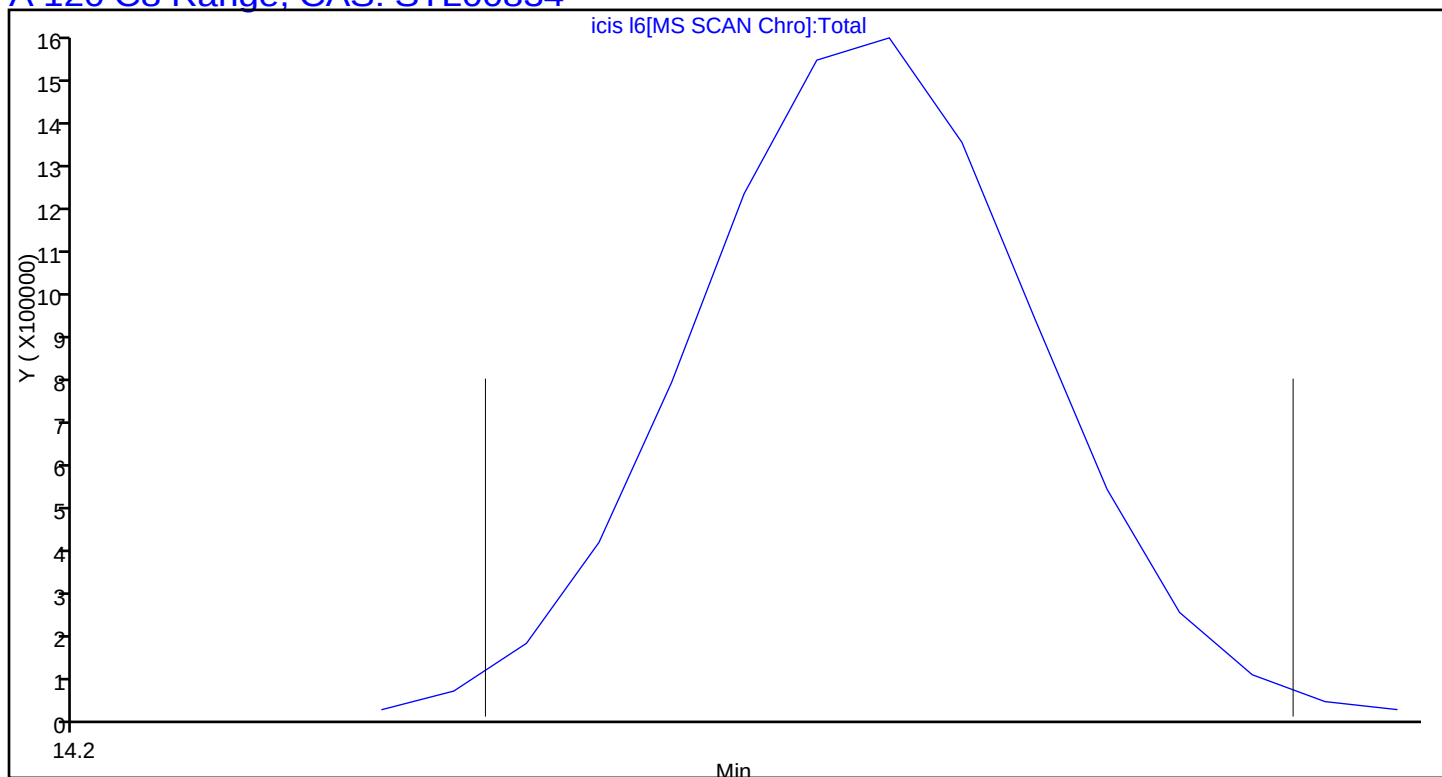
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 120 C8 Range, CAS: STL00834

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I7.D
 Lims ID: IC L7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 03-Mar-2015 14:36:30 ALS Bottle#: 12 Worklist Smp#: 8
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 023282
 Misc. Info.: 140-0001421-008
 Operator ID: 7126 Instrument ID: ME
 Sublist: chrom-ME_TO15*sub4
 Method: \\KNXCHROM\ChromData\ME\20150302-1421.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 14:48:29 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK030

First Level Reviewer: barlozhetskayaa

Date: 03-Mar-2015 15:37:37

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	8.496	8.495	0.001	95	375241	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.739	10.736	0.003	93	1661540	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.560	15.558	0.002	67	1503774	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.216	17.213	0.003	89	1137376	4.00	4.02	
6 Chlorodifluoromethane	67	3.384	3.383	0.001	94	157789	4.00	3.72	
7 Propene	41	3.395	3.396	-0.001	96	461873	4.00	3.47	
8 Dichlorodifluoromethane	85	3.443	3.443	0.000	99	1426095	4.00	3.72	
9 Chloromethane	52	3.621	3.620	0.001	61	150516	4.00	3.83	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.622	-0.001	88	925508	4.00	3.81	
11 Acetaldehyde	44	3.767	3.763	0.004	95	924351	20.0	20.0	
12 Vinyl chloride	62	3.783	3.784	-0.001	99	481225	4.00	3.85	
14 Butane	43	3.869	3.868	0.001	84	821889	4.00	3.93	
13 Butadiene	54	3.869	3.868	0.001	68	393939	4.00	3.92	
15 Bromomethane	94	4.182	4.179	0.003	98	416332	4.00	3.87	
16 Chloroethane	64	4.317	4.313	0.004	92	229033	4.00	3.87	
17 Ethanol	31	4.398	4.397	0.001	96	816039	20.0	18.3	
18 Vinyl bromide	106	4.608	4.603	0.005	97	444023	4.00	3.94	
19 2-Methylbutane	43	4.651	4.649	0.002	90	574389	4.00	3.97	
21 Trichlorofluoromethane	101	4.867	4.864	0.003	100	1294070	4.00	3.78	
20 Acrolein	56	4.872	4.871	0.001	24	161469	4.00	3.74	
22 Acetonitrile	40	4.943	4.938	0.005	99	170878	4.00	4.15	
23 Acetone	58	4.980	4.979	0.001	72	568130	12.0	11.5	
24 Isopropyl alcohol	45	5.067	5.065	0.002	89	1681135	12.0	11.2	
25 Pentane	72	5.083	5.081	0.002	95	81305	4.00	3.84	
26 Ethyl ether	31	5.239	5.240	-0.001	94	384992	4.00	4.01	
27 1,1-Dichloroethene	96	5.568	5.568	0.000	89	416744	4.00	3.93	
29 2-Methyl-2-propanol	59	5.660	5.663	-0.003	95	833996	4.00	3.79	
28 Acrylonitrile	53	5.676	5.673	0.003	83	317233	4.00	3.94	
30 1,1,2-Trichloro-1,2,2-trif	101	5.741	5.738	0.003	95	923031	4.00	3.81	
31 Methylene Chloride	84	5.924	5.921	0.003	92	401729	4.00	3.91	

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	5.935	5.935	0.000	90	550611	4.00	3.74	
33 Carbon disulfide	76	6.086	6.082	0.004	99	1133961	4.00	3.87	
34 trans-1,2-Dichloroethene	96	6.738	6.732	0.006	83	431549	4.00	3.82	
35 2-Methylpentane	43	6.744	6.744	0.000	95	1083449	4.00	3.82	
36 Methyl tert-butyl ether	73	6.846	6.849	-0.003	96	1116105	4.00	3.93	
37 1,1-Dichloroethane	63	7.164	7.161	0.003	100	855728	4.00	3.79	
38 Vinyl acetate	43	7.261	7.262	-0.001	100	1289436	4.00	4.05	
39 2-Butanone (MEK)	72	7.714	7.716	-0.002	91	171154	4.00	3.49	
40 Hexane	56	7.736	7.735	0.001	87	414991	4.00	3.88	
140 Isopropyl ether	45	7.892	7.893	-0.001	96	1502809	4.00	3.89	
41 cis-1,2-Dichloroethene	96	8.162	8.158	0.004	97	456506	4.00	3.85	
42 Ethyl acetate	43	8.340	8.340	0.000	97	906230	4.00	3.80	
43 Chloroform	83	8.507	8.505	0.002	78	1049916	4.00	3.79	
143 Tert-butyl ethyl ether	59	8.577	8.582	-0.005	96	1321369	4.00	4.01	
44 Tetrahydrofuran	42	8.895	8.905	-0.010	91	494573	4.00	3.82	
45 1,1,1-Trichloroethane	97	9.542	9.543	-0.001	96	1215137	4.00	3.76	
46 1,2-Dichloroethane	62	9.666	9.662	0.004	96	800262	4.00	3.85	
47 n-Butanol	31	10.108	10.114	-0.006	85	194733	4.00	3.80	
49 Cyclohexane	69	10.157	10.159	-0.002	77	210653	4.00	3.89	
48 Benzene	78	10.162	10.161	0.001	96	1231788	4.00	3.94	
50 Carbon tetrachloride	117	10.184	10.184	0.000	97	1320993	4.00	4.01	
51 2,3-Dimethylpentane	71	10.281	10.280	0.001	90	292677	4.00	3.92	
52 Thiophene	84	10.448	10.449	-0.001	98	711097	4.00	3.93	
141 Tert-amyl methyl ether	73	10.648	10.651	-0.003	89	1077967	4.00	4.09	
53 Isooctane	57	10.950	10.947	0.003	97	2379139	4.00	3.83	
54 n-Heptane	71	11.343	11.341	0.002	93	454143	4.00	3.86	
55 1,2-Dichloropropane	63	11.435	11.434	0.001	81	472438	4.00	3.91	
56 Trichloroethene	130	11.467	11.467	0.000	97	662052	4.00	3.78	
57 Dibromomethane	93	11.559	11.558	0.001	94	563150	4.00	3.79	
58 Dichlorobromomethane	83	11.710	11.706	0.004	99	1129467	4.00	3.95	
59 1,4-Dioxane	88	11.715	11.721	-0.006	30	173582	4.00	3.84	
60 Methyl methacrylate	41	11.802	11.802	0.000	92	618431	4.00	3.95	
61 Methylcyclohexane	83	12.249	12.250	-0.001	89	984660	4.00	3.85	
62 4-Methyl-2-pentanone (MIBK)	43	12.670	12.673	-0.003	83	978087	4.00	3.66	
63 cis-1,3-Dichloropropene	75	12.735	12.734	0.000	97	792001	4.00	4.01	
64 trans-1,3-Dichloropropene	75	13.446	13.446	0.000	96	762868	4.00	4.10	
65 Toluene	91	13.565	13.562	0.003	93	1492299	4.00	3.96	
66 1,1,2-Trichloroethane	83	13.651	13.648	0.003	73	430223	4.00	4.06	
67 2-Methylthiophene	97	13.721	13.718	0.003	98	1243500	4.00	4.03	
68 3-Methylthiophene	97	13.926	13.923	0.003	99	1222636	4.00	4.07	
69 2-Hexanone	58	14.029	14.032	-0.003	92	469437	4.00	4.02	
70 n-Octane	85	14.261	14.260	0.001	94	527291	4.00	4.06	
71 Chlorodibromomethane	129	14.358	14.356	0.002	97	1192302	4.00	4.21	
72 Ethylene Dibromide	107	14.654	14.651	0.003	95	858826	4.00	4.07	
73 Tetrachloroethene	129	14.719	14.720	-0.001	94	649488	4.00	3.86	
74 Chlorobenzene	112	15.609	15.607	0.002	91	1260275	4.00	4.01	
75 2,3-Dimethylheptane	43	15.619	15.621	-0.002	94	1524206	4.00	3.88	
76 Ethylbenzene	91	15.900	15.896	0.004	99	1976608	4.00	4.04	
77 2-Ethylthiophene	97	16.002	16.003	-0.001	73	1559423	4.00	4.03	
78 m-Xylene & p-Xylene	91	16.062	16.060	0.002	99	3048157	8.00	8.09	
81 n-Nonane	57	16.482	16.479	0.003	92	1069228	4.00	4.08	
79 Bromoform	173	16.515	16.516	-0.001	83	1078253	4.00	4.50	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
80 Styrene	104	16.531	16.530	0.001	90	1180744	4.00	4.36	
82 o-Xylene	91	16.590	16.591	-0.001	79	1597239	4.00	4.06	
83 1,1,2,2-Tetrachloroethane	83	16.924	16.921	0.003	99	1011994	4.00	4.19	
84 1,2,3-Trichloropropane	110	17.086	17.083	0.004	93	365911	4.00	4.05	
85 Isopropylbenzene	105	17.183	17.180	0.003	97	2224954	4.00	4.01	
86 N-Propylbenzene	120	17.728	17.728	0.000	87	634727	4.00	4.21	
87 2-Chlorotoluene	126	17.776	17.776	0.000	58	598008	4.00	4.04	
88 4-Ethyltoluene	105	17.884	17.884	0.000	97	2035780	4.00	4.18	
89 1,3,5-Trimethylbenzene	120	17.960	17.960	0.000	92	1022329	4.00	4.14	
90 Alpha Methyl Styrene	118	18.197	18.196	0.001	83	928176	4.00	4.40	
91 n-Decane	57	18.251	18.252	-0.001	89	1245273	4.00	4.21	
92 tert-Butylbenzene	119	18.391	18.392	-0.001	86	1964645	4.00	4.19	
93 1,2,4-Trimethylbenzene	105	18.407	18.405	0.002	94	1772220	4.00	4.14	
95 sec-Butylbenzene	105	18.666	18.665	0.001	96	2441048	4.00	4.14	
94 1,3-Dichlorobenzene	146	18.682	18.683	-0.001	98	1241239	4.00	4.14	
96 Benzyl chloride	91	18.758	18.759	-0.001	97	1603027	4.00	4.39	
97 1,4-Dichlorobenzene	146	18.774	18.771	0.003	93	1217638	4.00	4.16	
98 4-Isopropyltoluene	119	18.833	18.830	0.003	85	2106355	4.00	4.11	
99 1,2,3-Trimethylbenzene	105	18.887	18.884	0.003	75	1351258	4.00	4.11	
100 Butylcyclohexane	83	18.936	18.937	-0.001	87	1285872	4.00	3.98	
102 2,3-Dihydroindene	117	19.135	19.134	0.001	89	1638727	4.00	4.11	
101 1,2-Dichlorobenzene	146	19.135	19.136	-0.001	83	1179340	4.00	4.12	
103 Indene	116	19.265	19.266	-0.001	85	1255063	4.00	4.22	
104 n-Butylbenzene	91	19.270	19.270	0.000	96	1830783	4.00	4.15	
106 Undecane	57	19.583	19.581	0.002	94	1189866	4.00	4.45	
105 1,2-Dimethyl-4-Ethylbenzen	119	19.648	19.644	0.004	97	1524070	4.00	4.15	
142 1,2-Dibromo-3-Chloropropan	157	19.750	19.747	0.003	97	573329	4.00	4.30	
107 1,2,4,5-Tetramethylbenzene	119	20.030	20.032	-0.002	97	1793510	4.00	4.21	
108 1,2,3,5-Tetramethylbenzene	119	20.084	20.085	-0.001	95	1102235	4.00	4.16	
109 1,2,3,4-Tetramethylbenzene	119	20.483	20.484	-0.001	97	1469773	4.00	4.11	
110 Dodecane	57	20.640	20.641	-0.001	91	795562	4.00	3.89	
111 1,2,4-Trichlorobenzene	180	20.845	20.846	-0.001	95	678879	4.00	4.02	
112 Naphthalene	128	20.990	20.988	0.002	99	1463682	4.00	4.19	
113 Benzo(b)thiophene	134	21.098	21.097	0.001	99	1065327	4.00	3.82	
114 Hexachlorobutadiene	225	21.206	21.206	0.000	84	726261	4.00	3.87	
115 1,2,3-Trichlorobenzene	180	21.281	21.281	0.000	95	543466	4.00	3.90	
116 2-Methylnaphthalene	142	22.133	22.134	-0.001	100	662881	12.5	12.0	
117 1-Methylnaphthalene	142	22.333	22.332	0.001	100	623355	12.5	11.7	
A 118 C6 Range	1	7.736	(7.671-7.800)		0	5037378	4.00	3.60	
A 119 Toluene Range	1	13.565	(13.535-13.595)		0	3935475	4.00	3.99	
A 120 C8 Range	1	14.261	(14.231-14.291)		0	5436878	4.00	4.03	
S 124 Xylenes, Total	100				0		12.0	12.1	
S 144 1,2-Dichloroethene, Total	1				0		8.00	7.68	

Reagents:

CCN2C00X10_00001

Amount Added: 200.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I7.D

Injection Date: 03-Mar-2015 14:36:30

Instrument ID: ME

Operator ID: 7126

Lims ID: IC L7

Worklist Smp#: 8

Client ID:

Purge Vol: 500.000 mL

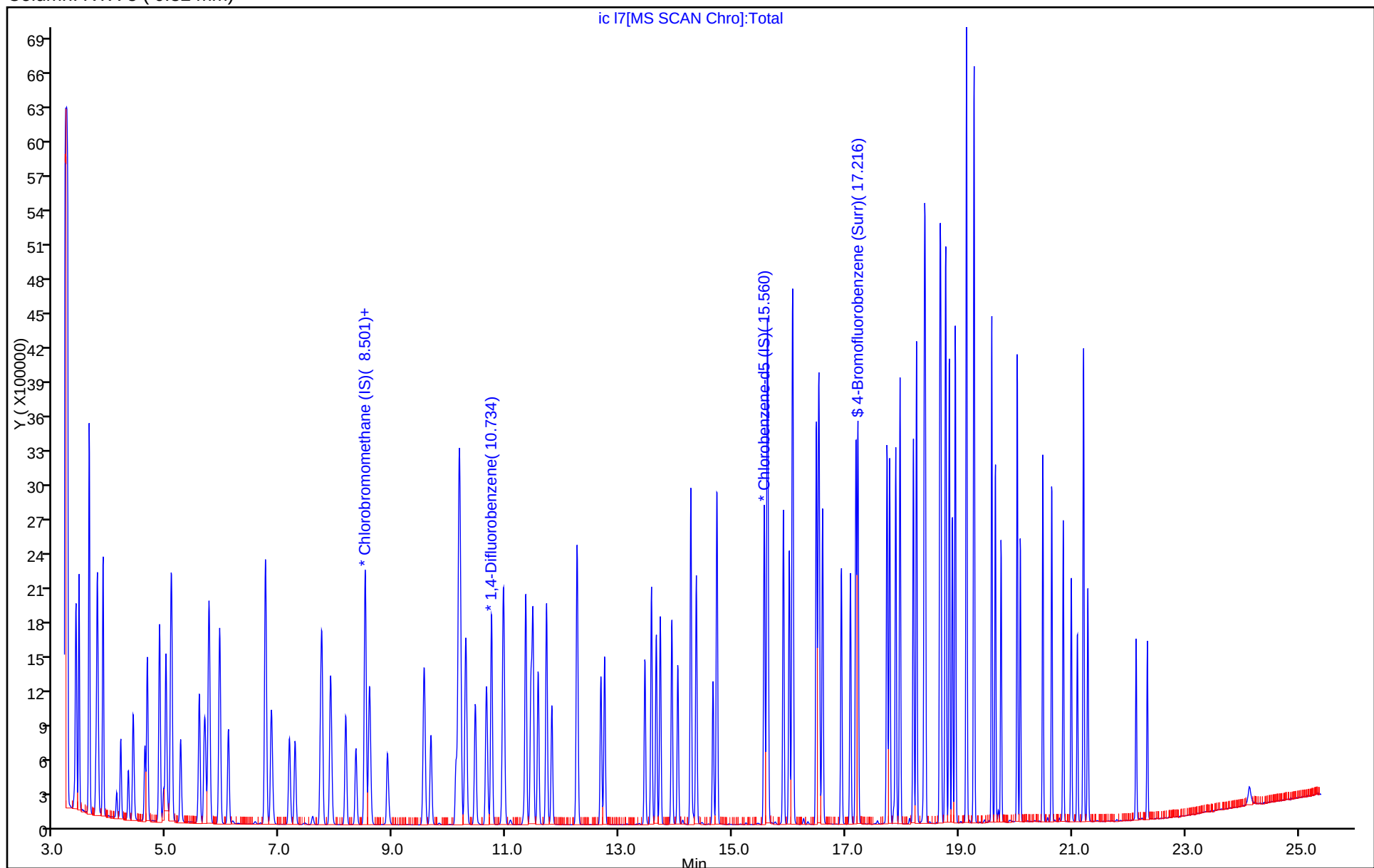
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I7.D

Injection Date: 03-Mar-2015 14:36:30

Instrument ID: ME

Lims ID: IC L7

Client ID:

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 8

Purge Vol: 500.000 mL

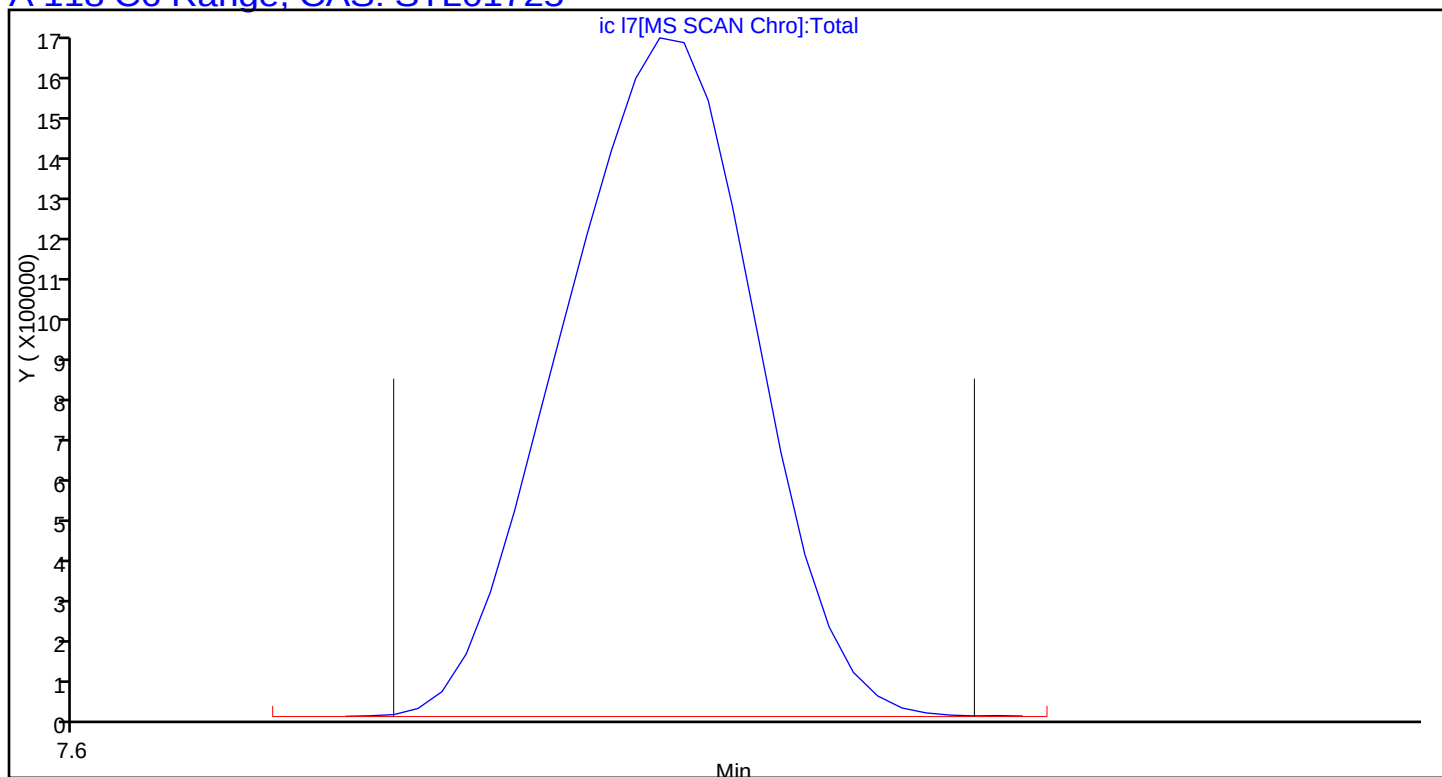
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I7.D

Injection Date: 03-Mar-2015 14:36:30

Instrument ID: ME

Lims ID: IC L7

Client ID:

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 8

Purge Vol: 500.000 mL

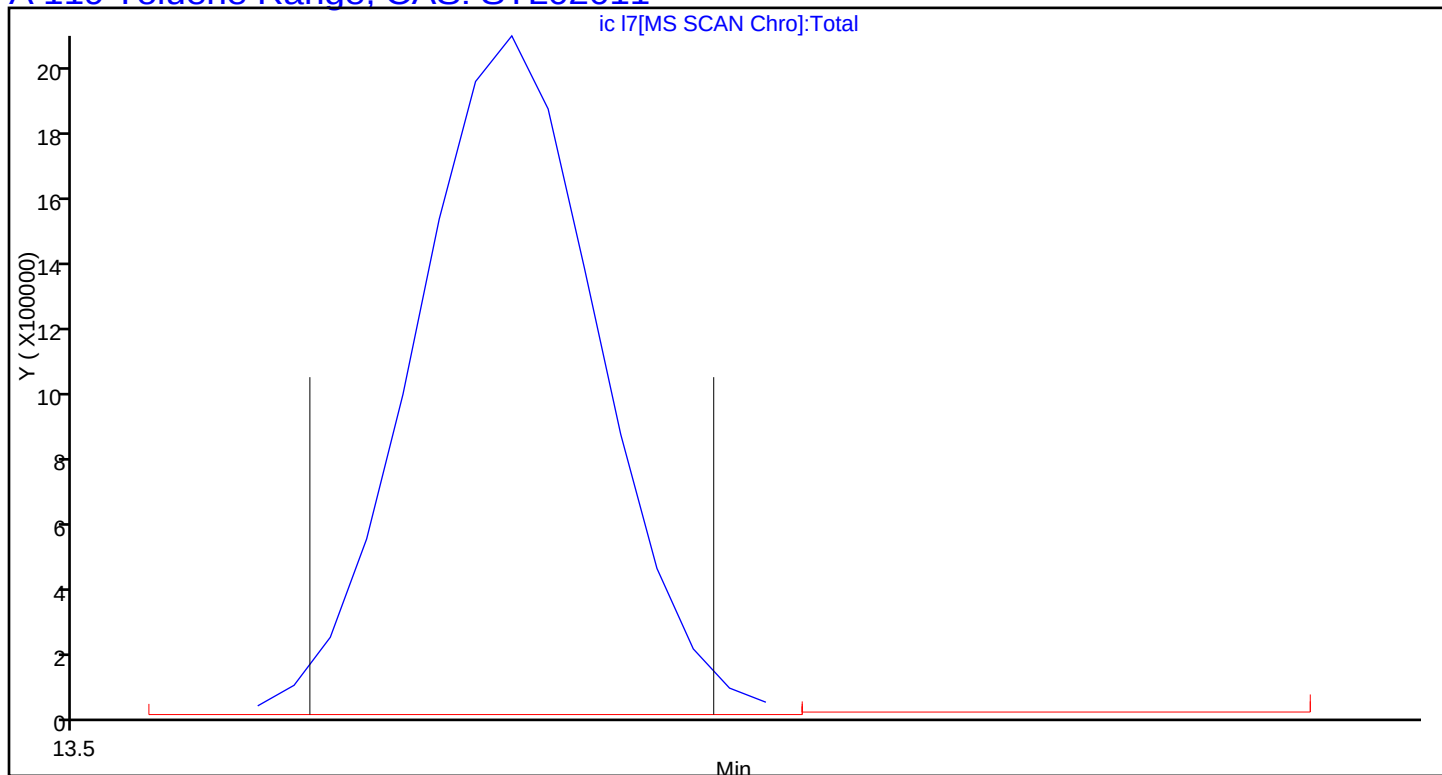
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Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 119 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I7.D

Injection Date: 03-Mar-2015 14:36:30

Instrument ID: ME

Lims ID: IC L7

Client ID:

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 8

Purge Vol: 500.000 mL

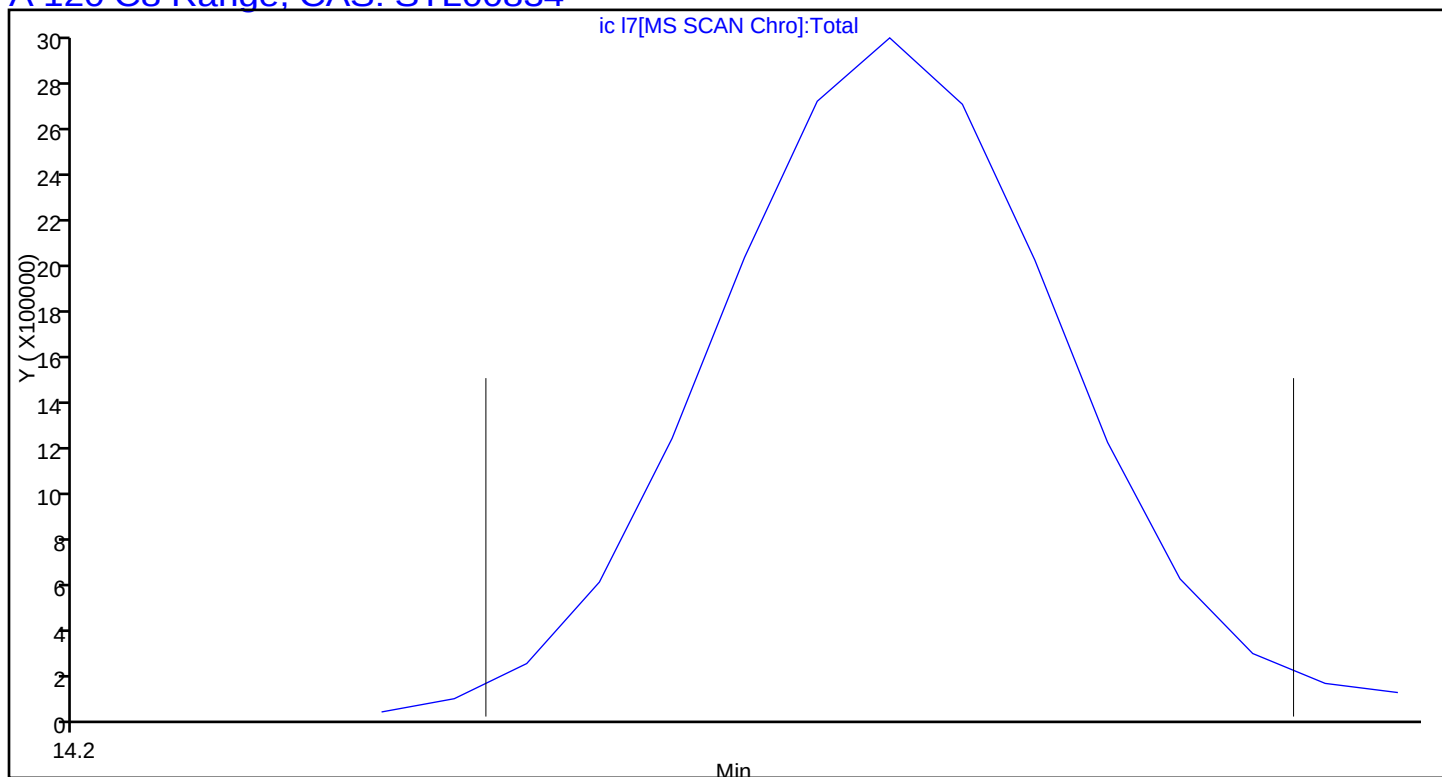
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Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 120 C8 Range, CAS: STL00834

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l8.D
 Lims ID: IC L8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 03-Mar-2015 15:24:30 ALS Bottle#: 13 Worklist Smp#: 9
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 023281
 Misc. Info.: 140-0001421-009
 Operator ID: 7126 Instrument ID: ME
 Sublist: chrom-ME_TO15*sub4
 Method: \\KNXCHROM\ChromData\ME\20150302-1421.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 14:48:32 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK030

First Level Reviewer: barlozhetskayaa

Date: 04-Mar-2015 11:16:33

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	8.501	8.495	0.006	67	389578	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.739	10.736	0.003	91	1796743	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.560	15.558	0.002	53	1703912	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.215	17.213	0.002	86	1277124	4.00	3.98	
6 Chlorodifluoromethane	67	3.384	3.383	0.001	93	303536	8.00	6.90	
7 Propene	41	3.395	3.396	-0.001	97	863279	8.00	6.25	
8 Dichlorodifluoromethane	85	3.443	3.443	0.000	98	2660310	8.00	6.69	
9 Chloromethane	52	3.621	3.620	0.001	60	287819	8.00	7.05	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.622	-0.001	86	1787657	8.00	7.09	
11 Acetaldehyde	44	3.762	3.763	-0.001	97	1710730	40.0	35.6	
12 Vinyl chloride	62	3.783	3.784	-0.001	99	945432	8.00	7.29	
14 Butane	43	3.864	3.868	-0.004	84	1522704	8.00	7.01	
13 Butadiene	54	3.864	3.868	-0.004	70	774982	8.00	7.43	
15 Bromomethane	94	4.177	4.179	-0.002	99	827130	8.00	7.41	
16 Chloroethane	64	4.312	4.313	-0.001	92	464009	8.00	7.56	
17 Ethanol	31	4.403	4.397	0.006	96	1615463	40.0	34.8	
18 Vinyl bromide	106	4.603	4.603	0.000	97	883815	8.00	7.55	
19 2-Methylbutane	43	4.646	4.649	-0.003	90	1100312	8.00	7.33	
21 Trichlorofluoromethane	101	4.862	4.864	-0.002	100	2459289	8.00	6.92	
20 Acrolein	56	4.872	4.871	0.001	25	325610	8.00	7.26	
22 Acetonitrile	40	4.942	4.938	0.004	98	352875	8.00	8.26	
23 Acetone	58	4.980	4.979	0.001	71	1151145	24.0	22.4	
24 Isopropyl alcohol	45	5.072	5.065	0.007	82	3263808	24.0	21.0	
25 Pentane	72	5.083	5.081	0.002	82	162500	8.00	7.40	
26 Ethyl ether	31	5.239	5.240	-0.001	94	800285	8.00	8.02	
27 1,1-Dichloroethene	96	5.568	5.568	0.000	90	833244	8.00	7.56	
29 2-Methyl-2-propanol	59	5.665	5.663	0.002	96	1641594	8.00	7.18	
28 Acrylonitrile	53	5.681	5.673	0.008	82	654585	8.00	7.82	
30 1,1,2-Trichloro-1,2,2-trif	101	5.741	5.738	0.002	95	1812214	8.00	7.21	
31 Methylene Chloride	84	5.924	5.921	0.003	92	718032	8.00	6.73	

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	5.935	5.935	0.000	91	1075331	8.00	7.03	
33 Carbon disulfide	76	6.080	6.082	-0.002	99	2229171	8.00	7.34	
34 trans-1,2-Dichloroethene	96	6.733	6.732	0.001	96	866236	8.00	7.39	
35 2-Methylpentane	43	6.743	6.744	-0.001	94	2093974	8.00	7.10	
36 Methyl tert-butyl ether	73	6.841	6.849	-0.008	94	2342247	8.00	7.95	
37 1,1-Dichloroethane	63	7.164	7.161	0.003	100	1695217	8.00	7.24	
38 Vinyl acetate	43	7.267	7.262	0.005	100	2658759	8.00	8.05	
39 2-Butanone (MEK)	72	7.714	7.716	-0.002	91	369658	8.00	7.26	
40 Hexane	56	7.736	7.735	0.001	87	812731	8.00	7.31	
140 Isopropyl ether	45	7.892	7.893	-0.001	96	3102818	8.00	7.74	
41 cis-1,2-Dichloroethene	96	8.162	8.158	0.004	97	925050	8.00	7.52	
42 Ethyl acetate	43	8.340	8.340	0.000	98	1947373	8.00	7.86	
43 Chloroform	83	8.512	8.505	0.007	83	2059767	8.00	7.15	
143 Tert-butyl ethyl ether	59	8.582	8.582	0.000	96	2743408	8.00	8.02	
44 Tetrahydrofuran	42	8.895	8.905	-0.010	91	1054160	8.00	7.84	
45 1,1,1-Trichloroethane	97	9.548	9.543	0.005	96	2370434	8.00	7.06	
46 1,2-Dichloroethane	62	9.666	9.662	0.004	96	1583519	8.00	7.05	
47 n-Butanol	31	10.108	10.114	-0.006	85	378852	8.00	6.84	
49 Cyclohexane	69	10.157	10.159	-0.002	78	419453	8.00	7.16	
48 Benzene	78	10.168	10.161	0.007	96	2468084	8.00	7.30	
50 Carbon tetrachloride	117	10.189	10.184	0.005	98	2521281	8.00	7.09	
51 2,3-Dimethylpentane	71	10.286	10.280	0.006	90	583512	8.00	7.23	
52 Thiophene	84	10.453	10.449	0.004	98	1430185	8.00	7.32	
141 Tert-amyl methyl ether	73	10.648	10.651	-0.003	90	2292227	8.00	7.67	
53 Isooctane	57	10.950	10.947	0.003	96	4574611	8.00	6.81	
54 n-Heptane	71	11.343	11.341	0.002	93	919734	8.00	7.24	
55 1,2-Dichloropropane	63	11.435	11.434	0.001	81	968475	8.00	7.42	
56 Trichloroethene	130	11.473	11.467	0.006	97	1372265	8.00	7.24	
57 Dibromomethane	93	11.564	11.558	0.006	94	1133274	8.00	7.05	
58 Dichlorobromomethane	83	11.710	11.706	0.004	99	2221527	8.00	7.18	
59 1,4-Dioxane	88	11.715	11.721	-0.006	30	357993	8.00	7.33	
60 Methyl methacrylate	41	11.807	11.802	0.005	93	1354096	8.00	8.00	
61 Methylcyclohexane	83	12.249	12.250	-0.001	90	1958218	8.00	7.08	
62 4-Methyl-2-pentanone (MIBK)	43	12.675	12.673	0.002	95	1975097	8.00	6.84	
63 cis-1,3-Dichloropropene	75	12.740	12.734	0.006	97	1627079	8.00	7.63	
64 trans-1,3-Dichloropropene	75	13.452	13.446	0.006	97	1598586	8.00	7.59	
65 Toluene	91	13.565	13.562	0.003	92	3000546	8.00	7.03	
66 1,1,2-Trichloroethane	83	13.651	13.648	0.003	82	889624	8.00	7.41	
67 2-Methylthiophene	97	13.721	13.718	0.003	98	2523293	8.00	7.22	
68 3-Methylthiophene	97	13.926	13.923	0.003	99	2478395	8.00	7.28	
69 2-Hexanone	58	14.034	14.032	0.002	93	948525	8.00	7.16	
70 n-Octane	85	14.266	14.260	0.006	92	1069241	8.00	7.27	
71 Chlorodibromomethane	129	14.363	14.356	0.007	97	2384775	8.00	7.44	
72 Ethylene Dibromide	107	14.654	14.651	0.003	95	1781511	8.00	7.45	
73 Tetrachloroethene	129	14.724	14.720	0.004	95	1313380	8.00	6.89	
74 Chlorobenzene	112	15.609	15.607	0.002	90	2562312	8.00	7.20	
75 2,3-Dimethylheptane	43	15.625	15.621	0.004	93	2929963	8.00	6.59	
76 Ethylbenzene	91	15.900	15.896	0.004	98	3929689	8.00	7.09	
77 2-Ethylthiophene	97	16.002	16.003	-0.001	76	3140304	8.00	7.17	
78 m-Xylene & p-Xylene	91	16.062	16.060	0.002	97	5885747	16.0	13.8	
81 n-Nonane	57	16.482	16.479	0.003	90	2145527	8.00	7.22	
79 Bromoform	173	16.520	16.516	0.004	94	2192459	8.00	8.07	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
80 Styrene	104	16.531	16.530	0.001	90	2488968	8.00	8.12	
82 o-Xylene	91	16.595	16.591	0.004	78	3182273	8.00	7.13	
83 1,1,2,2-Tetrachloroethane	83	16.924	16.921	0.003	98	2054392	8.00	7.51	
84 1,2,3-Trichloropropane	110	17.086	17.083	0.004	92	777428	8.00	7.59	
85 Isopropylbenzene	105	17.183	17.180	0.003	97	4411701	8.00	7.01	
86 N-Propylbenzene	120	17.733	17.728	0.005	85	1349284	8.00	7.90	
87 2-Chlorotoluene	126	17.776	17.776	0.000	58	1250634	8.00	7.45	
88 4-Ethyltoluene	105	17.884	17.884	0.000	96	4130891	8.00	7.48	
89 1,3,5-Trimethylbenzene	120	17.965	17.960	0.005	93	2159984	8.00	7.73	
90 Alpha Methyl Styrene	118	18.197	18.196	0.001	83	1966103	8.00	8.23	
91 n-Decane	57	18.256	18.252	0.004	91	2483196	8.00	7.41	
92 tert-Butylbenzene	119	18.396	18.392	0.004	86	3950337	8.00	7.43	
93 1,2,4-Trimethylbenzene	105	18.407	18.405	0.002	89	3558593	8.00	7.33	
95 sec-Butylbenzene	105	18.666	18.665	0.001	95	4784944	8.00	7.16	
94 1,3-Dichlorobenzene	146	18.688	18.683	0.005	98	2577503	8.00	7.58	
96 Benzyl chloride	91	18.763	18.759	0.004	97	3291328	8.00	7.96	
97 1,4-Dichlorobenzene	146	18.774	18.771	0.003	91	2539368	8.00	7.65	
98 4-Isopropyltoluene	119	18.833	18.830	0.003	80	4169394	8.00	7.18	
99 1,2,3-Trimethylbenzene	105	18.887	18.884	0.003	93	2726703	8.00	7.31	
100 Butylcyclohexane	83	18.941	18.937	0.004	86	2567110	8.00	7.02	
102 2,3-Dihydroindene	117	19.135	19.134	0.001	89	3317401	8.00	7.35	
101 1,2-Dichlorobenzene	146	19.141	19.136	0.005	86	2440106	8.00	7.53	
103 Indene	116	19.270	19.266	0.004	82	2602196	8.00	7.71	
104 n-Butylbenzene	91	19.270	19.270	0.000	95	3676062	8.00	7.36	
106 Undecane	57	19.583	19.581	0.002	94	2480404	8.00	8.18	
105 1,2-Dimethyl-4-Ethylbenzen	119	19.647	19.644	0.003	96	3097224	8.00	7.44	
142 1,2-Dibromo-3-Chloropropan	157	19.750	19.747	0.003	97	1194301	8.00	7.91	
107 1,2,4,5-Tetramethylbenzene	119	20.036	20.032	0.004	97	3574261	8.00	7.41	
108 1,2,3,5-Tetramethylbenzene	119	20.090	20.085	0.005	95	2277677	8.00	7.59	
109 1,2,3,4-Tetramethylbenzene	119	20.489	20.484	0.005	97	2989257	8.00	7.37	
110 Dodecane	57	20.645	20.641	0.004	93	1620705	8.00	6.99	
111 1,2,4-Trichlorobenzene	180	20.850	20.846	0.004	95	1509532	8.00	7.88	
112 Naphthalene	128	20.990	20.988	0.002	98	3151199	8.00	7.95	
113 Benzo(b)thiophene	134	21.098	21.097	0.001	99	2357722	8.00	7.46	
114 Hexachlorobutadiene	225	21.206	21.206	0.000	84	1476655	8.00	6.95	
115 1,2,3-Trichlorobenzene	180	21.281	21.281	0.000	93	1213579	8.00	7.68	
116 2-Methylnaphthalene	142	22.133	22.134	-0.001	100	1251082	25.0	20.0	
117 1-Methylnaphthalene	142	22.333	22.332	0.001	100	1150881	25.0	19.1	
A 118 C6 Range	1	7.741	(7.671-7.811)		0	9991158	8.00	6.61	
A 119 Toluene Range	1	13.565	(13.535-13.595)		0	8020231	8.00	7.53	
A 120 C8 Range	1	14.266	(14.236-14.296)		0	10671061	8.00	7.31	
S 124 Xylenes, Total	100				0		24.0	20.9	
S 144 1,2-Dichloroethene, Total	1				0		16.0	14.9	

Reagents:

CCN2C00X20_00001

Amount Added: 200.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l8.D

Injection Date: 03-Mar-2015 15:24:30

Instrument ID: ME

Operator ID: 7126

Lims ID: IC L8

Worklist Smp#: 9

Client ID:

Purge Vol: 500.000 mL

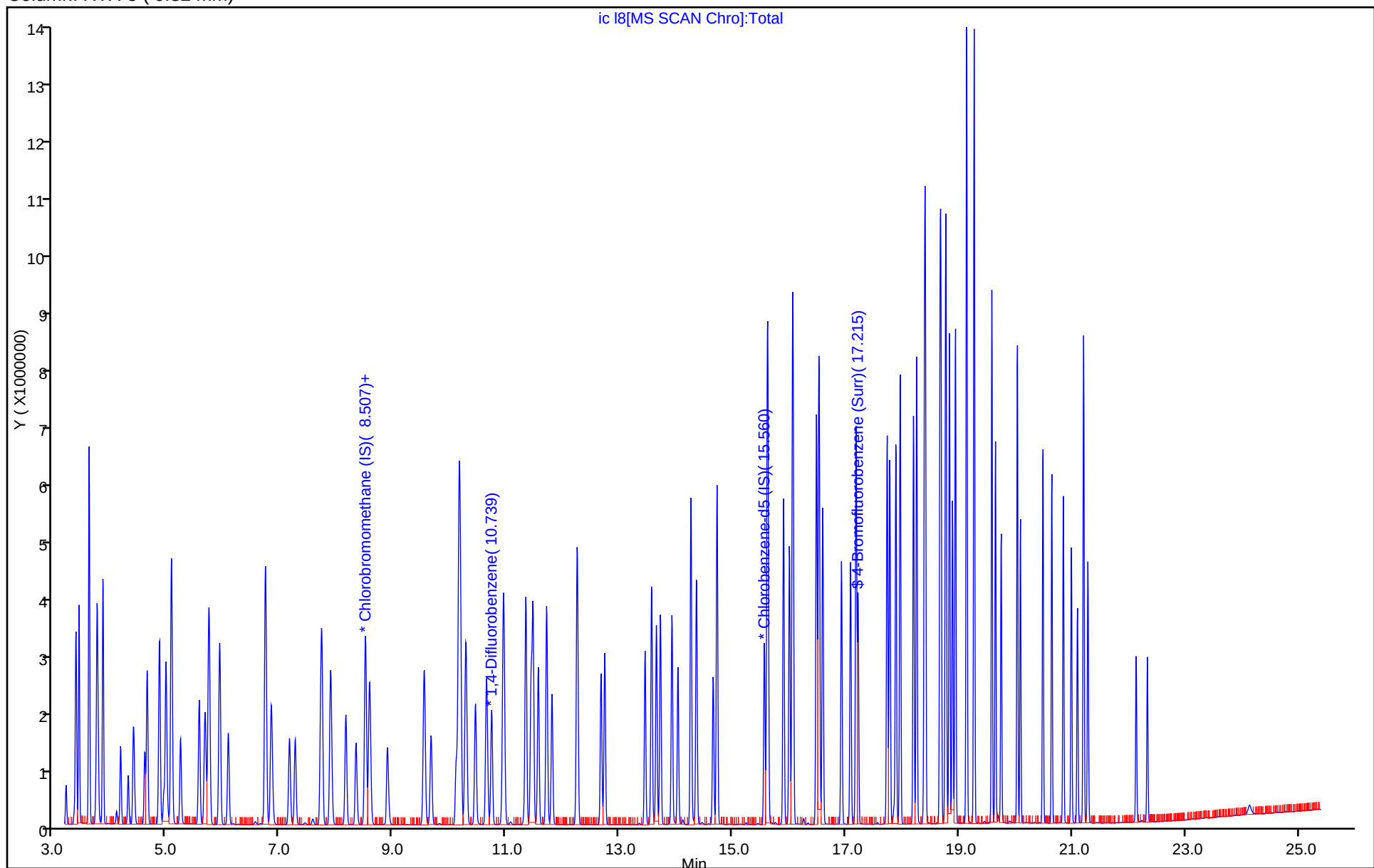
Dil. Factor: 1.0000

ALS Bottle#: 13

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l8.D

Injection Date: 03-Mar-2015 15:24:30

Instrument ID: ME

Lims ID: IC L8

Client ID:

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 9

Purge Vol: 500.000 mL

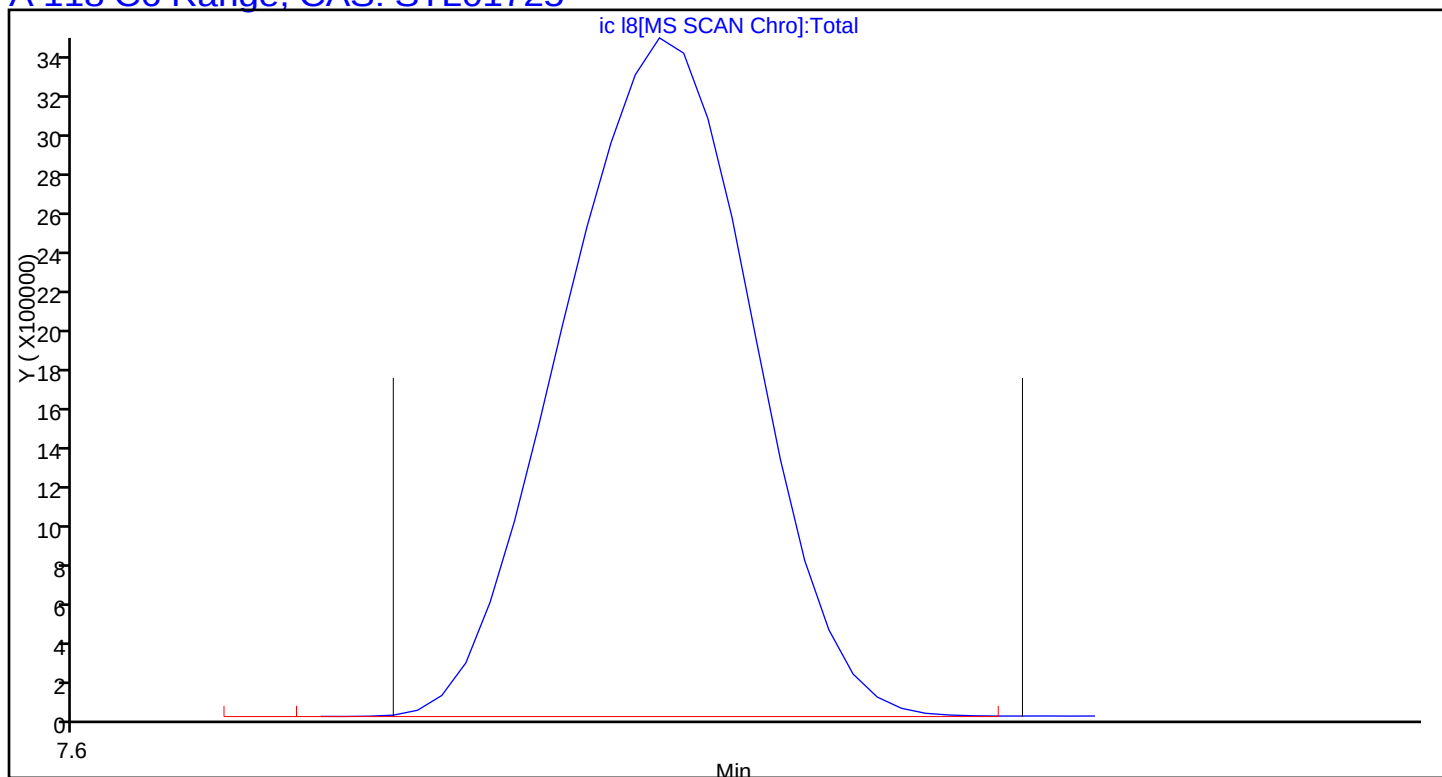
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l8.D

Injection Date: 03-Mar-2015 15:24:30

Instrument ID: ME

Lims ID: IC L8

Client ID:

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 9

Purge Vol: 500.000 mL

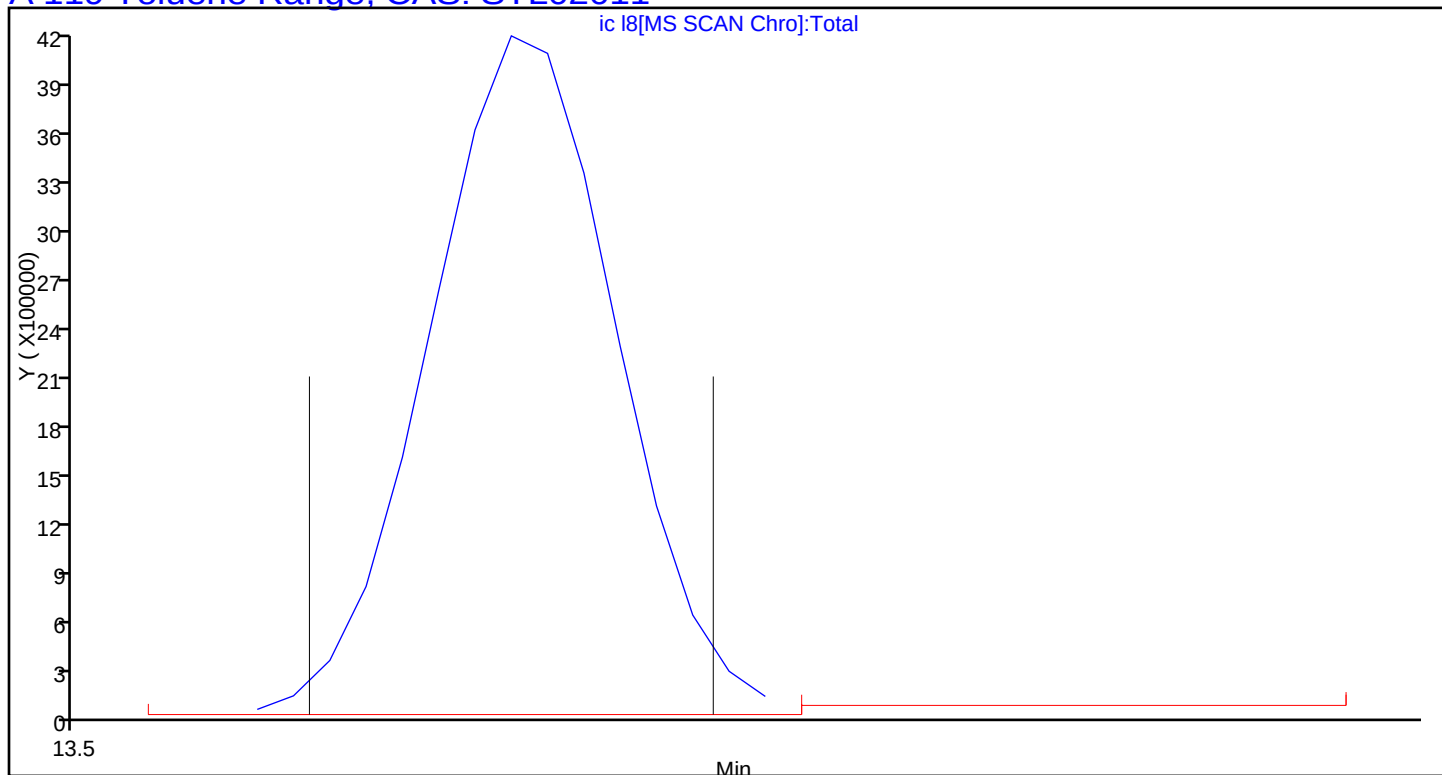
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

A 119 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l8.D

Injection Date: 03-Mar-2015 15:24:30

Instrument ID: ME

Lims ID: IC L8

Client ID:

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 9

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

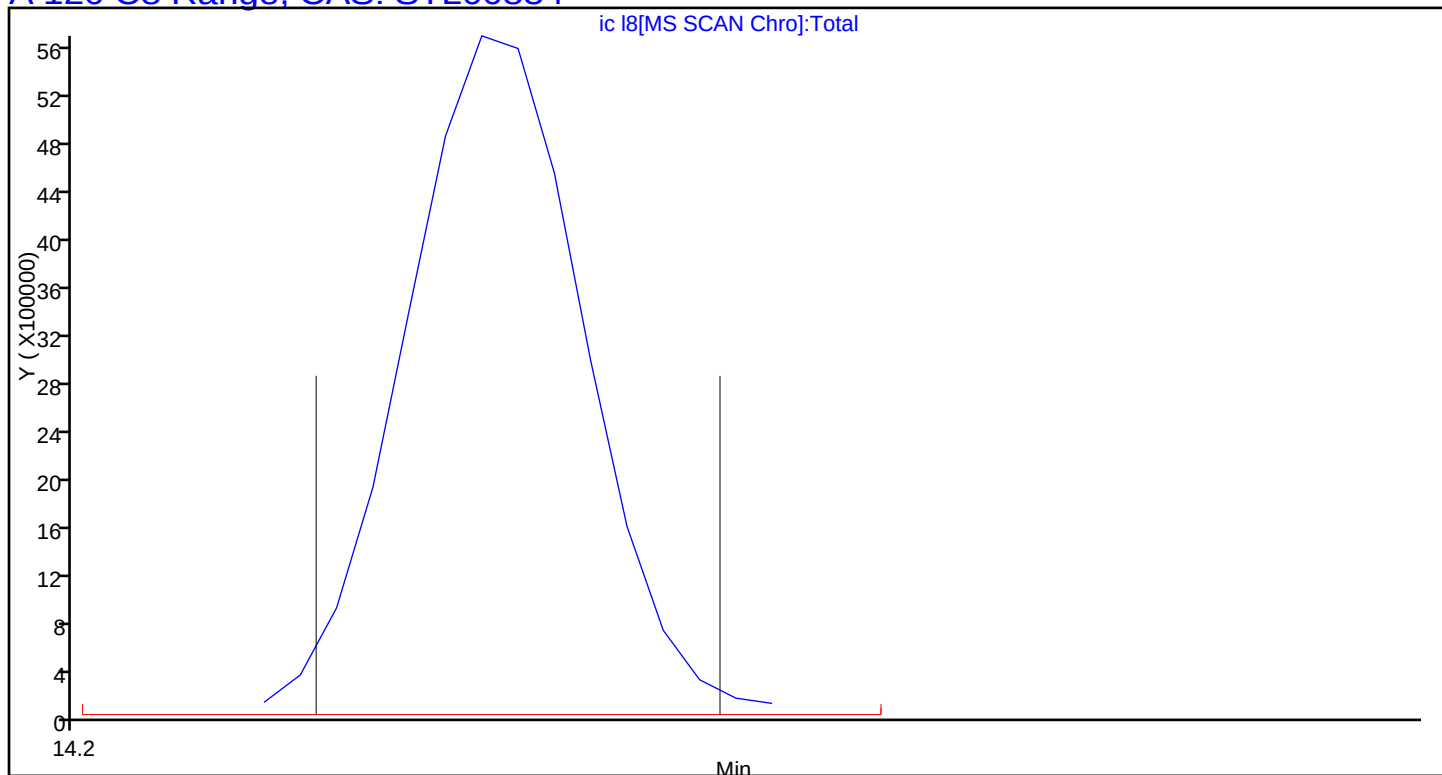
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

A 120 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I9.D
 Lims ID: IC L9
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 03-Mar-2015 16:09:30 ALS Bottle#: 14 Worklist Smp#: 10
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 023280
 Misc. Info.: 140-0001421-010
 Operator ID: 7126 Instrument ID: ME
 Sublist: chrom-ME_TO15*sub4
 Method: \\KNXCHROM\ChromData\ME\20150302-1421.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 14:48:35 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK030

First Level Reviewer: barlozhetskayaa

Date: 04-Mar-2015 10:22:49

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	8.501	8.495	0.006	56	389901	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.745	10.736	0.009	90	1766536	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.560	15.558	0.002	45	1685252	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.216	17.213	0.003	83	1259897	4.00	3.97	
6 Chlorodifluoromethane	67	3.384	3.383	0.001	94	614250	16.0	13.9	
7 Propene	41	3.395	3.396	-0.001	96	1673252	16.0	12.1	
8 Dichlorodifluoromethane	85	3.443	3.443	0.000	97	4901458	16.0	12.3	
9 Chloromethane	52	3.621	3.620	0.001	62	566339	16.0	13.9	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.622	-0.001	85	3466596	16.0	13.7	
11 Acetaldehyde	44	3.767	3.763	0.004	99	2831497	80.0	58.8	
12 Vinyl chloride	62	3.783	3.784	-0.001	99	1883141	16.0	14.5	
14 Butane	43	3.869	3.868	0.001	83	2900462	16.0	13.3	
13 Butadiene	54	3.869	3.868	0.001	73	1538765	16.0	14.7	
15 Bromomethane	94	4.182	4.179	0.003	98	1637373	16.0	14.7	
16 Chloroethane	64	4.317	4.313	0.004	93	913975	16.0	14.9	
17 Ethanol	31	4.414	4.397	0.017	96	2708751	80.0	58.4	
18 Vinyl bromide	106	4.608	4.603	0.005	97	1722253	16.0	14.7	
19 2-Methylbutane	43	4.651	4.649	0.002	89	2126958	16.0	14.2	
21 Trichlorofluoromethane	101	4.867	4.864	0.003	99	4485927	16.0	12.6	
20 Acrolein	56	4.878	4.871	0.007	11	564944	16.0	12.6	
22 Acetonitrile	40	4.948	4.938	0.010	98	615720	16.0	14.4	
23 Acetone	58	4.986	4.979	0.007	88	1701082	48.0	33.1	
24 Isopropyl alcohol	45	5.088	5.065	0.023	77	5472971	48.0	35.2	
25 Pentane	72	5.083	5.081	0.002	84	323295	16.0	14.7	
26 Ethyl ether	31	5.239	5.240	-0.001	94	1353622	16.0	13.6	
27 1,1-Dichloroethene	96	5.573	5.568	0.005	96	1616290	16.0	14.7	
29 2-Methyl-2-propanol	59	5.676	5.663	0.013	96	3058405	16.0	13.4	
28 Acrylonitrile	53	5.687	5.673	0.014	67	1173152	16.0	14.0	
30 1,1,2-Trichloro-1,2,2-trif	101	5.741	5.738	0.003	94	3454662	16.0	13.7	
31 Methylene Chloride	84	5.929	5.921	0.008	93	1375830	16.0	12.9	

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	5.940	5.935	0.005	92	1970638	16.0	12.9	
33 Carbon disulfide	76	6.086	6.082	0.004	98	4233264	16.0	13.9	
34 trans-1,2-Dichloroethene	96	6.738	6.732	0.006	91	1642087	16.0	14.0	
35 2-Methylpentane	43	6.749	6.744	0.005	94	3843867	16.0	13.0	
36 Methyl tert-butyl ether	73	6.846	6.849	-0.003	94	3876895	16.0	13.1	
37 1,1-Dichloroethane	63	7.170	7.161	0.009	100	3143744	16.0	13.4	
38 Vinyl acetate	43	7.272	7.262	0.010	100	4541545	16.0	13.7	
39 2-Butanone (MEK)	72	7.720	7.716	0.004	89	593780	16.0	11.6	
40 Hexane	56	7.741	7.735	0.006	88	1533367	16.0	13.8	
140 Isopropyl ether	45	7.898	7.893	0.005	95	5109272	16.0	12.7	
41 cis-1,2-Dichloroethene	96	8.167	8.158	0.009	97	1770263	16.0	14.4	
42 Ethyl acetate	43	8.345	8.340	0.005	98	3125452	16.0	12.6	
43 Chloroform	83	8.518	8.505	0.013	84	3768446	16.0	13.1	
143 Tert-butyl ethyl ether	59	8.582	8.582	0.000	96	4585733	16.0	13.4	
44 Tetrahydrofuran	42	8.900	8.905	-0.005	92	1740068	16.0	12.9	
45 1,1,1-Trichloroethane	97	9.548	9.543	0.005	97	4300857	16.0	12.8	
46 1,2-Dichloroethane	62	9.672	9.662	0.010	96	2865639	16.0	13.0	
47 n-Butanol	31	10.114	10.114	0.000	81	714616	16.0	13.1	
49 Cyclohexane	69	10.162	10.159	0.003	77	791983	16.0	13.8	
48 Benzene	78	10.168	10.161	0.007	97	4458322	16.0	13.4	
50 Carbon tetrachloride	117	10.189	10.184	0.005	97	4452021	16.0	12.7	
51 2,3-Dimethylpentane	71	10.286	10.280	0.006	90	1117397	16.0	14.1	
52 Thiophene	84	10.459	10.449	0.010	98	2643181	16.0	13.8	
141 Tert-amyl methyl ether	73	10.653	10.651	0.002	92	3824675	16.0	12.9	
53 Isooctane	57	10.955	10.947	0.008	94	8042591	16.0	12.2	
54 n-Heptane	71	11.349	11.341	0.008	91	1733886	16.0	13.9	
55 1,2-Dichloropropane	63	11.440	11.434	0.006	81	1754270	16.0	13.7	
56 Trichloroethene	130	11.473	11.467	0.006	97	2494803	16.0	13.4	
57 Dibromomethane	93	11.564	11.558	0.006	94	2097510	16.0	13.3	
58 Dichlorobromomethane	83	11.715	11.706	0.009	99	4002567	16.0	13.2	
59 1,4-Dioxane	88	11.721	11.721	0.000	39	630812	16.0	13.1	
60 Methyl methacrylate	41	11.807	11.802	0.005	93	2184812	16.0	13.1	
61 Methylcyclohexane	83	12.255	12.250	0.005	90	3575488	16.0	13.1	
62 4-Methyl-2-pentanone (MIBK)	43	12.675	12.673	0.002	96	3506313	16.0	12.3	
63 cis-1,3-Dichloropropene	75	12.740	12.734	0.006	97	2908747	16.0	13.9	
64 trans-1,3-Dichloropropene	75	13.452	13.446	0.006	97	2854902	16.0	13.7	
65 Toluene	91	13.570	13.562	0.008	94	5160739	16.0	12.2	
66 1,1,2-Trichloroethane	83	13.657	13.648	0.009	72	1619633	16.0	13.6	
67 2-Methylthiophene	97	13.727	13.718	0.009	96	4416282	16.0	12.8	
68 3-Methylthiophene	97	13.932	13.923	0.009	98	4332237	16.0	12.9	
69 2-Hexanone	58	14.034	14.032	0.002	94	1776938	16.0	13.6	
70 n-Octane	85	14.266	14.260	0.006	89	1972391	16.0	13.6	
71 Chlorodibromomethane	129	14.363	14.356	0.007	96	4200371	16.0	13.2	
72 Ethylene Dibromide	107	14.660	14.651	0.009	97	3185492	16.0	13.5	
73 Tetrachloroethene	129	14.724	14.720	0.004	95	2387707	16.0	12.7	
74 Chlorobenzene	112	15.614	15.607	0.007	89	4482032	16.0	12.7	
75 2,3-Dimethylheptane	43	15.625	15.621	0.004	89	4890541	16.0	11.1	
76 Ethylbenzene	91	15.900	15.896	0.004	96	6489313	16.0	11.8	
77 2-Ethylthiophene	97	16.008	16.003	0.005	71	5291194	16.0	12.2	
78 m-Xylene & p-Xylene	91	16.067	16.060	0.007	93	9340381	32.0	22.1	
81 n-Nonane	57	16.482	16.479	0.003	87	3751899	16.0	12.8	
79 Bromoform	173	16.520	16.516	0.004	93	3841729	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
80 Styrene	104	16.536	16.530	0.006	91	4286724	16.0	14.1	
82 o-Xylene	91	16.595	16.591	0.004	95	5301803	16.0	12.0	
83 1,1,2,2-Tetrachloroethane	83	16.924	16.921	0.003	97	3604462	16.0	13.3	
84 1,2,3-Trichloropropane	110	17.086	17.083	0.004	92	1344184	16.0	13.3	
85 Isopropylbenzene	105	17.183	17.180	0.003	97	7076221	16.0	11.4	
86 N-Propylbenzene	120	17.733	17.728	0.005	81	2349724	16.0	13.9	
87 2-Chlorotoluene	126	17.782	17.776	0.006	67	2226543	16.0	13.4	
88 4-Ethyltoluene	105	17.890	17.884	0.006	94	6669337	16.0	12.2	
89 1,3,5-Trimethylbenzene	120	17.965	17.960	0.005	94	3648297	16.0	13.2	
90 Alpha Methyl Styrene	118	18.202	18.196	0.006	82	3412683	16.0	14.4	
91 n-Decane	57	18.256	18.252	0.004	93	4147161	16.0	12.5	
92 tert-Butylbenzene	119	18.396	18.392	0.004	85	6374457	16.0	12.1	
93 1,2,4-Trimethylbenzene	105	18.413	18.405	0.008	91	5724196	16.0	11.9	
95 sec-Butylbenzene	105	18.671	18.665	0.006	92	7454950	16.0	11.3	
94 1,3-Dichlorobenzene	146	18.688	18.683	0.005	97	4443247	16.0	13.2	
96 Benzyl chloride	91	18.763	18.759	0.004	96	5364340	16.0	13.1	
97 1,4-Dichlorobenzene	146	18.779	18.771	0.008	90	4381940	16.0	13.4	
98 4-Isopropyltoluene	119	18.833	18.830	0.003	82	6497547	16.0	11.3	
99 1,2,3-Trimethylbenzene	105	18.887	18.884	0.003	82	4492166	16.0	12.2	
100 Butylcyclohexane	83	18.941	18.937	0.004	85	4415052	16.0	12.2	
102 2,3-Dihydroindene	117	19.141	19.134	0.007	90	5397610	16.0	12.1	
101 1,2-Dichlorobenzene	146	19.141	19.136	0.005	86	4144980	16.0	12.9	
103 Indene	116	19.270	19.266	0.004	85	4402278	16.0	13.2	
104 n-Butylbenzene	91	19.275	19.270	0.005	92	5762141	16.0	11.7	
106 Undecane	57	19.583	19.581	0.002	92	4008594	16.0	13.4	
105 1,2-Dimethyl-4-Ethylbenzen	119	19.647	19.644	0.003	93	4981755	16.0	12.1	
142 1,2-Dibromo-3-Chloropropan	157	19.750	19.747	0.003	97	2108388	16.0	14.1	
107 1,2,4,5-Tetramethylbenzene	119	20.036	20.032	0.004	96	5676670	16.0	11.9	
108 1,2,3,5-Tetramethylbenzene	119	20.090	20.085	0.005	96	3808065	16.0	12.8	
109 1,2,3,4-Tetramethylbenzene	119	20.489	20.484	0.005	97	4908142	16.0	12.2	
110 Dodecane	57	20.645	20.641	0.004	93	3026750	16.0	13.2	
111 1,2,4-Trichlorobenzene	180	20.850	20.846	0.004	93	2689576	16.0	14.2	
112 Naphthalene	128	20.990	20.988	0.002	97	5354184	16.0	13.7	
113 Benzo(b)thiophene	134	21.098	21.097	0.001	98	4201330	16.0	13.4	
114 Hexachlorobutadiene	225	21.206	21.206	0.000	83	2532644	16.0	12.0	
115 1,2,3-Trichlorobenzene	180	21.281	21.281	0.000	93	2224496	16.0	14.2	
116 2-Methylnaphthalene	142	22.139	22.134	0.005	99	2893636	50.0	46.7	
117 1-Methylnaphthalene	142	22.333	22.332	0.001	99	2730293	50.0	45.8	
A 118 C6 Range	1	7.741	(7.666-7.806)		0	17618346	16.0	11.8	
A 119 Toluene Range	1	13.570	(13.540-13.600)		0	14095450	16.0	13.5	
A 120 C8 Range	1	14.266	(14.236-14.296)		0	19012674	16.0	13.2	
S 124 Xylenes, Total	100				0		48.0	34.1	
S 144 1,2-Dichloroethene, Total	1				0		32.0	28.4	

Reagents:

CCN2C00X40_00001

Amount Added: 200.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I9.D

Injection Date: 03-Mar-2015 16:09:30

Instrument ID: ME

Operator ID: 7126

Lims ID: IC L9

Worklist Smp#: 10

Client ID:

Purge Vol: 500.000 mL

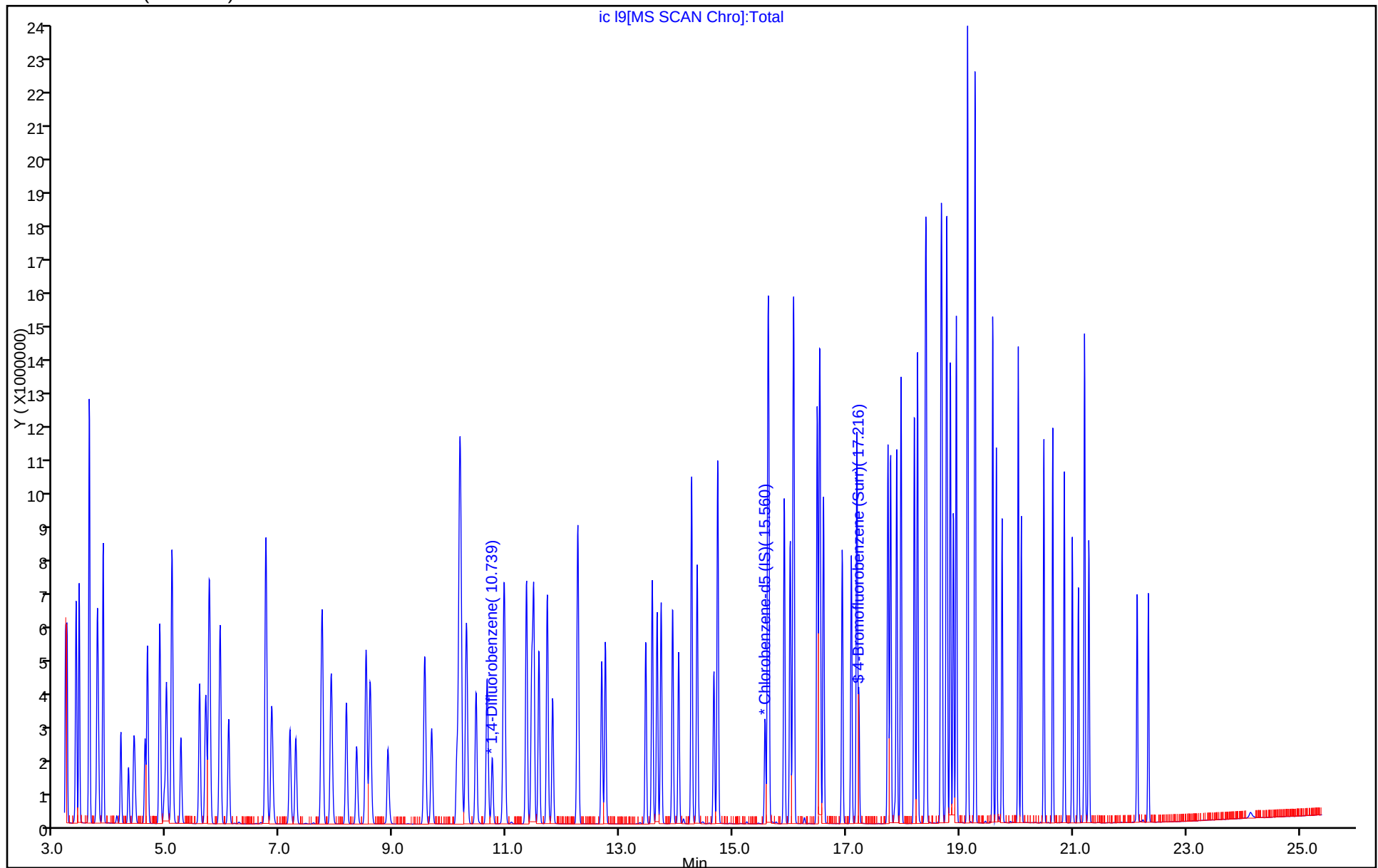
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I9.D

Injection Date: 03-Mar-2015 16:09:30

Instrument ID: ME

Lims ID: IC L9

Client ID:

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 10

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

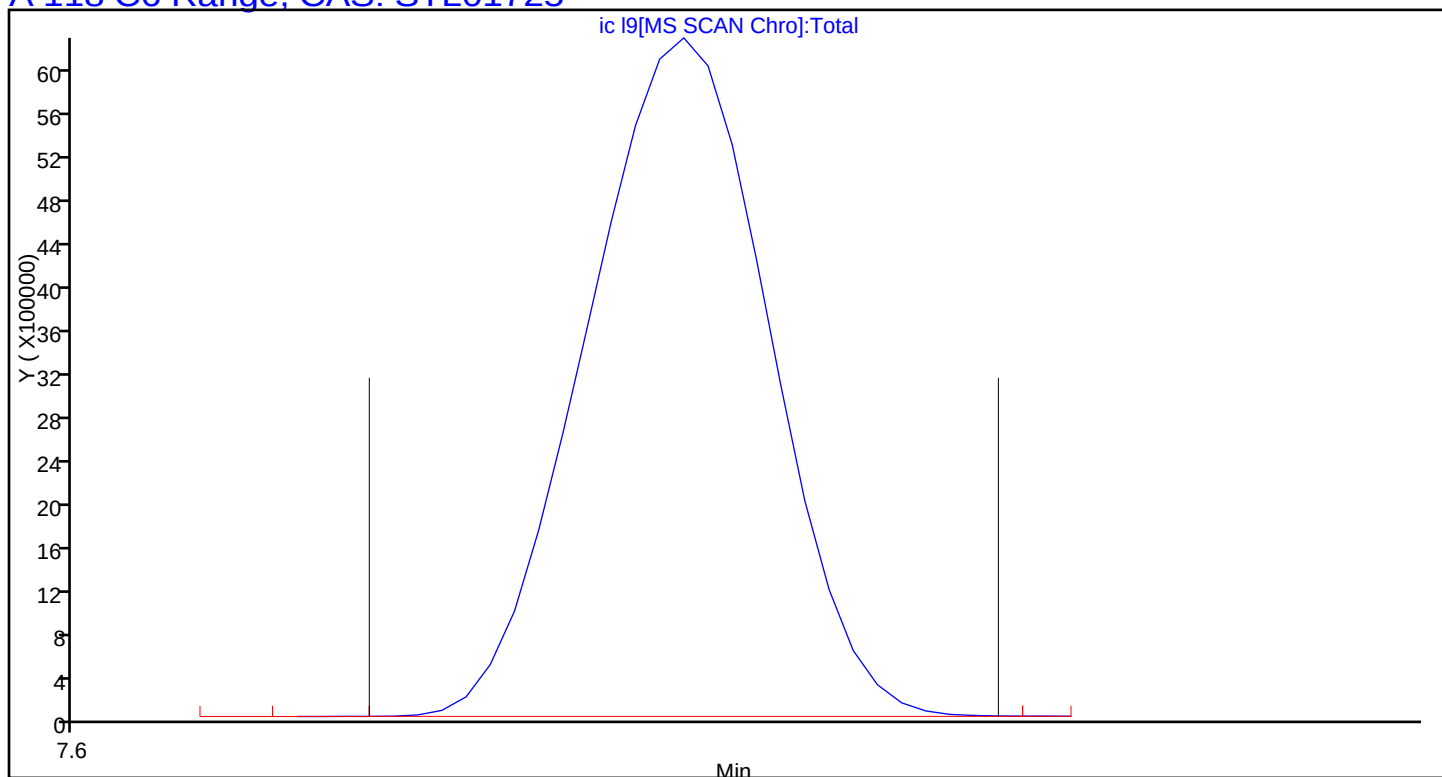
Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

A 118 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I9.D

Injection Date: 03-Mar-2015 16:09:30

Instrument ID: ME

Lims ID: IC L9

Client ID:

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 10

Purge Vol: 500.000 mL

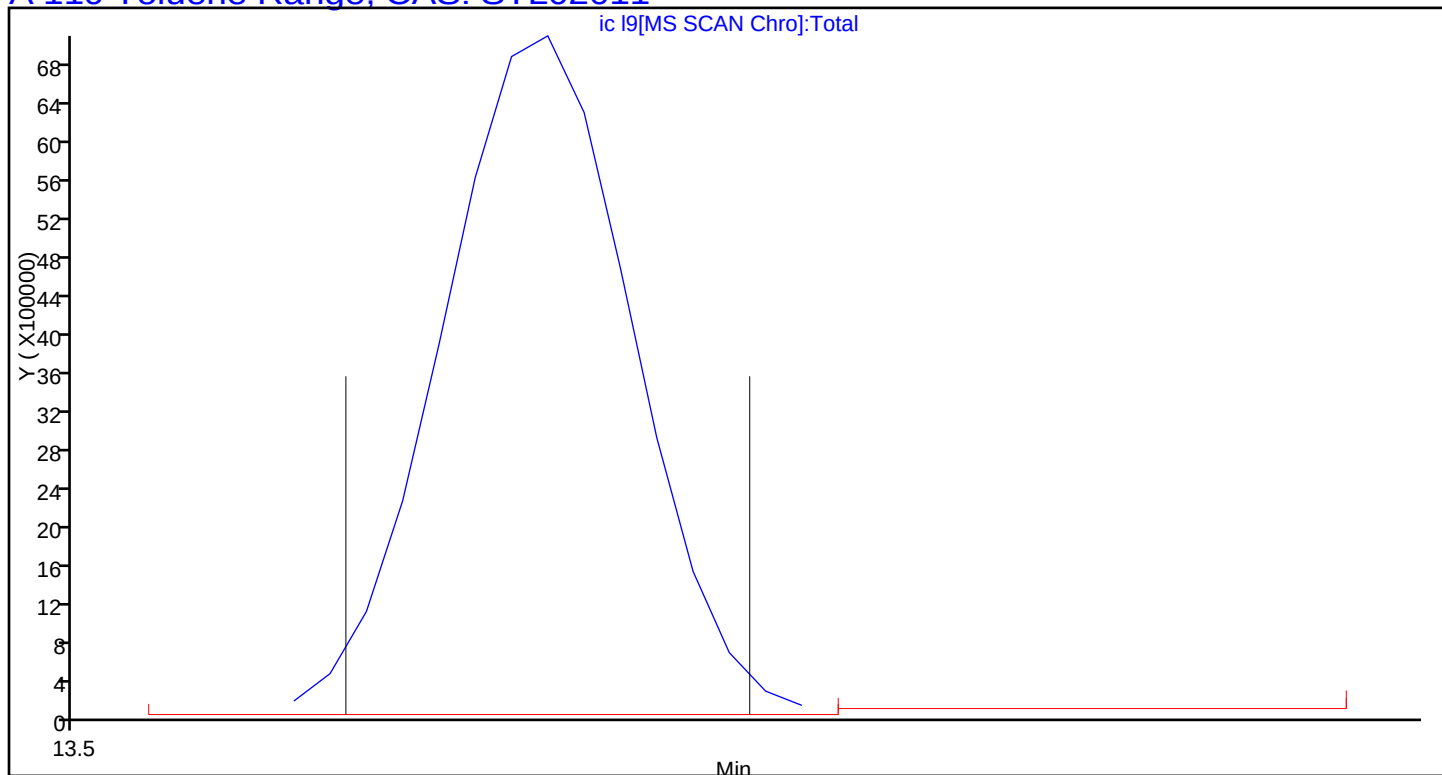
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 119 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I9.D

Injection Date: 03-Mar-2015 16:09:30

Instrument ID: ME

Lims ID: IC L9

Client ID:

Operator ID: 7126

ALS Bottle#:

14

Worklist Smp#:

10

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: ME_TO15

Limit Group:

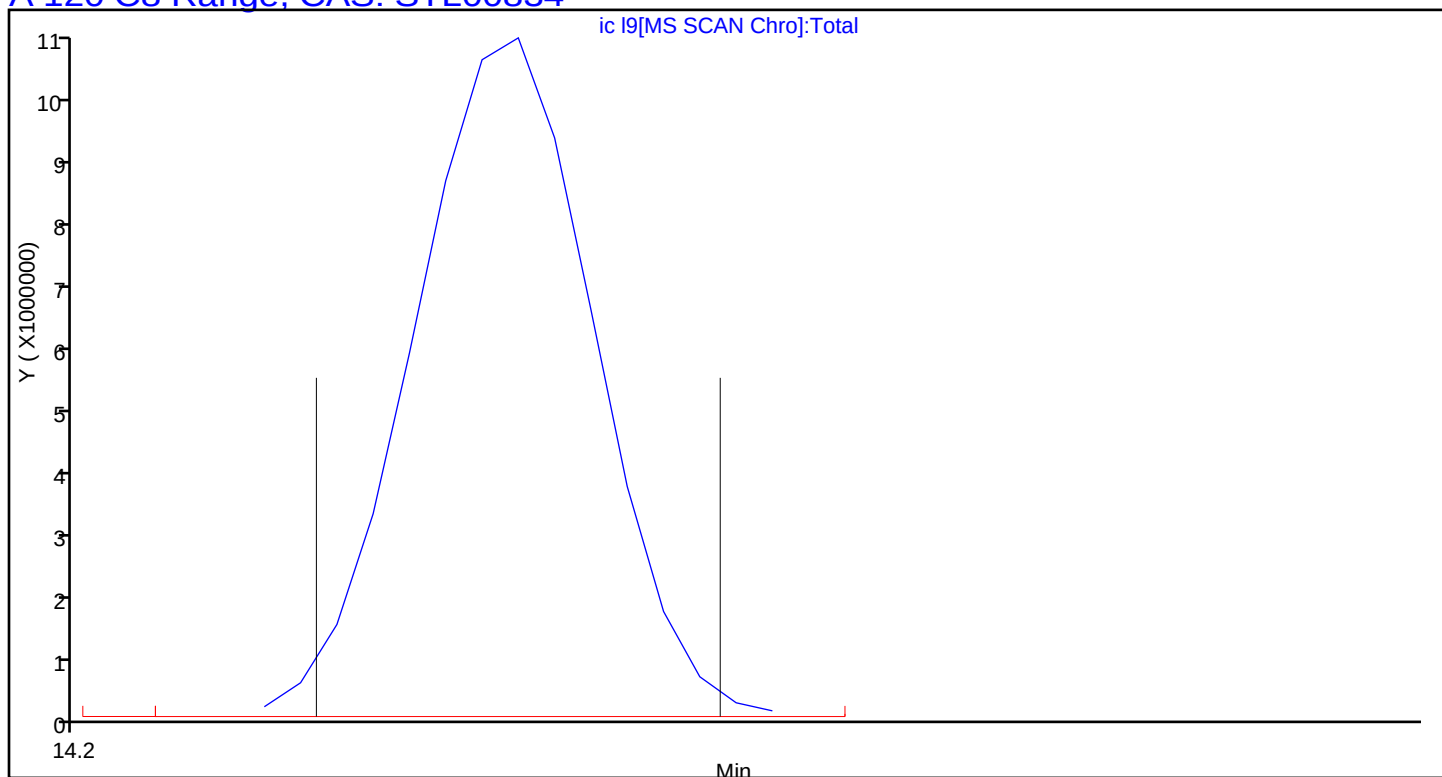
MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

A 120 C8 Range, CAS: STL00834



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Lab Sample ID: ICV 140-2456/12 Calibration Date: 03/03/2015 17:39

Instrument ID: ME Calib Start Date: 03/03/2015 10:06

GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/03/2015 16:09

Lab File ID: icv.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	0.4520	0.4661		2.06	2.00	3.1	35.0
Propene	Ave	1.419	1.317		1.86	2.00	-7.2	35.0
Dichlorodifluoromethane	Ave	4.086	4.374		2.14	2.00	7.1	35.0
1,2-Dichlorotetrafluoroethane	Ave	2.588	3.014		2.33	2.00	16.5	35.0
Chloromethane	Ave	0.4190	0.4628		2.21	2.00	10.5	35.0
Acetaldehyde	Ave	0.4938	0.4450		9.01	10.0	-9.9	80.0
Vinyl chloride	Ave	1.332	1.480		2.22	2.00	11.2	35.0
Butane	Ave	2.229	2.392		2.15	2.00	7.3	35.0
1,3-Butadiene	Ave	1.071	1.183		2.21	2.00	10.4	35.0
Bromomethane	Ave	1.146	1.328		2.32	2.00	15.9	35.0
Chloroethane	Ave	0.6306	0.7232		2.29	2.00	14.7	35.0
Ethanol	Ave	0.4760	0.4482		9.42	10.0	-5.9	80.0
Vinyl bromide	Ave	1.203	1.310		2.18	2.00	8.9	35.0
2-Methylbutane	Ave	1.542	1.732		2.25	2.00	12.3	35.0
Trichlorofluoromethane	Ave	3.647	4.058		2.23	2.00	11.3	35.0
Acrolein	Ave	0.4606	0.3988		1.73	2.00	-13.4	35.0
Acetonitrile	Ave	0.4386	0.4383		2.00	2.00	-0.0	35.0
Acetone	Ave	0.5267	0.4539		5.17	6.00	-13.8	35.0
Isopropyl alcohol	Ave	1.596	1.466		5.51	6.00	-8.2	35.0
Pentane	Ave	0.2255	0.2479		2.20	2.00	9.9	35.0
Ethyl ether	Ave	1.024	1.104		2.16	2.00	7.8	35.0
1,1-Dichloroethene	Ave	1.132	1.099		1.94	2.00	-2.9	35.0
t-Butyl alcohol	Ave	2.347	2.232		1.90	2.00	-4.9	35.0
Acrylonitrile	Ave	0.8592	0.8308		1.93	2.00	-3.3	35.0
1,1,2-Trichlorotrifluoroethane	Ave	2.580	2.352		1.82	2.00	-8.8	35.0
Methylene Chloride	Ave	1.095	0.9650		1.76	2.00	-11.8	35.0
3-Chloropropene	Ave	1.571	1.392		1.77	2.00	-11.4	35.0
Carbon disulfide	Ave	3.120	3.532		2.26	2.00	13.2	35.0
trans-1,2-Dichloroethene	Ave	1.203	1.319		2.19	2.00	9.7	35.0
2-Methylpentane	Ave	3.026	3.530		2.33	2.00	16.7	80.0
Methyl tert-butyl ether	Ave	3.026	2.885		1.91	2.00	-4.7	35.0
1,1-Dichloroethane	Ave	2.405	2.285		1.90	2.00	-5.0	35.0
Vinyl acetate	Ave	3.393	3.113		1.84	2.00	-8.2	35.0
2-Butanone	Ave	0.5231	0.4256		1.63	2.00	-18.6	35.0
Hexane	Ave	1.141	1.220		2.14	2.00	6.9	35.0
Isopropyl ether	Ave	4.118	4.108		2.00	2.00	-0.2	
cis-1,2-Dichloroethene	Ave	1.262	1.211		1.92	2.00	-4.1	35.0
Ethyl acetate	Ave	2.544	2.439		1.92	2.00	-4.1	35.0
Chloroform	Ave	2.957	2.757		1.87	2.00	-6.7	35.0
Tert-butyl ethyl ether	Ave	3.511	3.608		2.06	2.00	2.8	

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Lab Sample ID: ICV 140-2456/12 Calibration Date: 03/03/2015 17:39
 Instrument ID: ME Calib Start Date: 03/03/2015 10:06
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/03/2015 16:09
 Lab File ID: icv.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	1.381	1.280		1.85	2.00	-7.3	35.0
1,1,1-Trichloroethane	Ave	3.449	3.270		1.90	2.00	-5.2	35.0
1,2-Dichloroethane	Ave	0.5003	0.4731		1.89	2.00	-5.4	35.0
1-Butanol	Ave	0.1234	0.1080		1.75	2.00	-12.4	35.0
Cyclohexane	Ave	0.1303	0.1380		2.12	2.00	5.9	35.0
Benzene	Ave	0.7529	0.7214		1.92	2.00	-4.2	35.0
Carbon tetrachloride	Ave	0.7922	0.7163		1.81	2.00	-9.6	35.0
2,3-Dimethylpentane	Ave	0.1797	0.1731		1.93	2.00	-3.7	80.0
Thiophene	Ave	0.4351	0.4711		2.17	2.00	8.3	80.0
Tert-amyl methyl ether	Ave	0.7016	0.6885		1.96	2.00	-1.9	
2,2,4-Trimethylpentane	Ave	1.497	1.509		2.02	2.00	0.8	35.0
Heptane	Ave	0.2830	0.2851		2.02	2.00	0.7	35.0
1,2-Dichloropropane	Ave	0.2907	0.2773		1.91	2.00	-4.6	35.0
Trichloroethene	Ave	0.4222	0.4170		1.98	2.00	-1.2	35.0
Dibromomethane	Ave	0.3578	0.3543		1.98	2.00	-1.0	35.0
Bromodichloromethane	Ave	0.6887	0.7025		2.04	2.00	2.0	35.0
1,4-Dioxane	Ave	0.1087	0.1024		1.88	2.00	-5.9	35.0
Methyl methacrylate	Ave	0.3766	0.3664		1.95	2.00	-2.7	35.0
Methylcyclohexane	Ave	0.6159	0.5135		1.67	2.00	-16.6	80.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6431	0.5684		1.77	2.00	-11.6	35.0
cis-1,3-Dichloropropene	Ave	0.4750	0.4386		1.85	2.00	-7.7	35.0
trans-1,3-Dichloropropene	Ave	0.4946	0.4849		1.96	2.00	-2.0	35.0
Toluene	Ave	1.003	0.9537		1.90	2.00	-4.9	35.0
1,1,2-Trichloroethane	Ave	0.2817	0.2733		1.94	2.00	-3.0	35.0
2-Methylthiophene	Ave	0.8201	0.8721		2.13	2.00	6.3	80.0
3-Methylthiophene	Ave	0.7995	0.8798		2.20	2.00	10.1	80.0
2-Hexanone	Ave	0.3108	0.2809		1.81	2.00	-9.6	35.0
Octane	Ave	0.3451	0.3418		1.98	2.00	-1.0	35.0
Dibromochloromethane	Ave	0.7527	0.7475		1.99	2.00	-0.7	35.0
1,2-Dibromoethane	Ave	0.5611	0.5359		1.91	2.00	-4.5	35.0
Tetrachloroethene	Ave	0.4472	0.4245		1.90	2.00	-5.1	35.0
Chlorobenzene	Ave	0.8355	0.7998		1.92	2.00	-4.3	35.0
2,3-Dimethylheptane	Ave	1.044	1.078		2.06	2.00	3.2	80.0
Ethylbenzene	Ave	1.301	1.227		1.89	2.00	-5.7	35.0
2-Ethylthiophene	Ave	1.028	1.030		2.00	2.00	0.1	80.0
m-Xylene & p-Xylene	Ave	1.003	0.9643		3.85	4.00	-3.8	35.0
Nonane	Ave	0.6975	0.6894		1.98	2.00	-1.2	35.0
Bromoform	Ave	0.6379	0.6412		2.01	2.00	0.5	35.0
Styrene	Ave	0.7197	0.7008		1.95	2.00	-2.6	35.0
o-Xylene	Ave	1.047	1.009		1.93	2.00	-3.6	35.0
1,1,2,2-Tetrachloroethane	Ave	0.6420	0.5848		1.82	2.00	-8.9	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Lab Sample ID: ICV 140-2456/12 Calibration Date: 03/03/2015 17:39
 Instrument ID: ME Calib Start Date: 03/03/2015 10:06
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/03/2015 16:09
 Lab File ID: icv.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
1,2,3-Trichloropropane	Ave	0.2405	0.2183		1.82	2.00	-9.2	35.0
Isopropylbenzene	Ave	1.477	1.396		1.89	2.00	-5.4	35.0
Propylbenzene	Ave	0.4012	0.3745		1.87	2.00	-6.6	35.0
2-Chlorotoluene	Ave	0.3941	0.3728		1.89	2.00	-5.4	35.0
4-Ethyltoluene	Ave	1.296	1.293		2.00	2.00	-0.2	35.0
1,3,5-Trimethylbenzene	Ave	0.6562	0.6116		1.86	2.00	-6.8	35.0
Alpha Methyl Styrene	Ave	0.5611	0.5442		1.94	2.00	-3.0	35.0
Decane	Ave	0.7866	0.7548		1.92	2.00	-4.0	35.0
tert-Butylbenzene	Ave	1.248	1.181		1.89	2.00	-5.4	35.0
1,2,4-Trimethylbenzene	Ave	1.140	1.067		1.87	2.00	-6.4	35.0
sec-Butylbenzene	Ave	1.570	1.495		1.91	2.00	-4.8	35.0
1,3-Dichlorobenzene	Ave	0.7982	0.7589		1.90	2.00	-4.9	35.0
Benzyl chloride	Ave	0.9705	0.8731		1.80	2.00	-10.0	35.0
1,4-Dichlorobenzene	Ave	0.7789	0.7425		1.91	2.00	-4.7	35.0
4-Isopropyltoluene	Ave	1.363	1.283		1.88	2.00	-5.8	35.0
1,2,3-Trimethylbenzene	Ave	0.8753	0.8942		2.04	2.00	2.2	80.0
Butylcyclohexane	Ave	0.8589	0.8149		1.90	2.00	-5.1	80.0
1,2-Dichlorobenzene	Ave	0.7611	0.7136		1.88	2.00	-6.2	35.0
Indane	Ave	1.060	0.9776		1.84	2.00	-7.8	80.0
Indene	Ave	0.7919	0.9315		2.35	2.00	17.6	80.0
Butylbenzene	Ave	1.173	1.076		1.83	2.00	-8.3	35.0
Undecane	Ave	0.7118	0.6278		1.76	2.00	-11.8	35.0
1,2-Dimethyl-4-Ethylbenzene	Ave	0.9779	1.140		2.33	2.00	16.6	80.0
1,2-Dibromo-3-Chloropropane	Ave	0.3545	0.2422		1.37	2.00	-31.7	
1,2,4,5-Tetramethylbenzene	Ave	1.132	1.164		2.06	2.00	2.8	80.0
1,2,3,5-Tetramethylbenzene	Ave	0.7044	0.7417		2.11	2.00	5.3	80.0
1,2,3,4-Tetramethylbenzene	Ave	0.9522	0.9173		1.93	2.00	-3.7	80.0
Dodecane	Ave	0.5442	0.4834		1.78	2.00	-11.2	35.0
1,2,4-Trichlorobenzene	Ave	0.4497	0.4183		1.86	2.00	-7.0	35.0
Naphthalene	Ave	0.9301	0.9232		1.99	2.00	-0.7	35.0
Benzo (b) thiophene	Ave	0.7419	0.6302		1.70	2.00	-15.1	80.0
Hexachlorobutadiene	Ave	0.4989	0.4936		1.98	2.00	-1.1	35.0
1,2,3-Trichlorobenzene	Ave	0.3709	0.3492		1.88	2.00	-5.9	35.0
2-Methylnaphthalene	Ave	0.1470	0.0941		4.00	6.25	-36.0	80.0
1-Methylnaphthalene	Ave	0.1415	0.0946		4.18	6.25	-33.1	80.0
4-Bromofluorobenzene (Surr)	Ave	0.7532	0.7598		4.04	4.00	0.9	35.0

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\icv.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 03-Mar-2015 17:39:30 ALS Bottle#: 15 Worklist Smp#: 12
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 023290
 Misc. Info.: 140-0001421-012
 Operator ID: 7126 Instrument ID: ME
 Sublist:
 Method: \\KNXCHROM\ChromData\ME\20150302-1421.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Mar-2015 14:48:35 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK030

First Level Reviewer: barlozhetskayaa

Date: 04-Mar-2015 11:26:39

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	8.496	8.495	0.001	97	371428	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.734	10.736	-0.002	96	1664682	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.560	15.558	0.002	90	1586368	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.216	17.213	0.003	89	1205339	4.00	4.04	
6 Chlorodifluoromethane	67	3.384	3.383	0.001	97	86592	2.00	2.06	
7 Propene	41	3.395	3.396	-0.001	96	244727	2.00	1.86	
8 Dichlorodifluoromethane	85	3.443	3.443	0.000	100	812468	2.00	2.14	
9 Chloromethane	52	3.621	3.620	0.001	58	85978	2.00	2.21	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.622	-0.001	89	559935	2.00	2.33	
11 Acetaldehyde	44	3.762	3.763	-0.001	98	413277	10.0	9.01	
12 Vinyl chloride	62	3.783	3.784	-0.001	99	275017	2.00	2.22	
14 Butane	43	3.864	3.868	-0.004	84	444387	2.00	2.15	
13 Butadiene	54	3.869	3.868	0.001	69	219742	2.00	2.21	
15 Bromomethane	94	4.177	4.179	-0.002	99	246762	2.00	2.32	
16 Chloroethane	64	4.312	4.313	-0.001	92	134350	2.00	2.29	
17 Ethanol	31	4.392	4.397	-0.005	97	416259	10.0	9.42	
18 Vinyl bromide	106	4.603	4.603	0.000	98	243263	2.00	2.18	
19 2-Methylbutane	43	4.646	4.649	-0.003	90	321652	2.00	2.25	
21 Trichlorofluoromethane	101	4.862	4.864	-0.002	100	753756	2.00	2.23	
20 Acrolein	56	4.872	4.871	0.001	93	74078	2.00	1.73	
22 Acetonitrile	40	4.937	4.938	-0.001	97	81425	2.00	2.00	
23 Acetone	58	4.975	4.979	-0.004	99	252968	6.00	5.17	
24 Isopropyl alcohol	45	5.056	5.065	-0.009	97	817028	6.00	5.51	
25 Pentane	72	5.083	5.081	0.002	96	46048	2.00	2.20	
26 Ethyl ether	31	5.239	5.240	-0.001	95	205116	2.00	2.16	
27 1,1-Dichloroethene	96	5.568	5.568	0.000	94	204148	2.00	1.94	
29 2-Methyl-2-propanol	59	5.654	5.663	-0.009	96	414553	2.00	1.90	
28 Acrylonitrile	53	5.670	5.673	-0.003	92	154325	2.00	1.93	
30 1,1,2-Trichloro-1,2,2-trif	101	5.741	5.738	0.003	96	436851	2.00	1.82	
31 Methylene Chloride	84	5.919	5.921	-0.003	94	179254	2.00	1.76	

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	5.935	5.935	0.000	95	258649	2.00	1.77	
33 Carbon disulfide	76	6.080	6.082	-0.002	99	656098	2.00	2.26	
34 trans-1,2-Dichloroethene	96	6.733	6.732	0.001	95	245072	2.00	2.19	
35 2-Methylpentane	43	6.744	6.744	0.000	95	655813	2.00	2.33	
36 Methyl tert-butyl ether	73	6.846	6.849	-0.003	97	535869	2.00	1.91	
37 1,1-Dichloroethane	63	7.159	7.161	-0.002	100	424412	2.00	1.90	
38 Vinyl acetate	43	7.256	7.262	-0.006	100	578307	2.00	1.84	
39 2-Butanone (MEK)	72	7.709	7.716	-0.007	96	79066	2.00	1.63	
40 Hexane	56	7.730	7.735	-0.005	89	226616	2.00	2.14	
140 Isopropyl ether	45	7.892	7.893	-0.001	96	763133	2.00	2.00	
41 cis-1,2-Dichloroethene	96	8.156	8.158	-0.002	98	224959	2.00	1.92	
42 Ethyl acetate	43	8.334	8.340	-0.006	98	453140	2.00	1.92	
43 Chloroform	83	8.507	8.505	0.002	98	512216	2.00	1.87	
143 Tert-butyl ethyl ether	59	8.577	8.582	-0.005	96	670334	2.00	2.06	
44 Tetrahydrofuran	42	8.895	8.905	-0.010	91	237793	2.00	1.85	
45 1,1,1-Trichloroethane	97	9.542	9.543	-0.001	96	607534	2.00	1.90	
46 1,2-Dichloroethane	62	9.661	9.662	-0.001	98	393845	2.00	1.89	
47 n-Butanol	31	10.108	10.114	-0.006	85	89937	2.00	1.75	
49 Cyclohexane	69	10.152	10.159	-0.007	92	114876	2.00	2.12	
48 Benzene	78	10.162	10.161	0.001	98	600597	2.00	1.92	
50 Carbon tetrachloride	117	10.184	10.184	0.000	97	596347	2.00	1.81	
51 2,3-Dimethylpentane	71	10.281	10.280	0.001	89	144133	2.00	1.93	
52 Thiophene	84	10.448	10.449	-0.001	98	392227	2.00	2.17	
141 Tert-amyl methyl ether	73	10.648	10.651	-0.003	94	546278	2.00	1.96	
53 Isooctane	57	10.944	10.947	-0.003	97	1256333	2.00	2.02	
54 n-Heptane	71	11.338	11.341	-0.003	94	237322	2.00	2.02	
55 1,2-Dichloropropane	63	11.430	11.434	-0.004	82	230896	2.00	1.91	
56 Trichloroethene	130	11.467	11.467	0.000	97	347203	2.00	1.98	
57 Dibromomethane	93	11.559	11.558	0.001	96	294958	2.00	1.98	
58 Dichlorobromomethane	83	11.705	11.706	-0.001	99	584856	2.00	2.04	
59 1,4-Dioxane	88	11.715	11.721	-0.006	95	85241	2.00	1.88	
60 Methyl methacrylate	41	11.802	11.802	0.000	93	305079	2.00	1.95	
61 Methylcyclohexane	83	12.249	12.250	-0.001	89	427523	2.00	1.67	
62 4-Methyl-2-pentanone (MIBK)	43	12.670	12.673	-0.003	99	473245	2.00	1.77	
63 cis-1,3-Dichloropropene	75	12.734	12.734	0.000	97	365145	2.00	1.85	
64 trans-1,3-Dichloropropene	75	13.446	13.446	0.000	97	384737	2.00	1.96	
65 Toluene	91	13.565	13.562	0.003	93	756665	2.00	1.90	
66 1,1,2-Trichloroethane	83	13.646	13.648	-0.002	97	216861	2.00	1.94	
67 2-Methylthiophene	97	13.721	13.718	0.003	98	691917	2.00	2.13	
68 3-Methylthiophene	97	13.921	13.923	-0.002	99	698050	2.00	2.20	
69 2-Hexanone	58	14.029	14.032	-0.003	92	222880	2.00	1.81	
70 n-Octane	85	14.261	14.260	0.001	94	271186	2.00	1.98	
71 Chlorodibromomethane	129	14.358	14.356	0.002	98	593046	2.00	1.99	
72 Ethylene Dibromide	107	14.654	14.651	0.003	99	425187	2.00	1.91	
73 Tetrachloroethene	129	14.719	14.720	-0.001	95	336776	2.00	1.90	
74 Chlorobenzene	112	15.609	15.607	0.002	93	634561	2.00	1.92	
75 2,3-Dimethylheptane	43	15.619	15.621	-0.002	95	855079	2.00	2.06	
76 Ethylbenzene	91	15.894	15.896	-0.002	99	973484	2.00	1.89	
77 2-Ethylthiophene	97	16.002	16.003	-0.001	99	816943	2.00	2.00	
78 m-Xylene & p-Xylene	91	16.062	16.060	0.002	100	1530214	4.00	3.85	
81 n-Nonane	57	16.477	16.479	-0.002	93	546943	2.00	1.98	
79 Bromoform	173	16.515	16.516	-0.001	96	508726	2.00	2.01	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
80 Styrene	104	16.531	16.530	0.001	99	556030	2.00	1.95	
82 o-Xylene	91	16.590	16.591	-0.001	99	800737	2.00	1.93	
83 1,1,2,2-Tetrachloroethane	83	16.919	16.921	-0.002	98	463991	2.00	1.82	
84 1,2,3-Trichloropropane	110	17.081	17.083	-0.001	94	173188	2.00	1.82	
85 Isopropylbenzene	105	17.178	17.180	-0.002	96	1107850	2.00	1.89	
86 N-Propylbenzene	120	17.728	17.728	0.000	99	297160	2.00	1.87	
87 2-Chlorotoluene	126	17.776	17.776	0.000	98	295772	2.00	1.89	
88 4-Ethyltoluene	105	17.884	17.884	0.000	98	1025939	2.00	2.00	
89 1,3,5-Trimethylbenzene	120	17.960	17.960	0.000	93	485272	2.00	1.86	
90 Alpha Methyl Styrene	118	18.197	18.196	0.001	91	431795	2.00	1.94	
91 n-Decane	57	18.251	18.252	-0.001	91	598826	2.00	1.92	
92 tert-Butylbenzene	119	18.391	18.392	-0.001	92	937096	2.00	1.89	
93 1,2,4-Trimethylbenzene	105	18.407	18.405	0.002	96	846630	2.00	1.87	
95 sec-Butylbenzene	105	18.666	18.665	0.001	97	1186200	2.00	1.91	
94 1,3-Dichlorobenzene	146	18.682	18.683	-0.001	99	602125	2.00	1.90	
96 Benzyl chloride	91	18.758	18.759	-0.001	98	692715	2.00	1.80	
97 1,4-Dichlorobenzene	146	18.769	18.771	-0.002	95	589115	2.00	1.91	
98 4-Isopropyltoluene	119	18.828	18.830	-0.002	97	1018264	2.00	1.88	
99 1,2,3-Trimethylbenzene	105	18.887	18.884	0.003	99	709446	2.00	2.04	
100 Butylcyclohexane	83	18.936	18.937	-0.001	88	646540	2.00	1.90	
102 2,3-Dihydroindene	117	19.135	19.134	0.001	93	775596	2.00	1.84	
101 1,2-Dichlorobenzene	146	19.135	19.136	-0.001	84	566158	2.00	1.88	
103 Indene	116	19.265	19.266	-0.001	90	739032	2.00	2.35	
104 n-Butylbenzene	91	19.270	19.270	0.000	98	853310	2.00	1.83	
106 Undecane	57	19.583	19.581	0.002	94	498080	2.00	1.76	
105 1,2-Dimethyl-4-Ethylbenzen	119	19.648	19.644	0.004	98	904665	2.00	2.33	
142 1,2-Dibromo-3-Chloropropan	157	19.745	19.747	-0.002	97	192211	2.00	1.37	
107 1,2,4,5-Tetramethylbenzene	119	20.030	20.032	-0.002	97	923506	2.00	2.06	
108 1,2,3,5-Tetramethylbenzene	119	20.084	20.085	-0.001	95	588483	2.00	2.11	
109 1,2,3,4-Tetramethylbenzene	119	20.483	20.484	-0.001	97	727751	2.00	1.93	
110 Dodecane	57	20.640	20.641	-0.001	95	383559	2.00	1.78	
111 1,2,4-Trichlorobenzene	180	20.845	20.846	-0.001	95	331883	2.00	1.86	
112 Naphthalene	128	20.990	20.988	0.002	99	732446	2.00	1.99	
113 Benzo(b)thiophene	134	21.098	21.097	0.001	99	500016	2.00	1.70	
114 Hexachlorobutadiene	225	21.206	21.206	0.000	94	391649	2.00	1.98	
115 1,2,3-Trichlorobenzene	180	21.281	21.281	0.000	95	277058	2.00	1.88	
116 2-Methylnaphthalene	142	22.133	22.134	-0.001	100	233417	6.25	4.00	
117 1-Methylnaphthalene	142	22.333	22.332	0.001	100	234667	6.25	4.18	
A 118 C6 Range	1	7.736	(7.666-7.806)		0	2633257	2.00	1.88	
A 119 Toluene Range	1	13.570	(13.540-13.600)		0	1970788	2.00	2.00	
A 120 C8 Range	1	14.266	(14.236-14.296)		0	2779374	2.00	2.06	
S 124 Xylenes, Total	100				0		6.00	5.78	

Reagents:

IBM2C00X10_00003

Amount Added: 100.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\icv.D

Injection Date: 03-Mar-2015 17:39:30

Instrument ID: ME

Operator ID: 7126

Lims ID: ICV

Worklist Smp#: 12

Client ID:

Purge Vol: 500.000 mL

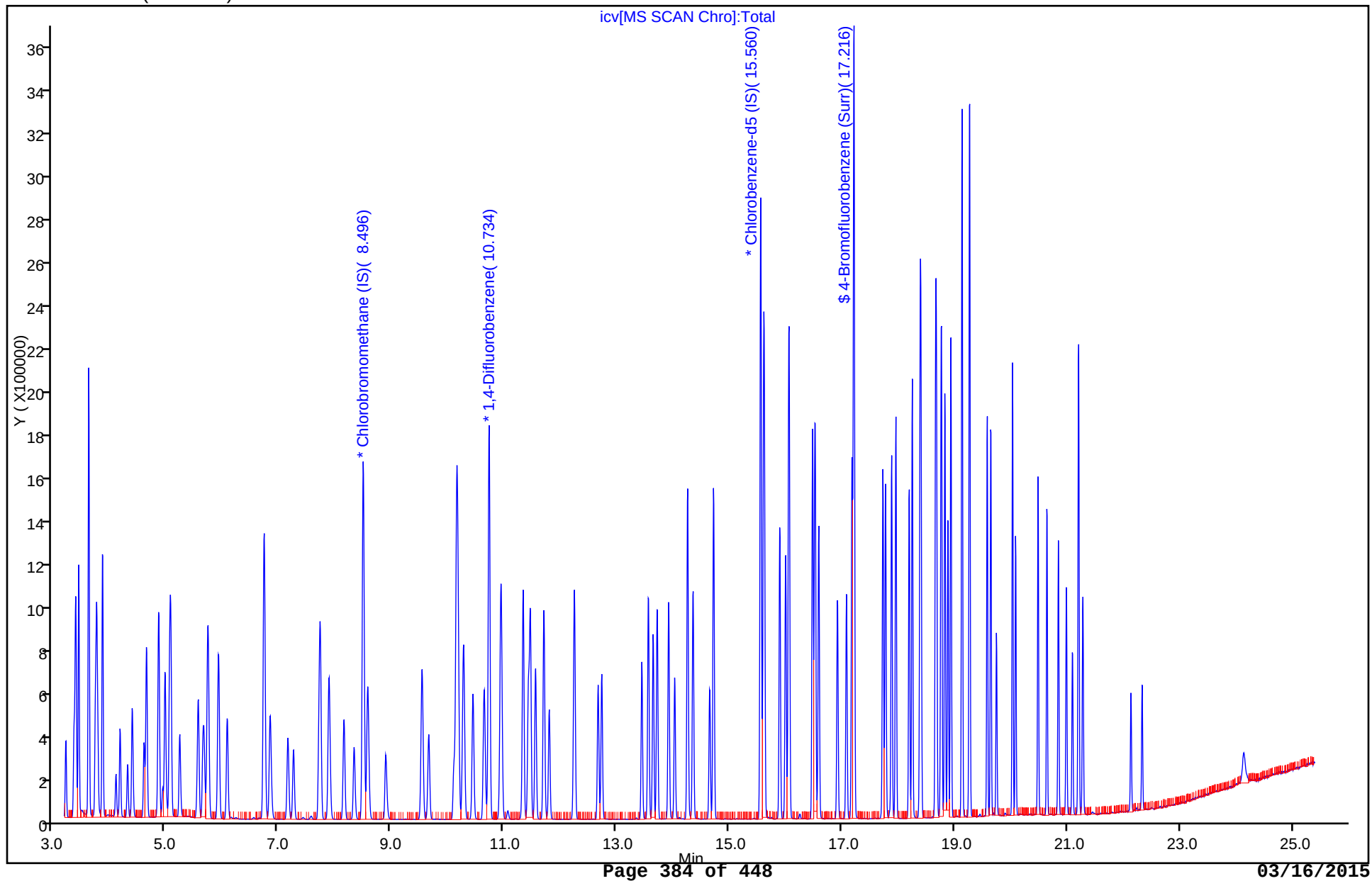
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: ME_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: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Lab Sample ID: CCVIS 140-2464/2 Calibration Date: 03/05/2015 09:33

Instrument ID: ME Calib Start Date: 03/03/2015 10:06

GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/03/2015 16:09

Lab File ID: ECCVC05.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	0.4520	0.5155		2.28	2.00	14.0	30.0
Propene	Ave	1.419	1.518		2.14	2.00	7.0	30.0
Dichlorodifluoromethane	Ave	4.086	4.731		2.32	2.00	15.8	30.0
Chloromethane	Ave	0.4190	0.4850		2.32	2.00	15.7	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.588	3.005		2.32	2.00	16.1	30.0
Acetaldehyde	Ave	0.4938	0.4931		9.99	10.0	-0.1	50.0
Vinyl chloride	Ave	1.332	1.549		2.33	2.00	16.3	30.0
1,3-Butadiene	Ave	1.071	1.246		2.33	2.00	16.3	30.0
Butane	Ave	2.229	2.498		2.24	2.00	12.1	30.0
Bromomethane	Ave	1.146	1.350		2.36	2.00	17.8	30.0
Chloroethane	Ave	0.6306	0.7273		2.31	2.00	15.3	30.0
Ethanol	Ave	0.4760	0.5141		10.8	10.0	8.0	50.0
Vinyl bromide	Ave	1.203	1.419		2.36	2.00	18.0	30.0
2-Methylbutane	Ave	1.542	1.734		2.25	2.00	12.4	30.0
Trichlorofluoromethane	Ave	3.647	4.009		2.20	2.00	9.9	30.0
Acrolein	Ave	0.4606	0.4897		2.13	2.00	6.3	30.0
Acetonitrile	Ave	0.4386	0.5311		2.42	2.00	21.1	30.0
Acetone	Ave	0.5267	0.5220		5.95	6.00	-0.9	30.0
Isopropyl alcohol	Ave	1.596	1.783		6.71	6.00	11.7	30.0
Pentane	Ave	0.2255	0.2504		2.22	2.00	11.0	30.0
Ethyl ether	Ave	1.024	1.172		2.29	2.00	14.5	30.0
1,1-Dichloroethene	Ave	1.132	1.275		2.26	2.00	12.7	30.0
t-Butyl alcohol	Ave	2.347	2.582		2.20	2.00	10.0	30.0
Acrylonitrile	Ave	0.8592	0.9877		2.30	2.00	15.0	30.0
1,1,2-Trichlorotrifluoroethane	Ave	2.580	2.905		2.25	2.00	12.6	30.0
Methylene Chloride	Ave	1.095	1.157		2.11	2.00	5.7	30.0
3-Chloropropene	Ave	1.571	1.658		2.11	2.00	5.5	30.0
Carbon disulfide	Ave	3.120	3.515		2.25	2.00	12.7	30.0
trans-1,2-Dichloroethene	Ave	1.203	1.360		2.26	2.00	13.0	30.0
2-Methylpentane	Ave	3.026	3.532		2.34	2.00	16.7	50.0
Methyl tert-butyl ether	Ave	3.026	3.610		2.39	2.00	19.3	30.0
1,1-Dichloroethane	Ave	2.405	2.717		2.26	2.00	13.0	30.0
Vinyl acetate	Ave	3.393	4.087		2.41	2.00	20.5	30.0
2-Butanone	Ave	0.5231	0.5193		1.99	2.00	-0.7	30.0
Hexane	Ave	1.141	1.300		2.28	2.00	13.9	30.0
Isopropyl ether	Ave	4.118	4.860		2.36	2.00	18.0	
cis-1,2-Dichloroethene	Ave	1.262	1.428		2.26	2.00	13.1	30.0
Ethyl acetate	Ave	2.544	3.007		2.37	2.00	18.2	30.0
Chloroform	Ave	2.957	3.296		2.23	2.00	11.5	30.0
Tert-butyl ethyl ether	Ave	3.511	4.176		2.38	2.00	18.9	

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Lab Sample ID: CCVIS 140-2464/2 Calibration Date: 03/05/2015 09:33

Instrument ID: ME Calib Start Date: 03/03/2015 10:06

GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/03/2015 16:09

Lab File ID: ECCVC05.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	1.381	1.631		2.36	2.00	18.1	30.0
1,1,1-Trichloroethane	Ave	3.449	3.855		2.24	2.00	11.8	30.0
1,2-Dichloroethane	Ave	0.5003	0.5477		2.19	2.00	9.5	30.0
1-Butanol	Ave	0.1234	0.1318		2.14	2.00	6.8	30.0
Cyclohexane	Ave	0.1303	0.1415		2.17	2.00	8.5	30.0
Benzene	Ave	0.7529	0.8171		2.17	2.00	8.5	30.0
Carbon tetrachloride	Ave	0.7922	0.8972		2.27	2.00	13.3	30.0
2,3-Dimethylpentane	Ave	0.1797	0.1912		2.13	2.00	6.4	50.0
Thiophene	Ave	0.4351	0.4708		2.17	2.00	8.2	50.0
Tert-amyl methyl ether	Ave	0.7016	0.7921		2.26	2.00	12.9	
2,2,4-Trimethylpentane	Ave	1.497	1.595		2.13	2.00	6.6	30.0
Heptane	Ave	0.2830	0.2974		2.10	2.00	5.1	30.0
1,2-Dichloropropane	Ave	0.2907	0.3150		2.17	2.00	8.4	30.0
Trichloroethene	Ave	0.4222	0.4497		2.13	2.00	6.5	30.0
Dibromomethane	Ave	0.3578	0.3794		2.12	2.00	6.0	30.0
Bromodichloromethane	Ave	0.6887	0.7521		2.19	2.00	9.2	30.0
1,4-Dioxane	Ave	0.1087	0.1196		2.20	2.00	9.9	30.0
Methyl methacrylate	Ave	0.3766	0.4319		2.29	2.00	14.7	30.0
Methylcyclohexane	Ave	0.6159	0.6555		2.13	2.00	6.4	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6431	0.6254		1.95	2.00	-2.8	30.0
cis-1,3-Dichloropropene	Ave	0.4750	0.5209		2.19	2.00	9.6	30.0
trans-1,3-Dichloropropene	Ave	0.4946	0.5399		2.18	2.00	9.2	30.0
Toluene	Ave	1.003	1.061		2.12	2.00	5.8	30.0
1,1,2-Trichloroethane	Ave	0.2817	0.3041		2.16	2.00	8.0	30.0
2-Methylthiophene	Ave	0.8201	0.8842		2.16	2.00	7.8	50.0
3-Methylthiophene	Ave	0.7995	0.8630		2.16	2.00	8.0	50.0
2-Hexanone	Ave	0.3108	0.3043		1.96	2.00	-2.1	30.0
Octane	Ave	0.3451	0.3639		2.11	2.00	5.4	30.0
Dibromochloromethane	Ave	0.7527	0.8298		2.21	2.00	10.2	30.0
1,2-Dibromoethane	Ave	0.5611	0.6041		2.15	2.00	7.7	30.0
Tetrachloroethene	Ave	0.4472	0.4665		2.09	2.00	4.3	30.0
Chlorobenzene	Ave	0.8355	0.8950		2.14	2.00	7.1	30.0
2,3-Dimethylheptane	Ave	1.044	1.123		2.15	2.00	7.5	50.0
Ethylbenzene	Ave	1.301	1.427		2.19	2.00	9.7	30.0
2-Ethylthiophene	Ave	1.028	1.130		2.20	2.00	9.9	50.0
m-Xylene & p-Xylene	Ave	1.003	1.125		4.49	4.00	12.2	30.0
Nonane	Ave	0.6975	0.7581		2.18	2.00	8.7	30.0
Bromoform	Ave	0.6379	0.7031		2.21	2.00	10.2	30.0
Styrene	Ave	0.7197	0.8292		2.31	2.00	15.2	30.0
o-Xylene	Ave	1.047	1.151		2.20	2.00	10.0	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6420	0.6898		2.15	2.00	7.4	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-2464/2 Calibration Date: 03/05/2015 09:33
 Instrument ID: ME Calib Start Date: 03/03/2015 10:06
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/03/2015 16:09
 Lab File ID: ECCVC05.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
1,2,3-Trichloropropane	Ave	0.2405	0.2622		2.18	2.00	9.0	30.0
Isopropylbenzene	Ave	1.477	1.632		2.21	2.00	10.6	30.0
Propylbenzene	Ave	0.4012	0.4414		2.20	2.00	10.0	30.0
2-Chlorotoluene	Ave	0.3941	0.4171		2.12	2.00	5.8	30.0
4-Ethyltoluene	Ave	1.296	1.478		2.28	2.00	14.0	30.0
1,3,5-Trimethylbenzene	Ave	0.6562	0.7247		2.21	2.00	10.4	30.0
Alpha Methyl Styrene	Ave	0.5611	0.6413		2.29	2.00	14.3	30.0
Decane	Ave	0.7866	0.8932		2.27	2.00	13.6	30.0
tert-Butylbenzene	Ave	1.248	1.421		2.28	2.00	13.8	30.0
1,2,4-Trimethylbenzene	Ave	1.140	1.292		2.27	2.00	13.4	30.0
sec-Butylbenzene	Ave	1.570	1.777		2.27	2.00	13.2	30.0
1,3-Dichlorobenzene	Ave	0.7982	0.8491		2.13	2.00	6.4	30.0
Benzyl chloride	Ave	0.9705	1.074		2.21	2.00	10.7	30.0
1,4-Dichlorobenzene	Ave	0.7789	0.8200		2.11	2.00	5.3	30.0
4-Isopropyltoluene	Ave	1.363	1.529		2.25	2.00	12.2	30.0
1,2,3-Trimethylbenzene	Ave	0.8753	0.9717		2.22	2.00	11.0	50.0
Butylcyclohexane	Ave	0.8589	0.9128		2.13	2.00	6.3	50.0
Indane	Ave	1.060	1.159		2.19	2.00	9.3	50.0
1,2-Dichlorobenzene	Ave	0.7611	0.8141		2.14	2.00	7.0	30.0
Butylbenzene	Ave	1.173	1.313		2.24	2.00	12.0	30.0
Indene	Ave	0.7919	0.8666		2.19	2.00	9.4	50.0
Undecane	Ave	0.7118	0.8180		2.30	2.00	14.9	30.0
1,2-Dimethyl-4-Ethylbenzene	Ave	0.9779	1.052		2.15	2.00	7.6	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.3545	0.3361		1.90	2.00	-5.2	
1,2,4,5-Tetramethylbenzene	Ave	1.132	1.210		2.14	2.00	6.9	50.0
1,2,3,5-Tetramethylbenzene	Ave	0.7044	0.7401		2.10	2.00	5.1	50.0
1,2,3,4-Tetramethylbenzene	Ave	0.9522	0.9499		2.00	2.00	-0.2	50.0
Dodecane	Ave	0.5442	0.4055		1.49	2.00	-25.5	30.0
1,2,4-Trichlorobenzene	Ave	0.4497	0.3767		1.68	2.00	-16.2	30.0
Naphthalene	Ave	0.9301	0.7779		1.67	2.00	-16.4	30.0
Benzo (b) thiophene	Ave	0.7419	0.5201		1.40	2.00	-29.9	50.0
Hexachlorobutadiene	Ave	0.4989	0.4629		1.86	2.00	-7.2	30.0
1,2,3-Trichlorobenzene	Ave	0.3709	0.2613		1.41	2.00	-29.6	30.0
2-Methylnaphthalene	Ave	0.1470	0.0743		3.16	6.25	-49.4	50.0
1-Methylnaphthalene	Ave	0.1415	0.0718		3.17	6.25	-49.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7532	0.7809		4.15	4.00	3.7	30.0

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\ECCVC05.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 05-Mar-2015 09:33:30 ALS Bottle#: 6 Worklist Smp#: 2
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS/LCS,,2,6,,CCV/LCS
 Misc. Info.: E030515,TO155,,140-0001425-002
 Operator ID: 7126 Instrument ID: ME
 Sublist: chrom-ME_TO15*sub4
 Method: \\KNXCHROM\ChromData\ME\20150304-1425.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 06-Mar-2015 09:24:58 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK009

First Level Reviewer: tajh

Date: 06-Mar-2015 09:24:58

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	8.491	8.491	0.000	96	366360	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.729	10.729	0.000	94	1704113	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.555	15.555	0.000	71	1588808	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.210	17.210	0.000	87	1240703	4.00	4.15	
6 Chlorodifluoromethane	67	3.379	3.379	0.000	93	94473	2.00	2.28	
7 Propene	41	3.390	3.390	0.000	94	278214	2.00	2.14	
8 Dichlorodifluoromethane	85	3.438	3.438	0.000	99	867105	2.00	2.32	
9 Chloromethane	52	3.616	3.616	0.000	61	88881	2.00	2.32	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.621	0.000	87	550736	2.00	2.32	
11 Acetaldehyde	44	3.762	3.762	0.000	97	451905	10.0	10.0	
12 Vinyl chloride	62	3.778	3.778	0.000	99	283808	2.00	2.33	
14 Butane	43	3.864	3.864	0.000	84	457915	2.00	2.24	
13 Butadiene	54	3.864	3.864	0.000	69	228356	2.00	2.33	
15 Bromomethane	94	4.177	4.177	0.000	99	247436	2.00	2.36	
16 Chloroethane	64	4.306	4.306	0.000	92	133294	2.00	2.31	
17 Ethanol	31	4.393	4.393	0.000	96	471080	10.0	10.8	
18 Vinyl bromide	106	4.597	4.597	0.000	97	260013	2.00	2.36	
19 2-Methylbutane	43	4.646	4.646	0.000	90	317723	2.00	2.25	
21 Trichlorofluoromethane	101	4.862	4.862	0.000	99	734824	2.00	2.20	
20 Acrolein	56	4.867	4.867	0.000	9	89750	2.00	2.13	
22 Acetonitrile	40	4.932	4.932	0.000	98	97336	2.00	2.42	
23 Acetone	58	4.975	4.975	0.000	72	287012	6.00	5.95	
24 Isopropyl alcohol	45	5.056	5.056	0.000	94	980342	6.00	6.71	
25 Pentane	72	5.077	5.077	0.000	96	45892	2.00	2.22	
26 Ethyl ether	31	5.234	5.234	0.000	95	214878	2.00	2.29	
27 1,1-Dichloroethene	96	5.563	5.563	0.000	90	233748	2.00	2.26	
29 2-Methyl-2-propanol	59	5.654	5.654	0.000	93	473167	2.00	2.20	
28 Acrylonitrile	53	5.671	5.671	0.000	87	181025	2.00	2.30	
30 1,1,2-Trichloro-1,2,2-trif	101	5.735	5.735	0.000	95	532428	2.00	2.25	
31 Methylene Chloride	84	5.919	5.919	0.000	91	211975	2.00	2.11	

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	5.929	5.929	0.000	91	303832	2.00	2.11	
33 Carbon disulfide	76	6.080	6.080	0.000	99	644208	2.00	2.25	
34 trans-1,2-Dichloroethene	96	6.727	6.727	0.000	90	249181	2.00	2.26	
35 2-Methylpentane	43	6.738	6.738	0.000	95	647349	2.00	2.34	
36 Methyl tert-butyl ether	73	6.841	6.841	0.000	96	661546	2.00	2.39	
37 1,1-Dichloroethane	63	7.153	7.153	0.000	99	497880	2.00	2.26	
38 Vinyl acetate	43	7.256	7.256	0.000	100	749071	2.00	2.41	
39 2-Butanone (MEK)	72	7.709	7.709	0.000	90	95178	2.00	1.99	
40 Hexane	56	7.730	7.730	0.000	87	238273	2.00	2.28	
140 Isopropyl ether	45	7.887	7.887	0.000	96	890742	2.00	2.36	
41 cis-1,2-Dichloroethene	96	8.151	8.151	0.000	98	261694	2.00	2.26	
42 Ethyl acetate	43	8.334	8.334	0.000	97	551121	2.00	2.37	
43 Chloroform	83	8.502	8.502	0.000	72	604030	2.00	2.23	
143 Tert-butyl ethyl ether	59	8.577	8.577	0.000	96	765427	2.00	2.38	
44 Tetrahydrofuran	42	8.895	8.895	0.000	91	298999	2.00	2.36	
45 1,1,1-Trichloroethane	97	9.537	9.537	0.000	95	706568	2.00	2.24	
46 1,2-Dichloroethane	62	9.655	9.655	0.000	96	466912	2.00	2.19	
47 n-Butanol	31	10.103	10.103	0.000	86	112361	2.00	2.14	
49 Cyclohexane	69	10.152	10.152	0.000	76	120594	2.00	2.17	
48 Benzene	78	10.157	10.157	0.000	95	696540	2.00	2.17	
50 Carbon tetrachloride	117	10.179	10.179	0.000	97	764852	2.00	2.27	
51 2,3-Dimethylpentane	71	10.276	10.276	0.000	89	162984	2.00	2.13	
52 Thiophene	84	10.443	10.443	0.000	97	401369	2.00	2.17	
141 Tert-amyl methyl ether	73	10.642	10.642	0.000	86	629555	2.00	2.26	
53 Isooctane	57	10.944	10.944	0.000	97	1359942	2.00	2.13	
54 n-Heptane	71	11.338	11.338	0.000	94	253543	2.00	2.10	
55 1,2-Dichloropropane	63	11.430	11.430	0.000	81	268577	2.00	2.17	
56 Trichloroethene	130	11.462	11.462	0.000	98	383346	2.00	2.13	
57 Dibromomethane	93	11.554	11.554	0.000	94	323467	2.00	2.12	
58 Dichlorobromomethane	83	11.705	11.705	0.000	99	641137	2.00	2.19	
59 1,4-Dioxane	88	11.710	11.710	0.000	31	101932	2.00	2.20	
60 Methyl methacrylate	41	11.796	11.796	0.000	91	368182	2.00	2.29	
61 Methylcyclohexane	83	12.244	12.244	0.000	89	558825	2.00	2.13	
62 4-Methyl-2-pentanone (MIBK)	43	12.664	12.664	0.000	99	533191	2.00	1.95	
63 cis-1,3-Dichloropropene	75	12.729	12.729	0.000	97	444040	2.00	2.19	
64 trans-1,3-Dichloropropene	75	13.446	13.446	0.000	97	429099	2.00	2.18	
65 Toluene	91	13.560	13.560	0.000	93	843503	2.00	2.12	
66 1,1,2-Trichloroethane	83	13.646	13.646	0.000	85	241697	2.00	2.16	
67 2-Methylthiophene	97	13.716	13.716	0.000	98	702777	2.00	2.16	
68 3-Methylthiophene	97	13.921	13.921	0.000	99	685945	2.00	2.16	
69 2-Hexanone	58	14.029	14.029	0.000	92	241865	2.00	1.96	
70 n-Octane	85	14.255	14.255	0.000	95	289222	2.00	2.11	
71 Chlorodibromomethane	129	14.352	14.352	0.000	97	659563	2.00	2.21	
72 Ethylene Dibromide	107	14.649	14.649	0.000	95	480121	2.00	2.15	
73 Tetrachloroethene	129	14.719	14.719	0.000	95	370752	2.00	2.09	
74 Chlorobenzene	112	15.603	15.603	0.000	83	711362	2.00	2.14	
75 2,3-Dimethylheptane	43	15.619	15.619	0.000	93	892304	2.00	2.15	
76 Ethylbenzene	91	15.894	15.894	0.000	99	1133859	2.00	2.19	
77 2-Ethylthiophene	97	15.997	15.997	0.000	77	897919	2.00	2.20	
78 m-Xylene & p-Xylene	91	16.056	16.056	0.000	99	1788880	4.00	4.49	
81 n-Nonane	57	16.477	16.477	0.000	92	602591	2.00	2.18	
79 Bromoform	173	16.515	16.515	0.000	84	558806	2.00	2.21	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
80 Styrene	104	16.525	16.525	0.000	89	659102	2.00	2.31	
82 o-Xylene	91	16.585	16.585	0.000	78	915202	2.00	2.20	
83 1,1,2,2-Tetrachloroethane	83	16.919	16.919	0.000	98	548231	2.00	2.15	
84 1,2,3-Trichloropropane	110	17.081	17.081	0.000	93	208411	2.00	2.18	
85 Isopropylbenzene	105	17.178	17.178	0.000	95	1297527	2.00	2.21	
86 N-Propylbenzene	120	17.728	17.728	0.000	88	350841	2.00	2.20	
87 2-Chlorotoluene	126	17.771	17.771	0.000	59	331547	2.00	2.12	
88 4-Ethyltoluene	105	17.879	17.879	0.000	97	1175016	2.00	2.28	
89 1,3,5-Trimethylbenzene	120	17.960	17.960	0.000	92	576030	2.00	2.21	
90 Alpha Methyl Styrene	118	18.192	18.192	0.000	84	509700	2.00	2.29	
91 n-Decane	57	18.251	18.251	0.000	89	709974	2.00	2.27	
92 tert-Butylbenzene	119	18.391	18.391	0.000	86	1129695	2.00	2.28	
93 1,2,4-Trimethylbenzene	105	18.402	18.402	0.000	92	1027274	2.00	2.27	
95 sec-Butylbenzene	105	18.661	18.661	0.000	97	1412781	2.00	2.27	
94 1,3-Dichlorobenzene	146	18.677	18.677	0.000	98	674850	2.00	2.13	
96 Benzyl chloride	91	18.758	18.758	0.000	97	853702	2.00	2.21	
97 1,4-Dichlorobenzene	146	18.769	18.769	0.000	92	651729	2.00	2.11	
98 4-Isopropyltoluene	119	18.828	18.828	0.000	85	1215368	2.00	2.25	
99 1,2,3-Trimethylbenzene	105	18.882	18.882	0.000	79	772314	2.00	2.22	
100 Butylcyclohexane	83	18.936	18.936	0.000	87	725516	2.00	2.13	
102 2,3-Dihydroindene	117	19.130	19.130	0.000	89	920973	2.00	2.19	
101 1,2-Dichlorobenzene	146	19.135	19.135	0.000	83	647079	2.00	2.14	
103 Indene	116	19.265	19.265	0.000	78	688816	2.00	2.19	
104 n-Butylbenzene	91	19.265	19.265	0.000	96	1043980	2.00	2.24	
106 Undecane	57	19.577	19.577	0.000	92	650183	2.00	2.30	
105 1,2-Dimethyl-4-Ethylbenzen	119	19.642	19.642	0.000	96	836090	2.00	2.15	
142 1,2-Dibromo-3-Chloropropan	157	19.745	19.745	0.000	96	267129	2.00	1.90	
107 1,2,4,5-Tetramethylbenzene	119	20.030	20.030	0.000	96	962133	2.00	2.14	
108 1,2,3,5-Tetramethylbenzene	119	20.084	20.084	0.000	95	588232	2.00	2.10	
109 1,2,3,4-Tetramethylbenzene	119	20.483	20.483	0.000	96	754986	2.00	2.00	
110 Dodecane	57	20.640	20.640	0.000	91	322323	2.00	1.49	
111 1,2,4-Trichlorobenzene	180	20.845	20.845	0.000	94	299410	2.00	1.68	
112 Naphthalene	128	20.985	20.985	0.000	98	618301	2.00	1.67	
113 Benzo(b)thiophene	134	21.093	21.093	0.000	99	413419	2.00	1.40	
114 Hexachlorobutadiene	225	21.206	21.206	0.000	84	367929	2.00	1.86	
115 1,2,3-Trichlorobenzene	180	21.281	21.281	0.000	95	207683	2.00	1.41	
116 2-Methylnaphthalene	142	22.133	22.133	0.000	98	184646	6.25	3.16	
117 1-Methylnaphthalene	142	22.333	22.333	0.000	99	178225	6.25	3.17	
A 118 C6 Range	1	7.725	(7.660-7.790)		0	2902574	2.00	2.02	
A 119 Toluene Range	1	13.560	(13.530-13.590)		0	2222408	2.00	2.20	
A 120 C8 Range	1	14.255	(14.225-14.285)		0	3007706	2.00	2.17	
S 124 Xylenes, Total	100				0		6.00	6.69	
S 144 1,2-Dichloroethene, Total	1				0		4.00	4.52	

Reagents:

DCN2C00X10_00002

Amount Added: 100.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\ECCVC05.D

Injection Date: 05-Mar-2015 09:33:30

Instrument ID: ME

Operator ID: 7126

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 500.000 mL

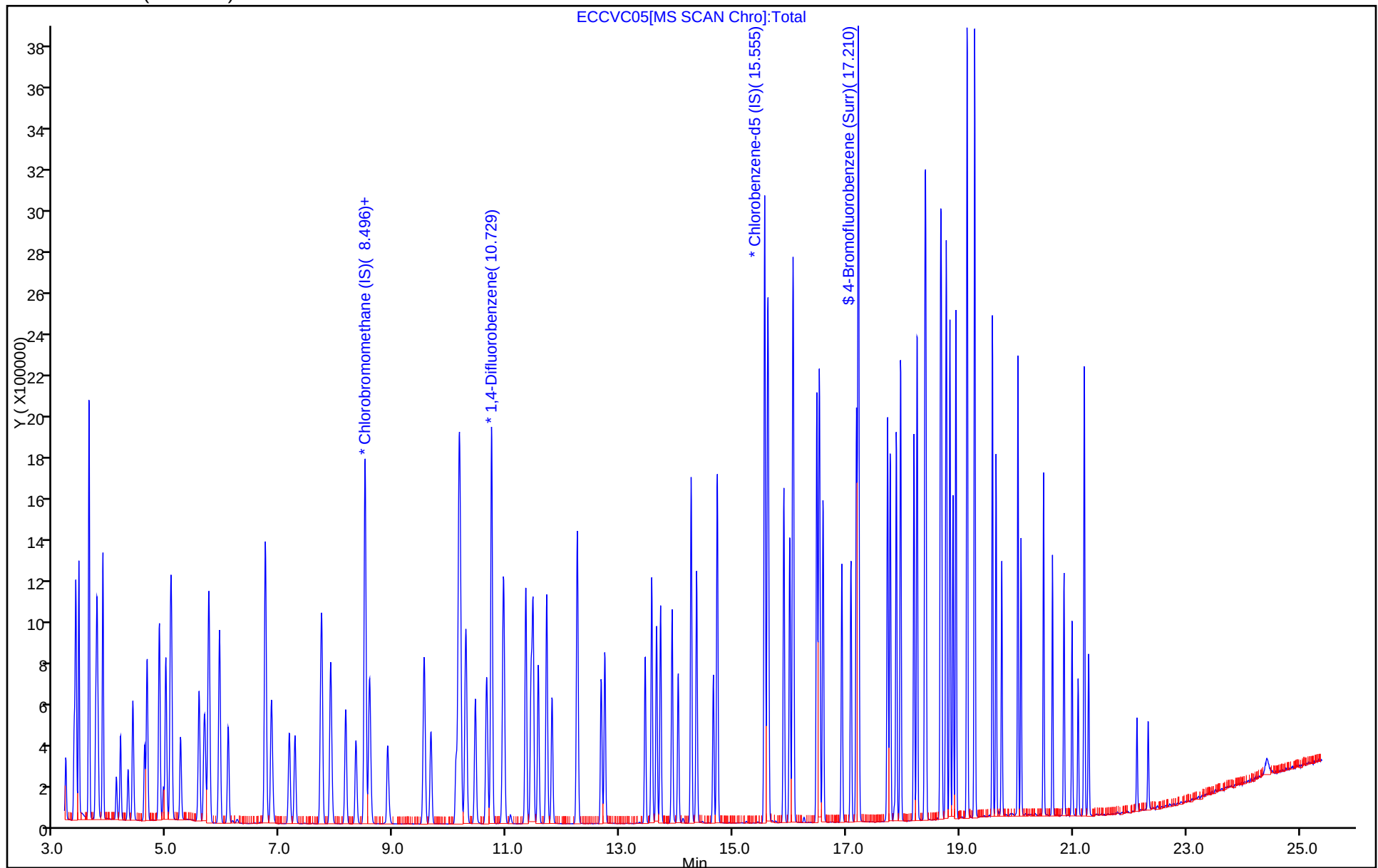
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\bfb.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 03-Mar-2015 09:35:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: BFB,,3,,,BFB
Misc. Info.: 140-0001421-001
Operator ID: 7126 Instrument ID: ME
Method: \\KNXCHROM\ChromData\ME\20150302-1421.b\ME_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Mar-2015 14:48:05 Calib Date: 03-Mar-2015 16:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I9.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK030

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
\$ 132 BFB	95	4.732	4.732	0.000	0	633081	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

MAbfb1_00003

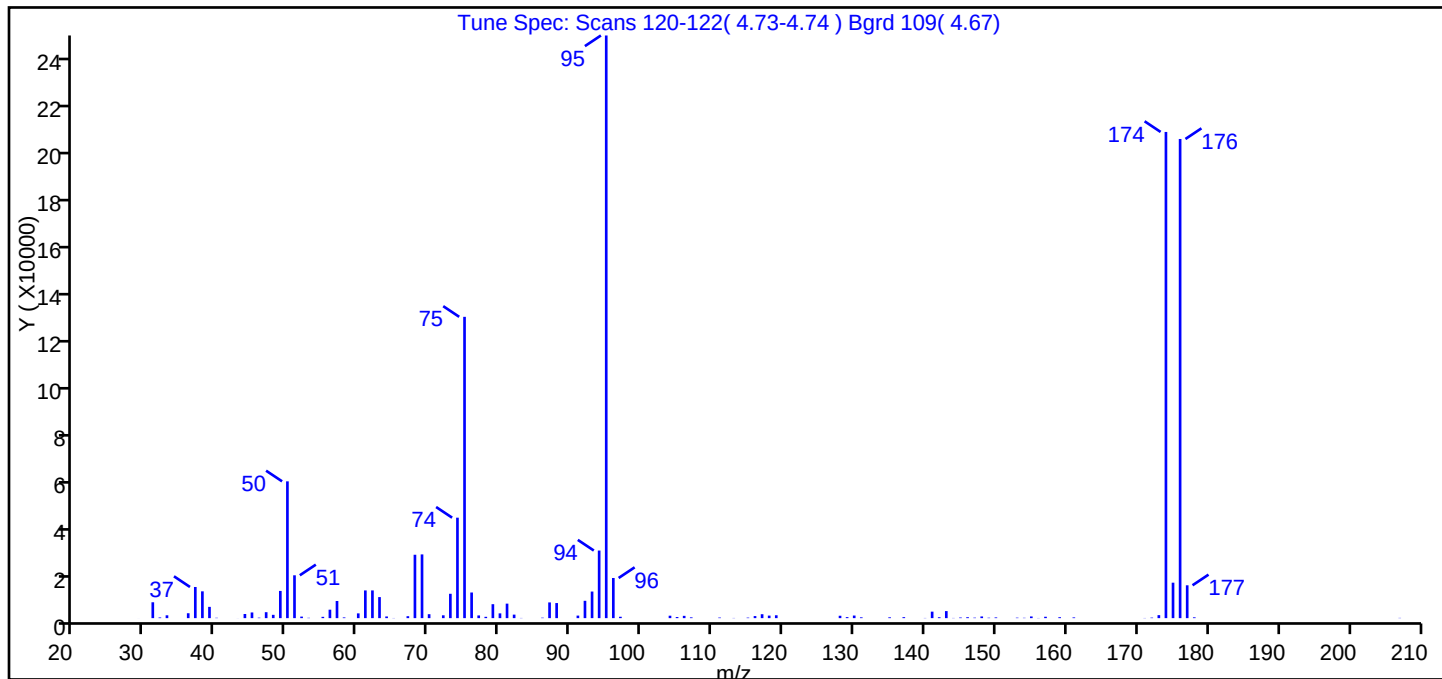
Amount Added: 40.00

Units: ml

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\bfb.D
Injection Date: 03-Mar-2015 09:35:30 Instrument ID: ME
Lims ID: BFB
Client ID:
Operator ID: 7126 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: ME_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

\$ 132 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	23.5
75	30 to 60% of m/z 95	51.7
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.5 (0.6)
174	50 to 120% of m/z 95	83.4
175	5 to 9% of m/z 174	6.1 (7.3)
176	Greater than 95% but less than 101% of m/z 174	82.2 (98.6)
177	5 to 9% of m/z 176	5.6 (6.9)

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\bfb.D\ME_TO15.rsl\spectra.d
 Injection Date: 03-Mar-2015 09:35:30
 Spectrum: Tune Spec: Scans 120-122(4.73-4.74) Bgrd 109(4.67)
 Base Peak: 95.00
 Minimum % Base Peak: 0
 Number of Points: 100

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	11	61.00	11601	92.00	7259	142.00	372
31.00	6647	62.00	11605	93.00	11135	143.00	2953
32.00	281	63.00	8812	94.00	28296	144.00	83
33.00	1190	64.00	700	95.00	243904	145.00	262
36.00	2052	65.00	68	96.00	16808	146.00	389
37.00	13045	67.00	816	97.00	579	147.00	202
38.00	11221	68.00	26536	104.00	1019	148.00	709
39.00	4720	69.00	26680	105.00	461	149.00	172
40.00	150	70.00	1650	106.00	961	150.00	302
43.00	18	72.00	1190	107.00	324	153.00	200
44.00	1737	73.00	10199	111.00	245	154.00	142
45.00	2380	74.00	42056	113.00	80	155.00	704
46.00	197	75.00	126128	115.00	220	156.00	70
47.00	2493	76.00	10738	116.00	868	157.00	582
48.00	1387	77.00	1131	117.00	1643	159.00	390
49.00	11392	78.00	557	118.00	1063	161.00	307
50.00	57264	79.00	5842	119.00	1206	171.00	72
51.00	17936	80.00	2000	128.00	999	172.00	220
52.00	650	81.00	6072	129.00	425	173.00	1251
53.00	136	82.00	1475	130.00	1090	174.00	203520
55.00	548	83.00	82	131.00	337	175.00	14847
56.00	3543	86.00	193	135.00	343	176.00	200576
57.00	7177	87.00	6583	137.00	410	177.00	13753
58.00	302	88.00	6315	140.00	80	178.00	339
60.00	1995	91.00	1067	141.00	2721	207.00	106

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150302-1421.b\bfb.D

Injection Date: 03-Mar-2015 09:35:30

Instrument ID: ME

Operator ID: 7126

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 500.0 mL

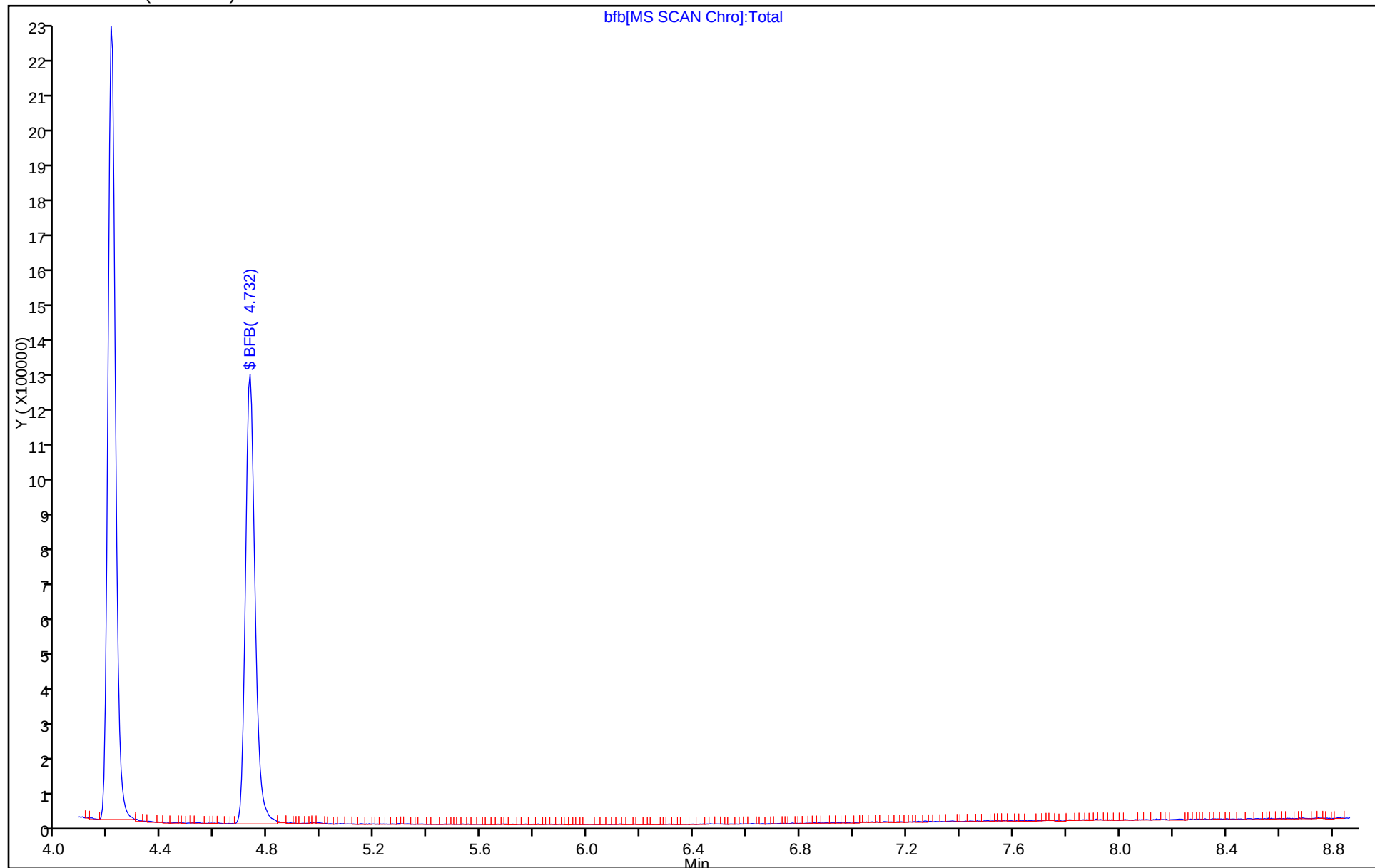
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EBFBC05.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 05-Mar-2015 09:02:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 100.0 mL Dil. Factor: 1.0000
Sample Info: BFB,,3,,,BFB
Misc. Info.: E030515,BFB,,140-0001425-001
Operator ID: 7126 Instrument ID: ME
Method: \\KNXCHROM\ChromData\ME\20150304-1425.b\ME_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Mar-2015 09:24:06 Calib Date: 03-Mar-2015 16:09:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I9.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK009

First Level Reviewer: tajh

Date: 06-Mar-2015 09:24:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags

\$ 132 BFB	95	4.716	4.716	0.000	0	654426	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

MAbfb1_00003

Amount Added: 40.00

Units: ml

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EBFBC05.D

Injection Date: 05-Mar-2015 09:02:30

Instrument ID: ME

Lims ID: BFB

Client ID:

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 1

Injection Vol: 100.0 mL

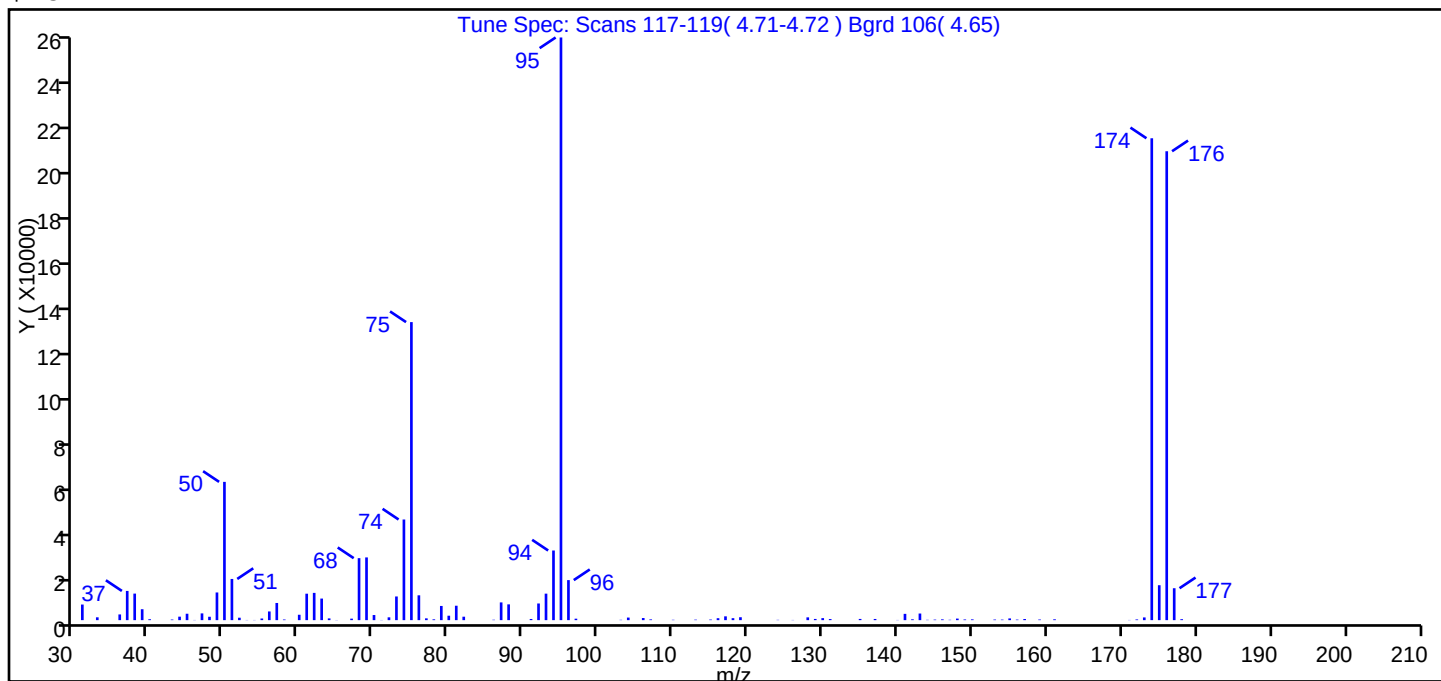
Dil. Factor: 1.0000

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Tune Method: BFB Method 8260

\$ 132 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	23.7
75	30 to 60% of m/z 95	51.2
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.5 (0.6)
174	50 to 120% of m/z 95	82.7
175	5 to 9% of m/z 174	6.0 (7.2)
176	Greater than 95% but less than 101% of m/z 174	80.5 (97.3)
177	5 to 9% of m/z 176	5.5 (6.8)

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EBFBC05.D\ME_TO15.rslt\spectra.d
Injection Date: 05-Mar-2015 09:02:30
Spectrum: Tune Spec: Scans 117-119(4.71-4.72) Bgrd 106(4.65)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 101

m/z	Y	m/z	Y	m/z	Y	m/z	Y
31.00	6927	63.00	9578	95.00	258624	144.00	141
33.00	1258	64.00	774	96.00	17768	145.00	241
36.00	2535	65.00	67	97.00	646	146.00	343
37.00	12962	67.00	665	103.00	141	147.00	156
38.00	11780	68.00	27512	104.00	1142	148.00	690
39.00	4848	69.00	27840	106.00	939	149.00	304
40.00	408	70.00	2271	107.00	332	150.00	341
43.00	264	71.00	71	110.00	156	153.00	265
44.00	1545	72.00	1251	113.00	219	154.00	236
45.00	2844	73.00	10509	115.00	267	155.00	763
46.00	83	74.00	44672	116.00	861	156.00	240
47.00	2996	75.00	132288	117.00	1690	157.00	499
48.00	1504	76.00	11022	118.00	875	159.00	280
49.00	12284	77.00	794	119.00	1294	161.00	370
50.00	61376	78.00	364	124.00	135	171.00	82
51.00	18280	79.00	6296	126.00	86	172.00	314
52.00	1079	80.00	1968	128.00	1235	173.00	1208
53.00	76	81.00	6399	129.00	533	174.00	213888
54.00	78	82.00	1528	130.00	895	175.00	15503
55.00	728	86.00	176	131.00	481	176.00	208128
56.00	3857	87.00	7870	135.00	534	177.00	14169
57.00	7619	88.00	7001	137.00	521	178.00	419
58.00	286	91.00	514	140.00	83	207.00	1
60.00	2393	92.00	7396	141.00	2790		
61.00	11740	93.00	11761	142.00	368		
62.00	12102	94.00	30912	143.00	2936		

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EBFBC05.D

Injection Date: 05-Mar-2015 09:02:30

Instrument ID: ME

Operator ID: 7126

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 100.0 mL

Dil. Factor: 1.0000

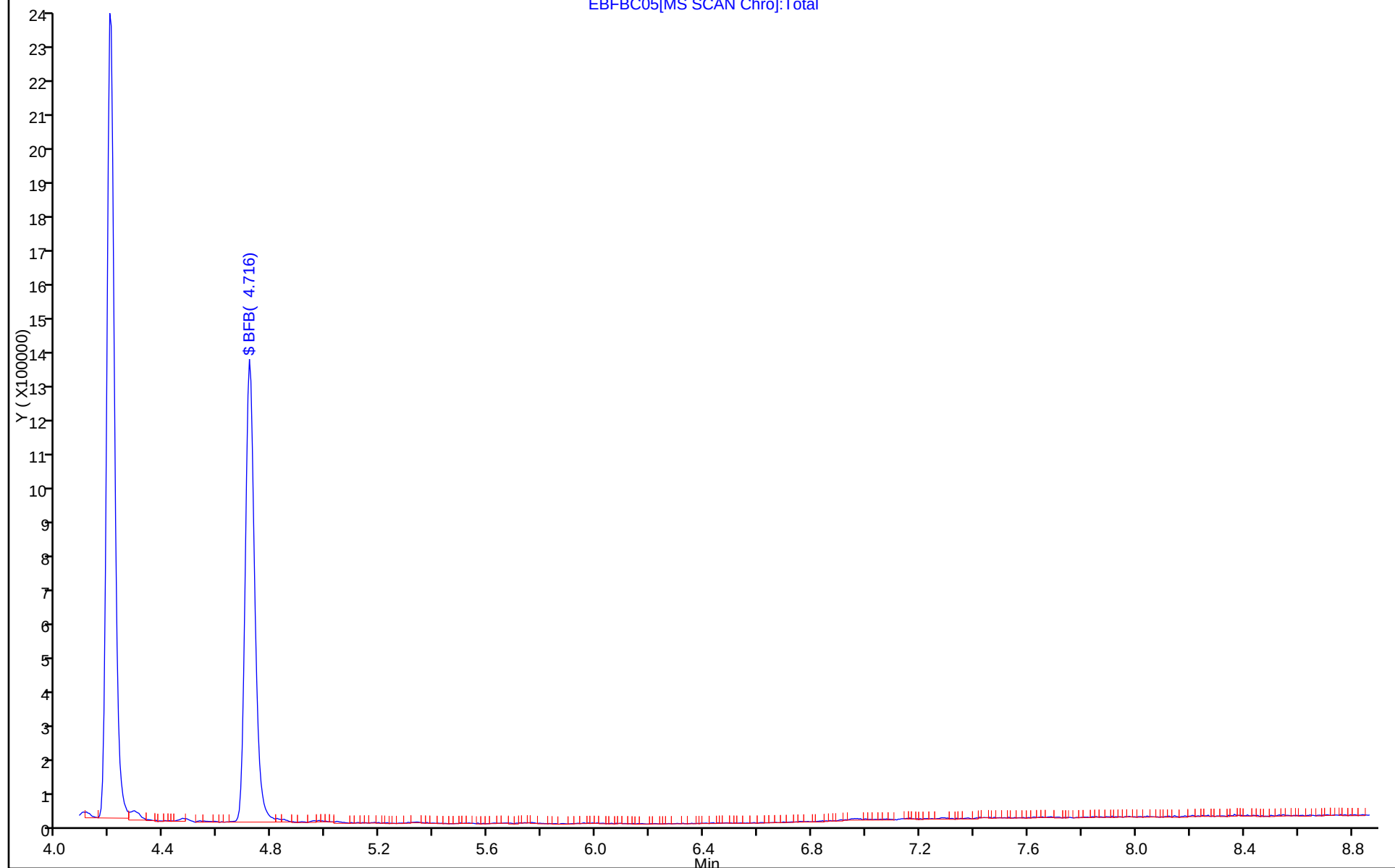
ALS Bottle#: 16

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

EBFBC05[MS SCAN Chro]:Total



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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: MB 140-2464/6

Matrix: Air Lab File ID: EB500C05.D

Analysis Method: TO 15 LL Date Collected: _____

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 13:33

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.: 2464 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		0.080	
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		0.040	
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		0.080	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-2464/6
 Matrix: Air Lab File ID: EB500C05.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 13:33
 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.: 2464 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		0.80	
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		0.040	
75-69-4	Trichlorofluoromethane	137.37	ND		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: MB 140-2464/6

Matrix: Air Lab File ID: EB500C05.D

Analysis Method: TO 15 LL Date Collected: _____

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 13:33

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.: 2464 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		0.32	
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		0.25	
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		0.32	
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: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-2464/6
 Matrix: Air Lab File ID: EB500C05.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 13:33
 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.: 2464 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		1.5	
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		0.21	
75-69-4	Trichlorofluoromethane	137.37	ND		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EB500C05.D
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 05-Mar-2015 13:33:30 ALS Bottle#: 16 Worklist Smp#: 6
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: MB500mL
 Misc. Info.: E030515,TO155,,140-0001424-006
 Operator ID: 7126 Instrument ID: ME
 Method: \\KNXCHROM\ChromData\ME\20150304-1425.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 06-Mar-2015 09:24:58 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK009

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	8.491	8.491	0.000	96	354849	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.734	10.729	0.005	96	1597715	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.560	15.555	0.005	90	1471468	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.215	17.210	0.005	87	1124527	4.00	4.06	
7 Propene	41	3.406	3.390	0.016	66	11220		0.0891	
14 Butane	43	3.761	3.864	-0.103	55	13819		0.0699	
31 Methylene Chloride	84	5.913	5.919	-0.006	91	5331		0.0549	
141 Tert-amyl methyl ether	73	10.728	10.642	0.086	40	22304		0.0864	
A 118 C6 Range	1	7.725	(7.660-7.790)		0	13101		0.009741	
A 119 Toluene Range	1	13.571	(13.530-13.590)		0	7422		0.007833	
A 120 C8 Range	1	14.258	(14.225-14.285)		0	1270		0.000978	
T 126 Propane TIC	44	3.999	4.000	-0.001	1	1949		0.0220	7
T 136 Methanol TIC	31	3.740	4.100	-0.360	4	302748		3.41	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\EB500C05.D

Injection Date: 05-Mar-2015 13:33:30

Instrument ID: ME

Operator ID: 7126

Lims ID: mb

Worklist Smp#: 6

Client ID:

Purge Vol: 500.000 mL

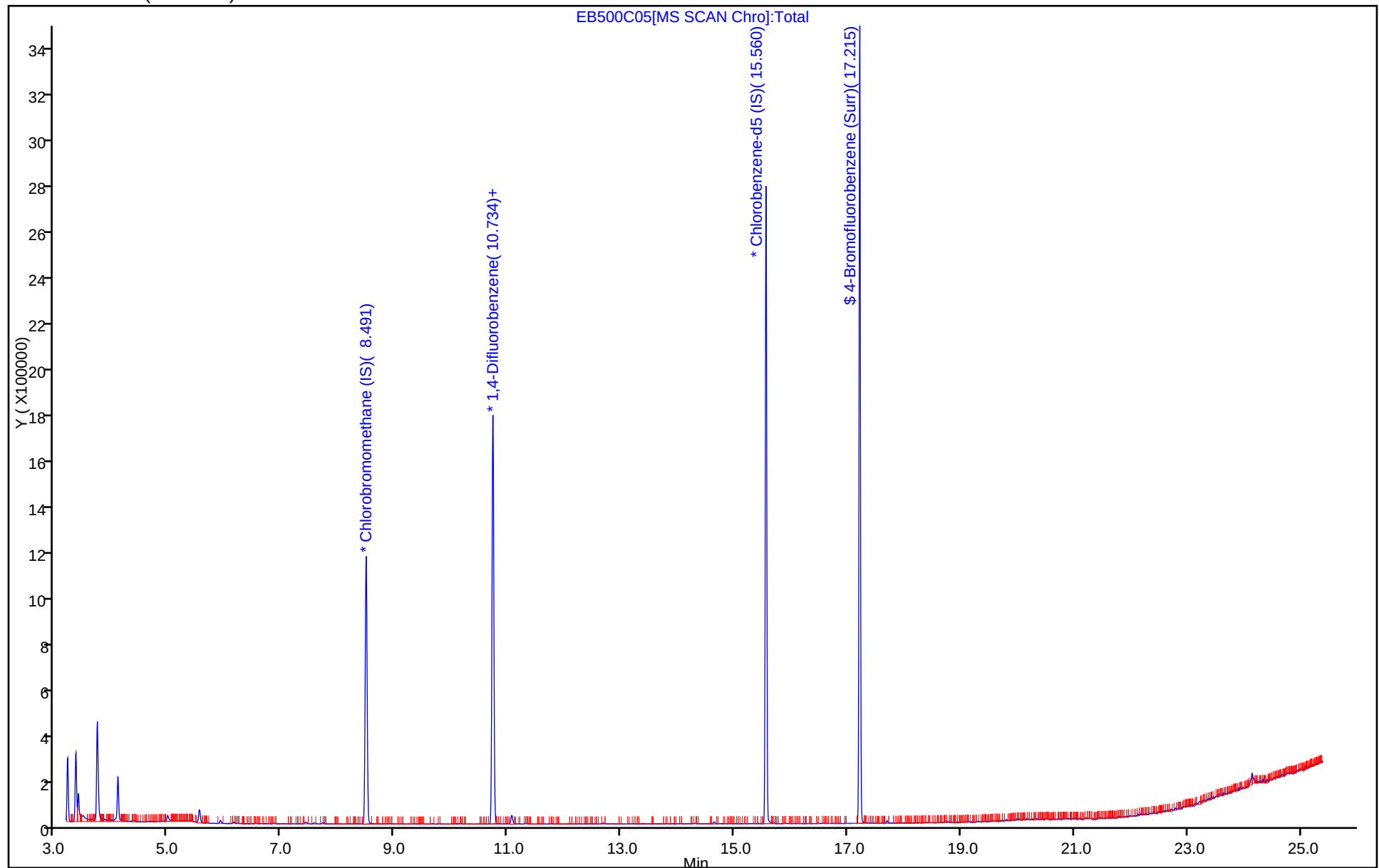
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: ME_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: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCS 140-2464/1002

Matrix: Air Lab File ID: ECCVC05-LCS.d

Analysis Method: TO 15 LL Date Collected: _____

Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 09:33

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.: 2464 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	2.24		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	2.15		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	2.16		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	2.25		0.080	
75-34-3	1,1-Dichloroethane	98.96	2.26		0.080	
75-35-4	1,1-Dichloroethene	96.94	2.26		0.080	
120-82-1	1,2,4-Trichlorobenzene	181.45	1.68		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	2.27		0.080	
106-93-4	1,2-Dibromoethane	187.87	2.15		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	2.14		0.080	
107-06-2	1,2-Dichloroethane	98.96	2.19		0.080	
78-87-5	1,2-Dichloropropane	112.99	2.17		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.32		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	2.21		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	2.13		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	2.11		0.080	
123-91-1	1,4-Dioxane	88.11	2.20		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	2.13		0.20	
78-93-3	2-Butanone	72.11	1.99		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.95		0.20	
71-43-2	Benzene	78.11	2.17		0.080	
100-44-7	Benzyl chloride	126.58	2.21		0.16	
75-27-4	Bromodichloromethane	163.83	2.19		0.080	
75-25-2	Bromoform	252.75	2.21		0.080	
74-83-9	Bromomethane	94.94	2.36		0.080	
56-23-5	Carbon tetrachloride	153.81	2.27		0.040	
108-90-7	Chlorobenzene	112.56	2.14		0.080	
75-00-3	Chloroethane	64.52	2.31		0.080	
67-66-3	Chloroform	119.38	2.23		0.080	
74-87-3	Chloromethane	50.49	2.32		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	2.26		0.080	
10061-01-5	cis-1,3-Dichloropropene	110.97	2.19		0.080	
110-82-7	Cyclohexane	84.16	2.17		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 140-2464/1002
 Matrix: Air Lab File ID: ECCVC05-LCS.d
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 03/05/2015 09:33
 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.: 2464 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	2.21		0.080	
75-71-8	Dichlorodifluoromethane	120.91	2.32		0.080	
64-17-5	Ethanol	46.07	10.8		0.80	
100-41-4	Ethylbenzene	106.17	2.19		0.080	
87-68-3	Hexachlorobutadiene	260.76	1.86		0.080	
110-54-3	Hexane	86.17	2.28		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	2.39		0.16	
75-09-2	Methylene Chloride	84.93	2.11		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	4.49		0.080	
95-47-6	o-Xylene	106.17	2.20		0.080	
100-42-5	Styrene	104.15	2.31		0.080	
75-65-0	t-Butyl alcohol	74.12	2.20		0.32	
127-18-4	Tetrachloroethene	165.83	2.09		0.080	
108-88-3	Toluene	92.14	2.12		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	2.26		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	2.18		0.080	
79-01-6	Trichloroethene	131.39	2.13		0.040	
75-69-4	Trichlorofluoromethane	137.37	2.20		0.080	
75-01-4	Vinyl chloride	62.50	2.33		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

TestAmerica Laboratories
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\ECCVC05-LCS.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 05-Mar-2015 09:33:30 ALS Bottle#: 6 Worklist Smp#: 1002
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS/LCS,,2,6,,CCV/LCS
 Misc. Info.: E030515,TO155,,140-0001425-002
 Operator ID: 7126 Instrument ID: ME
 Method: \\KNXCHROM\ChromData\ME\20150304-1425.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 06-Mar-2015 09:24:58 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic l9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK009

First Level Reviewer: tajh

Date: 06-Mar-2015 09:24:58

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	8.491	8.491	0.000	96	366360	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.729	10.729	0.000	94	1704113	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.555	15.555	0.000	71	1588808	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.210	17.210	0.000	87	1240703	4.00	4.15	
6 Chlorodifluoromethane	67	3.379	3.379	0.000	93	94473	2.00	2.28	
7 Propene	41	3.390	3.390	0.000	94	278214	2.00	2.14	
8 Dichlorodifluoromethane	85	3.438	3.438	0.000	99	867105	2.00	2.32	
9 Chloromethane	52	3.616	3.616	0.000	61	88881	2.00	2.32	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.621	3.621	0.000	87	550736	2.00	2.32	
11 Acetaldehyde	44	3.762	3.762	0.000	97	451905	10.0	10.0	
12 Vinyl chloride	62	3.778	3.778	0.000	99	283808	2.00	2.33	
14 Butane	43	3.864	3.864	0.000	84	457915	2.00	2.24	
13 Butadiene	54	3.864	3.864	0.000	69	228356	2.00	2.33	
15 Bromomethane	94	4.177	4.177	0.000	99	247436	2.00	2.36	
16 Chloroethane	64	4.306	4.306	0.000	92	133294	2.00	2.31	
17 Ethanol	31	4.393	4.393	0.000	96	471080	10.0	10.8	
18 Vinyl bromide	106	4.597	4.597	0.000	97	260013	2.00	2.36	
19 2-Methylbutane	43	4.646	4.646	0.000	90	317723	2.00	2.25	
21 Trichlorofluoromethane	101	4.862	4.862	0.000	99	734824	2.00	2.20	
20 Acrolein	56	4.867	4.867	0.000	9	89750	2.00	2.13	
22 Acetonitrile	40	4.932	4.932	0.000	98	97336	2.00	2.42	
23 Acetone	58	4.975	4.975	0.000	72	287012	6.00	5.95	
24 Isopropyl alcohol	45	5.056	5.056	0.000	94	980342	6.00	6.71	
25 Pentane	72	5.077	5.077	0.000	96	45892	2.00	2.22	
26 Ethyl ether	31	5.234	5.234	0.000	95	214878	2.00	2.29	
27 1,1-Dichloroethene	96	5.563	5.563	0.000	90	233748	2.00	2.26	
29 2-Methyl-2-propanol	59	5.654	5.654	0.000	93	473167	2.00	2.20	
28 Acrylonitrile	53	5.671	5.671	0.000	87	181025	2.00	2.30	
30 1,1,2-Trichloro-1,2,2-trif	101	5.735	5.735	0.000	95	532428	2.00	2.25	
31 Methylene Chloride	84	5.919	5.919	0.000	91	211975	2.00	2.11	
32 3-Chloro-1-propene	39	5.929	5.929	0.000	91	303832	2.00	2.11	

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	6.080	6.080	0.000	99	644208	2.00	2.25	
34 trans-1,2-Dichloroethene	96	6.727	6.727	0.000	90	249181	2.00	2.26	
35 2-Methylpentane	43	6.738	6.738	0.000	95	647349	2.00	2.34	
36 Methyl tert-butyl ether	73	6.841	6.841	0.000	96	661546	2.00	2.39	
37 1,1-Dichloroethane	63	7.153	7.153	0.000	99	497880	2.00	2.26	
38 Vinyl acetate	43	7.256	7.256	0.000	100	749071	2.00	2.41	
39 2-Butanone (MEK)	72	7.709	7.709	0.000	90	95178	2.00	1.99	
40 Hexane	56	7.730	7.730	0.000	87	238273	2.00	2.28	
140 Isopropyl ether	45	7.887	7.887	0.000	96	890742	2.00	2.36	
41 cis-1,2-Dichloroethene	96	8.151	8.151	0.000	98	261694	2.00	2.26	
42 Ethyl acetate	43	8.334	8.334	0.000	97	551121	2.00	2.37	
43 Chloroform	83	8.502	8.502	0.000	72	604030	2.00	2.23	
143 Tert-butyl ethyl ether	59	8.577	8.577	0.000	96	765427	2.00	2.38	
44 Tetrahydrofuran	42	8.895	8.895	0.000	91	298999	2.00	2.36	
45 1,1,1-Trichloroethane	97	9.537	9.537	0.000	95	706568	2.00	2.24	
46 1,2-Dichloroethane	62	9.655	9.655	0.000	96	466912	2.00	2.19	
47 n-Butanol	31	10.103	10.103	0.000	86	112361	2.00	2.14	
49 Cyclohexane	69	10.152	10.152	0.000	76	120594	2.00	2.17	
48 Benzene	78	10.157	10.157	0.000	95	696540	2.00	2.17	
50 Carbon tetrachloride	117	10.179	10.179	0.000	97	764852	2.00	2.27	
51 2,3-Dimethylpentane	71	10.276	10.276	0.000	89	162984	2.00	2.13	
52 Thiophene	84	10.443	10.443	0.000	97	401369	2.00	2.17	
141 Tert-amyl methyl ether	73	10.642	10.642	0.000	86	629555	2.00	2.26	
53 Isooctane	57	10.944	10.944	0.000	97	1359942	2.00	2.13	
54 n-Heptane	71	11.338	11.338	0.000	94	253543	2.00	2.10	
55 1,2-Dichloropropane	63	11.430	11.430	0.000	81	268577	2.00	2.17	
56 Trichloroethene	130	11.462	11.462	0.000	98	383346	2.00	2.13	
57 Dibromomethane	93	11.554	11.554	0.000	94	323467	2.00	2.12	
58 Dichlorobromomethane	83	11.705	11.705	0.000	99	641137	2.00	2.19	
59 1,4-Dioxane	88	11.710	11.710	0.000	31	101932	2.00	2.20	
60 Methyl methacrylate	41	11.796	11.796	0.000	91	368182	2.00	2.29	
61 Methylcyclohexane	83	12.244	12.244	0.000	89	558825	2.00	2.13	
62 4-Methyl-2-pentanone (MIBK)	43	12.664	12.664	0.000	99	533191	2.00	1.95	
63 cis-1,3-Dichloropropene	75	12.729	12.729	0.000	97	444040	2.00	2.19	
64 trans-1,3-Dichloropropene	75	13.446	13.446	0.000	97	429099	2.00	2.18	
65 Toluene	91	13.560	13.560	0.000	93	843503	2.00	2.12	
66 1,1,2-Trichloroethane	83	13.646	13.646	0.000	85	241697	2.00	2.16	
67 2-Methylthiophene	97	13.716	13.716	0.000	98	702777	2.00	2.16	
68 3-Methylthiophene	97	13.921	13.921	0.000	99	685945	2.00	2.16	
69 2-Hexanone	58	14.029	14.029	0.000	92	241865	2.00	1.96	
70 n-Octane	85	14.255	14.255	0.000	95	289222	2.00	2.11	
71 Chlorodibromomethane	129	14.352	14.352	0.000	97	659563	2.00	2.21	
72 Ethylene Dibromide	107	14.649	14.649	0.000	95	480121	2.00	2.15	
73 Tetrachloroethene	129	14.719	14.719	0.000	95	370752	2.00	2.09	
74 Chlorobenzene	112	15.603	15.603	0.000	83	711362	2.00	2.14	
75 2,3-Dimethylheptane	43	15.619	15.619	0.000	93	892304	2.00	2.15	
76 Ethylbenzene	91	15.894	15.894	0.000	99	1133859	2.00	2.19	
77 2-Ethylthiophene	97	15.997	15.997	0.000	77	897919	2.00	2.20	
78 m-Xylene & p-Xylene	91	16.056	16.056	0.000	99	1788880	4.00	4.49	
81 n-Nonane	57	16.477	16.477	0.000	92	602591	2.00	2.18	
79 Bromoform	173	16.515	16.515	0.000	84	558806	2.00	2.21	
80 Styrene	104	16.525	16.525	0.000	89	659102	2.00	2.31	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
82 o-Xylene	91	16.585	16.585	0.000	78	915202	2.00	2.20	
83 1,1,2,2-Tetrachloroethane	83	16.919	16.919	0.000	98	548231	2.00	2.15	
84 1,2,3-Trichloropropane	110	17.081	17.081	0.000	93	208411	2.00	2.18	
85 Isopropylbenzene	105	17.178	17.178	0.000	95	1297527	2.00	2.21	
86 N-Propylbenzene	120	17.728	17.728	0.000	88	350841	2.00	2.20	
87 2-Chlorotoluene	126	17.771	17.771	0.000	59	331547	2.00	2.12	
88 4-Ethyltoluene	105	17.879	17.879	0.000	97	1175016	2.00	2.28	
89 1,3,5-Trimethylbenzene	120	17.960	17.960	0.000	92	576030	2.00	2.21	
90 Alpha Methyl Styrene	118	18.192	18.192	0.000	84	509700	2.00	2.29	
91 n-Decane	57	18.251	18.251	0.000	89	709974	2.00	2.27	
92 tert-Butylbenzene	119	18.391	18.391	0.000	86	1129695	2.00	2.28	
93 1,2,4-Trimethylbenzene	105	18.402	18.402	0.000	92	1027274	2.00	2.27	
95 sec-Butylbenzene	105	18.661	18.661	0.000	97	1412781	2.00	2.27	
94 1,3-Dichlorobenzene	146	18.677	18.677	0.000	98	674850	2.00	2.13	
96 Benzyl chloride	91	18.758	18.758	0.000	97	853702	2.00	2.21	
97 1,4-Dichlorobenzene	146	18.769	18.769	0.000	92	651729	2.00	2.11	
98 4-Isopropyltoluene	119	18.828	18.828	0.000	85	1215368	2.00	2.25	
99 1,2,3-Trimethylbenzene	105	18.882	18.882	0.000	79	772314	2.00	2.22	
100 Butylcyclohexane	83	18.936	18.936	0.000	87	725516	2.00	2.13	
102 2,3-Dihydroindene	117	19.130	19.130	0.000	89	920973	2.00	2.19	
101 1,2-Dichlorobenzene	146	19.135	19.135	0.000	83	647079	2.00	2.14	
103 Indene	116	19.265	19.265	0.000	78	688816	2.00	2.19	
104 n-Butylbenzene	91	19.265	19.265	0.000	96	1043980	2.00	2.24	
106 Undecane	57	19.577	19.577	0.000	92	650183	2.00	2.30	
105 1,2-Dimethyl-4-Ethylbenzen	119	19.642	19.642	0.000	96	836090	2.00	2.15	
142 1,2-Dibromo-3-Chloropropan	157	19.745	19.745	0.000	96	267129	2.00	1.90	
107 1,2,4,5-Tetramethylbenzene	119	20.030	20.030	0.000	96	962133	2.00	2.14	
108 1,2,3,5-Tetramethylbenzene	119	20.084	20.084	0.000	95	588232	2.00	2.10	
109 1,2,3,4-Tetramethylbenzene	119	20.483	20.483	0.000	96	754986	2.00	2.00	
110 Dodecane	57	20.640	20.640	0.000	91	322323	2.00	1.49	
111 1,2,4-Trichlorobenzene	180	20.845	20.845	0.000	94	299410	2.00	1.68	
112 Naphthalene	128	20.985	20.985	0.000	98	618301	2.00	1.67	
113 Benzo(b)thiophene	134	21.093	21.093	0.000	99	413419	2.00	1.40	
114 Hexachlorobutadiene	225	21.206	21.206	0.000	84	367929	2.00	1.86	
115 1,2,3-Trichlorobenzene	180	21.281	21.281	0.000	95	207683	2.00	1.41	
116 2-Methylnaphthalene	142	22.133	22.133	0.000	98	184646	6.25	3.16	
117 1-Methylnaphthalene	142	22.333	22.333	0.000	99	178225	6.25	3.17	
A 118 C6 Range	1	7.725	(7.660-7.790)		0	2902574	2.00	2.02	
A 119 Toluene Range	1	13.560	(13.530-13.590)		0	2222408	2.00	2.20	
A 120 C8 Range	1	14.255	(14.225-14.285)		0	3007706	2.00	2.17	
S 124 Xylenes, Total	100				0		6.00	6.69	
S 144 1,2-Dichloroethene, Total	1				0		4.00	4.52	

Reagents:

DCN2C00X10_00002

Amount Added: 100.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Laboratories

Data File: \\KNXCHROM\ChromData\ME\20150304-1425.b\ECCVC05-LCS.d

Injection Date: 05-Mar-2015 09:33:30

Instrument ID: ME

Operator ID: 7126

Lims ID: LCS

Worklist Smp#: 1002

Client ID:

Purge Vol: 500.000 mL

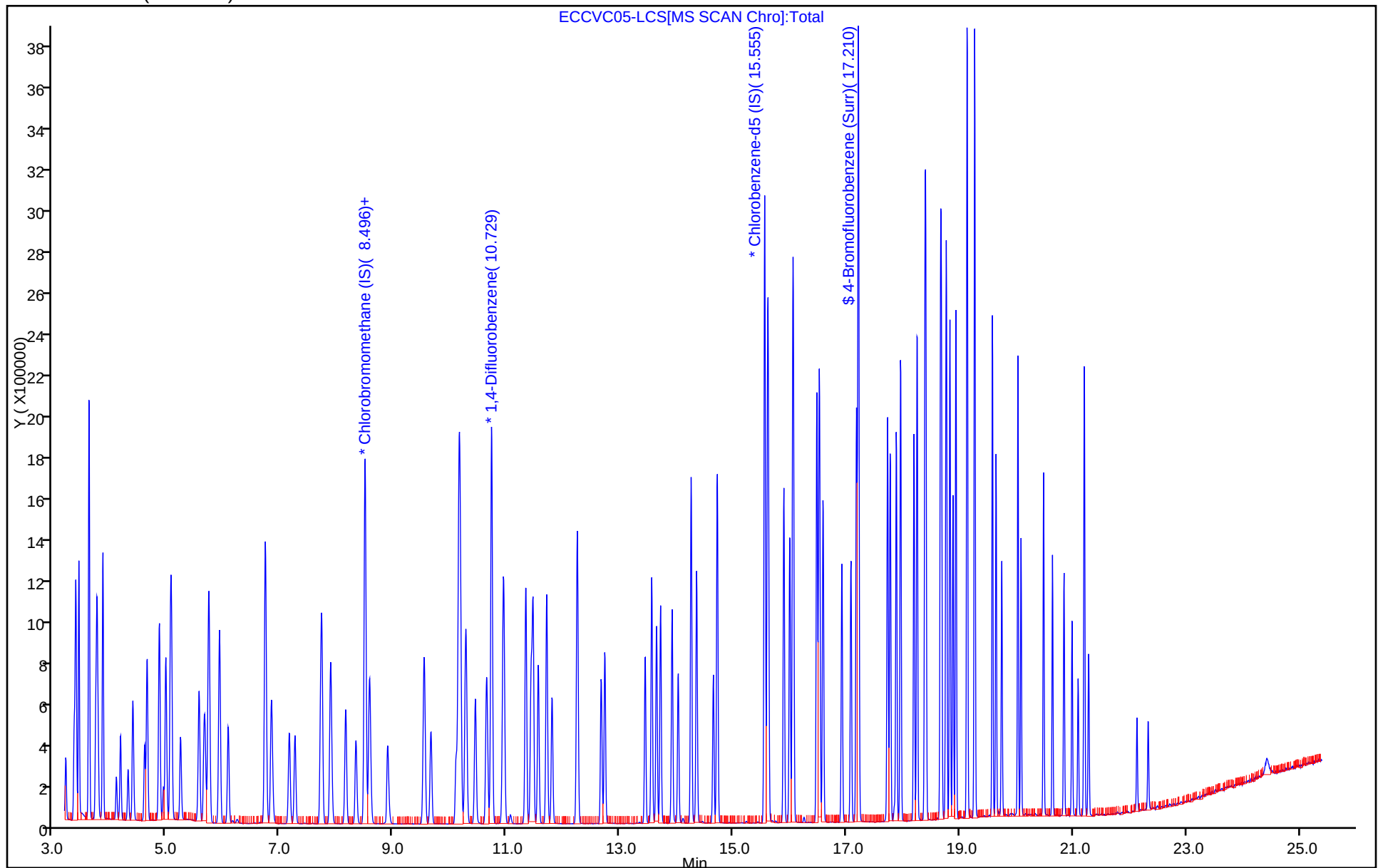
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Knoxville Job No.: 140-2815-1

SDG No.: _____

Instrument ID: ME Start Date: 03/03/2015 09:35Analysis Batch Number: 2456 End Date: 03/04/2015 04:07

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-2456/1		03/03/2015 09:35	1	bfb.D	RTX-5 0.32 (mm)
IC 140-2456/2		03/03/2015 10:06	1	ic 11.D	RTX-5 0.32 (mm)
IC 140-2456/3		03/03/2015 10:52	1	ic 12.D	RTX-5 0.32 (mm)
IC 140-2456/4		03/03/2015 11:36	1	ic 13.D	RTX-5 0.32 (mm)
IC 140-2456/5		03/03/2015 12:22	1	ic 14.D	RTX-5 0.32 (mm)
IC 140-2456/6		03/03/2015 13:07	1	ic 15.D	RTX-5 0.32 (mm)
ICIS 140-2456/7		03/03/2015 13:52	1	icis 16.D	RTX-5 0.32 (mm)
IC 140-2456/8		03/03/2015 14:36	1	ic 17.D	RTX-5 0.32 (mm)
IC 140-2456/9		03/03/2015 15:24	1	ic 18.D	RTX-5 0.32 (mm)
IC 140-2456/10		03/03/2015 16:09	1	ic 19.D	RTX-5 0.32 (mm)
ICV 140-2456/12		03/03/2015 17:39	1	icv.D	RTX-5 0.32 (mm)
ZZZZZ		03/03/2015 21:09	1		RTX-5 0.32 (mm)
ZZZZZ		03/03/2015 21:54	1		RTX-5 0.32 (mm)
ZZZZZ		03/03/2015 22:39	1		RTX-5 0.32 (mm)
ZZZZZ		03/03/2015 23:24	1		RTX-5 0.32 (mm)
ZZZZZ		03/04/2015 00:09	1		RTX-5 0.32 (mm)
ZZZZZ		03/04/2015 00:54	1		RTX-5 0.32 (mm)
ZZZZZ		03/04/2015 01:40	1		RTX-5 0.32 (mm)
ZZZZZ		03/04/2015 02:28	1		RTX-5 0.32 (mm)
ZZZZZ		03/04/2015 03:21	1		RTX-5 0.32 (mm)
ZZZZZ		03/04/2015 04:07	1		RTX-5 0.32 (mm)

150303

TA-Knoxville
TO-14 Autosampler LogME ICAL
WL 1421
As 3/4/15

Sample	Position/Volume	psia	Date	Time
BFB	16 - 100 mL	30.8	3/3/2015	9:35:51 AM
ICAL1	7 - 101 mL	42	3/3/2015	10:06:47 AM
ICAL2	7 - 201 mL	41.1	3/3/2015	10:52:07 AM
ICAL3	8 - 201 mL	40.1	3/3/2015	11:36:34 AM
ICAL4	9 - 201 mL	39.5	3/3/2015	12:22:20 PM
ICAL5	10 - 201 mL	39.6	3/3/2015	1:07:24 PM
ICAL6	11 - 200 mL	39.3	3/3/2015	1:52:05 PM
ICAL7	12 - 200 mL	36.6	3/3/2015	2:36:58 PM
ICAL8	13 - 201 mL	34.2	3/3/2015	3:24:08 PM
ICAL9	14 - 201 mL	39.3	3/3/2015	4:09:06 PM
FLUSH	15 - 100 mL	35.6	3/3/2015	4:54:18 PM
ICV	15 - 100 mL	34.2	3/3/2015	5:39:00 PM
LCS	15 - 200 mL	32.6	3/3/2015	6:25:38 PM
dnuf flush	16 - 200 mL	30.5	3/3/2015	7:38:48 PM
MB500mL	16 - 501 mL	30	3/3/2015	8:23:46 PM
bottle2802-01	1 - 200 mL	22	3/3/2015	9:09:20 PM
bottle2802-02	2 - 200 mL	19.8	3/3/2015	9:54:22 PM
bottle2802-03	3 - 200 mL	22.8	3/3/2015	10:39:54 PM
bottle2802-04	4 - 200 mL	22.5	3/3/2015	11:24:56 PM
bottle2802-05	5 - 200 mL	21.4	3/4/2015	12:09:51 AM
bottle2802-06	6 - 200 mL	24.1	3/4/2015	12:54:56 AM
bottle2802-07	7 - 200 mL	24.3	3/4/2015	1:40:39 AM
bottle2802-08	8 - 201 mL	21.9	3/4/2015	2:28:00 AM
2643-02	9 - 1001 mL	39	3/4/2015	3:21:55 AM
2643-01	10 - 11 mL	38.2	3/4/2015	4:07:23 AM

TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 15 & KNOX-MS-0023, Rev 1

Analysis Date:	3/3/15	Instrument:	ME	Chrom WL #:	1421	TALS Batch & Event #	TO14/15: 2456 287	AFCEE: 2457 288	
							DOD: 2458 289	OHIO: 2459 290	
Chrom/Worklist Review						1 st	Comments		2 nd
1. Re-read each Limit Group [method editor-limit groups]						✓			
2. Verify LODV in Chrom [method editor -> edit -> MDL]						✓			
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]						✓			✓
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						✓			✓
• 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						✓			✓
• tert-butylbenzene/4-isopropyltoluene						✓			✓
• 1,3-, 1,4-, and 1,2-dichlorobenzene						✓			✓
• 1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes						✓			✓
• 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-	AFC	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) [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. [Ctrl-C, details]						NA			
21. Is the second source analysis within limits? [F8 - idv]						✓	✓	✓	✓
22. Analyst/Date: AS 3/4/15						2nd Level Reviewer/Date:			
Comments:									
TALS Review						TO-	AFC	DOD	OH
23. Upload ICAL						✓	✓	✓	✓
24. Graphics uploaded? [Sample List Tab]						✓	✓	✓	✓
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. If criteria not met, was a NCM generated?						NA			
28. After review in TALS, approve the method in TALS.						✓	✓	✓	✓
29. After verifying TALS is correct, lock method in Chrom <resolve any error issues>						✓	✓	✓	✓
30. Checklist & Entech report scanned, attached & assigned properly?						✓	✓	✓	✓
Analyst: AS						Date: 3/4/15		2nd Level Reviewer: JMW	
Comments:						Date: 3/4/15			

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica KnoxvilleJob No.: 140-2815-1

SDG No.: _____

Instrument ID: MEStart Date: 03/05/2015 09:02Analysis Batch Number: 2464End Date: 03/06/2015 08:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-2464/1		03/05/2015 09:02	1	EBFBC05.D	RTX-5 0.32 (mm)
CCVIS 140-2464/2		03/05/2015 09:33	1	ECCVC05.D	RTX-5 0.32 (mm)
LCS 140-2464/1002		03/05/2015 09:33	1	ECCVC05-LCS.d	RTX-5 0.32 (mm)
ZZZZZ		03/05/2015 11:49	1		RTX-5 0.32 (mm)
ZZZZZ		03/05/2015 12:42	1		RTX-5 0.32 (mm)
MB 140-2464/6		03/05/2015 13:33	1	EB500C05.D	RTX-5 0.32 (mm)
140-2815-1	H20-BA-2015	03/05/2015 14:23	1	EC05P103.D	RTX-5 0.32 (mm)
140-2815-2	DUP1-2015	03/05/2015 15:12	1	EC05P104.D	RTX-5 0.32 (mm)
140-2815-3	D3-OA-2015	03/05/2015 16:01	1	EC05P105.D	RTX-5 0.32 (mm)
140-2815-4	H23-BA-2015	03/05/2015 16:52	1	EC05P106.D	RTX-5 0.32 (mm)
140-2815-5	H23-SS-2015	03/05/2015 17:41	1	EC05P107.D	RTX-5 0.32 (mm)
140-2815-6	DUP2-2015	03/05/2015 18:35	1	EC05P108.D	RTX-5 0.32 (mm)
140-2815-7	D2-OA-2015	03/05/2015 19:25	1	EC05P109.D	RTX-5 0.32 (mm)
140-2815-8	H28-BA-2015	03/05/2015 20:15	1	EC05P110.D	RTX-5 0.32 (mm)
140-2815-9	H28-SS-2015	03/05/2015 21:04	1	EC05P111.D	RTX-5 0.32 (mm)
140-2815-10	H3-BA-2015	03/05/2015 21:55	1	EC05P112.D	RTX-5 0.32 (mm)
140-2815-11	H3-SS-2015	03/05/2015 22:44	1	EC05P113.D	RTX-5 0.32 (mm)
140-2815-12	H15-BA2-2015	03/05/2015 23:33	1	EC05P114.D	RTX-5 0.32 (mm)
140-2815-13	H2-BA-2015	03/06/2015 00:22	1	EC05P115.D	RTX-5 0.32 (mm)
ZZZZZ		03/06/2015 01:11	1		RTX-5 0.32 (mm)
ZZZZZ		03/06/2015 03:32	1		RTX-5 0.32 (mm)
140-2815-8 DL	H28-BA-2015 DL	03/06/2015 08:03	1	EC05P110DL.D	RTX-5 0.32 (mm)

150305

TA-Knoxville
TO-14 Autosampler Log

Sample	Position/Volume	psia	Date	Time
BFB	16 - 100 mL	29.2	3/5/2015	9:02:58 AM
CCV	15 - 101 mL	32.9	3/5/2015	9:33:56 AM
dnuleak	STD- 27.6 mL	27.6	3/5/2015	11:12:54 AM
LOT	1 - 501 mL	24	3/5/2015	11:49:53 AM
LOT	2 - 501 mL	24.7	3/5/2015	12:42:18 PM
BLANK	16 - 501 mL	28.3	3/5/2015	1:33:00 PM
2815-01	3 - 501 mL	11	3/5/2015	2:23:16 PM
2815-02	4 - 501 mL	11	3/5/2015	3:12:34 PM
2815-03	5 - 500 mL	12.4	3/5/2015	4:01:51 PM
2815-04	6 - 501 mL	10.9	3/5/2015	4:52:35 PM
2815-05	7 - 500 mL	10	3/5/2015	5:41:44 PM
2815-06	8 - 501 mL	10.7	3/5/2015	6:35:23 PM
2815-07	9 - 501 mL	12.8	3/5/2015	7:25:26 PM
2815-08	10 - 500 mL	10.5	3/5/2015	8:15:16 PM
2815-09	11 - 500 mL	8.2	3/5/2015	9:04:48 PM
2815-10	12 - 501 mL	9.8	3/5/2015	9:55:44 PM
2815-11	13 - 501 mL	8.9	3/5/2015	10:44:34 PM
2815-12	14 - 500 mL	11.3	3/5/2015	11:33:38 PM
2815-13	15 - 501 mL	8.6	3/6/2015	12:22:19 AM
2815-13DU	15 - 501 mL	5.4	3/6/2015	1:11:17 AM
flush	1 - 20 mL	25.1	3/6/2015	1:55:33 AM
flow10445	1 - 501 mL	9.8	3/6/2015	2:46:41 AM
2643-01	2 - 10 mL	16.1	3/6/2015	3:32:41 AM
2643-01R	2 - 20 mL	15.7	3/6/2015	4:17:03 AM
ENDBLK	16 - 20 mL	28.2	3/6/2015	5:03:25 AM
ENDBLK	16 - 20 mL	28.1	3/6/2015	5:47:48 AM
ENDBLK	16 - 21 mL	27.9	3/6/2015	6:32:59 AM
2815-08	10 - 50 mL	10.5	3/6/2015	8:03:42 AM

TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 15 & KNOX-MS-0023, Rev 1

Page 1 of 2

Instrument/Date	ME 3/5/15	Routine	AFCEE	POD	OHIO
CCAL Chrom WL #	1425	CCAL Batch #	2464		
ICAL Chrom WL #	1421	ICAL Batch # / Event #	2456 / 287	/	/

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]	/		/
2. Did BFB meet tune criteria? [F8]	/	☐ [Failed TO-14A, but passes TO-15] (NCM# _____)	/
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICAL File batch #/start/end Cal date/time)? [F8]	/		/
4. Is the %D ≤ 30% for all target analytes? [≤ 40% for AFCEE non-table analytes] [Chrom-F8] [TALS-Sample Results Tab]	/	☐ CCV - %D - LCS criteria met (NCM# _____) ☐ CCV - %D High - outside criteria, samples ND, Sample IDs Included (NCM# _____)	/
5. 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	/		/
• tert-butylbenzene/4-isopropyltoluene	/		/
• 1,3-, 1,4-, and 1,2-dichlorobenzene	/		/
• 1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	/		/
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	/		/
• 2-, and 1-methylnaphthalene	/		/
6. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	/		/
7. Has the RT been updated to the method?	/		/
Analyst: <i>[Signature]</i> Date: 3/6/15		2nd Level Reviewer: <i>[Signature]</i> Date: 03/09/15	
Comments:		Comments:	
8. 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]	/		/
9. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	/		/
10. Were all samples/QC analyzed within 24 hr of BFB? [F7]	/		/
11. 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# _____)	/
12. All runs - peaks ID'd correctly and false positives removed?	/		/
13. If manual integrations performed, are they properly performed, correctly ID'd, baseline clearly identified, and reason given?	/		/
14. 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 - EA/RA Concurs (NCM# _____) ☐ (4) Surrogate -RX concurs, Report both (NCM# _____) ☐ (5) ISTD - Matrix, DL required (NCM# _____)	/
Sample Reason Sample Reason			
15. Samples outside calibration range scheduled for dilution? Samples:	/	☐ ICAL - Range Exceeded; Minimum Dilution	/
Chrom Review	1 st	If No, why is data reportable?	2 nd
16. 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			
17. RIC inspected for proper integration for TPH?	/		/
18. Obvious non-TPH peaks excluded?	/		/
19. Individual TPH peak area < octane high point area?	/		/

Page 2 of 2

Analyst:	Date:	2nd Level Reviewer :	Date:
Comments:		Comments:	
Example Calculation: $0.1519 \times 500 \text{ KI} = 0.1519$			

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

Lab Name: TestAmerica Knoxville Job No.: 140-2665-1

SDG No.: _____

Client Sample ID: 09943 Lab Sample ID: 140-2665-11

Matrix: Air Lab File ID: LOT2665.D

Analysis Method: TO 15 LL Date Collected: 01/27/2015 09:00

Sample wt/vol: 500(mL) Date Analyzed: 01/28/2015 15:02

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.: 2270 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-43-2	Benzene	ND		0.080	
100-44-7	Benzyl chloride	ND		0.16	
74-83-9	Bromomethane	ND		0.080	
56-23-5	Carbon tetrachloride	ND		0.040	
108-90-7	Chlorobenzene	ND		0.080	
75-00-3	Chloroethane	ND		0.080	
87-61-6	1,2,3-Trichlorobenzene	ND		0.40	
67-66-3	Chloroform	ND		0.080	
96-18-4	1,2,3-Trichloropropane	ND		0.20	
74-87-3	Chloromethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.080	
541-73-1	1,3-Dichlorobenzene	ND		0.080	
106-46-7	1,4-Dichlorobenzene	ND		0.080	
75-71-8	Dichlorodifluoromethane	ND		0.080	
75-34-3	1,1-Dichloroethane	ND		0.080	
107-06-2	1,2-Dichloroethane	ND		0.080	
75-35-4	1,1-Dichloroethene	ND		0.080	
156-59-2	cis-1,2-Dichloroethene	ND		0.080	
78-87-5	1,2-Dichloropropane	ND		0.080	
123-91-1	1,4-Dioxane	ND		0.20	
78-93-3	2-Butanone	ND		0.32	
10061-01-5	cis-1,3-Dichloropropene	ND		0.080	
95-49-8	2-Chlorotoluene	ND		0.16	
10061-02-6	trans-1,3-Dichloropropene	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.080	
591-78-6	2-Hexanone	ND		0.20	
107-05-1	3-Chloroprene	ND		0.080	
100-41-4	Ethylbenzene	ND		0.080	
622-96-8	4-Ethyltoluene	ND		0.16	
75-69-4	Trichlorofluoromethane	ND		0.080	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		0.080	
67-64-1	Acetone	ND		2.0	
75-09-2	Methylene Chloride	ND		0.20	
75-05-8	Acetonitrile	ND		0.40	
100-42-5	Styrene	ND		0.080	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2665-1

SDG No.: _____

Client Sample ID: 09943 Lab Sample ID: 140-2665-11

Matrix: Air Lab File ID: LOT2665.D

Analysis Method: TO 15 LL Date Collected: 01/27/2015 09:00

Sample wt/vol: 500(mL) Date Analyzed: 01/28/2015 15:02

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.: 2270 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.080	
107-02-8	Acrolein	ND		0.16	
107-13-1	Acrylonitrile	ND		0.80	
127-18-4	Tetrachloroethene	ND		0.040	
98-83-9	Alpha Methyl Styrene	ND		0.16	
108-88-3	Toluene	ND		0.12	
120-82-1	1,2,4-Trichlorobenzene	ND		0.080	
71-55-6	1,1,1-Trichloroethane	ND		0.080	
75-27-4	Bromodichloromethane	ND		0.080	
79-00-5	1,1,2-Trichloroethane	ND		0.080	
75-25-2	Bromoform	ND		0.080	
79-01-6	Trichloroethene	ND		0.040	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	ND		0.080	
106-97-8	Butane	ND		0.16	
108-67-8	1,3,5-Trimethylbenzene	ND		0.080	
75-15-0	Carbon disulfide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.040	
95-47-6	o-Xylene	ND		0.080	
75-45-6	Chlorodifluoromethane	ND		0.080	
179601-23-1	m-Xylene & p-Xylene	ND		0.080	
106-93-4	1,2-Dibromoethane	ND		0.080	
110-82-7	Cyclohexane	ND		0.20	
124-18-5	n-Decane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.080	
74-95-3	Dibromomethane	ND		0.16	
112-40-3	n-Dodecane	ND		0.40	
64-17-5	Ethanol	ND		0.80	
141-78-6	Ethyl acetate	ND		0.80	
60-29-7	Ethyl ether	ND		0.80	
142-82-5	n-Heptane	ND		0.20	
110-54-3	Hexane	ND		0.20	
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	
91-20-3	Naphthalene	ND		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2665-1

SDG No.: _____

Client Sample ID: 09943 Lab Sample ID: 140-2665-11

Matrix: Air Lab File ID: LOT2665.D

Analysis Method: TO 15 LL Date Collected: 01/27/2015 09:00

Sample wt/vol: 500 (mL) Date Analyzed: 01/28/2015 15:02

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.: 2270 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
104-51-8	n-Butylbenzene	ND		0.16	
103-65-1	N-Propylbenzene	ND		0.16	
111-65-9	n-Octane	ND		0.16	
109-66-0	Pentane	ND		0.40	
115-07-1	Propene	ND		0.20	
135-98-8	sec-Butylbenzene	ND		0.16	
98-06-6	tert-Butylbenzene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		0.40	
156-60-5	trans-1,2-Dichloroethene	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	
488-23-3	1,2,3,4-Tetramethylbenzene	ND		0.080	
527-53-7	1,2,3,5-Tetramethylbenzene	ND		0.080	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.080	
934-80-5	1,2-Dimethyl-4-Ethylbenzene	ND		0.080	
90-12-0	1-Methylnaphthalene	ND		1.0	
3074-71-3	2,3-Dimethylheptane	ND		0.080	
872-55-9	2-Ethylthiophene	ND		0.080	
554-14-3	2-Methylthiophene	ND		0.080	
91-57-6	2-Methylnaphthalene	ND		1.0	
616-44-4	3-Methylthiophene	ND		0.080	
95-15-8	Benzo(b) thiophene	ND		0.16	
110-02-1	Thiophene	ND		0.080	
1678-93-9	Butylcyclohexane	ND		0.080	
526-73-8	1,2,3-Trimethylbenzene	ND		0.080	
106-99-0	1,3-Butadiene	ND		0.16	
540-84-1	2,2,4-Trimethylpentane	ND		0.20	
71-36-3	1-Butanol	ND		0.80	
565-59-3	2,3-Dimethylpentane	ND		0.080	
78-78-4	2-Methylbutane	ND		0.20	
107-83-5	2-Methylpentane	ND		0.080	
75-07-0	Acetaldehyde	ND		4.0	
98-82-8	Cumene	ND		0.16	
496-11-7	Indane	ND		0.080	
95-13-6	Indene	ND		0.16	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2665-1
SDG No.: _____
Client Sample ID: 09943 Lab Sample ID: 140-2665-11
Matrix: Air Lab File ID: LOT2665.D
Analysis Method: TO 15 LL Date Collected: 01/27/2015 09:00
Sample wt/vol: 500 (mL) Date Analyzed: 01/28/2015 15:02
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.: 2270 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
99-87-6	p-Cymene	ND		0.080	
75-65-0	tert-Butanol	ND		0.32	
108-87-2	Methylcyclohexane	ND		0.080	
111-84-2	n-Nonane	ND		0.20	

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150128-1294.b\LOT2665.D
 Lims ID: 140-2665-A-11 Lab Sample ID: 140-2665-11
 Client ID: 09943
 Sample Type: Client
 Inject. Date: 28-Jan-2015 15:02:30 ALS Bottle#: 6 Worklist Smp#: 5
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 09943
 Misc. Info.: E012815,TO155,,140-0001294-005
 Operator ID: 7126 Instrument ID: ME
 Method: \\KNXCHROM\ChromData\ME\20150128-1294.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 28-Jan-2015 18:11:23 Calib Date: 20-Dec-2014 00:23:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20141219-1198.b\ic I9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK010

First Level Reviewer: barlozhetskayaa

Date: 28-Jan-2015 18:11:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.588	8.593	-0.005	94	457102	4.00	
* 2 1,4-Difluorobenzene	114	10.944	10.950	-0.006	96	1865237	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.277	16.283	-0.006	88	1687397	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	18.143	18.148	-0.005	90	1075100	3.78	
31 Methylene Chloride	84	5.935	5.940	-0.005	98	12355	0.1088	
40 Hexane	56	7.795	7.801	-0.005	58	1908	0.0149	
47 n-Butanol	31	10.308	10.292	0.016	77	1510	0.0377	

Reagents:

MAissur1_00002 Amount Added: 40.00 Units: mL Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150128-1294.b\LOT2665.D

Injection Date: 28-Jan-2015 15:02:30

Instrument ID: ME

Operator ID: 7126

Lims ID: 140-2665-A-11

Lab Sample ID: 140-2665-11

Worklist Smp#: 5

Client ID: 09943

Purge Vol: 500.000 mL

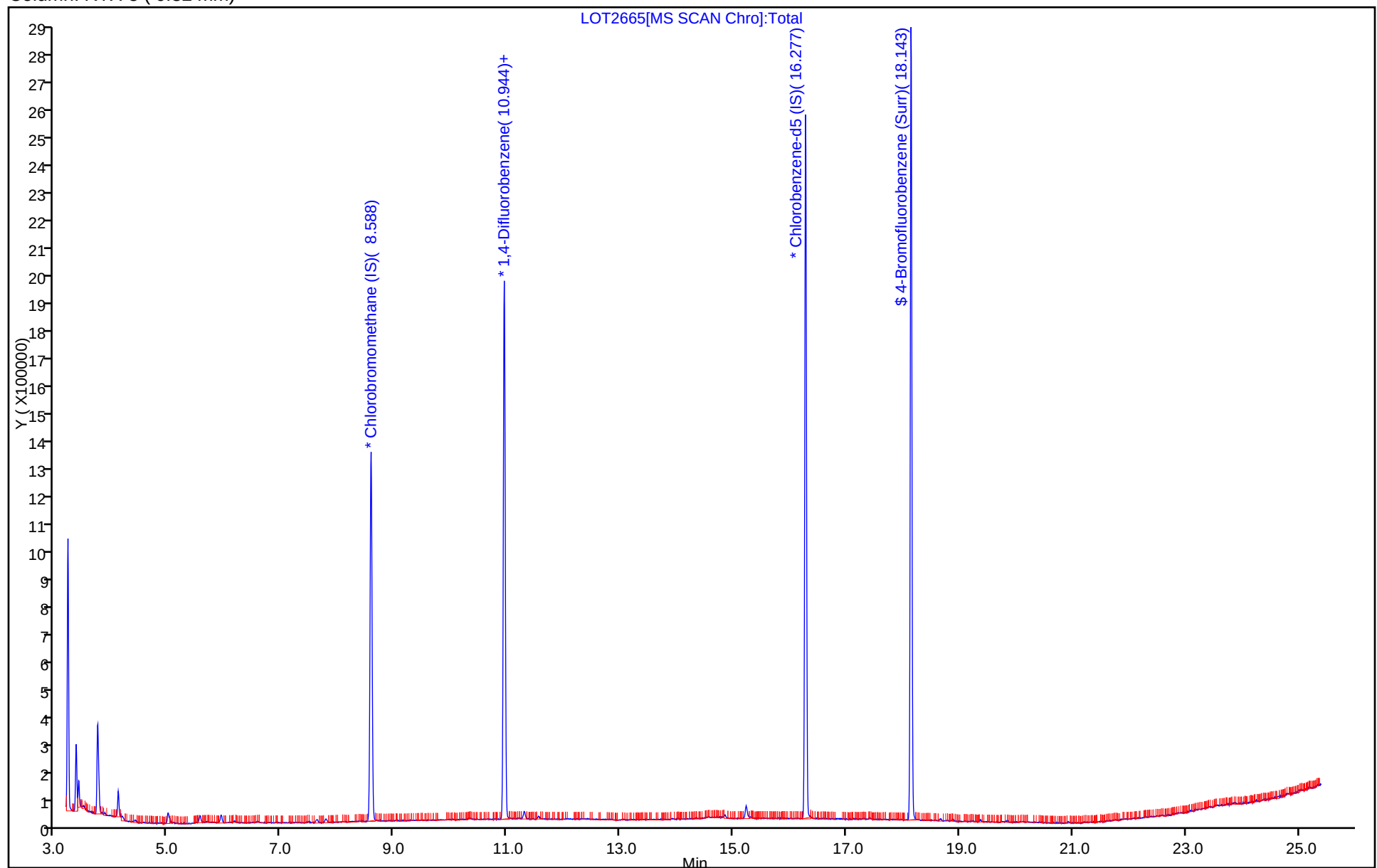
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: ME_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: TestAmerica Knoxville Job No.: 140-2714-1

SDG No.: _____

Client Sample ID: 10807 Lab Sample ID: 140-2714-3

Matrix: Air Lab File ID: LOT2714R.D

Analysis Method: TO 15 LL Date Collected: 02/09/2015 09:25

Sample wt/vol: 500(mL) Date Analyzed: 02/11/2015 07:50

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.: 2359 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-43-2	Benzene	ND		0.080	
100-44-7	Benzyl chloride	ND		0.16	
74-83-9	Bromomethane	ND		0.080	
56-23-5	Carbon tetrachloride	ND		0.040	
108-90-7	Chlorobenzene	ND		0.080	
75-00-3	Chloroethane	ND		0.080	
87-61-6	1,2,3-Trichlorobenzene	ND		0.40	
67-66-3	Chloroform	ND		0.080	
96-18-4	1,2,3-Trichloropropane	ND		0.20	
74-87-3	Chloromethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.080	
541-73-1	1,3-Dichlorobenzene	ND		0.080	
106-46-7	1,4-Dichlorobenzene	ND		0.080	
75-71-8	Dichlorodifluoromethane	ND		0.080	
75-34-3	1,1-Dichloroethane	ND		0.080	
107-06-2	1,2-Dichloroethane	ND		0.080	
75-35-4	1,1-Dichloroethene	ND		0.080	
156-59-2	cis-1,2-Dichloroethene	ND		0.080	
78-87-5	1,2-Dichloropropane	ND		0.080	
123-91-1	1,4-Dioxane	ND		0.20	
78-93-3	2-Butanone	ND		0.32	
10061-01-5	cis-1,3-Dichloropropene	ND		0.080	
95-49-8	2-Chlorotoluene	ND		0.16	
10061-02-6	trans-1,3-Dichloropropene	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.080	
591-78-6	2-Hexanone	ND		0.20	
107-05-1	3-Chloroprene	ND		0.080	
100-41-4	Ethylbenzene	ND		0.080	
622-96-8	4-Ethyltoluene	ND		0.16	
75-69-4	Trichlorofluoromethane	ND		0.080	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		0.080	
67-64-1	Acetone	ND		2.0	
75-09-2	Methylene Chloride	ND		0.20	
75-05-8	Acetonitrile	ND		0.40	
100-42-5	Styrene	ND		0.080	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2714-1

SDG No.: _____

Client Sample ID: 10807 Lab Sample ID: 140-2714-3

Matrix: Air Lab File ID: LOT2714R.D

Analysis Method: TO 15 LL Date Collected: 02/09/2015 09:25

Sample wt/vol: 500(mL) Date Analyzed: 02/11/2015 07:50

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.: 2359 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.080	
107-02-8	Acrolein	ND		0.16	
107-13-1	Acrylonitrile	ND		0.80	
127-18-4	Tetrachloroethene	ND		0.040	
98-83-9	Alpha Methyl Styrene	ND		0.16	
108-88-3	Toluene	ND		0.12	
120-82-1	1,2,4-Trichlorobenzene	ND		0.080	
71-55-6	1,1,1-Trichloroethane	ND		0.080	
75-27-4	Bromodichloromethane	ND		0.080	
79-00-5	1,1,2-Trichloroethane	ND		0.080	
75-25-2	Bromoform	ND		0.080	
79-01-6	Trichloroethene	ND		0.040	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	ND		0.080	
106-97-8	Butane	ND		0.16	
108-67-8	1,3,5-Trimethylbenzene	ND		0.080	
75-15-0	Carbon disulfide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.040	
95-47-6	o-Xylene	ND		0.080	
75-45-6	Chlorodifluoromethane	ND		0.080	
179601-23-1	m-Xylene & p-Xylene	ND		0.080	
106-93-4	1,2-Dibromoethane	ND		0.080	
110-82-7	Cyclohexane	ND		0.20	
124-18-5	n-Decane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.080	
74-95-3	Dibromomethane	ND		0.16	
112-40-3	n-Dodecane	ND		0.40	
64-17-5	Ethanol	ND		0.80	
141-78-6	Ethyl acetate	ND		0.80	
60-29-7	Ethyl ether	ND		0.80	
142-82-5	n-Heptane	ND		0.20	
110-54-3	Hexane	ND		0.20	
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	
91-20-3	Naphthalene	ND		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2714-1
 SDG No.: _____
 Client Sample ID: 10807 Lab Sample ID: 140-2714-3
 Matrix: Air Lab File ID: LOT2714R.D
 Analysis Method: TO 15 LL Date Collected: 02/09/2015 09:25
 Sample wt/vol: 500 (mL) Date Analyzed: 02/11/2015 07:50
 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.: 2359 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
104-51-8	n-Butylbenzene	ND		0.16	
103-65-1	N-Propylbenzene	ND		0.16	
111-65-9	n-Octane	ND		0.16	
109-66-0	Pentane	ND		0.40	
115-07-1	Propene	ND		0.20	
135-98-8	sec-Butylbenzene	ND		0.16	
98-06-6	tert-Butylbenzene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		0.40	
156-60-5	trans-1,2-Dichloroethene	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	
488-23-3	1,2,3,4-Tetramethylbenzene	ND		0.080	
527-53-7	1,2,3,5-Tetramethylbenzene	ND		0.080	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.080	
934-80-5	1,2-Dimethyl-4-Ethylbenzene	ND		0.080	
90-12-0	1-Methylnaphthalene	ND		1.0	
3074-71-3	2,3-Dimethylheptane	ND		0.080	
872-55-9	2-Ethylthiophene	ND		0.080	
554-14-3	2-Methylthiophene	ND		0.080	
91-57-6	2-Methylnaphthalene	ND		1.0	
616-44-4	3-Methylthiophene	ND		0.080	
95-15-8	Benzo(b) thiophene	ND		0.16	
110-02-1	Thiophene	ND		0.080	
1678-93-9	Butylcyclohexane	ND		0.080	
526-73-8	1,2,3-Trimethylbenzene	ND		0.080	
106-99-0	1,3-Butadiene	ND		0.16	
540-84-1	2,2,4-Trimethylpentane	ND		0.20	
71-36-3	1-Butanol	ND		0.80	
565-59-3	2,3-Dimethylpentane	ND		0.080	
78-78-4	2-Methylbutane	ND		0.20	
107-83-5	2-Methylpentane	ND		0.080	
75-07-0	Acetaldehyde	ND		4.0	
98-82-8	Cumene	ND		0.16	
496-11-7	Indane	ND		0.080	
95-13-6	Indene	ND		0.16	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2714-1
SDG No.: _____
Client Sample ID: 10807 Lab Sample ID: 140-2714-3
Matrix: Air Lab File ID: LOT2714R.D
Analysis Method: TO 15 LL Date Collected: 02/09/2015 09:25
Sample wt/vol: 500 (mL) Date Analyzed: 02/11/2015 07:50
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.: 2359 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
99-87-6	p-Cymene	ND		0.080	
75-65-0	tert-Butanol	ND		0.32	
108-87-2	Methylcyclohexane	ND		0.080	
111-84-2	n-Nonane	ND		0.20	

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MR\20150206-1349.b\LOT2714R.D
 Lims ID: 140-2714-A-3 Lab Sample ID: 140-2714-3
 Client ID: 10807
 Sample Type: Client
 Inject. Date: 11-Feb-2015 07:50:30 ALS Bottle#: 5 Worklist Smp#: 25
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 10807, RECLEANED
 Misc. Info.: 140-0001349-025
 Operator ID: Instrument ID: MR
 Method: \\KNXCHROM\ChromData\MR\20150206-1349.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 11-Feb-2015 09:27:25 Calib Date: 31-Jan-2015 21:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\MR\20150130-1312.b\RA31IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: tajh

Date: 11-Feb-2015 09:58:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.468	8.485	-0.017	98	327619	4.00	
* 2 1,4-Difluorobenzene	114	10.669	10.679	-0.010	95	1673908	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.902	16.908	-0.006	89	1425577	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	19.652	19.658	-0.006	87	938250	4.12	
13 Butane	43	4.241	4.235	0.006	93	13296	0.0787	
19 2-Methylbutane	43	4.980	4.974	0.006	90	3646	0.0235	
31 Methylene Chloride	84	6.096	6.107	-0.011	98	9689	0.0951	
62 4-Methyl-2-pentanone (MIBK	43	12.901	12.890	0.011	98	13118	0.0413	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MR\20150206-1349.b\LOT2714R.D

Injection Date: 11-Feb-2015 07:50:30

Instrument ID: MR

Operator ID:

Lims ID: 140-2714-A-3

Lab Sample ID: 140-2714-3

Worklist Smp#: 25

Client ID: 10807

Purge Vol: 500.000 mL

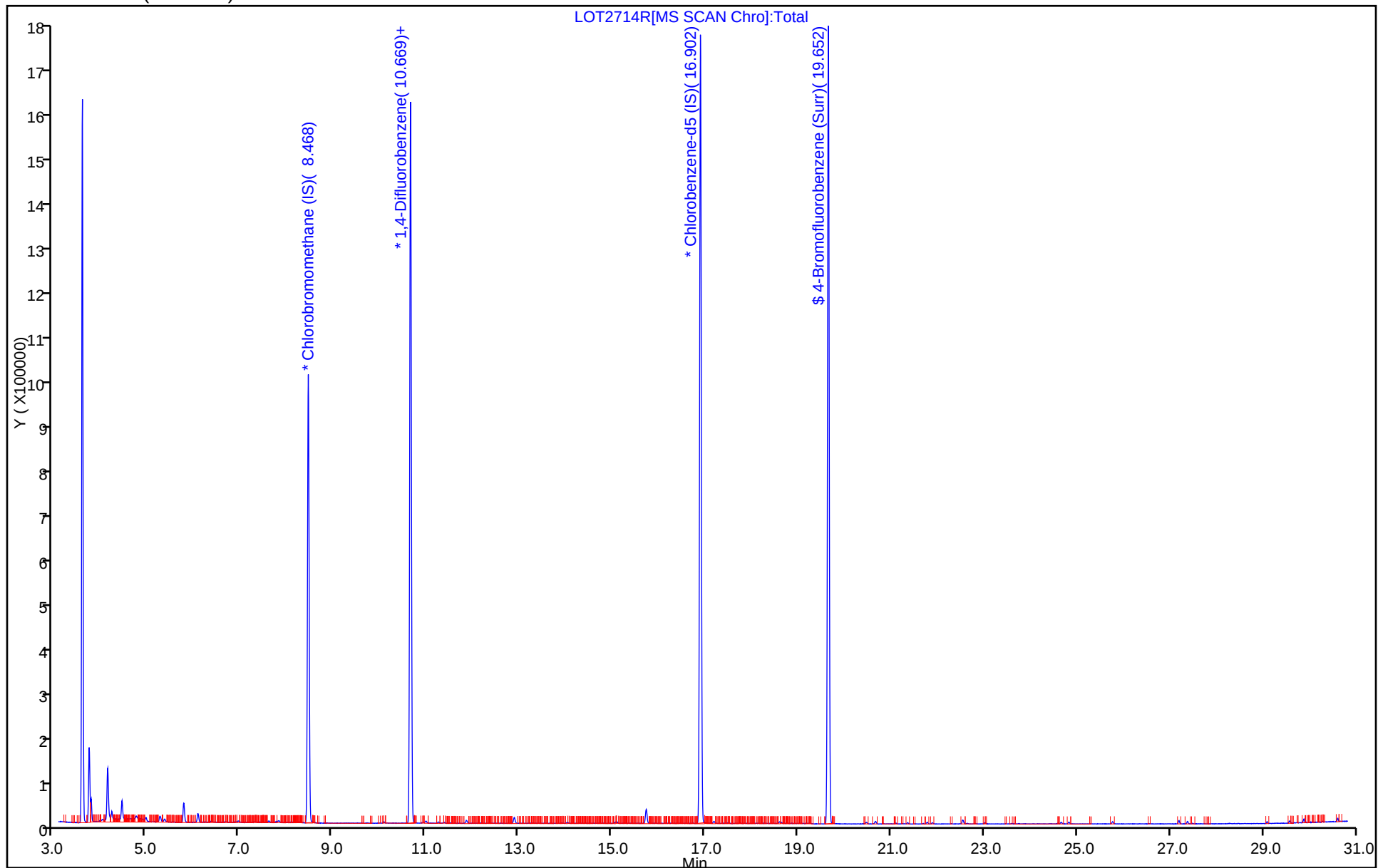
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



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

Lab Name: <u>TestAmerica Knoxville</u>	Job No.: <u>140-2715-1</u>
SDG No.: _____	
Client Sample ID: <u>10806</u>	Lab Sample ID: <u>140-2715-1</u>
Matrix: <u>Air</u>	Lab File ID: <u>LOT2715.D</u>
Analysis Method: <u>TO 15 LL</u>	Date Collected: <u>02/09/2015 10:35</u>
Sample wt/vol: <u>500(mL)</u>	Date Analyzed: <u>02/10/2015 12:42</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>RTX-5</u> ID: <u>0.32 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>2359</u>	Units: <u>ppb v/v</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-43-2	Benzene	ND		0.080	
100-44-7	Benzyl chloride	ND		0.16	
74-83-9	Bromomethane	ND		0.080	
56-23-5	Carbon tetrachloride	ND		0.040	
108-90-7	Chlorobenzene	ND		0.080	
75-00-3	Chloroethane	ND		0.080	
87-61-6	1,2,3-Trichlorobenzene	ND		0.40	
67-66-3	Chloroform	ND		0.080	
96-18-4	1,2,3-Trichloropropane	ND		0.20	
74-87-3	Chloromethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.080	
541-73-1	1,3-Dichlorobenzene	ND		0.080	
106-46-7	1,4-Dichlorobenzene	ND		0.080	
75-71-8	Dichlorodifluoromethane	ND		0.080	
75-34-3	1,1-Dichloroethane	ND		0.080	
107-06-2	1,2-Dichloroethane	ND		0.080	
75-35-4	1,1-Dichloroethene	ND		0.080	
156-59-2	cis-1,2-Dichloroethene	ND		0.080	
78-87-5	1,2-Dichloropropane	ND		0.080	
123-91-1	1,4-Dioxane	ND		0.20	
78-93-3	2-Butanone	ND		0.32	
10061-01-5	cis-1,3-Dichloropropene	ND		0.080	
95-49-8	2-Chlorotoluene	ND		0.16	
10061-02-6	trans-1,3-Dichloropropene	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.080	
591-78-6	2-Hexanone	ND		0.20	
107-05-1	3-Chloroprene	ND		0.080	
100-41-4	Ethylbenzene	ND		0.080	
622-96-8	4-Ethyltoluene	ND		0.16	
75-69-4	Trichlorofluoromethane	ND		0.080	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		0.080	
67-64-1	Acetone	ND		2.0	
75-09-2	Methylene Chloride	ND		0.20	
75-05-8	Acetonitrile	ND		0.40	
100-42-5	Styrene	ND		0.080	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2715-1

SDG No.: _____

Client Sample ID: 10806 Lab Sample ID: 140-2715-1

Matrix: Air Lab File ID: LOT2715.D

Analysis Method: TO 15 LL Date Collected: 02/09/2015 10:35

Sample wt/vol: 500(mL) Date Analyzed: 02/10/2015 12:42

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.: 2359 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.080	
107-02-8	Acrolein	ND		0.16	
107-13-1	Acrylonitrile	ND		0.80	
127-18-4	Tetrachloroethene	ND		0.040	
98-83-9	Alpha Methyl Styrene	ND		0.16	
108-88-3	Toluene	ND		0.12	
120-82-1	1,2,4-Trichlorobenzene	ND		0.080	
71-55-6	1,1,1-Trichloroethane	ND		0.080	
75-27-4	Bromodichloromethane	ND		0.080	
79-00-5	1,1,2-Trichloroethane	ND		0.080	
75-25-2	Bromoform	ND		0.080	
79-01-6	Trichloroethene	ND		0.040	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	ND		0.080	
106-97-8	Butane	ND		0.16	
108-67-8	1,3,5-Trimethylbenzene	ND		0.080	
75-15-0	Carbon disulfide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.040	
95-47-6	o-Xylene	ND		0.080	
75-45-6	Chlorodifluoromethane	ND		0.080	
179601-23-1	m-Xylene & p-Xylene	ND		0.080	
106-93-4	1,2-Dibromoethane	ND		0.080	
110-82-7	Cyclohexane	ND		0.20	
124-18-5	n-Decane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.080	
74-95-3	Dibromomethane	ND		0.16	
112-40-3	n-Dodecane	ND		0.40	
64-17-5	Ethanol	ND		0.80	
141-78-6	Ethyl acetate	ND		0.80	
60-29-7	Ethyl ether	ND		0.80	
142-82-5	n-Heptane	ND		0.20	
110-54-3	Hexane	ND		0.20	
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	
91-20-3	Naphthalene	ND		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2715-1
 SDG No.: _____
 Client Sample ID: 10806 Lab Sample ID: 140-2715-1
 Matrix: Air Lab File ID: LOT2715.D
 Analysis Method: TO 15 LL Date Collected: 02/09/2015 10:35
 Sample wt/vol: 500(mL) Date Analyzed: 02/10/2015 12:42
 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.: 2359 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
104-51-8	n-Butylbenzene	ND		0.16	
103-65-1	N-Propylbenzene	ND		0.16	
111-65-9	n-Octane	ND		0.16	
109-66-0	Pentane	ND		0.40	
115-07-1	Propene	ND		0.20	
135-98-8	sec-Butylbenzene	ND		0.16	
98-06-6	tert-Butylbenzene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		0.40	
156-60-5	trans-1,2-Dichloroethene	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	
488-23-3	1,2,3,4-Tetramethylbenzene	ND		0.080	
527-53-7	1,2,3,5-Tetramethylbenzene	ND		0.080	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.080	
934-80-5	1,2-Dimethyl-4-Ethylbenzene	ND		0.080	
90-12-0	1-Methylnaphthalene	ND		1.0	
3074-71-3	2,3-Dimethylheptane	ND		0.080	
872-55-9	2-Ethylthiophene	ND		0.080	
554-14-3	2-Methylthiophene	ND		0.080	
91-57-6	2-Methylnaphthalene	ND		1.0	
616-44-4	3-Methylthiophene	ND		0.080	
95-15-8	Benzo(b) thiophene	ND		0.16	
110-02-1	Thiophene	ND		0.080	
1678-93-9	Butylcyclohexane	ND		0.080	
526-73-8	1,2,3-Trimethylbenzene	ND		0.080	
106-99-0	1,3-Butadiene	ND		0.16	
540-84-1	2,2,4-Trimethylpentane	ND		0.20	
71-36-3	1-Butanol	ND		0.80	
565-59-3	2,3-Dimethylpentane	ND		0.080	
78-78-4	2-Methylbutane	ND		0.20	
107-83-5	2-Methylpentane	ND		0.080	
75-07-0	Acetaldehyde	ND		4.0	
98-82-8	Cumene	ND		0.16	
496-11-7	Indane	ND		0.080	
95-13-6	Indene	ND		0.16	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2715-1
SDG No.: _____
Client Sample ID: 10806 Lab Sample ID: 140-2715-1
Matrix: Air Lab File ID: LOT2715.D
Analysis Method: TO 15 LL Date Collected: 02/09/2015 10:35
Sample wt/vol: 500 (mL) Date Analyzed: 02/10/2015 12:42
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.: 2359 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
99-87-6	p-Cymene	ND		0.080	
75-65-0	tert-Butanol	ND		0.32	
108-87-2	Methylcyclohexane	ND		0.080	
111-84-2	n-Nonane	ND		0.20	

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MR\20150206-1349.b\LOT2715.D
 Lims ID: 140-2715-A-1 Lab Sample ID: 140-2715-1
 Client ID: 10806
 Sample Type: Client
 Inject. Date: 10-Feb-2015 12:42:30 ALS Bottle#: 2 Worklist Smp#: 5
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 10806
 Misc. Info.: 140-0001349-005
 Operator ID: Instrument ID: MR
 Method: \\KNXCHROM\ChromData\MR\20150206-1349.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 11-Feb-2015 09:23:41 Calib Date: 31-Jan-2015 21:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\MR\20150130-1312.b\RA31IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: tajh

Date: 10-Feb-2015 13:32:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.468	8.485	-0.017	98	326352	4.00	
* 2 1,4-Difluorobenzene	114	10.668	10.679	-0.011	95	1681027	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.907	16.908	-0.001	89	1453272	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	19.658	19.658	0.000	91	974878	4.20	
31 Methylene Chloride	84	6.090	6.107	-0.017	97	7853	0.0774	
40 Hexane	56	7.832	7.838	-0.006	85	2156	0.0191	
62 4-Methyl-2-pentanone (MIBK	43	12.901	12.890	0.011	98	15645	0.0490	

Reagents:

MAissur1_00002 Amount Added: 40.00 Units: mL Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MR\20150206-1349.b\LOT2715.D

Injection Date: 10-Feb-2015 12:42:30

Instrument ID: MR

Operator ID:

Lims ID: 140-2715-A-1

Lab Sample ID: 140-2715-1

Worklist Smp#: 5

Client ID: 10806

Purge Vol: 500.000 mL

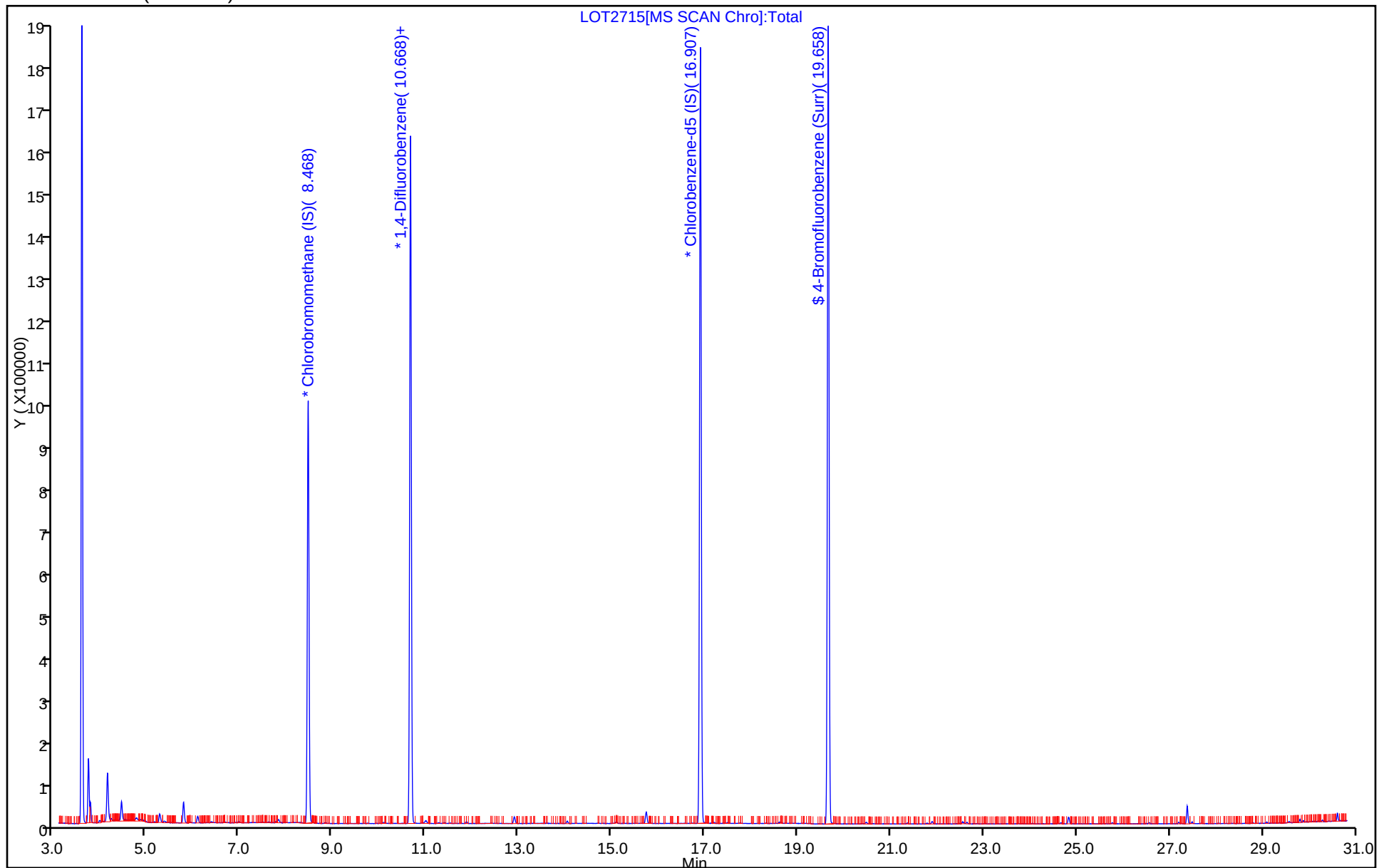
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



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

Lab Name: TestAmerica Knoxville Job No.: 140-2720-1

SDG No.: _____

Client Sample ID: 10257 Lab Sample ID: 140-2720-9

Matrix: Air Lab File ID: LOT2720.D

Analysis Method: TO 15 LL Date Collected: 02/11/2015 08:00

Sample wt/vol: 500 (mL) Date Analyzed: 02/12/2015 13:59

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.: 2374 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-43-2	Benzene	ND		0.080	
100-44-7	Benzyl chloride	ND		0.16	
74-83-9	Bromomethane	ND		0.080	
56-23-5	Carbon tetrachloride	ND		0.040	
108-90-7	Chlorobenzene	ND		0.080	
75-00-3	Chloroethane	ND		0.080	
87-61-6	1,2,3-Trichlorobenzene	ND		0.40	
67-66-3	Chloroform	ND		0.080	
96-18-4	1,2,3-Trichloropropane	ND		0.20	
74-87-3	Chloromethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.080	
541-73-1	1,3-Dichlorobenzene	ND		0.080	
106-46-7	1,4-Dichlorobenzene	ND		0.080	
75-71-8	Dichlorodifluoromethane	ND		0.080	
75-34-3	1,1-Dichloroethane	ND		0.080	
107-06-2	1,2-Dichloroethane	ND		0.080	
75-35-4	1,1-Dichloroethene	ND		0.080	
156-59-2	cis-1,2-Dichloroethene	ND		0.080	
78-87-5	1,2-Dichloropropane	ND		0.080	
123-91-1	1,4-Dioxane	ND		0.20	
78-93-3	2-Butanone	ND		0.32	
10061-01-5	cis-1,3-Dichloropropene	ND		0.080	
95-49-8	2-Chlorotoluene	ND		0.16	
10061-02-6	trans-1,3-Dichloropropene	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.080	
591-78-6	2-Hexanone	ND		0.20	
107-05-1	3-Chloroprene	ND		0.080	
100-41-4	Ethylbenzene	ND		0.080	
622-96-8	4-Ethyltoluene	ND		0.16	
75-69-4	Trichlorofluoromethane	ND		0.080	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		0.080	
67-64-1	Acetone	ND		2.0	
75-09-2	Methylene Chloride	ND		0.20	
75-05-8	Acetonitrile	ND		0.40	
100-42-5	Styrene	ND		0.080	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2720-1

SDG No.: _____

Client Sample ID: 10257 Lab Sample ID: 140-2720-9

Matrix: Air Lab File ID: LOT2720.D

Analysis Method: TO 15 LL Date Collected: 02/11/2015 08:00

Sample wt/vol: 500(mL) Date Analyzed: 02/12/2015 13:59

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.: 2374 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.080	
107-02-8	Acrolein	ND		0.16	
107-13-1	Acrylonitrile	ND		0.80	
127-18-4	Tetrachloroethene	ND		0.040	
98-83-9	Alpha Methyl Styrene	ND		0.16	
108-88-3	Toluene	ND		0.12	
120-82-1	1,2,4-Trichlorobenzene	ND		0.080	
71-55-6	1,1,1-Trichloroethane	ND		0.080	
75-27-4	Bromodichloromethane	ND		0.080	
79-00-5	1,1,2-Trichloroethane	ND		0.080	
75-25-2	Bromoform	ND		0.080	
79-01-6	Trichloroethene	ND		0.040	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	ND		0.080	
106-97-8	Butane	ND		0.16	
108-67-8	1,3,5-Trimethylbenzene	ND		0.080	
75-15-0	Carbon disulfide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.040	
95-47-6	o-Xylene	ND		0.080	
75-45-6	Chlorodifluoromethane	ND		0.080	
179601-23-1	m-Xylene & p-Xylene	ND		0.080	
106-93-4	1,2-Dibromoethane	ND		0.080	
110-82-7	Cyclohexane	ND		0.20	
124-18-5	n-Decane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.080	
74-95-3	Dibromomethane	ND		0.16	
112-40-3	n-Dodecane	ND		0.40	
64-17-5	Ethanol	ND		0.80	
141-78-6	Ethyl acetate	ND		0.80	
60-29-7	Ethyl ether	ND		0.80	
142-82-5	n-Heptane	ND		0.20	
110-54-3	Hexane	ND		0.20	
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	
91-20-3	Naphthalene	ND		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2720-1

SDG No.: _____

Client Sample ID: 10257 Lab Sample ID: 140-2720-9

Matrix: Air Lab File ID: LOT2720.D

Analysis Method: TO 15 LL Date Collected: 02/11/2015 08:00

Sample wt/vol: 500 (mL) Date Analyzed: 02/12/2015 13:59

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.: 2374 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
104-51-8	n-Butylbenzene	ND		0.16	
103-65-1	N-Propylbenzene	ND		0.16	
111-65-9	n-Octane	ND		0.16	
109-66-0	Pentane	ND		0.40	
115-07-1	Propene	ND		0.20	
135-98-8	sec-Butylbenzene	ND		0.16	
98-06-6	tert-Butylbenzene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		0.40	
156-60-5	trans-1,2-Dichloroethene	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	
488-23-3	1,2,3,4-Tetramethylbenzene	ND		0.080	
527-53-7	1,2,3,5-Tetramethylbenzene	ND		0.080	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.080	
934-80-5	1,2-Dimethyl-4-Ethylbenzene	ND		0.080	
90-12-0	1-Methylnaphthalene	ND		1.0	
3074-71-3	2,3-Dimethylheptane	ND		0.080	
872-55-9	2-Ethylthiophene	ND		0.080	
554-14-3	2-Methylthiophene	ND		0.080	
91-57-6	2-Methylnaphthalene	ND		1.0	
616-44-4	3-Methylthiophene	ND		0.080	
95-15-8	Benzo(b) thiophene	ND		0.16	
110-02-1	Thiophene	ND		0.080	
1678-93-9	Butylcyclohexane	ND		0.080	
526-73-8	1,2,3-Trimethylbenzene	ND		0.080	
106-99-0	1,3-Butadiene	ND		0.16	
540-84-1	2,2,4-Trimethylpentane	ND		0.20	
71-36-3	1-Butanol	ND		0.80	
565-59-3	2,3-Dimethylpentane	ND		0.080	
78-78-4	2-Methylbutane	ND		0.20	
107-83-5	2-Methylpentane	ND		0.080	
75-07-0	Acetaldehyde	ND		4.0	
98-82-8	Cumene	ND		0.16	
496-11-7	Indane	ND		0.080	
95-13-6	Indene	ND		0.16	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2720-1
SDG No.: _____
Client Sample ID: 10257 Lab Sample ID: 140-2720-9
Matrix: Air Lab File ID: LOT2720.D
Analysis Method: TO 15 LL Date Collected: 02/11/2015 08:00
Sample wt/vol: 500 (mL) Date Analyzed: 02/12/2015 13:59
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.: 2374 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
99-87-6	p-Cymene	ND		0.080	
75-65-0	tert-Butanol	ND		0.32	
108-87-2	Methylcyclohexane	ND		0.080	
111-84-2	n-Nonane	ND		0.20	

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150209-1362.b\LOT2720.D
 Lims ID: 140-2720-A-9 Lab Sample ID: 140-2720-9
 Client ID: 10257
 Sample Type: Client
 Inject. Date: 12-Feb-2015 13:59:30 ALS Bottle#: 15 Worklist Smp#: 4
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 10257
 Misc. Info.: J021215,TO15,,140-0001362-004
 Operator ID: 7126 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150209-1362.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 13-Feb-2015 10:33:58 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK015

First Level Reviewer: tajh

Date: 12-Feb-2015 15:13:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.580	9.587	-0.007	98	321404	4.00	
* 2 1,4-Difluorobenzene	114	11.721	11.728	-0.007	96	1459334	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.369	16.371	-0.002	89	1200066	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.983	17.985	-0.002	90	743116	3.78	
31 Methylene Chloride	84	6.906	6.914	-0.008	97	6060	0.0588	
110 Dodecane	57	21.275	21.277	-0.002	92	10085	0.0552	
112 Naphthalene	128	21.651	21.648	0.003	97	4970	0.0400	
114 Hexachlorobutadiene	225	21.807	21.804	0.003	94	5257	0.0493	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150209-1362.b\LOT2720.D

Injection Date: 12-Feb-2015 13:59:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: 140-2720-A-9

Lab Sample ID: 140-2720-9

Worklist Smp#: 4

Client ID: 10257

Purge Vol: 500.000 mL

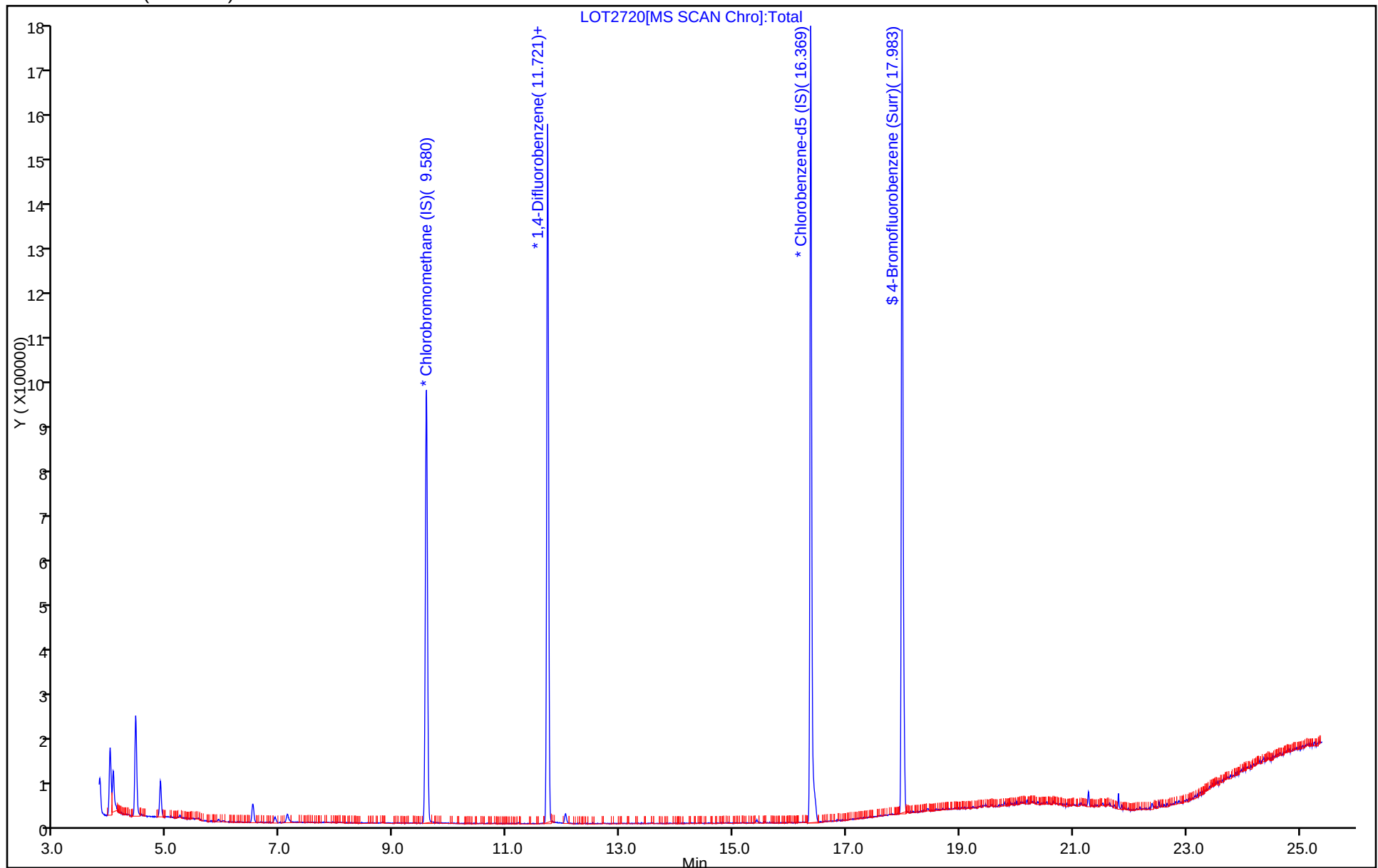
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Shipping and Receiving Documents

Canister Samples Chain of Custody Record

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

TAL Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
phone 865-291-3000 fax 865-584-4315

Client Contact Information		Project Manager: Gary Priscott		Sampled By: G. Priscott		1 of 1 COCs for Box	
Company: NYSDEC		Phone: 607 775 2545		J. Cook			
Address: 1679 Rt 11		Site Contact: Gary Priscott @ dec.ny.gov					
City/State/Zip: Kirkwood NY 13795		TAL Contact:					
Phone: 607 775 2545							
FAX:							
Project Name: Fmr Ethanol Gun off site		Analysis Turnaround Time					
Site/location: C155019A		(Standard) (Specify) X					
P# Callout # 121941		Rush (Specify)					
Sample Identification		Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID
H20-BA-2015	2/24/2015	1031	1009	-27.5	-2	10205	10711
DUP1-2015		24 hrs		-28	-2.5	09953	09826
D3-BA-2015		1037	1007	-29.5	-2	09845	10042
H23-BA-2015		1141	1121	-30	-3.5	10432	31002130
H23-SS-2015		1140	1122	-28.5	-4	09841	10395
DUP2-2015	✓	24 hrs		-26.5	-1	09654	10968
Sampled by: Gary Priscott Joshua Cook		Temperature (Fahrenheit)					
		Interior	Ambient				
		Start	~15°				
		Stop	~9°				
		Pressure (inches of Hg)					
		Interior	Ambient				
		Start	~30.2				
		Stop	~30.4				
Special Instructions/QC Requirements & Comments:		GA: outdoor (Ambient) Air		DUP2-2015 is a Sub Slab vapor sample.			
SS = Sub slab vapor							
BA = Basement (Indoor) Air							
Canisters Shipped by: Gary Priscott via FedEx		Date/Time: 2/27/2015 ~1315		Canisters Received by: J. Cook		13 cans	
Samples Relinquished by:		Date/Time:		Received by:		13 flow	
Relinquished by:		Date/Time:		Received by:		13 cc	
						27	

Canister Samples Chain of Custody Record

TestAmerica

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

THE LEADER IN ENVIRONMENTAL TESTING

Client Contact Information Company: <u>NYSEDEC</u> Address: <u>1679 Rt 11</u> City/State/Zip: <u>Kirkwood, NY 13795</u> Phone: <u>607 775 2545</u> FAX:		Project Manager: <u>Gary Priscott</u> Phone: <u>607 775 2545</u> Site Contact: <u>gary.priscott@dec.ny.gov</u> TAL Contact:		Sampled By: <u>G. Priscott / J. Cook</u>		1 of 1 COCs for Box	
Project Name: <u>Fmr Johnson Gun Off Site</u> Site/Location: <u>C755019A</u> Permit: <u>Callout # 121941</u>		Analysis Turnaround Time Standard (Specify) <u>X</u> Rush (Specify)		EPA 25C EPA 3C TO-14A TO-15		ASTM D-1946 Other (Please specify in notes section)	
Sample Identification		Time Start		Time Stop		Canister Vacuum in Field, "Hg (Start)	
Sample Date(s)		Canister Vacuum in Field, "Hg (Stop)		Flow Controller ID		Canister ID	
D2-0A-2015		1252		1247		-30	
H28-BA-2015		1338		1305		-6	
H28-SS-2015		1338		1300		-5	
H3-BA-2015		1412		1359		-4.5	
H3-SS-2015		1411		1355		-4.5	
H15-BA2-2015		0907		0845		-3	
Sampled by: <u>Gary Priscott</u> <u>Joshua Cook</u>		Temperature (Fahrenheit)		Pressure (inches of Hg)		Other (Please specify in notes section)	
Interior		Ambient		Ambient		Landfill Gas	
Start		~50		~40		Soil Gas	
Stop		~90		~90		Ambient Air	
Interior		Ambient		Ambient		Indoor Air	
Start		~30.0		~30.0		Sample Type	
Stop		~29.9		~29.9		Other (Please specify in notes section)	
Special Instructions/QC Requirements & Comments: OA = Outdoor (Ambient) Air BA = Basement (Indoor) Air SS = Soil Slab vapor Canisters Shipped by: <u>Gary Priscott</u> Samples Relinquished by: <u>Vic Feller</u> Relinquished by:							
Date/Time: <u>2/27/2015</u>		Date/Time: <u>2/27/2015</u>		Date/Time: <u>2/27/2015</u>		Date/Time: <u>2/27/2015</u>	
Received by: <u>[Signature]</u>		Received by: <u>[Signature]</u>		Received by: <u>[Signature]</u>		Received by: <u>[Signature]</u>	
Date/Time: <u>2/27/2015</u>		Date/Time: <u>2/27/2015</u>		Date/Time: <u>2/27/2015</u>		Date/Time: <u>2/27/2015</u>	
Received by: <u>[Signature]</u>		Received by: <u>[Signature]</u>		Received by: <u>[Signature]</u>		Received by: <u>[Signature]</u>	

Canister Samples Chain of Custody Record

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

Client Contact Information Company: NYSEDEC Address: 1679 Rt 11 City/State/Zip: Knoxville/TN/37915 Phone: 607 775 2545 FAX:		Project Manager: Gary Priscott Phone: 607 775 12545 Site Contact: gary.priscott@dec.ny.gov TAL Contact:		Sampled By: G. Priscott / K. Cook 1 of 1 COCs for Box							
Project Name: Fmr Johnson Gun Off Site Site/Location: C755019A PO# C44044# 121941		Analysis Turnaround Time Standard (Specify) ☒ X Rush (Specify)									
Sample Identification H12-BA-2015		Sample Date(s) 2/26/2015 - 2/27/2015	Time Start 1209	Time Stop 1147	Canister Vacuum in Field, "Hg (Start) -28	Canister Vacuum in Field, "Hg (Stop) -4	Flow Controller ID 10149	Canister ID 09610	TO-15 X	TO-14A EPA 3C EPA 25C ASTM D-1946	Other (Please specify in notes section) Sample Type Indoor Air Ambient Air Soil Gas Landfill Gas Other (Please specify in notes section)
Sampled by: Gary Priscott Joshua Cook		Temperature (Fahrenheit) Interior Ambient Start Stop									
		Pressure (inches of Hg) Interior Ambient Start Stop									
Special Instructions/QC Requirements & Comments: BA = Basement (Indoor) Air											
Canister Shipped by: Gary Priscott via FedEx		Date/Time: 2/27/2015 ~ 1315		Canisters Received by: K. Cook		Date/Time: 3/3/16 0900					
Samples Relinquished by:		Date/Time:		Received by:		Date/Time:					
Relinquished by:		Date/Time:		Received by:		Date/Time:					

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G1
Date: 3/4/2015

[illegible]

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 140-2815-1

Login Number: 2815

List Source: TestAmerica Knoxville

List Number: 1

Creator: Wilson, Ken

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

ANALYTICAL REPORT

Job Number: 140-2950-1

Job Description: Former Ithaca Gun Factory # C755019A

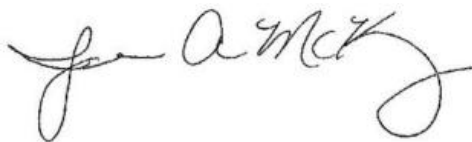
For:

New York State D.E.C.

1679 Rte. 11

Kirkwood, NY 13795

Attention: Gary Priscott



Approved for release.
Jamie A McKinney
Senior Project Manager
4/9/2015 11:24 AM

Jamie A McKinney, Senior Project Manager
5815 Middlebrook Pike, Knoxville, TN, 37921
(865)291-3000
jamie.mckinney@testamericainc.com
04/09/2015

The test results in this report meet all 2003 NELAC and 2003 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Table of Contents

Cover Title Page	1
Data Summaries	4
Definitions	4
Case Narrative	5
Detection Summary	6
Client Sample Results	9
Default Detection Limits	22
Surrogate Summary	24
QC Sample Results	25
QC Association	30
Chronicle	31
Certification Summary	33
Method Summary	34
Sample Summary	35
Organic Sample Data	36
Air - GC/MS VOA	36
Method TO15 Low Level	36
Method TO15 Low Level QC Summary	37
Method TO15 Low Level Sample Data	45
Standards Data	140
Method TO15 Low Level ICAL Data	140
Method TO15 Low Level CCAL Data	217
Raw QC Data	231
Method TO15 Low Level Tune Data	231
Method TO15 Low Level Blank Data	239
Method TO15 Low Level LCS/LCSD Data	245

Table of Contents

Method TO15 Low Level Run Logs	251
Clean Canister Certification	258
Clean Canister Data	258
Shipping and Receiving Documents	270
Client Chain of Custody	271
Sample Receipt Checklist	272

Definitions/Glossary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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
140-2950-1

Comments

No additional comments.

Receipt

The samples were received on 3/27/2015 11:30 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: Quantitation for ethanol was previously based on a one-point calibration standard at the reporting limit. This compound was quantitated based on a minimum 5-point calibration curve. The following interim criteria are being used until the method performance for this additional analyte is fully established:

- The initial calibration acceptance criteria is set at 40% RSD. Any compound greater than 40% RSD was changed to a linear or quadratic model with an $r^2 \geq 0.990$ acceptance criteria.
- There are no criteria for second source standard verification % D. The second source standard was independently prepared from the same parent mixture (as the primary source).
- The continuing calibration verification criteria are set at 50% D. Any compound greater than 50% D must pass the LCS criteria.
- The LCS recovery criteria are set at 20% to 180%.

Method(s) TO 14A, 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 TestAmerica Knoxville.

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: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

Client Sample ID: H29-SS-2015

Lab Sample ID: 140-2950-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.6		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	1.5		0.32		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.11		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.98		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	18	E	0.080		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.44		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	4.0		0.80		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.17		0.080		ppb v/v	1		TO 15 LL	Total/NA
t-Butyl alcohol	3.9		0.32		ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.51		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.29		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	13		0.040		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.25		0.080		ppb v/v	1		TO 15 LL	Total/NA
Chloroform - DL	19	D	0.20		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	8.8		0.44		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	4.5		0.94		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.34		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	6.2		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	87	E	0.39		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.2		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	7.5		1.5		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.72		0.35		ug/m3	1		TO 15 LL	Total/NA
t-Butyl alcohol	12		0.97		ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	3.4		0.54		ug/m3	1		TO 15 LL	Total/NA
Toluene	1.1		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	69		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.4		0.45		ug/m3	1		TO 15 LL	Total/NA
Chloroform - DL	94	D	0.98		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H29-BA-2015

Lab Sample ID: 140-2950-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	3.2		0.32		ppb v/v	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	0.35		0.20		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.16		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.078		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.12		0.080		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.47		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.42		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	4.7		0.80		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.50		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.074		0.040		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.19		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	9.5		0.94		ug/m3	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	1.4		0.82		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.52		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.49		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.56		0.39		ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Knoxville

Detection Summary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

Client Sample ID: H29-BA-2015 (Continued)

Lab Sample ID: 140-2950-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	0.98		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.1		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	8.8		1.5		ug/m3	1		TO 15 LL	Total/NA
Toluene	1.9		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	0.40		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.1		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: D4-OA-2015

Lab Sample ID: 140-2950-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.17		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.061		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.49		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.41		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	2.5		0.80		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.093		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.16		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.19		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.55		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.38		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	1.0		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.0		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	4.7		1.5		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.40		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	0.59		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.1		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H30-SS-2015

Lab Sample ID: 140-2950-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.71		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	1.2		0.32		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.049		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	7.3		0.080		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.37		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	4.6		0.80		ppb v/v	1		TO 15 LL	Total/NA
t-Butyl alcohol	2.6		0.32		ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	1.4		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.13		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	1.8		0.040		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
1,1,1-Trichloroethane	3.9		0.44		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	3.6		0.94		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.31		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	36		0.39		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.8		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	8.6		1.5		ug/m3	1		TO 15 LL	Total/NA
t-Butyl alcohol	7.8		0.97		ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Knoxville

Detection Summary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

Client Sample ID: H30-SS-2015 (Continued)

Lab Sample ID: 140-2950-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	9.3		0.54		ug/m3	1		TO 15 LL	Total/NA
Toluene	0.48		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	9.6		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.2		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H30-BA-2015

Lab Sample ID: 140-2950-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	0.43		0.32		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.21		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.074		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.15		0.080		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.49		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.43		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	100	E	0.80		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.14		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.40		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.19		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol - DL	120	D	2.0		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	1.3		0.94		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.66		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.46		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.72		0.39		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	1.0		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.1		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	190	E	1.5		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.62		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	1.5		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.1		0.45		ug/m3	1		TO 15 LL	Total/NA
Ethanol - DL	220	D	3.8		ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

Client Sample ID: H29-SS-2015

Lab Sample ID: 140-2950-1

Date Collected: 03/24/15 10:12

Matrix: Air

Date Received: 03/27/15 11:30

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	1.6		0.080		ppb v/v			03/31/15 20:27	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/31/15 20:27	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/31/15 20:27	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/31/15 20:27	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/31/15 20:27	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/31/15 20:27	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/31/15 20:27	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/31/15 20:27	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/31/15 20:27	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/31/15 20:27	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/31/15 20:27	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/31/15 20:27	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/31/15 20:27	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/31/15 20:27	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/31/15 20:27	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/31/15 20:27	1
1,4-Dioxane	ND		0.20		ppb v/v			03/31/15 20:27	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/31/15 20:27	1
2-Butanone	1.5		0.32		ppb v/v			03/31/15 20:27	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/31/15 20:27	1
Benzene	0.11		0.080		ppb v/v			03/31/15 20:27	1
Benzyl chloride	ND		0.16		ppb v/v			03/31/15 20:27	1
Bromodichloromethane	ND		0.080		ppb v/v			03/31/15 20:27	1
Bromoform	ND		0.080		ppb v/v			03/31/15 20:27	1
Bromomethane	ND		0.080		ppb v/v			03/31/15 20:27	1
Carbon tetrachloride	0.98		0.040		ppb v/v			03/31/15 20:27	1
Chlorobenzene	ND		0.080		ppb v/v			03/31/15 20:27	1
Chloroethane	ND		0.080		ppb v/v			03/31/15 20:27	1
Chloroform	18 E		0.080		ppb v/v			03/31/15 20:27	1
Chloromethane	ND		0.20		ppb v/v			03/31/15 20:27	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/31/15 20:27	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/31/15 20:27	1
Cyclohexane	ND		0.20		ppb v/v			03/31/15 20:27	1
Dibromochloromethane	ND		0.080		ppb v/v			03/31/15 20:27	1
Dichlorodifluoromethane	0.44		0.080		ppb v/v			03/31/15 20:27	1
Ethanol	4.0		0.80		ppb v/v			03/31/15 20:27	1
Ethylbenzene	ND		0.080		ppb v/v			03/31/15 20:27	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/31/15 20:27	1
Hexane	ND		0.20		ppb v/v			03/31/15 20:27	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/31/15 20:27	1
Methylene Chloride	ND		0.20		ppb v/v			03/31/15 20:27	1
m-Xylene & p-Xylene	0.17		0.080		ppb v/v			03/31/15 20:27	1
o-Xylene	ND		0.080		ppb v/v			03/31/15 20:27	1
Styrene	ND		0.080		ppb v/v			03/31/15 20:27	1
t-Butyl alcohol	3.9		0.32		ppb v/v			03/31/15 20:27	1
Tetrachloroethene	0.51		0.080		ppb v/v			03/31/15 20:27	1
Toluene	0.29		0.12		ppb v/v			03/31/15 20:27	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/31/15 20:27	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

Client Sample ID: H29-SS-2015

Lab Sample ID: 140-2950-1

Date Collected: 03/24/15 10:12

Matrix: Air

Date Received: 03/27/15 11:30

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			03/31/15 20:27	1
Trichloroethene	13		0.040		ppb v/v			03/31/15 20:27	1
Trichlorofluoromethane	0.25		0.080		ppb v/v			03/31/15 20:27	1
Vinyl chloride	ND		0.080		ppb v/v			03/31/15 20:27	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	8.8		0.44		ug/m3			03/31/15 20:27	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/31/15 20:27	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/31/15 20:27	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/31/15 20:27	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/31/15 20:27	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/31/15 20:27	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/31/15 20:27	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/31/15 20:27	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/31/15 20:27	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/31/15 20:27	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/31/15 20:27	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/31/15 20:27	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/31/15 20:27	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/31/15 20:27	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/31/15 20:27	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/31/15 20:27	1
1,4-Dioxane	ND		0.72		ug/m3			03/31/15 20:27	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/31/15 20:27	1
2-Butanone	4.5		0.94		ug/m3			03/31/15 20:27	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/31/15 20:27	1
Benzene	0.34		0.26		ug/m3			03/31/15 20:27	1
Benzyl chloride	ND		0.83		ug/m3			03/31/15 20:27	1
Bromodichloromethane	ND		0.54		ug/m3			03/31/15 20:27	1
Bromoform	ND		0.83		ug/m3			03/31/15 20:27	1
Bromomethane	ND		0.31		ug/m3			03/31/15 20:27	1
Carbon tetrachloride	6.2		0.25		ug/m3			03/31/15 20:27	1
Chlorobenzene	ND		0.37		ug/m3			03/31/15 20:27	1
Chloroethane	ND		0.21		ug/m3			03/31/15 20:27	1
Chloroform	87 E		0.39		ug/m3			03/31/15 20:27	1
Chloromethane	ND		0.41		ug/m3			03/31/15 20:27	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/31/15 20:27	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/31/15 20:27	1
Cyclohexane	ND		0.69		ug/m3			03/31/15 20:27	1
Dibromochloromethane	ND		0.68		ug/m3			03/31/15 20:27	1
Dichlorodifluoromethane	2.2		0.40		ug/m3			03/31/15 20:27	1
Ethanol	7.5		1.5		ug/m3			03/31/15 20:27	1
Ethylbenzene	ND		0.35		ug/m3			03/31/15 20:27	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/31/15 20:27	1
Hexane	ND		0.70		ug/m3			03/31/15 20:27	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/31/15 20:27	1
Methylene Chloride	ND		0.69		ug/m3			03/31/15 20:27	1
m-Xylene & p-Xylene	0.72		0.35		ug/m3			03/31/15 20:27	1
o-Xylene	ND		0.35		ug/m3			03/31/15 20:27	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

Client Sample ID: H29-SS-2015

Lab Sample ID: 140-2950-1

Date Collected: 03/24/15 10:12

Matrix: Air

Date Received: 03/27/15 11:30

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			03/31/15 20:27	1
t-Butyl alcohol	12		0.97		ug/m3			03/31/15 20:27	1
Tetrachloroethene	3.4		0.54		ug/m3			03/31/15 20:27	1
Toluene	1.1		0.45		ug/m3			03/31/15 20:27	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/31/15 20:27	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/31/15 20:27	1
Trichloroethene	69		0.21		ug/m3			03/31/15 20:27	1
Trichlorofluoromethane	1.4		0.45		ug/m3			03/31/15 20:27	1
Vinyl chloride	ND		0.20		ug/m3			03/31/15 20:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		60 - 140					03/31/15 20:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	19	D	0.20		ppb v/v			04/01/15 07:03	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	94	D	0.98		ug/m3			04/01/15 07:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		60 - 140					04/01/15 07:03	1

Client Sample ID: H29-BA-2015

Lab Sample ID: 140-2950-2

Date Collected: 03/24/15 10:12

Matrix: Air

Date Received: 03/27/15 11:30

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			03/31/15 21:22	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/31/15 21:22	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/31/15 21:22	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/31/15 21:22	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/31/15 21:22	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/31/15 21:22	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/31/15 21:22	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/31/15 21:22	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/31/15 21:22	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/31/15 21:22	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/31/15 21:22	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/31/15 21:22	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/31/15 21:22	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/31/15 21:22	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/31/15 21:22	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/31/15 21:22	1
1,4-Dioxane	ND		0.20		ppb v/v			03/31/15 21:22	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/31/15 21:22	1
2-Butanone	3.2		0.32		ppb v/v			03/31/15 21:22	1
4-Methyl-2-pentanone (MIBK)	0.35		0.20		ppb v/v			03/31/15 21:22	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

Client Sample ID: H29-BA-2015

Lab Sample ID: 140-2950-2

Date Collected: 03/24/15 10:12

Matrix: Air

Date Received: 03/27/15 11:30

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
Benzene	0.16		0.080		ppb v/v			03/31/15 21:22	1
Benzyl chloride	ND		0.16		ppb v/v			03/31/15 21:22	1
Bromodichloromethane	ND		0.080		ppb v/v			03/31/15 21:22	1
Bromoform	ND		0.080		ppb v/v			03/31/15 21:22	1
Bromomethane	ND		0.080		ppb v/v			03/31/15 21:22	1
Carbon tetrachloride	0.078		0.040		ppb v/v			03/31/15 21:22	1
Chlorobenzene	ND		0.080		ppb v/v			03/31/15 21:22	1
Chloroethane	ND		0.080		ppb v/v			03/31/15 21:22	1
Chloroform	0.12		0.080		ppb v/v			03/31/15 21:22	1
Chloromethane	0.47		0.20		ppb v/v			03/31/15 21:22	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/31/15 21:22	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/31/15 21:22	1
Cyclohexane	ND		0.20		ppb v/v			03/31/15 21:22	1
Dibromochloromethane	ND		0.080		ppb v/v			03/31/15 21:22	1
Dichlorodifluoromethane	0.42		0.080		ppb v/v			03/31/15 21:22	1
Ethanol	4.7		0.80		ppb v/v			03/31/15 21:22	1
Ethylbenzene	ND		0.080		ppb v/v			03/31/15 21:22	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/31/15 21:22	1
Hexane	ND		0.20		ppb v/v			03/31/15 21:22	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/31/15 21:22	1
Methylene Chloride	ND		0.20		ppb v/v			03/31/15 21:22	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			03/31/15 21:22	1
o-Xylene	ND		0.080		ppb v/v			03/31/15 21:22	1
Styrene	ND		0.080		ppb v/v			03/31/15 21:22	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/31/15 21:22	1
Tetrachloroethene	ND		0.080		ppb v/v			03/31/15 21:22	1
Toluene	0.50		0.12		ppb v/v			03/31/15 21:22	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/31/15 21:22	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/31/15 21:22	1
Trichloroethene	0.074		0.040		ppb v/v			03/31/15 21:22	1
Trichlorofluoromethane	0.19		0.080		ppb v/v			03/31/15 21:22	1
Vinyl chloride	ND		0.080		ppb v/v			03/31/15 21:22	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/31/15 21:22	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/31/15 21:22	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/31/15 21:22	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/31/15 21:22	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/31/15 21:22	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/31/15 21:22	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/31/15 21:22	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/31/15 21:22	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/31/15 21:22	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/31/15 21:22	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/31/15 21:22	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/31/15 21:22	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/31/15 21:22	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/31/15 21:22	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/31/15 21:22	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

Client Sample ID: H29-BA-2015

Lab Sample ID: 140-2950-2

Date Collected: 03/24/15 10:12

Matrix: Air

Date Received: 03/27/15 11:30

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-Dichlorobenzene	ND		0.48		ug/m3			03/31/15 21:22	1
1,4-Dioxane	ND		0.72		ug/m3			03/31/15 21:22	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/31/15 21:22	1
2-Butanone	9.5		0.94		ug/m3			03/31/15 21:22	1
4-Methyl-2-pentanone (MIBK)	1.4		0.82		ug/m3			03/31/15 21:22	1
Benzene	0.52		0.26		ug/m3			03/31/15 21:22	1
Benzyl chloride	ND		0.83		ug/m3			03/31/15 21:22	1
Bromodichloromethane	ND		0.54		ug/m3			03/31/15 21:22	1
Bromoform	ND		0.83		ug/m3			03/31/15 21:22	1
Bromomethane	ND		0.31		ug/m3			03/31/15 21:22	1
Carbon tetrachloride	0.49		0.25		ug/m3			03/31/15 21:22	1
Chlorobenzene	ND		0.37		ug/m3			03/31/15 21:22	1
Chloroethane	ND		0.21		ug/m3			03/31/15 21:22	1
Chloroform	0.56		0.39		ug/m3			03/31/15 21:22	1
Chloromethane	0.98		0.41		ug/m3			03/31/15 21:22	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/31/15 21:22	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/31/15 21:22	1
Cyclohexane	ND		0.69		ug/m3			03/31/15 21:22	1
Dibromochloromethane	ND		0.68		ug/m3			03/31/15 21:22	1
Dichlorodifluoromethane	2.1		0.40		ug/m3			03/31/15 21:22	1
Ethanol	8.8		1.5		ug/m3			03/31/15 21:22	1
Ethylbenzene	ND		0.35		ug/m3			03/31/15 21:22	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/31/15 21:22	1
Hexane	ND		0.70		ug/m3			03/31/15 21:22	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/31/15 21:22	1
Methylene Chloride	ND		0.69		ug/m3			03/31/15 21:22	1
m-Xylene & p-Xylene	ND		0.35		ug/m3			03/31/15 21:22	1
o-Xylene	ND		0.35		ug/m3			03/31/15 21:22	1
Styrene	ND		0.34		ug/m3			03/31/15 21:22	1
t-Butyl alcohol	ND		0.97		ug/m3			03/31/15 21:22	1
Tetrachloroethene	ND		0.54		ug/m3			03/31/15 21:22	1
Toluene	1.9		0.45		ug/m3			03/31/15 21:22	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/31/15 21:22	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/31/15 21:22	1
Trichloroethene	0.40		0.21		ug/m3			03/31/15 21:22	1
Trichlorofluoromethane	1.1		0.45		ug/m3			03/31/15 21:22	1
Vinyl chloride	ND		0.20		ug/m3			03/31/15 21:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		60 - 140					03/31/15 21:22	1

Client Sample ID: D4-OA-2015

Lab Sample ID: 140-2950-3

Date Collected: 03/24/15 10:24

Matrix: Air

Date Received: 03/27/15 11:30

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			03/31/15 22:16	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

Client Sample ID: D4-OA-2015

Lab Sample ID: 140-2950-3

Date Collected: 03/24/15 10:24

Matrix: Air

Date Received: 03/27/15 11:30

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
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/31/15 22:16	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/31/15 22:16	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/31/15 22:16	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/31/15 22:16	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/31/15 22:16	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/31/15 22:16	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/31/15 22:16	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/31/15 22:16	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/31/15 22:16	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/31/15 22:16	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/31/15 22:16	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/31/15 22:16	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/31/15 22:16	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/31/15 22:16	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/31/15 22:16	1
1,4-Dioxane	ND		0.20		ppb v/v			03/31/15 22:16	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/31/15 22:16	1
2-Butanone	ND		0.32		ppb v/v			03/31/15 22:16	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/31/15 22:16	1
Benzene	0.17		0.080		ppb v/v			03/31/15 22:16	1
Benzyl chloride	ND		0.16		ppb v/v			03/31/15 22:16	1
Bromodichloromethane	ND		0.080		ppb v/v			03/31/15 22:16	1
Bromoform	ND		0.080		ppb v/v			03/31/15 22:16	1
Bromomethane	ND		0.080		ppb v/v			03/31/15 22:16	1
Carbon tetrachloride	0.061		0.040		ppb v/v			03/31/15 22:16	1
Chlorobenzene	ND		0.080		ppb v/v			03/31/15 22:16	1
Chloroethane	ND		0.080		ppb v/v			03/31/15 22:16	1
Chloroform	ND		0.080		ppb v/v			03/31/15 22:16	1
Chloromethane	0.49		0.20		ppb v/v			03/31/15 22:16	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/31/15 22:16	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/31/15 22:16	1
Cyclohexane	ND		0.20		ppb v/v			03/31/15 22:16	1
Dibromochloromethane	ND		0.080		ppb v/v			03/31/15 22:16	1
Dichlorodifluoromethane	0.41		0.080		ppb v/v			03/31/15 22:16	1
Ethanol	2.5		0.80		ppb v/v			03/31/15 22:16	1
Ethylbenzene	ND		0.080		ppb v/v			03/31/15 22:16	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/31/15 22:16	1
Hexane	ND		0.20		ppb v/v			03/31/15 22:16	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/31/15 22:16	1
Methylene Chloride	ND		0.20		ppb v/v			03/31/15 22:16	1
m-Xylene & p-Xylene	0.093		0.080		ppb v/v			03/31/15 22:16	1
o-Xylene	ND		0.080		ppb v/v			03/31/15 22:16	1
Styrene	ND		0.080		ppb v/v			03/31/15 22:16	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/31/15 22:16	1
Tetrachloroethene	ND		0.080		ppb v/v			03/31/15 22:16	1
Toluene	0.16		0.12		ppb v/v			03/31/15 22:16	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/31/15 22:16	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/31/15 22:16	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

Client Sample ID: D4-OA-2015

Lab Sample ID: 140-2950-3

Date Collected: 03/24/15 10:24

Matrix: Air

Date Received: 03/27/15 11:30

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
Trichloroethene	ND		0.040		ppb v/v			03/31/15 22:16	1
Trichlorofluoromethane	0.19		0.080		ppb v/v			03/31/15 22:16	1
Vinyl chloride	ND		0.080		ppb v/v			03/31/15 22:16	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/31/15 22:16	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/31/15 22:16	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/31/15 22:16	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/31/15 22:16	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/31/15 22:16	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/31/15 22:16	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/31/15 22:16	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/31/15 22:16	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/31/15 22:16	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/31/15 22:16	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/31/15 22:16	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/31/15 22:16	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/31/15 22:16	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/31/15 22:16	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/31/15 22:16	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/31/15 22:16	1
1,4-Dioxane	ND		0.72		ug/m3			03/31/15 22:16	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/31/15 22:16	1
2-Butanone	ND		0.94		ug/m3			03/31/15 22:16	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/31/15 22:16	1
Benzene	0.55		0.26		ug/m3			03/31/15 22:16	1
Benzyl chloride	ND		0.83		ug/m3			03/31/15 22:16	1
Bromodichloromethane	ND		0.54		ug/m3			03/31/15 22:16	1
Bromoform	ND		0.83		ug/m3			03/31/15 22:16	1
Bromomethane	ND		0.31		ug/m3			03/31/15 22:16	1
Carbon tetrachloride	0.38		0.25		ug/m3			03/31/15 22:16	1
Chlorobenzene	ND		0.37		ug/m3			03/31/15 22:16	1
Chloroethane	ND		0.21		ug/m3			03/31/15 22:16	1
Chloroform	ND		0.39		ug/m3			03/31/15 22:16	1
Chloromethane	1.0		0.41		ug/m3			03/31/15 22:16	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/31/15 22:16	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/31/15 22:16	1
Cyclohexane	ND		0.69		ug/m3			03/31/15 22:16	1
Dibromochloromethane	ND		0.68		ug/m3			03/31/15 22:16	1
Dichlorodifluoromethane	2.0		0.40		ug/m3			03/31/15 22:16	1
Ethanol	4.7		1.5		ug/m3			03/31/15 22:16	1
Ethylbenzene	ND		0.35		ug/m3			03/31/15 22:16	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/31/15 22:16	1
Hexane	ND		0.70		ug/m3			03/31/15 22:16	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/31/15 22:16	1
Methylene Chloride	ND		0.69		ug/m3			03/31/15 22:16	1
m-Xylene & p-Xylene	0.40		0.35		ug/m3			03/31/15 22:16	1
o-Xylene	ND		0.35		ug/m3			03/31/15 22:16	1
Styrene	ND		0.34		ug/m3			03/31/15 22:16	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

Client Sample ID: D4-OA-2015

Lab Sample ID: 140-2950-3

Date Collected: 03/24/15 10:24

Matrix: Air

Date Received: 03/27/15 11:30

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
t-Butyl alcohol	ND		0.97		ug/m3			03/31/15 22:16	1
Tetrachloroethene	ND		0.54		ug/m3			03/31/15 22:16	1
Toluene	0.59		0.45		ug/m3			03/31/15 22:16	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/31/15 22:16	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/31/15 22:16	1
Trichloroethene	ND		0.21		ug/m3			03/31/15 22:16	1
Trichlorofluoromethane	1.1		0.45		ug/m3			03/31/15 22:16	1
Vinyl chloride	ND		0.20		ug/m3			03/31/15 22:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		60 - 140					03/31/15 22:16	1

Client Sample ID: H30-SS-2015

Lab Sample ID: 140-2950-4

Date Collected: 03/24/15 10:58

Matrix: Air

Date Received: 03/27/15 11:30

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	0.71		0.080		ppb v/v			03/31/15 23:11	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/31/15 23:11	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/31/15 23:11	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/31/15 23:11	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/31/15 23:11	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/31/15 23:11	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/31/15 23:11	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/31/15 23:11	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/31/15 23:11	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/31/15 23:11	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/31/15 23:11	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/31/15 23:11	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/31/15 23:11	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/31/15 23:11	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/31/15 23:11	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/31/15 23:11	1
1,4-Dioxane	ND		0.20		ppb v/v			03/31/15 23:11	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/31/15 23:11	1
2-Butanone	1.2		0.32		ppb v/v			03/31/15 23:11	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/31/15 23:11	1
Benzene	ND		0.080		ppb v/v			03/31/15 23:11	1
Benzyl chloride	ND		0.16		ppb v/v			03/31/15 23:11	1
Bromodichloromethane	ND		0.080		ppb v/v			03/31/15 23:11	1
Bromoform	ND		0.080		ppb v/v			03/31/15 23:11	1
Bromomethane	ND		0.080		ppb v/v			03/31/15 23:11	1
Carbon tetrachloride	0.049		0.040		ppb v/v			03/31/15 23:11	1
Chlorobenzene	ND		0.080		ppb v/v			03/31/15 23:11	1
Chloroethane	ND		0.080		ppb v/v			03/31/15 23:11	1
Chloroform	7.3		0.080		ppb v/v			03/31/15 23:11	1
Chloromethane	ND		0.20		ppb v/v			03/31/15 23:11	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

Client Sample ID: H30-SS-2015

Lab Sample ID: 140-2950-4

Date Collected: 03/24/15 10:58

Matrix: Air

Date Received: 03/27/15 11:30

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-1,2-Dichloroethene	ND		0.080		ppb v/v			03/31/15 23:11	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/31/15 23:11	1
Cyclohexane	ND		0.20		ppb v/v			03/31/15 23:11	1
Dibromochloromethane	ND		0.080		ppb v/v			03/31/15 23:11	1
Dichlorodifluoromethane	0.37		0.080		ppb v/v			03/31/15 23:11	1
Ethanol	4.6		0.80		ppb v/v			03/31/15 23:11	1
Ethylbenzene	ND		0.080		ppb v/v			03/31/15 23:11	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/31/15 23:11	1
Hexane	ND		0.20		ppb v/v			03/31/15 23:11	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/31/15 23:11	1
Methylene Chloride	ND		0.20		ppb v/v			03/31/15 23:11	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			03/31/15 23:11	1
o-Xylene	ND		0.080		ppb v/v			03/31/15 23:11	1
Styrene	ND		0.080		ppb v/v			03/31/15 23:11	1
t-Butyl alcohol	2.6		0.32		ppb v/v			03/31/15 23:11	1
Tetrachloroethene	1.4		0.080		ppb v/v			03/31/15 23:11	1
Toluene	0.13		0.12		ppb v/v			03/31/15 23:11	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/31/15 23:11	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			03/31/15 23:11	1
Trichloroethene	1.8		0.040		ppb v/v			03/31/15 23:11	1
Trichlorofluoromethane	0.22		0.080		ppb v/v			03/31/15 23:11	1
Vinyl chloride	ND		0.080		ppb v/v			03/31/15 23:11	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	3.9		0.44		ug/m3			03/31/15 23:11	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/31/15 23:11	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/31/15 23:11	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/31/15 23:11	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/31/15 23:11	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/31/15 23:11	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/31/15 23:11	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/31/15 23:11	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/31/15 23:11	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/31/15 23:11	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/31/15 23:11	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/31/15 23:11	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/31/15 23:11	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/31/15 23:11	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/31/15 23:11	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/31/15 23:11	1
1,4-Dioxane	ND		0.72		ug/m3			03/31/15 23:11	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/31/15 23:11	1
2-Butanone	3.6		0.94		ug/m3			03/31/15 23:11	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/31/15 23:11	1
Benzene	ND		0.26		ug/m3			03/31/15 23:11	1
Benzyl chloride	ND		0.83		ug/m3			03/31/15 23:11	1
Bromodichloromethane	ND		0.54		ug/m3			03/31/15 23:11	1
Bromoform	ND		0.83		ug/m3			03/31/15 23:11	1
Bromomethane	ND		0.31		ug/m3			03/31/15 23:11	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

Client Sample ID: H30-SS-2015

Lab Sample ID: 140-2950-4

Date Collected: 03/24/15 10:58

Matrix: Air

Date Received: 03/27/15 11:30

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
Carbon tetrachloride	0.31		0.25		ug/m3			03/31/15 23:11	1
Chlorobenzene	ND		0.37		ug/m3			03/31/15 23:11	1
Chloroethane	ND		0.21		ug/m3			03/31/15 23:11	1
Chloroform	36		0.39		ug/m3			03/31/15 23:11	1
Chloromethane	ND		0.41		ug/m3			03/31/15 23:11	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/31/15 23:11	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/31/15 23:11	1
Cyclohexane	ND		0.69		ug/m3			03/31/15 23:11	1
Dibromochloromethane	ND		0.68		ug/m3			03/31/15 23:11	1
Dichlorodifluoromethane	1.8		0.40		ug/m3			03/31/15 23:11	1
Ethanol	8.6		1.5		ug/m3			03/31/15 23:11	1
Ethylbenzene	ND		0.35		ug/m3			03/31/15 23:11	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/31/15 23:11	1
Hexane	ND		0.70		ug/m3			03/31/15 23:11	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/31/15 23:11	1
Methylene Chloride	ND		0.69		ug/m3			03/31/15 23:11	1
m-Xylene & p-Xylene	ND		0.35		ug/m3			03/31/15 23:11	1
o-Xylene	ND		0.35		ug/m3			03/31/15 23:11	1
Styrene	ND		0.34		ug/m3			03/31/15 23:11	1
t-Butyl alcohol	7.8		0.97		ug/m3			03/31/15 23:11	1
Tetrachloroethene	9.3		0.54		ug/m3			03/31/15 23:11	1
Toluene	0.48		0.45		ug/m3			03/31/15 23:11	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/31/15 23:11	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/31/15 23:11	1
Trichloroethene	9.6		0.21		ug/m3			03/31/15 23:11	1
Trichlorofluoromethane	1.2		0.45		ug/m3			03/31/15 23:11	1
Vinyl chloride	ND		0.20		ug/m3			03/31/15 23:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		60 - 140					03/31/15 23:11	1

Client Sample ID: H30-BA-2015

Lab Sample ID: 140-2950-5

Date Collected: 03/24/15 10:58

Matrix: Air

Date Received: 03/27/15 11:30

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			04/01/15 00:07	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/01/15 00:07	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/01/15 00:07	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/01/15 00:07	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/01/15 00:07	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/01/15 00:07	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/01/15 00:07	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			04/01/15 00:07	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/01/15 00:07	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/01/15 00:07	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/01/15 00:07	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

Client Sample ID: H30-BA-2015

Lab Sample ID: 140-2950-5

Date Collected: 03/24/15 10:58

Matrix: Air

Date Received: 03/27/15 11:30

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-Dichloropropane	ND		0.080		ppb v/v			04/01/15 00:07	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/01/15 00:07	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/01/15 00:07	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/01/15 00:07	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/01/15 00:07	1
1,4-Dioxane	ND		0.20		ppb v/v			04/01/15 00:07	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/01/15 00:07	1
2-Butanone	0.43		0.32		ppb v/v			04/01/15 00:07	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/01/15 00:07	1
Benzene	0.21		0.080		ppb v/v			04/01/15 00:07	1
Benzyl chloride	ND		0.16		ppb v/v			04/01/15 00:07	1
Bromodichloromethane	ND		0.080		ppb v/v			04/01/15 00:07	1
Bromoform	ND		0.080		ppb v/v			04/01/15 00:07	1
Bromomethane	ND		0.080		ppb v/v			04/01/15 00:07	1
Carbon tetrachloride	0.074		0.040		ppb v/v			04/01/15 00:07	1
Chlorobenzene	ND		0.080		ppb v/v			04/01/15 00:07	1
Chloroethane	ND		0.080		ppb v/v			04/01/15 00:07	1
Chloroform	0.15		0.080		ppb v/v			04/01/15 00:07	1
Chloromethane	0.49		0.20		ppb v/v			04/01/15 00:07	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/01/15 00:07	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/01/15 00:07	1
Cyclohexane	ND		0.20		ppb v/v			04/01/15 00:07	1
Dibromochloromethane	ND		0.080		ppb v/v			04/01/15 00:07	1
Dichlorodifluoromethane	0.43		0.080		ppb v/v			04/01/15 00:07	1
Ethanol	100	E	0.80		ppb v/v			04/01/15 00:07	1
Ethylbenzene	ND		0.080		ppb v/v			04/01/15 00:07	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/01/15 00:07	1
Hexane	ND		0.20		ppb v/v			04/01/15 00:07	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/01/15 00:07	1
Methylene Chloride	ND		0.20		ppb v/v			04/01/15 00:07	1
m-Xylene & p-Xylene	0.14		0.080		ppb v/v			04/01/15 00:07	1
o-Xylene	ND		0.080		ppb v/v			04/01/15 00:07	1
Styrene	ND		0.080		ppb v/v			04/01/15 00:07	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/01/15 00:07	1
Tetrachloroethene	ND		0.080		ppb v/v			04/01/15 00:07	1
Toluene	0.40		0.12		ppb v/v			04/01/15 00:07	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/01/15 00:07	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/01/15 00:07	1
Trichloroethene	ND		0.040		ppb v/v			04/01/15 00:07	1
Trichlorofluoromethane	0.19		0.080		ppb v/v			04/01/15 00:07	1
Vinyl chloride	ND		0.080		ppb v/v			04/01/15 00:07	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/01/15 00:07	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/01/15 00:07	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/01/15 00:07	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/01/15 00:07	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/01/15 00:07	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/01/15 00:07	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

Client Sample ID: H30-BA-2015

Lab Sample ID: 140-2950-5

Date Collected: 03/24/15 10:58

Matrix: Air

Date Received: 03/27/15 11:30

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-Trichlorobenzene	ND		0.59		ug/m3			04/01/15 00:07	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			04/01/15 00:07	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/01/15 00:07	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/01/15 00:07	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/01/15 00:07	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/01/15 00:07	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/01/15 00:07	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/01/15 00:07	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/01/15 00:07	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/01/15 00:07	1
1,4-Dioxane	ND		0.72		ug/m3			04/01/15 00:07	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/01/15 00:07	1
2-Butanone	1.3		0.94		ug/m3			04/01/15 00:07	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/01/15 00:07	1
Benzene	0.66		0.26		ug/m3			04/01/15 00:07	1
Benzyl chloride	ND		0.83		ug/m3			04/01/15 00:07	1
Bromodichloromethane	ND		0.54		ug/m3			04/01/15 00:07	1
Bromoform	ND		0.83		ug/m3			04/01/15 00:07	1
Bromomethane	ND		0.31		ug/m3			04/01/15 00:07	1
Carbon tetrachloride	0.46		0.25		ug/m3			04/01/15 00:07	1
Chlorobenzene	ND		0.37		ug/m3			04/01/15 00:07	1
Chloroethane	ND		0.21		ug/m3			04/01/15 00:07	1
Chloroform	0.72		0.39		ug/m3			04/01/15 00:07	1
Chloromethane	1.0		0.41		ug/m3			04/01/15 00:07	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/01/15 00:07	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/01/15 00:07	1
Cyclohexane	ND		0.69		ug/m3			04/01/15 00:07	1
Dibromochloromethane	ND		0.68		ug/m3			04/01/15 00:07	1
Dichlorodifluoromethane	2.1		0.40		ug/m3			04/01/15 00:07	1
Ethanol	190 E		1.5		ug/m3			04/01/15 00:07	1
Ethylbenzene	ND		0.35		ug/m3			04/01/15 00:07	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/01/15 00:07	1
Hexane	ND		0.70		ug/m3			04/01/15 00:07	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/01/15 00:07	1
Methylene Chloride	ND		0.69		ug/m3			04/01/15 00:07	1
m-Xylene & p-Xylene	0.62		0.35		ug/m3			04/01/15 00:07	1
o-Xylene	ND		0.35		ug/m3			04/01/15 00:07	1
Styrene	ND		0.34		ug/m3			04/01/15 00:07	1
t-Butyl alcohol	ND		0.97		ug/m3			04/01/15 00:07	1
Tetrachloroethene	ND		0.54		ug/m3			04/01/15 00:07	1
Toluene	1.5		0.45		ug/m3			04/01/15 00:07	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/01/15 00:07	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/01/15 00:07	1
Trichloroethene	ND		0.21		ug/m3			04/01/15 00:07	1
Trichlorofluoromethane	1.1		0.45		ug/m3			04/01/15 00:07	1
Vinyl chloride	ND		0.20		ug/m3			04/01/15 00:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		60 - 140		04/01/15 00:07	1

TestAmerica Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

Client Sample ID: H30-BA-2015

Lab Sample ID: 140-2950-5

Date Collected: 03/24/15 10:58

Matrix: Air

Date Received: 03/27/15 11:30

Sample Container: Summa Canister 6L

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	120	D	2.0		ppb v/v			04/01/15 07:57	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	220	D	3.8		ug/m3			04/01/15 07:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		60 - 140					04/01/15 07:57	1

Default Detection Limits

Client: New York State D.E.C.

TestAmerica Job ID: 140-2950-1

Project/Site: Former Ithaca Gun Factory # C755019A

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

Analyte	RL	MDL	Units	Method
1,1,1-Trichloroethane	0.080	0.012	ppb v/v	TO 15 LL
1,1,1-Trichloroethane	0.44	0.065	ug/m3	TO 15 LL
1,1,2,2-Tetrachloroethane	0.080	0.024	ppb v/v	TO 15 LL
1,1,2,2-Tetrachloroethane	0.55	0.16	ug/m3	TO 15 LL
1,1,2-Trichloroethane	0.080	0.021	ppb v/v	TO 15 LL
1,1,2-Trichloroethane	0.44	0.11	ug/m3	TO 15 LL
1,1,2-Trichlorotrifluoroethane	0.080	0.012	ppb v/v	TO 15 LL
1,1,2-Trichlorotrifluoroethane	0.61	0.092	ug/m3	TO 15 LL
1,1-Dichloroethane	0.080	0.010	ppb v/v	TO 15 LL
1,1-Dichloroethane	0.32	0.040	ug/m3	TO 15 LL
1,1-Dichloroethene	0.080	0.014	ppb v/v	TO 15 LL
1,1-Dichloroethene	0.32	0.056	ug/m3	TO 15 LL
1,2,4-Trichlorobenzene	0.080	0.039	ppb v/v	TO 15 LL
1,2,4-Trichlorobenzene	0.59	0.29	ug/m3	TO 15 LL
1,2,4-Trimethylbenzene	0.080	0.025	ppb v/v	TO 15 LL
1,2,4-Trimethylbenzene	0.39	0.12	ug/m3	TO 15 LL
1,2-Dibromoethane	0.080	0.018	ppb v/v	TO 15 LL
1,2-Dibromoethane	0.61	0.14	ug/m3	TO 15 LL
1,2-Dichlorobenzene	0.080	0.028	ppb v/v	TO 15 LL
1,2-Dichlorobenzene	0.48	0.17	ug/m3	TO 15 LL
1,2-Dichloroethane	0.080	0.019	ppb v/v	TO 15 LL
1,2-Dichloroethane	0.32	0.077	ug/m3	TO 15 LL
1,2-Dichloropropane	0.080	0.021	ppb v/v	TO 15 LL
1,2-Dichloropropane	0.37	0.097	ug/m3	TO 15 LL
1,2-Dichlorotetrafluoroethane	0.080	0.013	ppb v/v	TO 15 LL
1,2-Dichlorotetrafluoroethane	0.56	0.091	ug/m3	TO 15 LL
1,3,5-Trimethylbenzene	0.080	0.026	ppb v/v	TO 15 LL
1,3,5-Trimethylbenzene	0.39	0.13	ug/m3	TO 15 LL
1,3-Dichlorobenzene	0.080	0.026	ppb v/v	TO 15 LL
1,3-Dichlorobenzene	0.48	0.16	ug/m3	TO 15 LL
1,4-Dichlorobenzene	0.080	0.026	ppb v/v	TO 15 LL
1,4-Dichlorobenzene	0.48	0.16	ug/m3	TO 15 LL
1,4-Dioxane	0.20	0.032	ppb v/v	TO 15 LL
1,4-Dioxane	0.72	0.12	ug/m3	TO 15 LL
2,2,4-Trimethylpentane	0.20	0.016	ppb v/v	TO 15 LL
2,2,4-Trimethylpentane	0.93	0.075	ug/m3	TO 15 LL
2-Butanone	0.32	0.080	ppb v/v	TO 15 LL
2-Butanone	0.94	0.24	ug/m3	TO 15 LL
4-Methyl-2-pentanone (MIBK)	0.20	0.018	ppb v/v	TO 15 LL
4-Methyl-2-pentanone (MIBK)	0.82	0.074	ug/m3	TO 15 LL
Benzene	0.080	0.023	ppb v/v	TO 15 LL
Benzene	0.26	0.073	ug/m3	TO 15 LL
Benzyl chloride	0.16	0.031	ppb v/v	TO 15 LL
Benzyl chloride	0.83	0.16	ug/m3	TO 15 LL
Bromodichloromethane	0.080	0.018	ppb v/v	TO 15 LL
Bromodichloromethane	0.54	0.12	ug/m3	TO 15 LL
Bromoform	0.080	0.019	ppb v/v	TO 15 LL
Bromoform	0.83	0.20	ug/m3	TO 15 LL
Bromomethane	0.080	0.013	ppb v/v	TO 15 LL
Bromomethane	0.31	0.050	ug/m3	TO 15 LL
Carbon tetrachloride	0.040	0.015	ppb v/v	TO 15 LL
Carbon tetrachloride	0.25	0.094	ug/m3	TO 15 LL

TestAmerica Knoxville

Default Detection Limits

Client: New York State D.E.C.

TestAmerica Job ID: 140-2950-1

Project/Site: Former Ithaca Gun Factory # C755019A

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

Analyte	RL	MDL	Units	Method
Chlorobenzene	0.080	0.020	ppb v/v	TO 15 LL
Chlorobenzene	0.37	0.092	ug/m3	TO 15 LL
Chloroethane	0.080	0.014	ppb v/v	TO 15 LL
Chloroethane	0.21	0.037	ug/m3	TO 15 LL
Chloroform	0.080	0.015	ppb v/v	TO 15 LL
Chloroform	0.39	0.073	ug/m3	TO 15 LL
Chloromethane	0.20	0.064	ppb v/v	TO 15 LL
Chloromethane	0.41	0.13	ug/m3	TO 15 LL
cis-1,2-Dichloroethene	0.080	0.024	ppb v/v	TO 15 LL
cis-1,2-Dichloroethene	0.32	0.095	ug/m3	TO 15 LL
cis-1,3-Dichloropropene	0.080	0.029	ppb v/v	TO 15 LL
cis-1,3-Dichloropropene	0.36	0.13	ug/m3	TO 15 LL
Cyclohexane	0.20	0.016	ppb v/v	TO 15 LL
Cyclohexane	0.69	0.055	ug/m3	TO 15 LL
Dibromochloromethane	0.080	0.017	ppb v/v	TO 15 LL
Dibromochloromethane	0.68	0.14	ug/m3	TO 15 LL
Dichlorodifluoromethane	0.080	0.027	ppb v/v	TO 15 LL
Dichlorodifluoromethane	0.40	0.13	ug/m3	TO 15 LL
Ethanol	0.80	0.80	ppb v/v	TO 15 LL
Ethanol	1.5	1.5	ug/m3	TO 15 LL
Ethylbenzene	0.080	0.027	ppb v/v	TO 15 LL
Ethylbenzene	0.35	0.12	ug/m3	TO 15 LL
Hexachlorobutadiene	0.080	0.049	ppb v/v	TO 15 LL
Hexachlorobutadiene	0.85	0.52	ug/m3	TO 15 LL
Hexane	0.20	0.013	ppb v/v	TO 15 LL
Hexane	0.70	0.046	ug/m3	TO 15 LL
Methyl tert-butyl ether	0.16	0.068	ppb v/v	TO 15 LL
Methyl tert-butyl ether	0.58	0.25	ug/m3	TO 15 LL
Methylene Chloride	0.20	0.13	ppb v/v	TO 15 LL
Methylene Chloride	0.69	0.45	ug/m3	TO 15 LL
m-Xylene & p-Xylene	0.080	0.053	ppb v/v	TO 15 LL
m-Xylene & p-Xylene	0.35	0.23	ug/m3	TO 15 LL
o-Xylene	0.080	0.024	ppb v/v	TO 15 LL
o-Xylene	0.35	0.10	ug/m3	TO 15 LL
Styrene	0.080	0.023	ppb v/v	TO 15 LL
Styrene	0.34	0.098	ug/m3	TO 15 LL
t-Butyl alcohol	0.32	0.015	ppb v/v	TO 15 LL
t-Butyl alcohol	0.97	0.045	ug/m3	TO 15 LL
Tetrachloroethene	0.080	0.016	ppb v/v	TO 15 LL
Tetrachloroethene	0.54	0.11	ug/m3	TO 15 LL
Toluene	0.12	0.12	ppb v/v	TO 15 LL
Toluene	0.45	0.45	ug/m3	TO 15 LL
trans-1,2-Dichloroethene	0.080	0.020	ppb v/v	TO 15 LL
trans-1,2-Dichloroethene	0.32	0.079	ug/m3	TO 15 LL
trans-1,3-Dichloropropene	0.080	0.019	ppb v/v	TO 15 LL
trans-1,3-Dichloropropene	0.36	0.086	ug/m3	TO 15 LL
Trichloroethene	0.040	0.014	ppb v/v	TO 15 LL
Trichloroethene	0.21	0.075	ug/m3	TO 15 LL
Trichlorofluoromethane	0.080	0.010	ppb v/v	TO 15 LL
Trichlorofluoromethane	0.45	0.056	ug/m3	TO 15 LL
Vinyl chloride	0.080	0.029	ppb v/v	TO 15 LL
Vinyl chloride	0.20	0.074	ug/m3	TO 15 LL

TestAmerica Knoxville

Surrogate Summary

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

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)							
140-2950-1	H29-SS-2015	101							
140-2950-1 - DL	H29-SS-2015	102							
140-2950-2	H29-BA-2015	95							
140-2950-3	D4-OA-2015	92							
140-2950-4	H30-SS-2015	99							
140-2950-5	H30-BA-2015	100							
140-2950-5 - DL	H30-BA-2015	93							
LCS 140-2576/1002	Lab Control Sample	97							
MB 140-2576/4	Method Blank	100							

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

QC Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

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

Lab Sample ID: MB 140-2576/4

Matrix: Air

Analysis Batch: 2576

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			03/31/15 11:56	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			03/31/15 11:56	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			03/31/15 11:56	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			03/31/15 11:56	1
1,1-Dichloroethane	ND		0.080		ppb v/v			03/31/15 11:56	1
1,1-Dichloroethene	ND		0.080		ppb v/v			03/31/15 11:56	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			03/31/15 11:56	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			03/31/15 11:56	1
1,2-Dibromoethane	ND		0.080		ppb v/v			03/31/15 11:56	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			03/31/15 11:56	1
1,2-Dichloroethane	ND		0.080		ppb v/v			03/31/15 11:56	1
1,2-Dichloropropane	ND		0.080		ppb v/v			03/31/15 11:56	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			03/31/15 11:56	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			03/31/15 11:56	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			03/31/15 11:56	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			03/31/15 11:56	1
1,4-Dioxane	ND		0.20		ppb v/v			03/31/15 11:56	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			03/31/15 11:56	1
2-Butanone	ND		0.32		ppb v/v			03/31/15 11:56	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			03/31/15 11:56	1
Benzene	ND		0.080		ppb v/v			03/31/15 11:56	1
Benzyl chloride	ND		0.16		ppb v/v			03/31/15 11:56	1
Bromodichloromethane	ND		0.080		ppb v/v			03/31/15 11:56	1
Bromoform	ND		0.080		ppb v/v			03/31/15 11:56	1
Bromomethane	ND		0.080		ppb v/v			03/31/15 11:56	1
Carbon tetrachloride	ND		0.040		ppb v/v			03/31/15 11:56	1
Chlorobenzene	ND		0.080		ppb v/v			03/31/15 11:56	1
Chloroethane	ND		0.080		ppb v/v			03/31/15 11:56	1
Chloroform	ND		0.080		ppb v/v			03/31/15 11:56	1
Chloromethane	ND		0.20		ppb v/v			03/31/15 11:56	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			03/31/15 11:56	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			03/31/15 11:56	1
Cyclohexane	ND		0.20		ppb v/v			03/31/15 11:56	1
Dibromochloromethane	ND		0.080		ppb v/v			03/31/15 11:56	1
Dichlorodifluoromethane	ND		0.080		ppb v/v			03/31/15 11:56	1
Ethanol	ND		0.80		ppb v/v			03/31/15 11:56	1
Ethylbenzene	ND		0.080		ppb v/v			03/31/15 11:56	1
Hexachlorobutadiene	ND		0.080		ppb v/v			03/31/15 11:56	1
Hexane	ND		0.20		ppb v/v			03/31/15 11:56	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			03/31/15 11:56	1
Methylene Chloride	ND		0.20		ppb v/v			03/31/15 11:56	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			03/31/15 11:56	1
o-Xylene	ND		0.080		ppb v/v			03/31/15 11:56	1
Styrene	ND		0.080		ppb v/v			03/31/15 11:56	1
t-Butyl alcohol	ND		0.32		ppb v/v			03/31/15 11:56	1
Tetrachloroethene	ND		0.080		ppb v/v			03/31/15 11:56	1
Toluene	ND		0.12		ppb v/v			03/31/15 11:56	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			03/31/15 11:56	1

TestAmerica Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

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

Lab Sample ID: MB 140-2576/4

Matrix: Air

Analysis Batch: 2576

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			03/31/15 11:56	1
Trichloroethene	ND		0.040		ppb v/v			03/31/15 11:56	1
Trichlorofluoromethane	ND		0.080		ppb v/v			03/31/15 11:56	1
Vinyl chloride	ND		0.080		ppb v/v			03/31/15 11:56	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			03/31/15 11:56	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			03/31/15 11:56	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			03/31/15 11:56	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			03/31/15 11:56	1
1,1-Dichloroethane	ND		0.32		ug/m3			03/31/15 11:56	1
1,1-Dichloroethene	ND		0.32		ug/m3			03/31/15 11:56	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			03/31/15 11:56	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			03/31/15 11:56	1
1,2-Dibromoethane	ND		0.61		ug/m3			03/31/15 11:56	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			03/31/15 11:56	1
1,2-Dichloroethane	ND		0.32		ug/m3			03/31/15 11:56	1
1,2-Dichloropropane	ND		0.37		ug/m3			03/31/15 11:56	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			03/31/15 11:56	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			03/31/15 11:56	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			03/31/15 11:56	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			03/31/15 11:56	1
1,4-Dioxane	ND		0.72		ug/m3			03/31/15 11:56	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			03/31/15 11:56	1
2-Butanone	ND		0.94		ug/m3			03/31/15 11:56	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			03/31/15 11:56	1
Benzene	ND		0.26		ug/m3			03/31/15 11:56	1
Benzyl chloride	ND		0.83		ug/m3			03/31/15 11:56	1
Bromodichloromethane	ND		0.54		ug/m3			03/31/15 11:56	1
Bromoform	ND		0.83		ug/m3			03/31/15 11:56	1
Bromomethane	ND		0.31		ug/m3			03/31/15 11:56	1
Carbon tetrachloride	ND		0.25		ug/m3			03/31/15 11:56	1
Chlorobenzene	ND		0.37		ug/m3			03/31/15 11:56	1
Chloroethane	ND		0.21		ug/m3			03/31/15 11:56	1
Chloroform	ND		0.39		ug/m3			03/31/15 11:56	1
Chloromethane	ND		0.41		ug/m3			03/31/15 11:56	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			03/31/15 11:56	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			03/31/15 11:56	1
Cyclohexane	ND		0.69		ug/m3			03/31/15 11:56	1
Dibromochloromethane	ND		0.68		ug/m3			03/31/15 11:56	1
Dichlorodifluoromethane	ND		0.40		ug/m3			03/31/15 11:56	1
Ethanol	ND		1.5		ug/m3			03/31/15 11:56	1
Ethylbenzene	ND		0.35		ug/m3			03/31/15 11:56	1
Hexachlorobutadiene	ND		0.85		ug/m3			03/31/15 11:56	1
Hexane	ND		0.70		ug/m3			03/31/15 11:56	1
Methyl tert-butyl ether	ND		0.58		ug/m3			03/31/15 11:56	1
Methylene Chloride	ND		0.69		ug/m3			03/31/15 11:56	1

TestAmerica Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

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

Lab Sample ID: MB 140-2576/4

Matrix: Air

Analysis Batch: 2576

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			03/31/15 11:56	1
o-Xylene	ND		0.35		ug/m3			03/31/15 11:56	1
Styrene	ND		0.34		ug/m3			03/31/15 11:56	1
t-Butyl alcohol	ND		0.97		ug/m3			03/31/15 11:56	1
Tetrachloroethene	ND		0.54		ug/m3			03/31/15 11:56	1
Toluene	ND		0.45		ug/m3			03/31/15 11:56	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			03/31/15 11:56	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			03/31/15 11:56	1
Trichloroethene	ND		0.21		ug/m3			03/31/15 11:56	1
Trichlorofluoromethane	ND		0.45		ug/m3			03/31/15 11:56	1
Vinyl chloride	ND		0.20		ug/m3			03/31/15 11:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		60 - 140		03/31/15 11:56	1

Lab Sample ID: LCS 140-2576/1002

Matrix: Air

Analysis Batch: 2576

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	1.98		ppb v/v		99	70 - 130
1,1,2,2-Tetrachloroethane	2.00	2.16		ppb v/v		108	70 - 130
1,1,2-Trichloroethane	2.00	2.13		ppb v/v		106	70 - 130
1,1,2-Trichlorotrifluoroethane	2.00	1.96		ppb v/v		98	70 - 130
1,1-Dichloroethane	2.00	1.99		ppb v/v		99	70 - 130
1,1-Dichloroethene	2.00	2.00		ppb v/v		100	70 - 130
1,2,4-Trichlorobenzene	2.00	1.51		ppb v/v		76	60 - 140
1,2,4-Trimethylbenzene	2.00	2.14		ppb v/v		107	70 - 130
1,2-Dibromoethane	2.00	2.11		ppb v/v		105	70 - 130
1,2-Dichlorobenzene	2.00	1.88		ppb v/v		94	70 - 130
1,2-Dichloroethane	2.00	2.14		ppb v/v		107	70 - 130
1,2-Dichloropropane	2.00	1.99		ppb v/v		99	70 - 130
1,2-Dichlorotetrafluoroethane	2.00	2.09		ppb v/v		105	60 - 140
1,3,5-Trimethylbenzene	2.00	2.20		ppb v/v		110	70 - 130
1,3-Dichlorobenzene	2.00	1.83		ppb v/v		91	70 - 130
1,4-Dichlorobenzene	2.00	1.78		ppb v/v		89	70 - 130
1,4-Dioxane	2.00	1.87		ppb v/v		93	60 - 140
2,2,4-Trimethylpentane	2.00	2.04		ppb v/v		102	70 - 130
2-Butanone	2.00	1.89		ppb v/v		94	60 - 140
4-Methyl-2-pentanone (MIBK)	2.00	2.00		ppb v/v		100	60 - 140
Benzene	2.00	1.99		ppb v/v		99	70 - 130
Benzyl chloride	2.00	1.86		ppb v/v		93	70 - 130
Bromodichloromethane	2.00	2.10		ppb v/v		105	70 - 130
Bromoform	2.00	1.77		ppb v/v		88	60 - 140
Bromomethane	2.00	2.11		ppb v/v		105	70 - 130
Carbon tetrachloride	2.00	1.44		ppb v/v		72	70 - 130
Chlorobenzene	2.00	2.03		ppb v/v		102	70 - 130

TestAmerica Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

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

Lab Sample ID: LCS 140-2576/1002

Matrix: Air

Analysis Batch: 2576

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	2.11		ppb v/v		106	70 - 130
Chloroform	2.00	1.96		ppb v/v		98	70 - 130
Chloromethane	2.00	1.94		ppb v/v		97	60 - 140
cis-1,2-Dichloroethene	2.00	1.97		ppb v/v		98	70 - 130
cis-1,3-Dichloropropene	2.00	1.89		ppb v/v		94	70 - 130
Cyclohexane	2.00	2.07		ppb v/v		103	70 - 130
Dibromochloromethane	2.00	2.14		ppb v/v		107	70 - 130
Dichlorodifluoromethane	2.00	2.07		ppb v/v		103	60 - 140
Ethanol	10.0	10.1		ppb v/v		101	20 - 180
Ethylbenzene	2.00	2.22		ppb v/v		111	70 - 130
Hexachlorobutadiene	2.00	1.79		ppb v/v		89	60 - 140
Hexane	2.00	1.88		ppb v/v		94	70 - 130
Methyl tert-butyl ether	2.00	2.08		ppb v/v		104	60 - 140
Methylene Chloride	2.00	1.83		ppb v/v		92	70 - 130
m-Xylene & p-Xylene	4.00	4.29		ppb v/v		107	70 - 130
o-Xylene	2.00	2.13		ppb v/v		107	70 - 130
Styrene	2.00	2.15		ppb v/v		107	70 - 130
t-Butyl alcohol	2.00	1.79		ppb v/v		89	60 - 140
Tetrachloroethene	2.00	2.19		ppb v/v		109	70 - 130
Toluene	2.00	2.25		ppb v/v		113	70 - 130
trans-1,2-Dichloroethene	2.00	1.94		ppb v/v		97	70 - 130
trans-1,3-Dichloropropene	2.00	2.10		ppb v/v		105	70 - 130
Trichloroethene	2.00	1.96		ppb v/v		98	70 - 130
Trichlorofluoromethane	2.00	2.05		ppb v/v		102	60 - 140
Vinyl chloride	2.00	2.13		ppb v/v		106	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	11	10.8		ug/m3		99	70 - 130
1,1,1,2-Tetrachloroethane	14	14.9		ug/m3		108	70 - 130
1,1,2-Trichloroethane	11	11.6		ug/m3		106	70 - 130
1,1,2-Trichlorotrifluoroethane	15	15.0		ug/m3		98	70 - 130
1,1-Dichloroethane	8.1	8.04		ug/m3		99	70 - 130
1,1-Dichloroethene	7.9	7.95		ug/m3		100	70 - 130
1,2,4-Trichlorobenzene	15	11.2		ug/m3		76	60 - 140
1,2,4-Trimethylbenzene	9.8	10.5		ug/m3		107	70 - 130
1,2-Dibromoethane	15	16.2		ug/m3		105	70 - 130
1,2-Dichlorobenzene	12	11.3		ug/m3		94	70 - 130
1,2-Dichloroethane	8.1	8.65		ug/m3		107	70 - 130
1,2-Dichloropropane	9.2	9.18		ug/m3		99	70 - 130
1,2-Dichlorotetrafluoroethane	14	14.6		ug/m3		105	60 - 140
1,3,5-Trimethylbenzene	9.8	10.8		ug/m3		110	70 - 130
1,3-Dichlorobenzene	12	11.0		ug/m3		91	70 - 130
1,4-Dichlorobenzene	12	10.7		ug/m3		89	70 - 130
1,4-Dioxane	7.2	6.73		ug/m3		93	60 - 140
2,2,4-Trimethylpentane	9.3	9.55		ug/m3		102	70 - 130
2-Butanone	5.9	5.56		ug/m3		94	60 - 140
4-Methyl-2-pentanone (MIBK)	8.2	8.18		ug/m3		100	60 - 140

TestAmerica Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

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

Lab Sample ID: LCS 140-2576/1002

Matrix: Air

Analysis Batch: 2576

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	6.34		ug/m3		99	70 - 130
Benzyl chloride	10	9.63		ug/m3		93	70 - 130
Bromodichloromethane	13	14.1		ug/m3		105	70 - 130
Bromoform	21	18.3		ug/m3		88	60 - 140
Bromomethane	7.8	8.18		ug/m3		105	70 - 130
Carbon tetrachloride	13	9.05		ug/m3		72	70 - 130
Chlorobenzene	9.2	9.35		ug/m3		102	70 - 130
Chloroethane	5.3	5.58		ug/m3		106	70 - 130
Chloroform	9.8	9.57		ug/m3		98	70 - 130
Chloromethane	4.1	4.01		ug/m3		97	60 - 140
cis-1,2-Dichloroethene	7.9	7.81		ug/m3		98	70 - 130
cis-1,3-Dichloropropene	9.1	8.57		ug/m3		94	70 - 130
Cyclohexane	6.9	7.12		ug/m3		103	70 - 130
Dibromochloromethane	17	18.2		ug/m3		107	70 - 130
Dichlorodifluoromethane	9.9	10.2		ug/m3		103	60 - 140
Ethanol	19	19.1		ug/m3		101	20 - 180
Ethylbenzene	8.7	9.65		ug/m3		111	70 - 130
Hexachlorobutadiene	21	19.1		ug/m3		89	60 - 140
Hexane	7.1	6.63		ug/m3		94	70 - 130
Methyl tert-butyl ether	7.2	7.49		ug/m3		104	60 - 140
Methylene Chloride	7.0	6.37		ug/m3		92	70 - 130
m-Xylene & p-Xylene	17	18.6		ug/m3		107	70 - 130
o-Xylene	8.7	9.26		ug/m3		107	70 - 130
Styrene	8.5	9.14		ug/m3		107	70 - 130
t-Butyl alcohol	6.1	5.41		ug/m3		89	60 - 140
Tetrachloroethene	14	14.8		ug/m3		109	70 - 130
Toluene	7.5	8.50		ug/m3		113	70 - 130
trans-1,2-Dichloroethene	7.9	7.71		ug/m3		97	70 - 130
trans-1,3-Dichloropropene	9.1	9.55		ug/m3		105	70 - 130
Trichloroethene	11	10.5		ug/m3		98	70 - 130
Trichlorofluoromethane	11	11.5		ug/m3		102	60 - 140
Vinyl chloride	5.1	5.45		ug/m3		106	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		60 - 140

QC Association Summary

Client: New York State D.E.C.

TestAmerica Job ID: 140-2950-1

Project/Site: Former Ithaca Gun Factory # C755019A

Air - GC/MS VOA

Analysis Batch: 2576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-2950-1	H29-SS-2015	Total/NA	Air	TO 15 LL	
140-2950-1 - DL	H29-SS-2015	Total/NA	Air	TO 15 LL	
140-2950-2	H29-BA-2015	Total/NA	Air	TO 15 LL	
140-2950-3	D4-OA-2015	Total/NA	Air	TO 15 LL	
140-2950-4	H30-SS-2015	Total/NA	Air	TO 15 LL	
140-2950-5	H30-BA-2015	Total/NA	Air	TO 15 LL	
140-2950-5 - DL	H30-BA-2015	Total/NA	Air	TO 15 LL	
LCS 140-2576/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	
MB 140-2576/4	Method Blank	Total/NA	Air	TO 15 LL	

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

Client Sample ID: H29-SS-2015

Date Collected: 03/24/15 10:12

Date Received: 03/27/15 11:30

Lab Sample ID: 140-2950-1

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	2576	03/31/15 20:27	HMT	TAL KNX
		Instrument ID: MJ								
Total/NA	Analysis	TO 15 LL	DL	1	200 mL	500 mL	2576	04/01/15 07:03	HMT	TAL KNX
		Instrument ID: MJ								

Client Sample ID: H29-BA-2015

Date Collected: 03/24/15 10:12

Date Received: 03/27/15 11:30

Lab Sample ID: 140-2950-2

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	2576	03/31/15 21:22	HMT	TAL KNX
		Instrument ID: MJ								

Client Sample ID: D4-OA-2015

Date Collected: 03/24/15 10:24

Date Received: 03/27/15 11:30

Lab Sample ID: 140-2950-3

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	2576	03/31/15 22:16	HMT	TAL KNX
		Instrument ID: MJ								

Client Sample ID: H30-SS-2015

Date Collected: 03/24/15 10:58

Date Received: 03/27/15 11:30

Lab Sample ID: 140-2950-4

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	2576	03/31/15 23:11	HMT	TAL KNX
		Instrument ID: MJ								

Client Sample ID: H30-BA-2015

Date Collected: 03/24/15 10:58

Date Received: 03/27/15 11:30

Lab Sample ID: 140-2950-5

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	2576	04/01/15 00:07	HMT	TAL KNX
		Instrument ID: MJ								
Total/NA	Analysis	TO 15 LL	DL	1	200 mL	500 mL	2576	04/01/15 07:57	HMT	TAL KNX
		Instrument ID: MJ								

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-2950-1

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 140-2576/1002

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	2576	03/31/15 10:08	HMT	TAL KNX
Instrument ID: MJ										

Client Sample ID: Method Blank

Lab Sample ID: MB 140-2576/4

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	2576	03/31/15 11:56	HMT	TAL KNX
Instrument ID: MJ										

Laboratory References:

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

Certification Summary

Client: New York State D.E.C.

TestAmerica Job ID: 140-2950-1

Project/Site: Former Ithaca Gun Factory # C755019A

Laboratory: TestAmerica Knoxville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10781	03-31-16

The following analytes are included in this report, but are not certified under this 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	1,4-Dioxane
TO 15 LL		Air	Bromodichloromethane
TO 15 LL		Air	Cyclohexane
TO 15 LL		Air	Dibromochloromethane
TO 15 LL		Air	Dichlorodifluoromethane
TO 15 LL		Air	o-Xylene
TO 15 LL		Air	Trichlorofluoromethane

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
TO 15 LL		Air	Ethanol
TO 15 LL		Air	t-Butyl alcohol

Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 140-2950-1

Project/Site: Former Ithaca Gun Factory # C755019A

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

Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 140-2950-1

Project/Site: Former Ithaca Gun Factory # C755019A

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
140-2950-1	H29-SS-2015	Air	03/24/15 10:12	03/27/15 11:30
140-2950-2	H29-BA-2015	Air	03/24/15 10:12	03/27/15 11:30
140-2950-3	D4-OA-2015	Air	03/24/15 10:24	03/27/15 11:30
140-2950-4	H30-SS-2015	Air	03/24/15 10:58	03/27/15 11:30
140-2950-5	H30-BA-2015	Air	03/24/15 10:58	03/27/15 11:30

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: TestAmerica Knoxville Job No.: 140-2950-1
SDG No.: _____
Matrix: Air Level: Low
GC Column (1): RTX-5 ID: 0.32 (mm)

Client Sample ID	Lab Sample ID	BFB #
H29-SS-2015	140-2950-1	101
H29-SS-2015 DL	140-2950-1 DL	102
H29-BA-2015	140-2950-2	95
D4-OA-2015	140-2950-3	92
H30-SS-2015	140-2950-4	99
H30-BA-2015	140-2950-5	100
H30-BA-2015 DL	140-2950-5 DL	93
	MB 140-2576/4	100
	LCS 140-2576/1002	97

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: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Matrix: Air Level: Low Lab File ID: JCCVC31A-LCS.d
 Lab ID: LCS 140-2576/1002 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	2.00	1.98	99	70-130	
1,1,2,2-Tetrachloroethane	2.00	2.16	108	70-130	
1,1,2-Trichloroethane	2.00	2.13	106	70-130	
1,1,2-Trichlorotrifluoroethane	2.00	1.96	98	70-130	
1,1-Dichloroethane	2.00	1.99	99	70-130	
1,1-Dichloroethene	2.00	2.00	100	70-130	
1,2,4-Trichlorobenzene	2.00	1.51	76	60-140	
1,2,4-Trimethylbenzene	2.00	2.14	107	70-130	
1,2-Dibromoethane	2.00	2.11	105	70-130	
1,2-Dichlorobenzene	2.00	1.88	94	70-130	
1,2-Dichloroethane	2.00	2.14	107	70-130	
1,2-Dichloropropane	2.00	1.99	99	70-130	
1,2-Dichlorotetrafluoroethane	2.00	2.09	105	60-140	
1,3,5-Trimethylbenzene	2.00	2.20	110	70-130	
1,3-Dichlorobenzene	2.00	1.83	91	70-130	
1,4-Dichlorobenzene	2.00	1.78	89	70-130	
1,4-Dioxane	2.00	1.87	93	60-140	
2,2,4-Trimethylpentane	2.00	2.04	102	70-130	
2-Butanone	2.00	1.89	94	60-140	
4-Methyl-2-pentanone (MIBK)	2.00	2.00	100	60-140	
Benzene	2.00	1.99	99	70-130	
Benzyl chloride	2.00	1.86	93	70-130	
Bromodichloromethane	2.00	2.10	105	70-130	
Bromoform	2.00	1.77	88	60-140	
Bromomethane	2.00	2.11	105	70-130	
Carbon tetrachloride	2.00	1.44	72	70-130	
Chlorobenzene	2.00	2.03	102	70-130	
Chloroethane	2.00	2.11	106	70-130	
Chloroform	2.00	1.96	98	70-130	
Chloromethane	2.00	1.94	97	60-140	
cis-1,2-Dichloroethene	2.00	1.97	98	70-130	
cis-1,3-Dichloropropene	2.00	1.89	94	70-130	
Cyclohexane	2.00	2.07	103	70-130	
Dibromochloromethane	2.00	2.14	107	70-130	
Dichlorodifluoromethane	2.00	2.07	103	60-140	
Ethanol	10.0	10.1	101	20-180	
Ethylbenzene	2.00	2.22	111	70-130	
Hexachlorobutadiene	2.00	1.79	89	60-140	
Hexane	2.00	1.88	94	70-130	
Methyl tert-butyl ether	2.00	2.08	104	60-140	
Methylene Chloride	2.00	1.83	92	70-130	
m-Xylene & p-Xylene	4.00	4.29	107	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: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Matrix: Air Level: Low Lab File ID: JCCVC31A-LCS.d
 Lab ID: LCS 140-2576/1002 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
o-Xylene	2.00	2.13	107	70-130	
Styrene	2.00	2.15	107	70-130	
t-Butyl alcohol	2.00	1.79	89	60-140	
Tetrachloroethene	2.00	2.19	109	70-130	
Toluene	2.00	2.25	113	70-130	
trans-1,2-Dichloroethene	2.00	1.94	97	70-130	
trans-1,3-Dichloropropene	2.00	2.10	105	70-130	
Trichloroethene	2.00	1.96	98	70-130	
Trichlorofluoromethane	2.00	2.05	102	60-140	
Vinyl chloride	2.00	2.13	106	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Lab File ID: J500BC31.D Lab Sample ID: MB 140-2576/4
 Matrix: Air Heated Purge: (Y/N) N
 Instrument ID: MJ Date Analyzed: 03/31/2015 11:56
 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 140-2576/1002	JCCVC31A-LC S.d	03/31/2015 10:08
H29-SS-2015	140-2950-1	JC31P107.D	03/31/2015 20:27
H29-BA-2015	140-2950-2	JC31P108.D	03/31/2015 21:22
D4-OA-2015	140-2950-3	JC31P109.D	03/31/2015 22:16
H30-SS-2015	140-2950-4	JC31P110.D	03/31/2015 23:11
H30-BA-2015	140-2950-5	JC31P111.D	04/01/2015 00:07
H29-SS-2015 DL	140-2950-1 DL	JC31P107DL. D	04/01/2015 07:03
H30-BA-2015 DL	140-2950-5 DL	JC31P111DL. D	04/01/2015 07:57

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Lab File ID: JBFB02.D BFB Injection Date: 02/02/2015
 Instrument ID: MJ BFB Injection Time: 12:20
 Analysis Batch No.: 2321

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	21.2
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	7.3
173	Less than 2.0 % of mass 174	0.0 (0.0)1
174	50.0 - 120.00 % of mass 95	107.4
175	5.0 - 9.0 % of mass 174	8.5 (7.9)1
176	95.0 - 101.0 % of mass 174	105.1 (97.9)1
177	5.0 - 9.0 % of mass 176	7.2 (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
	IC 140-2321/2	JB02icL1.D	02/02/2015	12:48
	IC 140-2321/3	JB02icL2.D	02/02/2015	13:43
	IC 140-2321/4	JB02icL3.D	02/02/2015	14:37
	IC 140-2321/5	JB02icL4.D	02/02/2015	15:32
	IC 140-2321/6	JB02icL5.D	02/02/2015	16:27
	ICIS 140-2321/7	JB02icisL6.D	02/02/2015	17:21
	IC 140-2321/8	JB02icL7.D	02/02/2015	18:16
	IC 140-2321/9	JB02icL8.D	02/02/2015	19:10
	IC 140-2321/10	JB02icL9.D	02/02/2015	20:05
	ICV 140-2321/13	JB02LCS.D	02/02/2015	22:48

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Lab File ID: JBFBC31A.D BFB Injection Date: 03/31/2015
 Instrument ID: MJ BFB Injection Time: 09:40
 Analysis Batch No.: 2576

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	22.9
75	30.0 - 60.0 % of mass 95	50.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.3
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	106.5
175	5.0 - 9.0 % of mass 174	8.6 (8.0) 1
176	95.0 - 101.0 % of mass 174	104.9 (98.5) 1
177	5.0 - 9.0 % of mass 176	6.9 (6.6) 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 140-2576/2	JCCVC31A.D	03/31/2015	10:08
	LCS 140-2576/1002	JCCVC31A-LCS.d	03/31/2015	10:08
	MB 140-2576/4	J500BC31.D	03/31/2015	11:56
H29-SS-2015	140-2950-1	JC31P107.D	03/31/2015	20:27
H29-BA-2015	140-2950-2	JC31P108.D	03/31/2015	21:22
D4-OA-2015	140-2950-3	JC31P109.D	03/31/2015	22:16
H30-SS-2015	140-2950-4	JC31P110.D	03/31/2015	23:11
H30-BA-2015	140-2950-5	JC31P111.D	04/01/2015	00:07
H29-SS-2015 DL	140-2950-1 DL	JC31P107DL.D	04/01/2015	07:03
H30-BA-2015 DL	140-2950-5 DL	JC31P111DL.D	04/01/2015	07:57

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

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1
SDG No.: _____
Sample No.: ICIS 140-2321/7 Date Analyzed: 02/02/2015 17:21
Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm)
Lab File ID (Standard): JB02icisL6.D Heated Purge: (Y/N) N
Calibration ID: 275

	CBM		DFB		CBZ		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
INITIAL CALIBRATION MID-POINT	289189	9.60	1333947	11.74	1321331	16.38	
UPPER LIMIT	404865	9.93	1867526	12.07	1849863	16.71	
LOWER LIMIT	173513	9.27	800368	11.41	792799	16.05	
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 140-2321/13		299316	9.59	1429867	11.74	1314806	16.38

CBM = Chlorobromomethane (IS)

DFB = 1,4-Difluorobenzene

CBZ = 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: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Sample No.: CCVIS 140-2576/2 Date Analyzed: 03/31/2015 10:08
 Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm)
 Lab File ID (Standard): JCCVC31A.D Heated Purge: (Y/N) N
 Calibration ID: 275

	CBM		DFB		CBZ		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	263584	9.58	1153398	11.72	968292	16.36	
UPPER LIMIT	369018	9.91	1614757	12.05	1355609	16.69	
LOWER LIMIT	158150	9.25	692039	11.39	580975	16.03	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-2576/1002		263584	9.58	1153398	11.72	968292	16.36
MB 140-2576/4		282796	9.57	1240200	11.71	1062006	16.35
140-2950-1	H29-SS-2015	225924	9.57	1043768	11.71	891420	16.36
140-2950-2	H29-BA-2015	220985	9.57	1059225	11.71	894227	16.36
140-2950-3	D4-OA-2015	227039	9.57	1078226	11.71	928871	16.36
140-2950-4	H30-SS-2015	225834	9.57	1015852	11.71	859146	16.36
140-2950-5	H30-BA-2015	220585	9.57	1046925	11.71	899358	16.35
140-2950-1 DL	H29-SS-2015 DL	200878	9.57	926227	11.71	835458	16.35
140-2950-5 DL	H30-BA-2015 DL	204499	9.57	967496	11.71	801682	16.35

CBM = Chlorobromomethane (IS)

DFB = 1,4-Difluorobenzene

CBZ = 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: TestAmerica Knoxville Job No.: 140-2950-1

SDG No.: _____

Client Sample ID: H29-SS-2015 Lab Sample ID: 140-2950-1

Matrix: Air Lab File ID: JC31P107.D

Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:12

Sample wt/vol: 500 (mL) Date Analyzed: 03/31/2015 20:27

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.: 2576 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	1.6		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		0.080	
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	1.5		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	0.11		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	0.98		0.040	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	18	E	0.080	
74-87-3	Chloromethane	50.49	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Client Sample ID: H29-SS-2015 Lab Sample ID: 140-2950-1
 Matrix: Air Lab File ID: JC31P107.D
 Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:12
 Sample wt/vol: 500 (mL) Date Analyzed: 03/31/2015 20:27
 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.: 2576 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	0.44		0.080	
64-17-5	Ethanol	46.07	4.0		0.80	
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	0.17		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	3.9		0.32	
127-18-4	Tetrachloroethene	165.83	0.51		0.080	
108-88-3	Toluene	92.14	0.29		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	13		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.25		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1

SDG No.: _____

Client Sample ID: H29-SS-2015 Lab Sample ID: 140-2950-1

Matrix: Air Lab File ID: JC31P107.D

Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:12

Sample wt/vol: 500 (mL) Date Analyzed: 03/31/2015 20:27

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.: 2576 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	8.8		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		0.32	
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	4.5		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.34		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	6.2		0.25	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	87	E	0.39	
74-87-3	Chloromethane	50.49	ND		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Client Sample ID: H29-SS-2015 Lab Sample ID: 140-2950-1
 Matrix: Air Lab File ID: JC31P107.D
 Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:12
 Sample wt/vol: 500(mL) Date Analyzed: 03/31/2015 20:27
 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.: 2576 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	2.2		0.40	
64-17-5	Ethanol	46.07	7.5		1.5	
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	0.72		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	12		0.97	
127-18-4	Tetrachloroethene	165.83	3.4		0.54	
108-88-3	Toluene	92.14	1.1		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	69		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.4		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P107.D
 Lims ID: 140-2950-A-1 Lab Sample ID: 140-2950-1
 Client ID: H29-SS-2015
 Sample Type: Client
 Inject. Date: 31-Mar-2015 20:27:30 ALS Bottle#: 7 Worklist Smp#: 13
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2950-a-1
 Misc. Info.: J033115,TO15,,140-0001518-013
 Operator ID: 7126 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150330-1518.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 01-Apr-2015 09:18:38 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK018

First Level Reviewer: tajh

Date: 01-Apr-2015 06:51:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.571	9.577	-0.006	50	225924	4.00	
* 2 1,4-Difluorobenzene	114	11.712	11.718	-0.006	96	1043768	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.355	16.360	-0.005	90	891420	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.968	17.969	-0.001	87	587060	4.02	
8 Dichlorodifluoromethane	85	4.105	4.117	-0.012	96	112041	0.4405	
17 Ethanol	31	5.230	5.246	-0.016	97	125601	4.00	
20 Trichlorofluoromethane	101	5.762	5.779	-0.017	94	54788	0.2460	
28 2-Methyl-2-propanol	59	6.612	6.640	-0.028	96	518518	3.89	
30 1,1,2-Trichloro-1,2,2-trif	101	6.715	6.726	-0.011	69	10289	0.0687	
31 Methylene Chloride	84	6.903	6.919	-0.016	84	7858	0.1085	
39 2-Butanone (MEK)	72	8.769	8.781	-0.012	87	41064	1.53	
40 Hexane	56	8.786	8.802	-0.016	72	8876	0.1178	
43 Chloroform	83	9.576	9.587	-0.011	94	2552013	17.9	E
45 1,1,1-Trichloroethane	97	10.620	10.626	-0.006	96	242250	1.62	
49 Cyclohexane	69	11.201	11.207	-0.006	39	1707	0.0428	
48 Benzene	78	11.201	11.207	-0.006	53	20494	0.1063	
50 Carbon tetrachloride	117	11.223	11.228	-0.005	96	139992	0.9839	
56 Trichloroethene	130	12.411	12.417	-0.006	93	1075688	12.8	
59 Dichlorobromomethane	83	12.632	12.643	-0.011	73	10528	0.0762	
62 4-Methyl-2-pentanone (MIBK	43	13.541	13.541	0.000	86	25843	0.1629	
65 Toluene	91	14.407	14.413	-0.006	90	47186	0.2901	
73 Tetrachloroethene	129	15.537	15.537	0.000	91	35760	0.5050	
76 Ethylbenzene	91	16.683	16.683	0.000	1	7019	0.0369	
78 m-Xylene & p-Xylene	91	16.833	16.839	-0.006	37	25504	0.1665	
82 o-Xylene	91	17.355	17.366	-0.011	48	8756	0.0524	
93 1,2,4-Trimethylbenzene	105	19.077	19.077	0.000	43	7509	0.0417	
97 1,4-Dichlorobenzene	146	19.437	19.437	0.000	33	2519	0.0263	

[QC Flag Legend](#)

Processing Flags

E - Exceeded Maximum Amount

[Reagents:](#)

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P107.D

Injection Date: 31-Mar-2015 20:27:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: 140-2950-A-1

Lab Sample ID: 140-2950-1

Worklist Smp#: 13

Client ID: H29-SS-2015

Purge Vol: 500.000 mL

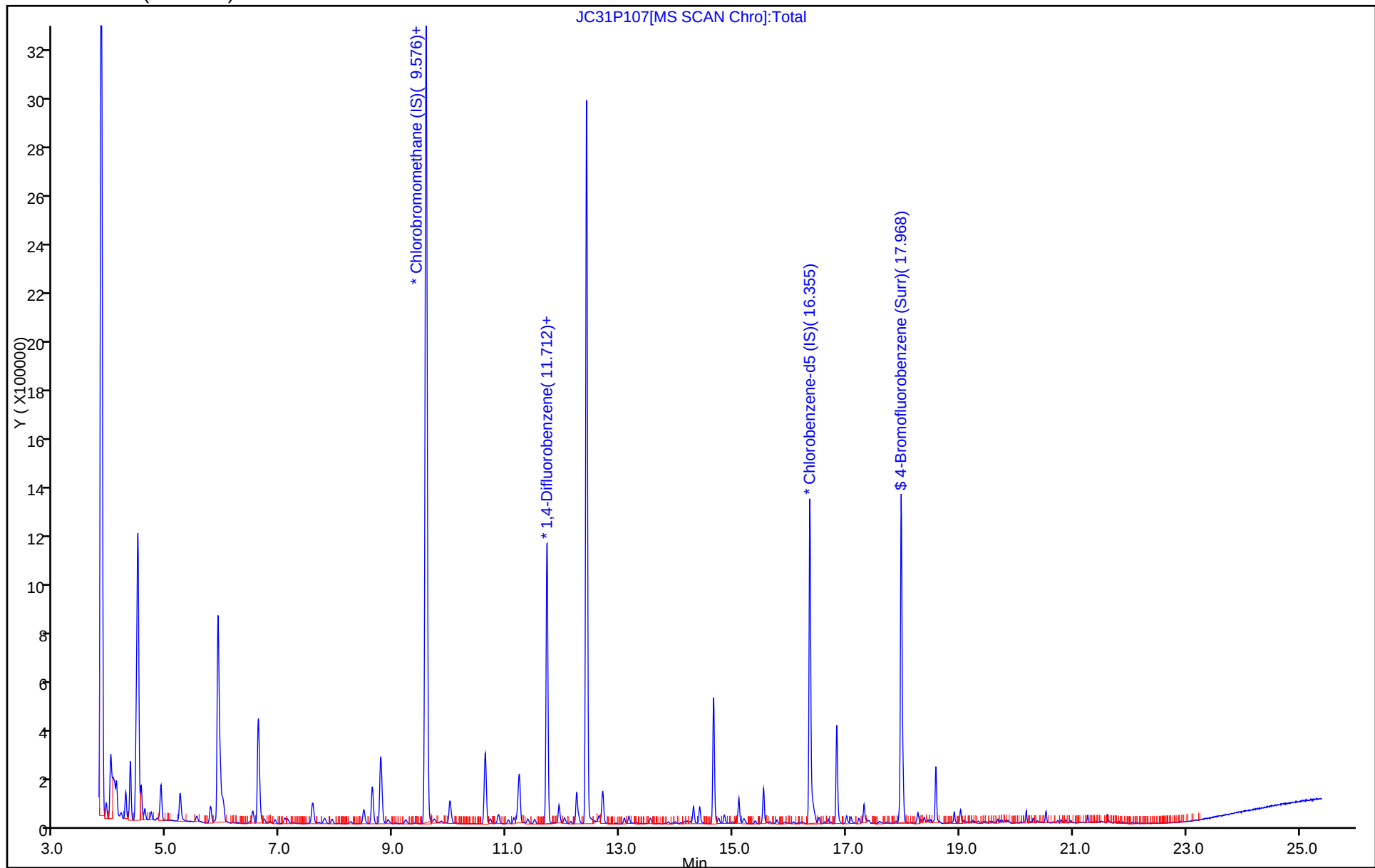
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P107.D

Injection Date: 31-Mar-2015 20:27:30

Instrument ID: MJ

Lims ID: 140-2950-A-1

Lab Sample ID: 140-2950-1

Client ID: H29-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 13

Purge Vol: 500.000 mL

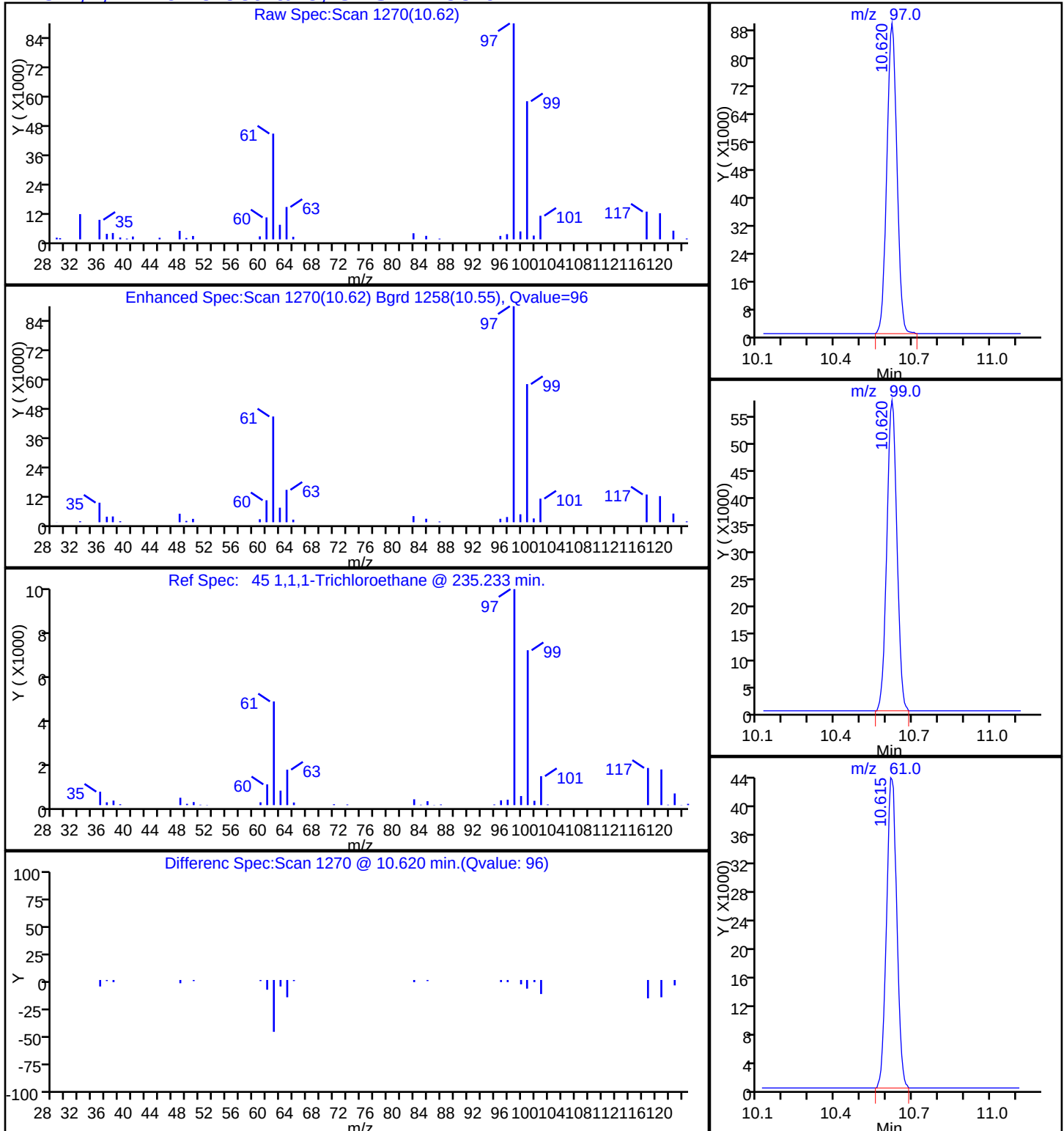
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

45 1,1,1-Trichloroethane, CAS: 71-55-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P107.D

Injection Date: 31-Mar-2015 20:27:30

Instrument ID: MJ

Lims ID: 140-2950-A-1

Lab Sample ID: 140-2950-1

Client ID: H29-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 13

Purge Vol: 500.000 mL

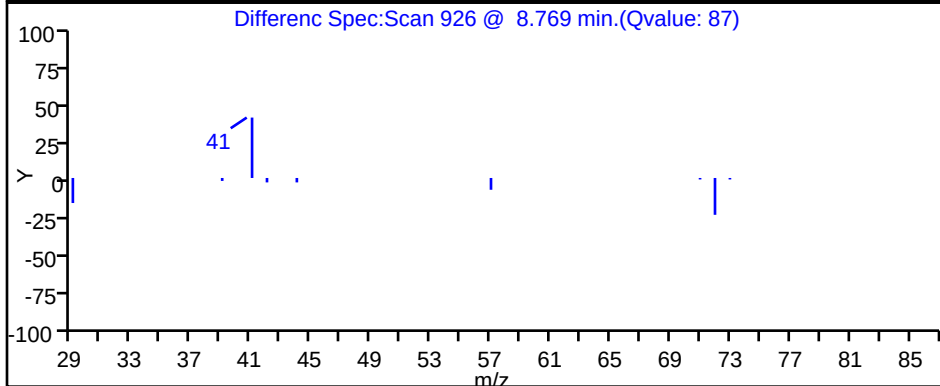
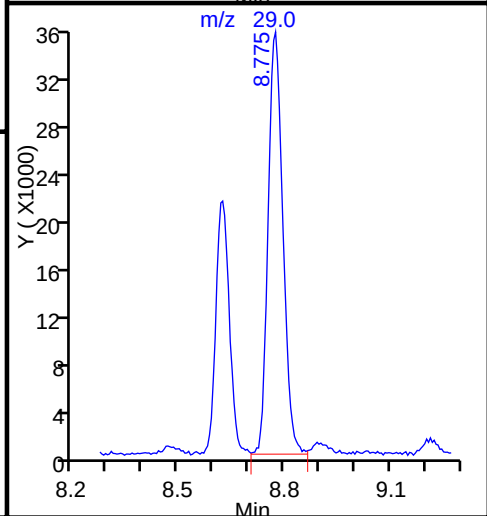
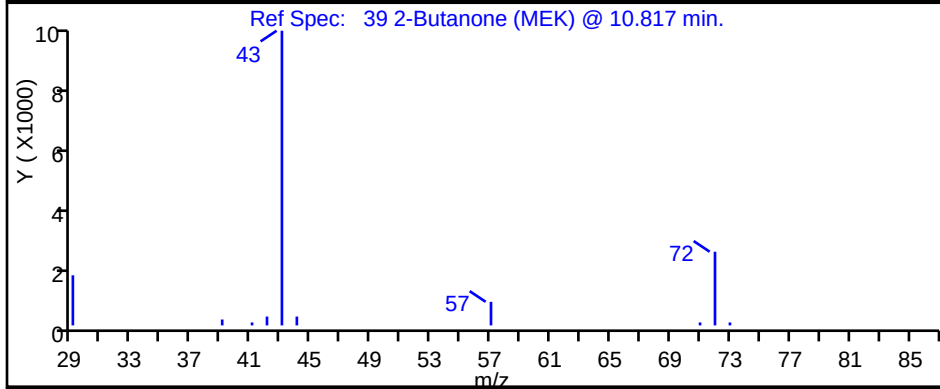
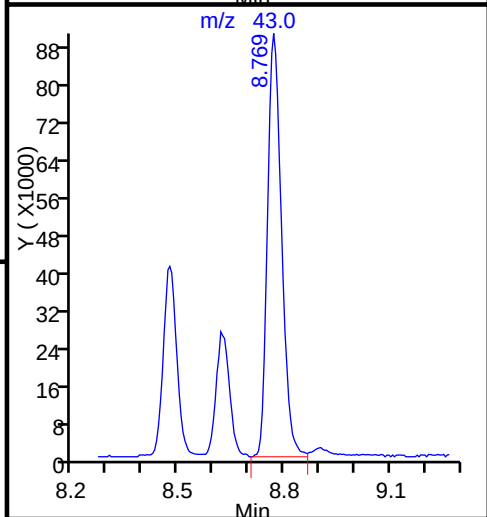
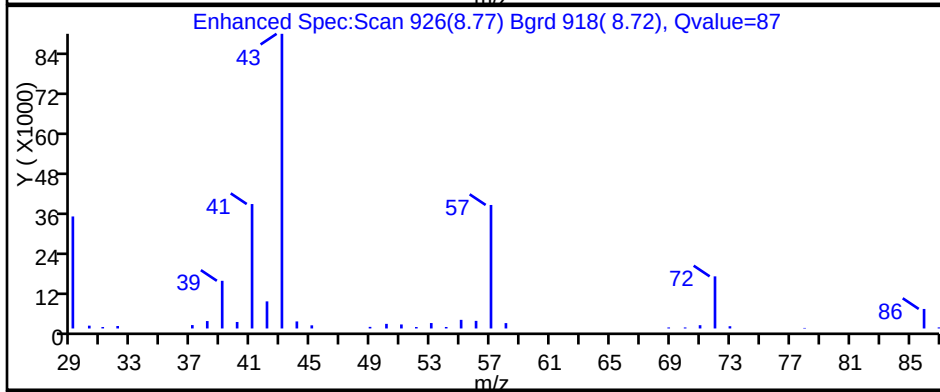
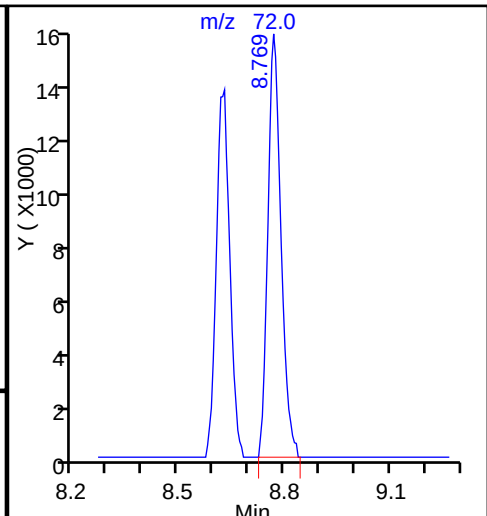
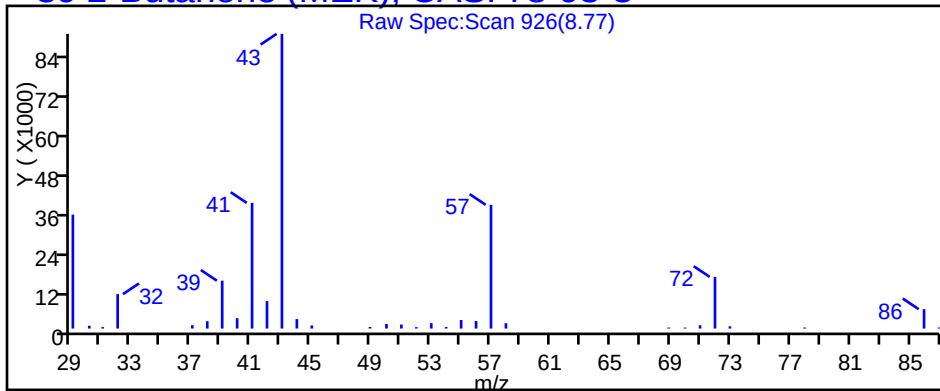
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P107.D

Injection Date: 31-Mar-2015 20:27:30

Instrument ID: MJ

Lims ID: 140-2950-A-1

Lab Sample ID: 140-2950-1

Client ID: H29-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 13

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

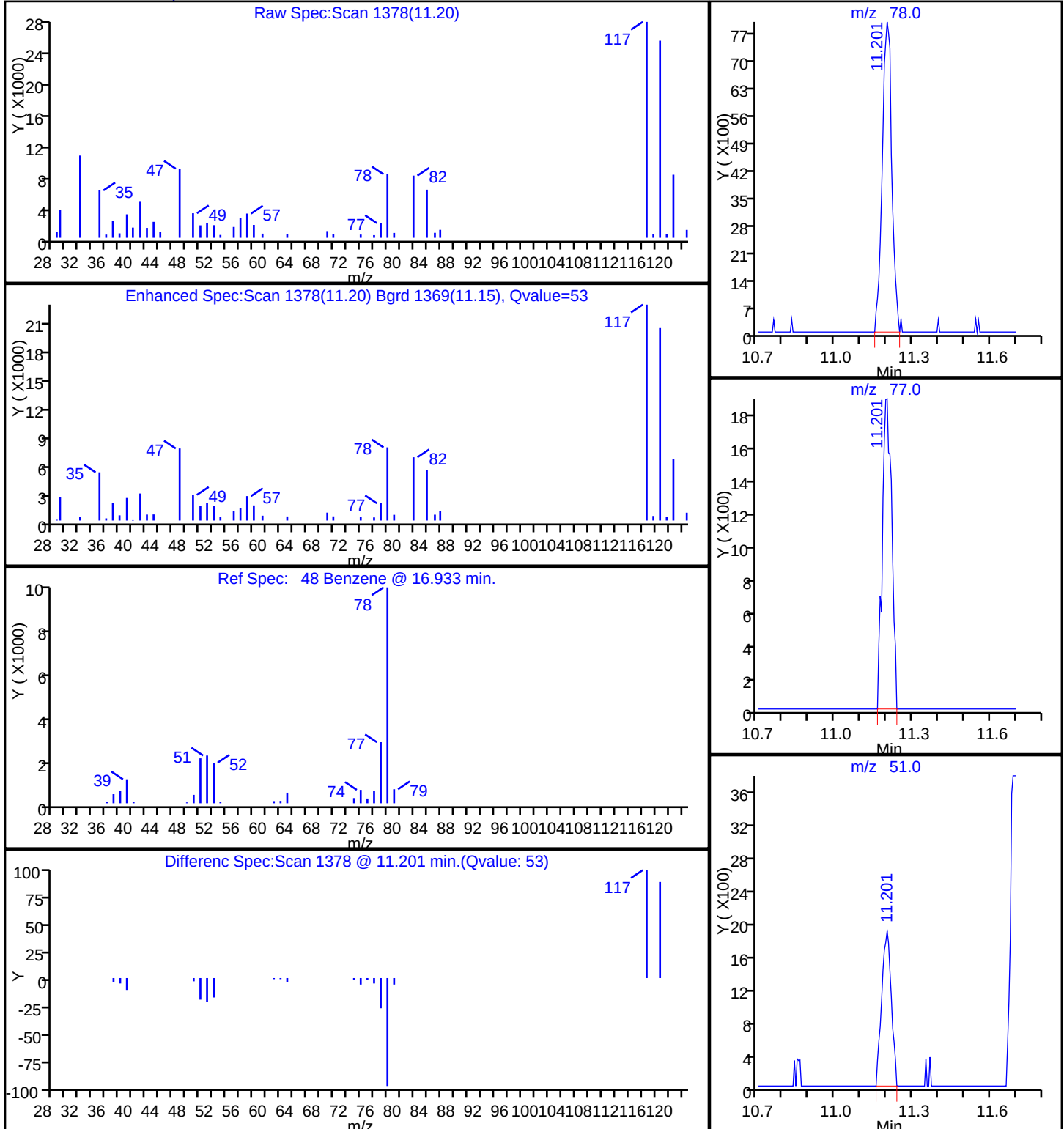
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P107.D

Injection Date: 31-Mar-2015 20:27:30

Instrument ID: MJ

Lims ID: 140-2950-A-1

Lab Sample ID: 140-2950-1

Client ID: H29-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 13

Purge Vol: 500.000 mL

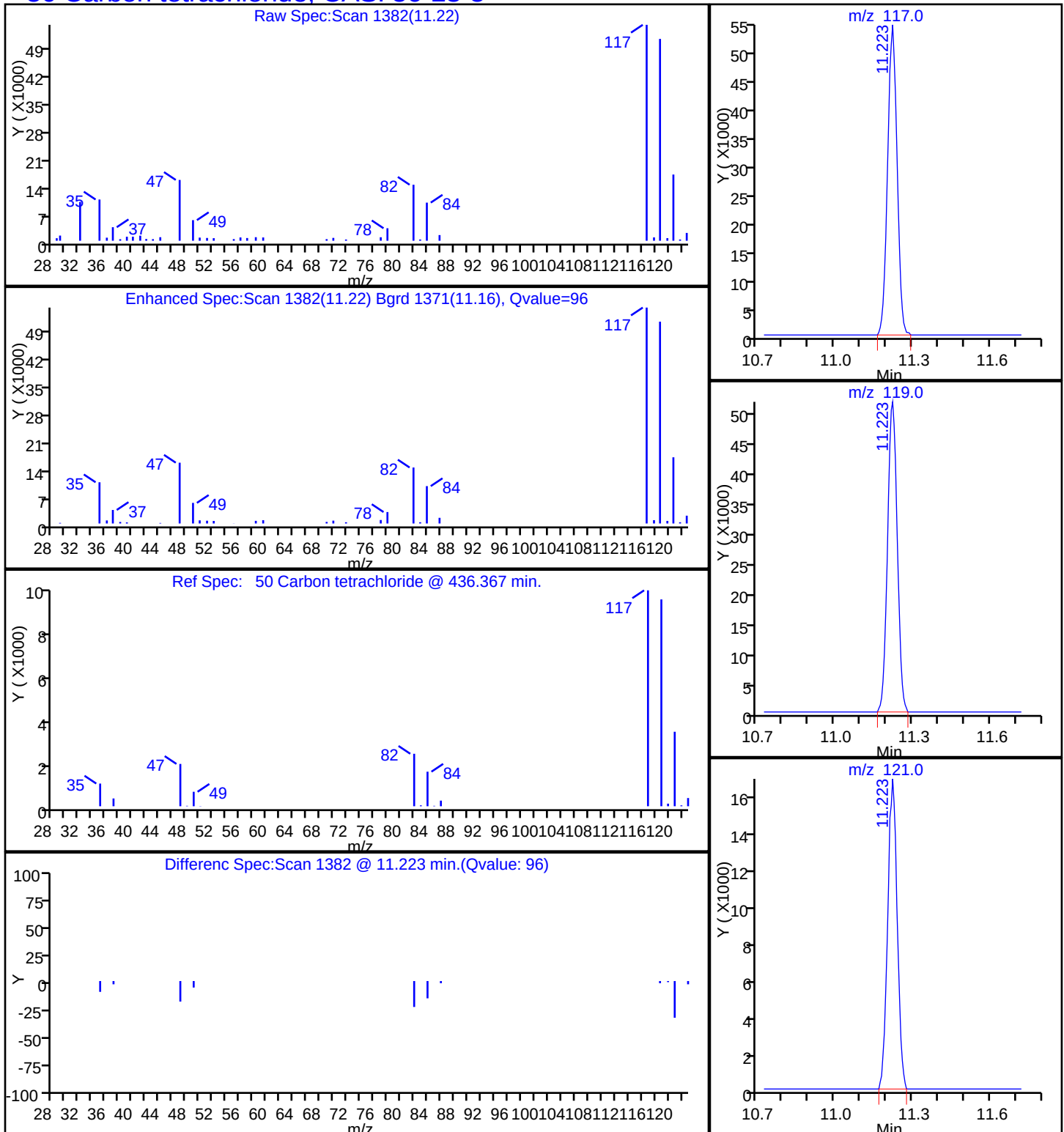
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P107.D

Injection Date: 31-Mar-2015 20:27:30

Instrument ID: MJ

Lims ID: 140-2950-A-1

Lab Sample ID: 140-2950-1

Client ID: H29-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 13

Purge Vol: 500.000 mL

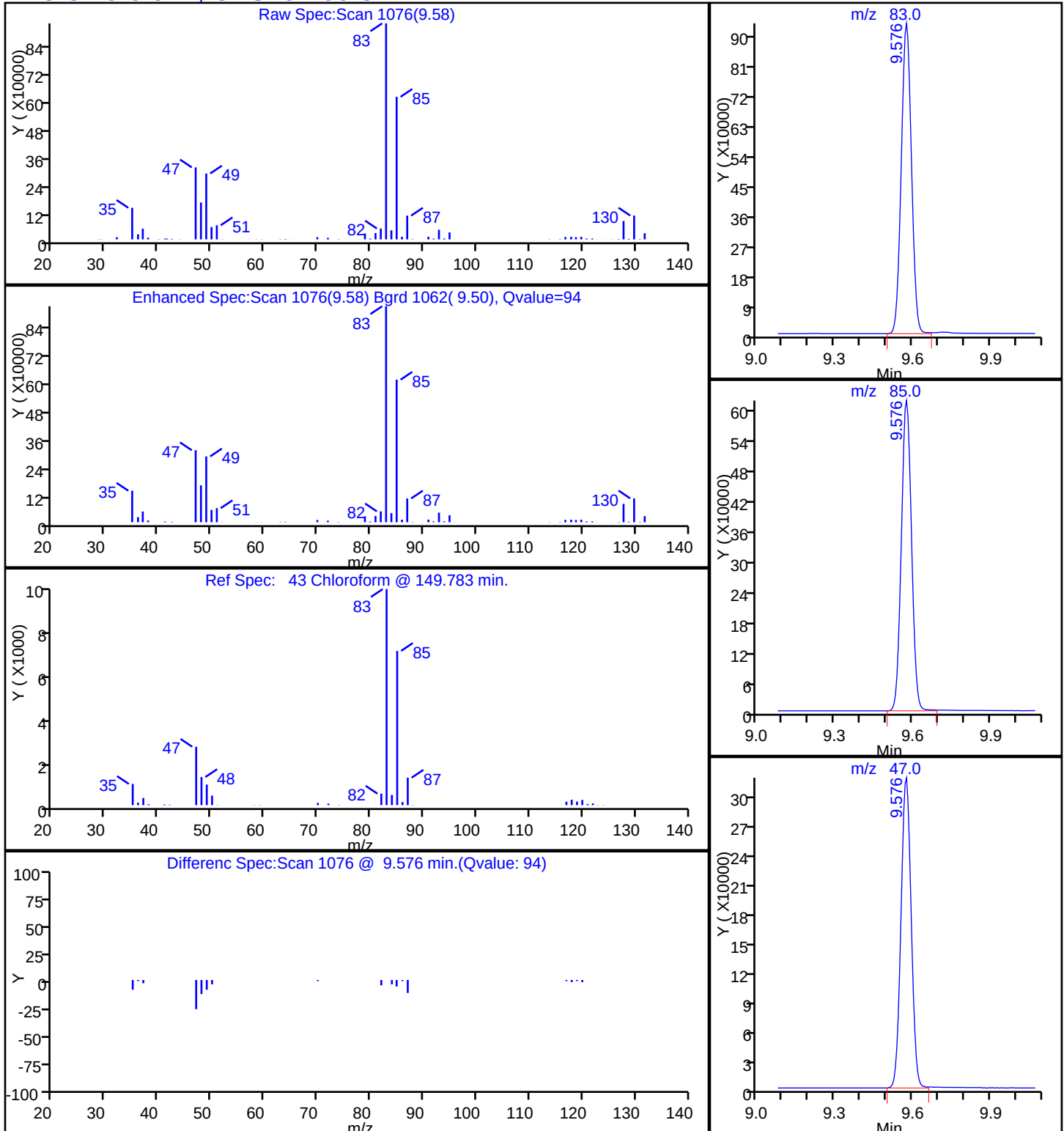
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

43 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P107.D

Injection Date: 31-Mar-2015 20:27:30

Instrument ID: MJ

Lims ID: 140-2950-A-1

Lab Sample ID: 140-2950-1

Client ID: H29-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 13

Purge Vol: 500.000 mL

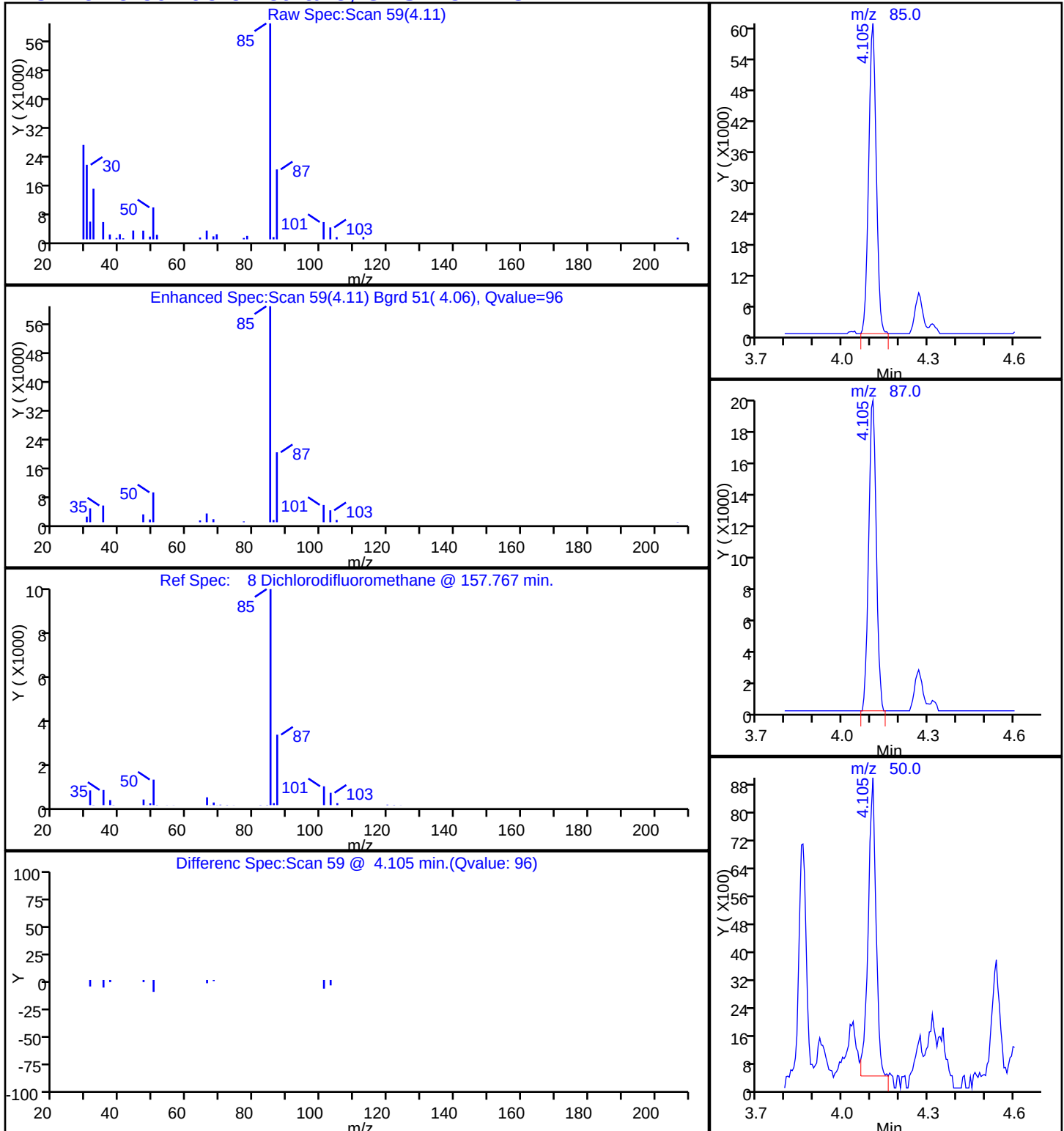
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P107.D

Injection Date: 31-Mar-2015 20:27:30

Instrument ID: MJ

Lims ID: 140-2950-A-1

Lab Sample ID: 140-2950-1

Client ID: H29-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 13

Purge Vol: 500.000 mL

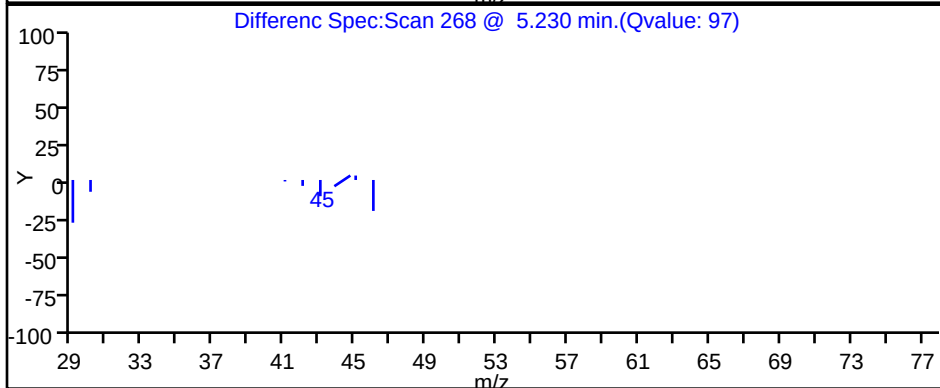
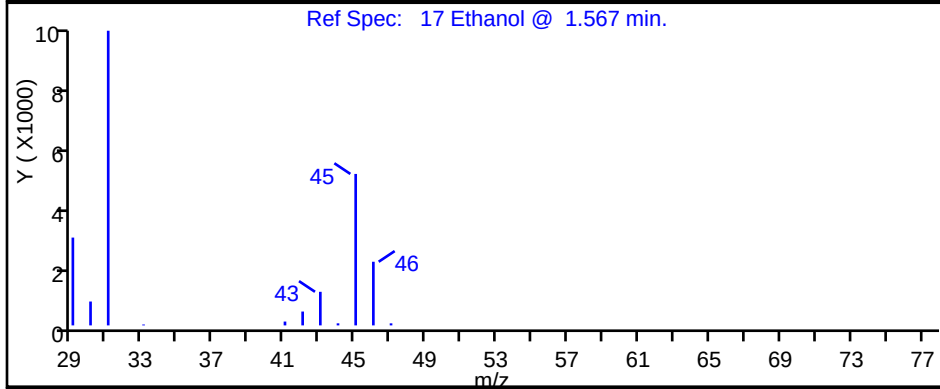
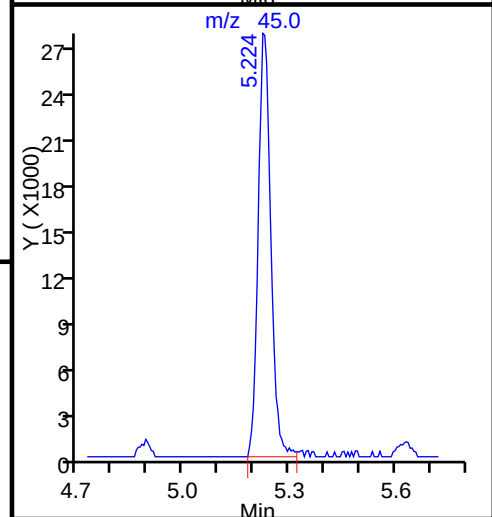
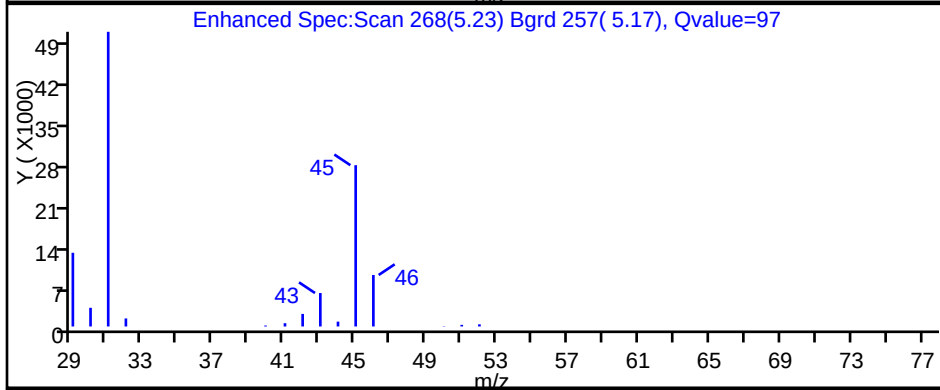
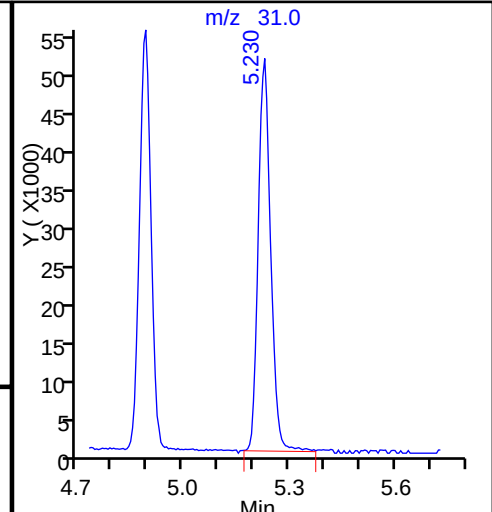
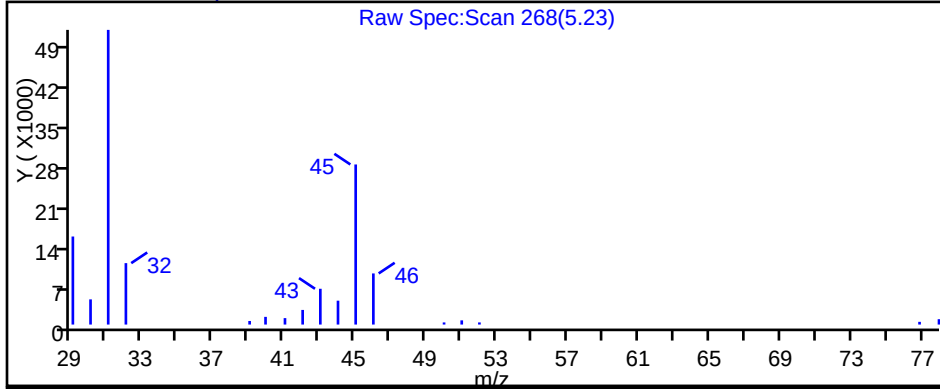
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P107.D

Injection Date: 31-Mar-2015 20:27:30

Instrument ID: MJ

Lims ID: 140-2950-A-1

Lab Sample ID: 140-2950-1

Client ID: H29-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 13

Purge Vol: 500.000 mL

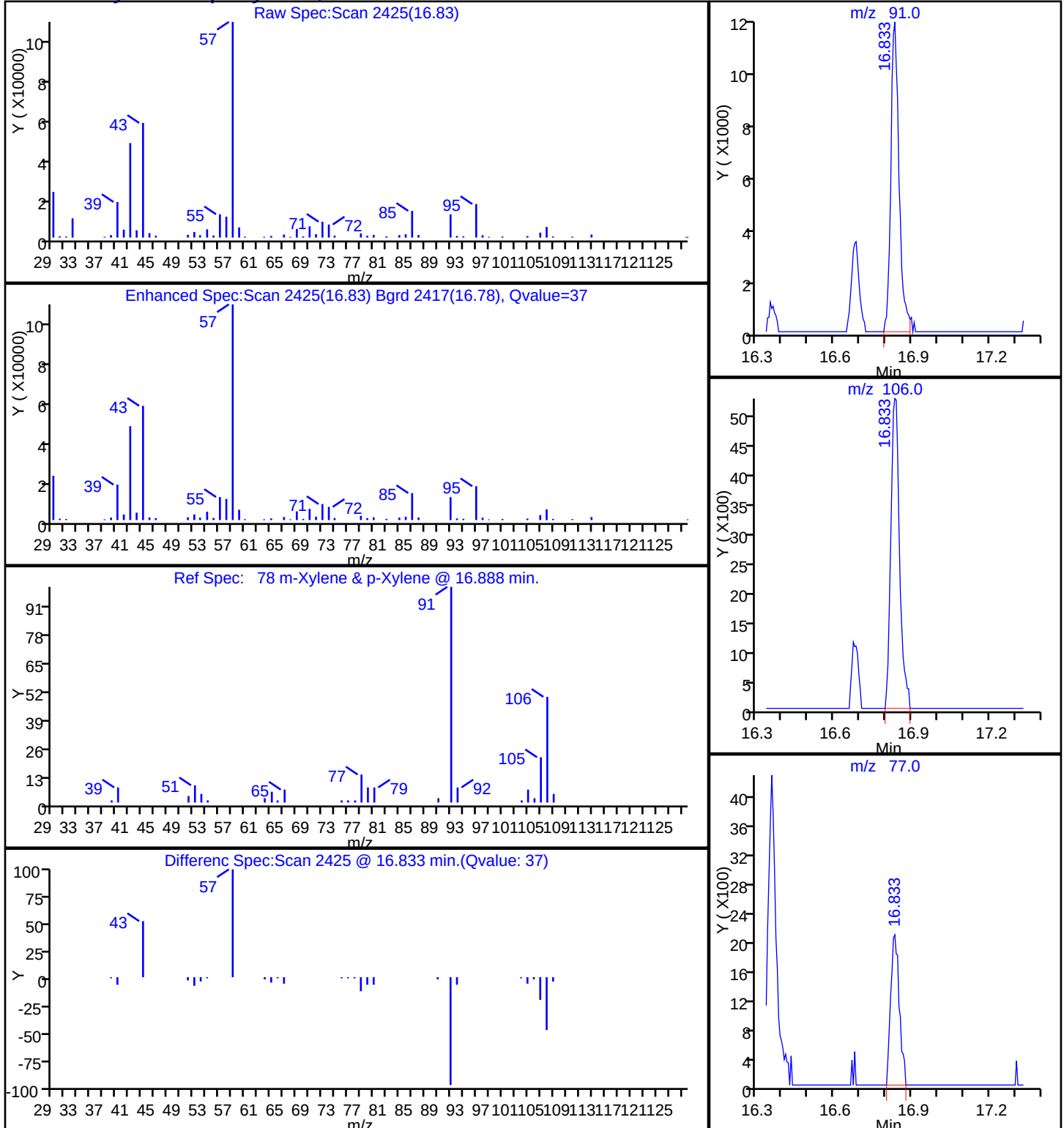
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P107.D

Injection Date: 31-Mar-2015 20:27:30

Instrument ID: MJ

Lims ID: 140-2950-A-1

Lab Sample ID: 140-2950-1

Client ID: H29-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 13

Purge Vol: 500.000 mL

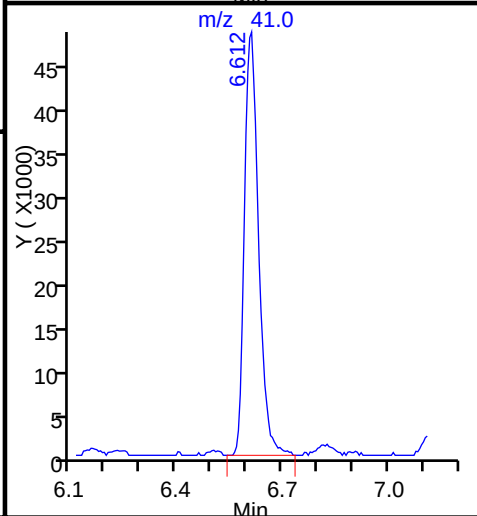
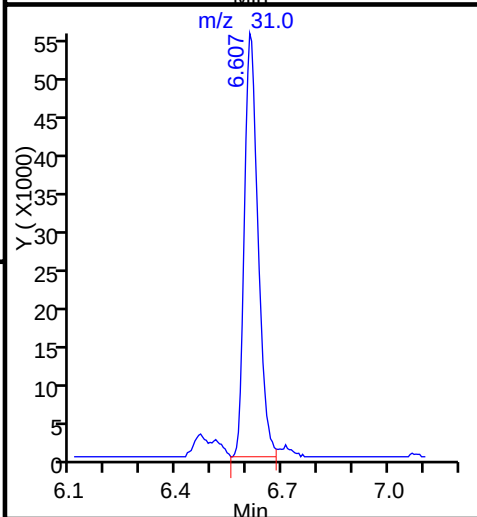
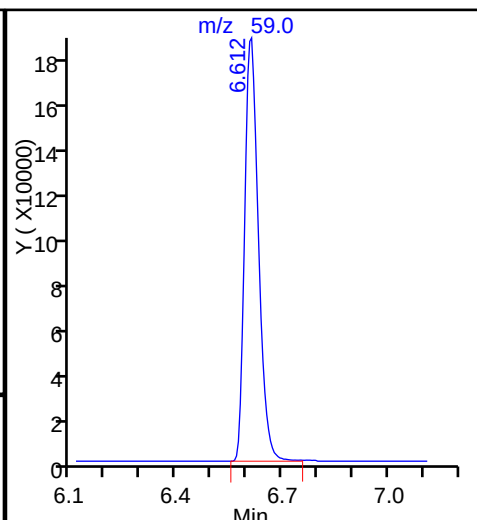
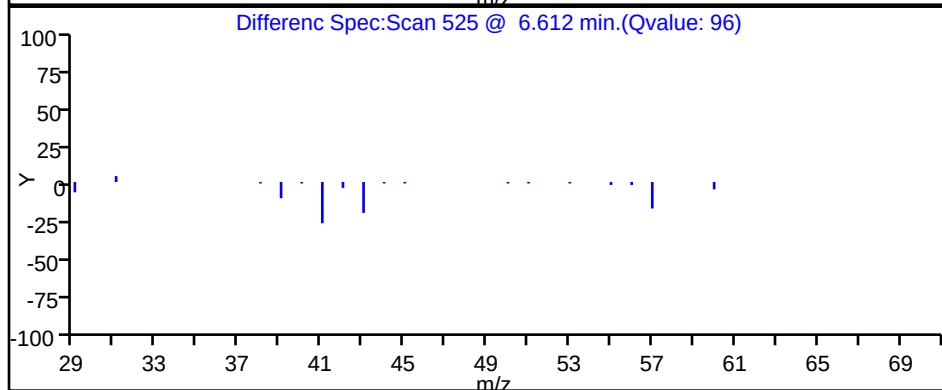
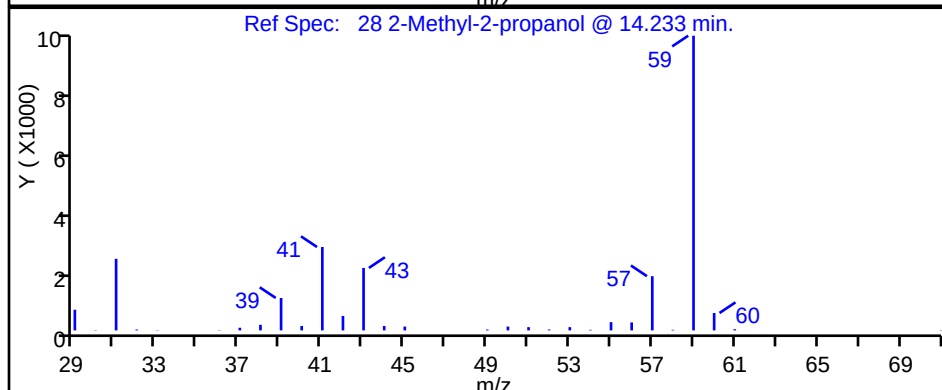
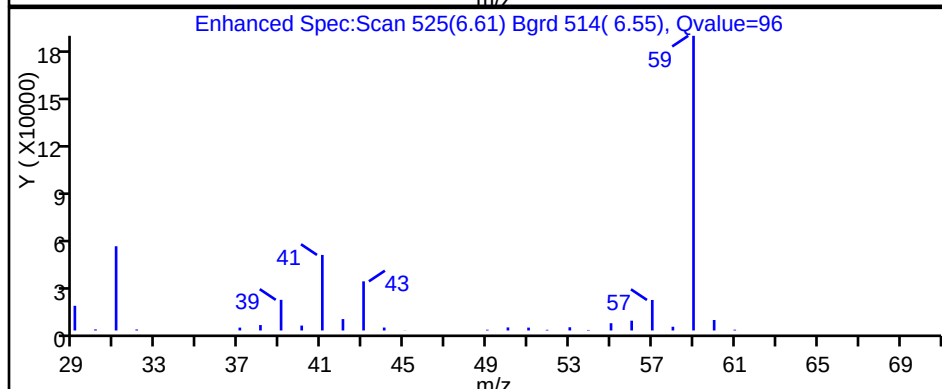
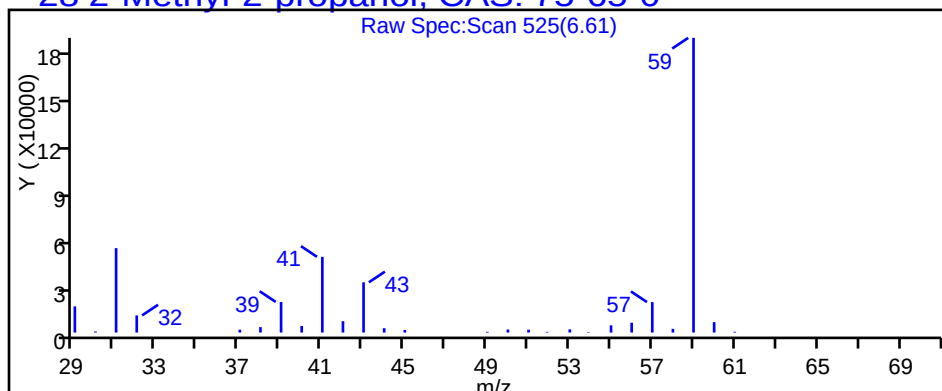
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

28 2-Methyl-2-propanol, CAS: 75-65-0

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P107.D

Injection Date: 31-Mar-2015 20:27:30

Instrument ID: MJ

Lims ID: 140-2950-A-1

Lab Sample ID: 140-2950-1

Client ID: H29-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 13

Purge Vol: 500.000 mL

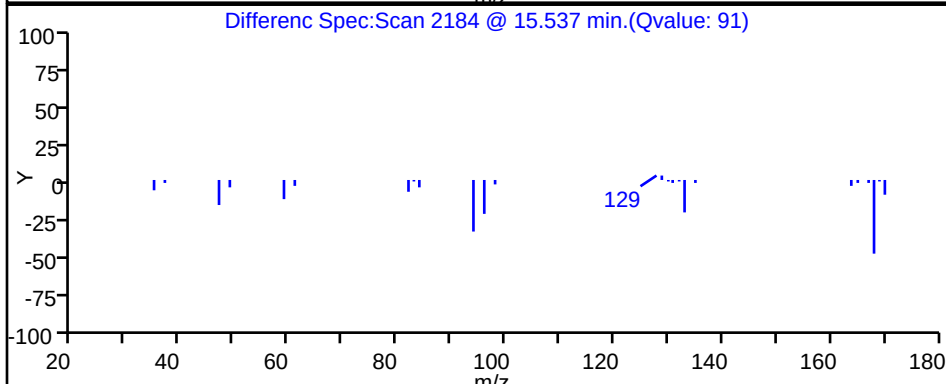
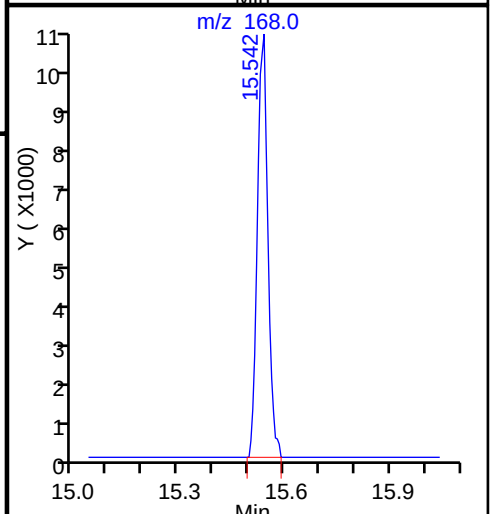
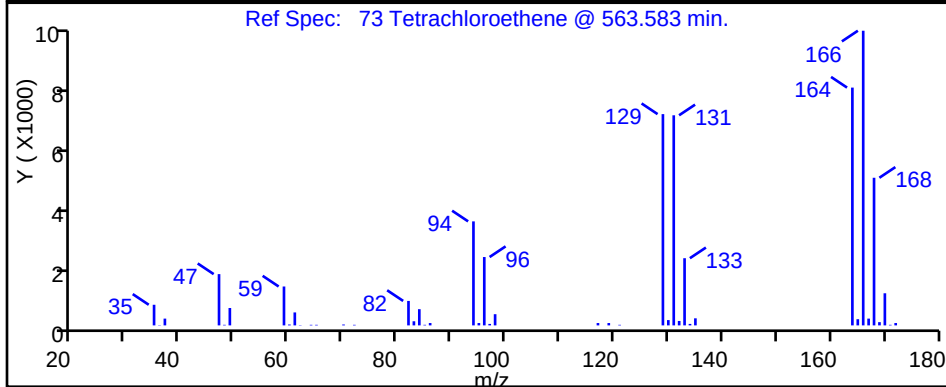
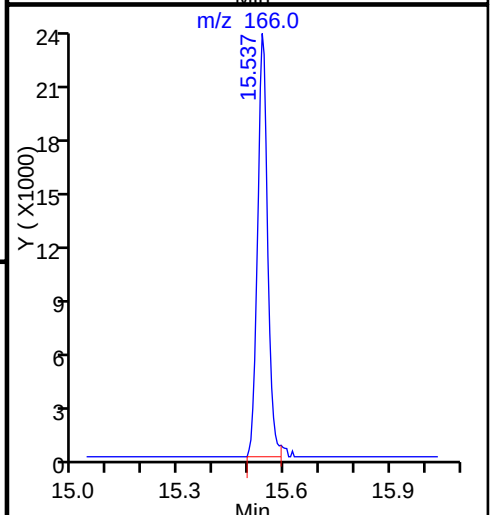
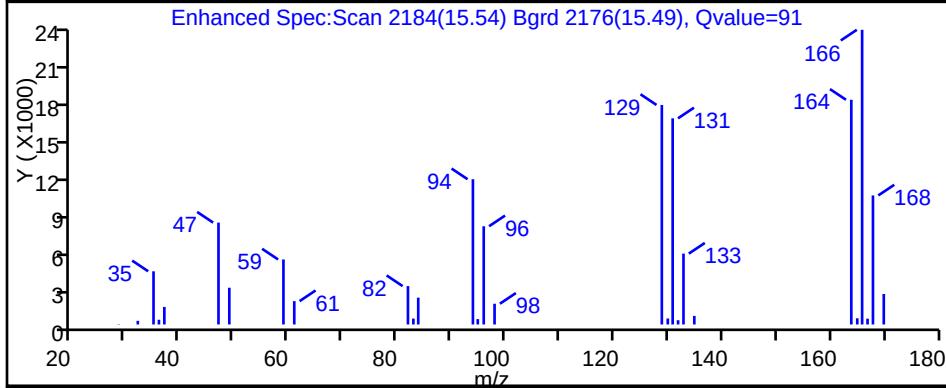
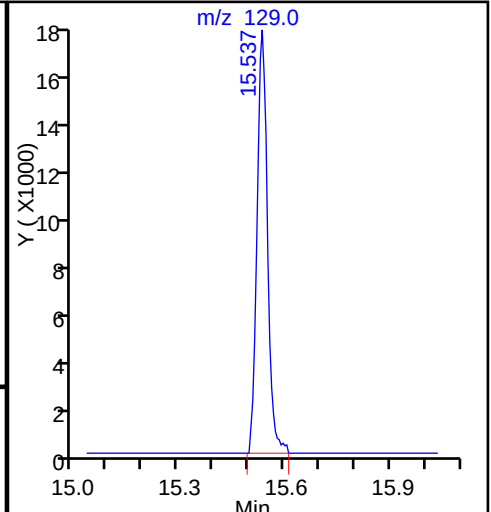
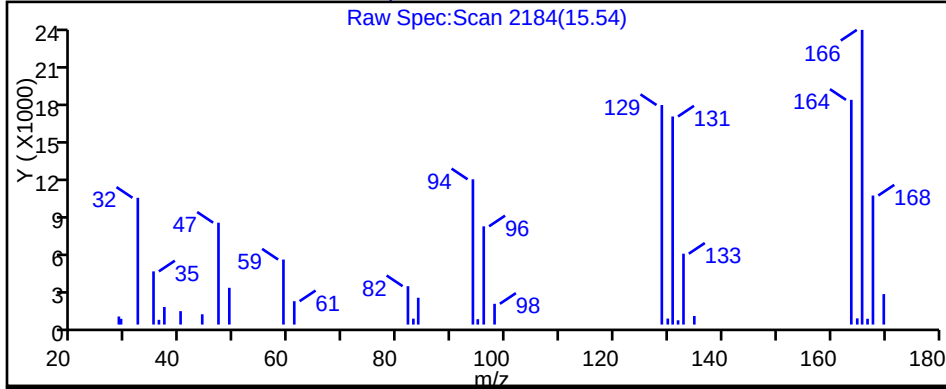
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

73 Tetrachloroethene, CAS: 127-18-4

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P107.D

Injection Date: 31-Mar-2015 20:27:30

Instrument ID: MJ

Lims ID: 140-2950-A-1

Lab Sample ID: 140-2950-1

Client ID: H29-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 13

Purge Vol: 500.000 mL

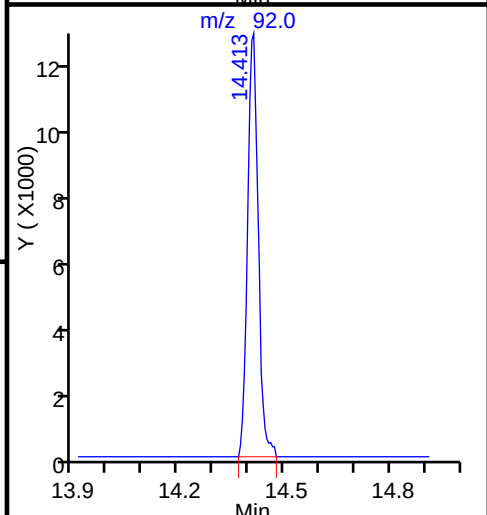
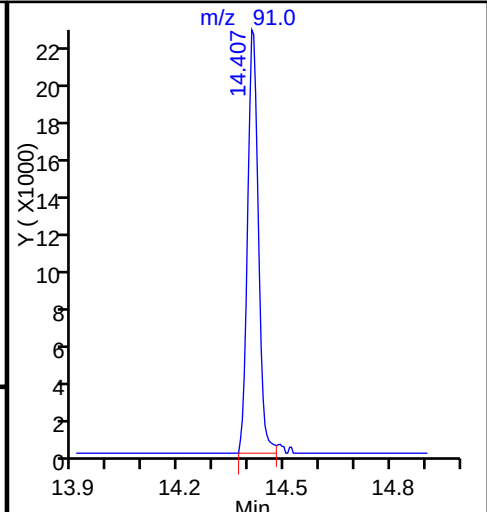
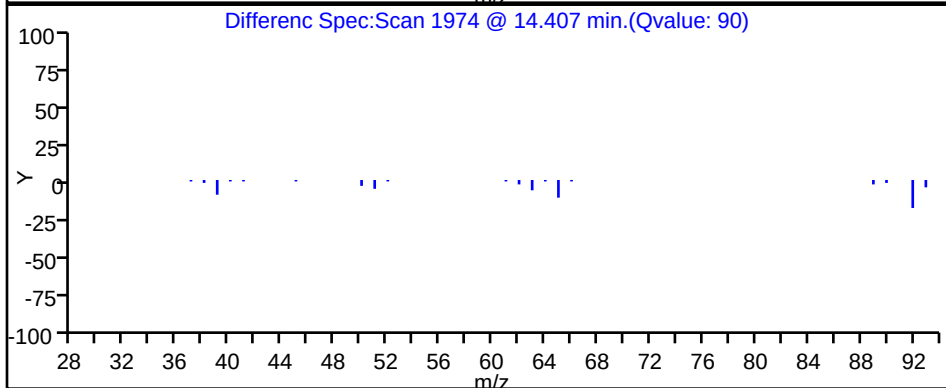
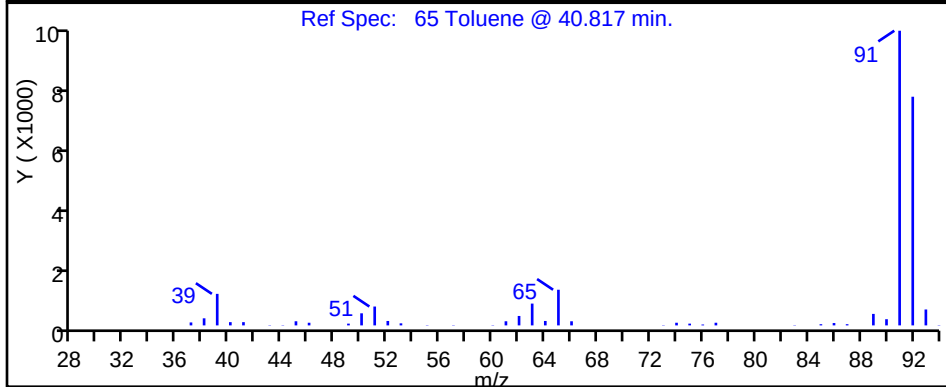
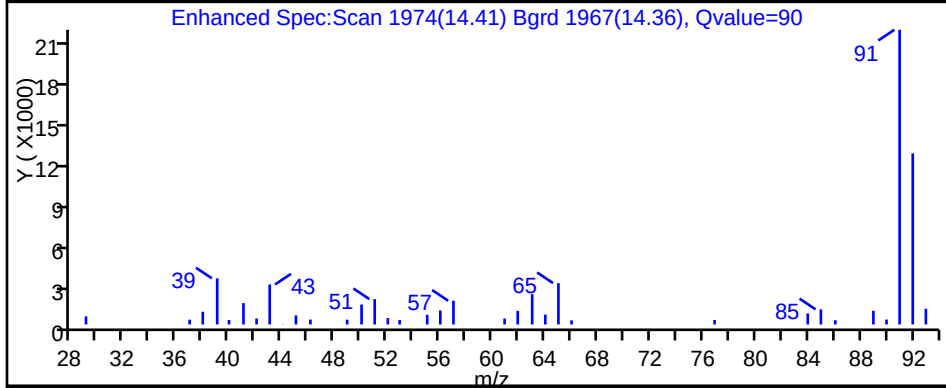
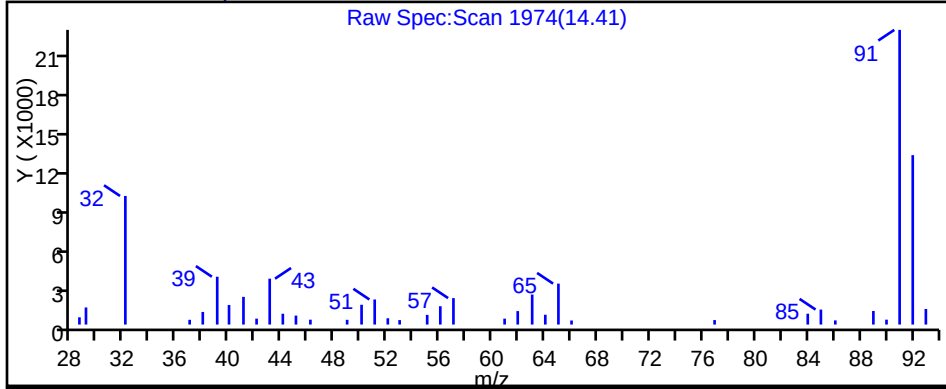
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P107.D

Injection Date: 31-Mar-2015 20:27:30

Instrument ID: MJ

Lims ID: 140-2950-A-1

Lab Sample ID: 140-2950-1

Client ID: H29-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 13

Purge Vol: 500.000 mL

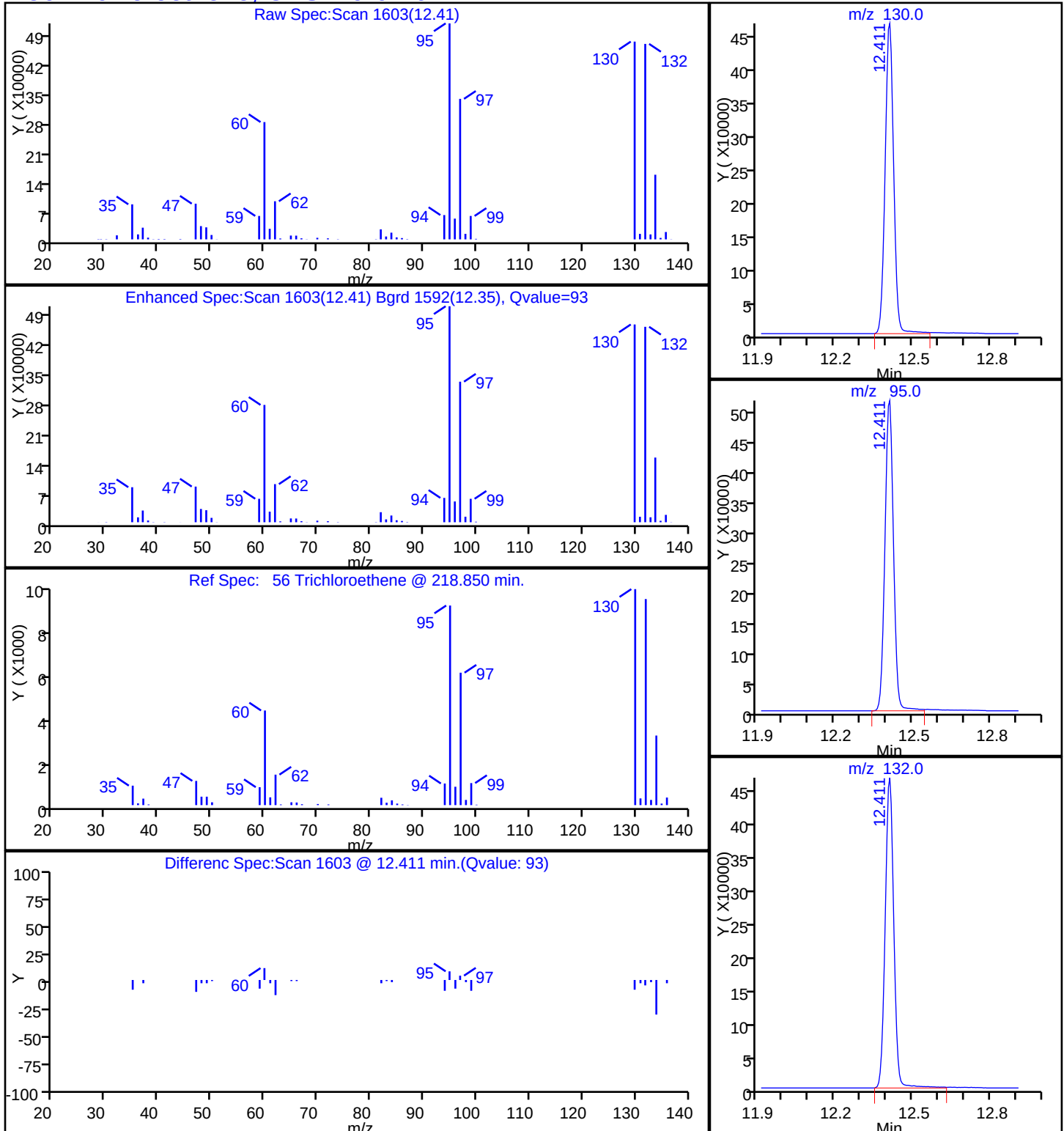
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

56 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P107.D

Injection Date: 31-Mar-2015 20:27:30

Instrument ID: MJ

Lims ID: 140-2950-A-1

Lab Sample ID: 140-2950-1

Client ID: H29-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 13

Purge Vol: 500.000 mL

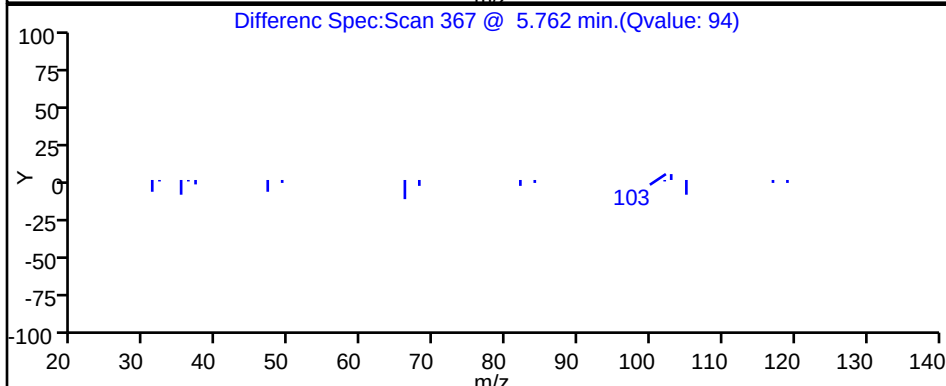
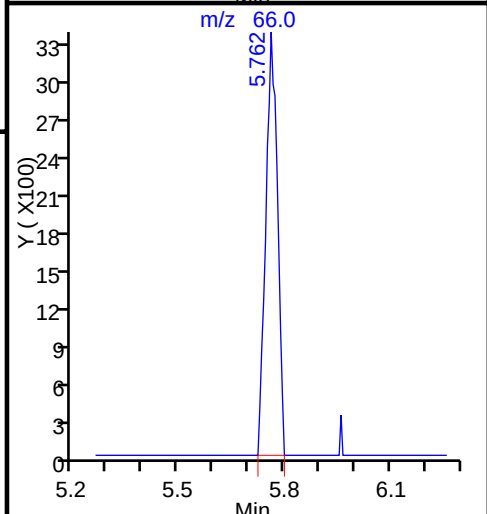
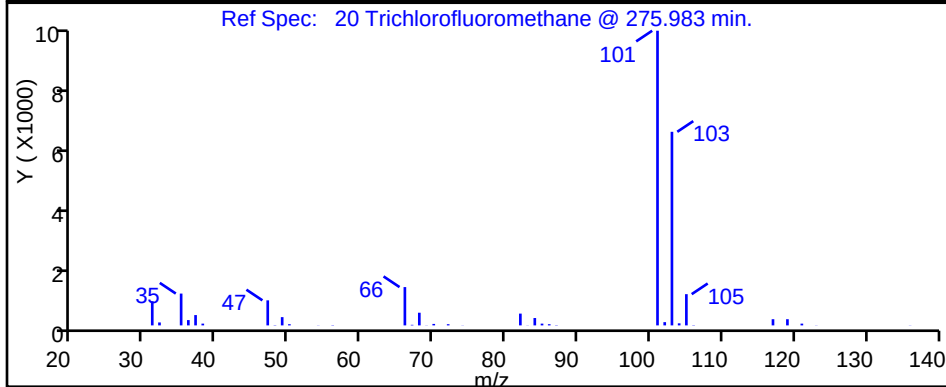
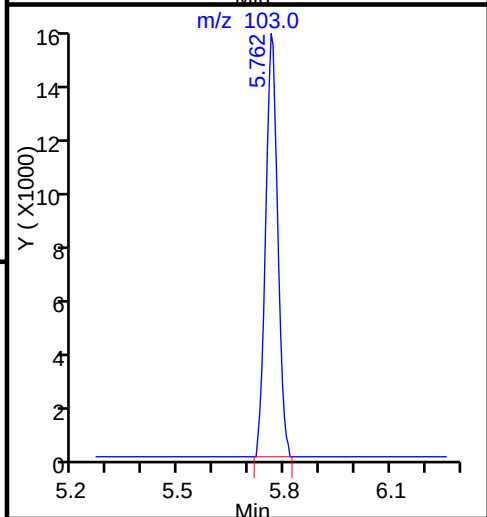
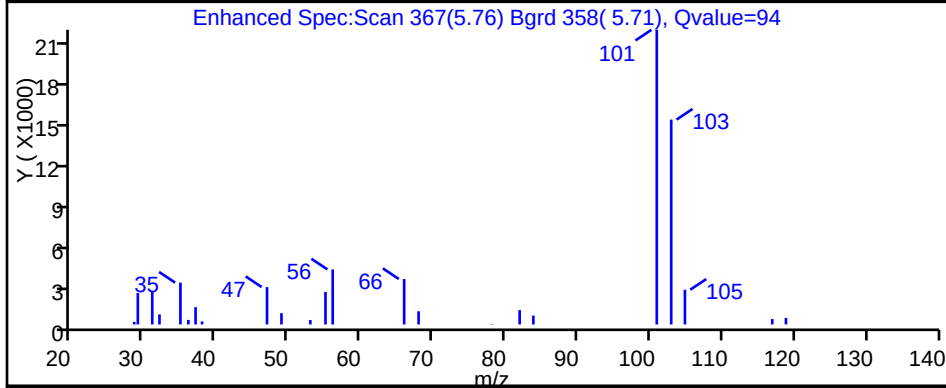
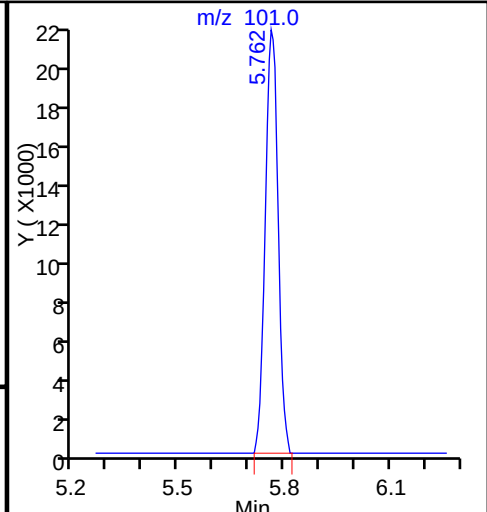
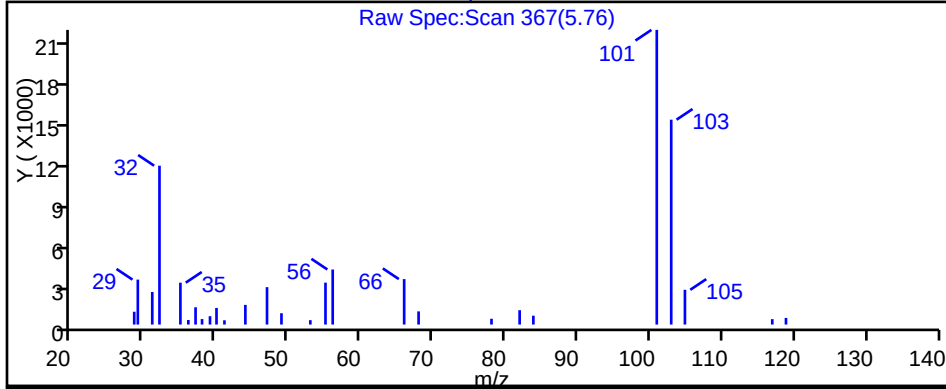
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1
SDG No.: _____
Client Sample ID: H29-SS-2015 DL Lab Sample ID: 140-2950-1 DL
Matrix: Air Lab File ID: JC31P107DL.D
Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:12
Sample wt/vol: 200 (mL) Date Analyzed: 04/01/2015 07:03
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.: 2576 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
67-66-3	Chloroform	119.38	19	D	0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1
SDG No.: _____
Client Sample ID: H29-SS-2015 DL Lab Sample ID: 140-2950-1 DL
Matrix: Air Lab File ID: JC31P107DL.D
Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:12
Sample wt/vol: 200 (mL) Date Analyzed: 04/01/2015 07:03
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.: 2576 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
67-66-3	Chloroform	119.38	94	D	0.98	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P107DL.D
 Lims ID: 140-2950-A-1 Lab Sample ID: 140-2950-1
 Client ID: H29-SS-2015
 Sample Type: Client
 Inject. Date: 01-Apr-2015 07:03:30 ALS Bottle#: 7 Worklist Smp#: 24
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2950-a-1
 Misc. Info.: J033115,TO15,,140-0001518-024
 Operator ID: 7126 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150330-1518.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 01-Apr-2015 09:18:38 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK018

First Level Reviewer: tajh

Date: 01-Apr-2015 08:42:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.570	9.577	-0.007	93	200878	4.00	
* 2 1,4-Difluorobenzene	114	11.706	11.718	-0.012	96	926227	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.354	16.360	-0.006	90	835458	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.968	17.969	-0.001	87	556541	4.07	
8 Dichlorodifluoromethane	85	4.110	4.117	-0.007	99	46601	0.2061	
17 Ethanol	31	5.240	5.246	-0.006	97	61927	2.22	
20 Trichlorofluoromethane	101	5.762	5.779	-0.017	99	22175	0.1120	
28 2-Methyl-2-propanol	59	6.622	6.640	-0.018	96	255670	2.16	
30 1,1,2-Trichloro-1,2,2-trif	101	6.719	6.726	-0.007	93	3887	0.0292	
31 Methylene Chloride	84	6.908	6.919	-0.011	95	4914	0.0763	
39 2-Butanone (MEK)	72	8.774	8.781	-0.007	97	13385	0.5596	
40 Hexane	56	8.796	8.802	-0.006	71	3046	0.0455	
43 Chloroform	83	9.576	9.587	-0.011	97	979202	7.72	
45 1,1,1-Trichloroethane	97	10.619	10.626	-0.007	97	91602	0.6890	
46 1,2-Dichloroethane	62	10.614	10.733	-0.119	40	6159	0.0798	
48 Benzene	78	11.200	11.207	-0.007	96	8072	0.0472	
50 Carbon tetrachloride	117	11.222	11.228	-0.006	97	52465	0.4155	
55 1,2-Dichloropropane	63	12.400	12.385	0.015	41	1660	0.0272	
56 Trichloroethene	130	12.405	12.417	-0.012	94	418978	5.62	
59 Dichlorobromomethane	83	12.626	12.643	-0.017	84	3704	0.0302	
62 4-Methyl-2-pentanone (MIBK	43	13.546	13.541	0.005	95	8600	0.0611	
65 Toluene	91	14.412	14.413	-0.001	92	14817	0.0972	
73 Tetrachloroethene	129	15.536	15.537	-0.001	93	12601	0.1899	
76 Ethylbenzene	91	16.833	16.683	0.150	51	7741	0.0434	
78 m-Xylene & p-Xylene	91	16.833	16.839	-0.006	46	7741	0.0539	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P107DL.D

Injection Date: 01-Apr-2015 07:03:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: 140-2950-A-1

Lab Sample ID: 140-2950-1

Worklist Smp#: 24

Client ID: H29-SS-2015

Purge Vol: 500.000 mL

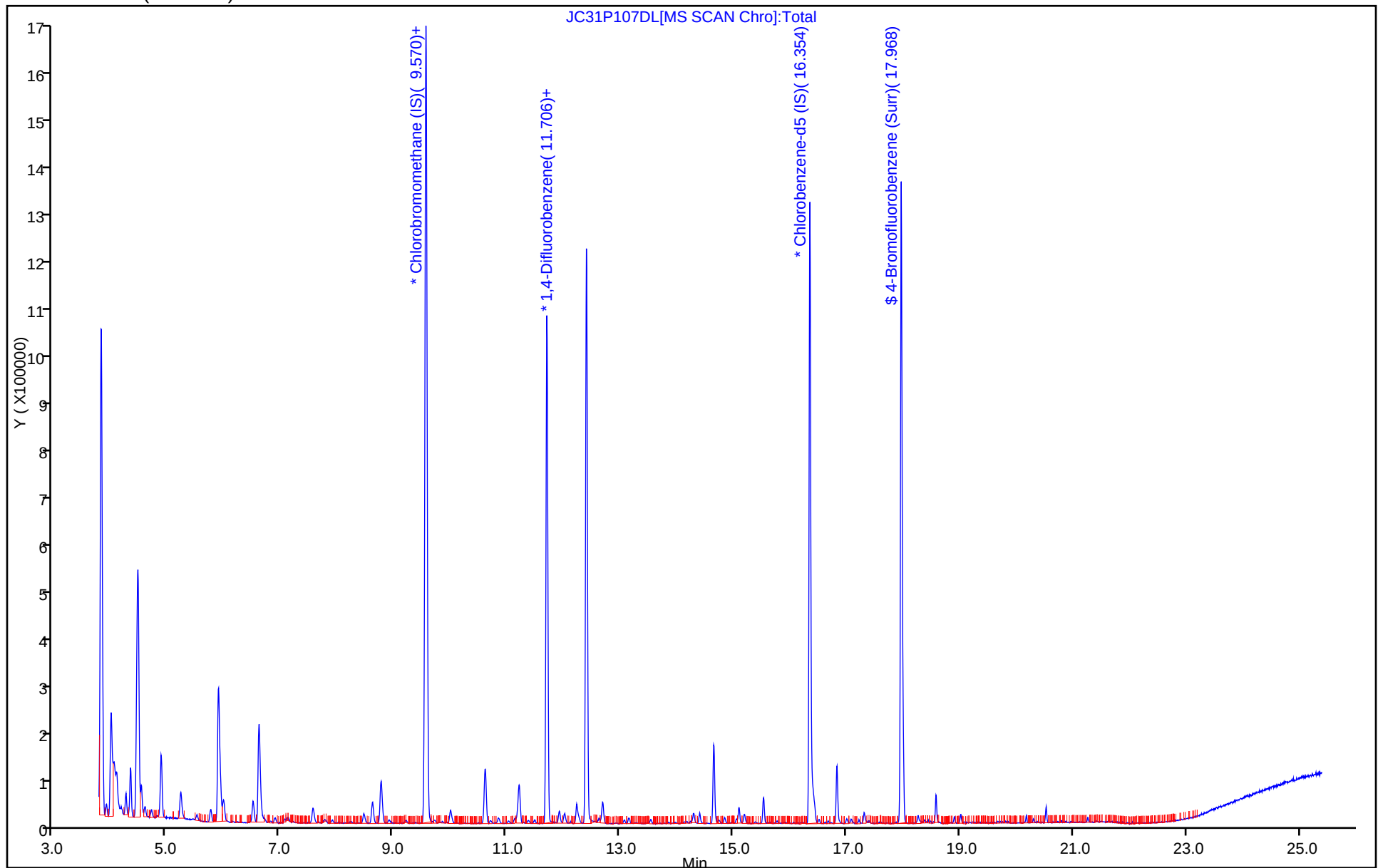
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P107DL.D

Injection Date: 01-Apr-2015 07:03:30

Instrument ID: MJ

Lims ID: 140-2950-A-1

Lab Sample ID: 140-2950-1

Client ID: H29-SS-2015

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 24

Purge Vol: 500.000 mL

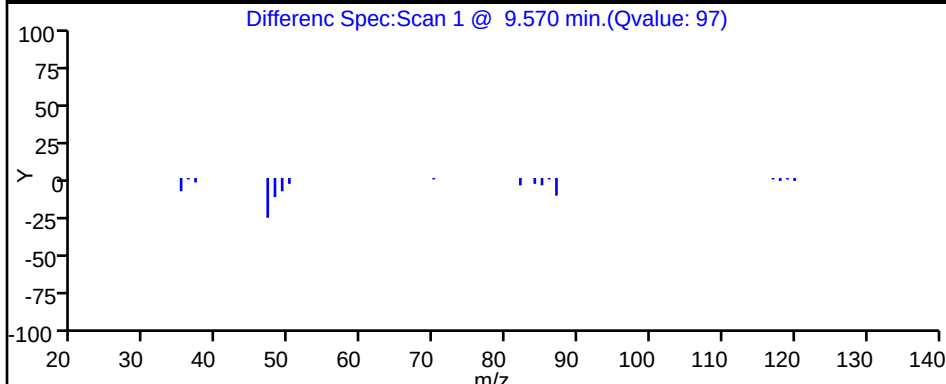
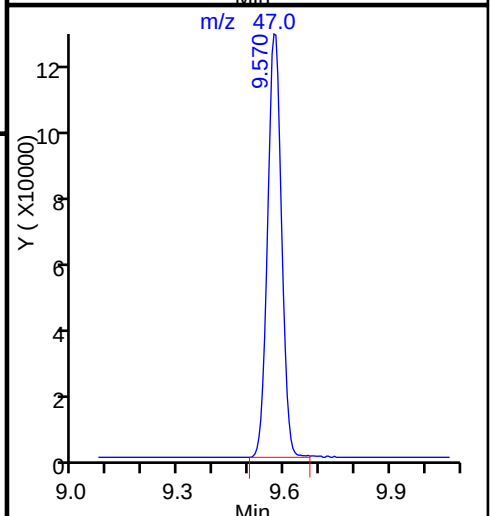
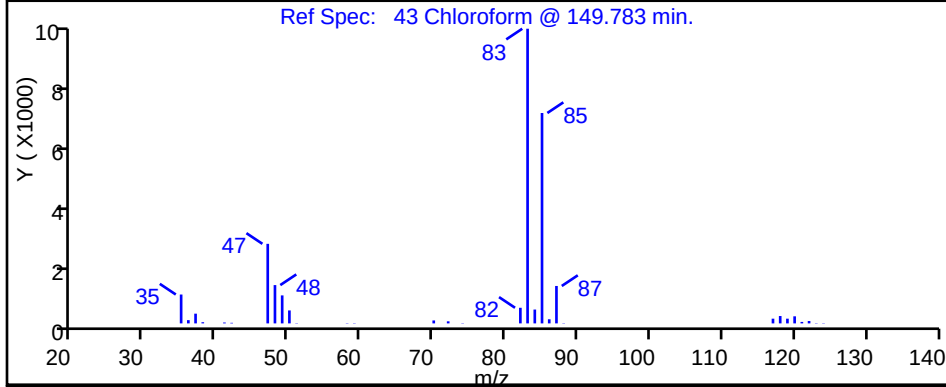
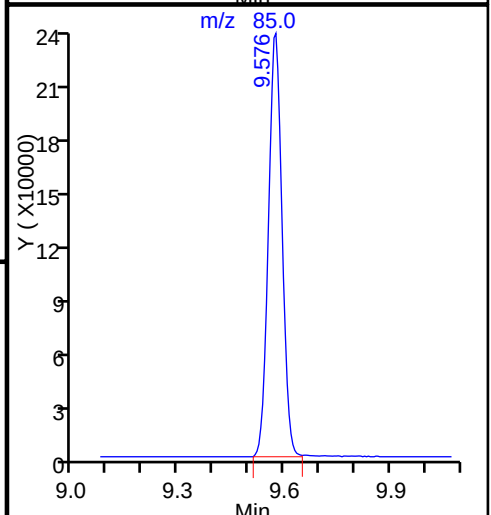
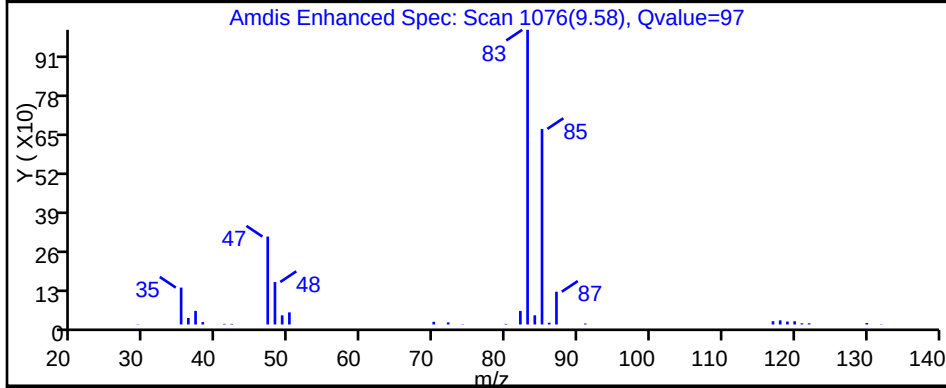
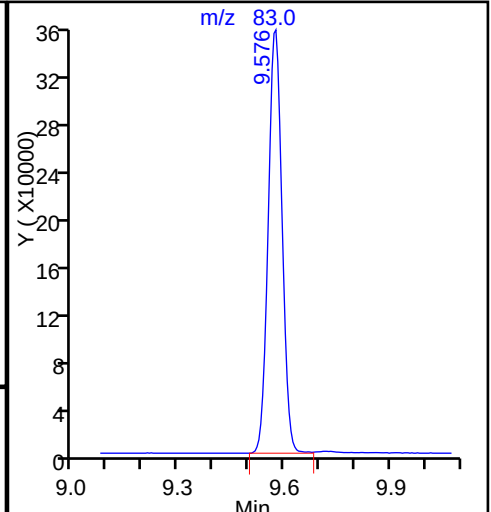
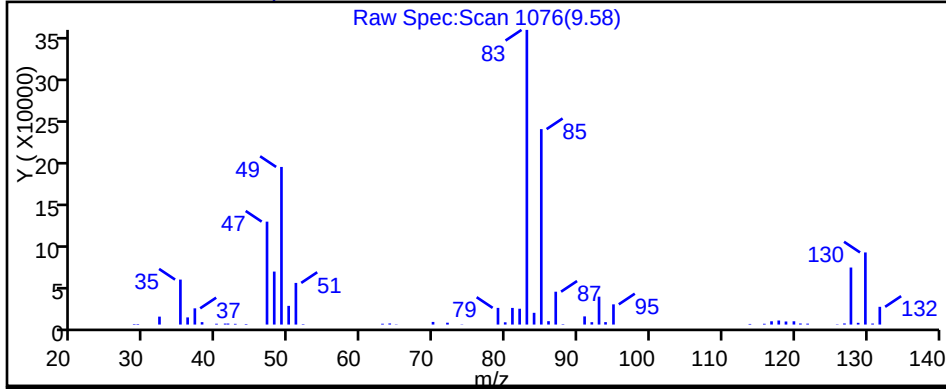
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

43 Chloroform, CAS: 67-66-3

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

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1

SDG No.: _____

Client Sample ID: H29-BA-2015 Lab Sample ID: 140-2950-2

Matrix: Air Lab File ID: JC31P108.D

Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:12

Sample wt/vol: 500 (mL) Date Analyzed: 03/31/2015 21:22

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.: 2576 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		0.080	
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	3.2		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	0.35		0.20	
71-43-2	Benzene	78.11	0.16		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	0.078		0.040	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	0.12		0.080	
74-87-3	Chloromethane	50.49	0.47		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Client Sample ID: H29-BA-2015 Lab Sample ID: 140-2950-2
 Matrix: Air Lab File ID: JC31P108.D
 Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:12
 Sample wt/vol: 500(mL) Date Analyzed: 03/31/2015 21:22
 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.: 2576 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	0.42		0.080	
64-17-5	Ethanol	46.07	4.7		0.80	
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	0.50		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	0.074		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.19		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

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: TestAmerica Knoxville Job No.: 140-2950-1

SDG No.: _____

Client Sample ID: H29-BA-2015 Lab Sample ID: 140-2950-2

Matrix: Air Lab File ID: JC31P108.D

Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:12

Sample wt/vol: 500 (mL) Date Analyzed: 03/31/2015 21:22

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.: 2576 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		0.32	
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	9.5		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.4		0.82	
71-43-2	Benzene	78.11	0.52		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	0.49		0.25	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	0.56		0.39	
74-87-3	Chloromethane	50.49	0.98		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Client Sample ID: H29-BA-2015 Lab Sample ID: 140-2950-2
 Matrix: Air Lab File ID: JC31P108.D
 Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:12
 Sample wt/vol: 500 (mL) Date Analyzed: 03/31/2015 21:22
 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.: 2576 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	2.1		0.40	
64-17-5	Ethanol	46.07	8.8		1.5	
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	1.9		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	0.40		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.1		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

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

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P108.D
 Lims ID: 140-2950-A-2 Lab Sample ID: 140-2950-2
 Client ID: H29-BA-2015
 Sample Type: Client
 Inject. Date: 31-Mar-2015 21:22:30 ALS Bottle#: 8 Worklist Smp#: 14
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2950-a-2
 Misc. Info.: J033115,TO15,,140-0001518-014
 Operator ID: 7126 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150330-1518.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 01-Apr-2015 09:18:38 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK018

First Level Reviewer: tajh

Date: 01-Apr-2015 06:51:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.573	9.577	-0.004	96	220985	4.00	
* 2 1,4-Difluorobenzene	114	11.709	11.718	-0.009	97	1059225	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.356	16.360	-0.004	90	894227	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.970	17.969	0.001	87	554119	3.79	
8 Dichlorodifluoromethane	85	4.102	4.117	-0.015	100	104364	0.4195	
9 Chloromethane	52	4.312	4.326	-0.014	99	16781	0.4743	
17 Ethanol	31	5.226	5.246	-0.020	97	144330	4.70	
20 Trichlorofluoromethane	101	5.764	5.779	-0.015	99	41683	0.1913	
28 2-Methyl-2-propanol	59	6.630	6.640	-0.010	92	7102	0.0544	
30 1,1,2-Trichloro-1,2,2-trif	101	6.716	6.726	-0.010	83	9609	0.0655	
31 Methylene Chloride	84	6.910	6.919	-0.009	96	10864	0.1533	
39 2-Butanone (MEK)	72	8.766	8.781	-0.015	99	84368	3.21	
40 Hexane	56	8.782	8.802	-0.020	69	4727	0.0642	
43 Chloroform	83	9.578	9.587	-0.009	30	16093	0.1154	
45 1,1,1-Trichloroethane	97	10.617	10.626	-0.009	79	2722	0.0186	
48 Benzene	78	11.198	11.207	-0.009	98	32150	0.1643	
50 Carbon tetrachloride	117	11.224	11.228	-0.004	97	11309	0.0783	
53 Isooctane	57	11.913	11.922	-0.009	29	7246	0.0186	
56 Trichloroethene	130	12.403	12.417	-0.015	93	6340	0.0744	
62 4-Methyl-2-pentanone (MIBK	43	13.538	13.541	-0.003	98	56091	0.3485	
65 Toluene	91	14.409	14.413	-0.004	93	80955	0.4962	
78 m-Xylene & p-Xylene	91	16.835	16.839	-0.004	97	10194	0.0663	
82 o-Xylene	91	17.357	17.366	-0.009	95	4339	0.0259	
93 1,2,4-Trimethylbenzene	105	19.073	19.077	-0.004	97	8541	0.0473	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P108.D

Injection Date: 31-Mar-2015 21:22:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: 140-2950-A-2

Lab Sample ID: 140-2950-2

Worklist Smp#: 14

Client ID: H29-BA-2015

Purge Vol: 500.000 mL

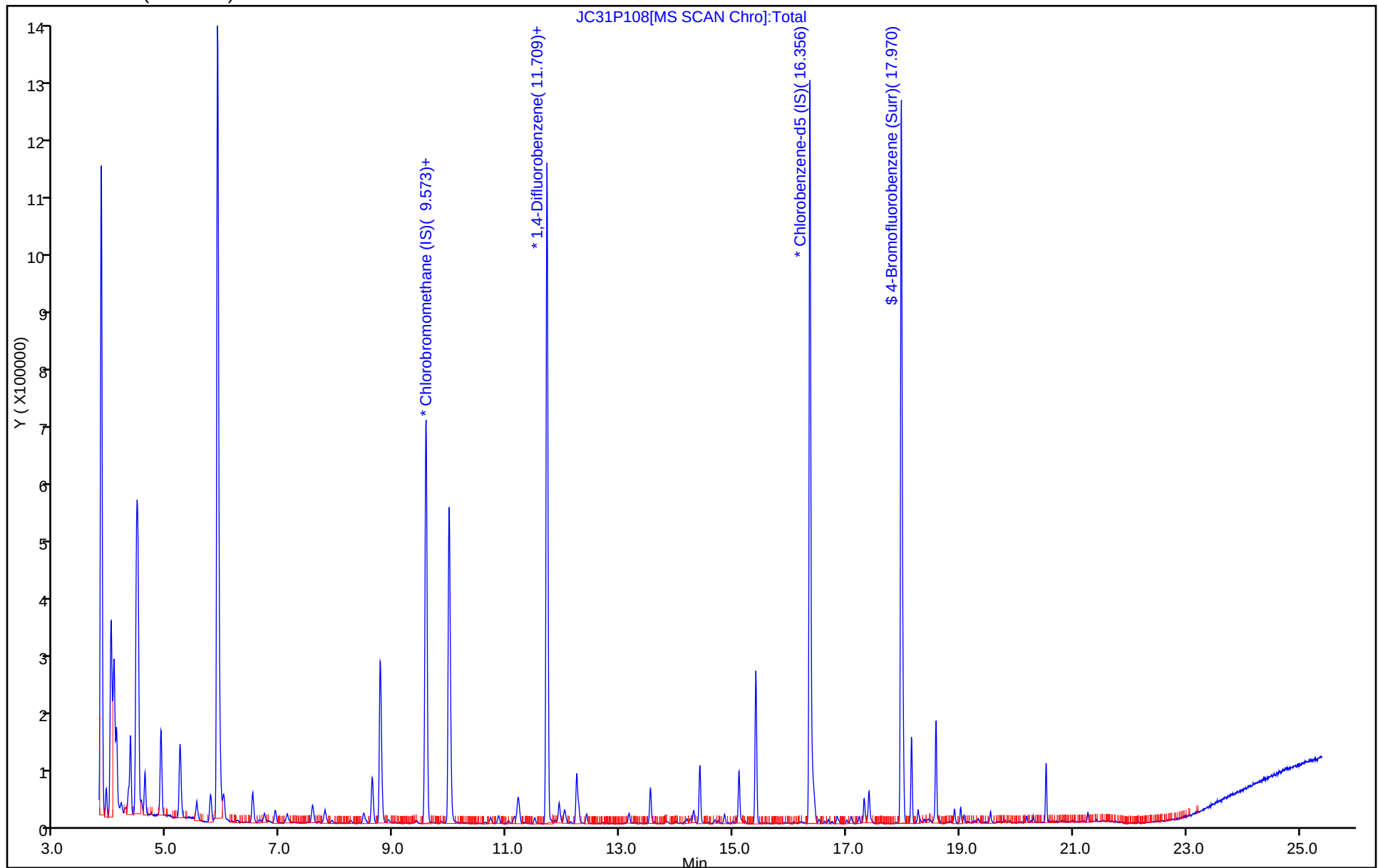
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P108.D

Injection Date: 31-Mar-2015 21:22:30

Instrument ID: MJ

Lims ID: 140-2950-A-2

Lab Sample ID: 140-2950-2

Client ID: H29-BA-2015

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 14

Purge Vol: 500.000 mL

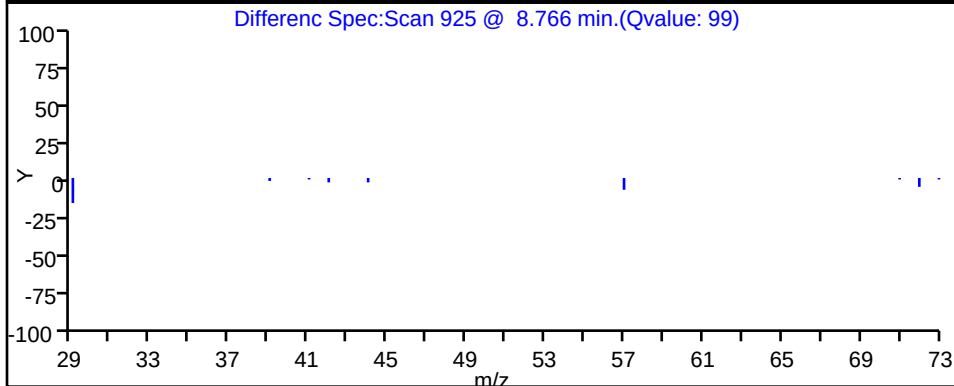
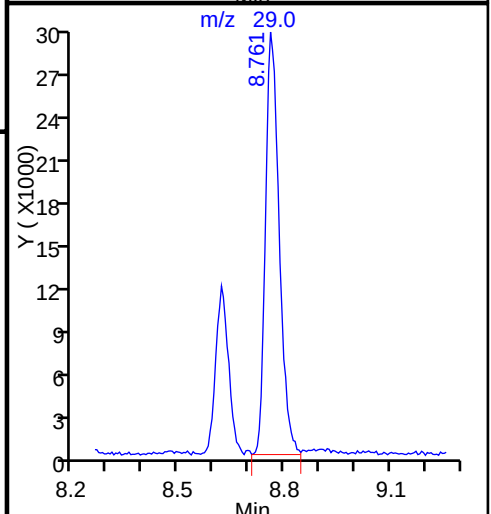
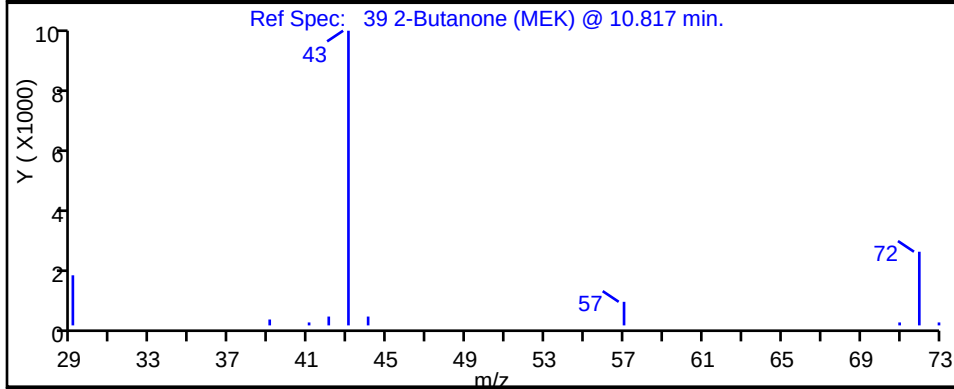
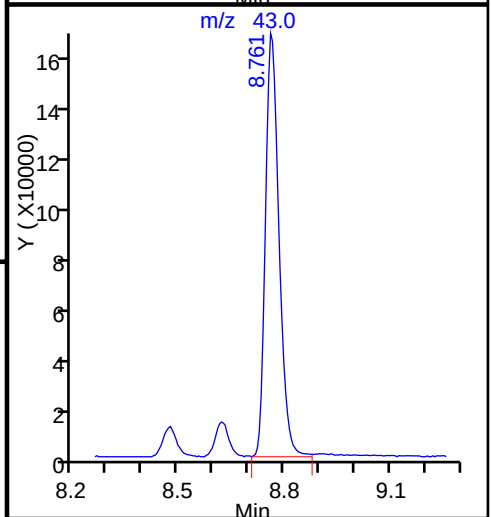
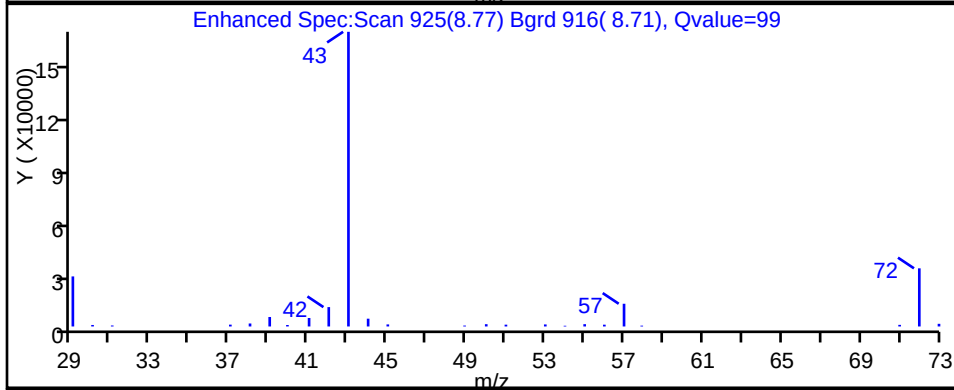
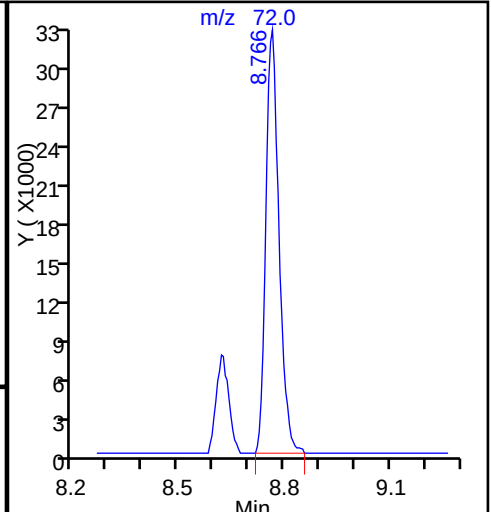
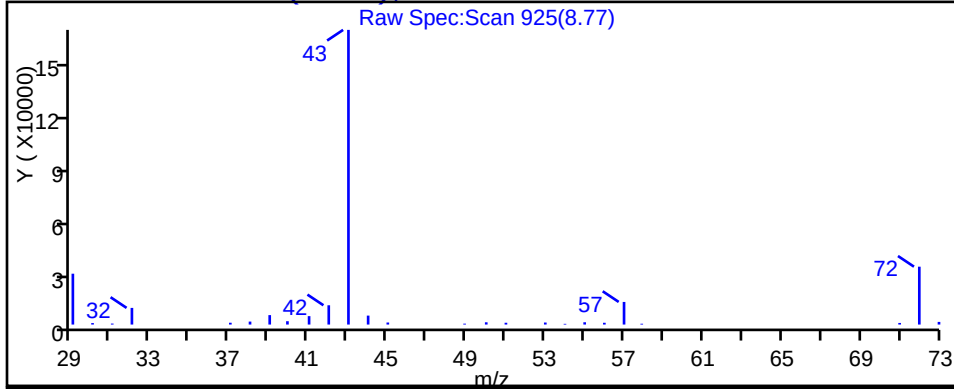
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P108.D

Injection Date: 31-Mar-2015 21:22:30

Instrument ID: MJ

Lims ID: 140-2950-A-2

Lab Sample ID: 140-2950-2

Client ID: H29-BA-2015

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 14

Purge Vol: 500.000 mL

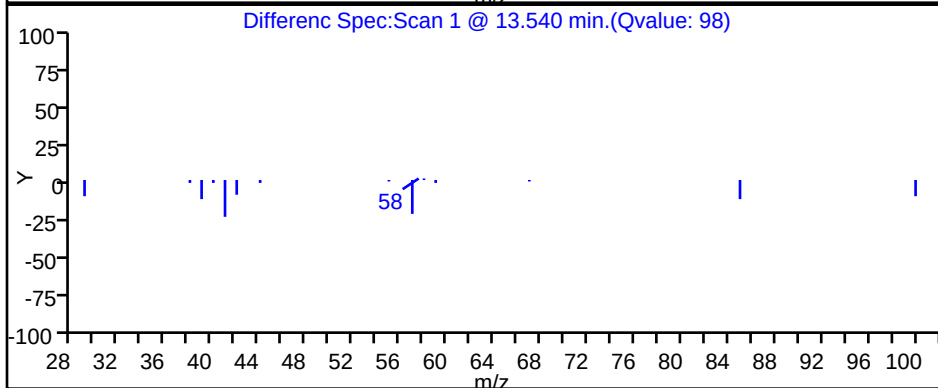
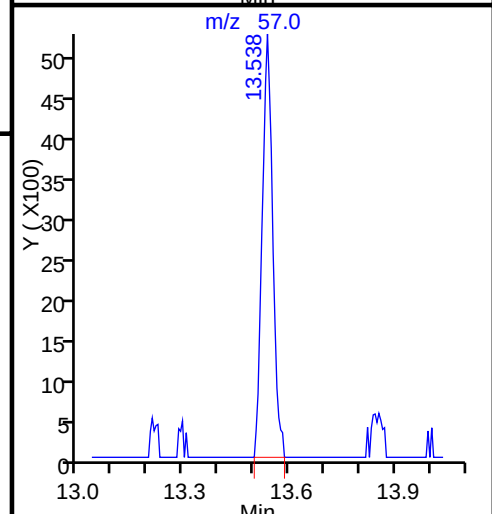
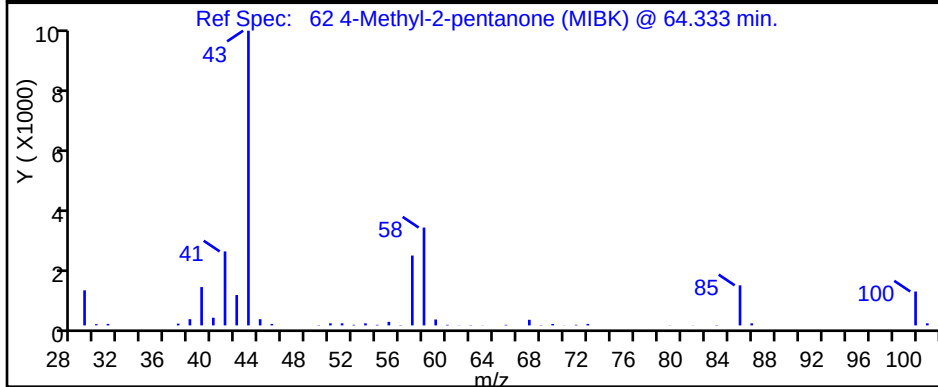
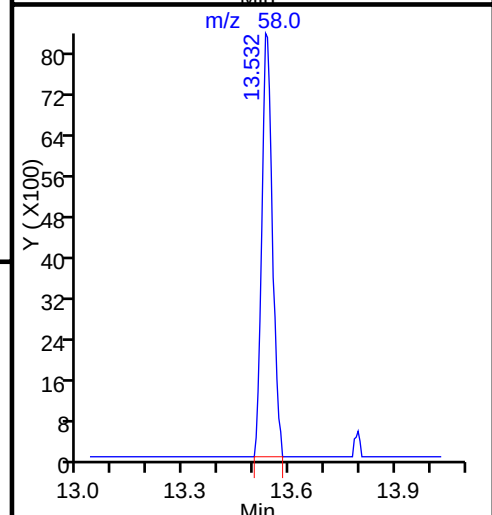
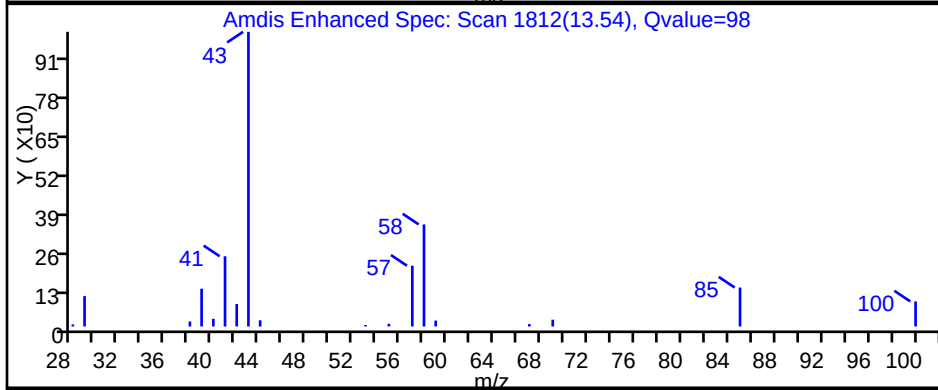
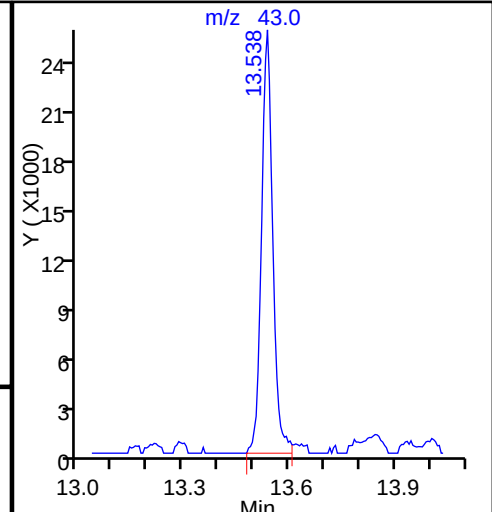
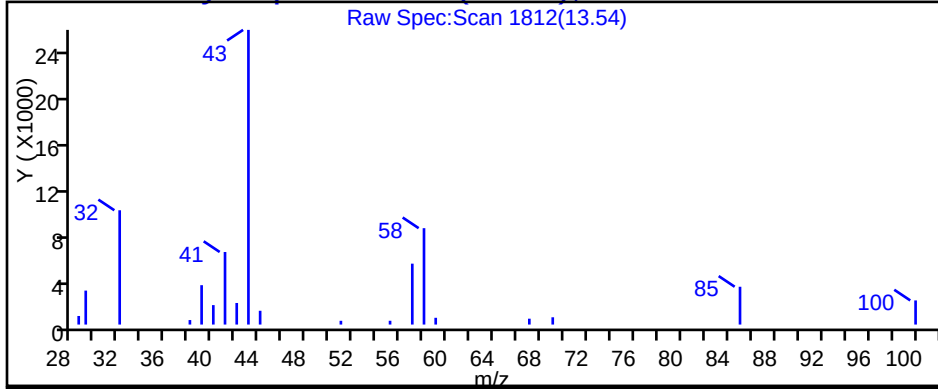
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

62 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P108.D

Injection Date: 31-Mar-2015 21:22:30

Instrument ID: MJ

Lims ID: 140-2950-A-2

Lab Sample ID: 140-2950-2

Client ID: H29-BA-2015

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 14

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

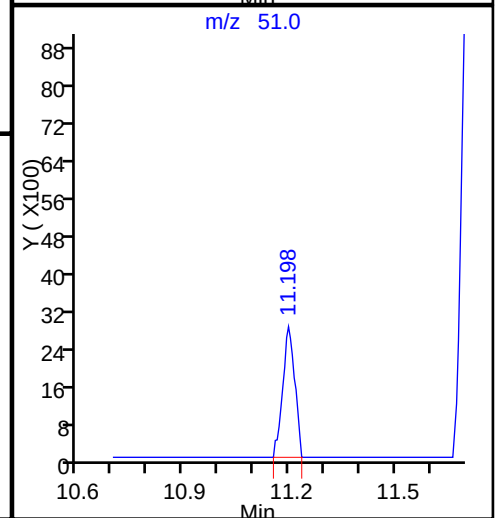
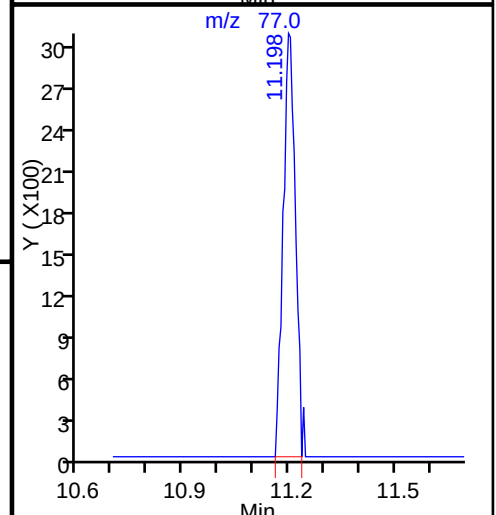
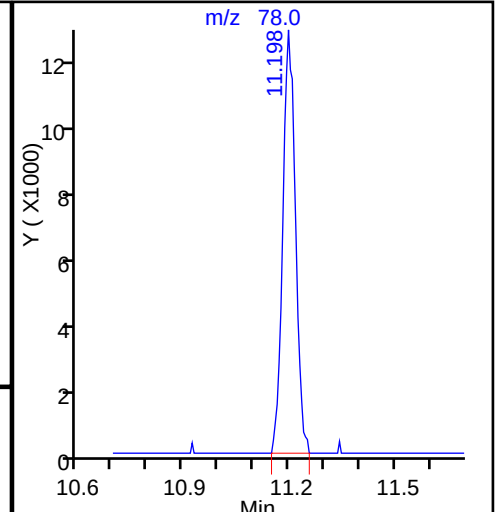
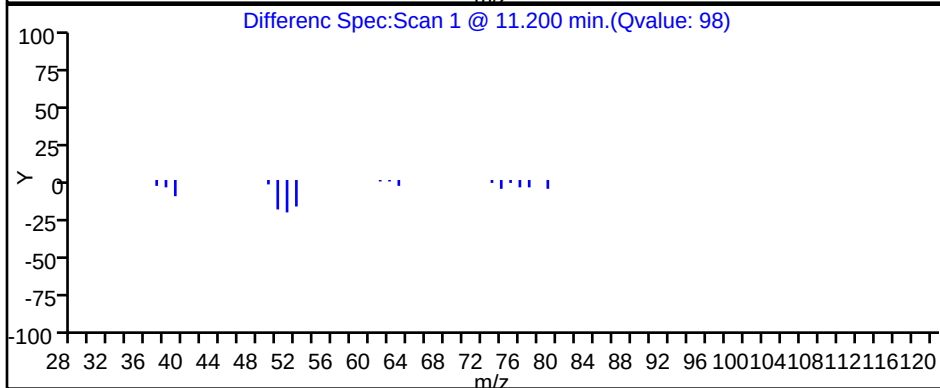
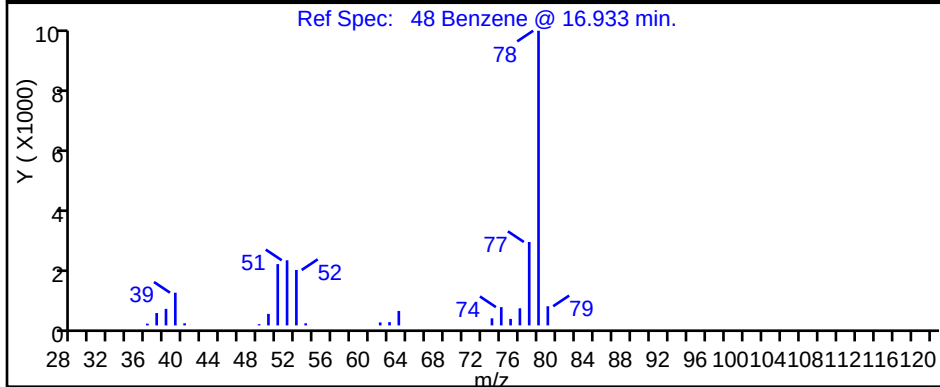
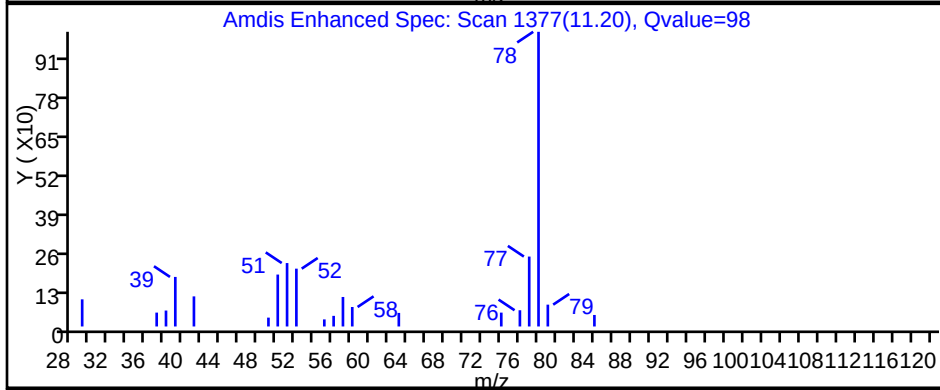
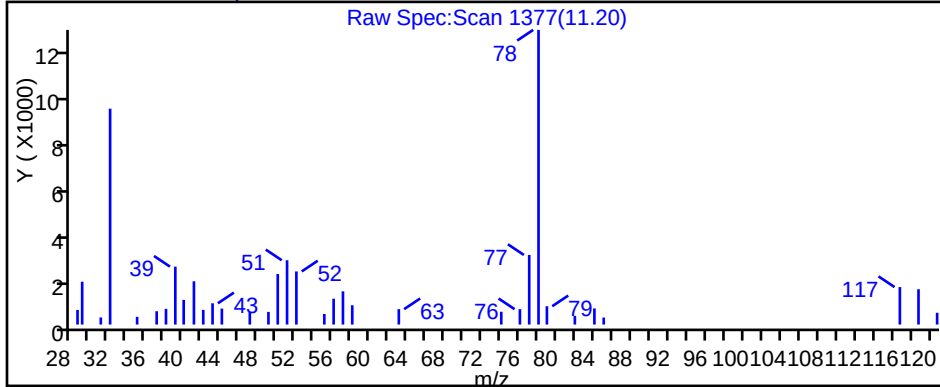
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P108.D

Injection Date: 31-Mar-2015 21:22:30

Instrument ID: MJ

Lims ID: 140-2950-A-2

Lab Sample ID: 140-2950-2

Client ID: H29-BA-2015

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 14

Purge Vol: 500.000 mL

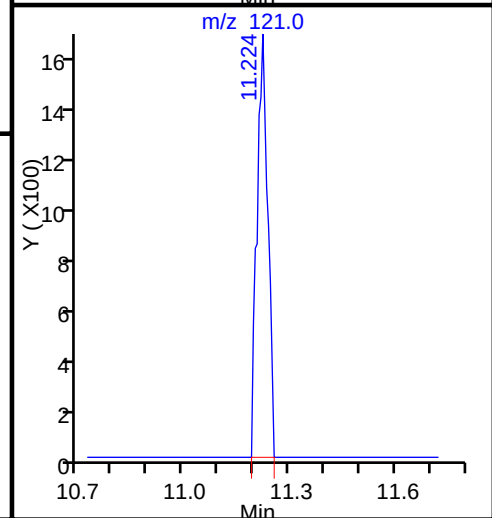
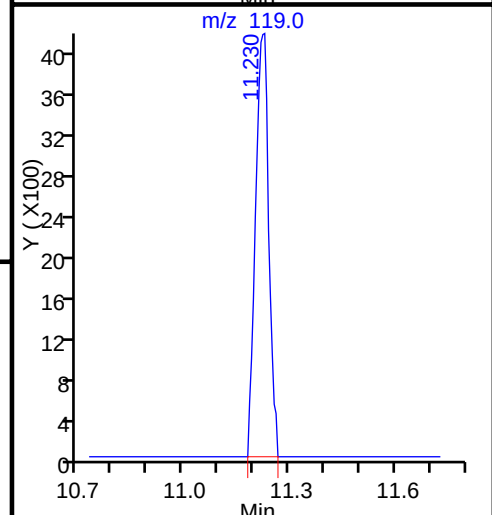
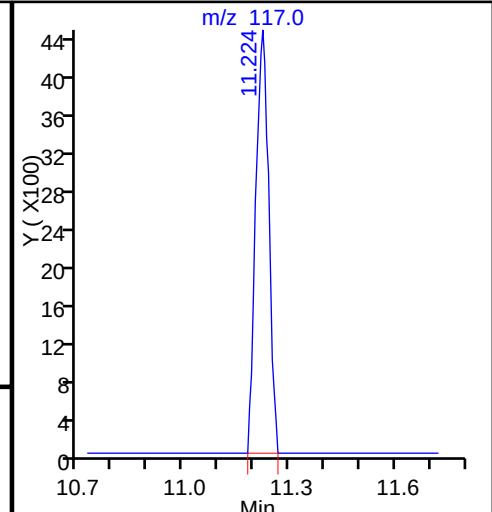
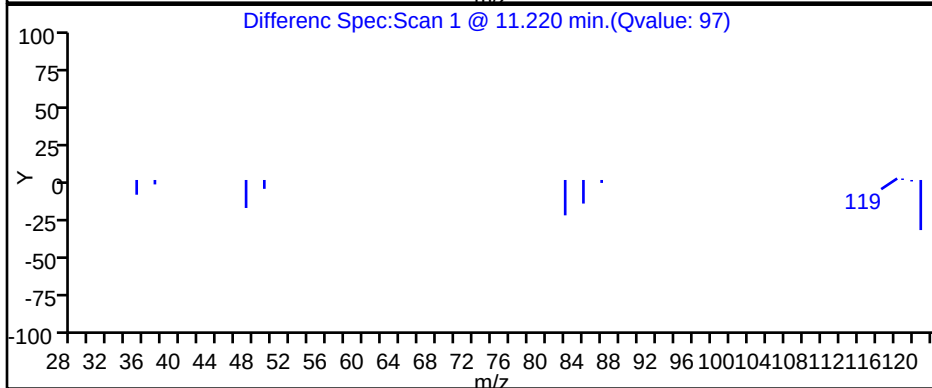
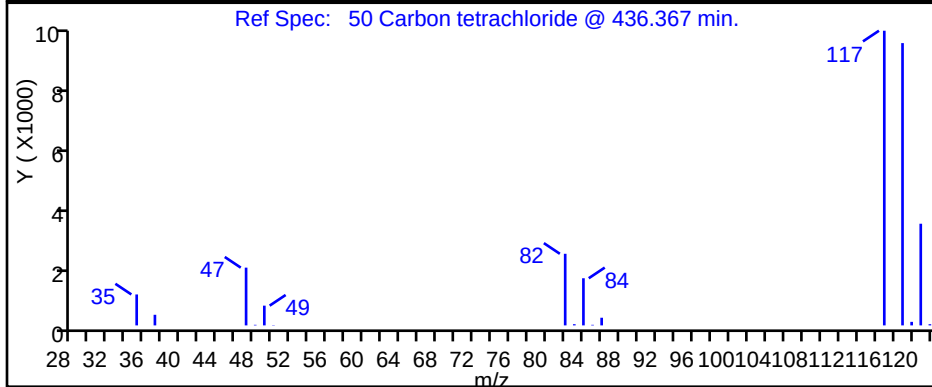
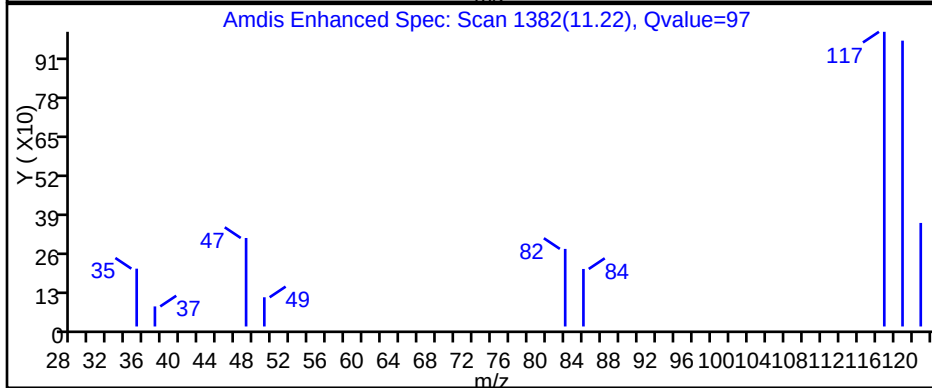
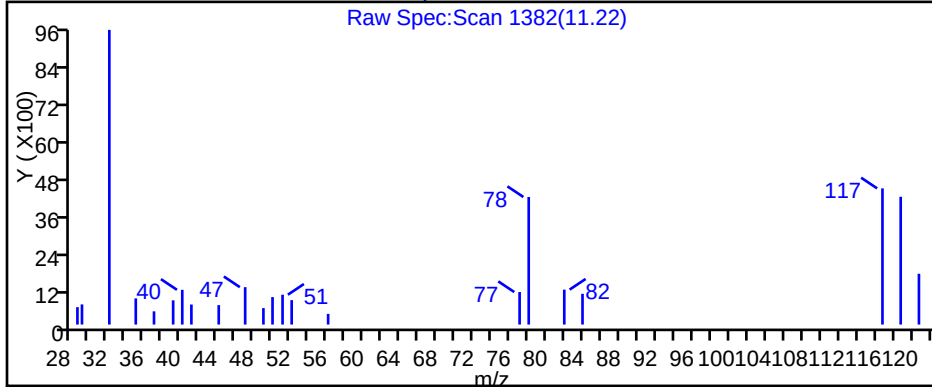
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P108.D

Injection Date: 31-Mar-2015 21:22:30

Instrument ID: MJ

Lims ID: 140-2950-A-2

Lab Sample ID: 140-2950-2

Client ID: H29-BA-2015

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 14

Purge Vol: 500.000 mL

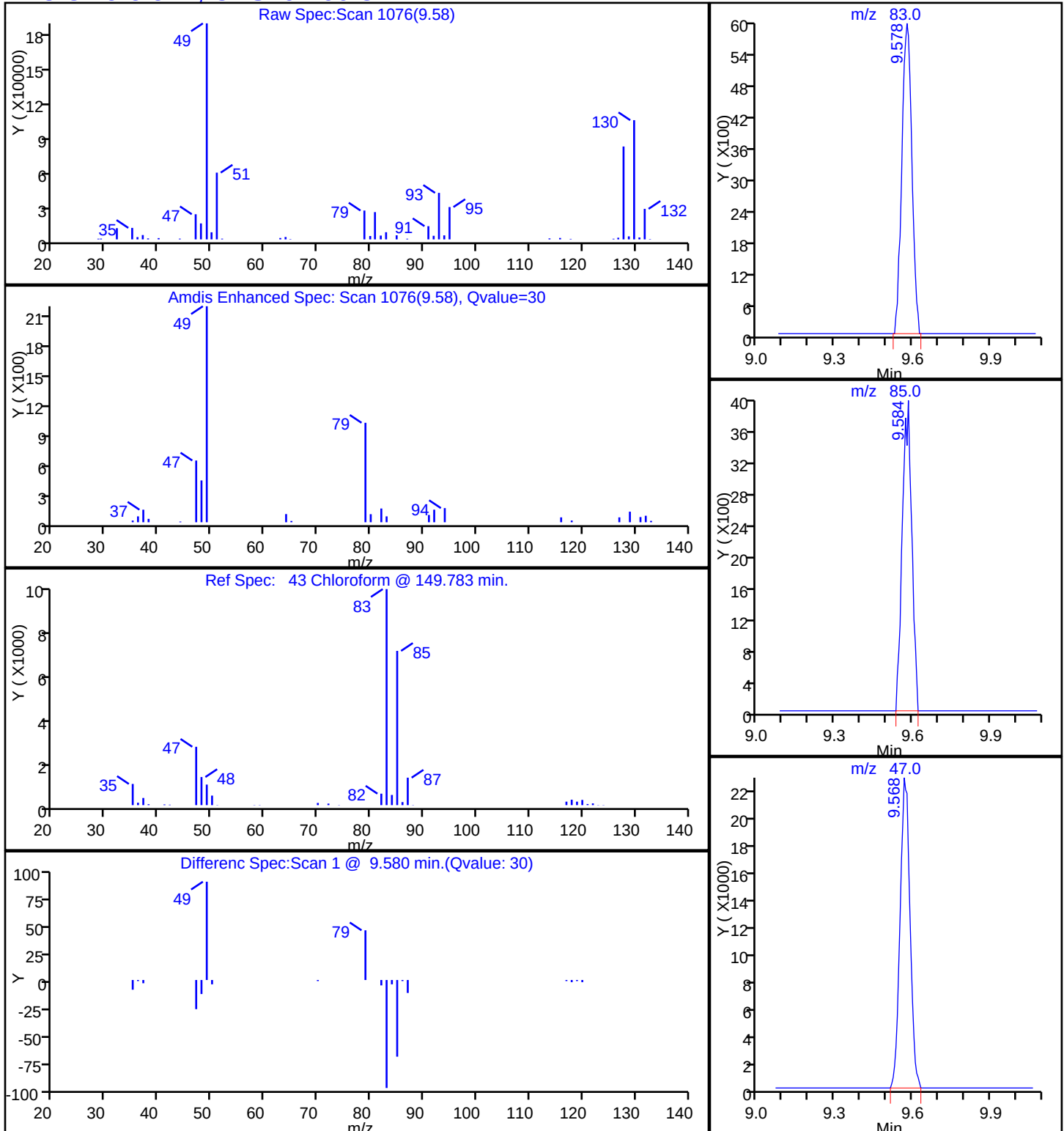
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

43 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P108.D

Injection Date: 31-Mar-2015 21:22:30

Instrument ID: MJ

Lims ID: 140-2950-A-2

Lab Sample ID: 140-2950-2

Client ID: H29-BA-2015

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 14

Purge Vol: 500.000 mL

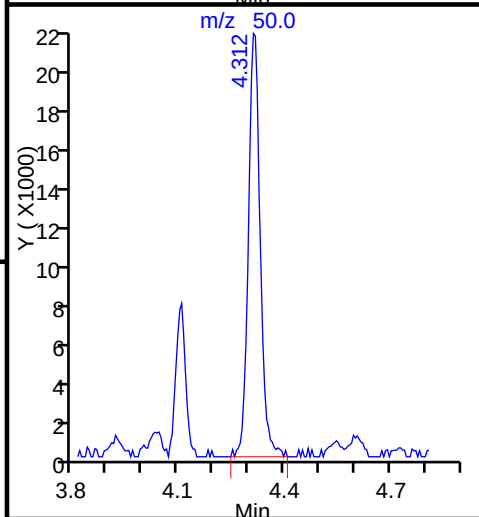
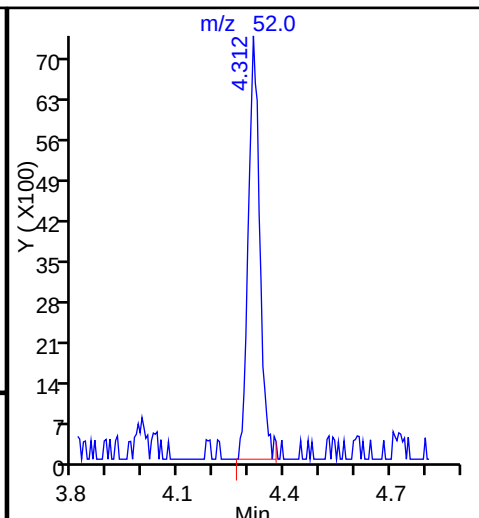
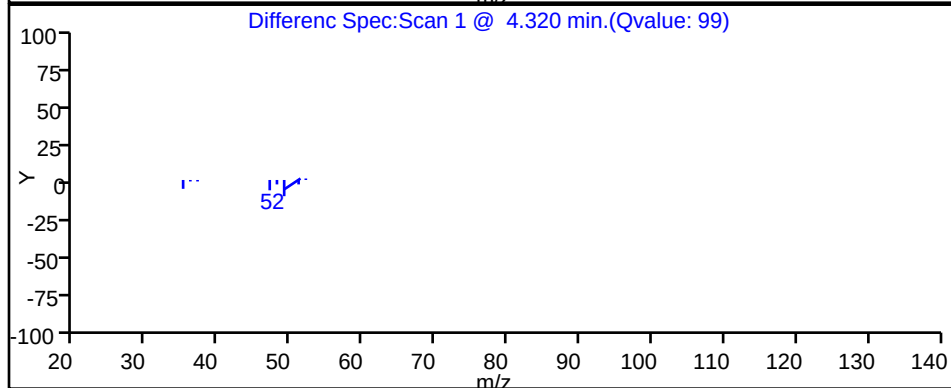
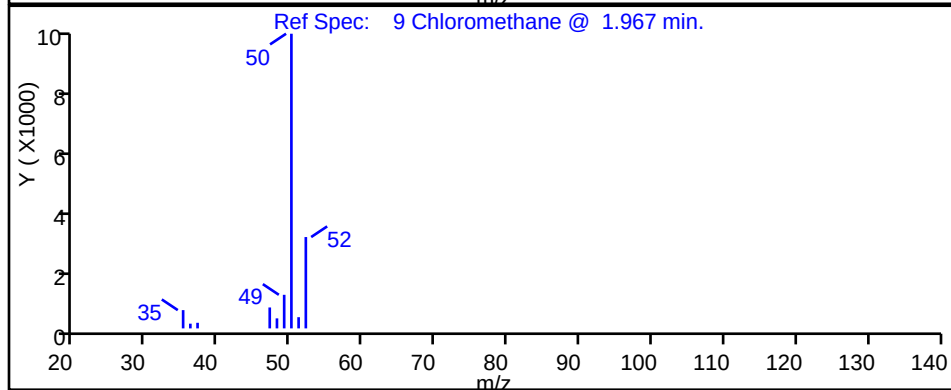
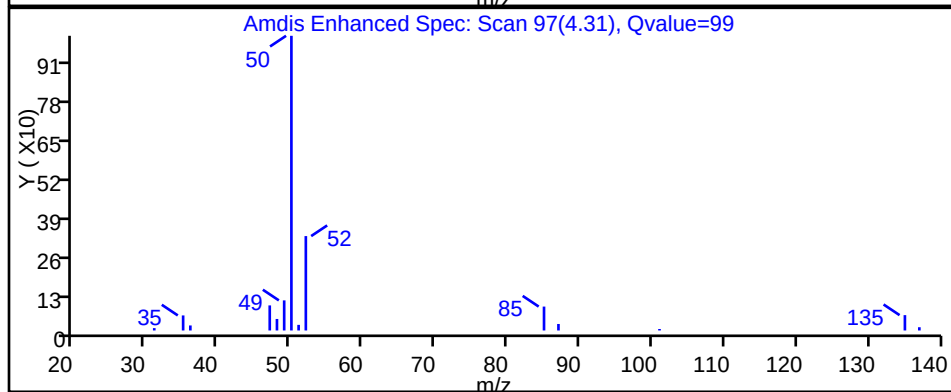
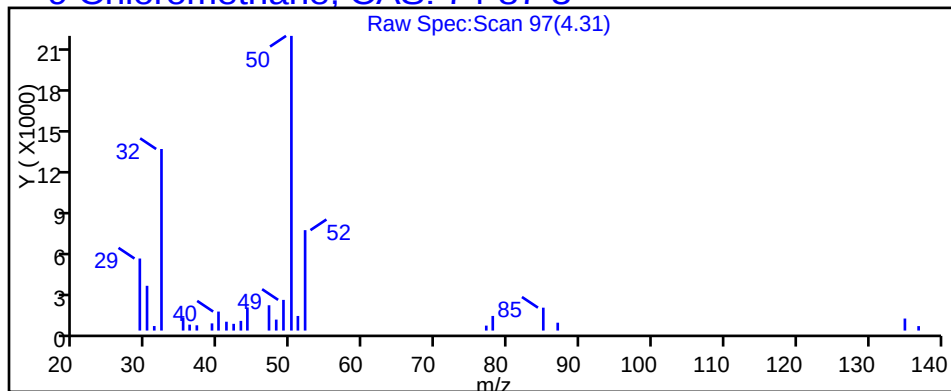
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P108.D

Injection Date: 31-Mar-2015 21:22:30

Instrument ID: MJ

Lims ID: 140-2950-A-2

Lab Sample ID: 140-2950-2

Client ID: H29-BA-2015

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 14

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

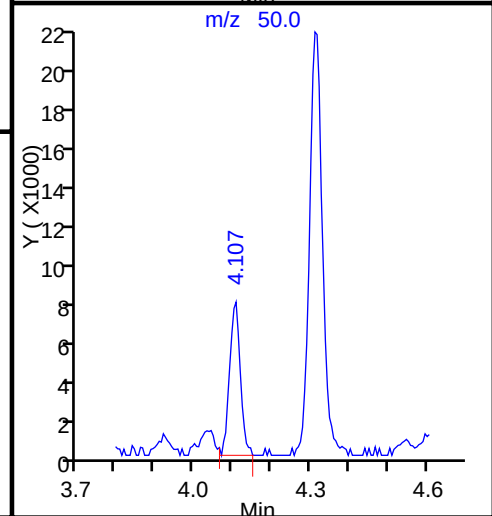
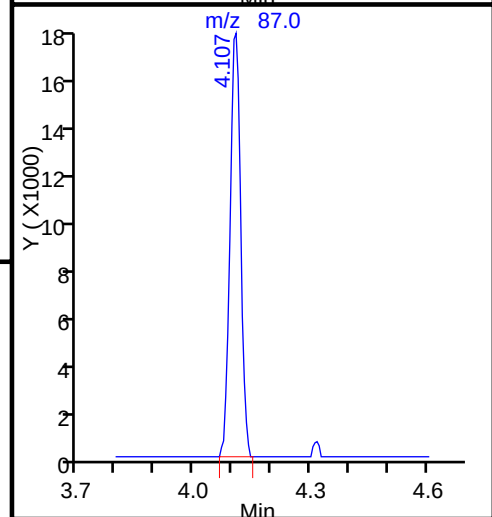
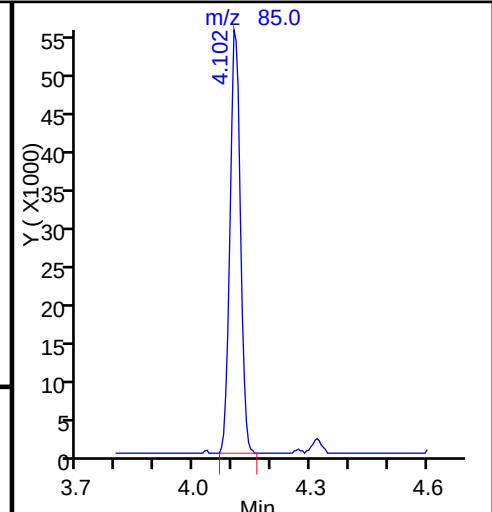
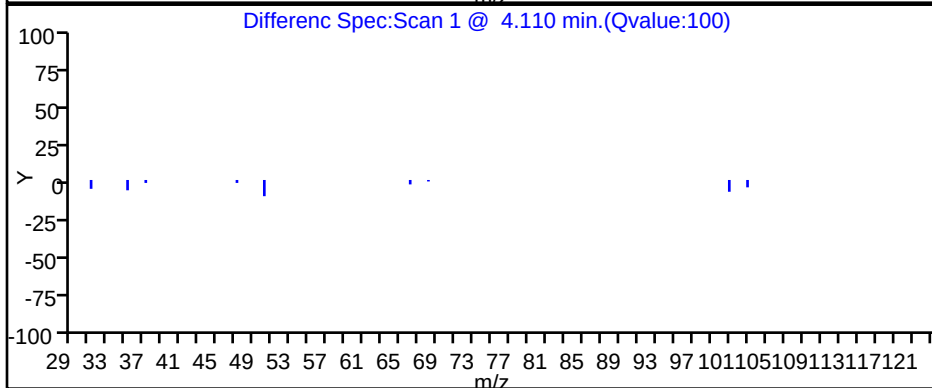
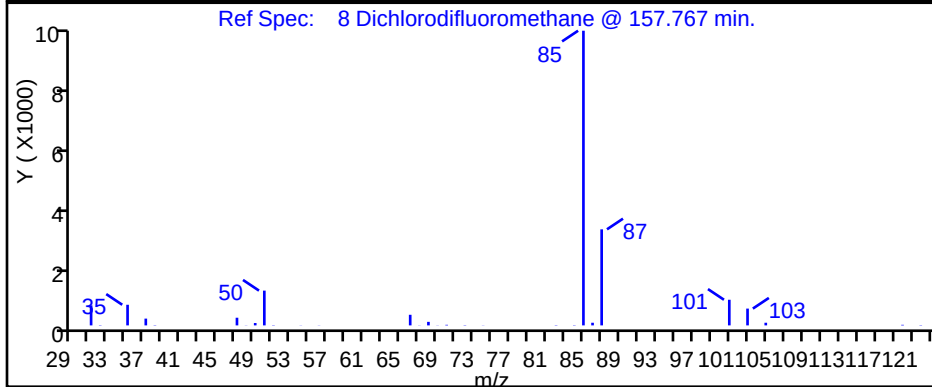
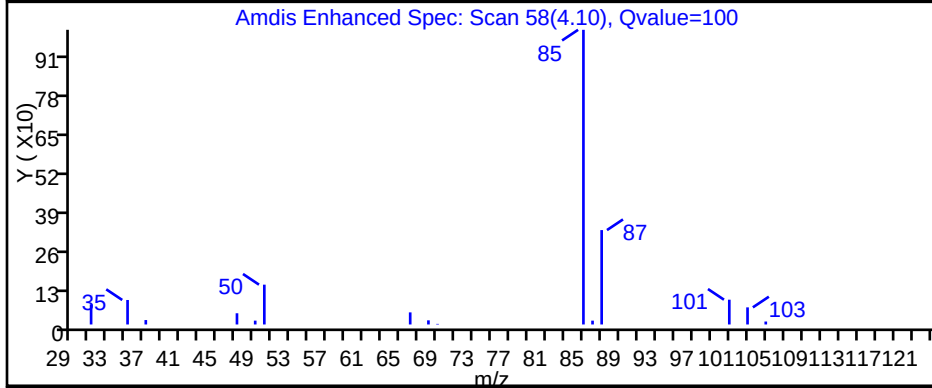
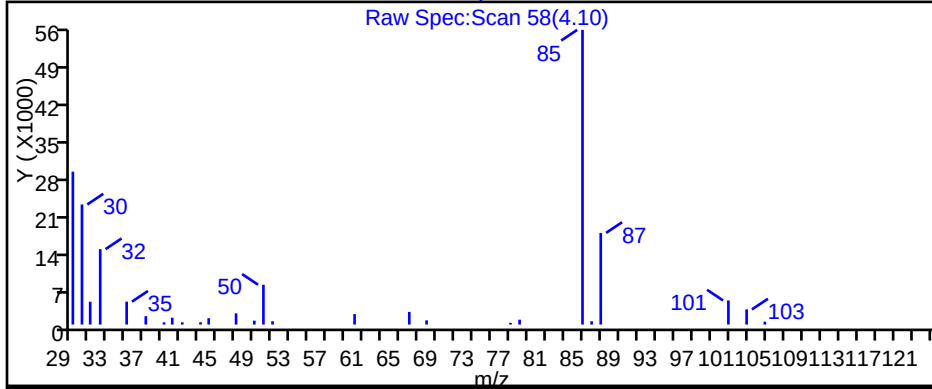
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P108.D

Injection Date: 31-Mar-2015 21:22:30

Instrument ID: MJ

Lims ID: 140-2950-A-2

Lab Sample ID: 140-2950-2

Client ID: H29-BA-2015

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 14

Purge Vol: 500.000 mL

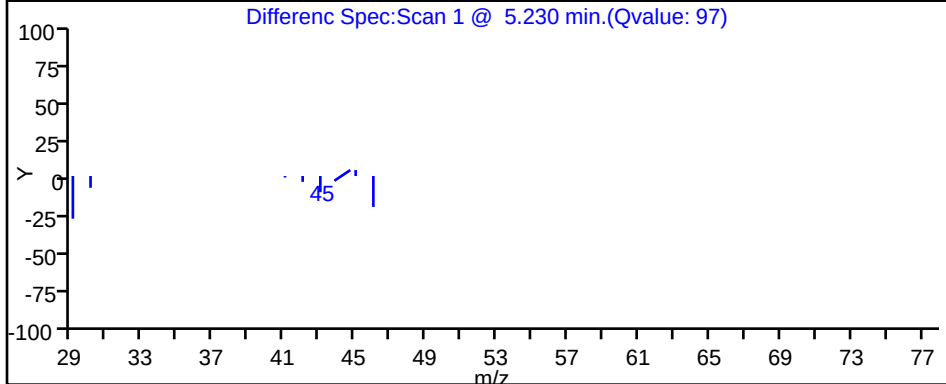
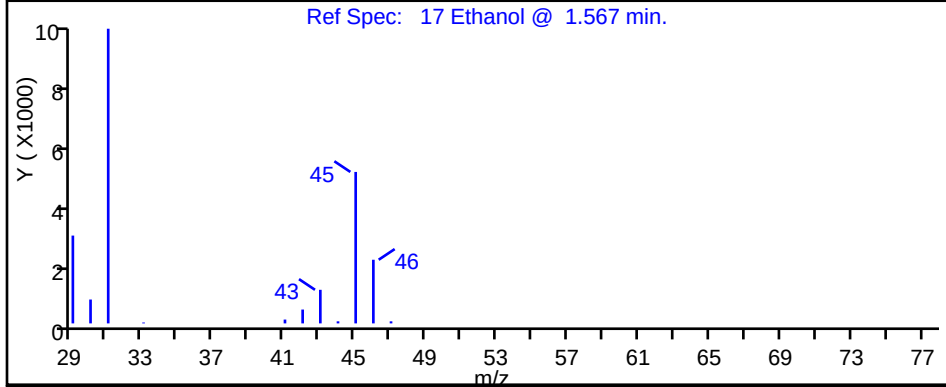
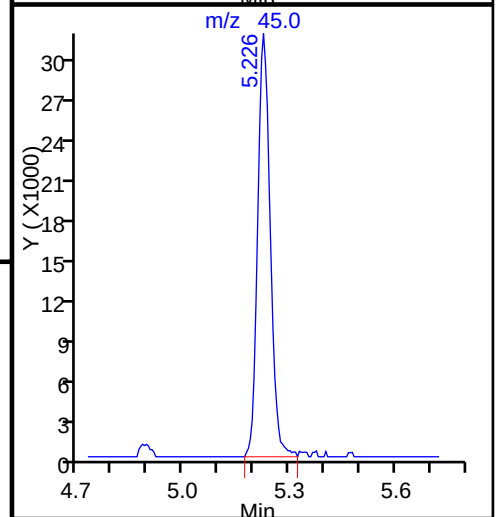
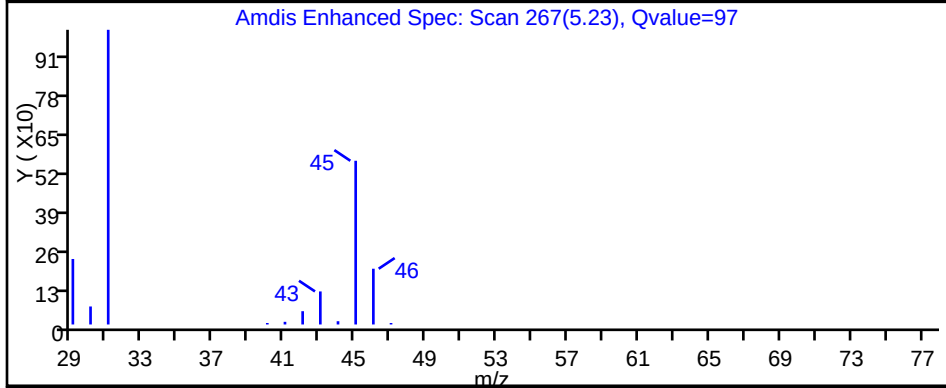
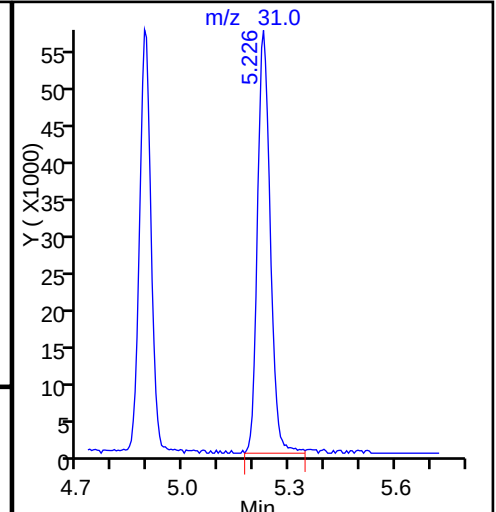
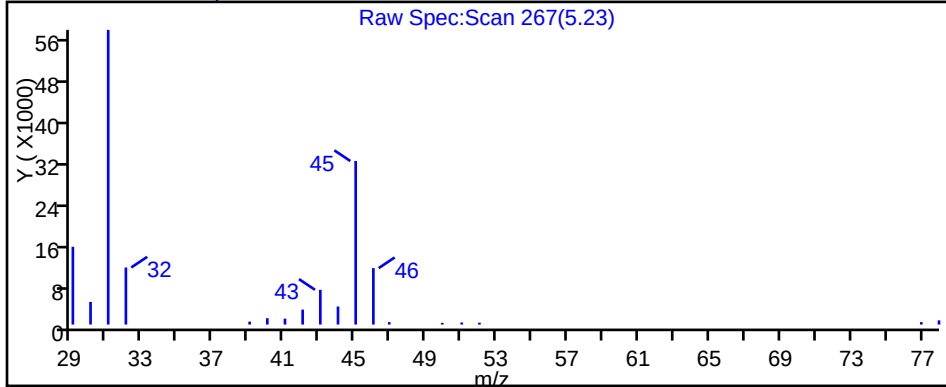
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P108.D

Injection Date: 31-Mar-2015 21:22:30

Instrument ID: MJ

Lims ID: 140-2950-A-2

Lab Sample ID: 140-2950-2

Client ID: H29-BA-2015

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 14

Purge Vol: 500.000 mL

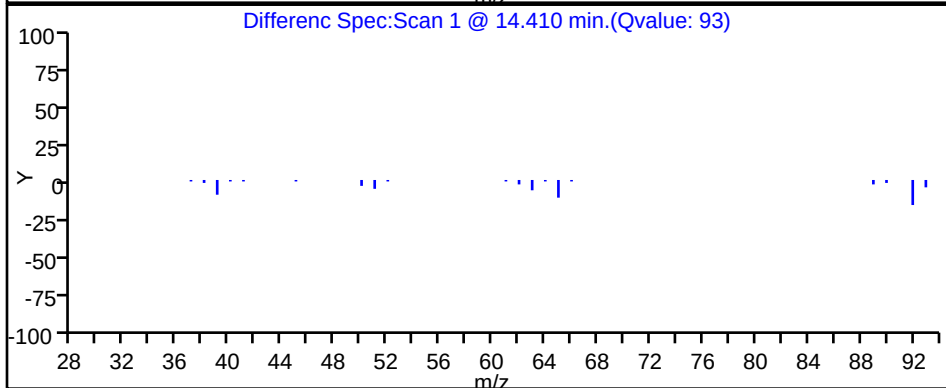
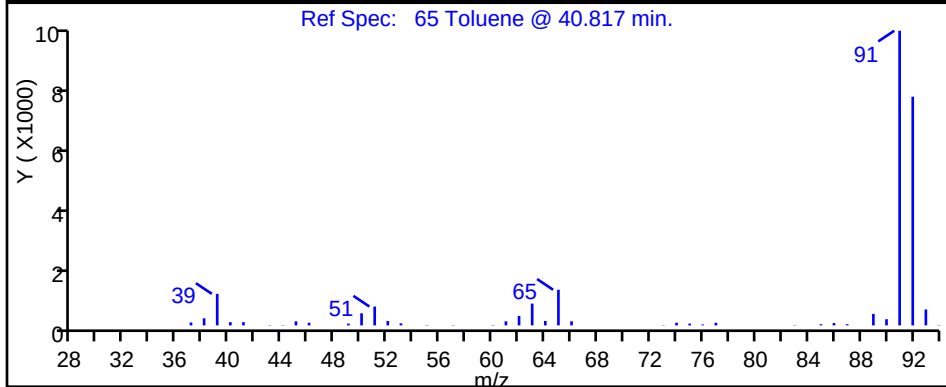
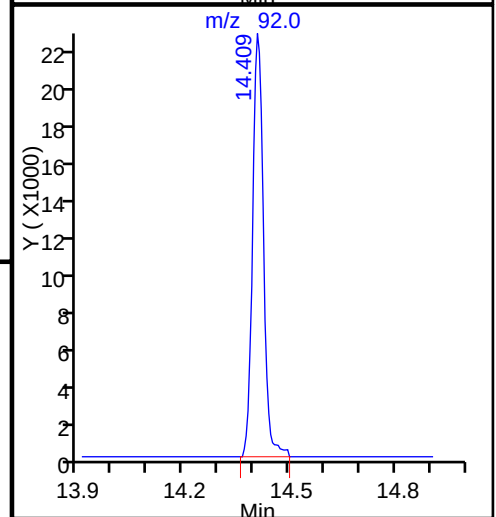
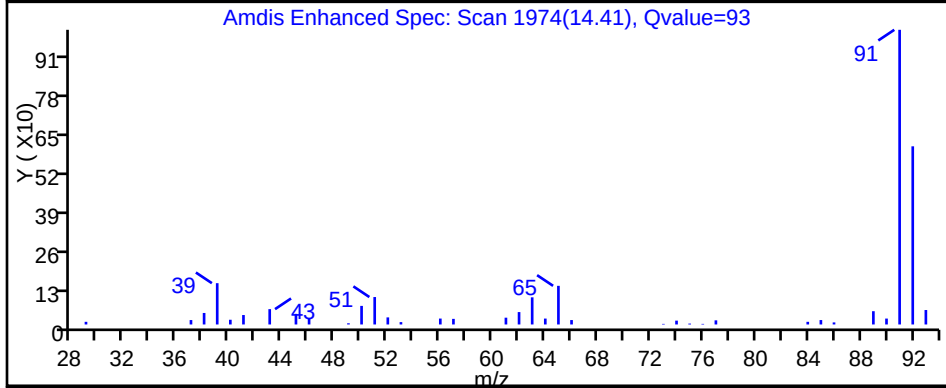
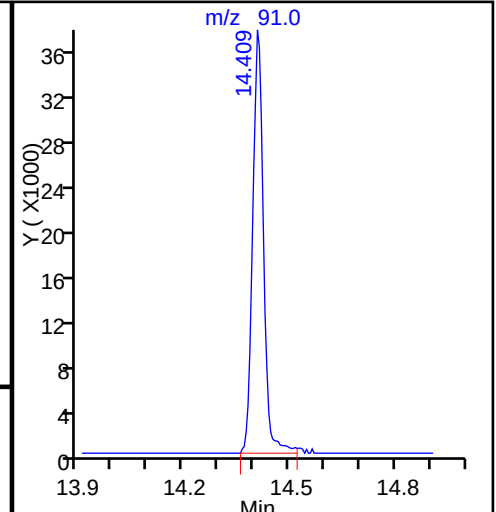
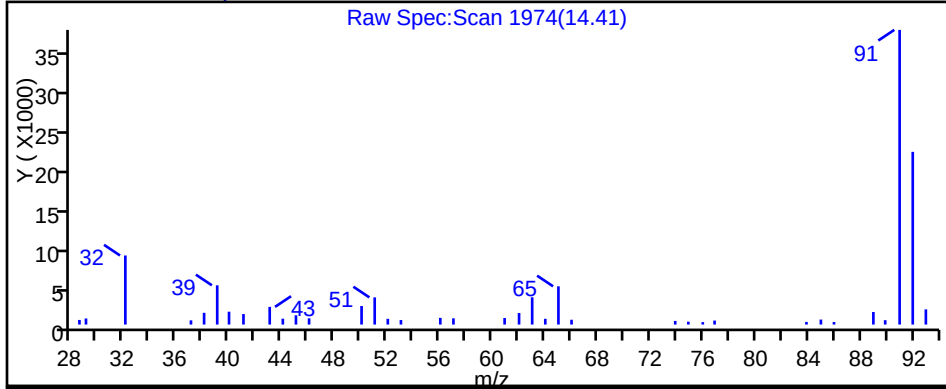
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P108.D

Injection Date: 31-Mar-2015 21:22:30

Instrument ID: MJ

Lims ID: 140-2950-A-2

Lab Sample ID: 140-2950-2

Client ID: H29-BA-2015

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 14

Purge Vol: 500.000 mL

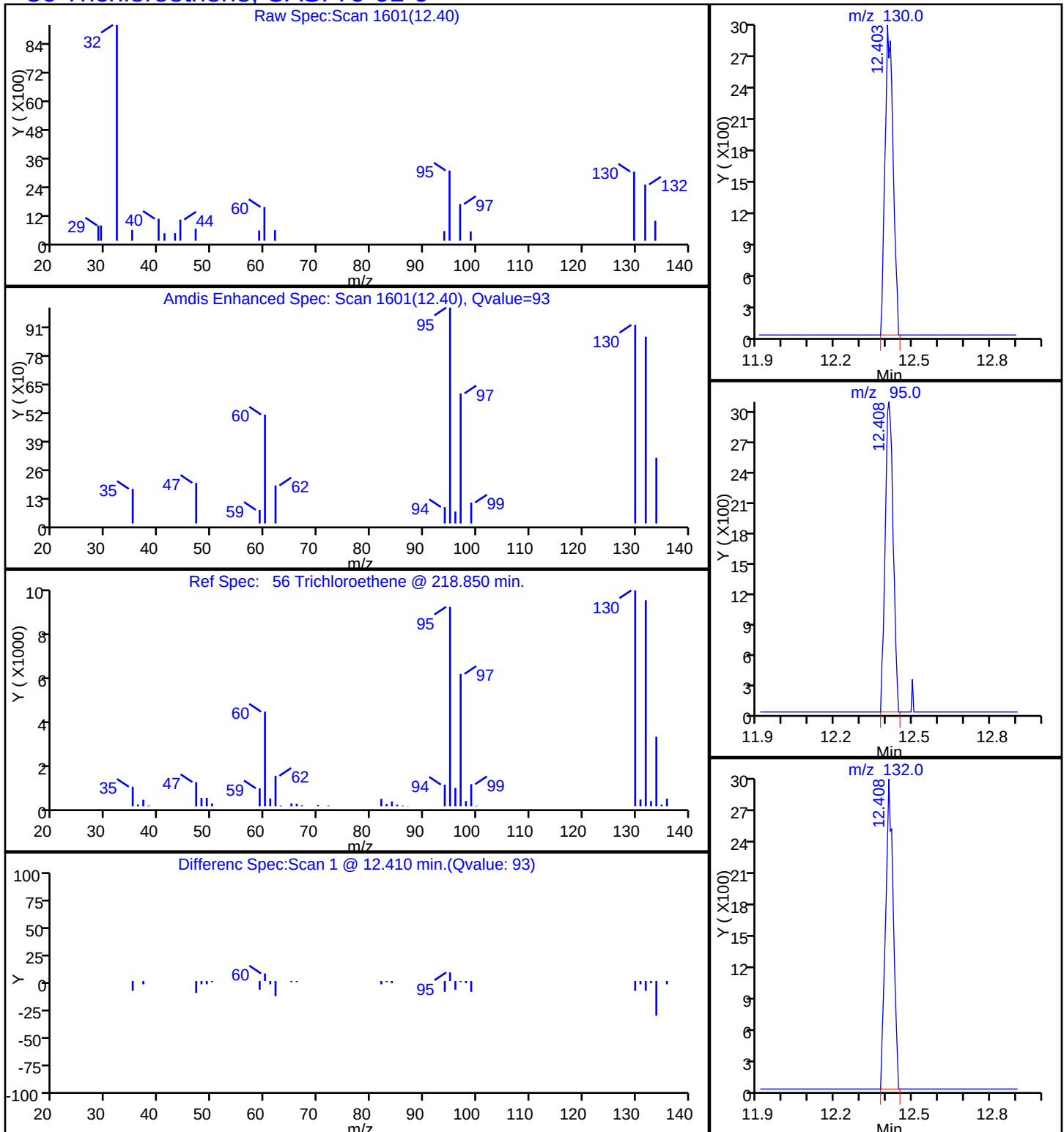
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

56 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P108.D

Injection Date: 31-Mar-2015 21:22:30

Instrument ID: MJ

Lims ID: 140-2950-A-2

Lab Sample ID: 140-2950-2

Client ID: H29-BA-2015

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 14

Purge Vol: 500.000 mL

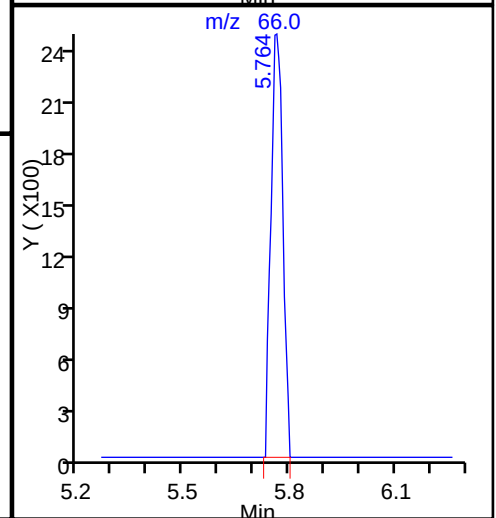
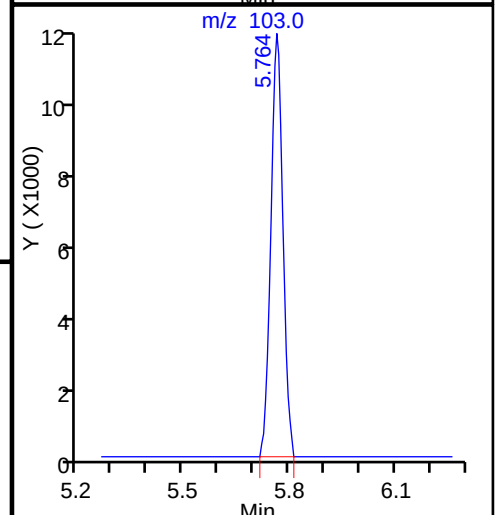
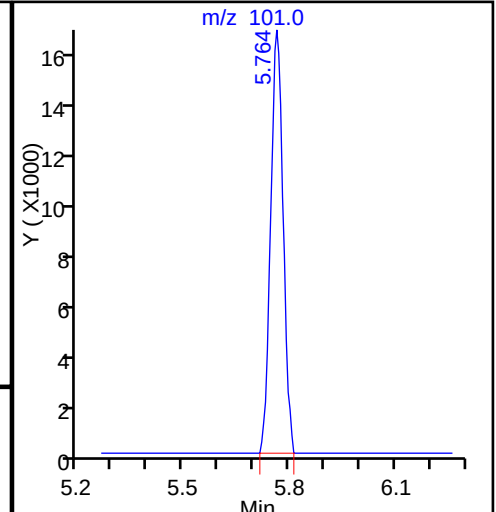
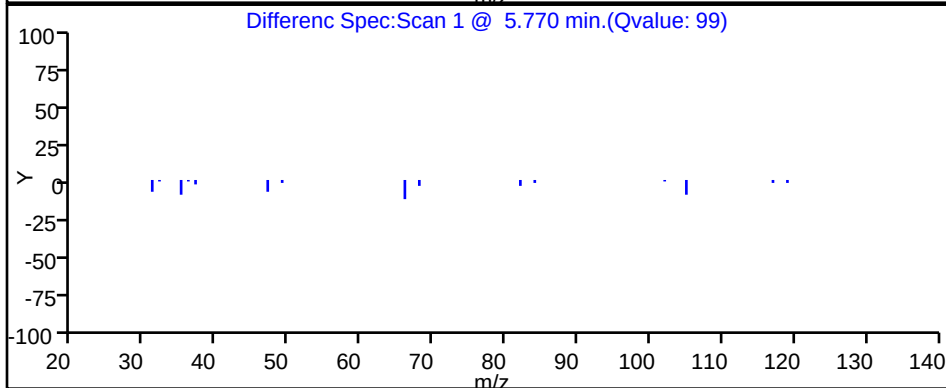
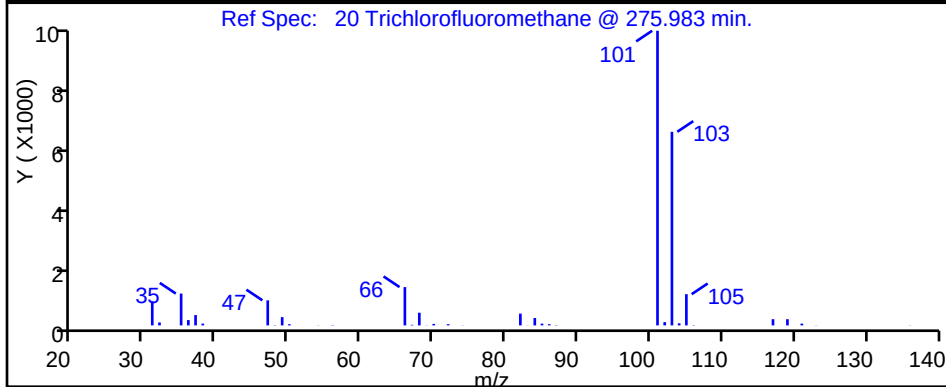
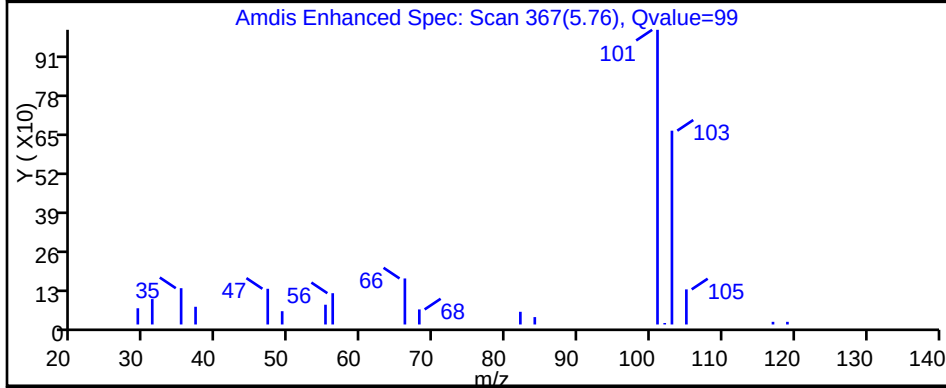
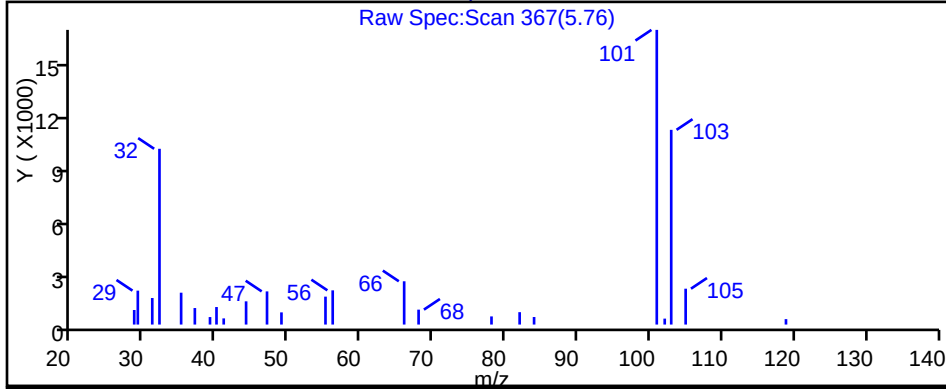
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1

SDG No.: _____

Client Sample ID: D4-OA-2015 Lab Sample ID: 140-2950-3

Matrix: Air Lab File ID: JC31P109.D

Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:24

Sample wt/vol: 500 (mL) Date Analyzed: 03/31/2015 22:16

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.: 2576 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		0.080	
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	0.17		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	0.061		0.040	
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	0.49		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Client Sample ID: D4-OA-2015 Lab Sample ID: 140-2950-3
 Matrix: Air Lab File ID: JC31P109.D
 Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:24
 Sample wt/vol: 500 (mL) Date Analyzed: 03/31/2015 22:16
 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.: 2576 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	0.41		0.080	
64-17-5	Ethanol	46.07	2.5		0.80	
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	0.093		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	0.16		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		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.19		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1

SDG No.: _____

Client Sample ID: D4-OA-2015 Lab Sample ID: 140-2950-3

Matrix: Air Lab File ID: JC31P109.D

Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:24

Sample wt/vol: 500 (mL) Date Analyzed: 03/31/2015 22:16

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.: 2576 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		0.32	
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	0.55		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	0.38		0.25	
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	1.0		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Client Sample ID: D4-OA-2015 Lab Sample ID: 140-2950-3
 Matrix: Air Lab File ID: JC31P109.D
 Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:24
 Sample wt/vol: 500 (mL) Date Analyzed: 03/31/2015 22:16
 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.: 2576 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	2.0		0.40	
64-17-5	Ethanol	46.07	4.7		1.5	
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	0.40		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	0.59		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		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.1		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P109.D
 Lims ID: 140-2950-A-3 Lab Sample ID: 140-2950-3
 Client ID: D4-OA-2015
 Sample Type: Client
 Inject. Date: 31-Mar-2015 22:16:30 ALS Bottle#: 9 Worklist Smp#: 15
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2950-a-3
 Misc. Info.: J033115,TO15,,140-0001518-015
 Operator ID: 7126 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150330-1518.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 01-Apr-2015 09:18:38 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK018

First Level Reviewer: tajh

Date: 01-Apr-2015 06:52:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.572	9.577	-0.005	96	227039	4.00	
* 2 1,4-Difluorobenzene	114	11.708	11.718	-0.010	96	1078226	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.356	16.360	-0.004	90	928871	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.969	17.969	0.000	90	558668	3.67	
8 Dichlorodifluoromethane	85	4.107	4.117	-0.010	100	105642	0.4133	
9 Chloromethane	52	4.316	4.326	-0.010	100	17986	0.4948	
17 Ethanol	31	5.225	5.246	-0.021	97	79452	2.52	
20 Trichlorofluoromethane	101	5.758	5.779	-0.021	98	41886	0.1871	
28 2-Methyl-2-propanol	59	6.646	6.640	0.006	88	2777	0.0207	
30 1,1,2-Trichloro-1,2,2-trif	101	6.721	6.726	-0.005	86	9341	0.0620	
31 Methylene Chloride	84	6.909	6.919	-0.010	96	9825	0.1350	
39 2-Butanone (MEK)	72	8.771	8.781	-0.010	92	5663	0.2095	
40 Hexane	56	8.797	8.802	-0.005	57	4567	0.0603	
43 Chloroform	83	9.577	9.587	-0.010	32	2219	0.0155	
48 Benzene	78	11.202	11.207	-0.005	98	34149	0.1715	
50 Carbon tetrachloride	117	11.224	11.228	-0.004	96	8903	0.0606	
53 Isooctane	57	11.918	11.922	-0.004	84	8582	0.0217	
62 4-Methyl-2-pentanone (MIBK	43	13.542	13.541	0.001	98	10978	0.0670	
65 Toluene	91	14.414	14.413	0.001	93	26545	0.1566	
76 Ethylbenzene	91	16.673	16.683	-0.010	93	5814	0.0293	
78 m-Xylene & p-Xylene	91	16.829	16.839	-0.010	97	14786	0.0926	
82 o-Xylene	91	17.362	17.366	-0.004	94	5832	0.0335	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P109.D

Injection Date: 31-Mar-2015 22:16:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: 140-2950-A-3

Lab Sample ID: 140-2950-3

Worklist Smp#: 15

Client ID: D4-OA-2015

Purge Vol: 500.000 mL

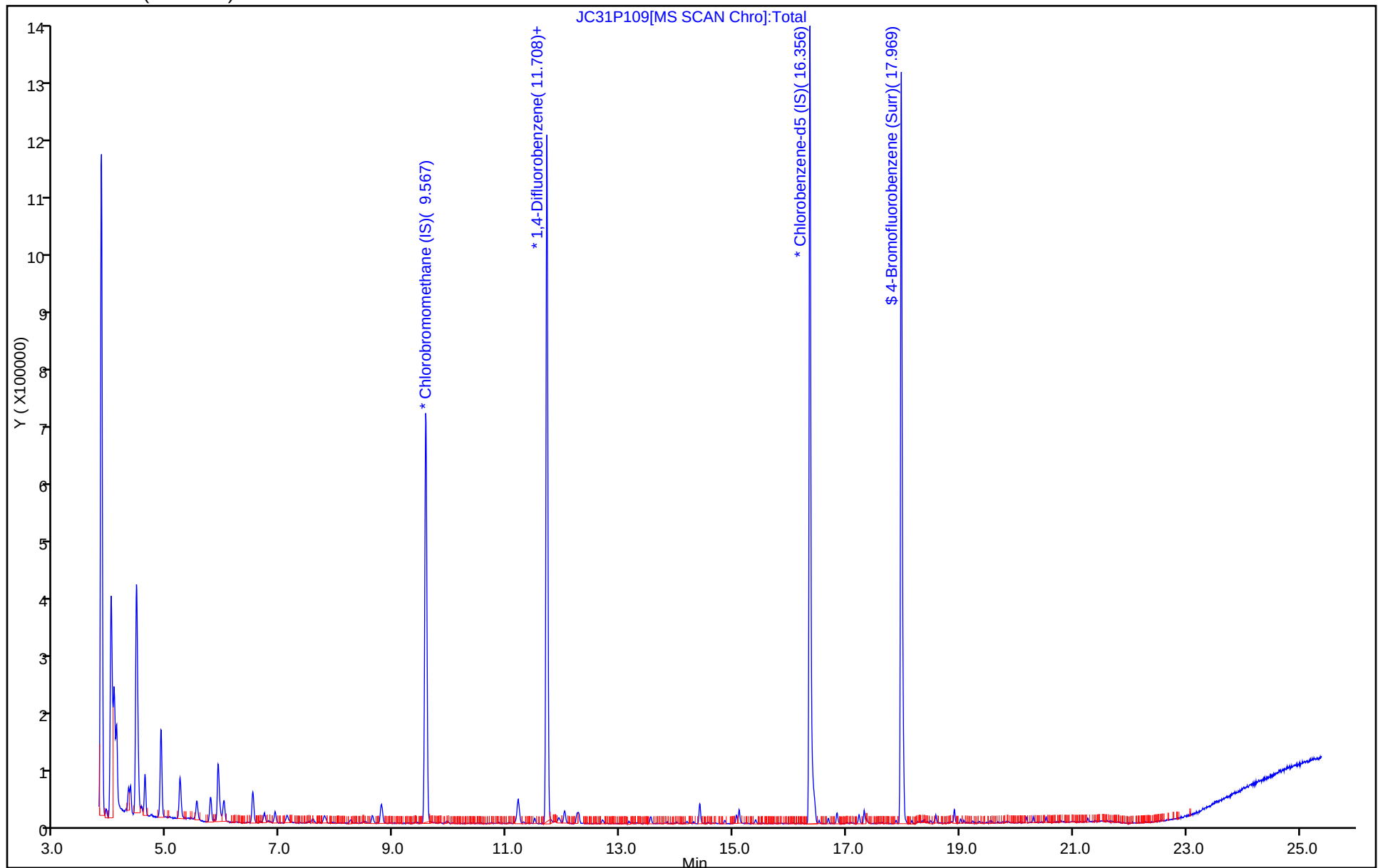
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P109.D

Injection Date: 31-Mar-2015 22:16:30

Instrument ID: MJ

Lims ID: 140-2950-A-3

Lab Sample ID: 140-2950-3

Client ID: D4-OA-2015

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 15

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

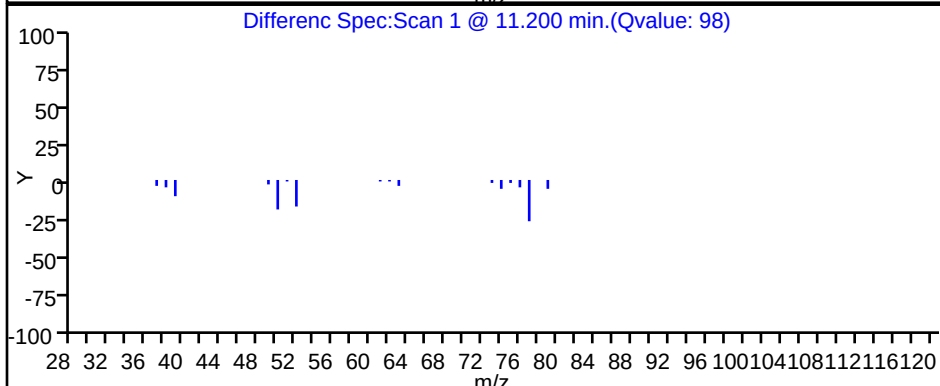
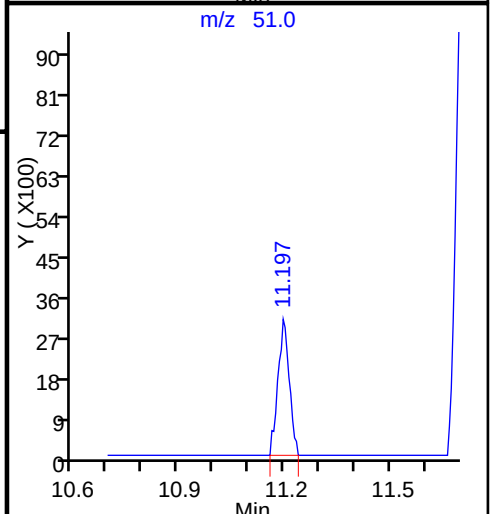
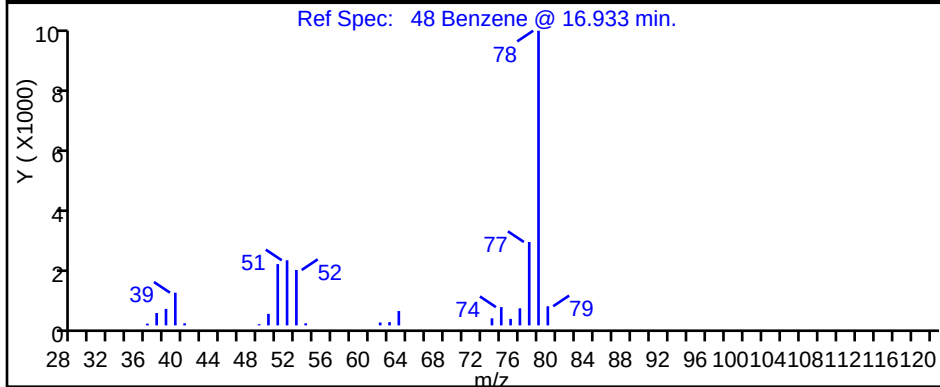
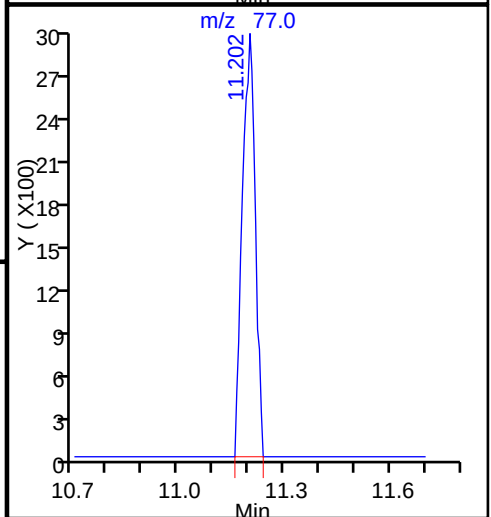
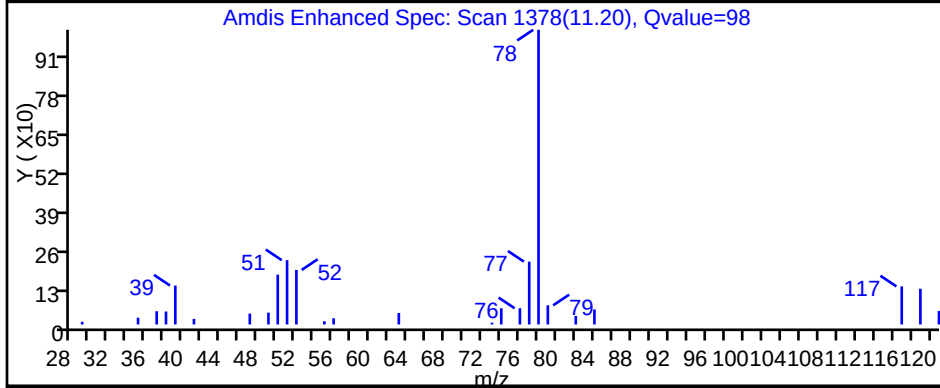
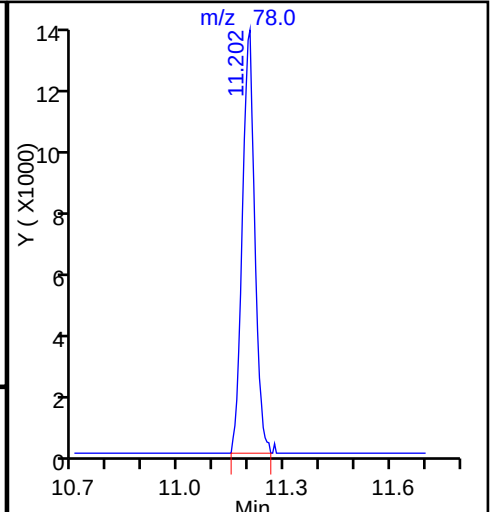
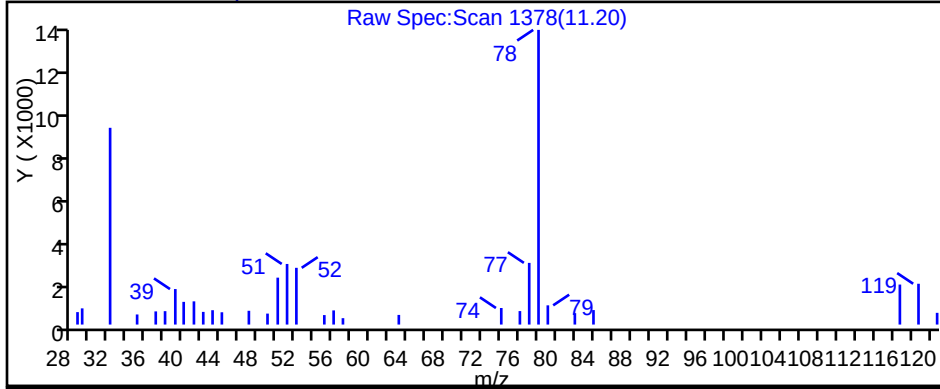
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P109.D

Injection Date: 31-Mar-2015 22:16:30

Instrument ID: MJ

Lims ID: 140-2950-A-3

Lab Sample ID: 140-2950-3

Client ID: D4-OA-2015

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 15

Purge Vol: 500.000 mL

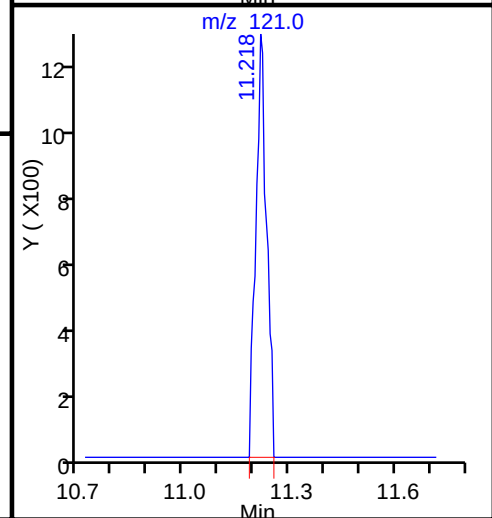
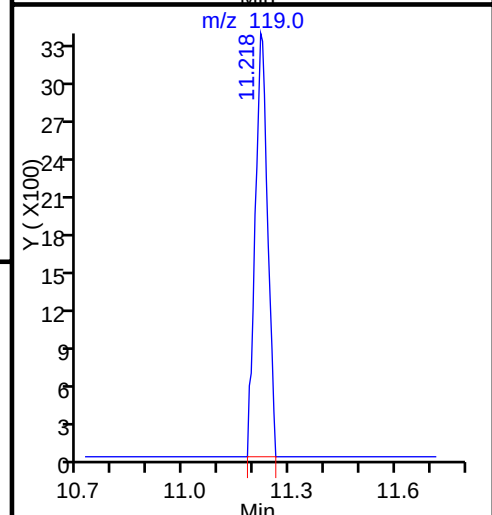
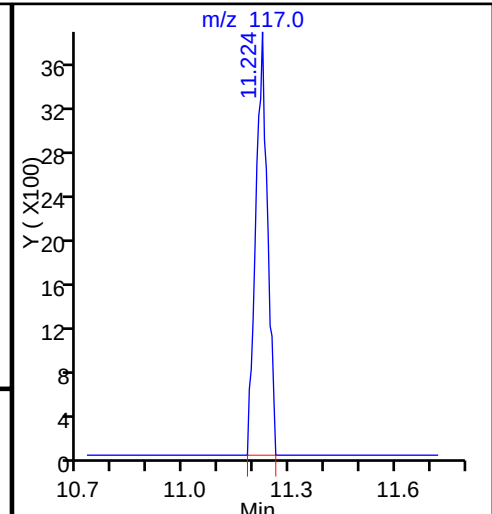
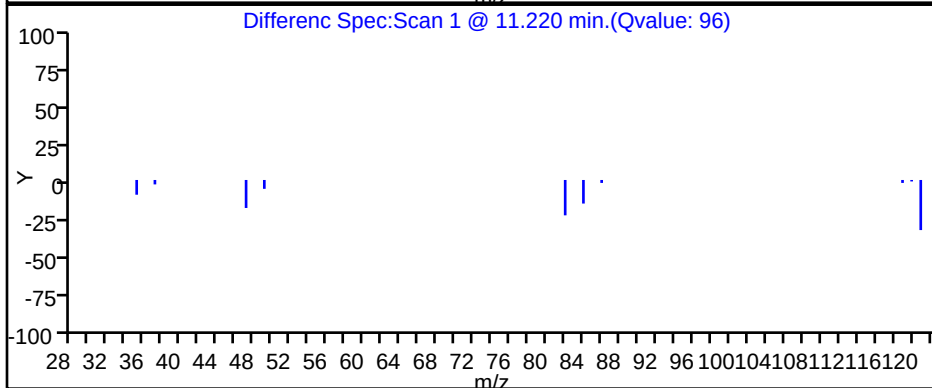
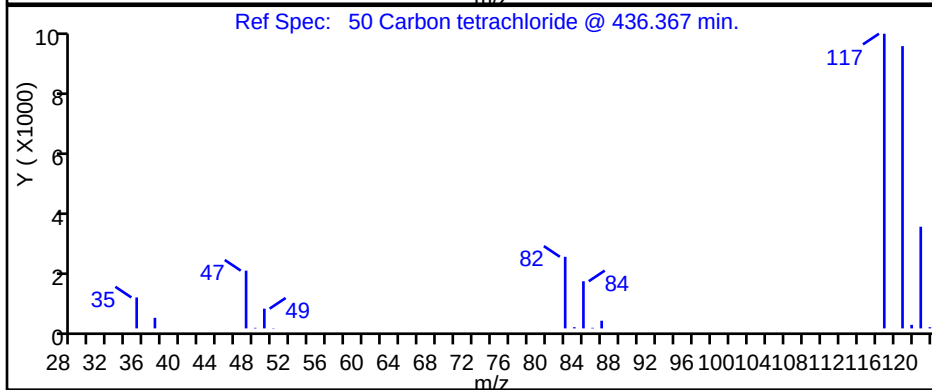
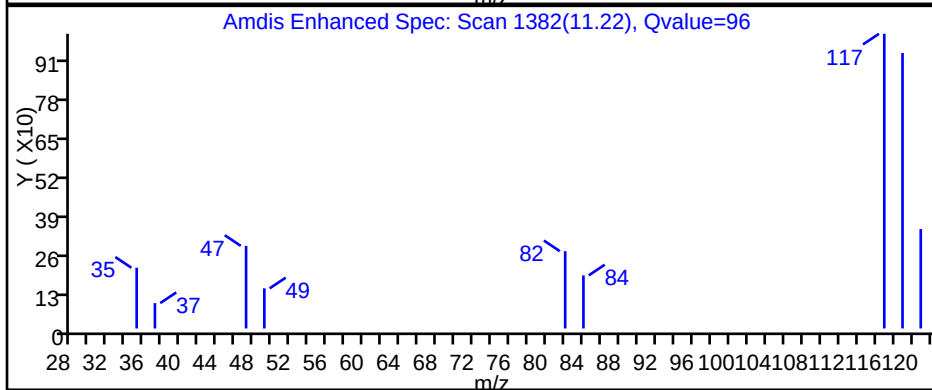
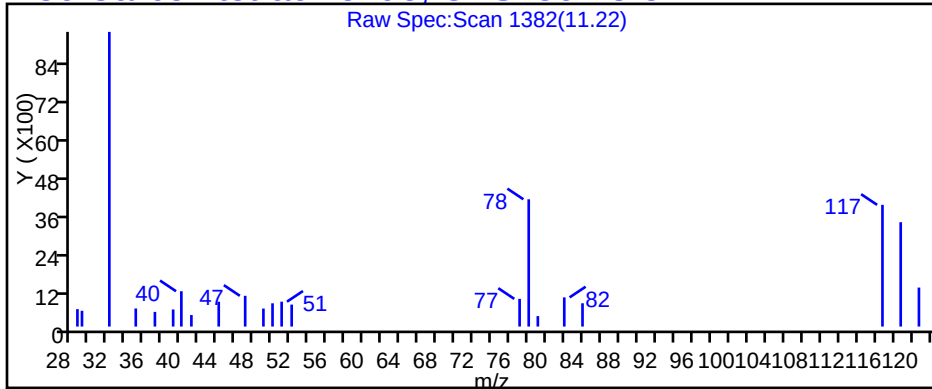
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P109.D

Injection Date: 31-Mar-2015 22:16:30

Instrument ID: MJ

Lims ID: 140-2950-A-3

Lab Sample ID: 140-2950-3

Client ID: D4-OA-2015

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 15

Purge Vol: 500.000 mL

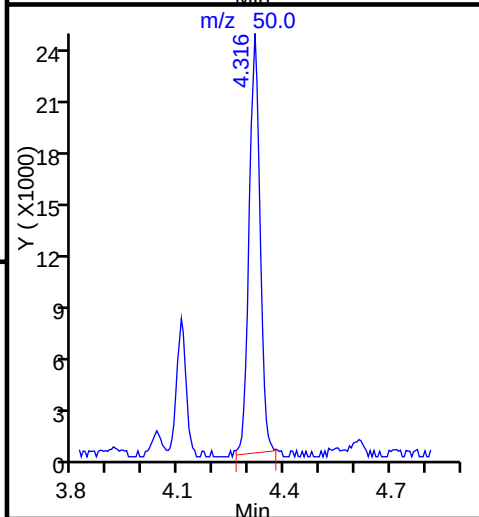
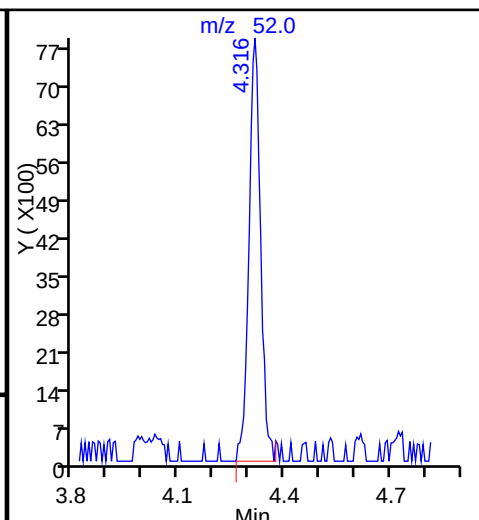
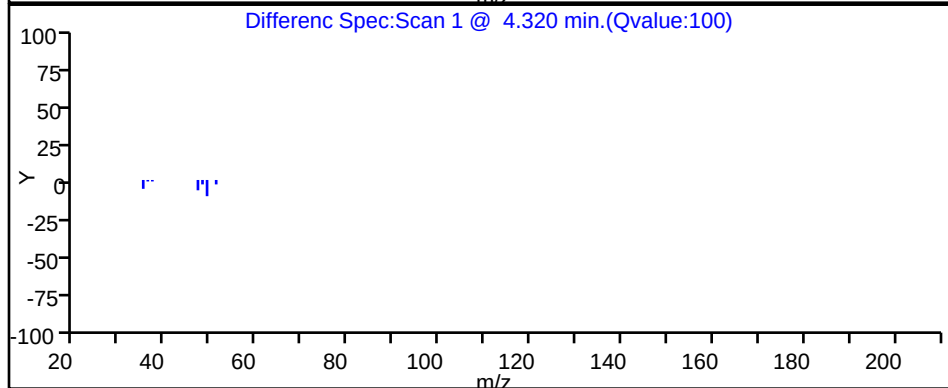
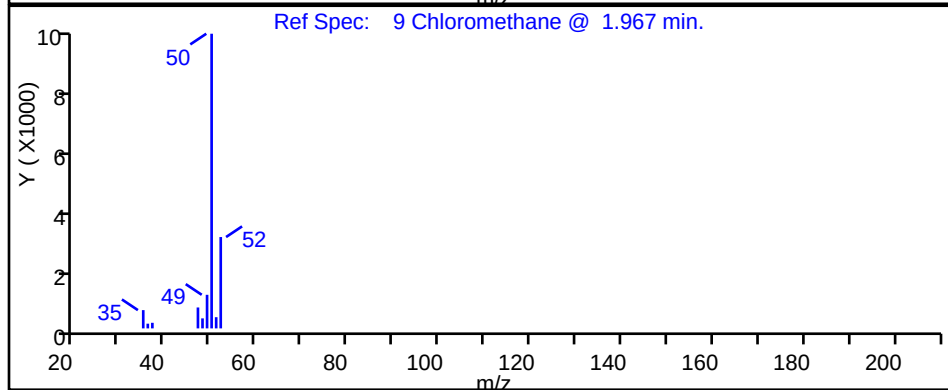
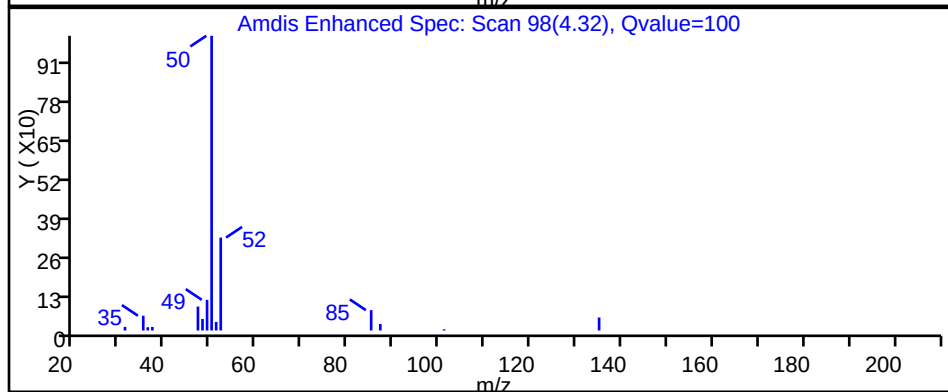
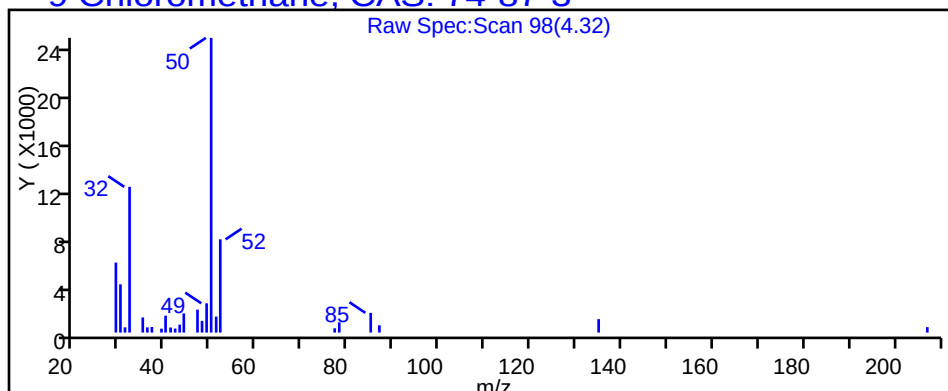
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P109.D

Injection Date: 31-Mar-2015 22:16:30

Instrument ID: MJ

Lims ID: 140-2950-A-3

Lab Sample ID: 140-2950-3

Client ID: D4-OA-2015

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 15

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

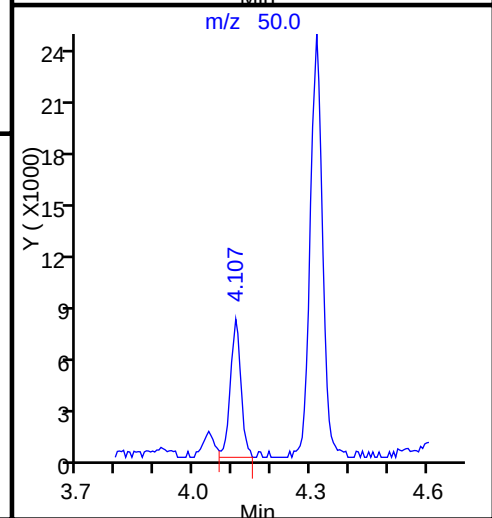
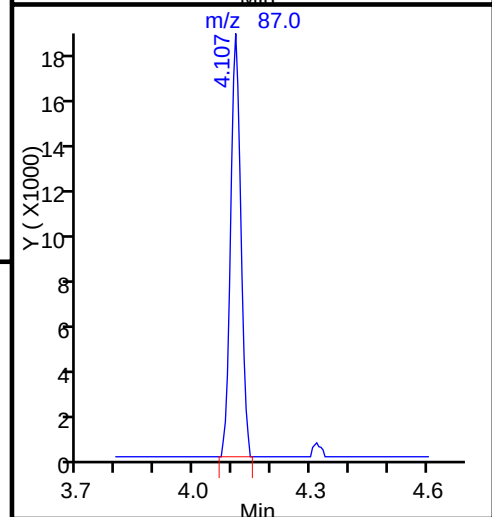
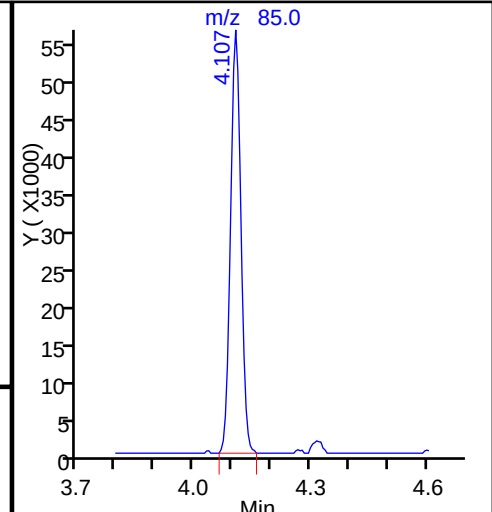
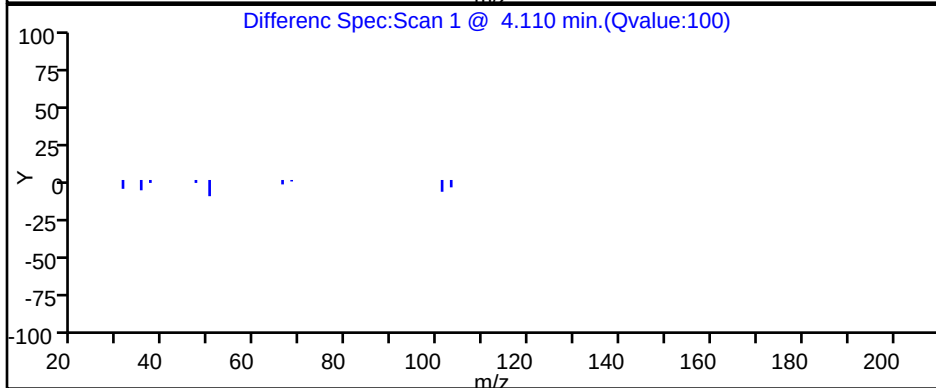
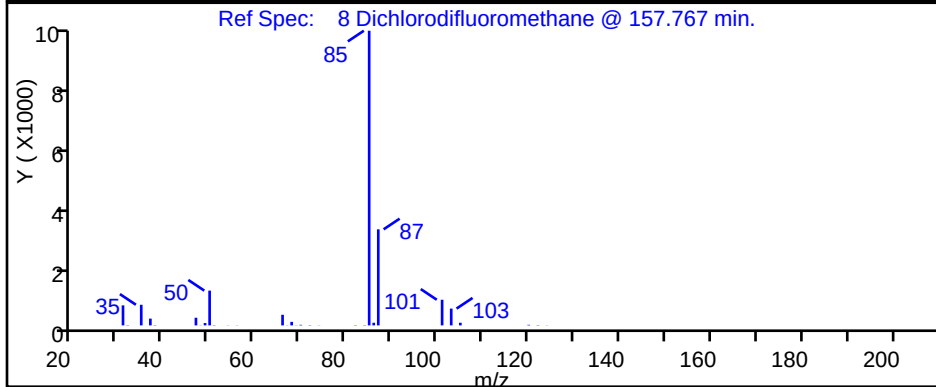
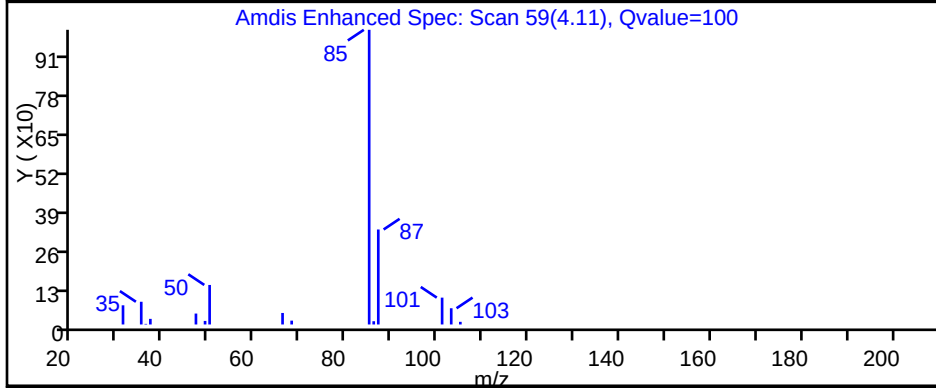
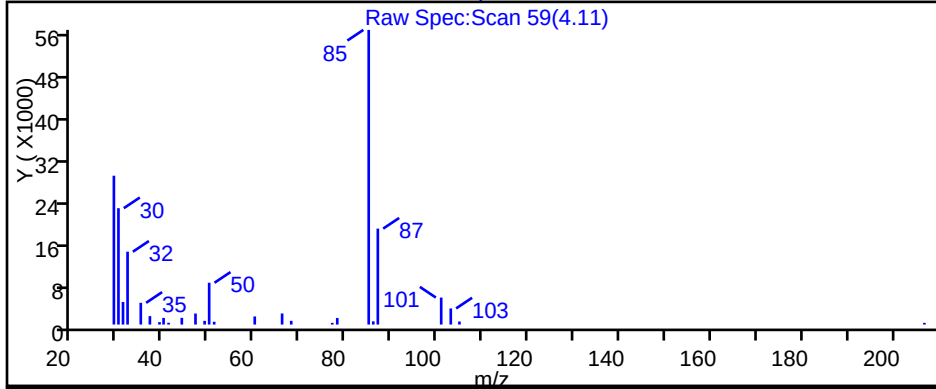
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P109.D

Injection Date: 31-Mar-2015 22:16:30

Instrument ID: MJ

Lims ID: 140-2950-A-3

Lab Sample ID: 140-2950-3

Client ID: D4-OA-2015

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 15

Purge Vol: 500.000 mL

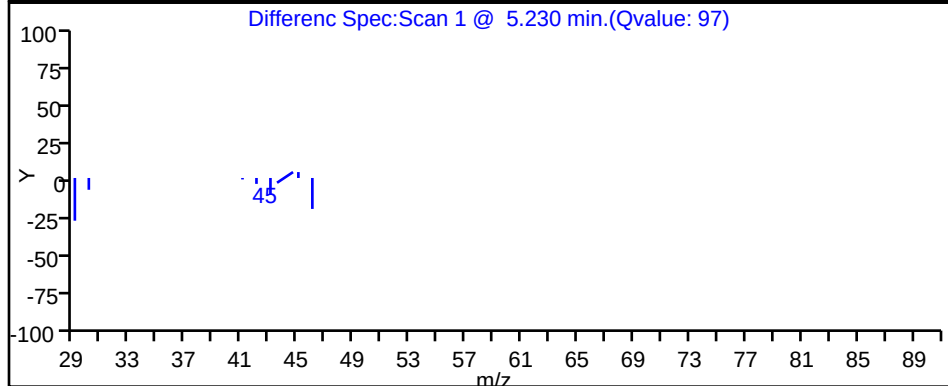
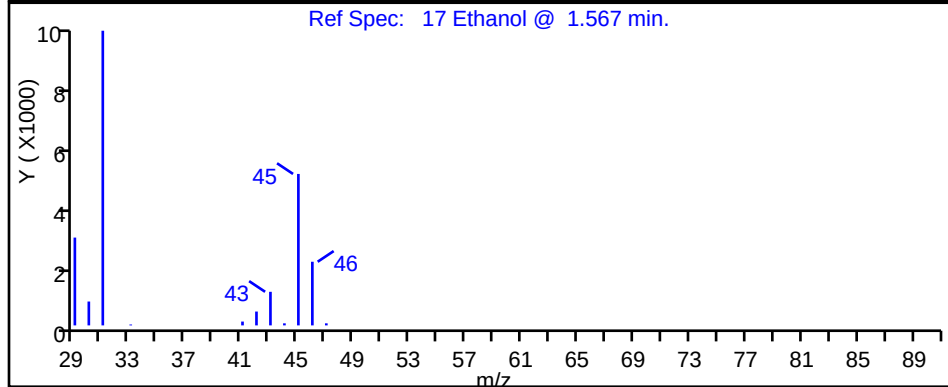
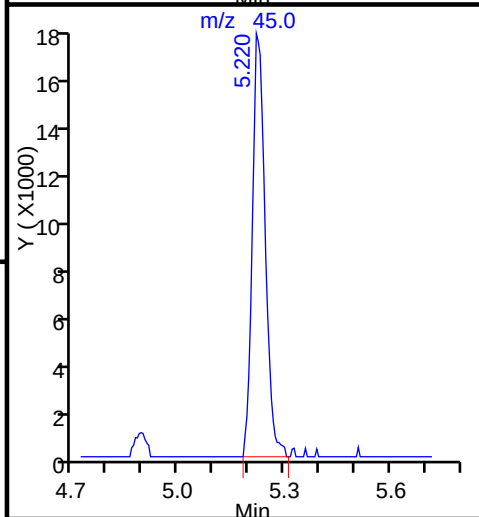
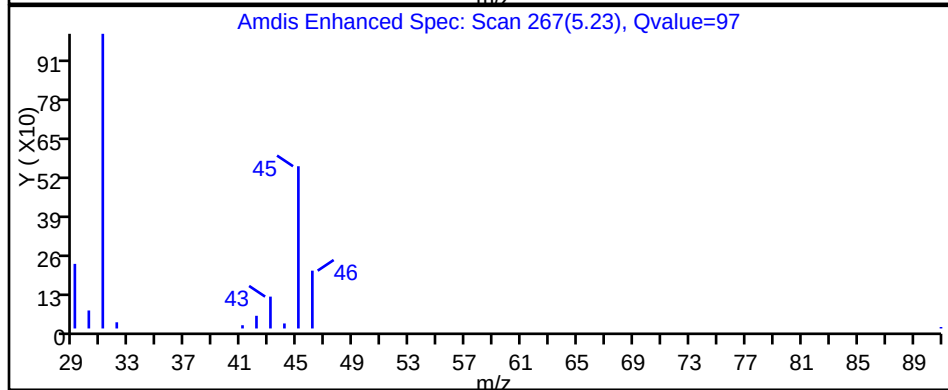
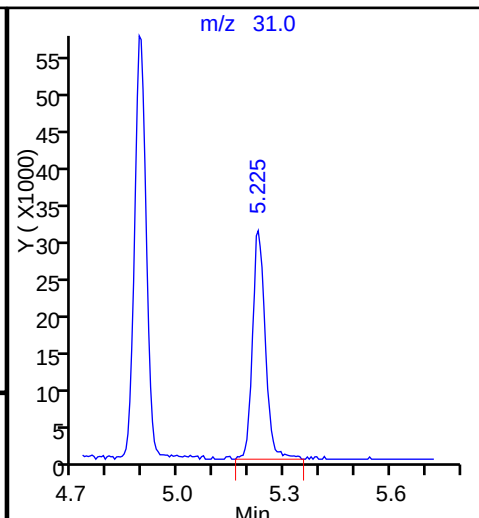
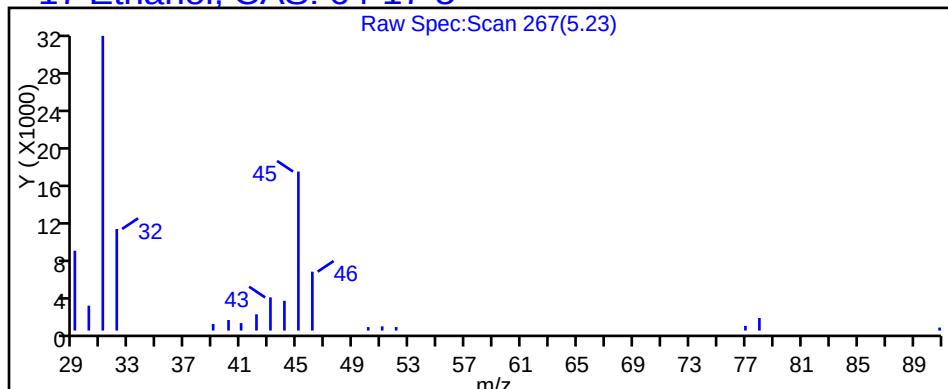
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P109.D

Injection Date: 31-Mar-2015 22:16:30

Instrument ID: MJ

Lims ID: 140-2950-A-3

Lab Sample ID: 140-2950-3

Client ID: D4-OA-2015

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 15

Purge Vol: 500.000 mL

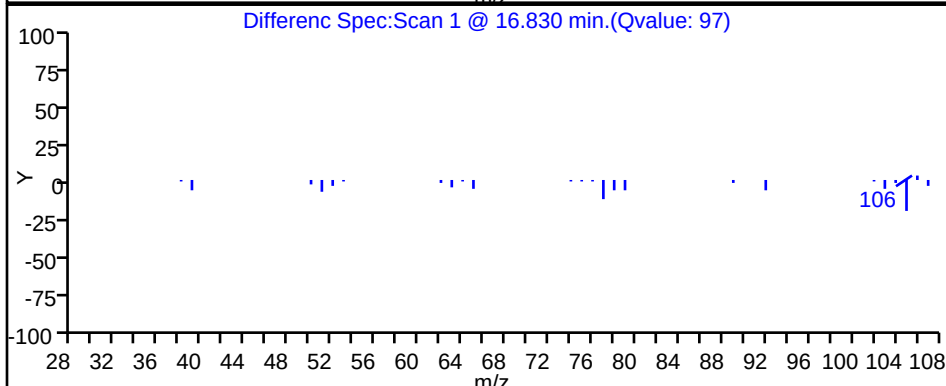
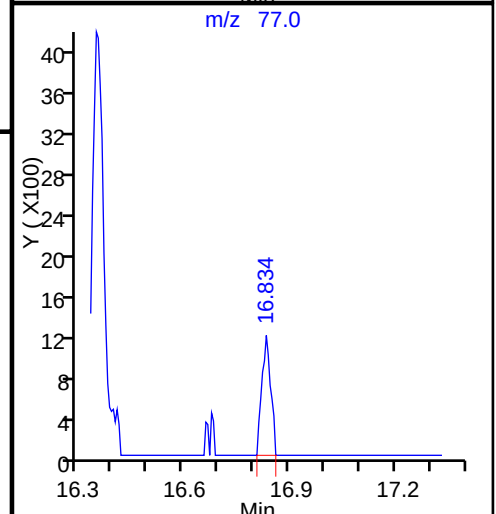
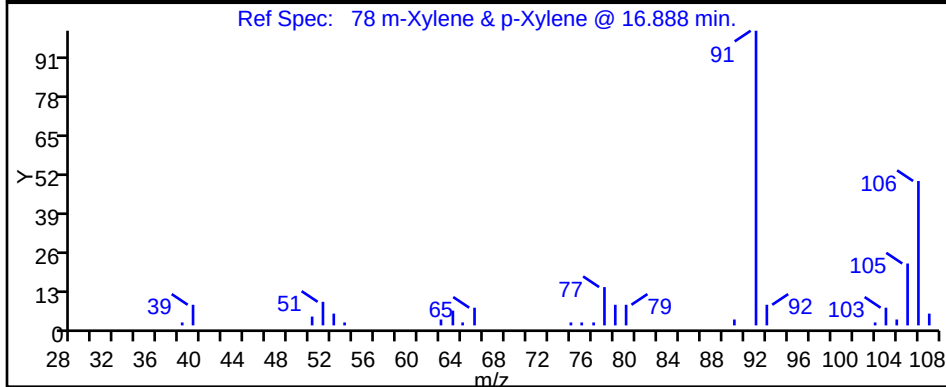
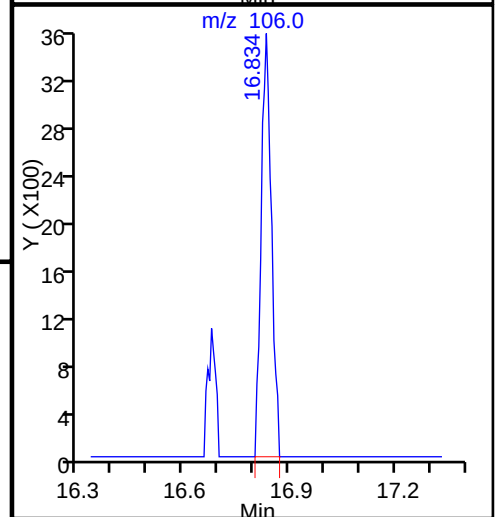
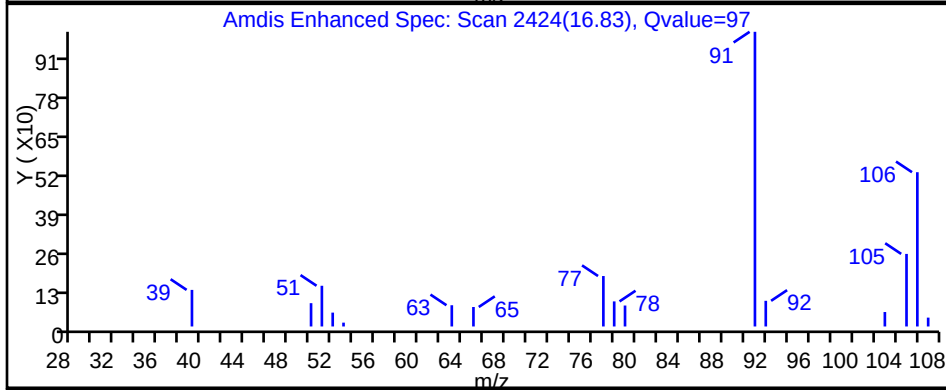
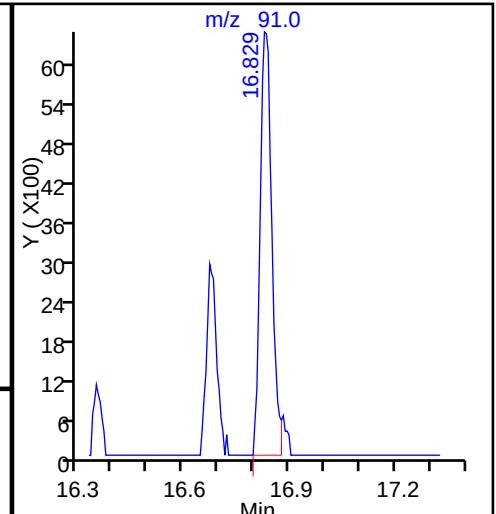
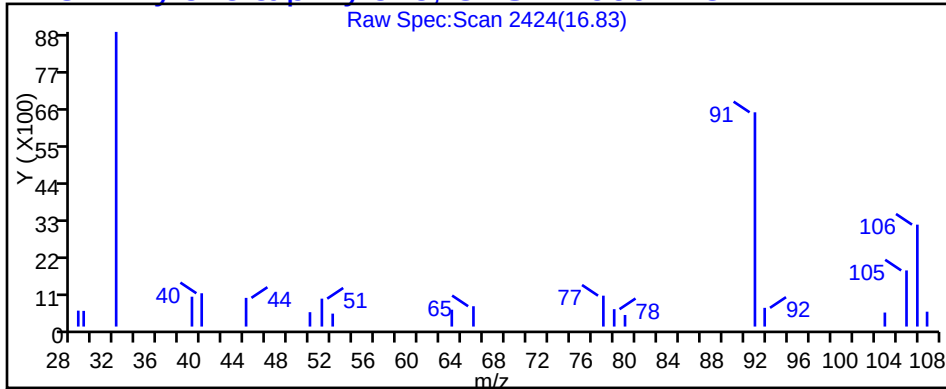
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P109.D

Injection Date: 31-Mar-2015 22:16:30

Instrument ID: MJ

Lims ID: 140-2950-A-3

Lab Sample ID: 140-2950-3

Client ID: D4-OA-2015

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 15

Purge Vol: 500.000 mL

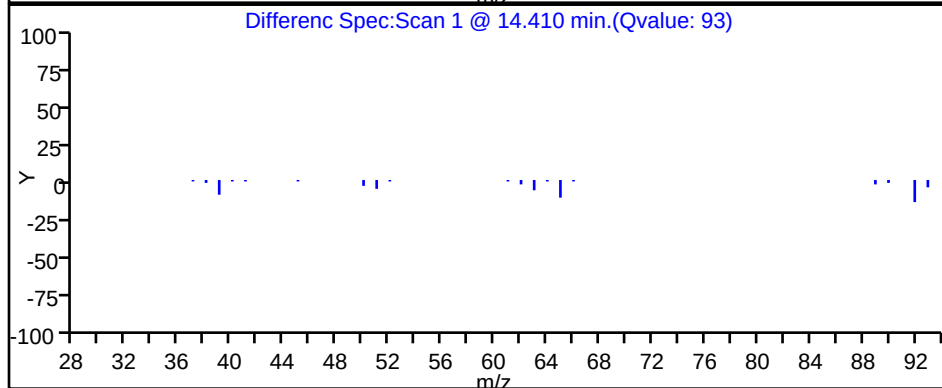
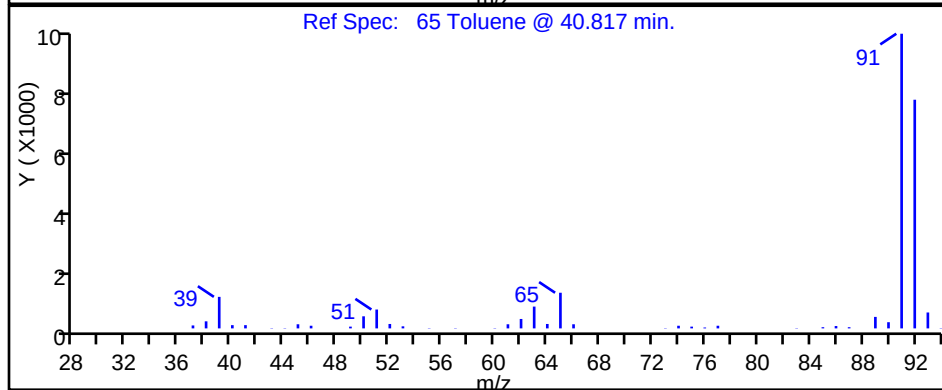
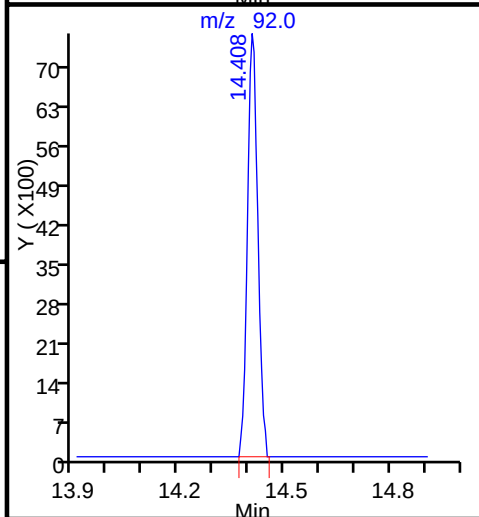
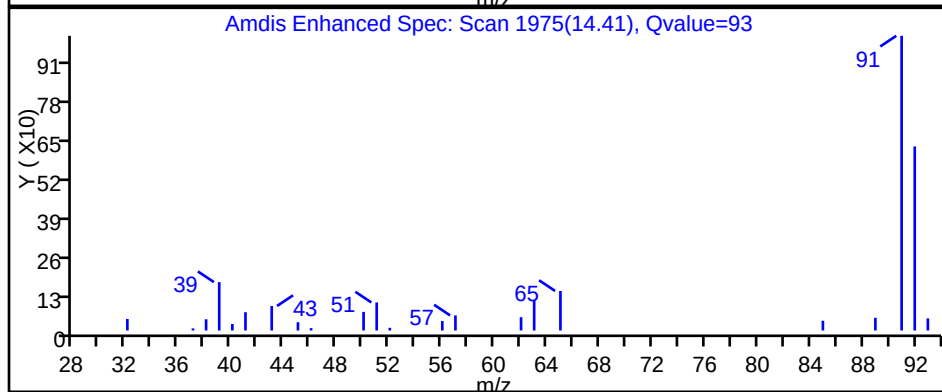
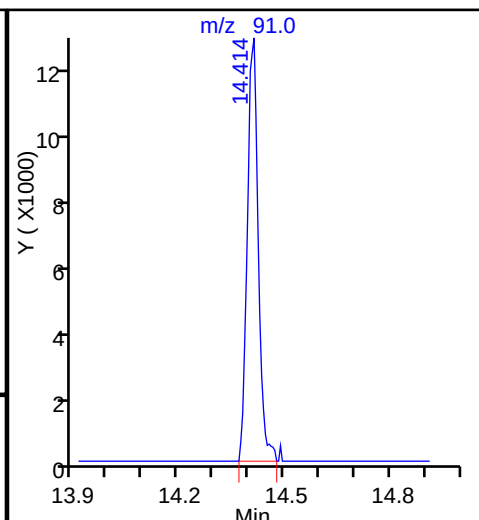
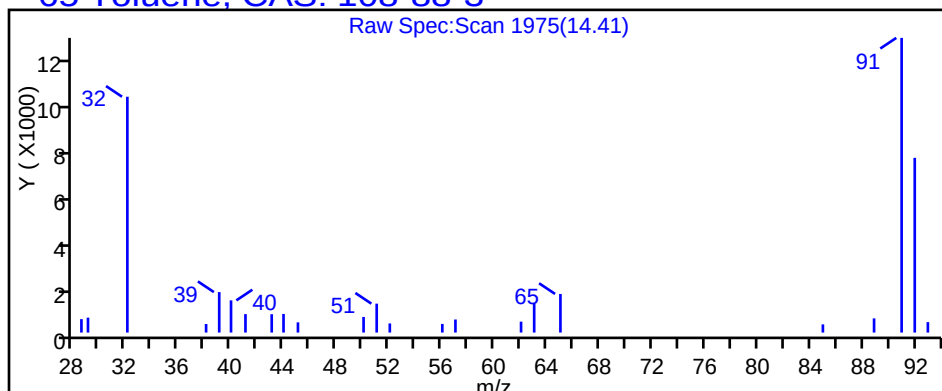
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P109.D

Injection Date: 31-Mar-2015 22:16:30

Instrument ID: MJ

Lims ID: 140-2950-A-3

Lab Sample ID: 140-2950-3

Client ID: D4-OA-2015

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 15

Purge Vol: 500.000 mL

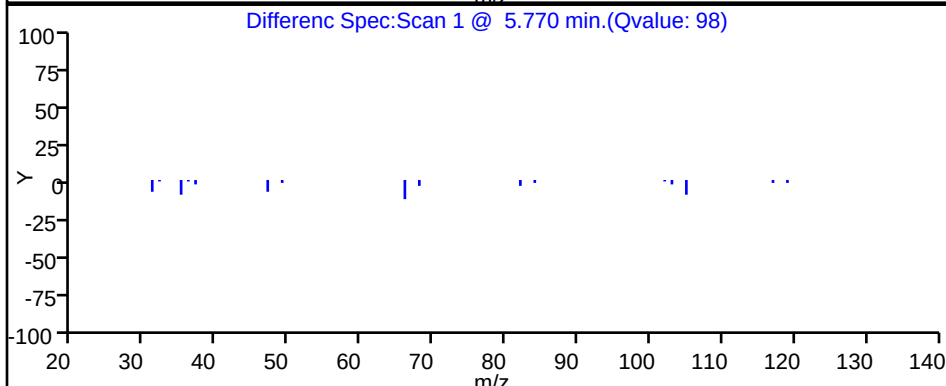
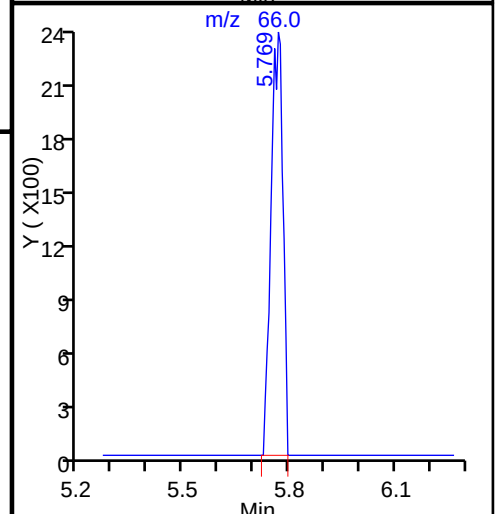
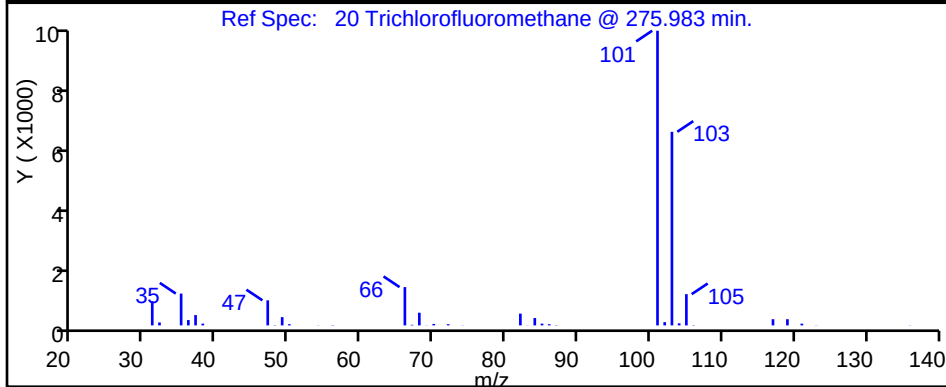
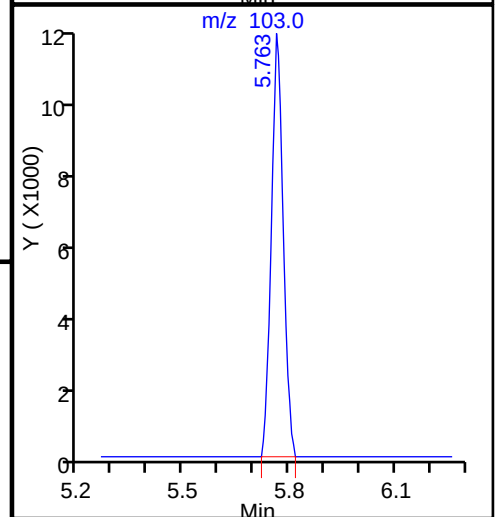
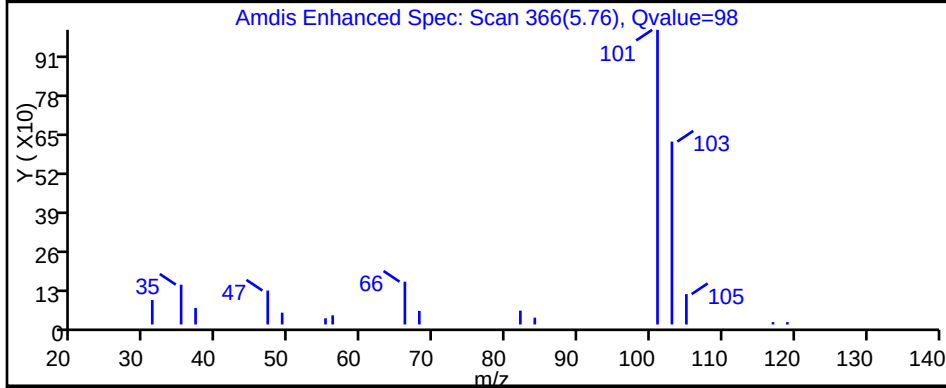
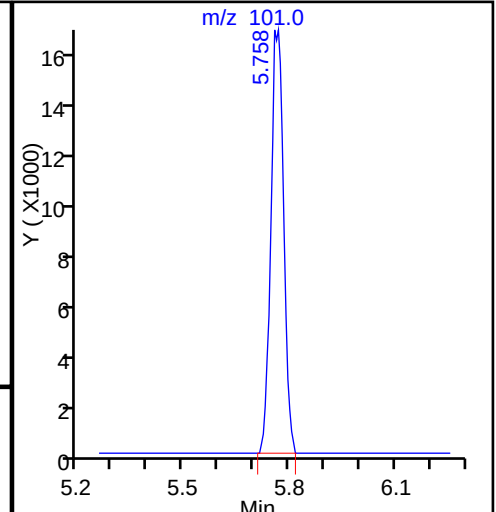
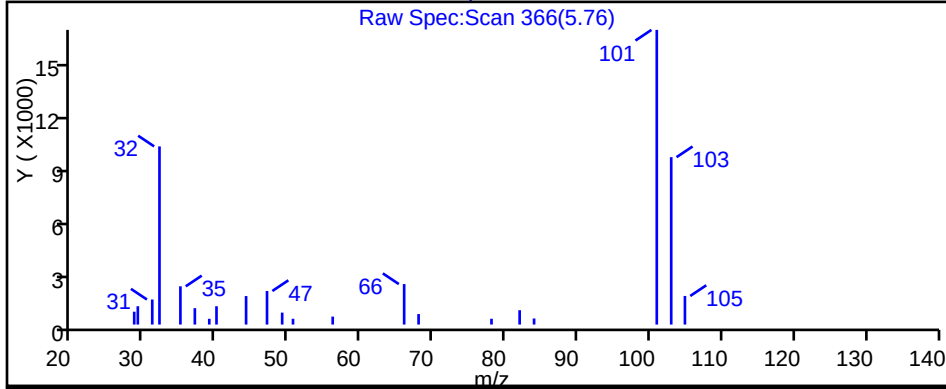
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1

SDG No.: _____

Client Sample ID: H30-SS-2015 Lab Sample ID: 140-2950-4

Matrix: Air Lab File ID: JC31P110.D

Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:58

Sample wt/vol: 500 (mL) Date Analyzed: 03/31/2015 23:11

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.: 2576 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	0.71		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		0.080	
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	1.2		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	0.049		0.040	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	7.3		0.080	
74-87-3	Chloromethane	50.49	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Client Sample ID: H30-SS-2015 Lab Sample ID: 140-2950-4
 Matrix: Air Lab File ID: JC31P110.D
 Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:58
 Sample wt/vol: 500(mL) Date Analyzed: 03/31/2015 23:11
 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.: 2576 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	0.37		0.080	
64-17-5	Ethanol	46.07	4.6		0.80	
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	2.6		0.32	
127-18-4	Tetrachloroethene	165.83	1.4		0.080	
108-88-3	Toluene	92.14	0.13		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	1.8		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.22		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1

SDG No.: _____

Client Sample ID: H30-SS-2015 Lab Sample ID: 140-2950-4

Matrix: Air Lab File ID: JC31P110.D

Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:58

Sample wt/vol: 500 (mL) Date Analyzed: 03/31/2015 23:11

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.: 2576 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	3.9		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		0.32	
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	3.6		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	0.31		0.25	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	36		0.39	
74-87-3	Chloromethane	50.49	ND		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Client Sample ID: H30-SS-2015 Lab Sample ID: 140-2950-4
 Matrix: Air Lab File ID: JC31P110.D
 Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:58
 Sample wt/vol: 500 (mL) Date Analyzed: 03/31/2015 23:11
 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.: 2576 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	1.8		0.40	
64-17-5	Ethanol	46.07	8.6		1.5	
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	7.8		0.97	
127-18-4	Tetrachloroethene	165.83	9.3		0.54	
108-88-3	Toluene	92.14	0.48		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	9.6		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.2		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P110.D
 Lims ID: 140-2950-A-4 Lab Sample ID: 140-2950-4
 Client ID: H30-SS-2015
 Sample Type: Client
 Inject. Date: 31-Mar-2015 23:11:30 ALS Bottle#: 10 Worklist Smp#: 16
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2950-a-4
 Misc. Info.: J033115,TO15,,140-0001518-016
 Operator ID: 7126 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150330-1518.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 01-Apr-2015 09:18:38 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK018

First Level Reviewer: tajh

Date: 01-Apr-2015 06:52:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.568	9.577	-0.009	71	225834	4.00	
* 2 1,4-Difluorobenzene	114	11.709	11.718	-0.009	96	1015852	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.357	16.360	-0.003	90	859146	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.965	17.969	-0.004	85	555711	3.95	
8 Dichlorodifluoromethane	85	4.108	4.117	-0.009	100	93306	0.3670	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.323	4.326	-0.003	28	2185	0.0131	
17 Ethanol	31	5.227	5.246	-0.019	96	143758	4.58	
20 Trichlorofluoromethane	101	5.765	5.779	-0.014	95	48141	0.2162	
28 2-Methyl-2-propanol	59	6.609	6.640	-0.031	97	341064	2.56	
30 1,1,2-Trichloro-1,2,2-trif	101	6.717	6.726	-0.009	70	10149	0.0677	
31 Methylene Chloride	84	6.910	6.919	-0.009	86	7979	0.1102	
39 2-Butanone (MEK)	72	8.766	8.781	-0.015	88	32580	1.21	
40 Hexane	56	8.793	8.802	-0.009	74	8190	0.1088	
43 Chloroform	83	9.579	9.587	-0.008	91	1038352	7.28	
45 1,1,1-Trichloroethane	97	10.622	10.626	-0.004	95	105534	0.7061	
48 Benzene	78	11.203	11.207	-0.004	61	11202	0.0597	
50 Carbon tetrachloride	117	11.219	11.228	-0.009	83	6772	0.0489	
56 Trichloroethene	130	12.408	12.417	-0.009	93	145904	1.79	
59 Dichlorobromomethane	83	12.623	12.643	-0.020	18	4654	0.0346	
62 4-Methyl-2-pentanone (MIBK	43	13.538	13.541	-0.003	83	16766	0.1086	
65 Toluene	91	14.409	14.413	-0.004	80	19893	0.1269	
73 Tetrachloroethene	129	15.539	15.537	0.002	93	93851	1.38	
78 m-Xylene & p-Xylene	91	16.830	16.839	-0.009	26	10718	0.0726	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P110.D

Injection Date: 31-Mar-2015 23:11:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: 140-2950-A-4

Lab Sample ID: 140-2950-4

Worklist Smp#: 16

Client ID: H30-SS-2015

Purge Vol: 500.000 mL

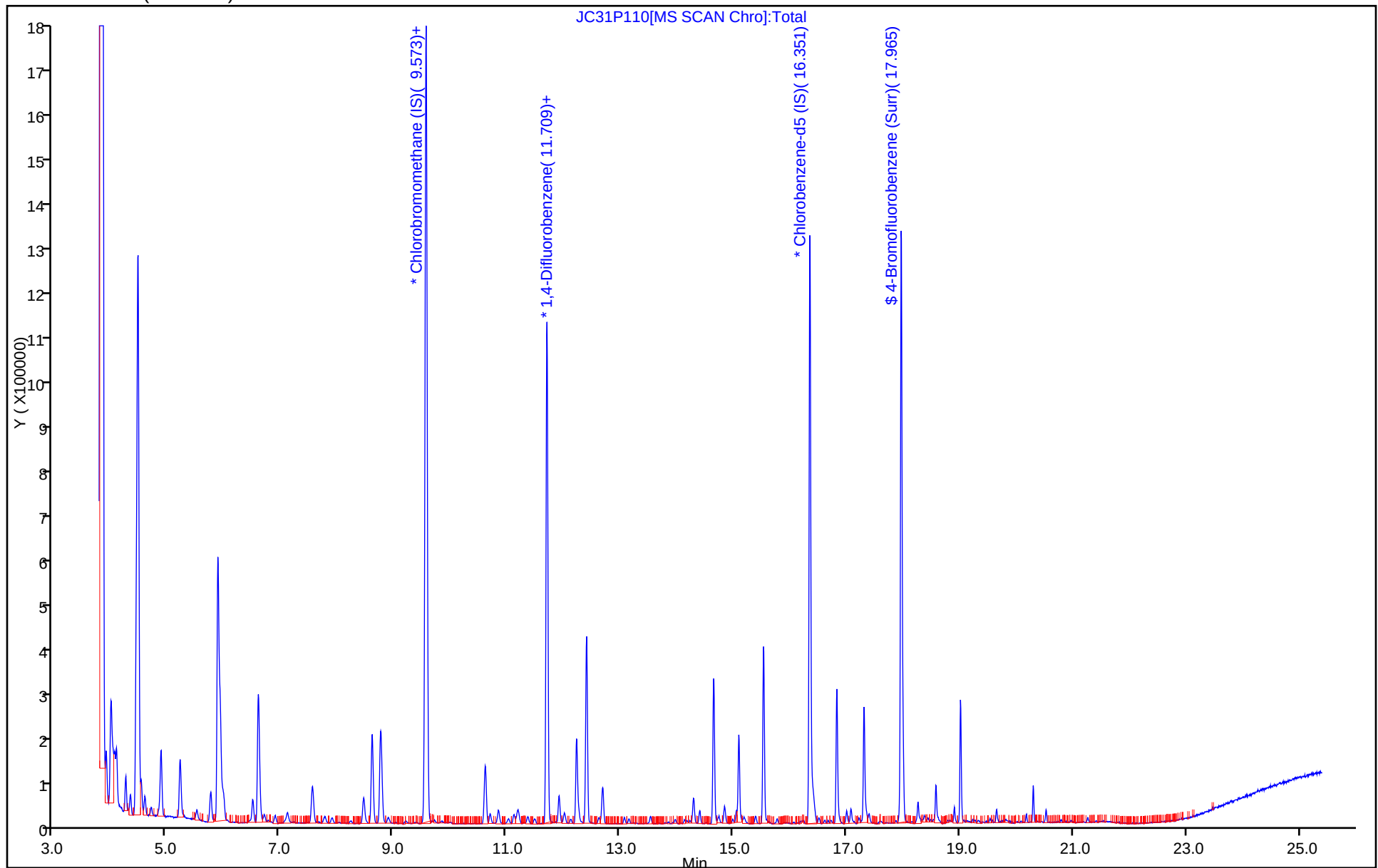
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P110.D

Injection Date: 31-Mar-2015 23:11:30

Instrument ID: MJ

Lims ID: 140-2950-A-4

Lab Sample ID: 140-2950-4

Client ID: H30-SS-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 16

Purge Vol: 500.000 mL

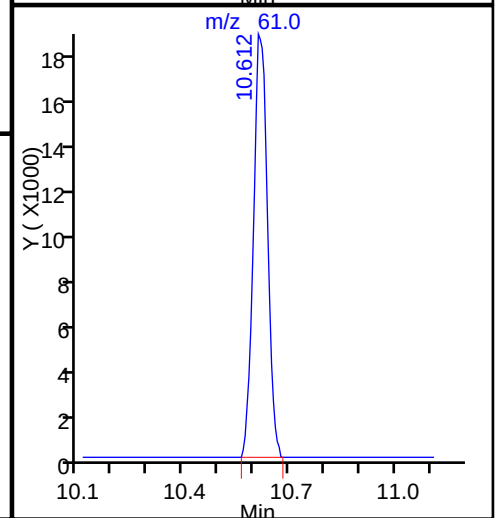
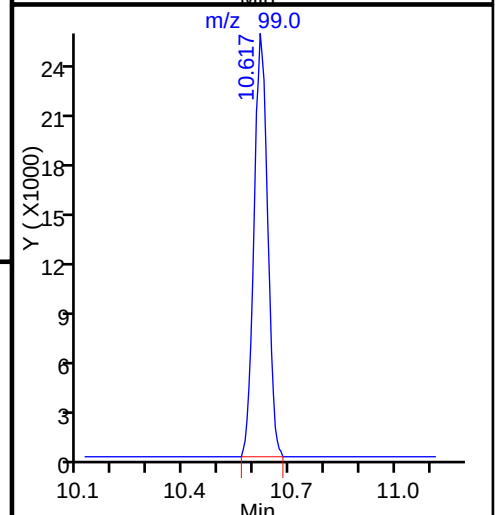
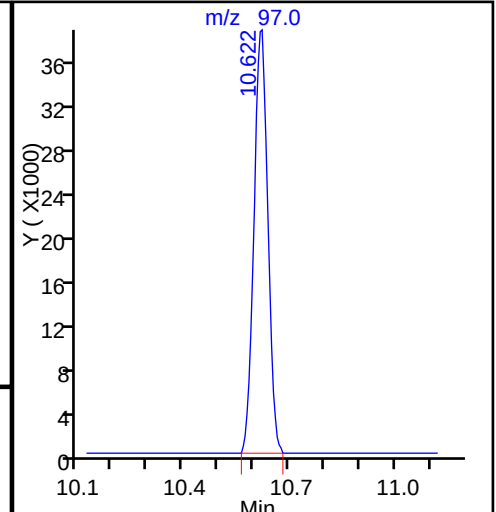
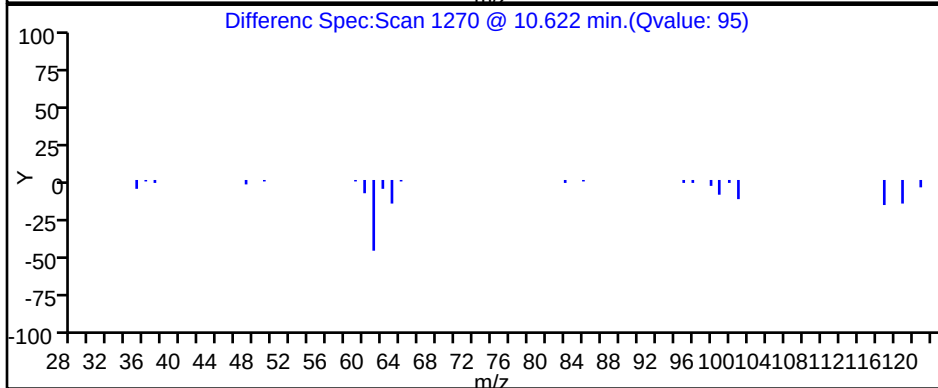
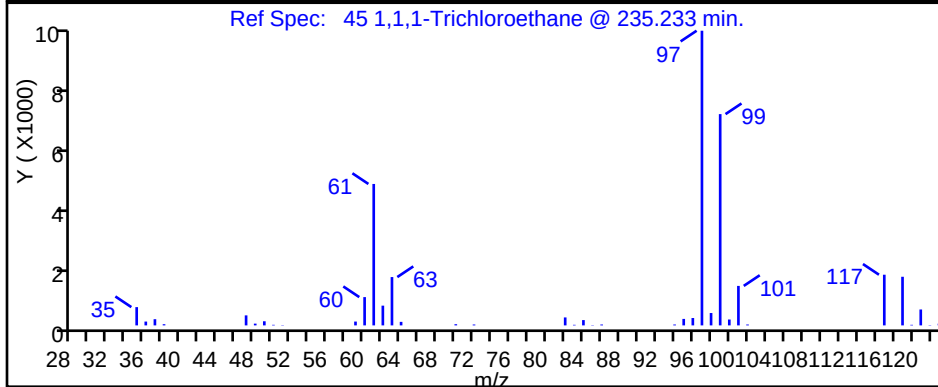
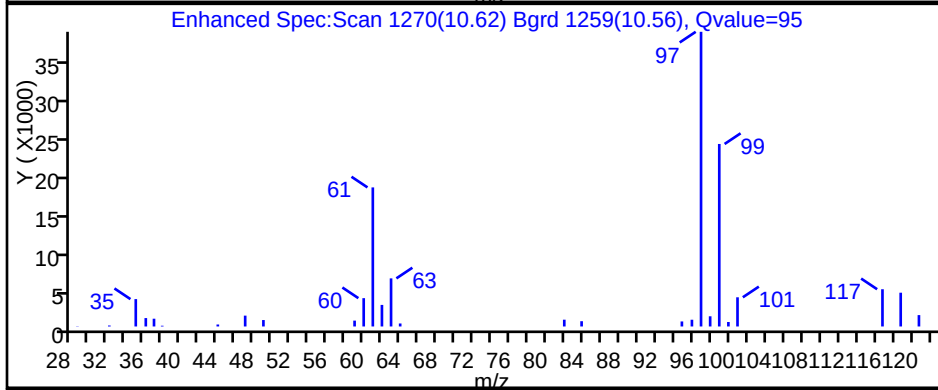
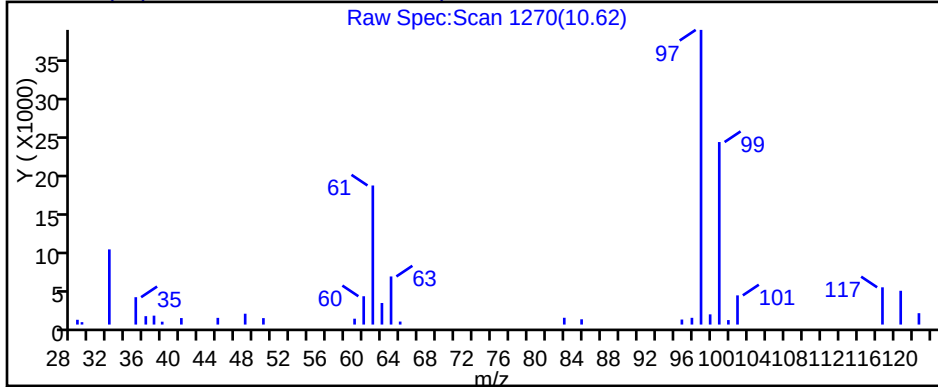
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

45 1,1,1-Trichloroethane, CAS: 71-55-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P110.D

Injection Date: 31-Mar-2015 23:11:30

Instrument ID: MJ

Lims ID: 140-2950-A-4

Lab Sample ID: 140-2950-4

Client ID: H30-SS-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 16

Purge Vol: 500.000 mL

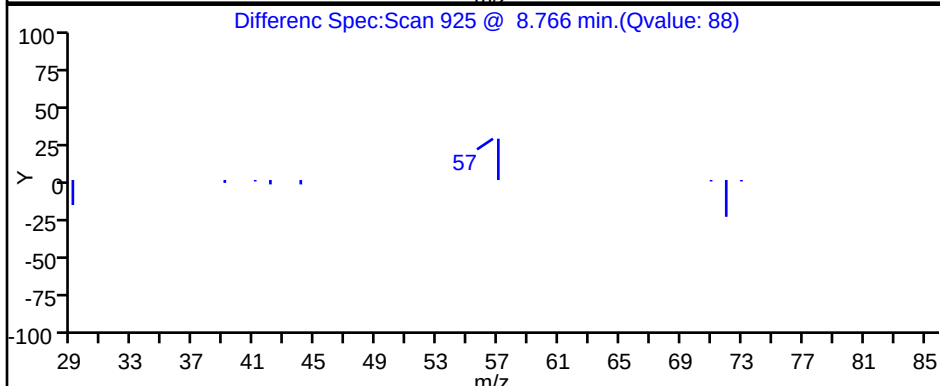
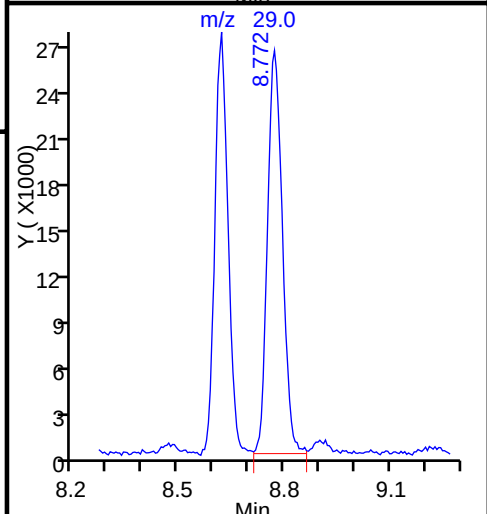
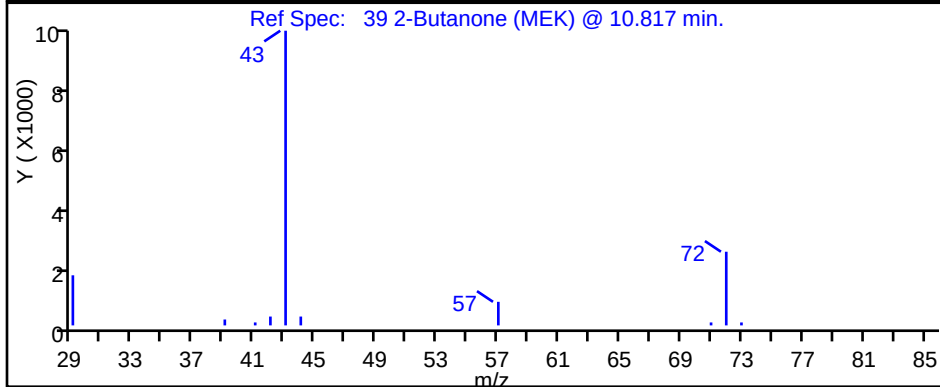
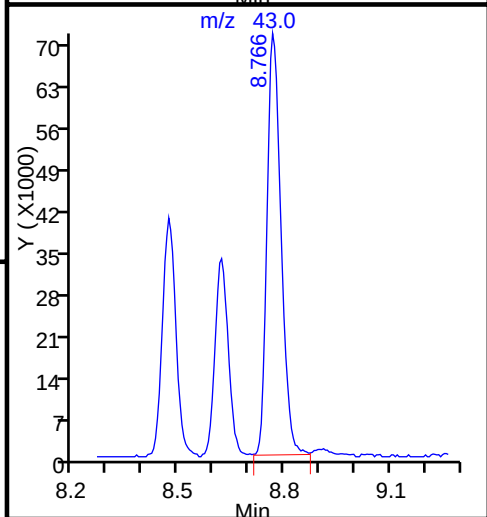
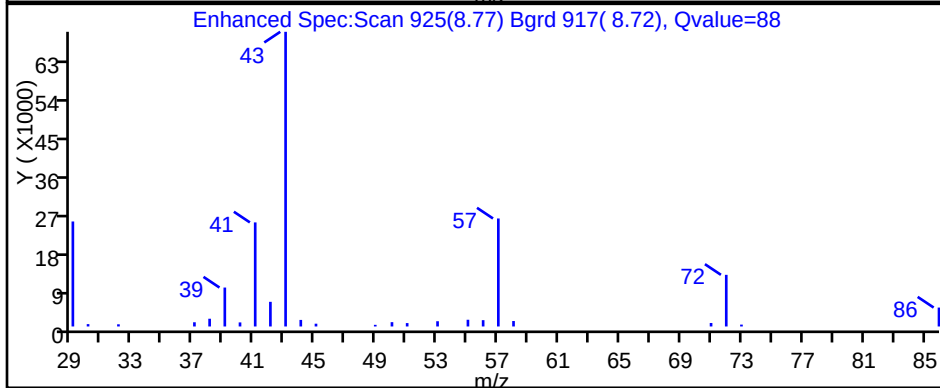
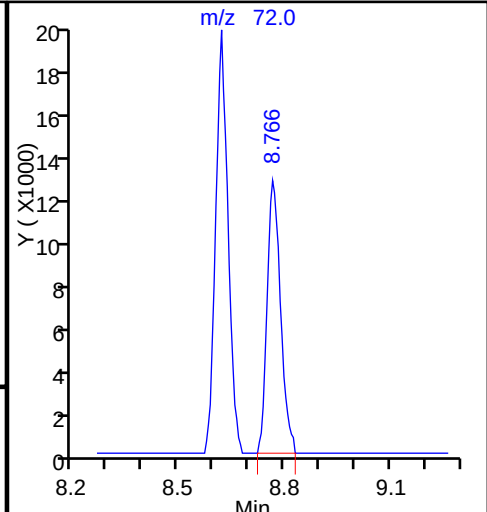
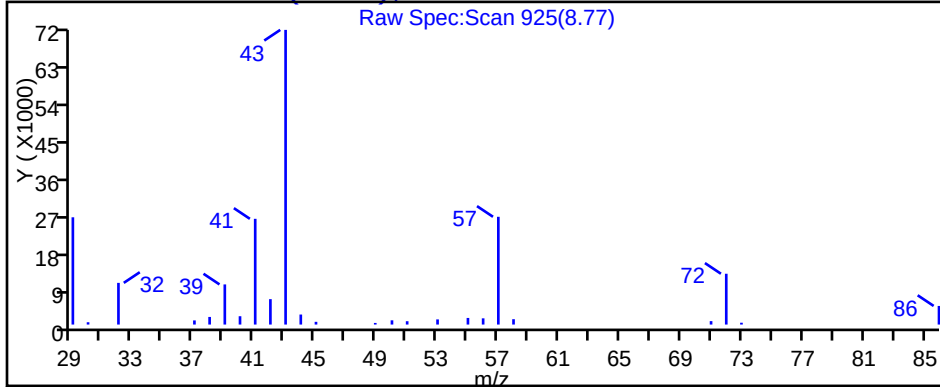
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P110.D

Injection Date: 31-Mar-2015 23:11:30

Instrument ID: MJ

Lims ID: 140-2950-A-4

Lab Sample ID: 140-2950-4

Client ID: H30-SS-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 16

Purge Vol: 500.000 mL

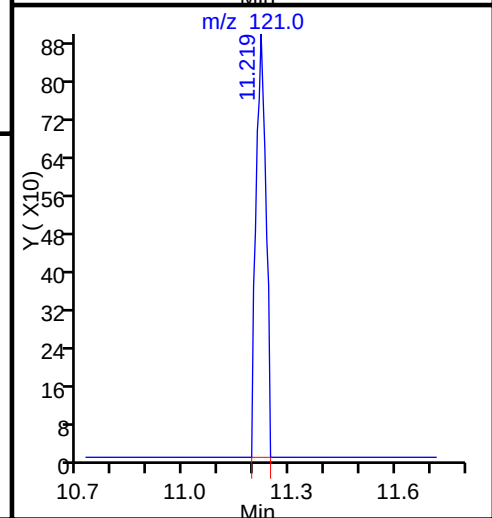
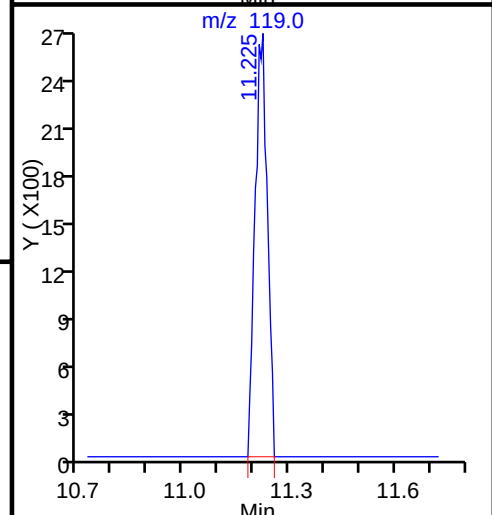
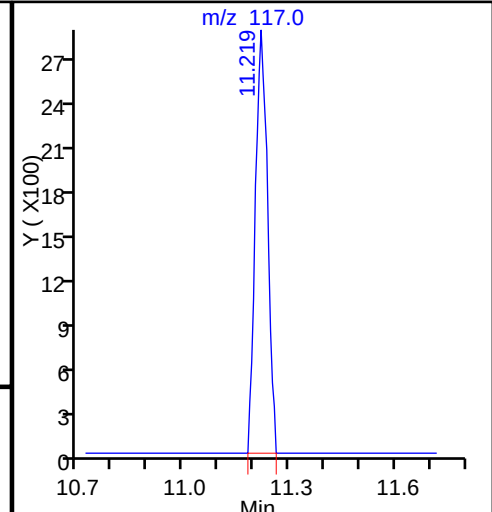
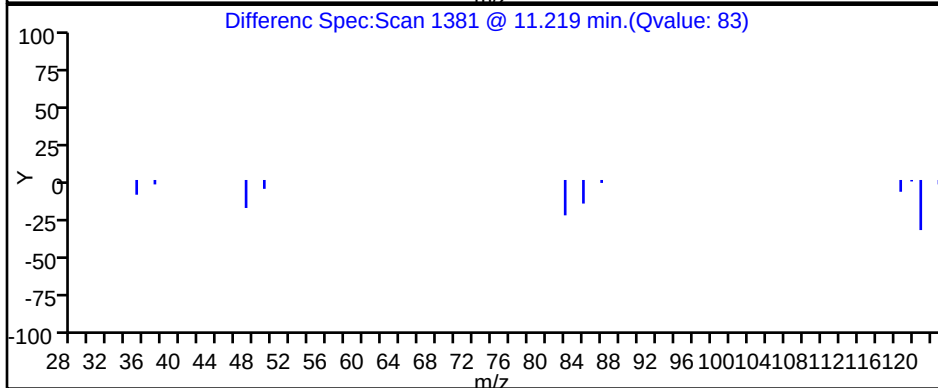
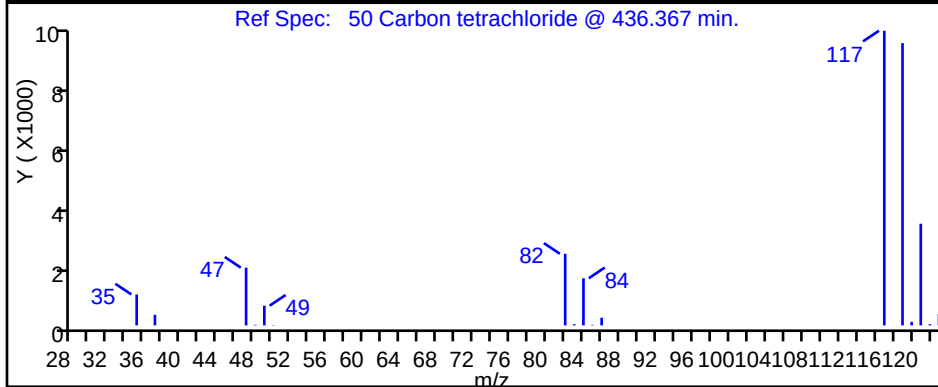
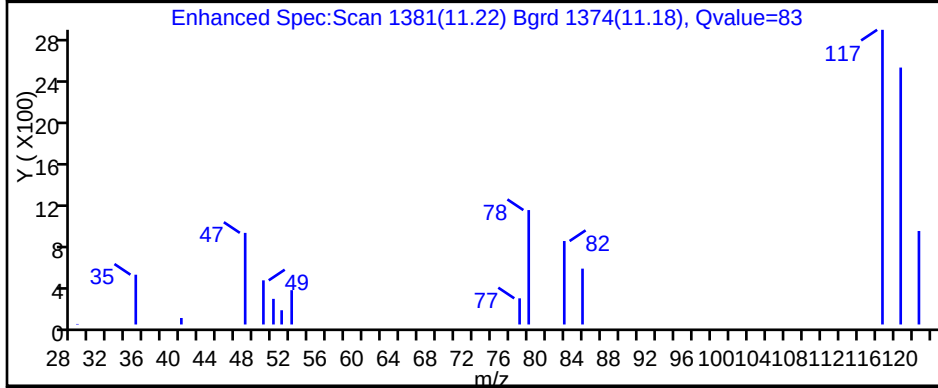
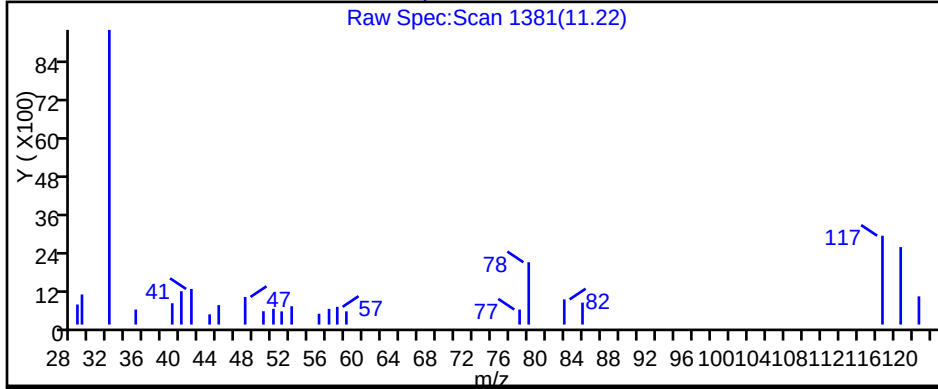
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P110.D

Injection Date: 31-Mar-2015 23:11:30

Instrument ID: MJ

Lims ID: 140-2950-A-4

Lab Sample ID: 140-2950-4

Client ID: H30-SS-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 16

Purge Vol: 500.000 mL

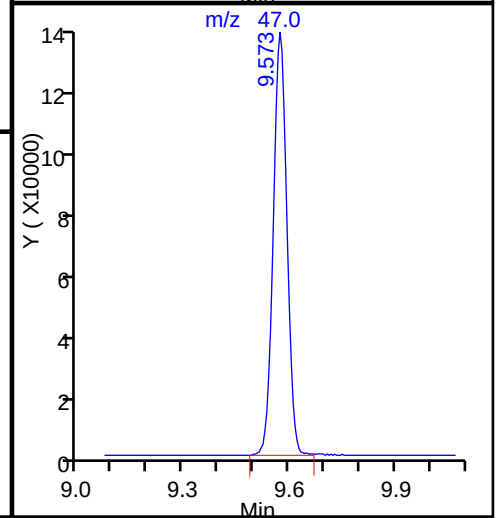
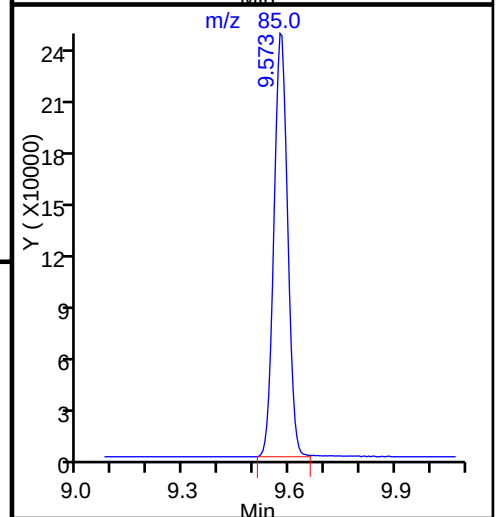
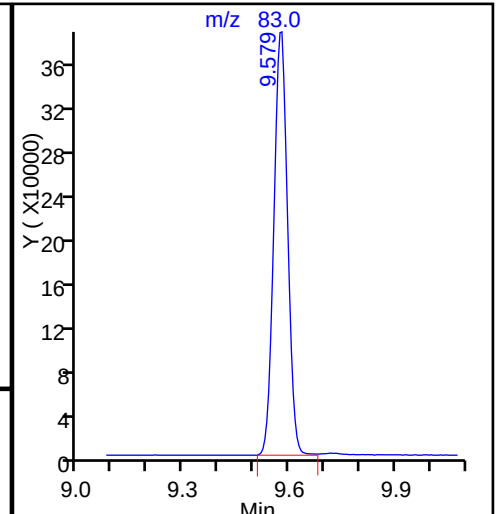
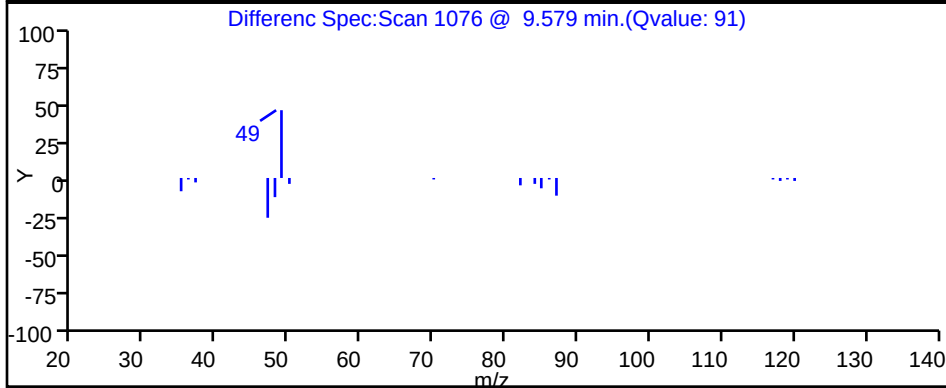
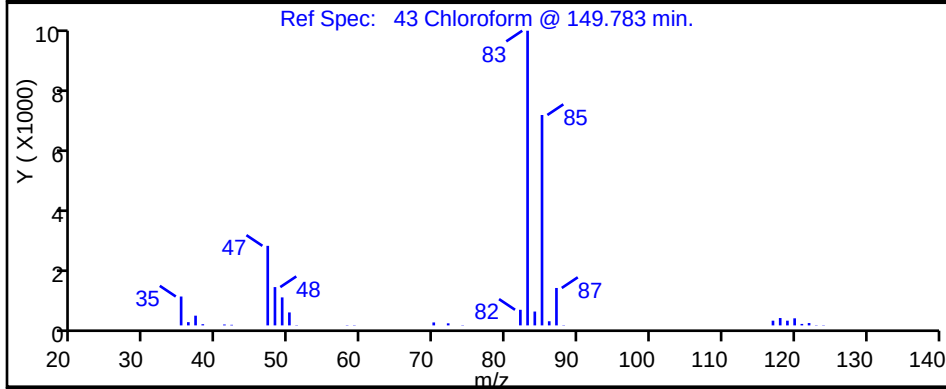
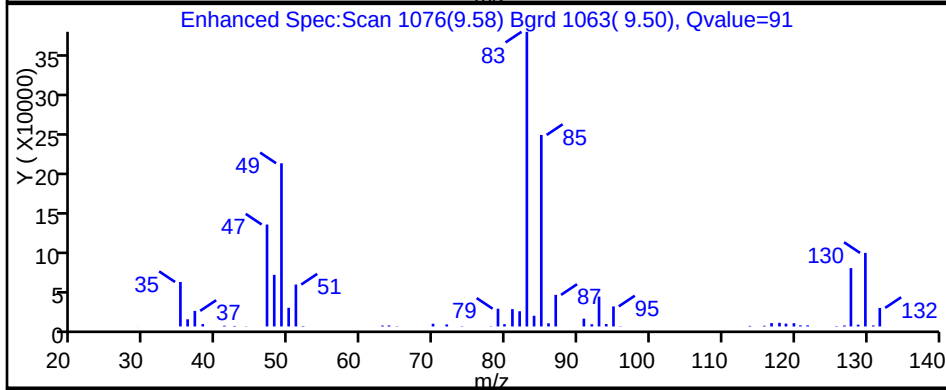
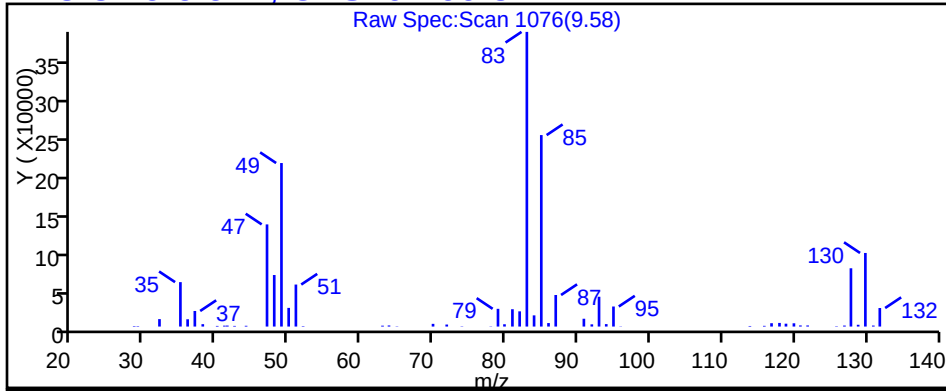
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

43 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P110.D

Injection Date: 31-Mar-2015 23:11:30

Instrument ID: MJ

Lims ID: 140-2950-A-4

Lab Sample ID: 140-2950-4

Client ID: H30-SS-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 16

Purge Vol: 500.000 mL

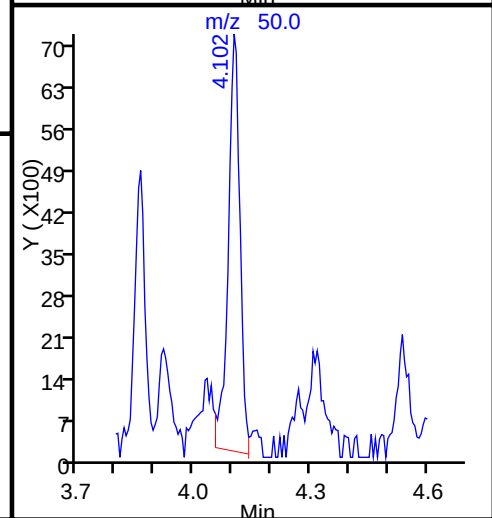
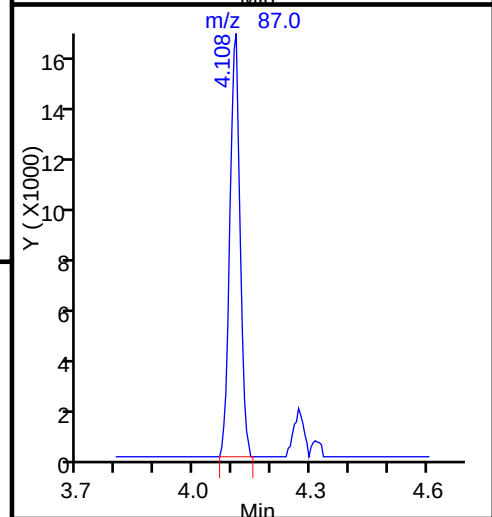
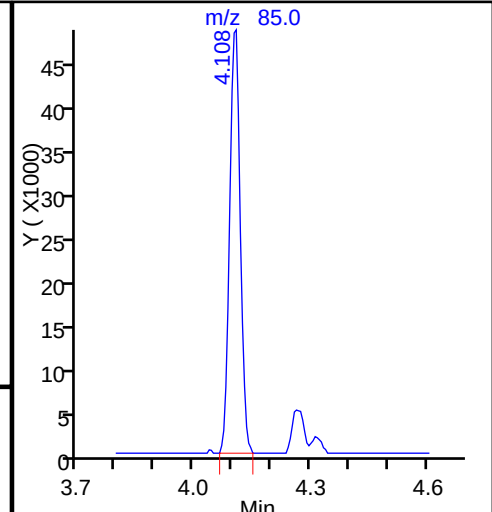
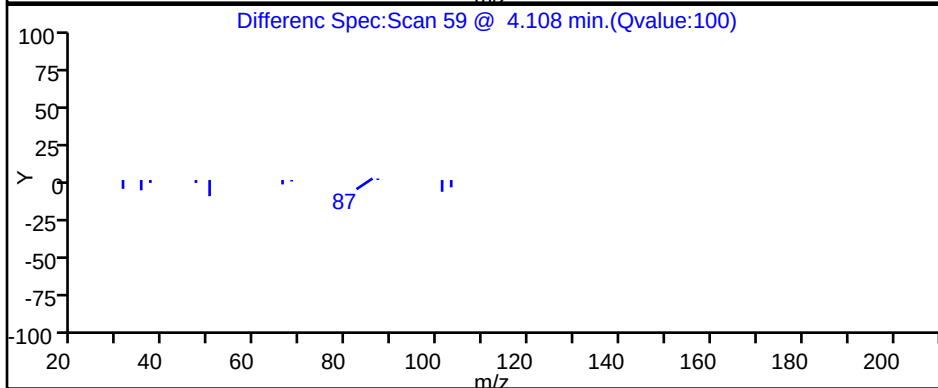
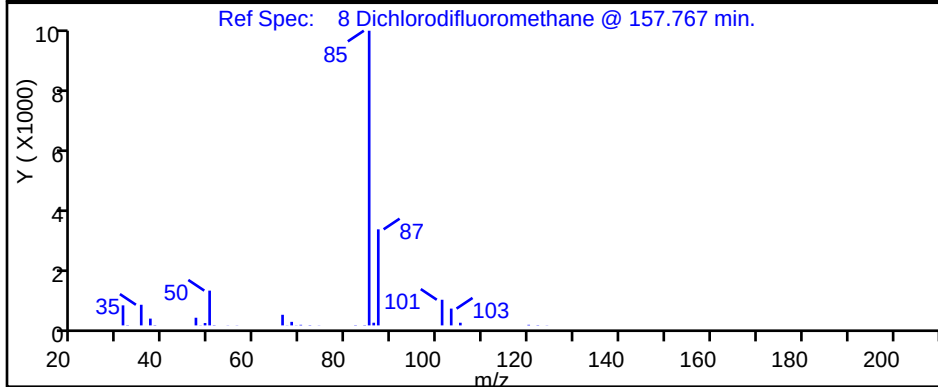
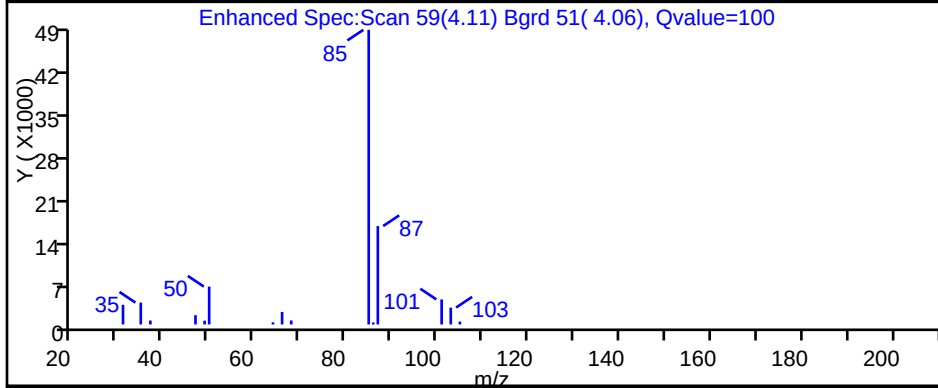
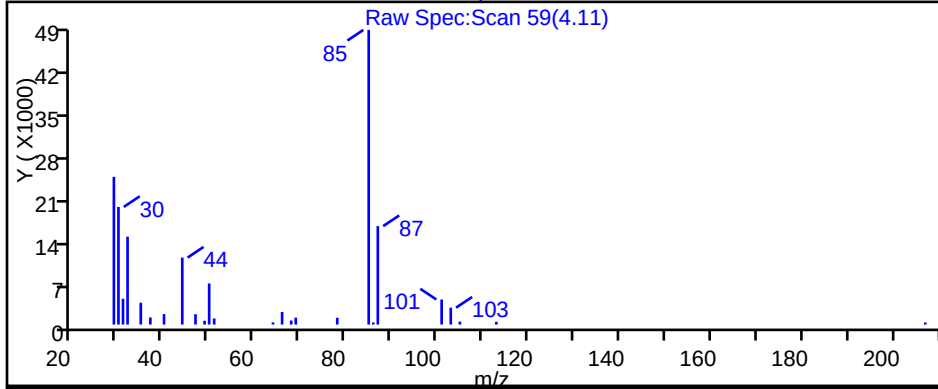
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P110.D

Injection Date: 31-Mar-2015 23:11:30

Instrument ID: MJ

Lims ID: 140-2950-A-4

Lab Sample ID: 140-2950-4

Client ID: H30-SS-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 16

Purge Vol: 500.000 mL

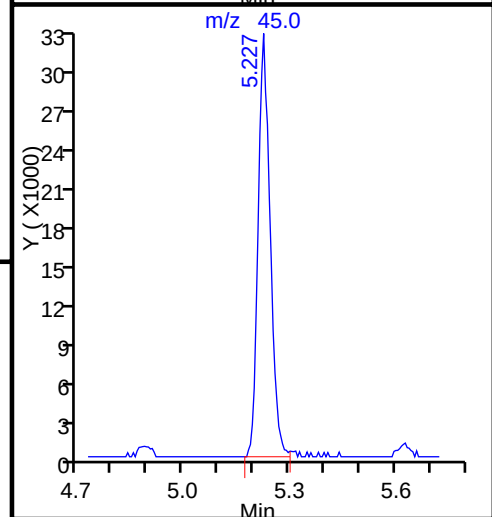
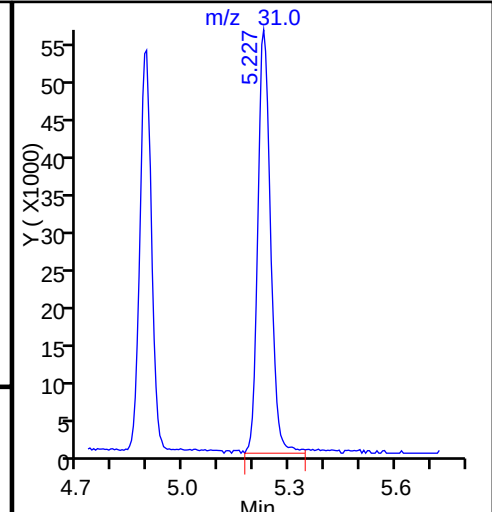
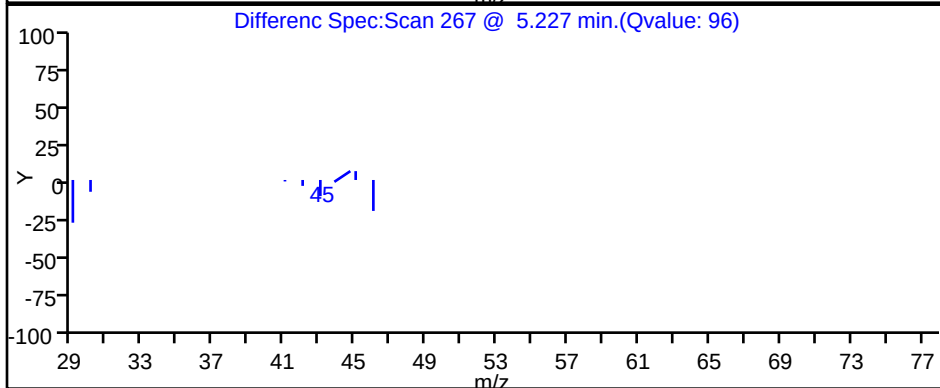
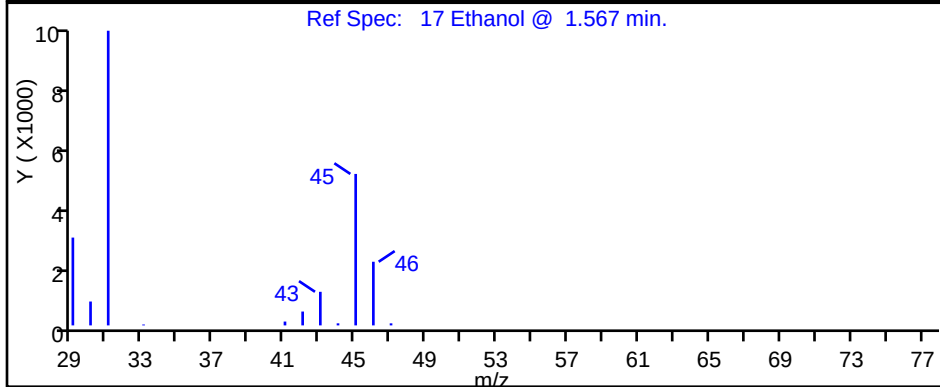
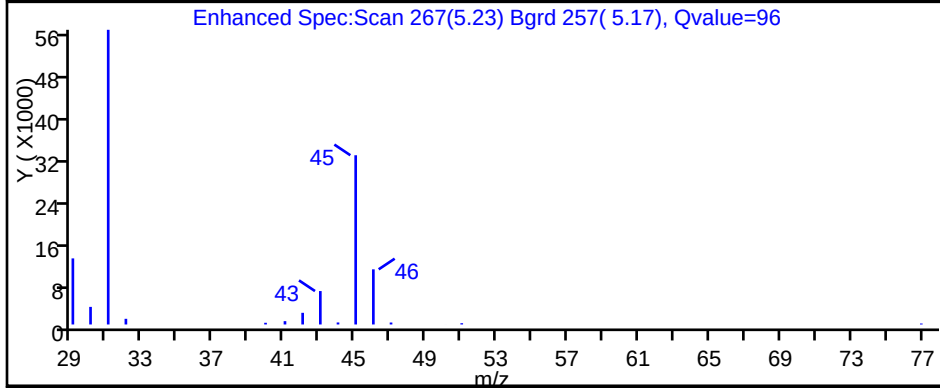
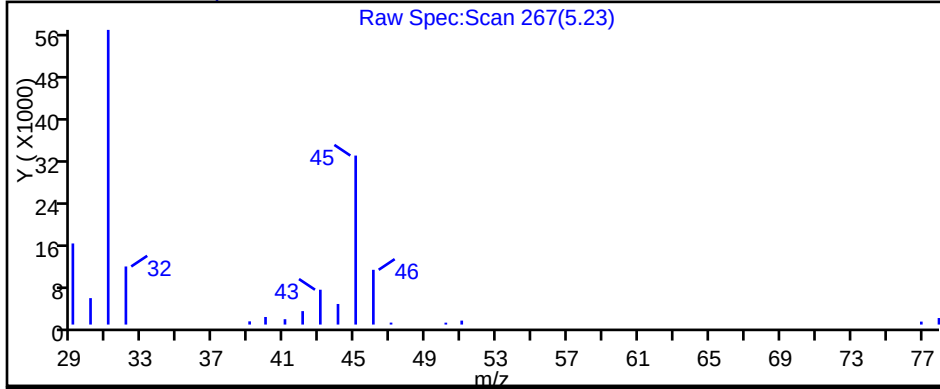
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P110.D

Injection Date: 31-Mar-2015 23:11:30

Instrument ID: MJ

Lims ID: 140-2950-A-4

Lab Sample ID: 140-2950-4

Client ID: H30-SS-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 16

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

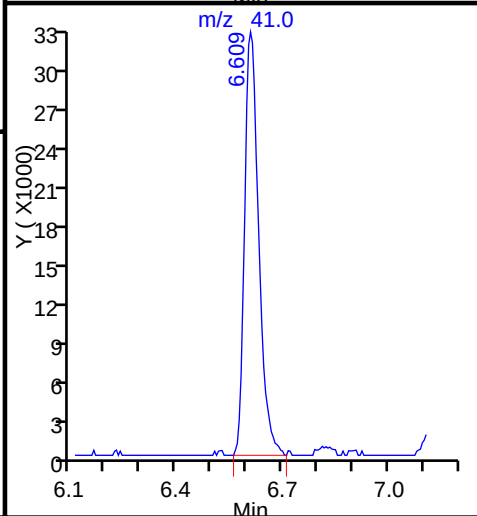
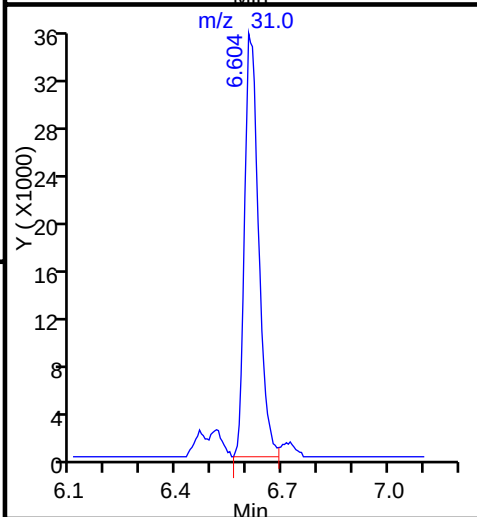
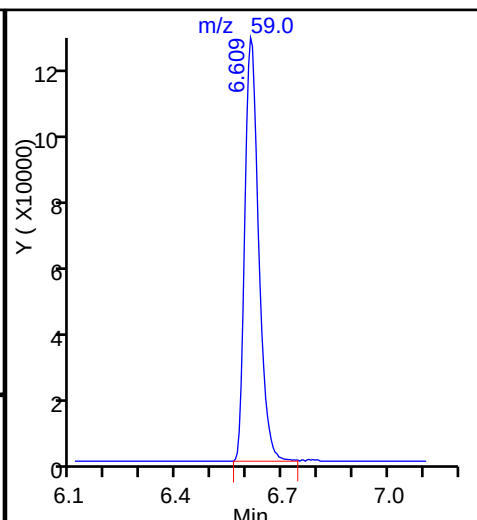
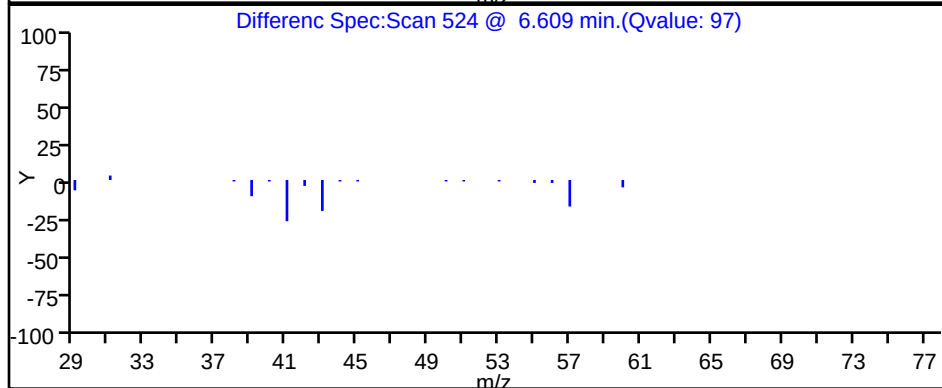
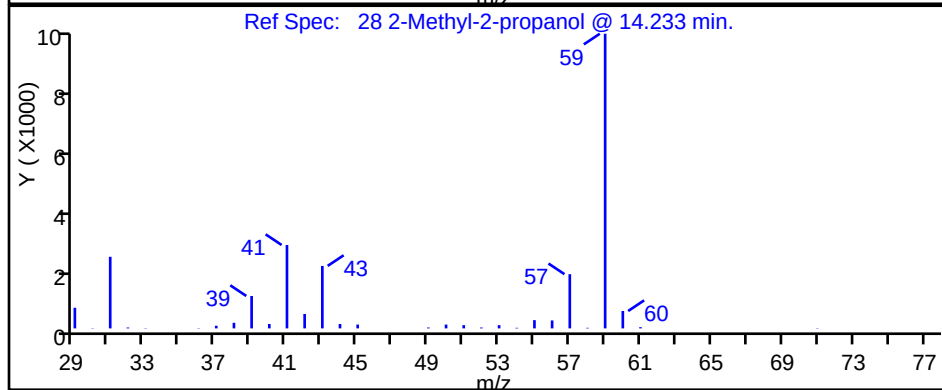
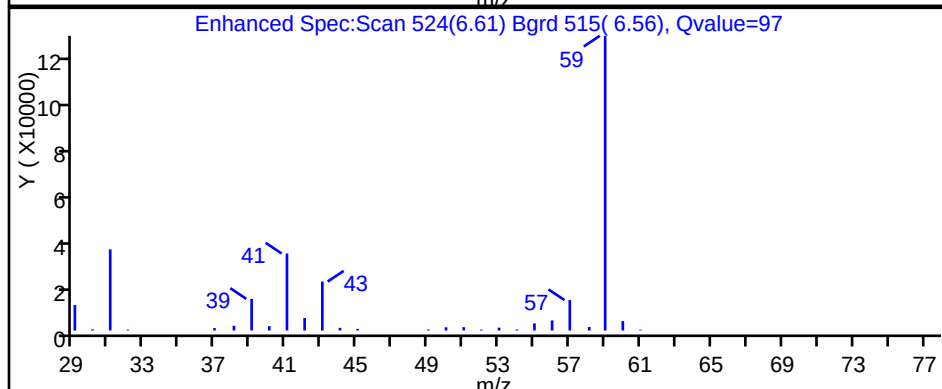
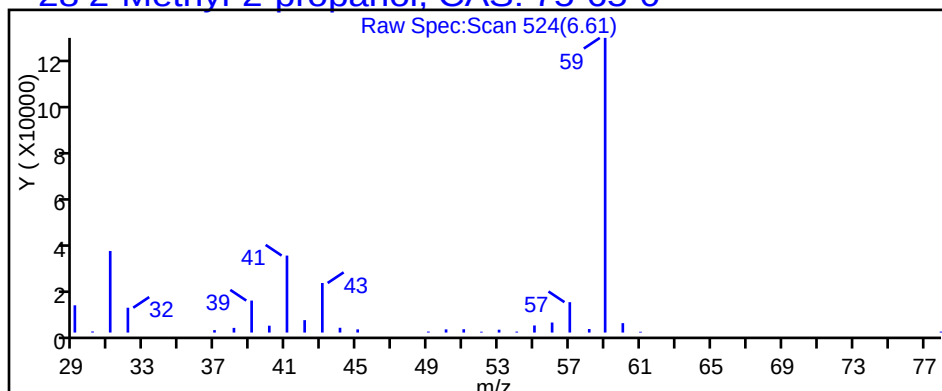
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

28 2-Methyl-2-propanol, CAS: 75-65-0



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P110.D

Injection Date: 31-Mar-2015 23:11:30

Instrument ID: MJ

Lims ID: 140-2950-A-4

Lab Sample ID: 140-2950-4

Client ID: H30-SS-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 16

Purge Vol: 500.000 mL

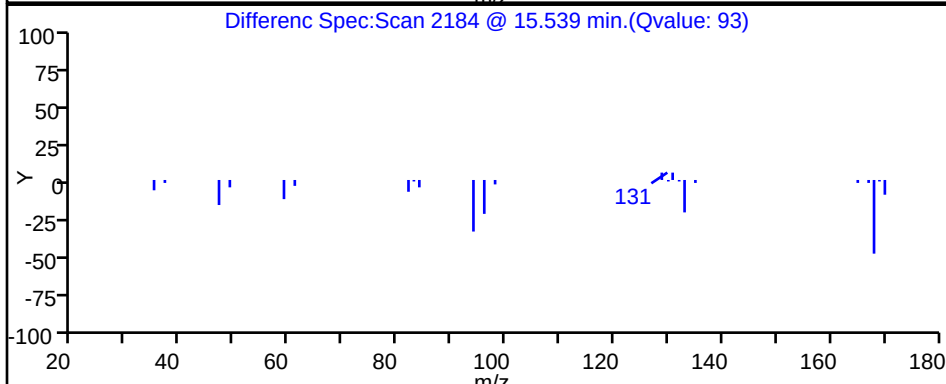
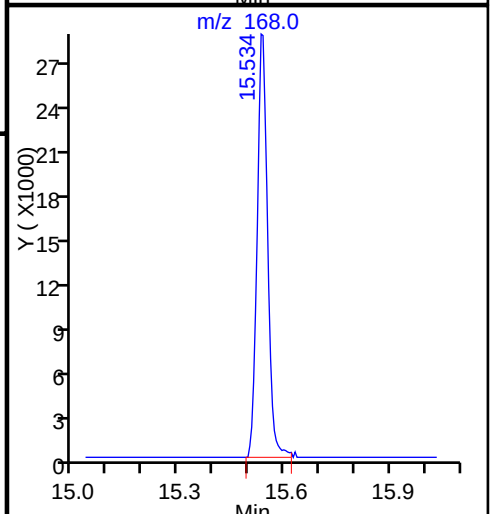
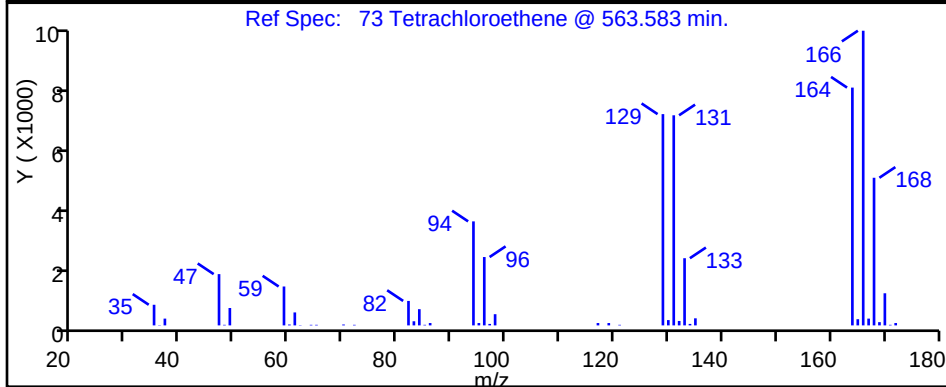
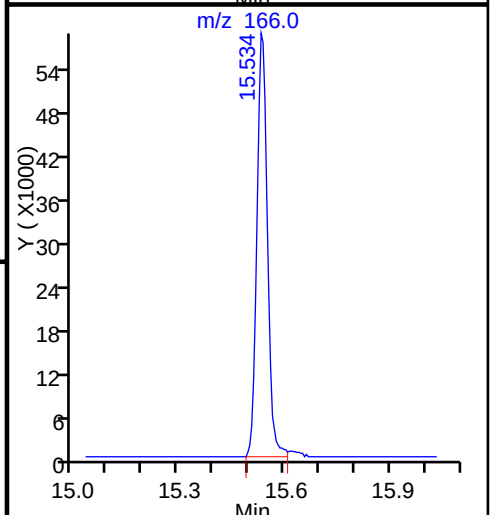
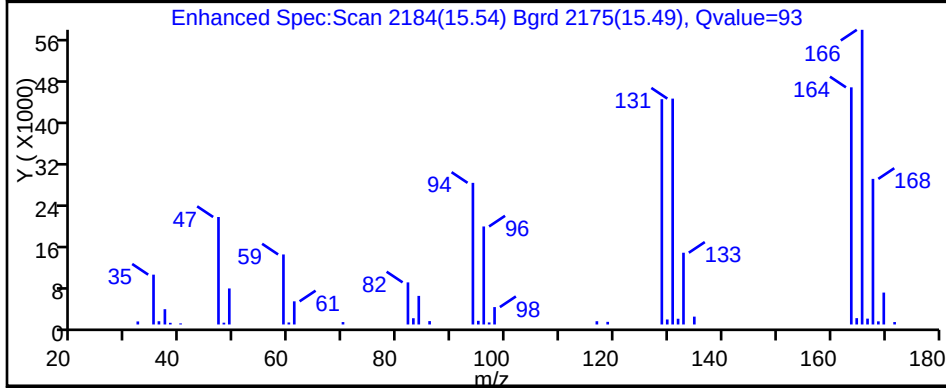
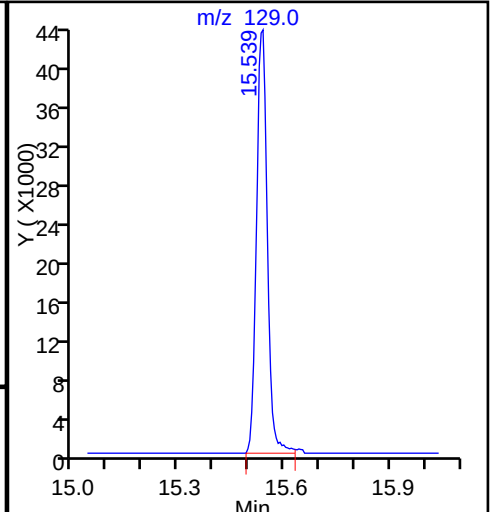
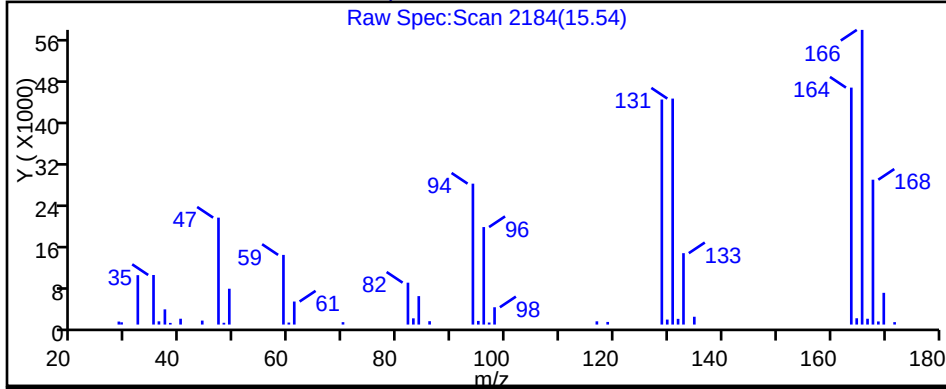
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

73 Tetrachloroethene, CAS: 127-18-4

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P110.D

Injection Date: 31-Mar-2015 23:11:30

Instrument ID: MJ

Lims ID: 140-2950-A-4

Lab Sample ID: 140-2950-4

Client ID: H30-SS-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 16

Purge Vol: 500.000 mL

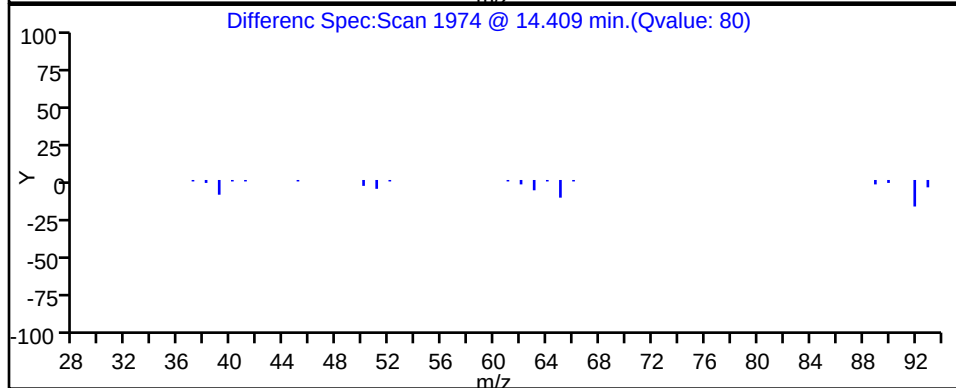
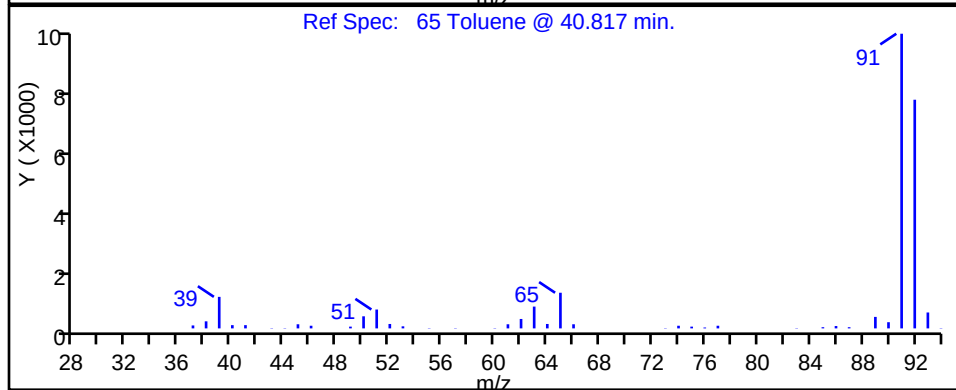
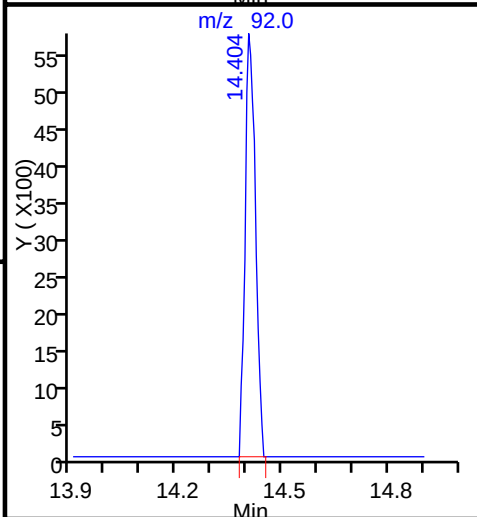
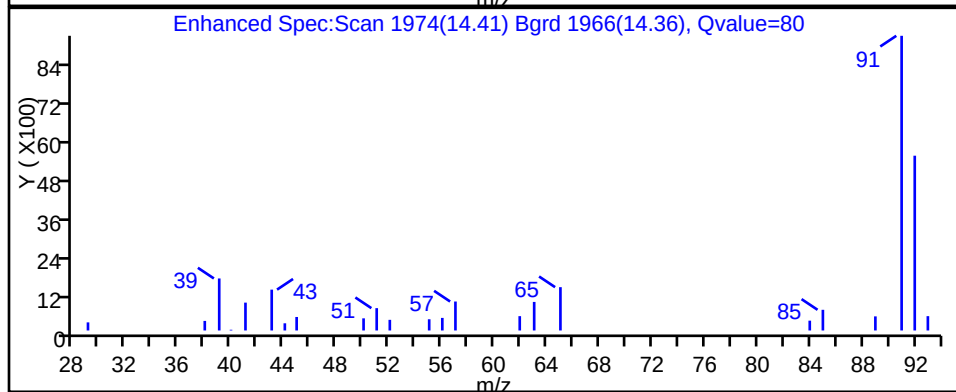
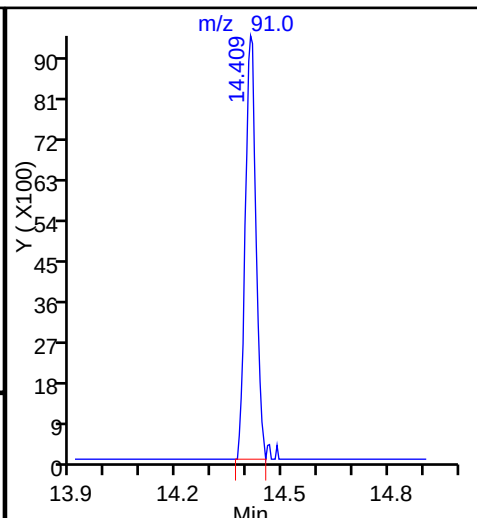
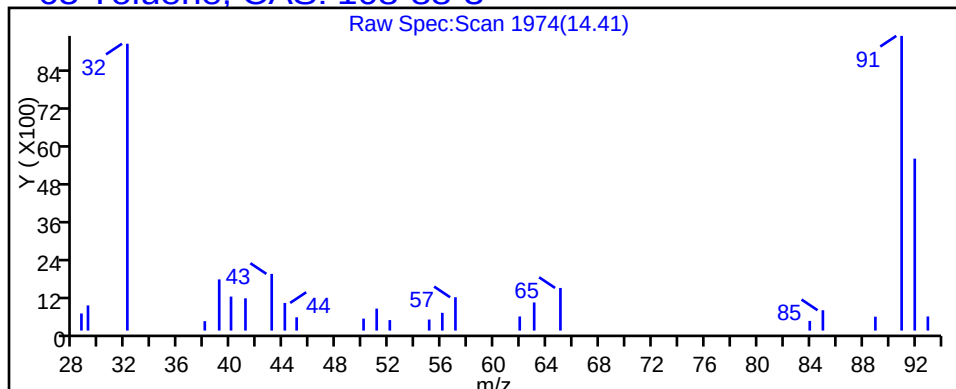
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P110.D

Injection Date: 31-Mar-2015 23:11:30

Instrument ID: MJ

Lims ID: 140-2950-A-4

Lab Sample ID: 140-2950-4

Client ID: H30-SS-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 16

Purge Vol: 500.000 mL

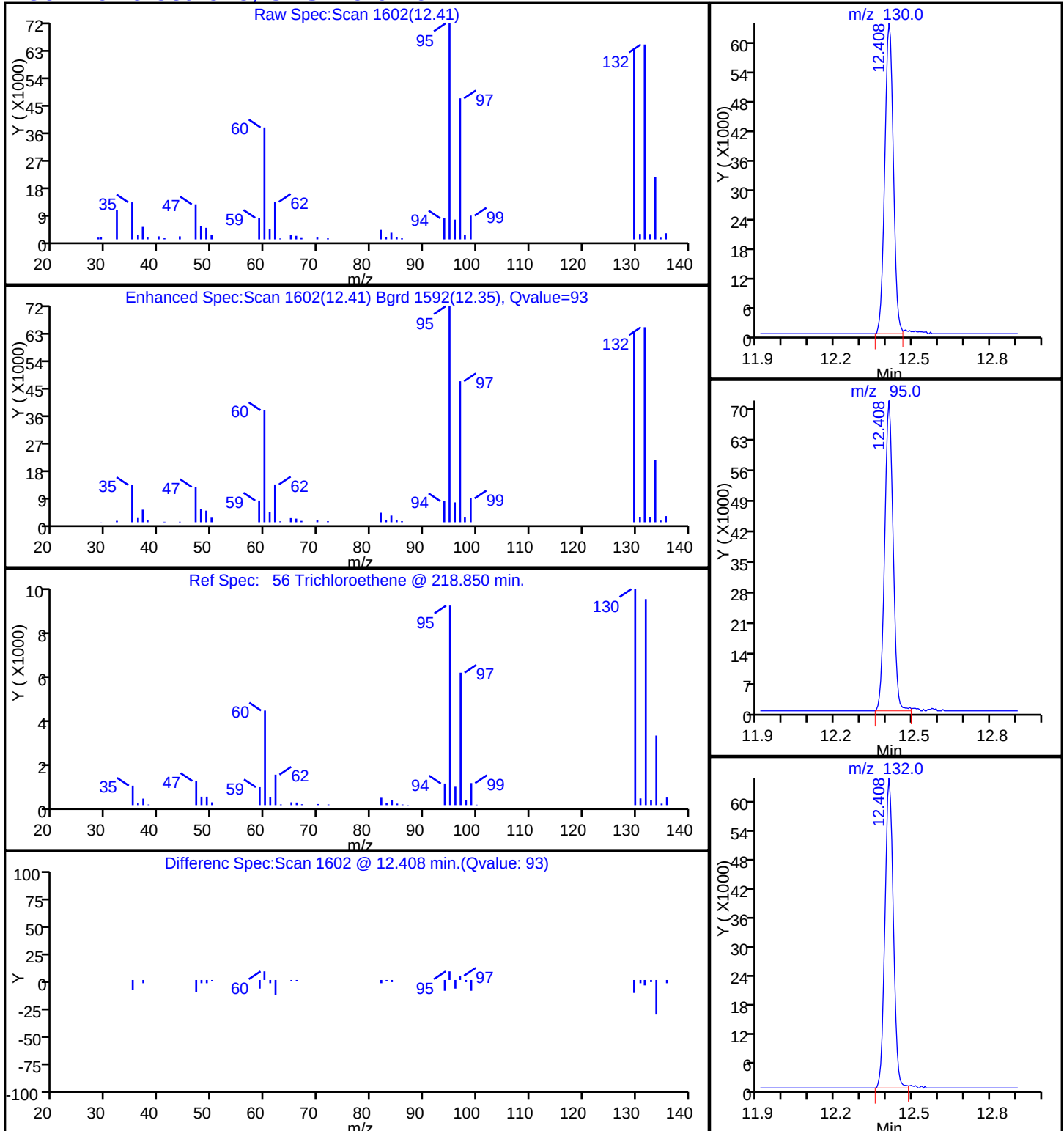
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

56 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P110.D

Injection Date: 31-Mar-2015 23:11:30

Instrument ID: MJ

Lims ID: 140-2950-A-4

Lab Sample ID: 140-2950-4

Client ID: H30-SS-2015

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 16

Purge Vol: 500.000 mL

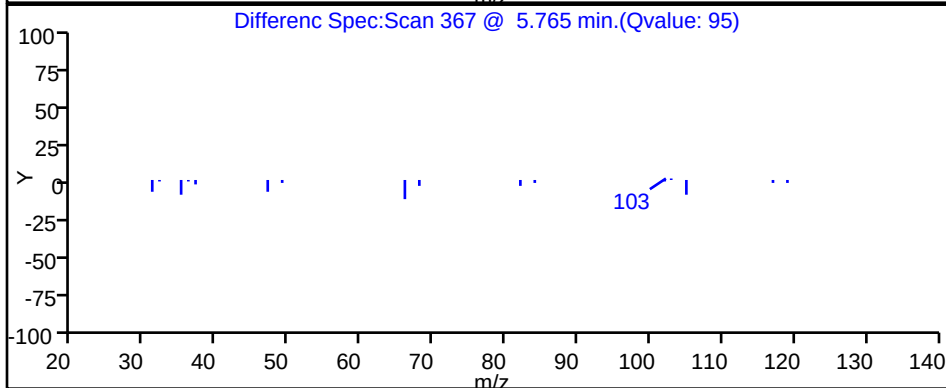
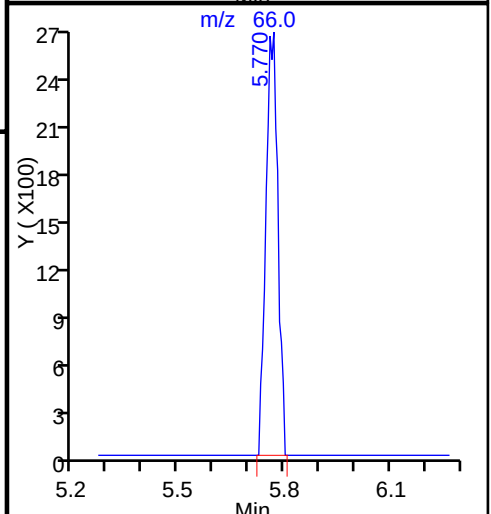
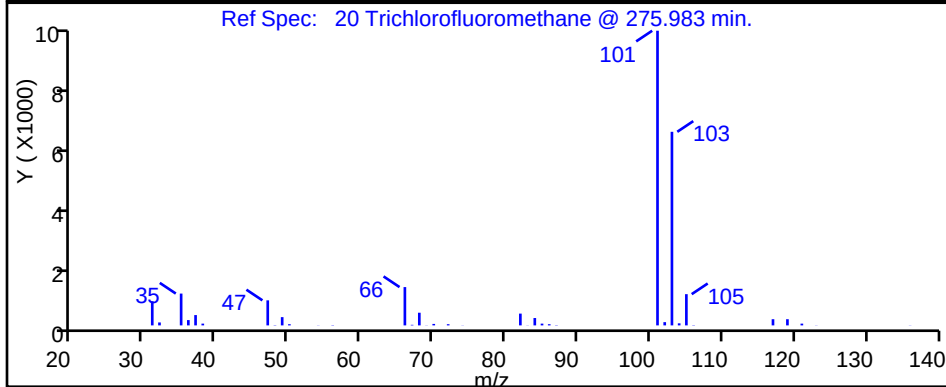
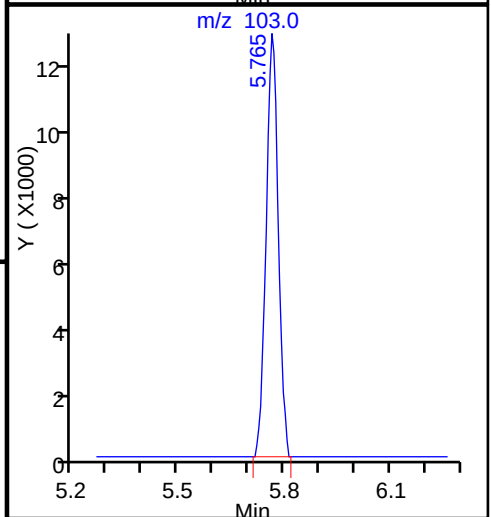
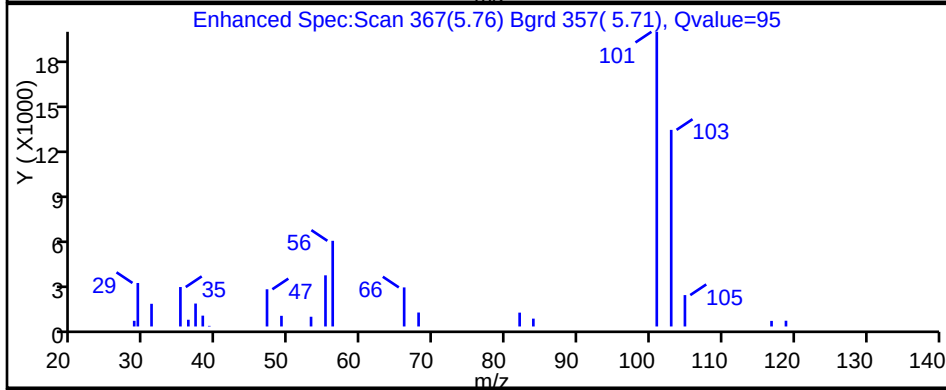
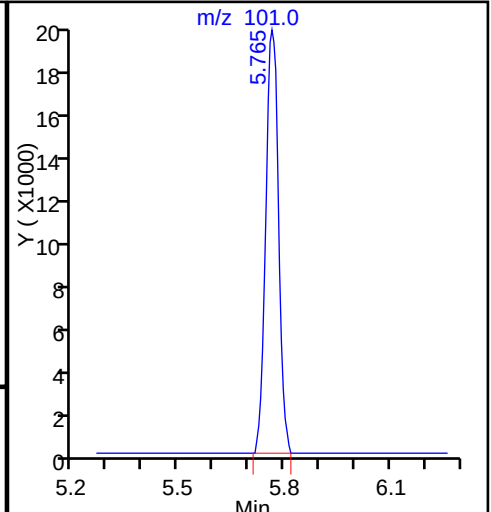
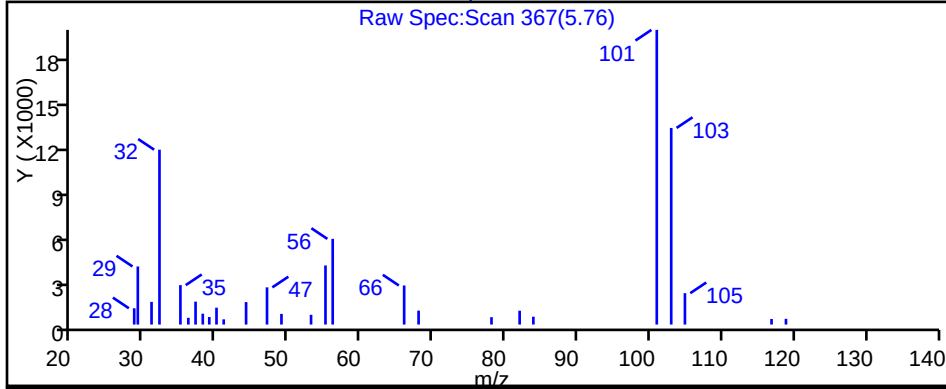
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1

SDG No.: _____

Client Sample ID: H30-BA-2015 Lab Sample ID: 140-2950-5

Matrix: Air Lab File ID: JC31P111.D

Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:58

Sample wt/vol: 500 (mL) Date Analyzed: 04/01/2015 00:07

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.: 2576 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		0.080	
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	0.43		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	0.21		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	0.074		0.040	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	0.15		0.080	
74-87-3	Chloromethane	50.49	0.49		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.080	
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: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Client Sample ID: H30-BA-2015 Lab Sample ID: 140-2950-5
 Matrix: Air Lab File ID: JC31P111.D
 Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:58
 Sample wt/vol: 500 (mL) Date Analyzed: 04/01/2015 00:07
 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.: 2576 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	0.43		0.080	
64-17-5	Ethanol	46.07	100	E	0.80	
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	0.14		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	0.40		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		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.19		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1

SDG No.: _____

Client Sample ID: H30-BA-2015 Lab Sample ID: 140-2950-5

Matrix: Air Lab File ID: JC31P111.D

Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:58

Sample wt/vol: 500 (mL) Date Analyzed: 04/01/2015 00:07

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.: 2576 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		0.32	
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	1.3		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.66		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	0.46		0.25	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	0.72		0.39	
74-87-3	Chloromethane	50.49	1.0		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.32	
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: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Client Sample ID: H30-BA-2015 Lab Sample ID: 140-2950-5
 Matrix: Air Lab File ID: JC31P111.D
 Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:58
 Sample wt/vol: 500 (mL) Date Analyzed: 04/01/2015 00:07
 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.: 2576 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	2.1		0.40	
64-17-5	Ethanol	46.07	190	E	1.5	
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	0.62		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	1.5		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	ND		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.1		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P111.D
 Lims ID: 140-2950-A-5 Lab Sample ID: 140-2950-5
 Client ID: H30-BA-2015
 Sample Type: Client
 Inject. Date: 01-Apr-2015 00:07:30 ALS Bottle#: 11 Worklist Smp#: 17
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2950-a-5
 Misc. Info.: J033115,TO15,,140-0001518-017
 Operator ID: 7126 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150330-1518.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 01-Apr-2015 09:18:38 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK018

First Level Reviewer: tajh

Date: 01-Apr-2015 06:53:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.565	9.577	-0.012	96	220585	4.00	
* 2 1,4-Difluorobenzene	114	11.706	11.718	-0.012	96	1046925	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.354	16.360	-0.006	90	899358	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.968	17.969	-0.001	88	588138	3.99	
8 Dichlorodifluoromethane	85	4.105	4.117	-0.012	100	106639	0.4294	
9 Chloromethane	52	4.315	4.326	-0.011	100	17192	0.4868	
17 Ethanol	31	5.240	5.246	-0.006	97	3084429	100.5	E
20 Trichlorofluoromethane	101	5.762	5.779	-0.017	98	41530	0.1910	
28 2-Methyl-2-propanol	59	6.649	6.640	0.009	94	8449	0.0649	
30 1,1,2-Trichloro-1,2,2-trif	101	6.719	6.726	-0.007	91	9986	0.0682	
31 Methylene Chloride	84	6.908	6.919	-0.011	96	11183	0.1581	
39 2-Butanone (MEK)	72	8.769	8.781	-0.012	96	11243	0.4280	
40 Hexane	56	8.785	8.802	-0.017	75	6325	0.0860	
43 Chloroform	83	9.571	9.587	-0.016	29	20468	0.1470	
48 Benzene	78	11.201	11.207	-0.006	98	39848	0.2060	
50 Carbon tetrachloride	117	11.222	11.228	-0.006	95	10499	0.0736	
53 Isooctane	57	11.911	11.922	-0.011	60	9039	0.0235	
56 Trichloroethene	130	12.416	12.417	-0.001	89	2044	0.0243	
62 4-Methyl-2-pentanone (MIBK	43	13.541	13.541	0.000	98	15205	0.0956	
65 Toluene	91	14.407	14.413	-0.006	92	65106	0.3967	
73 Tetrachloroethene	129	15.531	15.537	-0.006	89	2848	0.0399	
76 Ethylbenzene	91	16.677	16.683	-0.006	96	8572	0.0447	
78 m-Xylene & p-Xylene	91	16.827	16.839	-0.012	98	22171	0.1434	
82 o-Xylene	91	17.360	17.366	-0.006	98	8516	0.0505	
93 1,2,4-Trimethylbenzene	105	19.076	19.077	-0.001	98	13712	0.0755	

[QC Flag Legend](#)

Processing Flags

E - Exceeded Maximum Amount

[Reagents:](#)

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P111.D

Injection Date: 01-Apr-2015 00:07:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: 140-2950-A-5

Lab Sample ID: 140-2950-5

Worklist Smp#: 17

Client ID: H30-BA-2015

Purge Vol: 500.000 mL

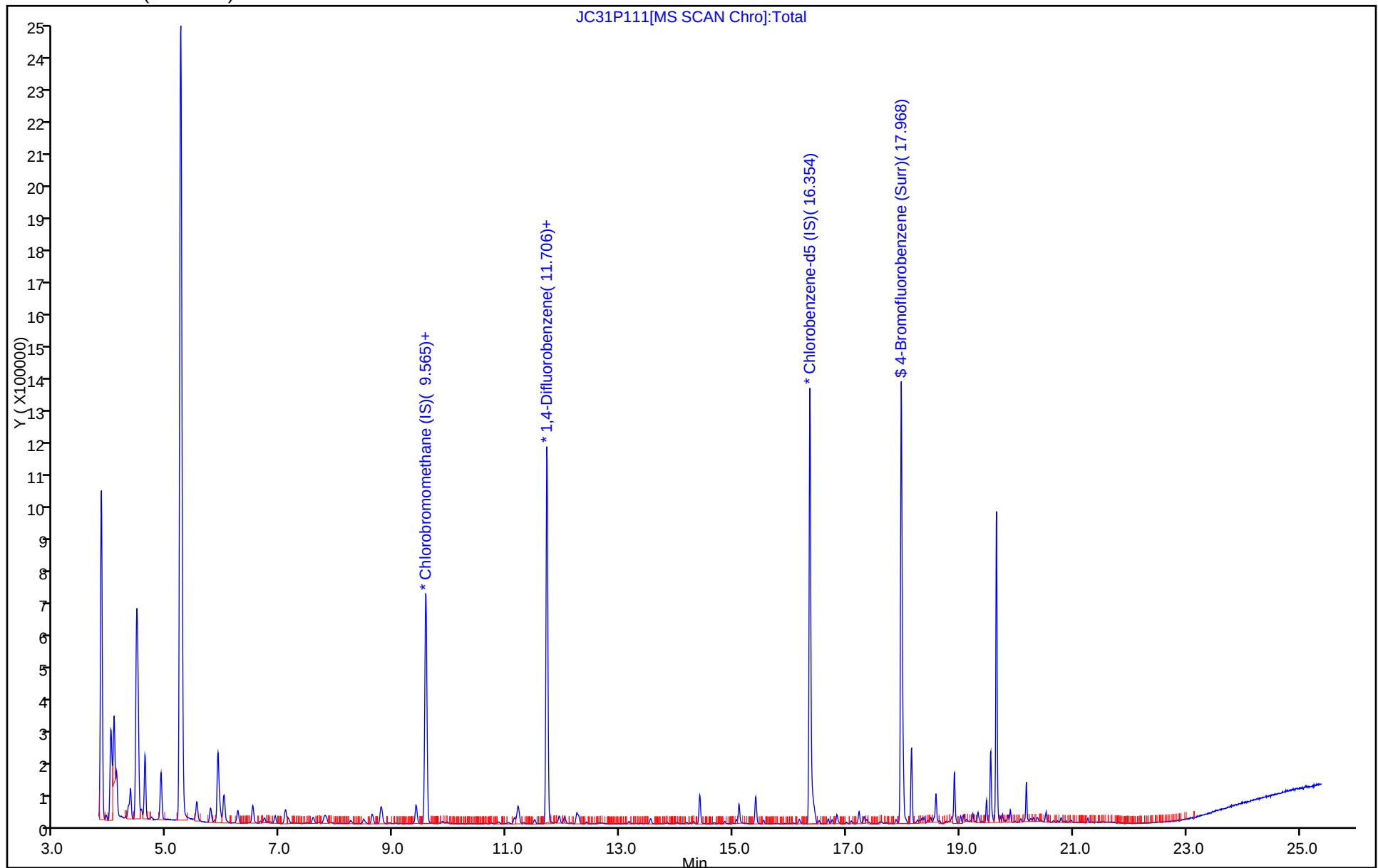
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P111.D

Injection Date: 01-Apr-2015 00:07:30

Instrument ID: MJ

Lims ID: 140-2950-A-5

Lab Sample ID: 140-2950-5

Client ID: H30-BA-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 17

Purge Vol: 500.000 mL

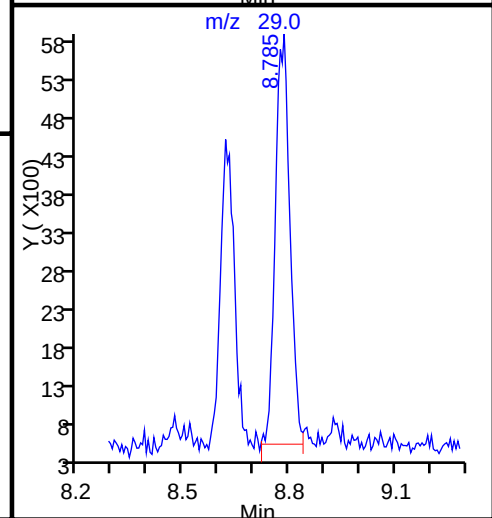
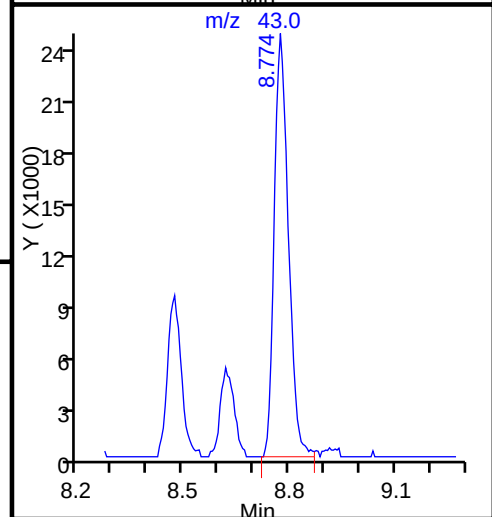
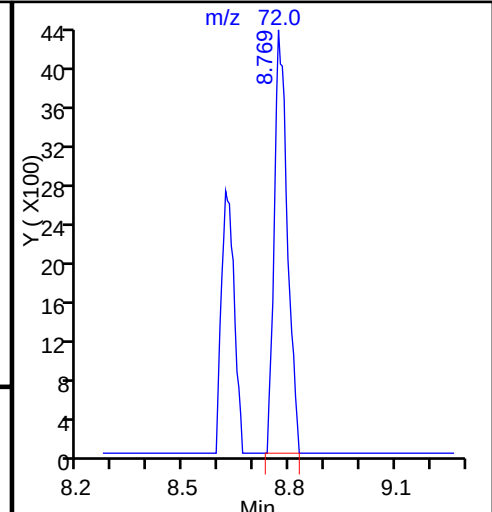
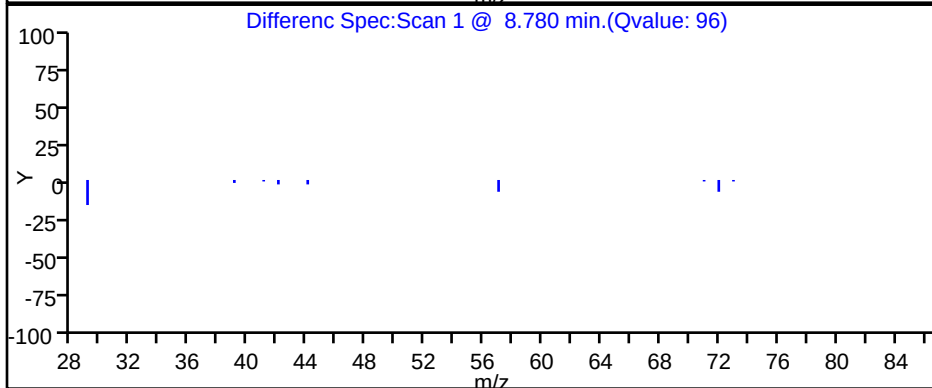
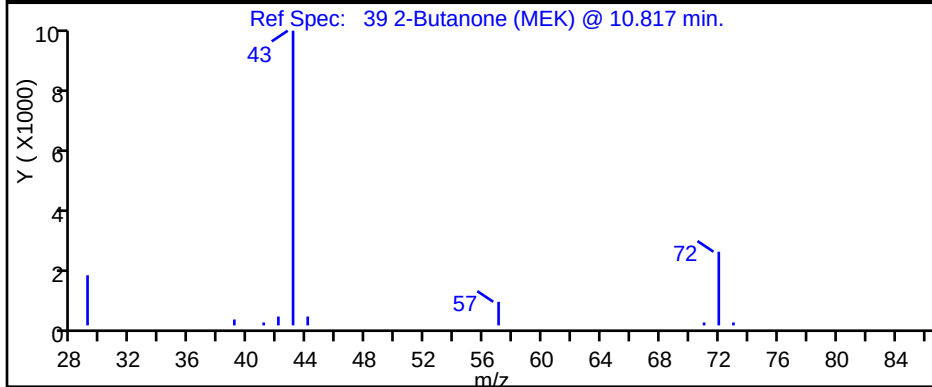
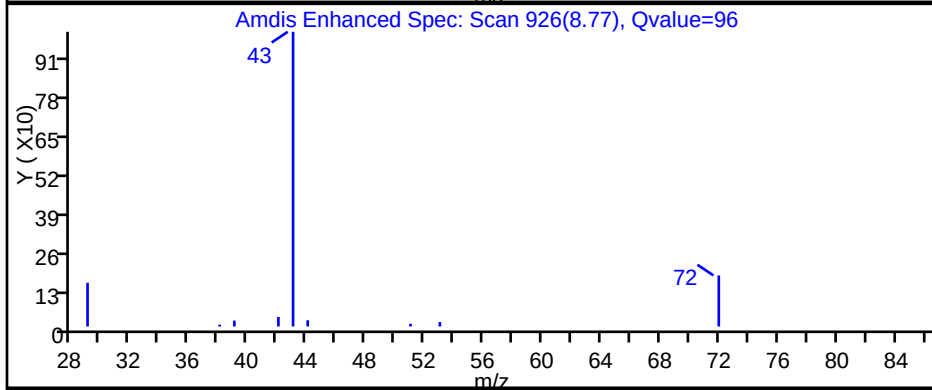
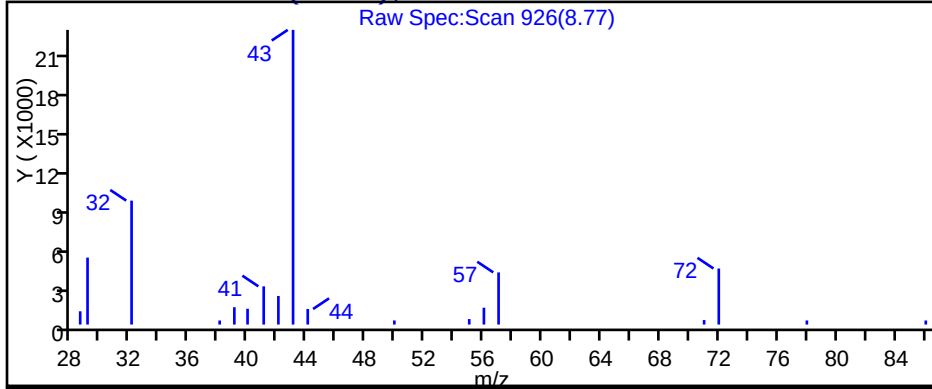
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P111.D

Injection Date: 01-Apr-2015 00:07:30

Instrument ID: MJ

Lims ID: 140-2950-A-5

Lab Sample ID: 140-2950-5

Client ID: H30-BA-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

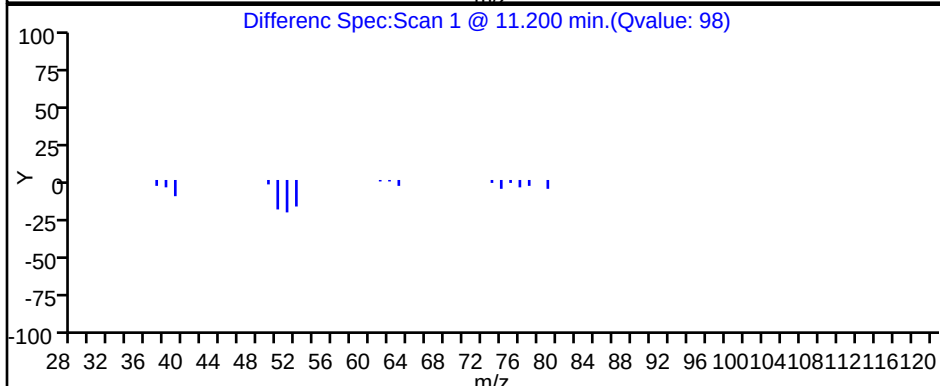
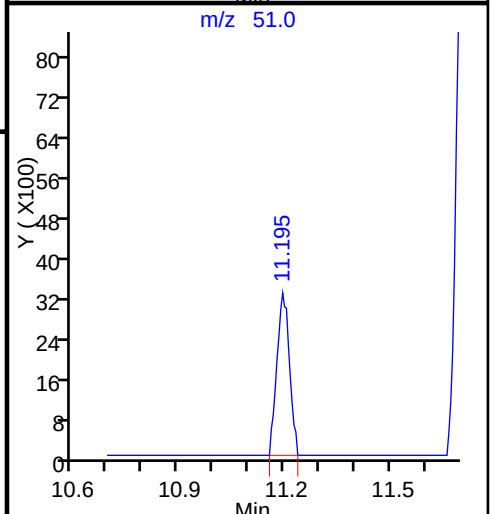
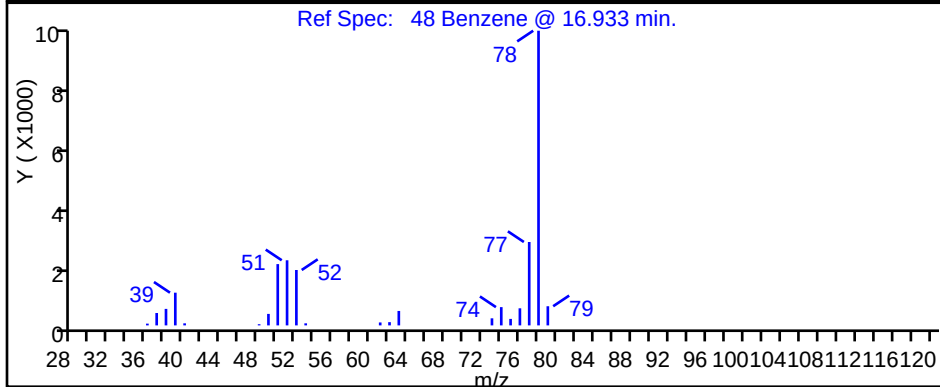
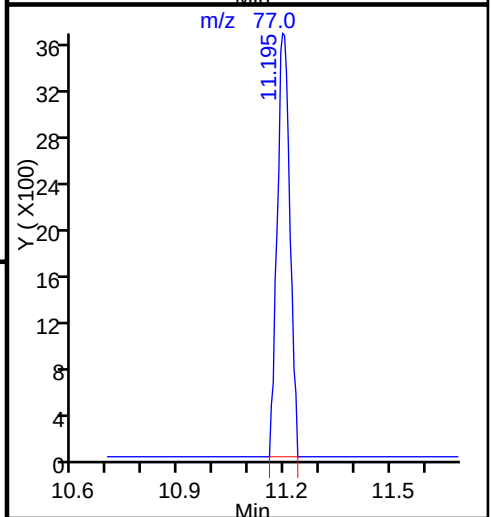
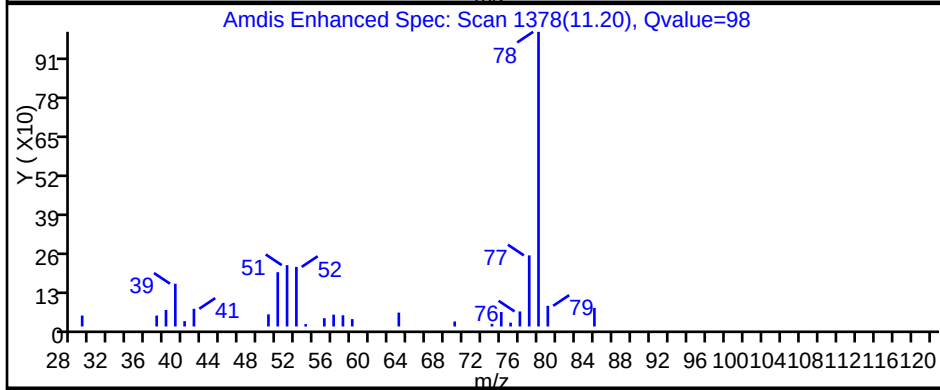
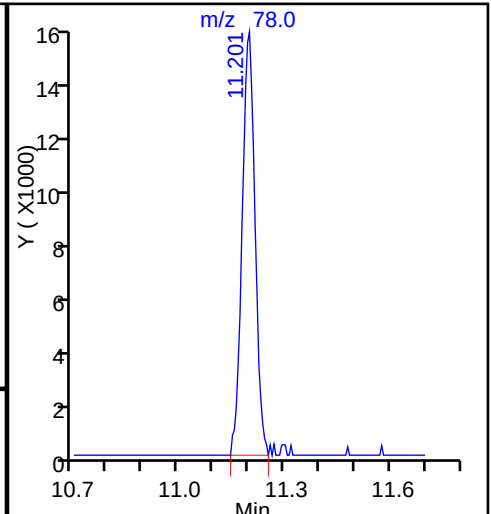
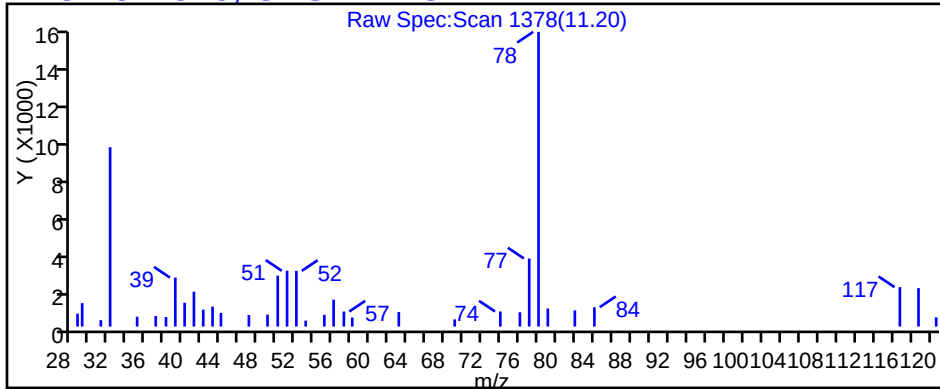
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

48 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P111.D

Injection Date: 01-Apr-2015 00:07:30

Instrument ID: MJ

Lims ID: 140-2950-A-5

Lab Sample ID: 140-2950-5

Client ID: H30-BA-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 17

Purge Vol: 500.000 mL

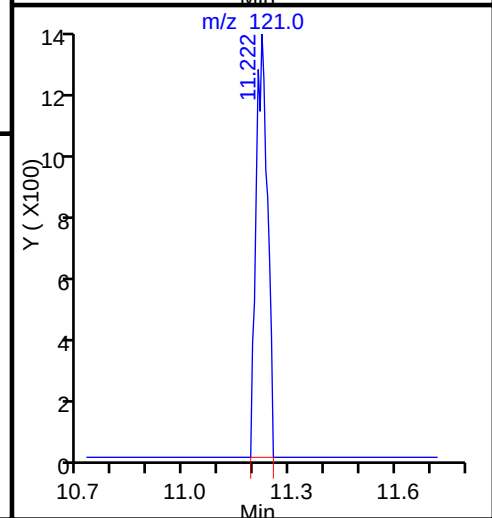
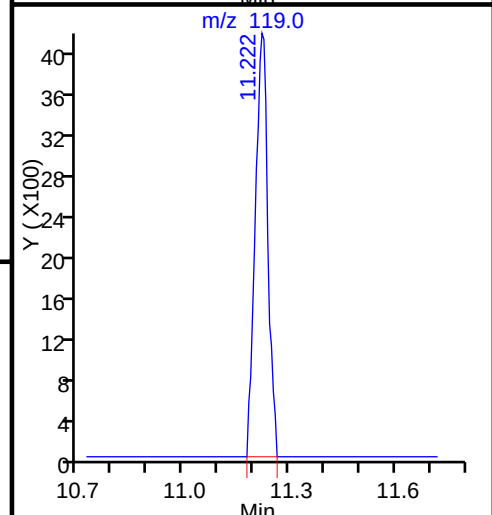
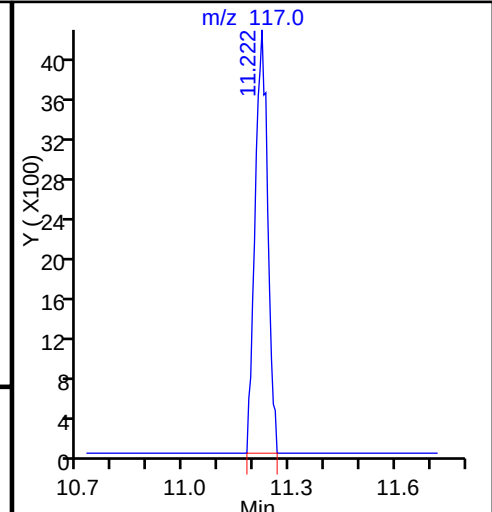
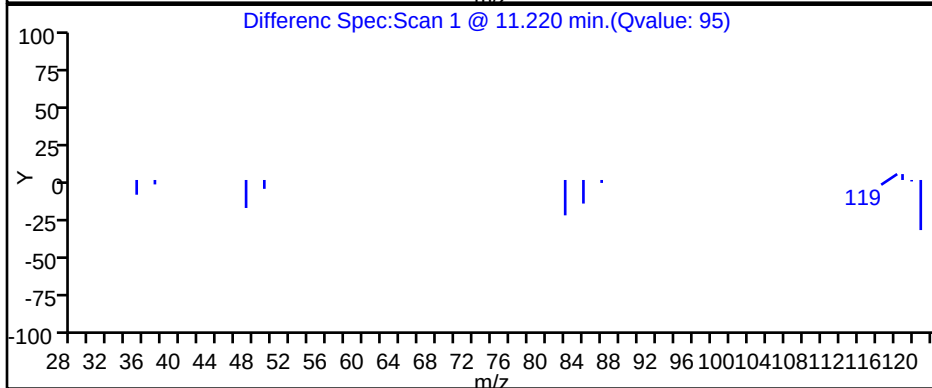
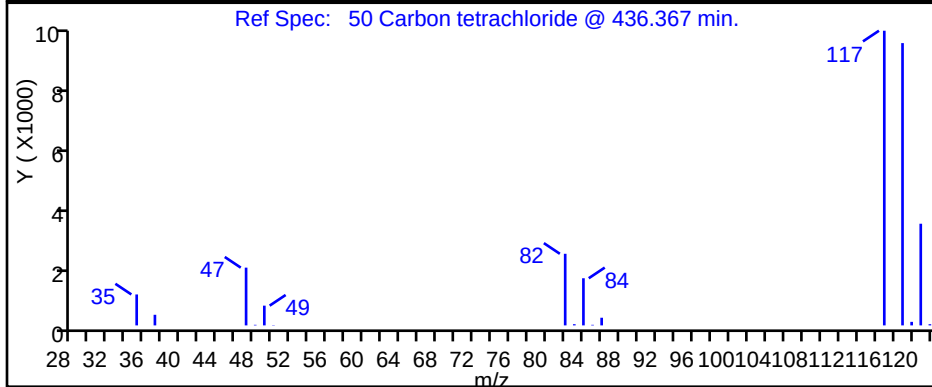
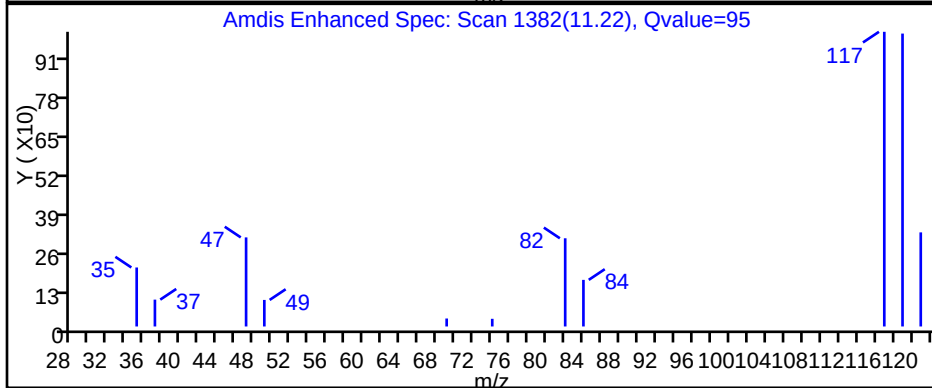
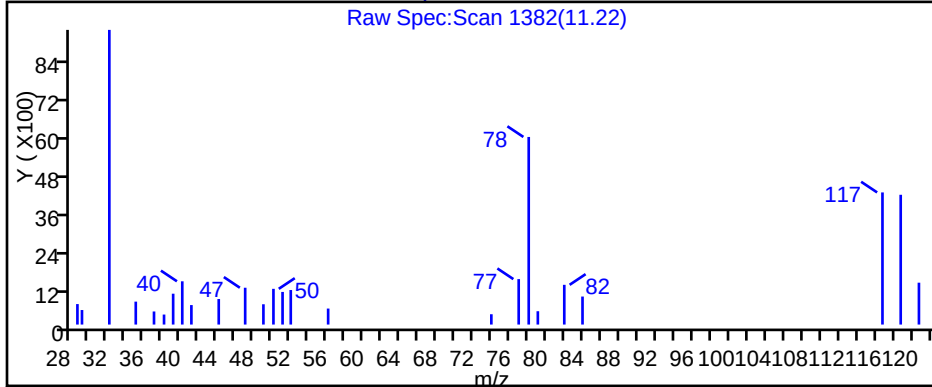
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P111.D

Injection Date: 01-Apr-2015 00:07:30

Instrument ID: MJ

Lims ID: 140-2950-A-5

Lab Sample ID: 140-2950-5

Client ID: H30-BA-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 17

Purge Vol: 500.000 mL

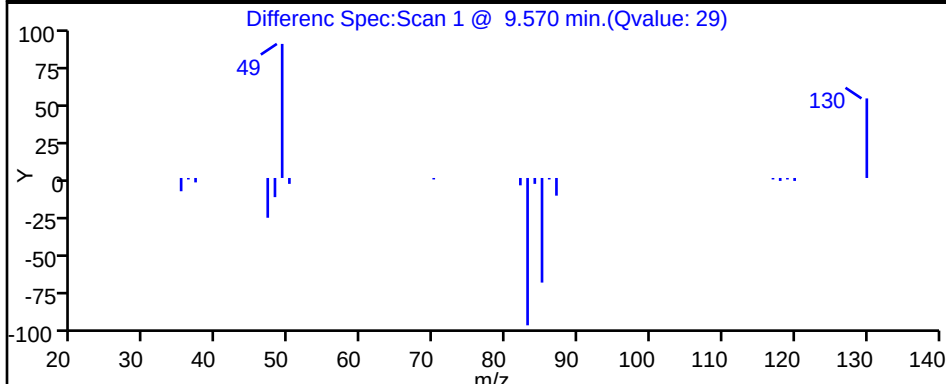
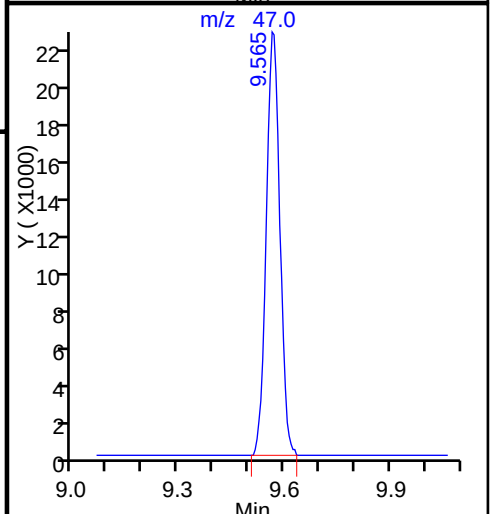
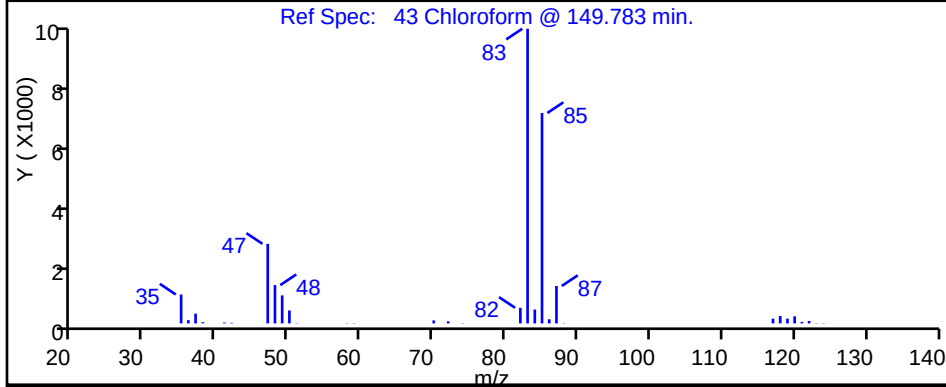
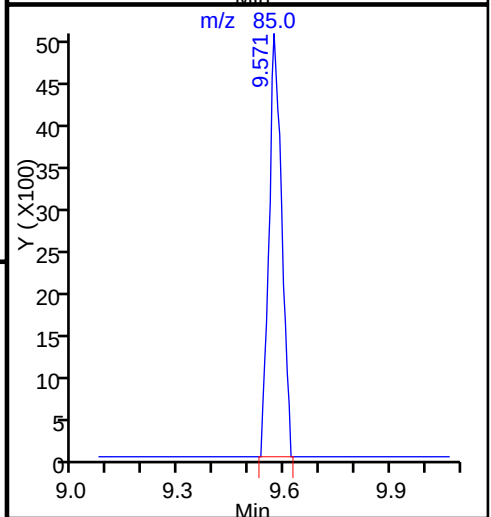
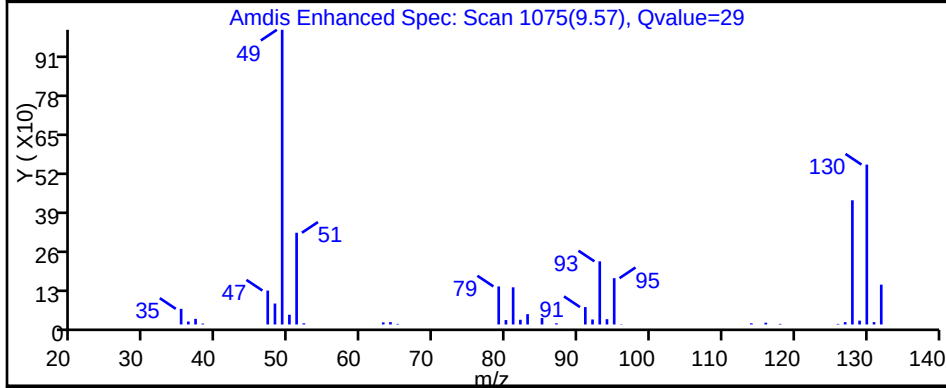
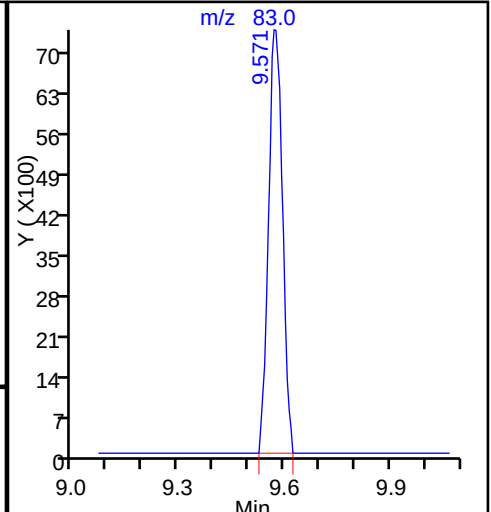
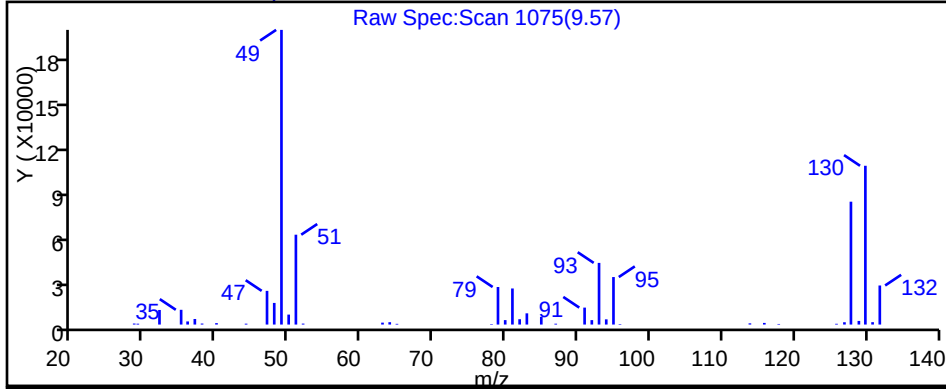
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

43 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P111.D

Injection Date: 01-Apr-2015 00:07:30

Instrument ID: MJ

Lims ID: 140-2950-A-5

Lab Sample ID: 140-2950-5

Client ID: H30-BA-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 17

Purge Vol: 500.000 mL

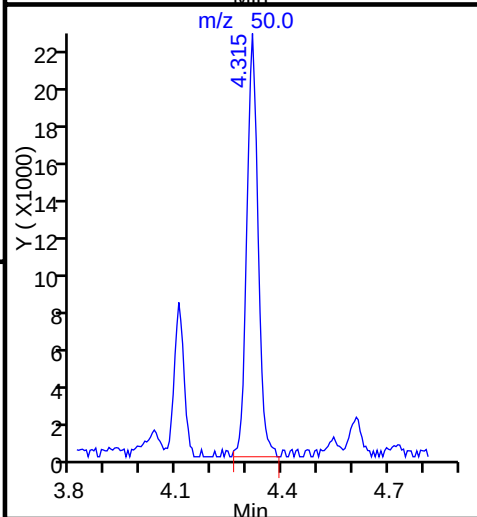
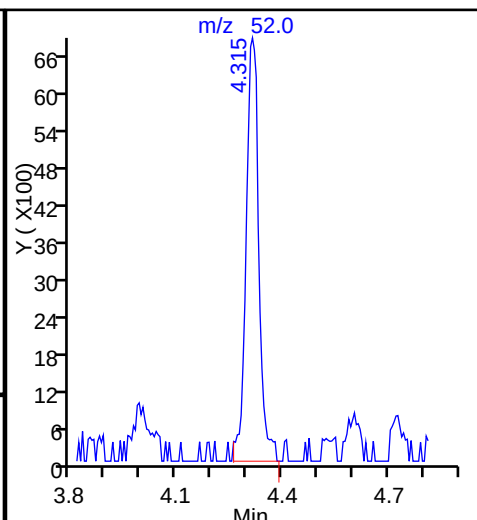
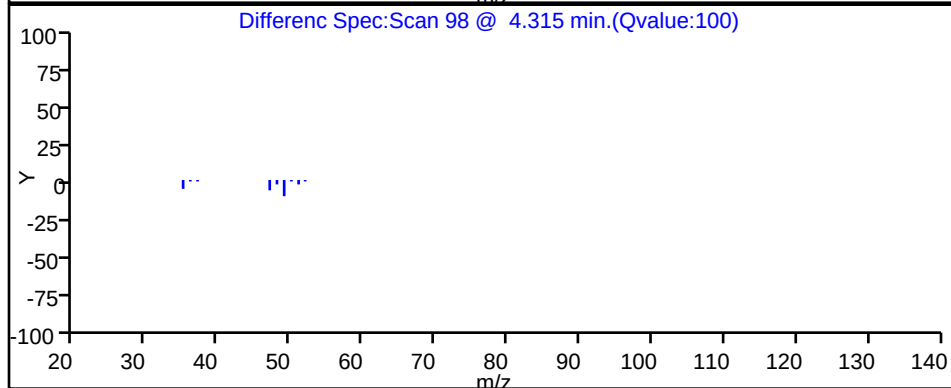
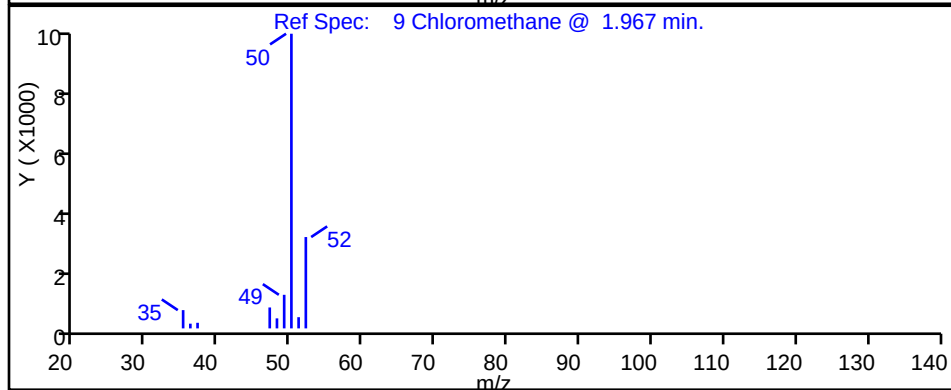
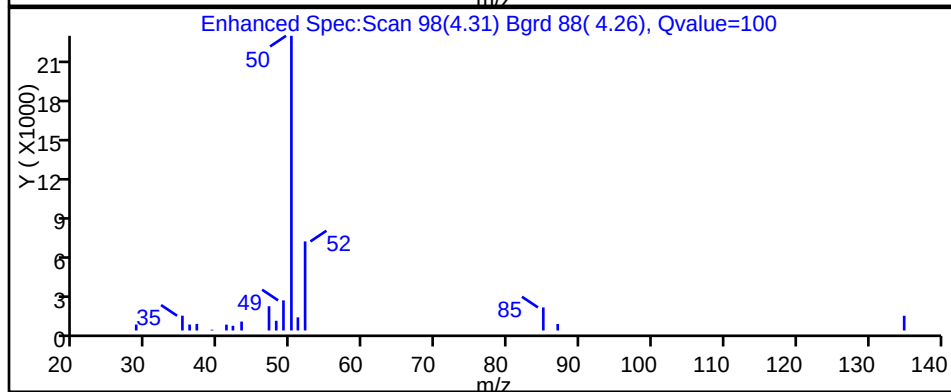
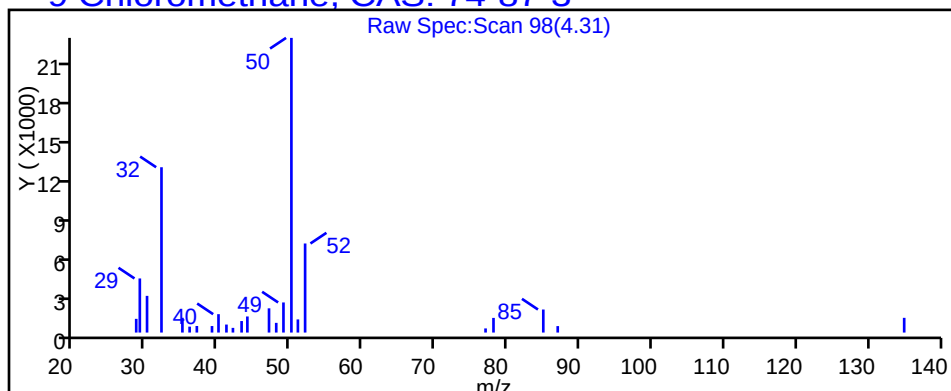
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P111.D

Injection Date: 01-Apr-2015 00:07:30

Instrument ID: MJ

Lims ID: 140-2950-A-5

Lab Sample ID: 140-2950-5

Client ID: H30-BA-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

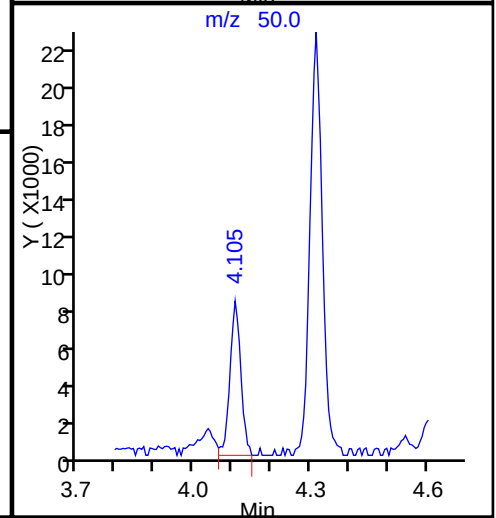
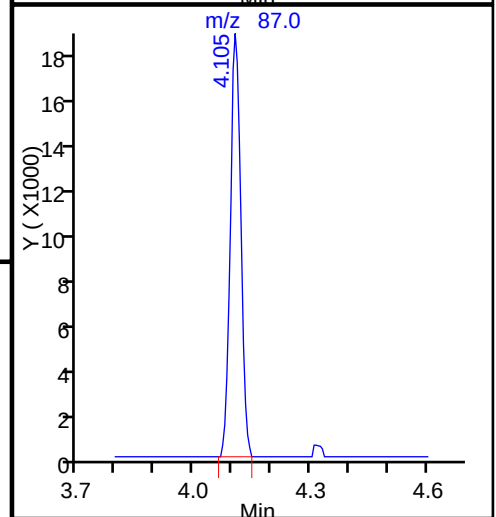
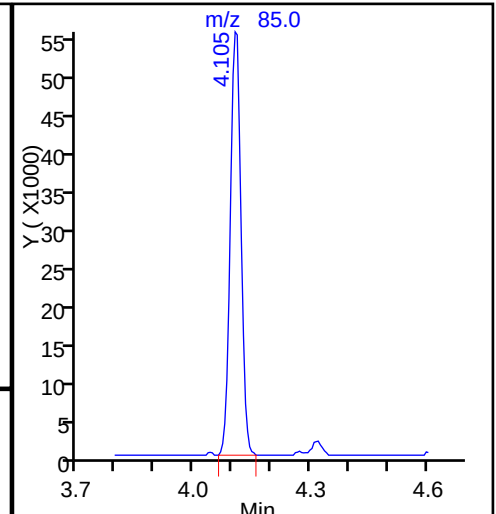
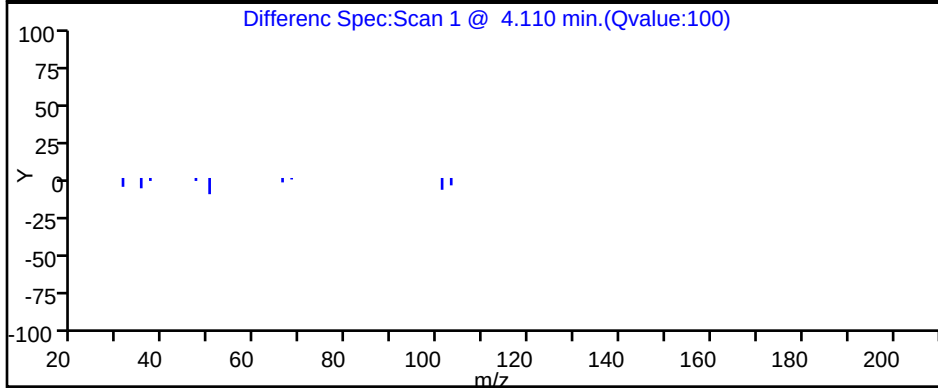
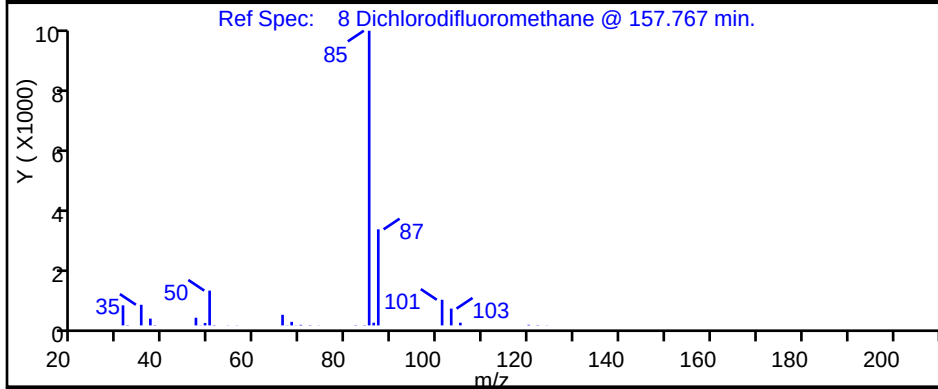
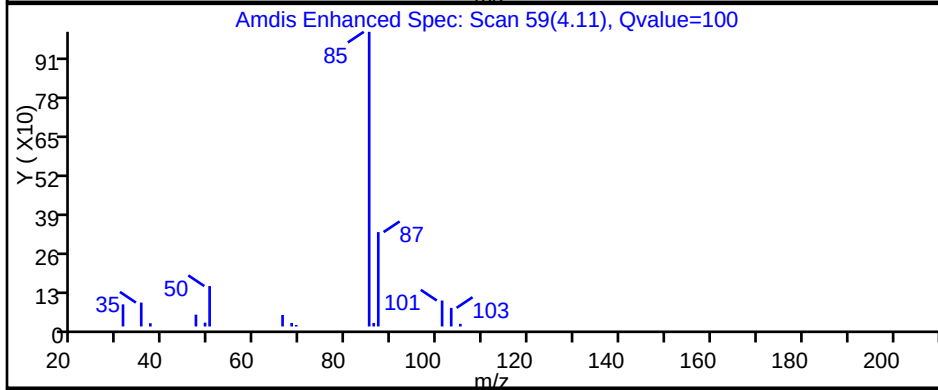
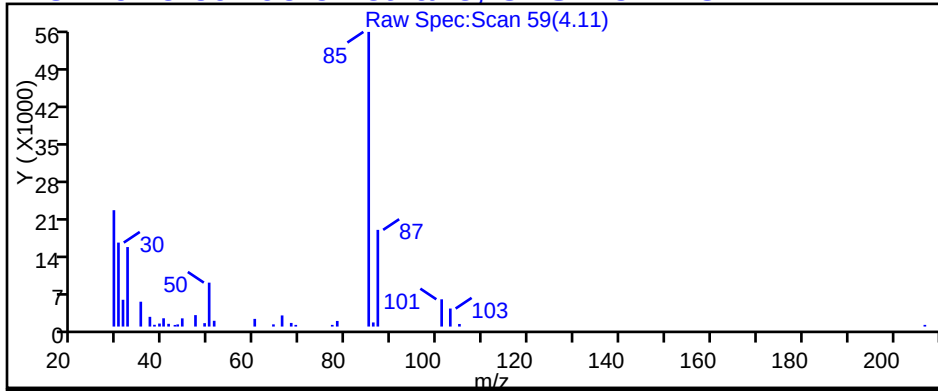
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P111.D

Injection Date: 01-Apr-2015 00:07:30

Instrument ID: MJ

Lims ID: 140-2950-A-5

Lab Sample ID: 140-2950-5

Client ID: H30-BA-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 17

Purge Vol: 500.000 mL

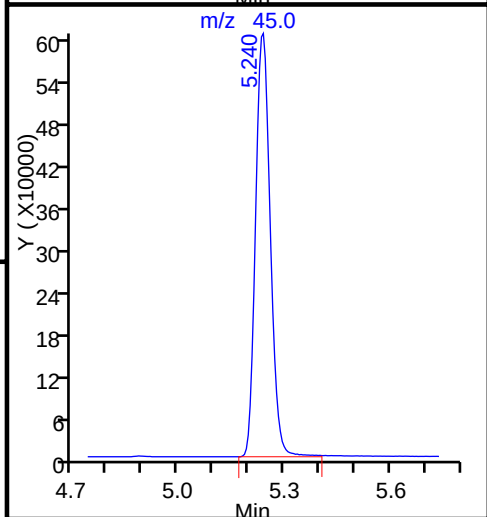
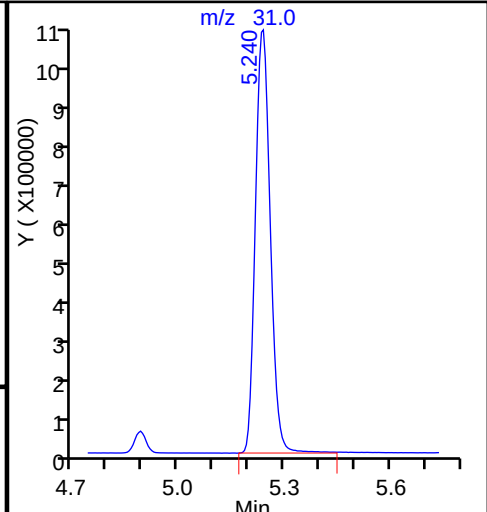
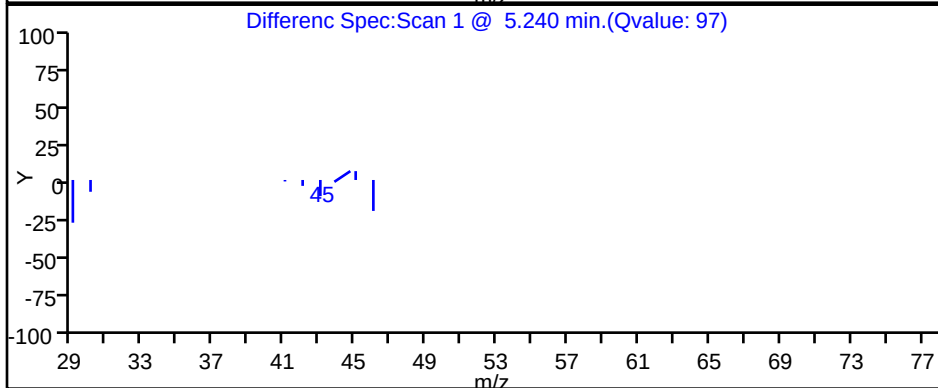
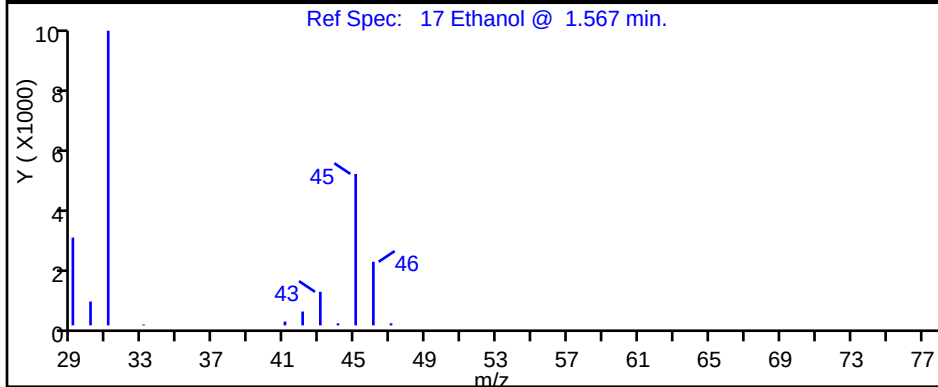
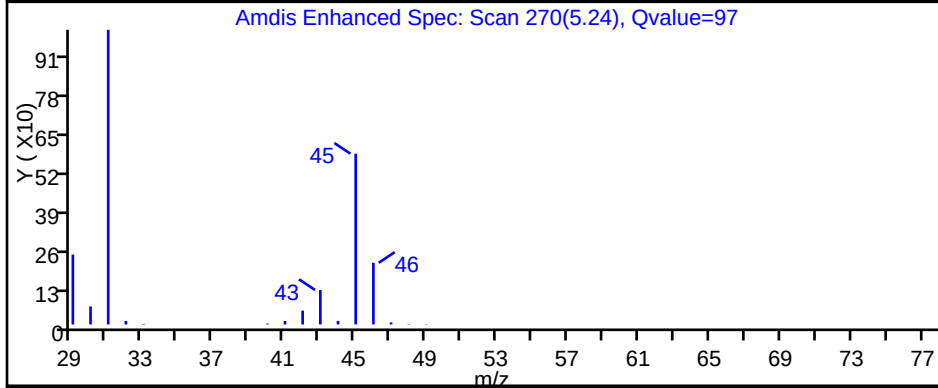
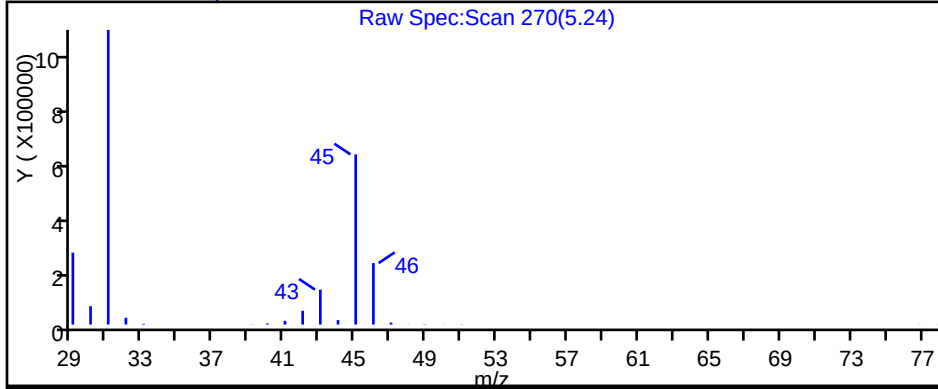
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P111.D

Injection Date: 01-Apr-2015 00:07:30

Instrument ID: MJ

Lims ID: 140-2950-A-5

Lab Sample ID: 140-2950-5

Client ID: H30-BA-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 17

Purge Vol: 500.000 mL

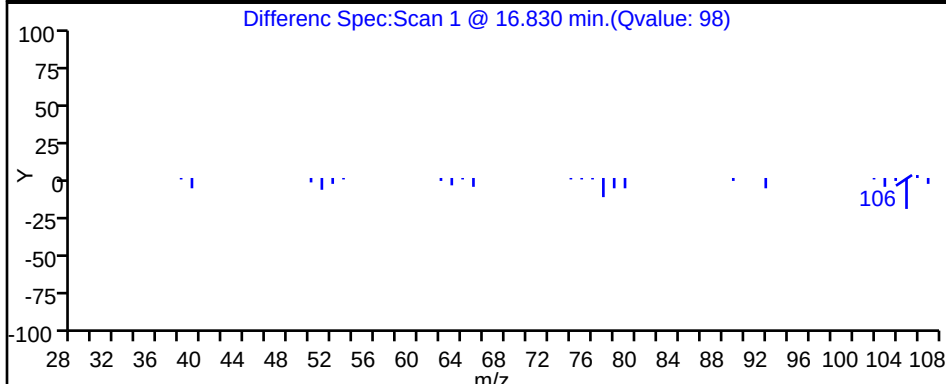
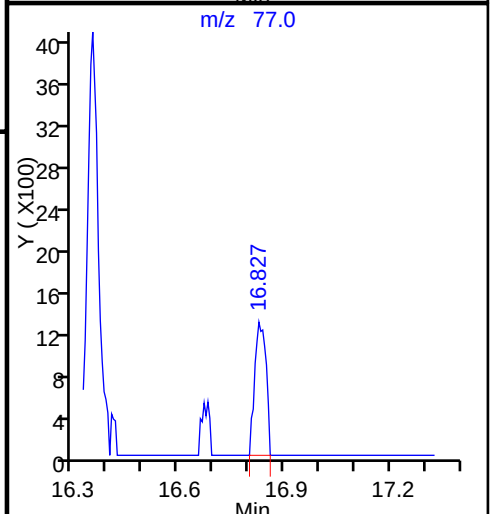
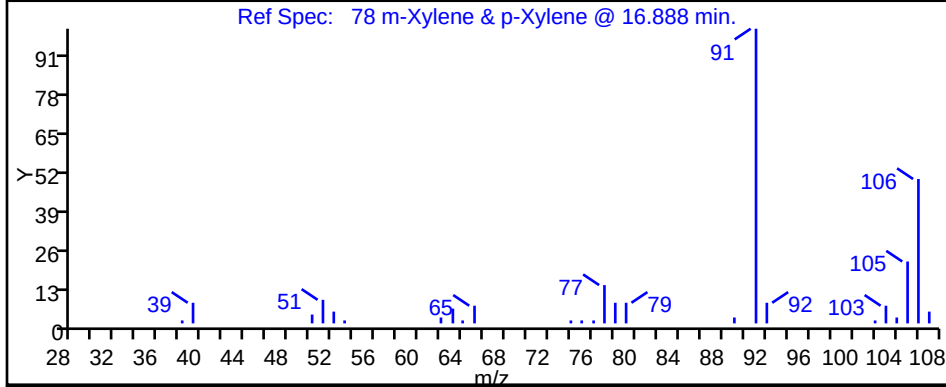
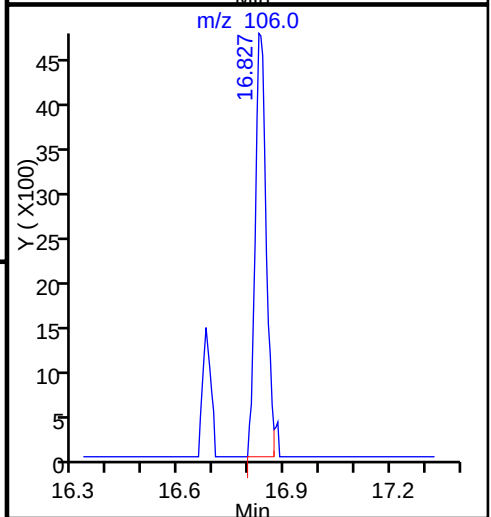
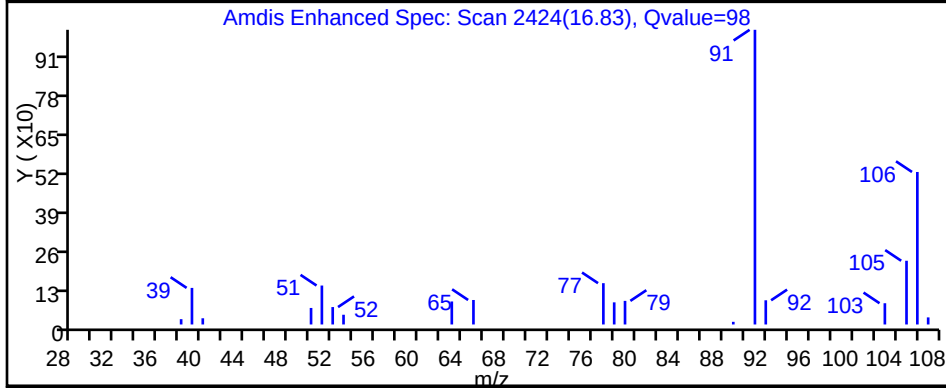
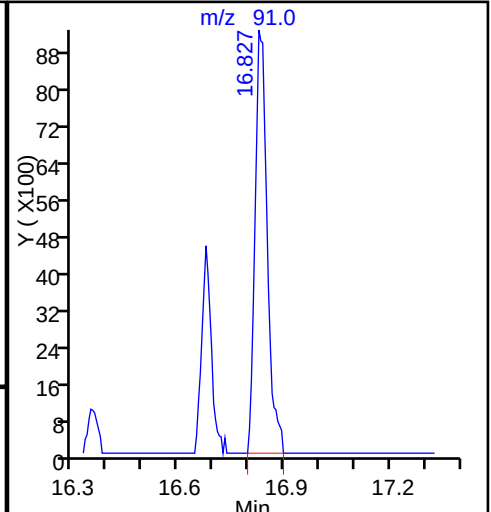
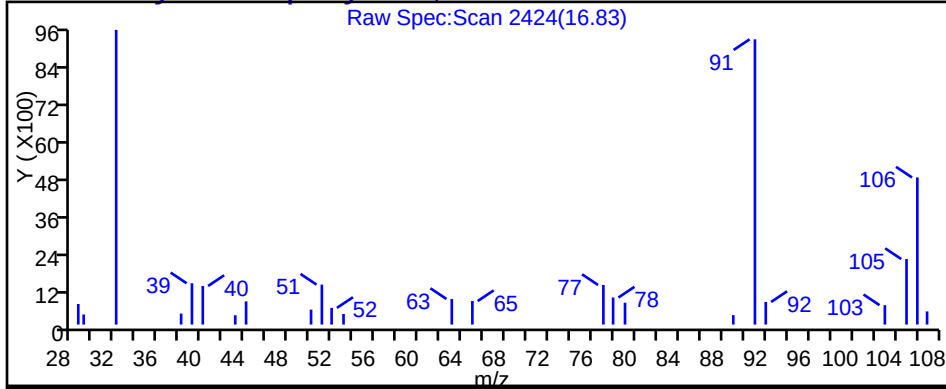
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P111.D

Injection Date: 01-Apr-2015 00:07:30

Instrument ID: MJ

Lims ID: 140-2950-A-5

Lab Sample ID: 140-2950-5

Client ID: H30-BA-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 17

Purge Vol: 500.000 mL

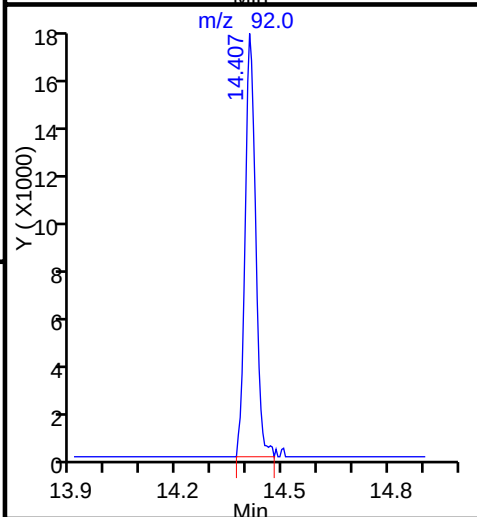
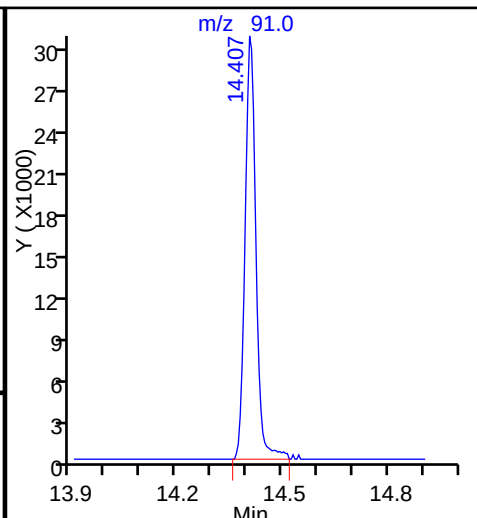
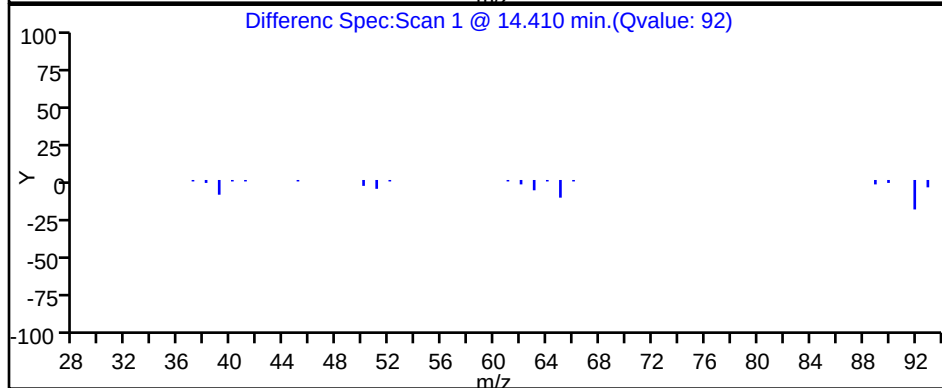
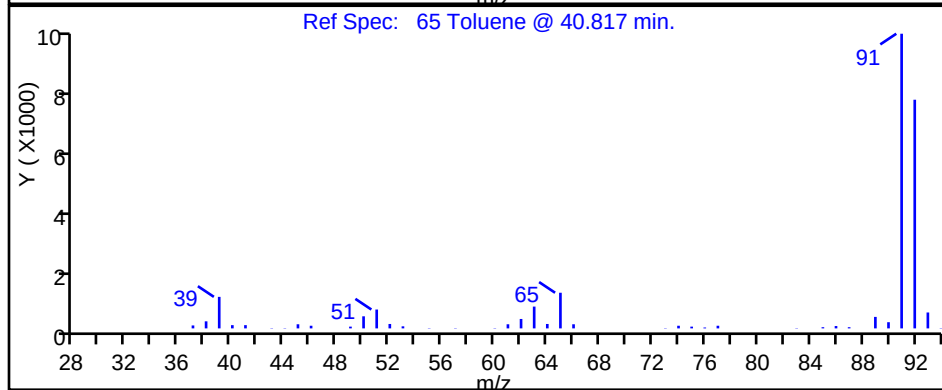
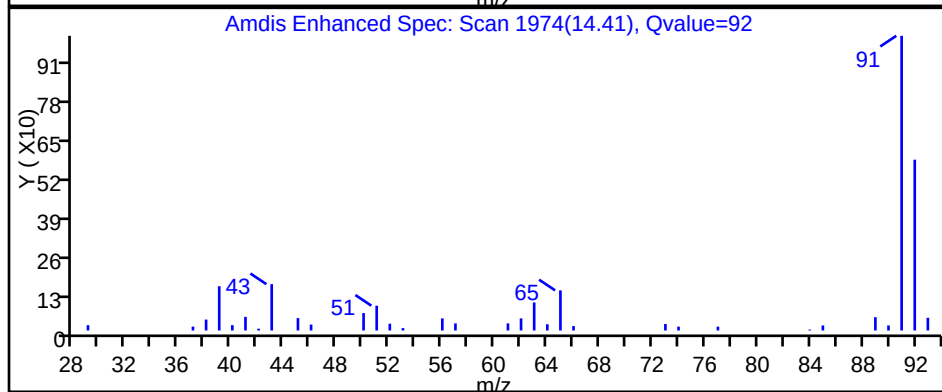
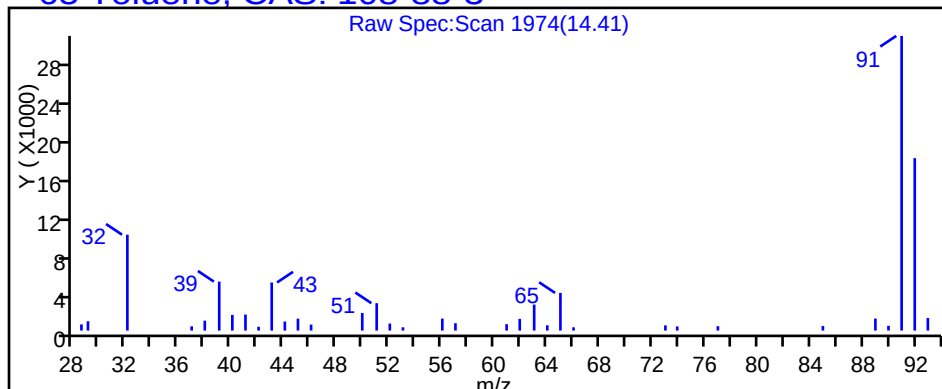
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P111.D

Injection Date: 01-Apr-2015 00:07:30

Instrument ID: MJ

Lims ID: 140-2950-A-5

Lab Sample ID: 140-2950-5

Client ID: H30-BA-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 17

Purge Vol: 500.000 mL

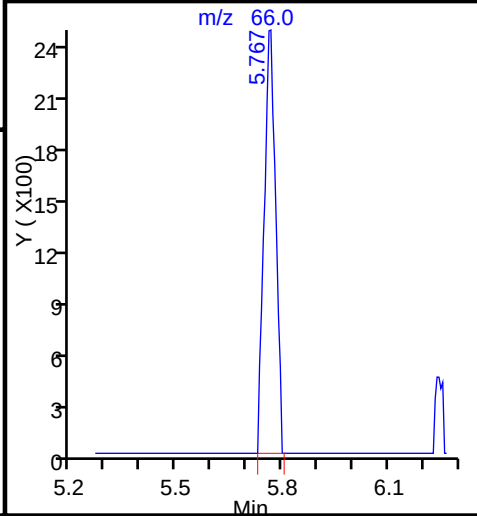
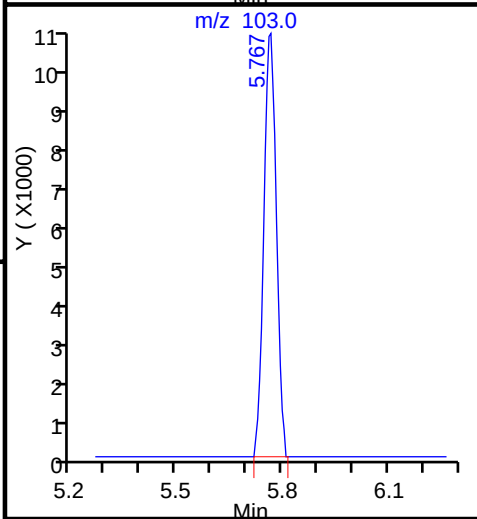
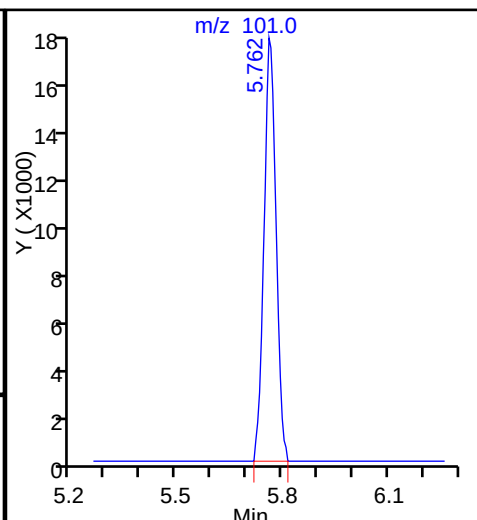
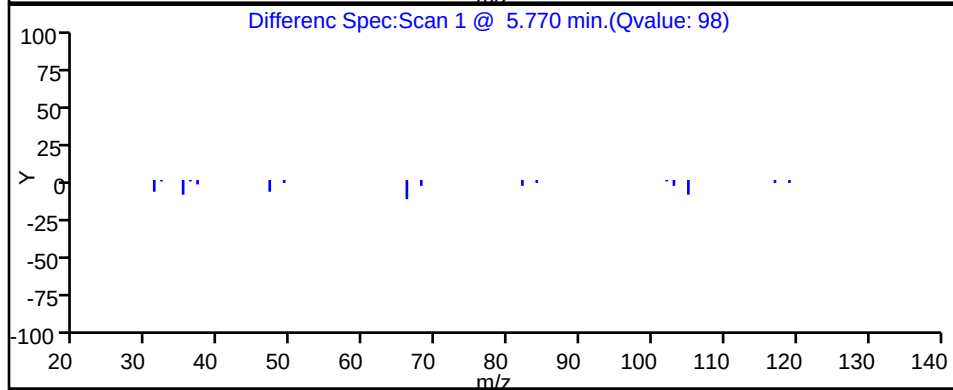
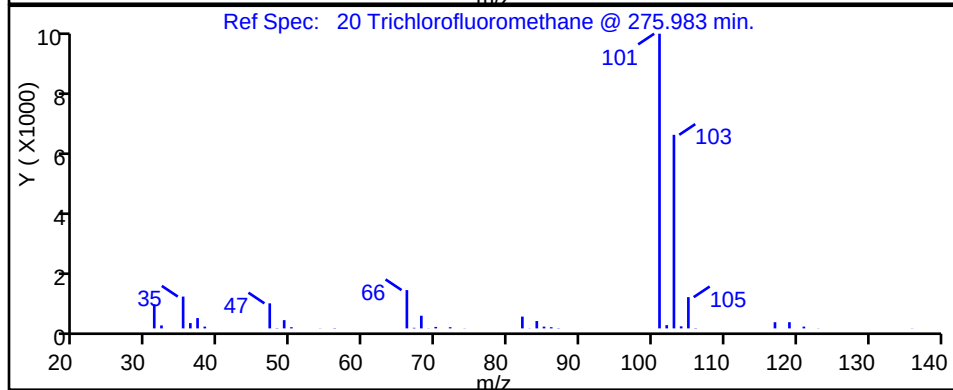
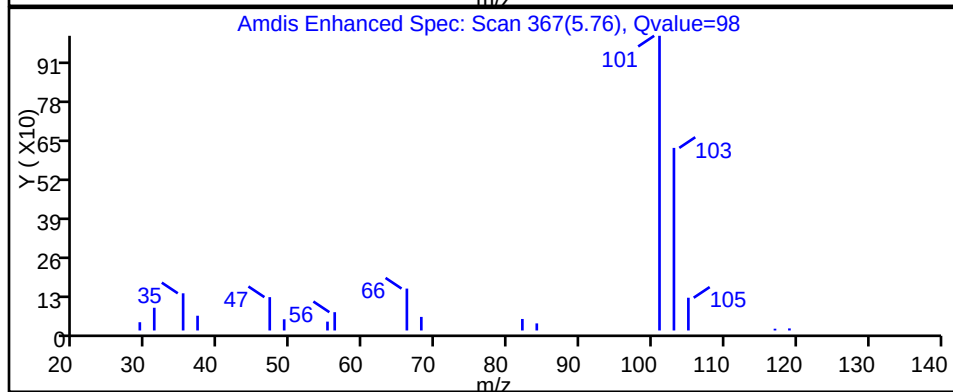
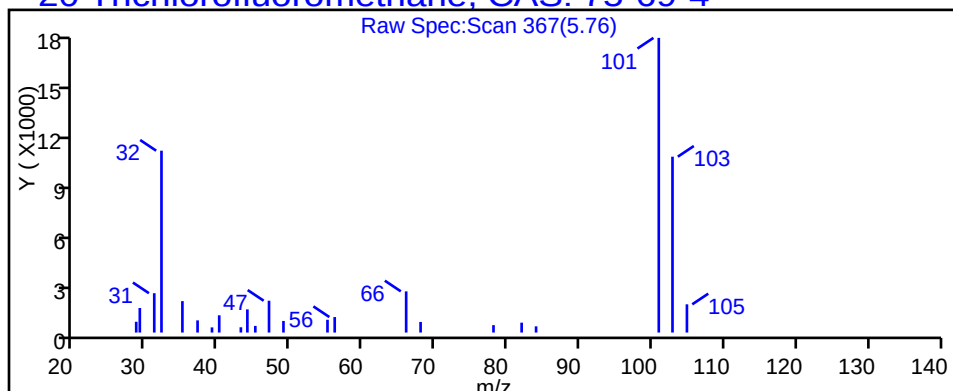
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

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

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1
SDG No.: _____
Client Sample ID: H30-BA-2015 DL Lab Sample ID: 140-2950-5 DL
Matrix: Air Lab File ID: JC31P111DL.D
Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:58
Sample wt/vol: 200 (mL) Date Analyzed: 04/01/2015 07:57
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.: 2576 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
64-17-5	Ethanol	46.07	120	D	2.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1
SDG No.: _____
Client Sample ID: H30-BA-2015 DL Lab Sample ID: 140-2950-5 DL
Matrix: Air Lab File ID: JC31P111DL.D
Analysis Method: TO 15 LL Date Collected: 03/24/2015 10:58
Sample wt/vol: 200 (mL) Date Analyzed: 04/01/2015 07:57
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.: 2576 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
64-17-5	Ethanol	46.07	220	D	3.8	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P111DL.D
 Lims ID: 140-2950-A-5 Lab Sample ID: 140-2950-5
 Client ID: H30-BA-2015
 Sample Type: Client
 Inject. Date: 01-Apr-2015 07:57:30 ALS Bottle#: 11 Worklist Smp#: 25
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-2950-a-5
 Misc. Info.: J033115,TO15,,140-0001518-025
 Operator ID: 7126 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150330-1518.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 01-Apr-2015 09:18:38 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK018

First Level Reviewer: tajh

Date: 01-Apr-2015 08:42:20

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.565	9.577	-0.012	96	204499	4.00	
* 2 1,4-Difluorobenzene	114	11.706	11.718	-0.012	96	967496	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.354	16.360	-0.006	90	801682	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.967	17.969	-0.002	87	490207	3.74	
8 Dichlorodifluoromethane	85	4.105	4.117	-0.012	99	42095	0.1828	
9 Chloromethane	52	4.314	4.326	-0.012	100	7857	0.2400	
17 Ethanol	31	5.224	5.246	-0.022	97	1322936	46.5	
20 Trichlorofluoromethane	101	5.767	5.779	-0.012	98	16720	0.0829	
28 2-Methyl-2-propanol	59	6.638	6.640	-0.002	92	5010	0.0415	
30 1,1,2-Trichloro-1,2,2-trif	101	6.714	6.726	-0.012	83	3928	0.0290	
31 Methylene Chloride	84	6.907	6.919	-0.012	97	7922	0.1208	
39 2-Butanone (MEK)	72	8.769	8.781	-0.012	97	4388	0.1802	
40 Hexane	56	8.790	8.802	-0.012	72	2777	0.0407	
43 Chloroform	83	9.570	9.587	-0.017	39	8053	0.0624	
48 Benzene	78	11.200	11.207	-0.007	97	16150	0.0904	
50 Carbon tetrachloride	117	11.216	11.228	-0.012	85	3902	0.0296	
62 4-Methyl-2-pentanone (MIBK	43	13.540	13.541	-0.001	94	6476	0.0441	
65 Toluene	91	14.406	14.413	-0.007	93	28441	0.1944	
76 Ethylbenzene	91	16.832	16.683	0.149	91	9790	0.0572	
78 m-Xylene & p-Xylene	91	16.832	16.839	-0.007	98	9792	0.0711	
93 1,2,4-Trimethylbenzene	105	19.076	19.077	-0.001	96	5475	0.0338	
96 Benzyl chloride	91	19.544	19.421	0.123	50	5163	0.0475	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P111DL.D

Injection Date: 01-Apr-2015 07:57:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: 140-2950-A-5

Lab Sample ID: 140-2950-5

Worklist Smp#: 25

Client ID: H30-BA-2015

Purge Vol: 500.000 mL

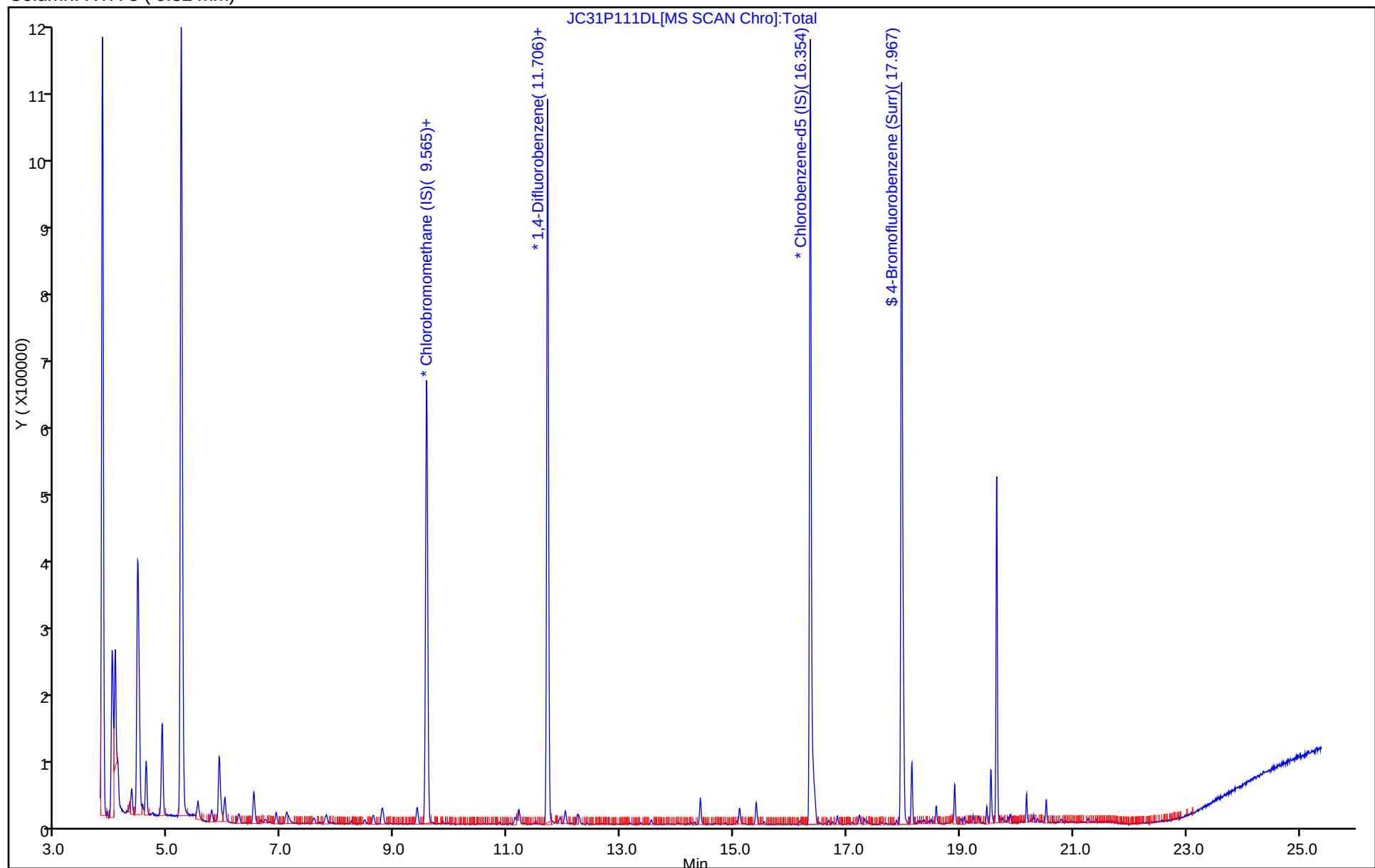
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JC31P111DL.D

Injection Date: 01-Apr-2015 07:57:30

Instrument ID: MJ

Lims ID: 140-2950-A-5

Lab Sample ID: 140-2950-5

Client ID: H30-BA-2015

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 25

Purge Vol: 500.000 mL

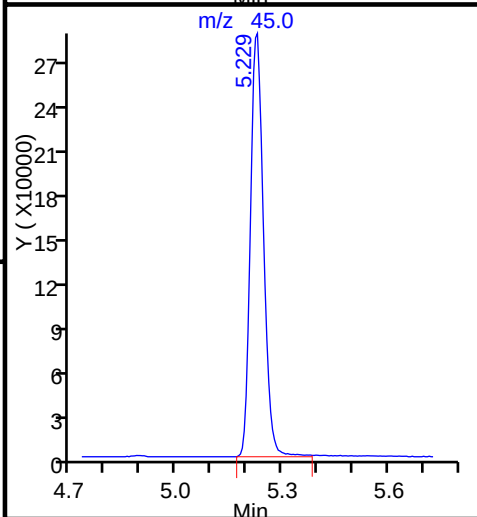
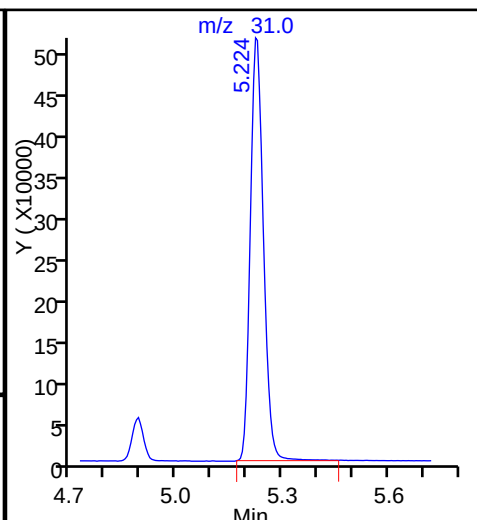
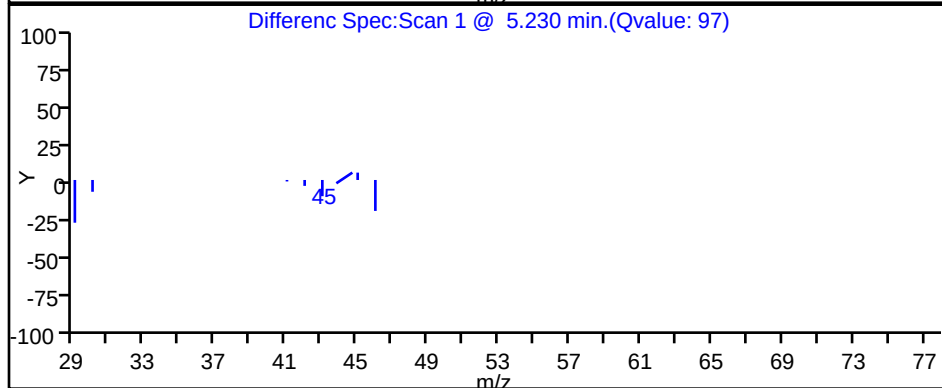
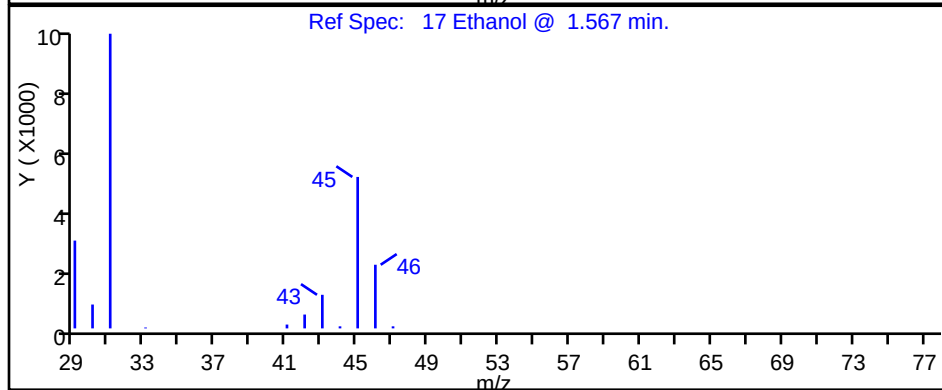
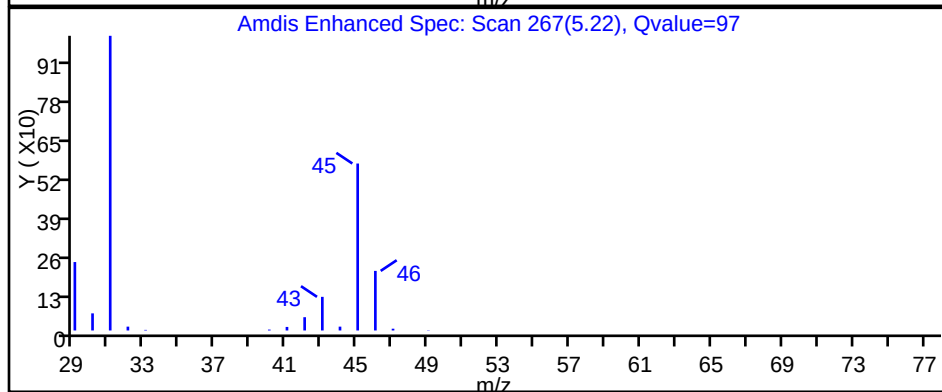
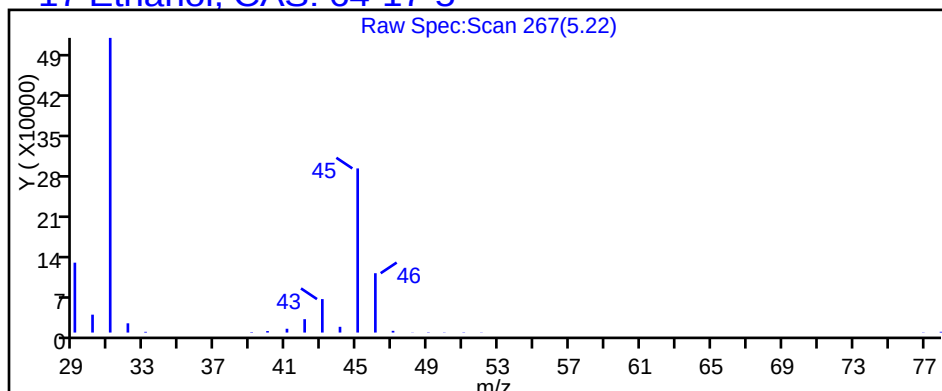
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-2321/2	JB02icL1.D
Level 2	IC 140-2321/3	JB02icL2.D
Level 3	IC 140-2321/4	JB02icL3.D
Level 4	IC 140-2321/5	JB02icL4.D
Level 5	IC 140-2321/6	JB02icL5.D
Level 6	ICIS 140-2321/7	JB02icisL6.D
Level 7	IC 140-2321/8	JB02icL7.D
Level 8	IC 140-2321/9	JB02icL8.D
Level 9	IC 140-2321/10	JB02icL9.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		B	M1	M2								
Chlorodifluoromethane	0.5243 0.5074	0.5056 0.4593	0.5587 0.4251	0.5376 0.4051	0.4290	Ave		0.4836				11.0		30.0			
Propene	++++ 1.9305	++++ 1.7278	2.6500 1.4831	2.3779 1.3899	1.7224	Ave		1.8974				24.0		30.0			
Dichlorodifluoromethane	4.3761 4.9268	4.4552 4.4440	5.4408 3.8344	5.2354 3.5735	4.2420	Ave		4.5031				14.0		30.0			
Chloromethane	++++ 0.6435	0.7604 0.5662	0.8499 0.5014	0.7603 0.4740	0.5673	Ave		0.6404				21.0		30.0			
1,2-Dichlorotetrafluoroethane	3.0110 3.1885	2.7926 2.9178	3.4973 2.5426	3.4455 2.4272	2.7262	Ave		2.9499				13.0		30.0			
Acetaldehyde	++++ 0.6363	++++ 0.6066	++++ 0.4618	0.6281 0.4769	0.5036	Ave		0.5522				14.0		40.0			
Vinyl chloride	1.6533 1.8524	1.6870 1.6815	2.1350 1.4865	2.0298 1.4320	1.5948	Ave		1.7280				14.0		30.0			
Butane	3.4524 3.0477	3.1166 2.7386	3.7554 2.3773	3.6208 2.2441	2.8289	Ave		3.0202				17.0		30.0			
1,3-Butadiene	1.3538 1.4646	1.3696 1.3357	1.6337 1.1927	1.6105 1.1434	1.2448	Ave		1.3721				13.0		30.0			
Bromomethane	1.4748 1.5482	1.4677 1.4179	1.7746 1.2597	1.6883 1.2484	1.3184	Ave		1.4665				12.0		30.0			
Chloroethane	++++ 0.7992	0.7497 0.7350	0.9047 0.6439	0.8899 0.6500	0.6825	Ave		0.7569				13.0		30.0			
Ethanol	0.7444 0.5569	0.6543 0.4849	0.7755 0.3551	0.6050 0.3762	0.4550	Ave		0.5564				27.0		40.0			
Vinyl bromide	1.2910 1.3661	1.2431 1.2470	1.5591 1.1074	1.4832 1.1182	1.1524	Ave		1.2853				12.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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		B	M1	M2								
2-Methylbutane	2.3786 2.0309	2.2951 1.8129	2.5629 1.5671	2.2838 1.5510	1.7810	Ave		2.0293				18.0		30.0			
Trichlorofluoromethane	3.8673 4.3355	3.6687 3.9321	4.7942 3.4025	4.5771 3.2452	3.6665	Ave		3.9432				13.0		30.0			
Acrolein	++++ 0.4123	0.7471 0.4023	0.6333 0.3578	0.4065 0.4123	0.2756	Ave		0.4559				34.0	*	30.0			
Acetonitrile	++++ 0.5424	++++ 0.5067	++++ 0.4255	0.5608 0.4753	0.3714	Ave		0.4803				15.0		30.0			
Acetone	++++ 0.6063	++++ 0.5591	++++ 0.3215	0.7238 0.3527	0.5250	Ave		0.5147				30.0		30.0			
Isopropyl alcohol	2.3452 2.2040	2.2001 1.9124	2.9011 1.4759	2.3123 1.5184	1.7996	Ave		2.0743				22.0		30.0			
Pentane	++++ 0.2623	++++ 0.2404	0.2736 0.2066	0.2784 0.2056	0.2221	Ave		0.2413				13.0		30.0			
Ethyl ether	1.7604 1.3538	1.2649 1.3839	2.2065 1.1640	1.3509 1.1643	1.0137	Ave		1.4069				26.0		30.0			
1,1-Dichloroethene	1.3535 1.3583	1.2093 1.2534	1.4887 1.0812	1.4470 1.0869	1.1609	Ave		1.2710				12.0		30.0			
t-Butyl alcohol	2.5127 2.5200	2.3075 2.2044	3.2268 1.8596	2.6255 2.0223	1.9794	Ave		2.3620				18.0		30.0			
Acrylonitrile	++++ 0.8108	++++ 0.7684	++++ 0.6686	0.7404 0.7466	0.5346	Ave		0.7116				14.0		30.0			
1,1,2-Trichlorotrifluoroethane	2.6911 2.8661	2.5842 2.6225	3.3066 2.1244	3.0115 2.1944	2.4801	Ave		2.6534				14.0		30.0			
Methylene Chloride	++++ 1.3165	++++ 1.1899	1.8234 0.9269	1.5652 0.9603	1.1954	Ave		1.2825				25.0		30.0			
3-Chloropropene	1.8617 1.4551	1.5399 1.2890	1.7766 0.8904	1.5378 0.9185	1.2619	Ave		1.3923				24.0		30.0			
Carbon disulfide	4.3271 4.9049	4.2436 4.4640	5.3952 3.8581	5.2244 3.7103	4.2017	Ave		4.4810				13.0		30.0			
trans-1,2-Dichloroethene	1.5396 1.5712	1.3565 1.4532	1.8068 1.1245	1.6997 1.1346	1.3559	Ave		1.4491				16.0		30.0			
2-Methylpentane	4.2310 4.0376	3.9523 3.6489	4.7714 2.8450	4.2823 2.8962	3.4995	Ave		3.7960				17.0		40.0			
Methyl tert-butyl ether	2.9264 2.6079	2.1657 2.3422	3.8047 1.7889	2.5834 1.8837	1.8516	Ave		2.4394				26.0		30.0			
1,1-Dichloroethane	2.5766 2.5826	2.5074 2.3510	3.1909 1.9361	2.5750 1.9941	2.2228	Ave		2.4374				15.0		30.0			
Vinyl acetate	3.3201 2.5854	2.4571 2.4719	3.7017 2.0444	2.2760 2.2037	1.7012	Ave		2.5291				25.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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		B	M1	M2								
2-Butanone	+++++ 0.5204	+++++ 0.4865	0.7393 0.3325	0.5022 0.3597	0.3933	Ave		0.4763				29.0		30.0			
C6 Range	+++++ 16.042	18.364 14.648	20.636 11.077	16.637 11.551	13.625	Ave		15.323				21.0		30.0			
Hexane	1.5356 1.3905	1.4153 1.2602	1.7430 0.9927	1.4356 1.0481	1.1817	Ave		1.3336				18.0		30.0			
Isopropyl ether	5.1498 4.3593	4.0570 3.8439	6.1395 2.9121	4.2492 2.9599	3.0621	Ave		4.0814				26.0		30.0			
cis-1,2-Dichloroethene	1.3583 1.3102	1.2285 1.1969	1.6735 0.9871	1.3337 1.0178	1.1229	Ave		1.2477				17.0		30.0			
Ethyl acetate	2.9875 2.4041	2.2052 2.2566	3.4518 1.7354	2.2777 1.8650	1.7501	Ave		2.3259				25.0		30.0			
Chloroform	2.8119 2.5325	2.6956 2.3108	3.5396 1.9599	2.6497 2.0032	2.2226	Ave		2.5251				19.0		30.0			
Tert-butyl ethyl ether	3.5384 3.3791	2.7158 2.9372	4.6223 2.2978	3.3126 2.3708	2.3675	Ave		3.0602				25.0		30.0			
Tetrahydrofuran	1.6295 1.3056	1.2434 1.2120	1.8503 0.9678	1.2605 1.0798	0.9334	Ave		1.2758				23.0		30.0			
1,1,1-Trichloroethane	2.6493 2.7517	2.8852 2.5406	3.6052 2.0466	2.8209 2.0637	2.4637	Ave		2.6474				18.0		30.0			
1,2-Dichloroethane	0.3577 0.3122	0.3421 0.3221	0.4581 0.2817	0.3516 0.2804	0.2930	Ave		0.3332				17.0		30.0			
1-Butanol	+++++ 0.1389	0.1129 0.1168	0.1537 0.0977	0.1406 0.1088	0.0990	Ave		0.1210				17.0		30.0			
Cyclohexane	+++++ 0.1603	0.1562 0.1417	0.2050 0.1131	0.1988 0.1082	0.1383	Ave		0.1527				23.0		30.0			
Benzene	0.9693 0.6664	0.8337 0.6681	0.9942 0.5878	0.7486 0.5572	0.6247	Ave		0.7389				22.0		30.0			
Carbon tetrachloride	0.5700 0.6410	0.5724 0.5714	0.6376 0.4548	0.5791 0.4457	0.4353	Ave		0.5452				15.0		30.0			
2,3-Dimethylpentane	+++++ 0.1920	0.2105 0.1657	0.2586 0.1461	0.2251 0.1470	0.1604	Ave		0.1882				22.0		40.0			
Thiophene	0.4666 0.4028	0.4433 0.3971	0.5620 0.3475	0.4336 0.3498	0.3633	Ave		0.4185				16.0		40.0			
Tert-amyl methyl ether	0.7637 0.6415	0.6096 0.5465	0.9683 0.4617	0.7079 0.4615	0.4796	Ave		0.6267				27.0		30.0			
2,2,4-Trimethylpentane	1.7630 1.4707	1.5496 1.2703	2.0972 1.1182	1.6700 1.0641	1.2189	Ave		1.4691				23.0		30.0			
Heptane	0.2997 0.2761	0.2846 0.2393	0.3852 0.2127	0.3097 0.2127	0.2181	Ave		0.2709				21.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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		B	M1	M2								
1,2-Dichloropropane	0.3035 0.2511	0.2453 0.2602	0.3737 0.2298	0.2773 0.2314	0.2022	Ave		0.2638				19.0		30.0			
Trichloroethene	0.3572 0.3309	0.3295 0.2850	0.4573 0.2484	0.3715 0.2469	0.2701	Ave		0.3218				21.0		30.0			
Dibromomethane	0.3577 0.3119	0.3284 0.2867	0.3993 0.2506	0.3364 0.2538	0.2608	Ave		0.3095				17.0		30.0			
Bromodichloromethane	0.5625 0.5567	0.5427 0.5093	0.6991 0.4527	0.5568 0.4460	0.4390	Ave		0.5294				15.0		30.0			
1,4-Dioxane	++++ 0.1095	0.1026 0.0956	0.1528 0.0800	0.1273 0.0858	0.0790	Ave		0.1041				25.0		30.0			
Methyl methacrylate	++++ 0.3106	0.3133 0.2871	0.4659 0.2335	0.3039 0.2466	0.2036	Ave		0.2956				27.0		30.0			
Methylcyclohexane	++++ 0.6170	0.6344 0.5408	0.8623 0.4610	0.7117 0.4466	0.5275	Ave		0.6002				23.0		40.0			
4-Methyl-2-pentanone (MIBK)	++++ 0.6581	++++ 0.5679	0.8674 0.4851	0.7160 0.5139	0.4462	Ave		0.6078				25.0		30.0			
cis-1,3-Dichloropropene	0.3994 0.3334	0.3136 0.3424	0.4593 0.3071	0.3515 0.3128	0.2548	Ave		0.3416				17.0		30.0			
trans-1,3-Dichloropropene	0.3795 0.3211	0.2988 0.3303	0.4774 0.2837	0.3485 0.2920	0.2397	Ave		0.3301				21.0		30.0			
Toluene	++++ 0.6849	0.7583 0.6912	1.1806 0.6042	0.7960 0.5830	0.5406	Ave		0.7298				28.0		30.0			
Toluene Range	++++ 1.6808	1.8023 1.7137	2.9360 1.4871	1.9295 1.4667	1.3269	Ave		1.7929				28.0		30.0			
1,1,2-Trichloroethane	0.2958 0.2227	0.2388 0.2285	0.3716 0.2025	0.2615 0.1984	0.1857	Ave		0.2451				24.0		30.0			
2-Methylthiophene	0.8034 0.5823	0.6216 0.6044	0.9191 0.5286	0.6593 0.5252	0.4680	Ave		0.6347				23.0		40.0			
3-Methylthiophene	0.7821 0.5671	0.6110 0.5914	0.9371 0.5213	0.6240 0.5152	0.4380	Ave		0.6208				24.0		40.0			
2-Hexanone	0.2956 0.3194	0.2317 0.2814	0.4124 0.2397	0.3474 0.2620	0.2327	Ave		0.2914				21.0		30.0			
Octane	0.3170 0.2647	0.2788 0.2526	0.3701 0.2275	0.2882 0.2194	0.2261	Ave		0.2716				18.0		30.0			
C8 Range	++++ 2.9369	3.3126 2.7627	4.2308 2.3477	3.2085 2.2222	2.5120	Ave		2.9417				22.0		30.0			
Dibromochloromethane	0.5229 0.4696	0.4598 0.4936	0.6958 0.4422	0.5110 0.4363	0.4005	Ave		0.4924				17.0		30.0			
1,2-Dibromoethane	++++ 0.3925	0.3869 0.3983	0.6112 0.3542	0.4517 0.3619	0.3107	Ave		0.4084				22.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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		B	M1	M2								
Tetrachloroethene	0.3617 0.2985	0.3387 0.2776	0.4748 0.2456	0.3549 0.2431	0.2646	Ave		0.3177				23.0		30.0			
2,3-Dimethylheptane	++++ 0.8589	1.1183 0.8783	1.4020 0.7603	1.0349 0.6705	0.8143	Ave		0.9422				25.0		40.0			
Chlorobenzene	0.7249 0.5322	0.5833 0.5382	0.8412 0.4786	0.6334 0.4729	0.4319	Ave		0.5818				23.0		30.0			
Ethylbenzene	++++ 0.8541	0.8314 0.7894	1.4041 0.6872	0.9664 0.6782	0.6158	Ave		0.8533				29.0		30.0			
2-Ethylthiophene	++++ 0.6494	0.6367 0.6289	1.0484 0.5474	0.7312 0.5506	0.4724	Ave		0.6581				27.0		40.0			
m-Xylene & p-Xylene	0.9079 0.6667	0.6428 0.6026	1.1125 0.5128	0.7617 0.4959	0.4839	Ave		0.6874				31.0	*	30.0			
Nonane	0.6565 0.5452	0.5366 0.5731	0.7977 0.5151	0.6025 0.4878	0.4524	Ave		0.5741				18.0		30.0			
Styrene	0.5391 0.4949	0.4315 0.4675	0.7174 0.4199	0.5319 0.4219	0.3356	Ave		0.4844				22.0		30.0			
Bromoform	0.4289 0.4316	0.3585 0.4440	0.5964 0.3965	0.4571 0.4129	0.3187	Ave		0.4272				18.0		30.0			
o-Xylene	0.9383 0.7222	0.7357 0.6457	1.2026 0.5623	0.8525 0.5608	0.5278	Ave		0.7498				29.0		30.0			
1,1,2,2-Tetrachloroethane	0.6766 0.5981	0.5147 0.5414	0.8780 0.4847	0.6688 0.4935	0.4324	Ave		0.5876				23.0		30.0			
1,2,3-Trichloropropane	++++ 0.1388	0.1127 0.1289	0.2053 0.1174	0.1542 0.1249	0.1011	Ave		0.1354				24.0		30.0			
Isopropylbenzene	++++ 0.9985	0.9683 0.8961	1.5890 0.7771	1.1198 0.7607	0.7235	Ave		0.9791				29.0		30.0			
Propylbenzene	0.2923 0.2720	0.2183 0.2449	0.4121 0.2189	0.2825 0.2332	0.1829	Ave		0.2619				25.0		30.0			
2-Chlorotoluene	0.3072 0.2530	0.2467 0.2439	0.3855 0.2168	0.2913 0.2242	0.1895	Ave		0.2620				22.0		30.0			
4-Ethyltoluene	1.1760 0.9847	0.8038 0.8744	1.4041 0.7753	1.0397 0.7831	0.6697	Ave		0.9456				25.0		30.0			
1,3,5-Trimethylbenzene	0.5198 0.4638	0.3945 0.4044	0.6996 0.3614	0.5033 0.3757	0.3264	Ave		0.4499				25.0		30.0			
Alpha Methyl Styrene	++++ 0.3845	0.2761 0.3583	0.5186 0.3428	0.3876 0.3673	0.2447	Ave		0.3600				23.0		30.0			
Decane	0.7727 0.6485	0.5646 0.6240	0.9785 0.5592	0.7469 0.5315	0.4581	Ave		0.6538				24.0		30.0			
tert-Butylbenzene	1.1439 0.9015	0.7627 0.7792	1.3543 0.6820	0.9781 0.6993	0.6460	Ave		0.8830				27.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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		B	M1	M2								
1,2,4-Trimethylbenzene	0.9507 0.8422	0.6828 0.7331	1.2561 0.6510	0.9099 0.6581	0.5891	Ave		0.8081				26.0		30.0			
sec-Butylbenzene	1.4119 1.2301	1.0289 1.0744	1.8542 0.9460	1.3193 0.9320	0.8702	Ave		1.1852				26.0		30.0			
1,3-Dichlorobenzene	0.5141 0.4656	0.4434 0.4322	0.6621 0.4054	0.5035 0.4400	0.3148	Ave		0.4646				20.0		30.0			
Benzyl chloride	0.5272 0.5890	0.4703 0.5424	0.7808 0.4798	0.5913 0.5385	0.3609	Ave		0.5422				21.0		30.0			
1,4-Dichlorobenzene	0.4959 0.4253	0.4014 0.3963	0.6051 0.3801	0.4672 0.4193	0.2787	Ave		0.4299				21.0		30.0			
4-Isopropyltoluene	1.0824 0.9693	0.7915 0.8646	1.4670 0.7687	1.0860 0.7723	0.6776	Ave		0.9422				26.0		30.0			
1,2,3-Trimethylbenzene	0.7985 0.6647	0.5470 0.5754	0.9894 0.5173	0.7312 0.5324	0.4768	Ave		0.6481				26.0		40.0			
Butylcyclohexane	0.8027 0.6911	0.6532 0.6647	0.9997 0.5961	0.7615 0.5626	0.5434	Ave		0.6972				20.0		40.0			
Indane	++++ 0.7644	0.6617 0.6699	1.0980 0.6081	0.8361 0.6172	0.5323	Ave		0.7235				25.0		40.0			
1,2-Dichlorobenzene	0.4905 0.4711	0.4214 0.4273	0.6572 0.3982	0.5242 0.4240	0.3200	Ave		0.4593				21.0		30.0			
Butylbenzene	0.9251 0.8969	0.7339 0.8046	1.3062 0.7260	0.9749 0.7362	0.5863	Ave		0.8544				24.0		30.0			
Indene	0.5239 0.5158	0.4169 0.4695	0.6511 0.4506	0.5115 0.4795	0.3203	Ave		0.4821				19.0		40.0			
Undecane	0.7233 0.7297	0.5962 0.6359	1.0321 0.5603	0.8163 0.5768	0.4903	Ave		0.6845				24.0		30.0			
1,2-Dimethyl-4-Ethylbenzene	0.7969 0.7077	0.5999 0.6439	1.0155 0.5832	0.8033 0.6141	0.4710	Ave		0.6928				23.0		40.0			
1,2-Dibromo-3-Chloropropane	++++ 0.2085	0.1529 0.1928	0.2495 0.1751	0.2070 0.2095	0.1330	Ave		0.1910				19.0		30.0			
1,2,4,5-Tetramethylbenzene	0.9858 0.8596	0.7733 0.7787	1.2736 0.6984	1.0065 0.7284	0.5908	Ave		0.8550				24.0		40.0			
1,2,3,5-Tetramethylbenzene	0.6442 0.5257	0.4793 0.4781	0.8007 0.4332	0.6242 0.4609	0.3690	Ave		0.5350				25.0		40.0			
1,2,3,4-Tetramethylbenzene	0.7749 0.6877	0.6207 0.6290	1.0255 0.5651	0.8226 0.6068	0.4897	Ave		0.6913				23.0		40.0			
Dodecane	0.6611 0.6364	0.5506 0.5409	0.8564 0.4909	0.7330 0.5388	0.4730	Ave		0.6090				21.0		30.0			
1,2,4-Trichlorobenzene	++++ 0.1969	0.1532 0.1880	0.2028 0.1916	0.1730 0.2560	0.1197	Ave		0.1851				21.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Naphthalene	+++++	0.3432	0.4802	0.4235	0.2894	Ave		0.4137				17.0		30.0			
	0.4501	0.4199	0.4086	0.4944													
Benzo(b)thiophene	+++++	0.1967	0.2099	0.1932	0.1350	Ave		0.2045				19.0		40.0			
	0.2117	0.2076	0.2038	0.2785													
Hexachlorobutadiene	0.3986	0.3385	0.5172	0.4120	0.2522	Ave		0.3552				22.0		30.0			
	0.3351	0.3107	0.2982	0.3338													
1,2,3-Trichlorobenzene	+++++	0.1417	0.1877	0.1647	0.1151	Ave		0.1634				17.0		30.0			
	0.1692	0.1601	0.1586	0.2099													
2-Methylnaphthalene	+++++	+++++	0.0488	0.0457	0.0307	Ave		0.0432				20.0		40.0			
	0.0375	0.0416	0.0399	0.0579													
1-Methylnaphthalene	+++++	+++++	0.0511	0.0470	0.0338	Ave		0.0458				22.0		40.0			
	0.0382	0.0392	0.0481	0.0634													
4-Bromofluorobenzene (Surr)	0.5054	0.6446	0.6105	0.6934	0.6598	Ave		0.6548				10.0		30.0			
	0.6612	0.6826	0.7207	0.7149													

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-2321/2	JB02icL1.D
Level 2	IC 140-2321/3	JB02icL2.D
Level 3	IC 140-2321/4	JB02icL3.D
Level 4	IC 140-2321/5	JB02icL4.D
Level 5	IC 140-2321/6	JB02icL5.D
Level 6	ICIS 140-2321/7	JB02icisL6.D
Level 7	IC 140-2321/8	JB02icL7.D
Level 8	IC 140-2321/9	JB02icL8.D
Level 9	IC 140-2321/10	JB02icL9.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 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Chlorodifluoromethane	CBM	Ave	1854 73369	3424 139030	8860 246192	14782 456091	32955	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Propene	CBM	Ave	++++ 279142	++++ 523001	42023 858998	65383 1565043	132305	++++ 2.00	++++ 4.00	0.200 8.00	0.400 16.0	1.00
Dichlorodifluoromethane	CBM	Ave	15474 712382	30170 1345206	86277 2220880	143956 4023663	325851	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Chloromethane	CBM	Ave	++++ 93053	5149 171399	13477 290411	20905 533733	43576	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2-Dichlorotetrafluoroethane	CBM	Ave	10647 461044	18911 883226	55459 1472653	94740 2732986	209418	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Acetaldehyde	CBM	Ave	++++ 460018	++++ 918159	++++ 1337471	86354 2684944	193433	++++ 10.0	++++ 20.0	++++ 40.0	2.00 80.0	5.00
Vinyl chloride	CBM	Ave	5846 267849	11424 509003	33856 861009	55811 1612356	122506	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Butane	CBM	Ave	12208 440683	21105 828963	59552 1376936	99559 2526819	217307	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,3-Butadiene	CBM	Ave	4787 211780	9275 404323	25907 690799	44283 1287411	95618	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Bromomethane	CBM	Ave	5215 223862	9939 429197	28141 729644	46423 1405706	101275	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Chloroethane	CBM	Ave	++++ 115555	5077 222490	14347 372958	24468 731868	52424	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Ethanol	CBM	Ave	13161 402629	22153 733956	61484 1028478	83182 2118175	174738	0.199 10.0	0.399 20.0	1.00 40.0	2.00 80.0	5.00
Vinyl bromide	CBM	Ave	4565 197531	8418 377459	24723 641424	40783 1259030	88520	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
2-Methylbutane	CBM	Ave	8411 293654	15542 548772	40642 907660	62797 1746402	136811	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Trichlorofluoromethane	CBM	Ave	13675 626895	24844 1190242	76025 1970709	125854 3654003	281649	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Acrolein	CBM	Ave	++++ 59615	5059 121783	10043 207242	11176 464276	21172	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Acetonitrile	CBM	Ave	++++ 78425	++++ 153373	++++ 246422	15421 535163	28527	++++ 2.00	++++ 4.00	++++ 8.00	0.400 16.0	1.00
Acetone	CBM	Ave	++++ 263015	++++ 507711	++++ 558708	59706 1191572	121002	++++ 6.00	++++ 12.0	++++ 24.0	1.20 48.0	3.00
Isopropyl alcohol	CBM	Ave	24880 956109	44699 1736744	138024 2564747	190752 5129253	414752	0.119 6.00	0.239 12.0	0.600 24.0	1.20 48.0	3.00
Pentane	CBM	Ave	++++ 37923	++++ 72775	4339 119661	7656 231477	17062	++++ 2.00	++++ 4.00	0.200 8.00	0.400 16.0	1.00
Ethyl ether	CBM	Ave	6225 195750	8566 418905	34989 674189	37146 1310999	77865	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,1-Dichloroethene	CBM	Ave	4786 196396	8189 379393	23607 626243	39787 1223778	89173	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
t-Butyl alcohol	CBM	Ave	8885 364383	15626 667284	51169 1077056	72191 2277047	152052	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Acrylonitrile	CBM	Ave	++++ 117234	++++ 232603	++++ 387279	20358 840602	41067	++++ 2.00	++++ 4.00	++++ 8.00	0.400 16.0	1.00
1,1,2-Trichlorotrifluoroethane	CBM	Ave	9516 414416	17500 793825	52435 1230455	82806 2470886	190514	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Methylene Chloride	CBM	Ave	++++ 190357	++++ 360167	28915 536859	43037 1081220	91824	++++ 2.00	++++ 4.00	0.200 8.00	0.400 16.0	1.00
3-Chloropropene	CBM	Ave	6583 210397	10428 390186	28172 515698	42284 1034161	96937	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Carbon disulfide	CBM	Ave	15301 709227	28737 1351244	85555 2234586	143653 4177657	322755	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
trans-1,2-Dichloroethene	CBM	Ave	5444 227185	9186 439892	28651 651321	46737 1277566	104152	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
2-Methylpentane	CBM	Ave	14961 583813	26764 1104518	75663 1647824	117748 3261067	268820	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Methyl tert-butyl ether	CBM	Ave	10348 377086	14666 708984	60333 1036143	71035 2121045	142235	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,1-Dichloroethane	CBM	Ave	9111 373428	16980 711643	50600 1121361	70804 2245258	170750	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Vinyl acetate	CBM	Ave	11740 373840	16639 748230	58700 1184112	62583 2481272	130681	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
2-Butanone	CBM	Ave	++++ 75250	++++ 147275	11724 192577	13810 405025	30213	++++ 2.00	++++ 4.00	0.200 8.00	0.400 16.0	1.00
C6 Range	CBM	Ave	++++ 2319650	124359 4434032	327237 6416009	457447 13006005	1046587	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Hexane	CBM	Ave	5430 201062	9584 381457	27640 574959	39474 1180131	90771	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Isopropyl ether	CBM	Ave	18210 630327	27473 1163550	97358 1686677	116839 3332719	235216	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
cis-1,2-Dichloroethene	CBM	Ave	4803 189453	8319 362314	26537 571755	36673 1146045	86254	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Ethyl acetate	CBM	Ave	10564 347626	14933 683079	54737 1005122	62629 2099963	134435	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Chloroform	CBM	Ave	9943 366179	18254 699491	56129 1135194	72858 2255531	170732	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Tert-butyl ethyl ether	CBM	Ave	12512 488593	18391 889084	73299 1330879	91084 2669450	181863	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Tetrahydrofuran	CBM	Ave	5762 188789	8420 366881	29342 560530	34658 1215789	71698	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,1,1-Trichloroethane	CBM	Ave	9368 397886	19538 769030	57170 1185383	77564 2323629	189252	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2-Dichloroethane	DFB	Ave	5830 208212	11019 470172	33204 749644	40539 1489491	108883	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1-Butanol	DFB	Ave	++++ 92621	3638 170470	11138 260136	16216 577894	36780	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Cyclohexane	DFB	Ave	++++ 106942	5033 206842	14857 301035	22926 574799	51385	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Benzene	DFB	Ave	15800 444457	26858 975273	72062 1564537	86310 2960278	232144	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Carbon tetrachloride	DFB	Ave	9291 427542	18438 834144	46211 1210447	66767 2367862	161764	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
2,3-Dimethylpentane	DFB	Ave	++++ 128091	6780 241958	18743 388956	25958 781028	59612	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Thiophene	DFB	Ave	7606 268671	14281 579718	40734 924914	49998 1858435	135004	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Tert-amyl methyl ether	CBZ	Ave	10469 423837	17350 759639	60937 1163690	76260 2393639	158012	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
2,2,4-Trimethylpentane	DFB	Ave	28736 980897	49918 1854422	152003 2976164	192544 5653514	452989	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Heptane	DFB	Ave	4885 184125	9169 349391	27922 566164	35713 1129883	81056	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2-Dichloropropane	DFB	Ave	4947 167458	7903 379911	27087 611640	31968 1229456	75149	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Trichloroethene	DFB	Ave	5822 220680	10613 416123	33142 661074	42837 1311549	100360	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Dibromomethane	DFB	Ave	5831 208058	10579 418582	28940 666985	38789 1348312	96908	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Bromodichloromethane	DFB	Ave	9169 371303	17484 743446	50671 1204865	64200 2369348	163139	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,4-Dioxane	DFB	Ave	++++ 73038	3304 139540	11078 212876	14676 455676	29376	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Methyl methacrylate	DFB	Ave	++++ 207175	10092 419174	33768 621512	35036 1310001	75660	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Methylcyclohexane	DFB	Ave	++++ 411526	20438 789531	62498 1227126	82063 2372870	196019	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
4-Methyl-2-pentanone (MIBK)	DFB	Ave	++++ 438930	++++ 829084	62867 1291012	82553 2730173	165821	++++ 2.00	++++ 4.00	0.200 8.00	0.400 16.0	1.00
cis-1,3-Dichloropropene	DFB	Ave	6510 222341	10101 499796	33291 817502	40533 1661597	94684	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
trans-1,3-Dichloropropene	CBZ	Ave	5202 212168	8505 459032	30041 715096	37546 1514639	78959	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Toluene	CBZ	Ave	++++ 452462	21582 960784	74297 1522934	85756 3023734	178095	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Toluene Range	CBZ	Ave	++++ 1110449	51296 2381997	184771 3748206	207864 7607152	437179	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,1,2-Trichloroethane	CBZ	Ave	4055 147163	6796 317612	23388 510378	28171 1028843	61191	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
2-Methylthiophene	CBZ	Ave	11014 384728	17692 840106	57843 1332270	71024 2724049	154183	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
3-Methylthiophene	CBZ	Ave	10722 374640	17391 821973	58976 1313774	67221 2672064	144312	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
2-Hexanone	CBZ	Ave	4052 210993	6594 391088	25954 604250	37426 1358936	76652	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Octane	CBZ	Ave	4346 174854	7934 351104	23293 573265	31044 1137688	74508	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
C8 Range	CBZ	Ave	++++ 1940288	94283 3839953	266259 5917096	345651 11525806	827615	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Dibromochloromethane	CBZ	Ave	7169 310253	13087 686011	43786 1114615	55052 2263093	131962	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2-Dibromoethane	CBZ	Ave	++++ 259344	11011 553685	38462 892760	48660 1876913	102354	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Tetrachloroethene	CBZ	Ave	4958 197241	9639 385841	29878 619114	38238 1260721	87178	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
2,3-Dimethylheptane	CBZ	Ave	++++ 567430	31829 1220814	88230 1916286	111490 3477383	268292	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Chlorobenzene	CBZ	Ave	9938 351581	16601 748137	52937 1206328	68232 2452735	142301	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Ethylbenzene	CBZ	Ave	++++ 564283	23663 1097171	88367 1731979	104105 3517516	202896	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
2-Ethylthiophene	CBZ	Ave	+++++ 429043	18121 874188	65978 1379714	78773 2855581	155636	+++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
m-Xylene & p-Xylene	CBZ	Ave	24892 880871	36589 1675287	140025 2584852	164123 5144380	318841	0.0794 4.00	0.160 8.00	0.400 16.0	0.800 32.0	2.00
Nonane	CBZ	Ave	9000 360199	15272 796594	50203 1298235	64902 2529868	149048	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Styrene	CBZ	Ave	7391 326941	12280 649833	45149 1058356	57296 2188134	110576	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Bromoform	CBZ	Ave	5880 285129	10205 617093	37533 999215	49248 2141767	105000	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
o-Xylene	CBZ	Ave	12863 477117	20939 897431	75681 1417298	91841 2908413	173902	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,1,2,2-Tetrachloroethane	CBZ	Ave	9275 395176	14649 752518	55254 1221582	72048 2559502	142468	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2,3-Trichloropropane	CBZ	Ave	+++++ 91715	3207 179115	12919 295930	16612 647877	33297	+++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Isopropylbenzene	CBZ	Ave	+++++ 659703	27559 1245518	99997 1958677	120638 3945641	238383	+++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Propylbenzene	CBZ	Ave	4007 179690	6212 340422	25935 551761	30429 1209554	60259	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
2-Chlorotoluene	CBZ	Ave	4211 167171	7022 339076	24262 546325	31380 1162874	62446	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
4-Ethyltoluene	CBZ	Ave	16121 650578	22877 1215330	88362 1954170	112001 4061702	220642	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,3,5-Trimethylbenzene	CBZ	Ave	7126 306387	11228 562124	44028 910938	54216 1948422	107543	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Alpha Methyl Styrene	CBZ	Ave	+++++ 254025	7857 498059	32639 863924	41756 1904974	80612	+++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Decane	CBZ	Ave	10593 428443	16071 867371	61578 1409402	80467 2756738	150935	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
tert-Butylbenzene	CBZ	Ave	15681 595558	21709 1083048	85228 1718951	105370 3627062	212848	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2,4-Trimethylbenzene	CBZ	Ave	13033 556397	19434 1018993	79047 1640694	98024 3413188	194096	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
sec-Butylbenzene	CBZ	Ave	19356 812671	29285 1493413	116691 2384356	142130 4833755	286712	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,3-Dichlorobenzene	CBZ	Ave	7048 307594	12621 600787	41670 1021760	54244 2282246	103715	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Benzyl chloride	CBZ	Ave	7227 389116	13385 753863	49141 1209361	63695 2793035	118897	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,4-Dichlorobenzene	CBZ	Ave	6798 280978	11424 550794	38079 958044	50329 2174777	91835	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
4-Isopropyltoluene	CBZ	Ave	14838 640395	22528 1201806	92324 1937413	116989 4005716	223257	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2,3-Trimethylbenzene	CBZ	Ave	10946 439173	15569 799833	62265 1303753	78769 2761285	157089	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Butylcyclohexane	CBZ	Ave	11004 456578	18591 923937	62915 1502351	82036 2918010	179037	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Indane	CBZ	Ave	++++ 505040	18833 931126	69100 1532701	90069 3201210	175381	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2-Dichlorobenzene	CBZ	Ave	6724 311215	11993 593910	41359 1003547	56467 2199254	105420	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Butylbenzene	CBZ	Ave	12682 592548	20887 1118397	82201 1829707	105027 3818089	193152	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Indene	CBZ	Ave	7182 340799	11866 652622	40978 1135584	55104 2486930	105535	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Undecane	CBZ	Ave	9915 482089	16970 883826	64951 1412079	87943 2991407	161550	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2-Dimethyl-4-Ethylbenzene	CBZ	Ave	10925 467559	17073 895008	63911 1469826	86542 3185170	155168	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2-Dibromo-3-Chloropropane	CBZ	Ave	++++ 137741	4351 267988	15699 441219	22303 1086555	43812	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2,4,5-Tetramethylbenzene	CBZ	Ave	13514 567879	22010 1082335	80151 1760180	108430 3777909	194644	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2,3,5-Tetramethylbenzene	CBZ	Ave	8831 347340	13642 664567	50389 1091723	67239 2390272	121580	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2,3,4-Tetramethylbenzene	CBZ	Ave	10623 454371	17666 874226	64538 1424220	88622 3147228	161331	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Dodecane	CBZ	Ave	9063 420435	15670 751872	53896 1237355	78965 2794574	155825	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2,4-Trichlorobenzene	CBZ	Ave	++++ 130070	4360 261358	12763 482865	18639 1327570	39424	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Naphthalene	CBZ	Ave	++++ 297395	9769 583681	30221 1029922	45619 2564117	95333	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Benzo(b)thiophene	CBZ	Ave	++++ 139849	5598 288619	13207 513760	20810 1444640	44465	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
Hexachlorobutadiene	CBZ	Ave	5464 221411	9633 431913	32549 751618	44388 1731386	83096	0.0397 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
1,2,3-Trichlorobenzene	CBZ	Ave	++++ 111816	4033 222581	11814 399699	17743 1088532	37937	++++ 2.00	0.0798 4.00	0.200 8.00	0.400 16.0	1.00
2-Methylnaphthalene	CBZ	Ave	++++ 77436	++++ 180845	9608 314249	15379 937834	31630	++++ 6.25	++++ 12.5	0.625 25.0	1.25 50.0	3.13
1-Methylnaphthalene	CBZ	Ave	++++ 78839	++++ 170215	10046 378573	15808 1028106	34839	++++ 6.25	++++ 12.5	0.625 25.0	1.25 50.0	3.13

FORM VI
AIR - GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1 Analy Batch No.: 2321

SDG No.: _____

Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/02/2015 12:48 Calibration End Date: 02/02/2015 20:05 Calibration ID: 275

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 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
4-Bromofluorobenzene (Surr)	CBZ	Ave	697988	919425	768365	746943	869463	4.00	4.00	4.00	4.00	4.00
			873686	948768	908244	926977		4.00	4.00	4.00	4.00	

Curve Type Legend:

Ave = Average ISTD

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL1.D
 Lims ID: IC L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 02-Feb-2015 12:48:30 ALS Bottle#: 9 Worklist Smp#: 2
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 022292,,1,1,,ICAL 0.04
 Misc. Info.: J020215I,TO15,,140-0001328-002
 Operator ID: 7126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub3
 Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Feb-2015 08:51:01 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: barlozhetskayaa

Date: 02-Feb-2015 18:42:01

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	9.593	9.593	0.000	98	356228	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.734	11.736	-0.002	96	1642054	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.382	16.380	0.002	89	1381044	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.990	17.991	-0.001	91	697988	4.00	3.09	
6 Chlorodifluoromethane	67	4.020	4.021	-0.001	62	1854	0.0397	0.0431	
7 Propene	41	4.047	4.036	0.011	76	18946	0.0397	0.1121	
8 Dichlorodifluoromethane	85	4.095	4.093	0.002	99	15474	0.0397	0.0386	
9 Chloromethane	52	4.299	4.302	-0.003	64	2912	0.0397	0.0511	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.310	4.307	0.003	91	10647	0.0397	0.0405	
11 Acetaldehyde	44	4.477	4.476	0.001	99	31878	0.1985	0.6482	
12 Vinyl chloride	62	4.499	4.497	0.001	95	5846	0.0397	0.0380	
13 Butane	43	4.601	4.597	0.004	84	12208	0.0397	0.0454	
14 Butadiene	54	4.601	4.598	0.003	58	4787	0.0397	0.0392	
15 Bromomethane	94	4.967	4.968	-0.001	95	5215	0.0397	0.0399	
16 Chloroethane	64	5.117	5.127	-0.010	67	2312	0.0397	0.0343	
17 Ethanol	31	5.225	5.223	0.002	94	13161	0.1985	0.2656	
18 Vinyl bromide	106	5.467	5.470	-0.003	96	4565	0.0397	0.0399	
19 2-Methylbutane	43	5.521	5.520	0.001	91	8411	0.0397	0.0465	
20 Trichlorofluoromethane	101	5.768	5.766	0.002	99	13675	0.0397	0.0389	
23 Acetone	58	5.908	5.899	0.009	99	17155	0.1191	0.3742	
24 Isopropyl alcohol	45	5.989	5.979	0.010	92	24880	0.1191	0.1347	
26 Ethyl ether	31	6.193	6.184	0.009	89	6225	0.0397	0.0497	
27 1,1-Dichloroethene	96	6.543	6.540	0.003	94	4786	0.0397	0.0423	
28 2-Methyl-2-propanol	59	6.640	6.627	0.013	94	8885	0.0397	0.0422	
29 Acrylonitrile	53	6.645	6.650	-0.005	84	3146	0.0397	0.0496	
30 1,1,2-Trichloro-1,2,2-trif	101	6.726	6.722	0.004	94	9516	0.0397	0.0403	
31 Methylene Chloride	84	6.914	6.915	-0.001	97	10797	0.0397	0.0945	
32 3-Chloro-1-propene	39	6.930	6.930	0.000	62	6583	0.0397	0.0531	
33 Carbon disulfide	76	7.102	7.098	0.004	97	15301	0.0397	0.0383	
34 trans-1,2-Dichloroethene	96	7.775	7.774	0.001	93	5444	0.0397	0.0422	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
35 2-Methylpentane	43	7.780	7.783	-0.003	95	14961	0.0397	0.0443	
36 Methyl tert-butyl ether	73	7.920	7.898	0.022	93	10348	0.0397	0.0476	
37 1,1-Dichloroethane	63	8.216	8.219	-0.003	97	9111	0.0397	0.0420	
38 Vinyl acetate	43	8.323	8.317	0.006	99	11740	0.0397	0.0521	
39 2-Butanone (MEK)	72	8.807	8.788	0.019	87	2666	0.0397	0.0629	
40 Hexane	56	8.813	8.811	0.002	67	5430	0.0397	0.0457	
139 Isopropyl ether	45	8.980	8.966	0.014	97	18210	0.0397	0.0501	
41 cis-1,2-Dichloroethene	96	9.243	9.246	-0.003	93	4803	0.0397	0.0432	
42 Ethyl acetate	43	9.426	9.417	0.009	97	10564	0.0397	0.0510	
43 Chloroform	83	9.593	9.599	-0.006	28	9943	0.0397	0.0442	
142 Tert-butyl ethyl ether	59	9.679	9.667	0.012	95	12512	0.0397	0.0459	
44 Tetrahydrofuran	42	10.039	10.018	0.021	92	5762	0.0397	0.0507	
45 1,1,1-Trichloroethane	97	10.636	10.643	-0.007	96	9368	0.0397	0.0397	
46 1,2-Dichloroethane	62	10.749	10.750	-0.001	93	5830	0.0397	0.0426	
47 n-Butanol	31	11.169	11.144	0.025	67	1883	0.0397	0.0379	
49 Cyclohexane	69	11.228	11.222	0.006	73	2720	0.0397	0.0434	
48 Benzene	78	11.228	11.226	0.002	96	15800	0.0397	0.0521	
50 Carbon tetrachloride	117	11.255	11.247	0.008	94	9291	0.0397	0.0415	
51 2,3-Dimethylpentane	71	11.314	11.320	-0.006	89	3241	0.0397	0.0420	
52 Thiophene	84	11.497	11.493	0.004	94	7606	0.0397	0.0443	
140 Tert-amyl methyl ether	73	11.669	11.660	0.009	91	10469	0.0397	0.0484	
53 Isooctane	57	11.944	11.939	0.005	97	28736	0.0397	0.0476	
54 n-Heptane	71	12.293	12.295	-0.002	91	4885	0.0397	0.0439	
55 1,2-Dichloropropane	63	12.401	12.405	-0.004	87	4947	0.0397	0.0457	
56 Trichloroethene	130	12.439	12.437	0.002	93	5822	0.0397	0.0441	
57 Dibromomethane	93	12.525	12.528	-0.003	97	5831	0.0397	0.0459	
59 Dichlorobromomethane	83	12.665	12.661	0.004	98	9169	0.0397	0.0422	
58 1,4-Dioxane	88	12.686	12.670	0.016	72	1549	0.0397	0.0363	
60 Methyl methacrylate	41	12.724	12.724	0.000	90	7090	0.0397	0.0584	
61 Methylcyclohexane	83	13.186	13.185	0.001	90	10925	0.0397	0.0443	
62 4-Methyl-2-pentanone (MIBK)	43	13.563	13.560	0.003	98	31322	0.0397	0.1255	
63 cis-1,3-Dichloropropene	75	13.633	13.630	0.003	94	6510	0.0397	0.0464	
64 trans-1,3-Dichloropropene	75	14.311	14.306	0.005	94	5202	0.0397	0.0456	
65 Toluene	91	14.434	14.436	-0.002	92	14623	0.0397	0.0580	
66 1,1,2-Trichloroethane	83	14.504	14.507	-0.003	93	4055	0.0397	0.0479	
67 2-Methylthiophene	97	14.590	14.588	0.002	96	11014	0.0397	0.0503	
68 3-Methylthiophene	97	14.784	14.786	-0.002	97	10722	0.0397	0.0500	
69 2-Hexanone	58	14.870	14.866	0.004	89	4052	0.0397	0.0403	
70 n-Octane	85	15.085	15.081	0.004	96	4346	0.0397	0.0463	
71 Chlorodibromomethane	129	15.209	15.209	0.000	96	7169	0.0397	0.0422	
72 Ethylene Dibromide	107	15.500	15.500	0.000	98	6280	0.0397	0.0445	
73 Tetrachloroethene	129	15.559	15.561	-0.002	91	4958	0.0397	0.0452	
74 2,3-Dimethylheptane	43	16.414	16.411	0.003	95	18232	0.0397	0.0560	
75 Chlorobenzene	112	16.425	16.429	-0.004	95	9938	0.0397	0.0495	
76 Ethylbenzene	91	16.705	16.703	0.002	98	17019	0.0397	0.0578	
77 2-Ethylthiophene	97	16.807	16.807	0.000	96	11193	0.0397	0.0493	
78 m-Xylene & p-Xylene	91	16.866	16.861	0.005	99	24892	0.0794	0.1049	
79 n-Nonane	57	17.248	17.245	0.003	93	9000	0.0397	0.0454	
80 Styrene	104	17.329	17.326	0.003	95	7391	0.0397	0.0442	
81 Bromoform	173	17.329	17.328	0.001	82	5880	0.0397	0.0399	
82 o-Xylene	91	17.382	17.386	-0.004	98	12863	0.0397	0.0497	
83 1,1,2,2-Tetrachloroethane	83	17.700	17.704	-0.004	96	9275	0.0397	0.0457	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 1,2,3-Trichloropropane	110	17.856	17.860	-0.004	95	1871	0.0397	0.0400	
85 Isopropylbenzene	105	17.958	17.953	0.005	96	18077	0.0397	0.0535	
86 N-Propylbenzene	120	18.464	18.463	0.001	98	4007	0.0397	0.0443	
87 2-Chlorotoluene	126	18.512	18.517	-0.005	96	4211	0.0397	0.0465	
88 4-Ethyltoluene	105	18.603	18.605	-0.002	98	16121	0.0397	0.0494	
89 1,3,5-Trimethylbenzene	120	18.673	18.673	0.000	91	7126	0.0397	0.0459	
90 Alpha Methyl Styrene	118	18.899	18.896	0.003	82	5213	0.0397	0.0419	
91 n-Decane	57	18.926	18.925	0.001	89	10593	0.0397	0.0469	
92 tert-Butylbenzene	119	19.082	19.083	-0.001	91	15681	0.0397	0.0514	
93 1,2,4-Trimethylbenzene	105	19.098	19.097	0.001	95	13033	0.0397	0.0467	
94 sec-Butylbenzene	105	19.340	19.341	-0.001	98	19356	0.0397	0.0473	
95 1,3-Dichlorobenzene	146	19.367	19.370	-0.003	94	7048	0.0397	0.0439	
96 Benzyl chloride	91	19.443	19.439	0.004	97	7227	0.0397	0.0386	
97 1,4-Dichlorobenzene	146	19.453	19.453	0.000	92	6798	0.0397	0.0458	
98 4-Isopropyltoluene	119	19.496	19.496	0.000	95	14838	0.0397	0.0456	
99 1,2,3-Trimethylbenzene	105	19.550	19.554	-0.004	96	10946	0.0397	0.0489	
100 Butylcyclohexane	83	19.599	19.597	0.002	88	11004	0.0397	0.0457	
101 2,3-Dihydroindene	117	19.798	19.799	-0.001	94	12364	0.0397	0.0495	
102 1,2-Dichlorobenzene	146	19.808	19.805	0.003	95	6724	0.0397	0.0424	
103 n-Butylbenzene	91	19.916	19.916	0.000	97	12682	0.0397	0.0430	
104 Indene	116	19.927	19.927	0.000	88	7182	0.0397	0.0431	
105 Undecane	57	20.196	20.195	0.001	95	9915	0.0397	0.0420	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.276	20.278	-0.002	97	10925	0.0397	0.0457	
141 1,2-Dibromo-3-Chloropropan	157	20.395	20.393	0.002	89	3205	0.0397	0.0486	
108 1,2,4,5-Tetramethylbenzene	119	20.669	20.668	0.001	95	13514	0.0397	0.0458	
107 1,2,3,5-Tetramethylbenzene	119	20.723	20.725	-0.002	94	8831	0.0397	0.0478	
109 1,2,3,4-Tetramethylbenzene	119	21.148	21.147	0.001	96	10623	0.0397	0.0445	
110 Dodecane	57	21.282	21.282	0.000	92	9063	0.0397	0.0431	
111 1,2,4-Trichlorobenzene	180	21.530	21.525	0.005	89	2367	0.0397	0.0370	
112 Naphthalene	128	21.659	21.655	0.004	97	5716	0.0397	0.0400	
113 Benzo(b)thiophene	134	21.740	21.741	-0.001	96	3811	0.0397	0.0540	
114 Hexachlorobutadiene	225	21.810	21.810	0.000	94	5464	0.0397	0.0446	
115 1,2,3-Trichlorobenzene	180	21.874	21.872	0.002	91	2345	0.0397	0.0416	
116 2-Methylnaphthalene	142	22.401	22.402	-0.001	97	4756	0.1241	0.3191	
117 1-Methylnaphthalene	142	22.530	22.528	0.002	96	4194	0.1241	0.2651	
A 118 C6 Range	1	8.807	(8.770-8.845)		0	69755	0.0397	0.0511	
A 122 Toluene Range	1	14.434	(14.404-14.464)		0	32005	0.0397	0.0517	
A 123 C8 Range	1	15.104	(15.056-15.152)		0	51311	0.0397	0.0505	
S 124 Xylenes, Total	100				0		0.1191	0.1546	
S 144 1,2-Dichloroethene, Total	1				0			0.0854	

Reagents:

MAic00.2_00010

Amount Added: 99.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL1.D

Injection Date: 02-Feb-2015 12:48:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: IC L1

Worklist Smp#: 2

Client ID:

Purge Vol: 500.000 mL

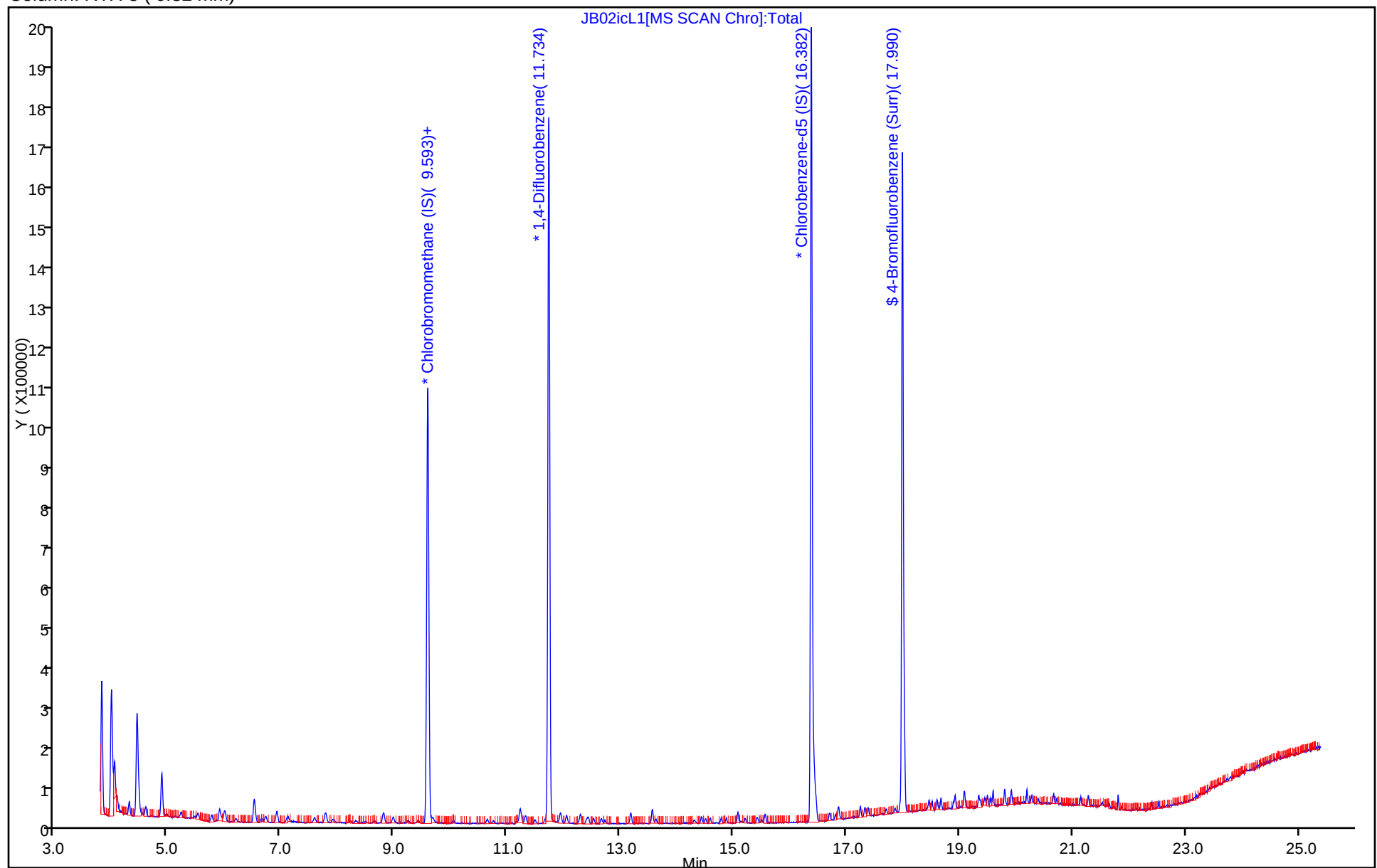
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL1.D

Injection Date: 02-Feb-2015 12:48:30

Instrument ID: MJ

Lims ID: IC L1

Client ID:

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 2

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

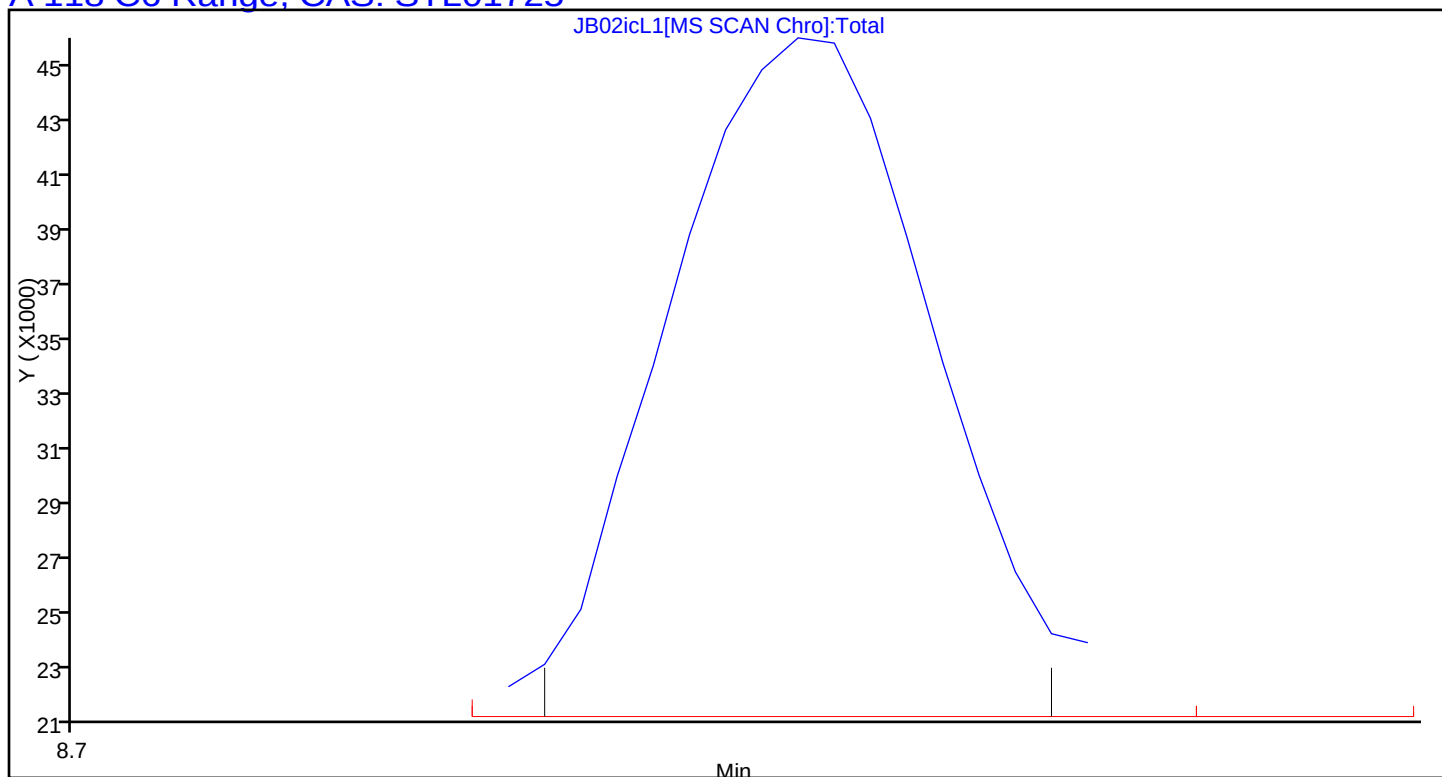
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL1.D

Injection Date: 02-Feb-2015 12:48:30

Instrument ID: MJ

Lims ID: IC L1

Client ID:

Operator ID: 7126

ALS Bottle#:

9

Worklist Smp#:

2

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MJ_TO15

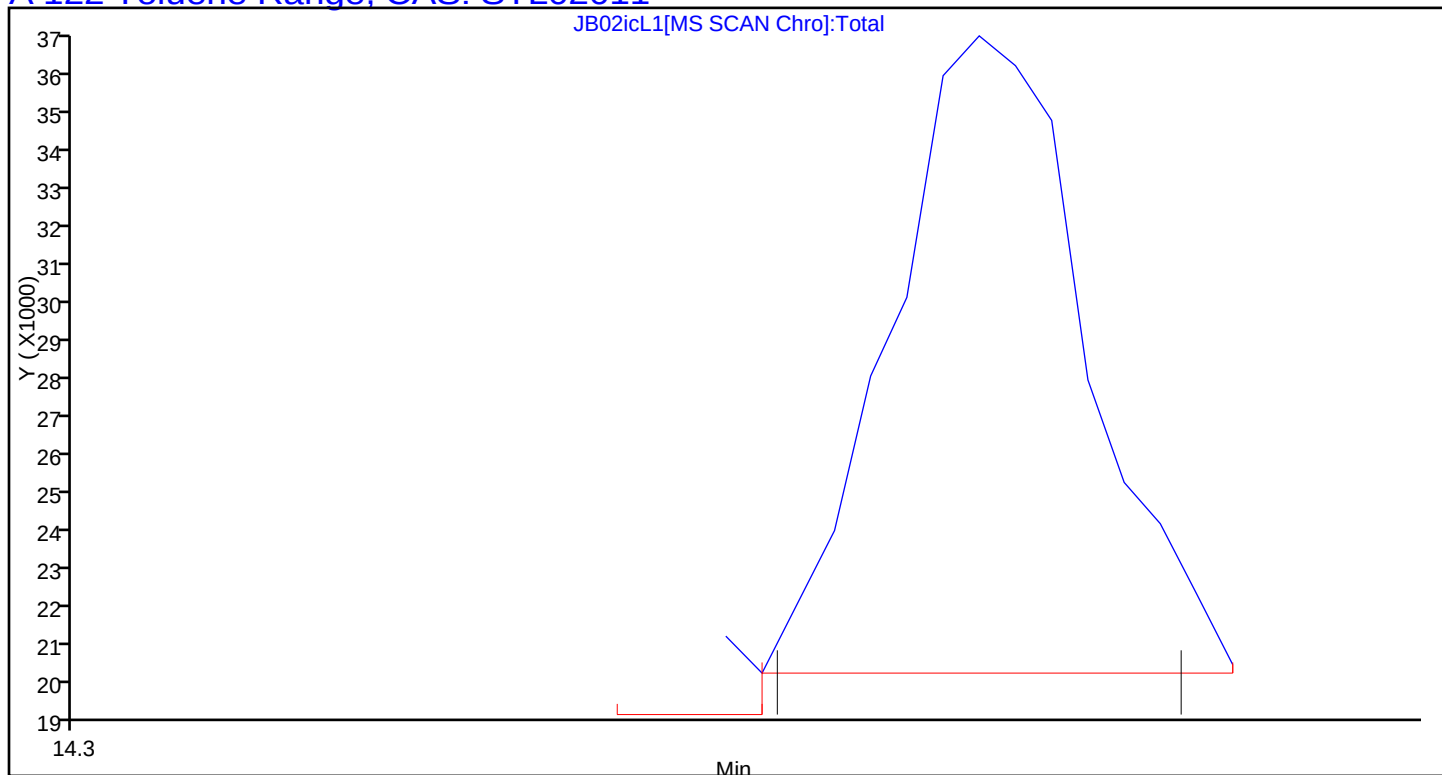
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

A 122 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL1.D

Injection Date: 02-Feb-2015 12:48:30

Instrument ID: MJ

Lims ID: IC L1

Client ID:

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 2

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

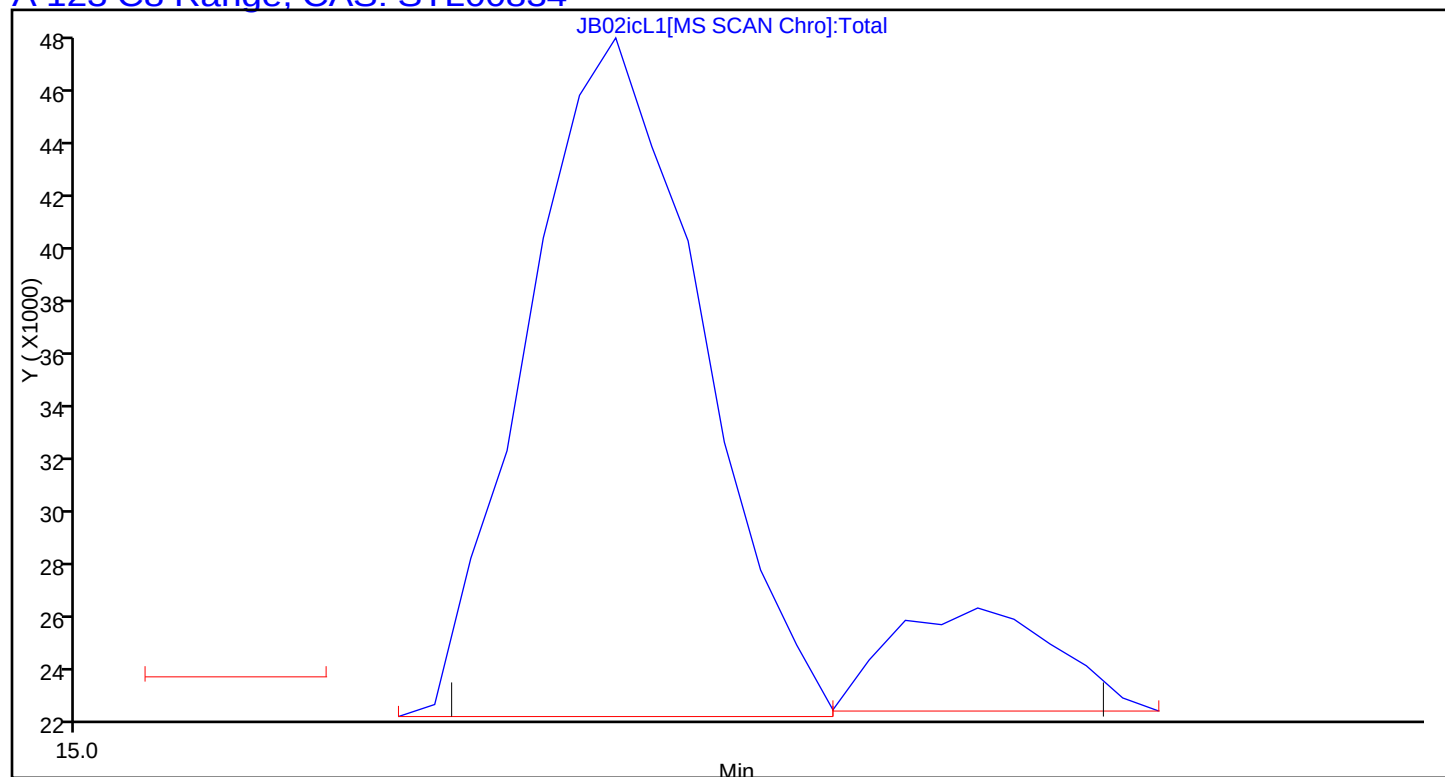
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 123 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL2.D
 Lims ID: IC L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 02-Feb-2015 13:43:30 ALS Bottle#: 9 Worklist Smp#: 3
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 022292,,1,2,,ICAL 0.08
 Misc. Info.: J020215I,TO15,,140-0001328-003
 Operator ID: 7126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub3
 Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Feb-2015 08:51:05 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: tajh

Date: 03-Feb-2015 07:37:59

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	9.588	9.593	-0.005	98	339388	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.734	11.736	-0.002	96	1614490	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.377	16.380	-0.003	89	1426446	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.991	17.991	0.000	91	919425	4.00	3.94	
6 Chlorodifluoromethane	67	4.026	4.021	0.005	95	3424	0.0798	0.0835	
7 Propene	41	4.042	4.036	0.006	90	28773	0.0798	0.1787	
8 Dichlorodifluoromethane	85	4.090	4.093	-0.003	99	30170	0.0798	0.0790	
9 Chloromethane	52	4.305	4.302	0.003	61	5149	0.0798	0.0948	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.305	4.307	-0.002	93	18911	0.0798	0.0756	
11 Acetaldehyde	44	4.477	4.476	0.001	92	43139	0.3991	0.9207	
12 Vinyl chloride	62	4.494	4.497	-0.003	97	11424	0.0798	0.0779	
13 Butane	43	4.596	4.597	-0.001	88	21105	0.0798	0.0824	
14 Butadiene	54	4.601	4.598	0.003	60	9275	0.0798	0.0797	
15 Bromomethane	94	4.972	4.968	0.004	98	9939	0.0798	0.0799	
16 Chloroethane	64	5.123	5.127	-0.004	89	5077	0.0798	0.0791	
17 Ethanol	31	5.220	5.223	-0.003	97	22153	0.3991	0.4693	
18 Vinyl bromide	106	5.473	5.470	0.003	98	8418	0.0798	0.0772	
19 2-Methylbutane	43	5.521	5.520	0.001	91	15542	0.0798	0.0903	
20 Trichlorofluoromethane	101	5.763	5.766	-0.003	99	24844	0.0798	0.0743	
21 Acrolein	56	5.774	5.774	0.000	33	5059	0.0798	0.1308	
23 Acetone	58	5.903	5.899	0.004	99	25539	0.2395	0.5848	
24 Isopropyl alcohol	45	5.973	5.979	-0.006	92	44699	0.2395	0.2540	
26 Ethyl ether	31	6.193	6.184	0.009	93	8566	0.0798	0.0718	
27 1,1-Dichloroethene	96	6.543	6.540	0.003	96	8189	0.0798	0.0759	
28 2-Methyl-2-propanol	59	6.635	6.627	0.008	96	15626	0.0798	0.0780	
29 Acrylonitrile	53	6.651	6.650	0.001	93	4657	0.0798	0.0771	
30 1,1,2-Trichloro-1,2,2-trif	101	6.721	6.722	-0.001	94	17500	0.0798	0.0777	
31 Methylene Chloride	84	6.914	6.915	-0.001	97	13956	0.0798	0.1283	
32 3-Chloro-1-propene	39	6.925	6.930	-0.005	92	10428	0.0798	0.0883	
33 Carbon disulfide	76	7.092	7.098	-0.006	99	28737	0.0798	0.0756	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
34 trans-1,2-Dichloroethene	96	7.770	7.774	-0.004	94	9186	0.0798	0.0747	
35 2-Methylpentane	43	7.780	7.783	-0.003	96	26764	0.0798	0.0831	
36 Methyl tert-butyl ether	73	7.910	7.898	0.012	95	14666	0.0798	0.0709	
37 1,1-Dichloroethane	63	8.222	8.219	0.003	98	16980	0.0798	0.0821	
38 Vinyl acetate	43	8.318	8.317	0.001	100	16639	0.0798	0.0775	
39 2-Butanone (MEK)	72	8.792	8.788	0.004	96	4286	0.0798	0.1061	
40 Hexane	56	8.808	8.811	-0.003	74	9584	0.0798	0.0847	
139 Isopropyl ether	45	8.969	8.966	0.003	97	27473	0.0798	0.0793	
41 cis-1,2-Dichloroethene	96	9.244	9.246	-0.002	96	8319	0.0798	0.0786	
42 Ethyl acetate	43	9.416	9.417	-0.001	97	14933	0.0798	0.0757	
43 Chloroform	83	9.599	9.599	0.000	28	18254	0.0798	0.0852	
142 Tert-butyl ethyl ether	59	9.669	9.667	0.002	96	18391	0.0798	0.0708	
44 Tetrahydrofuran	42	10.040	10.018	0.022	94	8420	0.0798	0.0778	
45 1,1,1-Trichloroethane	97	10.642	10.643	-0.001	95	19538	0.0798	0.0870	
46 1,2-Dichloroethane	62	10.744	10.750	-0.006	95	11019	0.0798	0.0819	
47 n-Butanol	31	11.153	11.144	0.009	83	3638	0.0798	0.0745	
49 Cyclohexane	69	11.223	11.222	0.001	74	5033	0.0798	0.0817	
48 Benzene	78	11.223	11.226	-0.003	96	26858	0.0798	0.0901	
50 Carbon tetrachloride	117	11.239	11.247	-0.008	97	18438	0.0798	0.0838	
51 2,3-Dimethylpentane	71	11.315	11.320	-0.005	92	6780	0.0798	0.0893	
52 Thiophene	84	11.492	11.493	-0.001	97	14281	0.0798	0.0846	
140 Tert-amyl methyl ether	73	11.670	11.660	0.010	94	17350	0.0798	0.0776	
53 Isooctane	57	11.939	11.939	0.000	98	49918	0.0798	0.0842	
54 n-Heptane	71	12.288	12.295	-0.007	94	9169	0.0798	0.0839	
55 1,2-Dichloropropane	63	12.401	12.405	-0.004	90	7903	0.0798	0.0742	
56 Trichloroethene	130	12.434	12.437	-0.003	95	10613	0.0798	0.0817	
57 Dibromomethane	93	12.525	12.528	-0.003	96	10579	0.0798	0.0847	
59 Dichlorobromomethane	83	12.654	12.661	-0.007	97	17484	0.0798	0.0818	
58 1,4-Dioxane	88	12.681	12.670	0.011	83	3304	0.0798	0.0787	
60 Methyl methacrylate	41	12.724	12.724	0.000	92	10092	0.0798	0.0846	
61 Methylcyclohexane	83	13.181	13.185	-0.004	91	20438	0.0798	0.0844	
62 4-Methyl-2-pentanone (MIBK)	43	13.563	13.560	0.003	98	52619	0.0798	0.2145	
63 cis-1,3-Dichloropropene	75	13.628	13.630	-0.002	96	10101	0.0798	0.0733	
64 trans-1,3-Dichloropropene	75	14.306	14.306	0.000	98	8505	0.0798	0.0722	
65 Toluene	91	14.435	14.436	-0.001	92	21582	0.0798	0.0829	
66 1,1,2-Trichloroethane	83	14.505	14.507	-0.002	95	6796	0.0798	0.0778	
67 2-Methylthiophene	97	14.585	14.588	-0.003	97	17692	0.0798	0.0782	
68 3-Methylthiophene	97	14.779	14.786	-0.007	98	17391	0.0798	0.0786	
69 2-Hexanone	58	14.871	14.866	0.005	90	6594	0.0798	0.0635	
70 n-Octane	85	15.080	15.081	-0.001	97	7934	0.0798	0.0819	
71 Chlorodibromomethane	129	15.209	15.209	0.000	97	13087	0.0798	0.0745	
72 Ethylene Dibromide	107	15.500	15.500	0.000	99	11011	0.0798	0.0756	
73 Tetrachloroethene	129	15.559	15.561	-0.002	93	9639	0.0798	0.0851	
74 2,3-Dimethylheptane	43	16.409	16.411	-0.002	91	31829	0.0798	0.0947	
75 Chlorobenzene	112	16.431	16.429	0.002	95	16601	0.0798	0.0800	
76 Ethylbenzene	91	16.700	16.703	-0.003	98	23663	0.0798	0.0778	
77 2-Ethylthiophene	97	16.807	16.807	0.000	96	18121	0.0798	0.0772	
78 m-Xylene & p-Xylene	91	16.861	16.861	0.000	99	36589	0.1596	0.1493	
79 n-Nonane	57	17.243	17.245	-0.002	94	15272	0.0798	0.0746	
80 Styrene	104	17.324	17.326	-0.002	96	12280	0.0798	0.0711	
81 Bromoform	173	17.329	17.328	0.001	85	10205	0.0798	0.0670	
82 o-Xylene	91	17.388	17.386	0.002	99	20939	0.0798	0.0783	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
83 1,1,2,2-Tetrachloroethane	83	17.706	17.704	0.002	96	14649	0.0798	0.0699	
84 1,2,3-Trichloropropane	110	17.862	17.860	0.002	94	3207	0.0798	0.0664	
85 Isopropylbenzene	105	17.953	17.953	0.000	89	27559	0.0798	0.0789	
86 N-Propylbenzene	120	18.464	18.463	0.001	98	6212	0.0798	0.0665	
87 2-Chlorotoluene	126	18.518	18.517	0.001	97	7022	0.0798	0.0751	
88 4-Ethyltoluene	105	18.604	18.605	-0.001	98	22877	0.0798	0.0678	
89 1,3,5-Trimethylbenzene	120	18.674	18.673	0.001	92	11228	0.0798	0.0700	
90 Alpha Methyl Styrene	118	18.894	18.896	-0.002	84	7857	0.0798	0.0612	
91 n-Decane	57	18.921	18.925	-0.004	88	16071	0.0798	0.0689	
92 tert-Butylbenzene	119	19.083	19.083	0.000	90	21709	0.0798	0.0689	
93 1,2,4-Trimethylbenzene	105	19.093	19.097	-0.004	96	19434	0.0798	0.0674	
94 sec-Butylbenzene	105	19.341	19.341	0.000	98	29285	0.0798	0.0693	
95 1,3-Dichlorobenzene	146	19.373	19.370	0.003	97	12621	0.0798	0.0762	
96 Benzyl chloride	91	19.438	19.439	-0.001	97	13385	0.0798	0.0692	
97 1,4-Dichlorobenzene	146	19.454	19.453	0.001	91	11424	0.0798	0.0745	
98 4-Isopropyltoluene	119	19.497	19.496	0.001	96	22528	0.0798	0.0671	
99 1,2,3-Trimethylbenzene	105	19.551	19.554	-0.003	98	15569	0.0798	0.0674	
100 Butylcyclohexane	83	19.594	19.597	-0.003	89	18591	0.0798	0.0748	
101 2,3-Dihydroindene	117	19.804	19.799	0.005	93	18833	0.0798	0.0730	
102 1,2-Dichlorobenzene	146	19.804	19.805	-0.001	80	11993	0.0798	0.0732	
103 n-Butylbenzene	91	19.916	19.916	0.000	98	20887	0.0798	0.0685	
104 Indene	116	19.927	19.927	0.000	88	11866	0.0798	0.0690	
105 Undecane	57	20.196	20.195	0.001	95	16970	0.0798	0.0695	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.277	20.278	-0.001	98	17073	0.0798	0.0691	
141 1,2-Dibromo-3-Chloropropan	157	20.390	20.393	-0.003	90	4351	0.0798	0.0639	
108 1,2,4,5-Tetramethylbenzene	119	20.670	20.668	0.002	95	22010	0.0798	0.0722	
107 1,2,3,5-Tetramethylbenzene	119	20.723	20.725	-0.002	94	13642	0.0798	0.0715	
109 1,2,3,4-Tetramethylbenzene	119	21.148	21.147	0.001	97	17666	0.0798	0.0717	
110 Dodecane	57	21.283	21.282	0.001	94	15670	0.0798	0.0722	
111 1,2,4-Trichlorobenzene	180	21.520	21.525	-0.005	91	4360	0.0798	0.0660	
112 Naphthalene	128	21.654	21.655	-0.001	98	9769	0.0798	0.0662	
113 Benzo(b)thiophene	134	21.740	21.741	-0.001	98	5598	0.0798	0.0767	
114 Hexachlorobutadiene	225	21.810	21.810	0.000	96	9633	0.0798	0.0761	
115 1,2,3-Trichlorobenzene	180	21.875	21.872	0.003	92	4033	0.0798	0.0692	
116 2-Methylnaphthalene	142	22.402	22.402	0.000	98	9874	0.2494	0.6415	
117 1-Methylnaphthalene	142	22.526	22.528	-0.002	98	9802	0.2494	0.5999	
A 118 C6 Range	1	8.808	(8.754-8.862)		0	124359	0.0798	0.0957	
A 122 Toluene Range	1	14.435	(14.405-14.465)		0	51296	0.0798	0.0802	
A 123 C8 Range	1	15.104	(15.056-15.152)		0	94283	0.0798	0.0899	
S 124 Xylenes, Total	100				0		0.2394	0.2276	
S 144 1,2-Dichloroethene, Total	1				0			0.1533	

Reagents:

MAic00.2_00010

Amount Added: 199.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL2.D

Injection Date: 02-Feb-2015 13:43:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: IC L2

Worklist Smp#: 3

Client ID:

Purge Vol: 500.000 mL

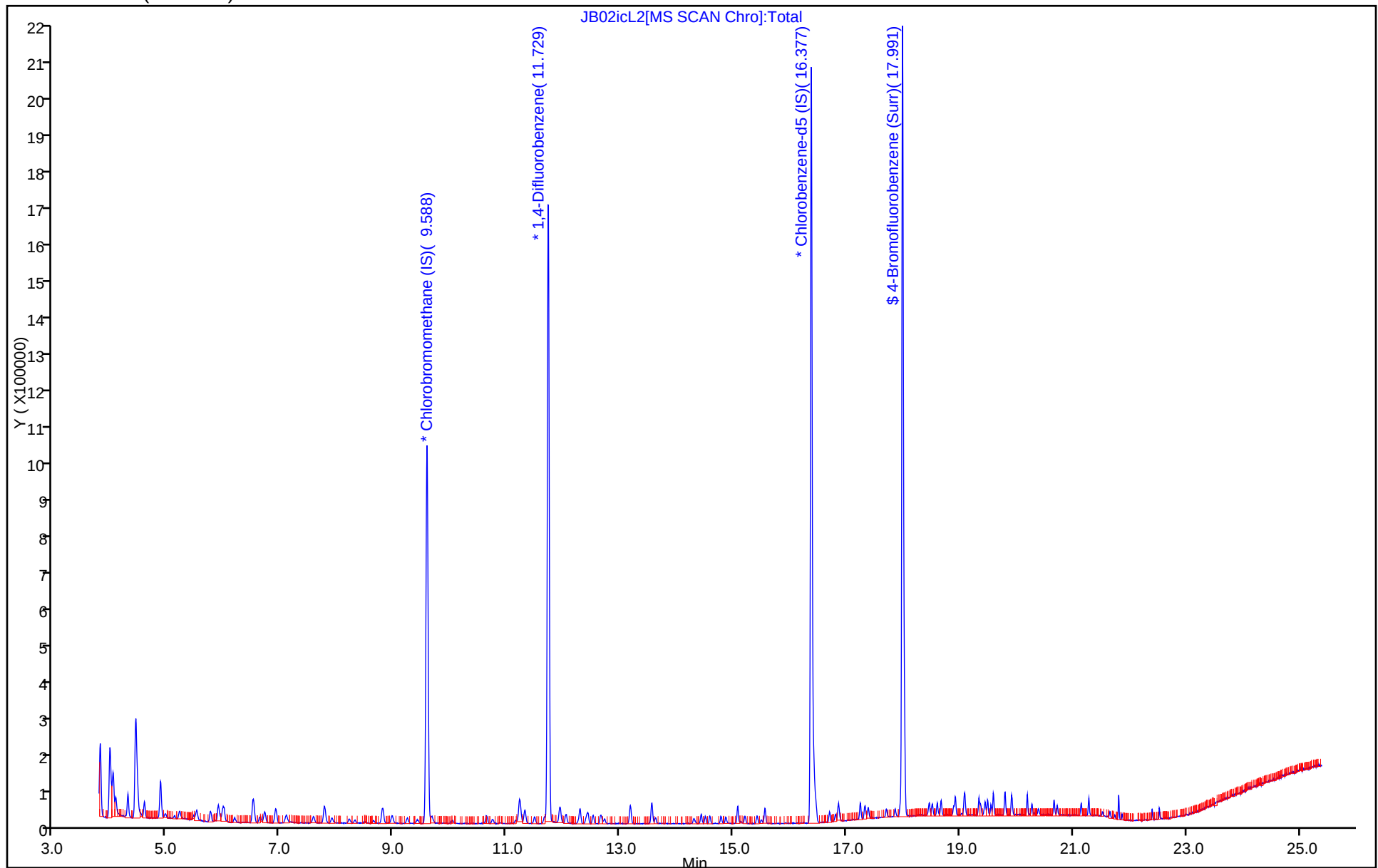
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL2.D

Injection Date: 02-Feb-2015 13:43:30

Instrument ID: MJ

Lims ID: IC L2

Client ID:

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 3

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

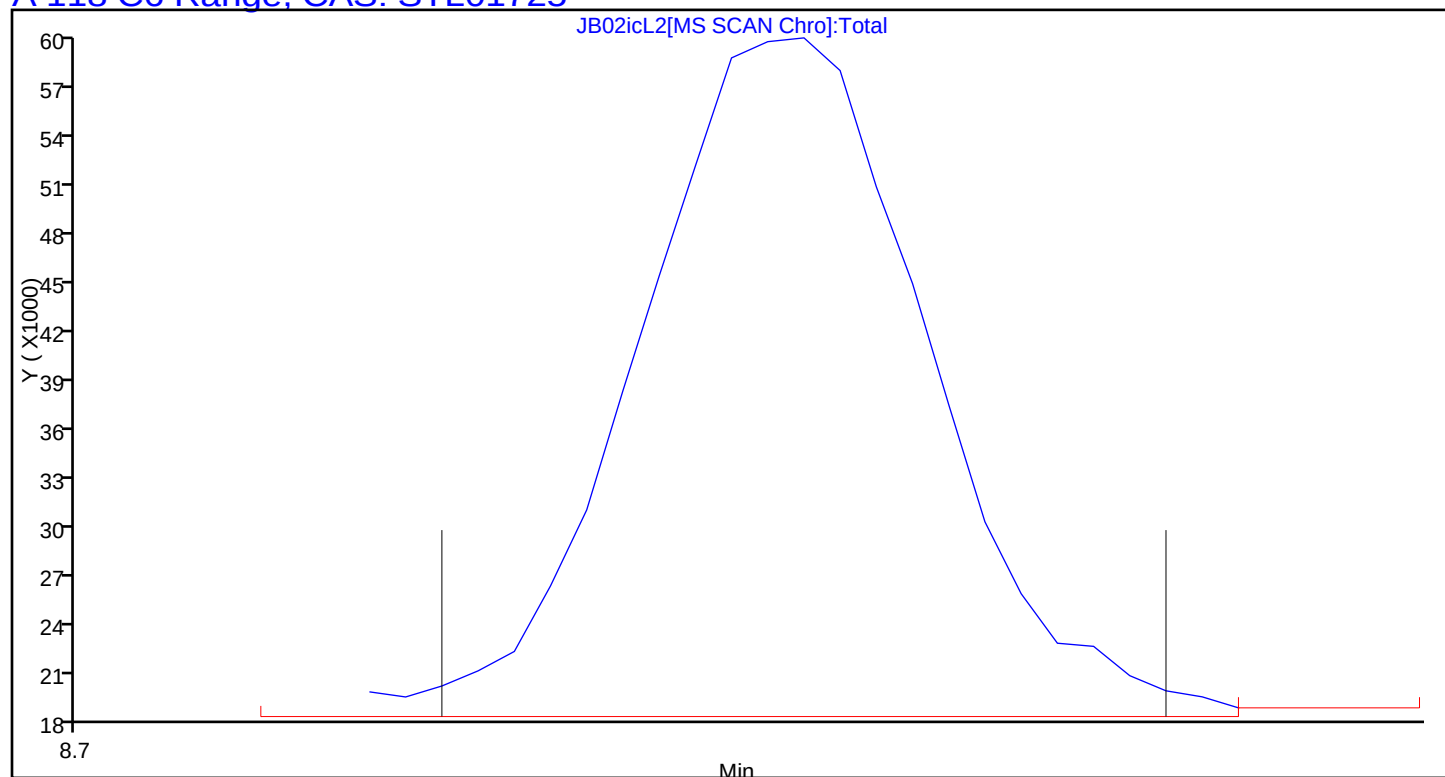
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL2.D

Injection Date: 02-Feb-2015 13:43:30

Instrument ID: MJ

Lims ID: IC L2

Client ID:

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 3

Purge Vol: 500.000 mL

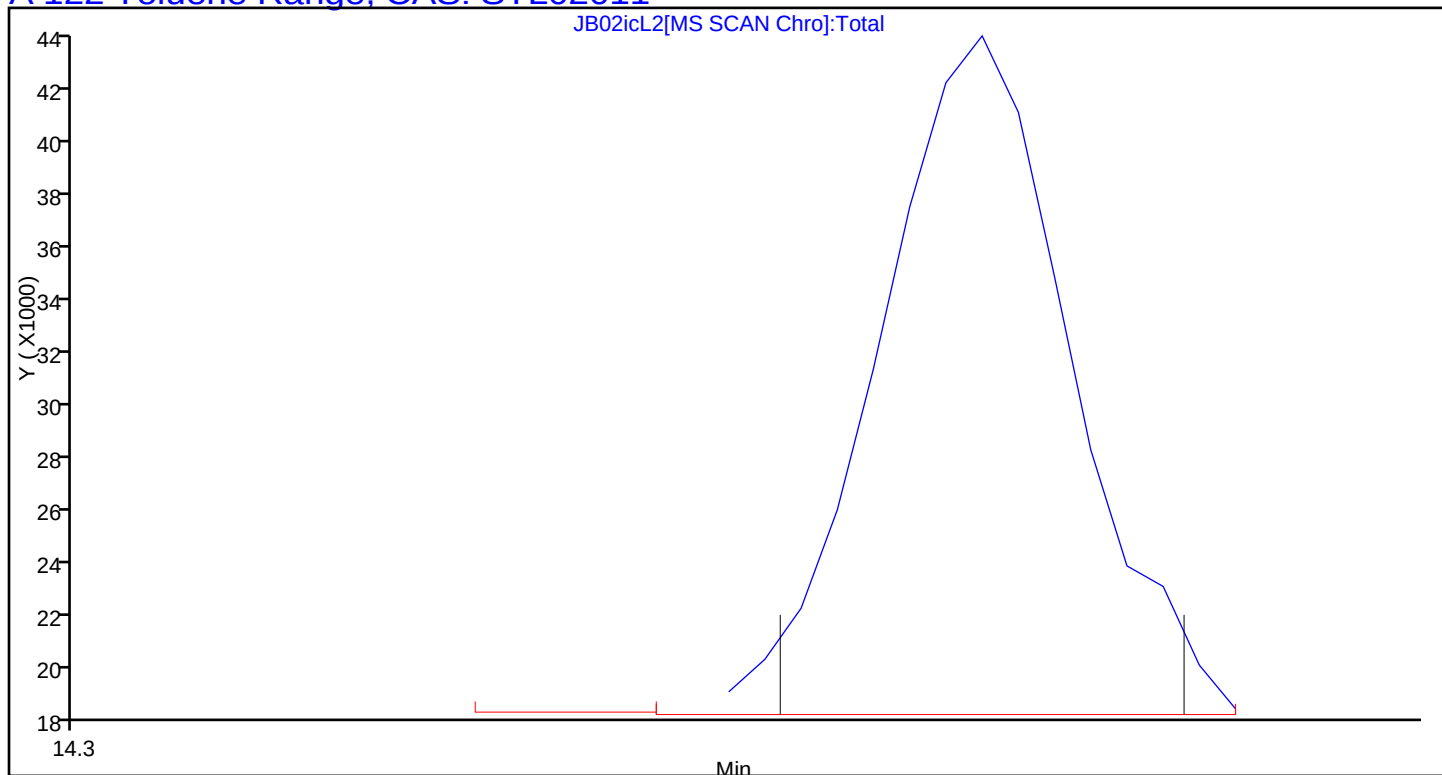
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL2.D

Injection Date: 02-Feb-2015 13:43:30

Instrument ID: MJ

Lims ID: IC L2

Client ID:

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 3

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

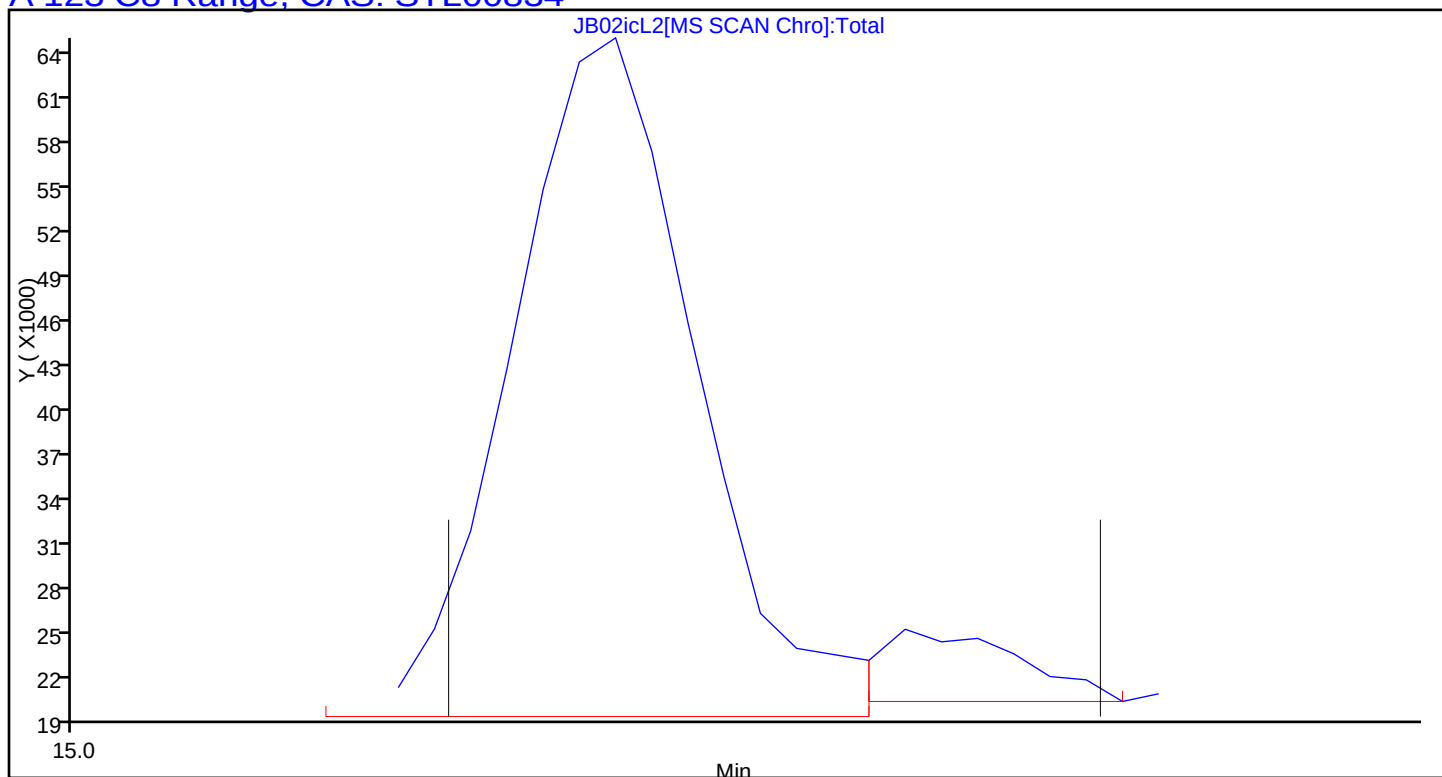
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 123 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL3.D
 Lims ID: IC L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 02-Feb-2015 14:37:30 ALS Bottle#: 10 Worklist Smp#: 4
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 022290,,1,3,,ICAL 0.16
 Misc. Info.: J020215I,TO15,,140-0001328-004
 Operator ID: 7126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub3
 Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Feb-2015 08:51:10 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: barlozhetskayaa

Date: 03-Feb-2015 09:57:43

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	9.590	9.593	-0.003	97	317151	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.736	11.736	0.000	96	1449596	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.379	16.380	-0.001	89	1258655	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.992	17.991	0.001	94	768365	4.00	3.73	
6 Chlorodifluoromethane	67	4.027	4.021	0.006	97	8860	0.2000	0.2311	
7 Propene	41	4.038	4.036	0.002	95	42023	0.2000	0.2793	
8 Dichlorodifluoromethane	85	4.097	4.093	0.004	100	86277	0.2000	0.2416	
9 Chloromethane	52	4.302	4.302	0.000	62	13477	0.2000	0.2654	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.307	4.307	0.000	93	55459	0.2000	0.2371	
11 Acetaldehyde	44	4.474	4.476	-0.002	99	82928	1.00	1.89	
12 Vinyl chloride	62	4.495	4.497	-0.002	99	33856	0.2000	0.2471	
13 Butane	43	4.598	4.597	0.001	87	59552	0.2000	0.2487	
14 Butadiene	54	4.598	4.598	0.000	61	25907	0.2000	0.2381	
15 Bromomethane	94	4.969	4.968	0.001	98	28141	0.2000	0.2420	
16 Chloroethane	64	5.125	5.127	-0.002	91	14347	0.2000	0.2391	
17 Ethanol	31	5.222	5.223	-0.001	97	61484	1.00	1.39	
18 Vinyl bromide	106	5.469	5.470	-0.001	98	24723	0.2000	0.2426	
19 2-Methylbutane	43	5.523	5.520	0.003	92	40642	0.2000	0.2526	
20 Trichlorofluoromethane	101	5.770	5.766	0.004	99	76025	0.2000	0.2432	
21 Acrolein	56	5.770	5.774	-0.004	32	10043	0.2000	0.2778	
22 Acetonitrile	40	5.851	5.850	0.001	93	12064	0.2000	0.3168	
23 Acetone	58	5.899	5.899	0.000	99	49926	0.6000	1.22	
24 Isopropyl alcohol	45	5.975	5.979	-0.004	91	138024	0.6000	0.8392	
25 Pentane	72	6.002	6.005	-0.002	97	4339	0.2000	0.2268	
26 Ethyl ether	31	6.185	6.184	0.001	90	34989	0.2000	0.3137	
27 1,1-Dichloroethene	96	6.534	6.540	-0.006	96	23607	0.2000	0.2343	
28 2-Methyl-2-propanol	59	6.626	6.627	-0.001	96	51169	0.2000	0.2732	
29 Acrylonitrile	53	6.647	6.650	-0.003	93	17104	0.2000	0.3032	
30 1,1,2-Trichloro-1,2,2-trif	101	6.722	6.722	0.000	94	52435	0.2000	0.2492	
31 Methylene Chloride	84	6.916	6.915	0.001	97	28915	0.2000	0.2844	

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	6.932	6.930	0.002	93	28172	0.2000	0.2552	
33 Carbon disulfide	76	7.099	7.098	0.001	99	85555	0.2000	0.2408	
34 trans-1,2-Dichloroethene	96	7.777	7.774	0.003	95	28651	0.2000	0.2494	
35 2-Methylpentane	43	7.782	7.783	-0.001	97	75663	0.2000	0.2514	
36 Methyl tert-butyl ether	73	7.901	7.898	0.003	97	60333	0.2000	0.3119	
37 1,1-Dichloroethane	63	8.218	8.219	-0.001	100	50600	0.2000	0.2618	
38 Vinyl acetate	43	8.315	8.317	-0.002	100	58700	0.2000	0.2927	
39 2-Butanone (MEK)	72	8.788	8.788	0.000	96	11724	0.2000	0.3105	
40 Hexane	56	8.810	8.811	-0.001	87	27640	0.2000	0.2614	
139 Isopropyl ether	45	8.966	8.966	0.000	98	97358	0.2000	0.3009	
41 cis-1,2-Dichloroethene	96	9.245	9.246	-0.001	96	26537	0.2000	0.2683	
42 Ethyl acetate	43	9.418	9.417	0.001	98	54737	0.2000	0.2968	
43 Chloroform	83	9.595	9.599	-0.004	32	56129	0.2000	0.2804	
142 Tert-butyl ethyl ether	59	9.665	9.667	-0.002	97	73299	0.2000	0.3021	
44 Tetrahydrofuran	42	10.020	10.018	0.002	94	29342	0.2000	0.2901	
45 1,1,1-Trichloroethane	97	10.639	10.643	-0.004	97	57170	0.2000	0.2724	
46 1,2-Dichloroethane	62	10.746	10.750	-0.004	97	33204	0.2000	0.2750	
47 n-Butanol	31	11.144	11.144	0.000	87	11138	0.2000	0.2539	
49 Cyclohexane	69	11.220	11.222	-0.002	77	14857	0.2000	0.2685	
48 Benzene	78	11.225	11.226	-0.001	97	72062	0.2000	0.2691	
50 Carbon tetrachloride	117	11.241	11.247	-0.006	98	46211	0.2000	0.2339	
51 2,3-Dimethylpentane	71	11.322	11.320	0.002	92	18743	0.2000	0.2748	
52 Thiophene	84	11.494	11.493	0.001	97	40734	0.2000	0.2686	
140 Tert-amyl methyl ether	73	11.661	11.660	0.001	95	60937	0.2000	0.3090	
53 Isooctane	57	11.941	11.939	0.002	98	152003	0.2000	0.2855	
54 n-Heptane	71	12.296	12.295	0.001	95	27922	0.2000	0.2844	
55 1,2-Dichloropropane	63	12.409	12.405	0.004	89	27087	0.2000	0.2833	
56 Trichloroethene	130	12.435	12.437	-0.002	95	33142	0.2000	0.2841	
57 Dibromomethane	93	12.527	12.528	-0.001	97	28940	0.2000	0.2580	
59 Dichlorobromomethane	83	12.661	12.661	0.000	98	50671	0.2000	0.2641	
58 1,4-Dioxane	88	12.672	12.670	0.002	89	11078	0.2000	0.2937	
60 Methyl methacrylate	41	12.721	12.724	-0.003	95	33768	0.2000	0.3153	
61 Methylcyclohexane	83	13.183	13.185	-0.002	91	62498	0.2000	0.2873	
62 4-Methyl-2-pentanone (MIBK)	43	13.560	13.560	0.000	98	62867	0.2000	0.2854	
63 cis-1,3-Dichloropropene	75	13.630	13.630	0.000	98	33291	0.2000	0.2689	
64 trans-1,3-Dichloropropene	75	14.308	14.306	0.002	98	30041	0.2000	0.2892	
65 Toluene	91	14.431	14.436	-0.005	93	74297	0.2000	0.3235	
66 1,1,2-Trichloroethane	83	14.501	14.507	-0.006	97	23388	0.2000	0.3033	
67 2-Methylthiophene	97	14.587	14.588	-0.001	98	57843	0.2000	0.2896	
68 3-Methylthiophene	97	14.786	14.786	0.000	100	58976	0.2000	0.3019	
69 2-Hexanone	58	14.867	14.866	0.001	91	25954	0.2000	0.2831	
70 n-Octane	85	15.077	15.081	-0.004	96	23293	0.2000	0.2726	
71 Chlorodibromomethane	129	15.206	15.209	-0.003	97	43786	0.2000	0.2826	
72 Ethylene Dibromide	107	15.496	15.500	-0.004	97	38462	0.2000	0.2993	
73 Tetrachloroethene	129	15.561	15.561	0.000	95	29878	0.2000	0.2989	
74 2,3-Dimethylheptane	43	16.411	16.411	0.000	95	88230	0.2000	0.2976	
75 Chlorobenzene	112	16.427	16.429	-0.002	91	52937	0.2000	0.2891	
76 Ethylbenzene	91	16.701	16.703	-0.002	99	88367	0.2000	0.3291	
77 2-Ethylthiophene	97	16.804	16.807	-0.003	97	65978	0.2000	0.3186	
78 m-Xylene & p-Xylene	91	16.857	16.861	-0.004	99	140025	0.4000	0.6473	
79 n-Nonane	57	17.245	17.245	0.000	95	50203	0.2000	0.2779	
80 Styrene	104	17.325	17.326	-0.001	99	45149	0.2000	0.2962	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
81 Bromoform	173	17.325	17.328	-0.003	90	37533	0.2000	0.2792	
82 o-Xylene	91	17.385	17.386	-0.001	99	75681	0.2000	0.3208	
83 1,1,2,2-Tetrachloroethane	83	17.702	17.704	-0.002	99	55254	0.2000	0.2989	
84 1,2,3-Trichloropropane	110	17.858	17.860	-0.002	98	12919	0.2000	0.3032	
85 Isopropylbenzene	105	17.949	17.953	-0.004	94	99997	0.2000	0.3246	
86 N-Propylbenzene	120	18.460	18.463	-0.003	99	25935	0.2000	0.3147	
87 2-Chlorotoluene	126	18.514	18.517	-0.003	98	24262	0.2000	0.2943	
88 4-Ethyltoluene	105	18.606	18.605	0.001	98	88362	0.2000	0.2970	
89 1,3,5-Trimethylbenzene	120	18.670	18.673	-0.003	92	44028	0.2000	0.3110	
90 Alpha Methyl Styrene	118	18.896	18.896	0.000	86	32639	0.2000	0.2881	
91 n-Decane	57	18.923	18.925	-0.002	87	61578	0.2000	0.2993	
92 tert-Butylbenzene	119	19.085	19.083	0.001	93	85228	0.2000	0.3067	
93 1,2,4-Trimethylbenzene	105	19.095	19.097	-0.002	96	79047	0.2000	0.3109	
94 sec-Butylbenzene	105	19.343	19.341	0.002	99	116691	0.2000	0.3129	
95 1,3-Dichlorobenzene	146	19.370	19.370	0.000	98	41670	0.2000	0.2850	
96 Benzyl chloride	91	19.440	19.439	0.001	98	49141	0.2000	0.2880	
97 1,4-Dichlorobenzene	146	19.450	19.453	-0.003	93	38079	0.2000	0.2815	
98 4-Isopropyltoluene	119	19.493	19.496	-0.003	97	92324	0.2000	0.3114	
99 1,2,3-Trimethylbenzene	105	19.553	19.554	-0.002	99	62265	0.2000	0.3053	
100 Butylcyclohexane	83	19.596	19.597	-0.001	88	62915	0.2000	0.2868	
101 2,3-Dihydroindene	117	19.800	19.799	0.001	93	69100	0.2000	0.3035	
102 1,2-Dichlorobenzene	146	19.805	19.805	0.000	94	41359	0.2000	0.2862	
103 n-Butylbenzene	91	19.918	19.916	0.002	98	82201	0.2000	0.3057	
104 Indene	116	19.929	19.927	0.002	89	40978	0.2000	0.2701	
105 Undecane	57	20.193	20.195	-0.002	94	64951	0.2000	0.3015	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.279	20.278	0.001	98	63911	0.2000	0.2932	
141 1,2-Dibromo-3-Chloropropan	157	20.392	20.393	-0.001	92	15699	0.2000	0.2612	
108 1,2,4,5-Tetramethylbenzene	119	20.666	20.668	-0.002	97	80151	0.2000	0.2979	
107 1,2,3,5-Tetramethylbenzene	119	20.725	20.725	0.000	94	50389	0.2000	0.2993	
109 1,2,3,4-Tetramethylbenzene	119	21.145	21.147	-0.002	97	64538	0.2000	0.2967	
110 Dodecane	57	21.279	21.282	-0.003	93	53896	0.2000	0.2812	
111 1,2,4-Trichlorobenzene	180	21.527	21.525	0.002	94	12763	0.2000	0.2191	
112 Naphthalene	128	21.656	21.655	0.001	98	30221	0.2000	0.2322	
113 Benzo(b)thiophene	134	21.742	21.741	0.001	99	13207	0.2000	0.2052	
114 Hexachlorobutadiene	225	21.812	21.810	0.002	96	32549	0.2000	0.2913	
115 1,2,3-Trichlorobenzene	180	21.871	21.872	-0.001	95	11814	0.2000	0.2298	
116 2-Methylnaphthalene	142	22.404	22.402	0.002	98	9608	0.6251	0.7074	
117 1-Methylnaphthalene	142	22.527	22.528	-0.001	98	10046	0.6251	0.6968	
A 118 C6 Range	1	8.804	(8.756-8.864)		0	327237	0.2000	0.2694	
A 122 Toluene Range	1	14.431	(14.401-14.461)		0	184771	0.2000	0.3275	
A 123 C8 Range	1	15.104	(15.056-15.152)		0	266259	0.2000	0.2876	
S 124 Xylenes, Total	100				0		0.6000	0.9681	
S 144 1,2-Dichloroethene, Total	1				0			0.5176	

Reagents:

MAic5_00013

Amount Added: 20.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 04-Feb-2015 08:51:10

Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL3.D

Injection Date: 02-Feb-2015 14:37:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: IC L3

Worklist Smp#: 4

Client ID:

Purge Vol: 500.000 mL

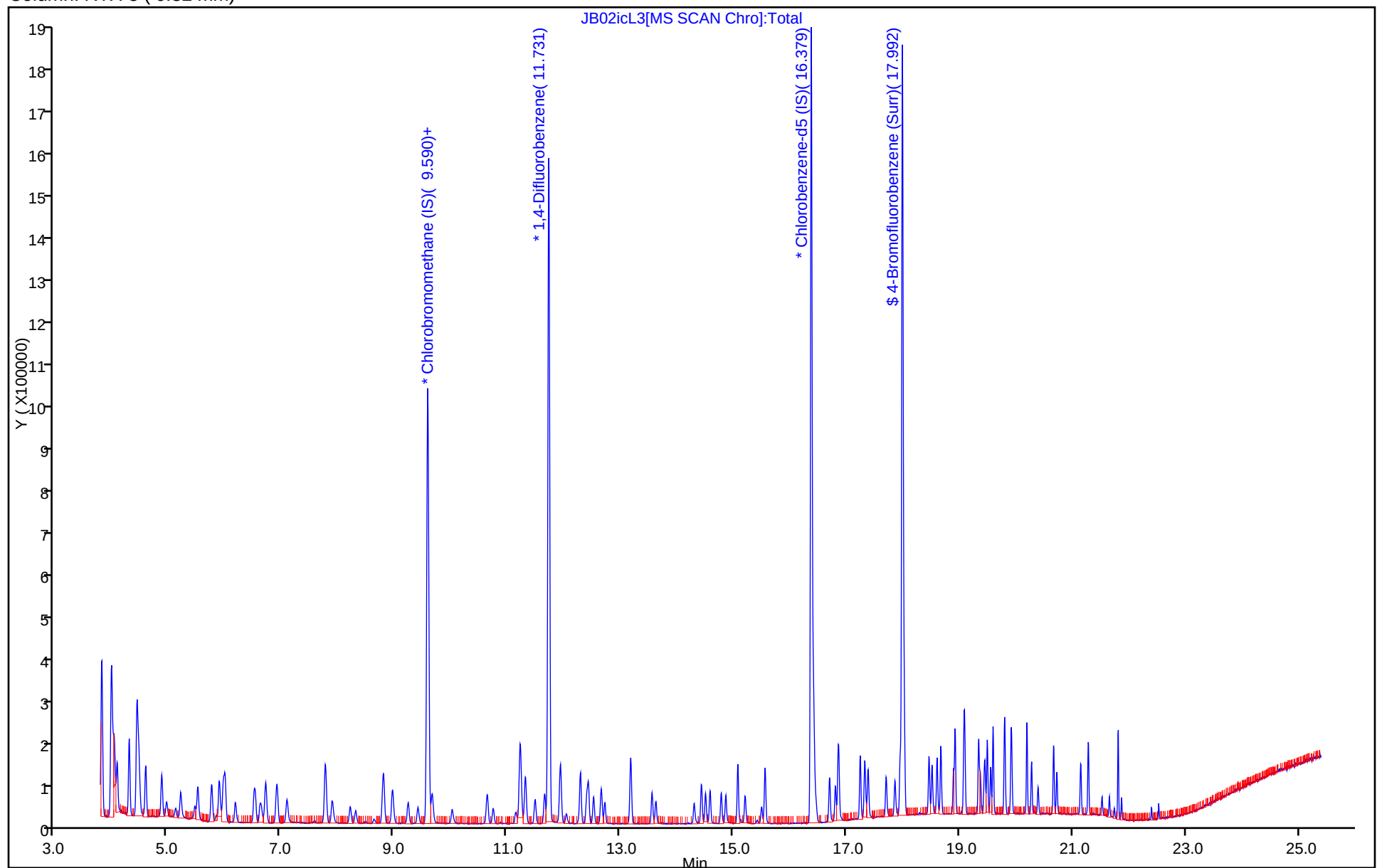
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL3.D

Injection Date: 02-Feb-2015 14:37:30

Instrument ID: MJ

Lims ID: IC L3

Client ID:

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 4

Purge Vol: 500.000 mL

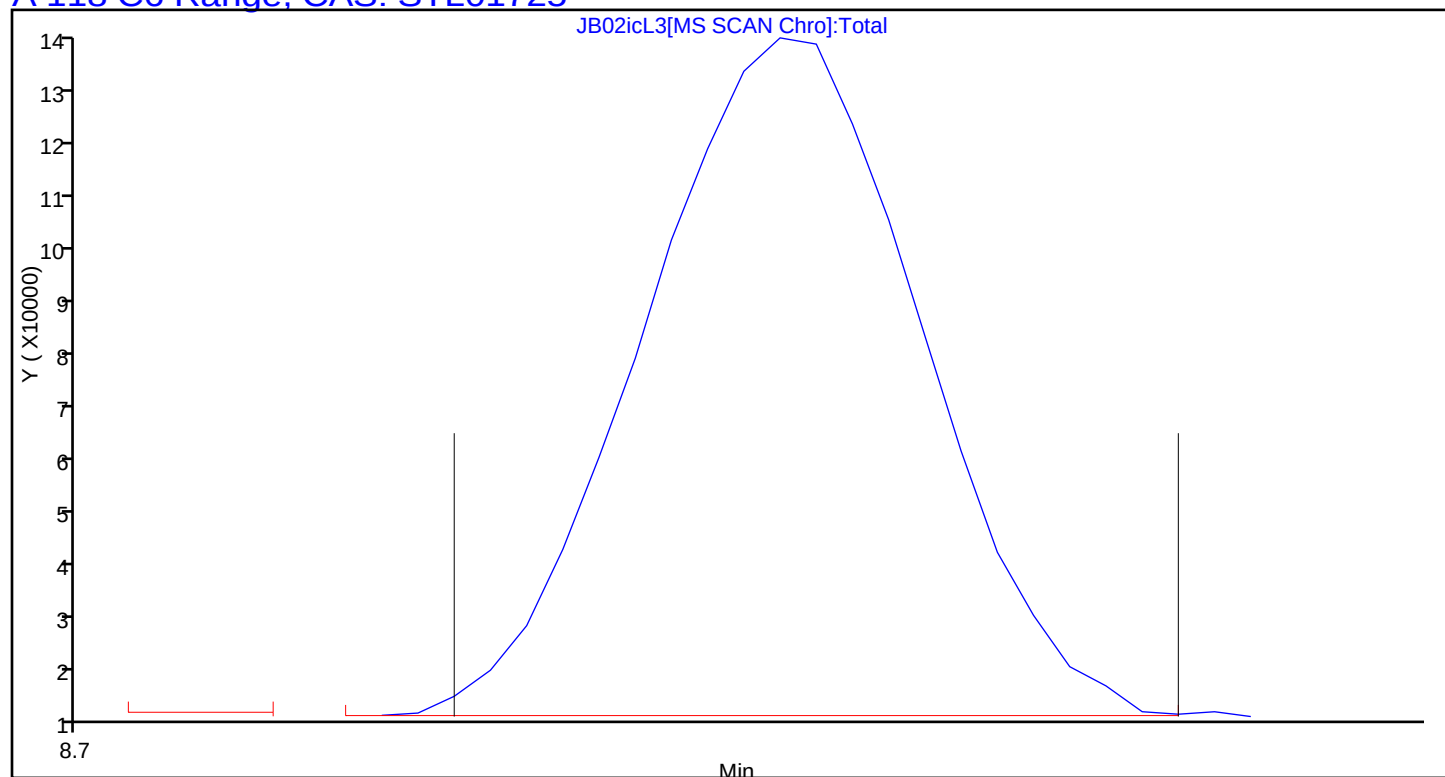
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL3.D

Injection Date: 02-Feb-2015 14:37:30

Instrument ID: MJ

Lims ID: IC L3

Client ID:

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 4

Purge Vol: 500.000 mL

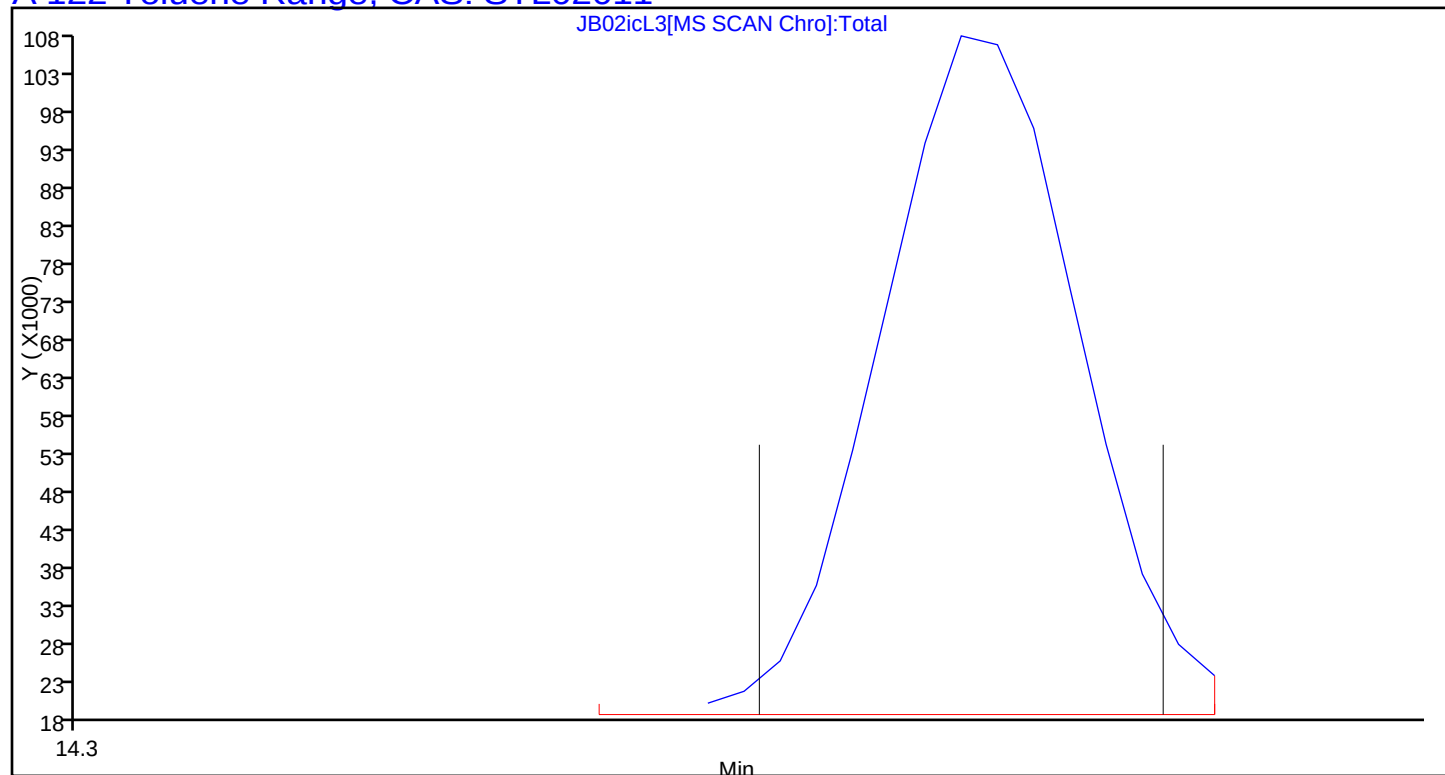
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 122 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL3.D

Injection Date: 02-Feb-2015 14:37:30

Instrument ID: MJ

Lims ID: IC L3

Client ID:

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 4

Purge Vol: 500.000 mL

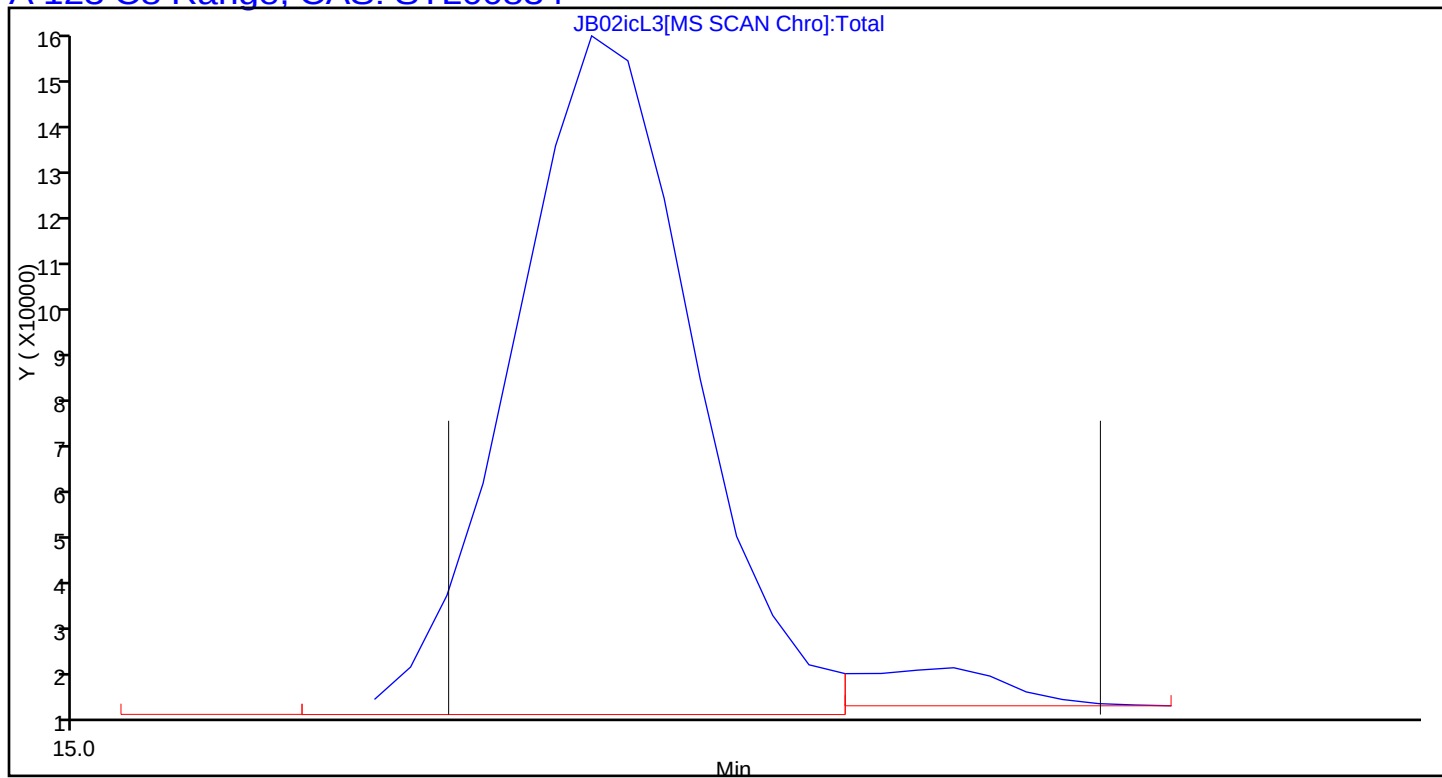
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 123 C8 Range, CAS: STL00834

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL4.D
 Lims ID: IC L4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 02-Feb-2015 15:32:30 ALS Bottle#: 11 Worklist Smp#: 5
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 022289,,1,4,,ICAL 0.4
 Misc. Info.: J020215I,TO15,,140-0001328-005
 Operator ID: 7126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub3
 Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Feb-2015 08:51:14 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: barlozhetskayaa

Date: 02-Feb-2015 16:37:09

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	9.593	9.593	0.000	97	274964	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.734	11.736	-0.002	96	1152980	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.381	16.380	0.001	89	1077285	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.990	17.991	-0.001	90	746943	4.00	4.24	
6 Chlorodifluoromethane	67	4.019	4.021	-0.002	97	14782	0.4000	0.4447	
7 Propene	41	4.036	4.036	0.000	98	65383	0.4000	0.5013	
8 Dichlorodifluoromethane	85	4.095	4.093	0.002	100	143956	0.4000	0.4651	
9 Chloromethane	52	4.305	4.302	0.003	97	20905	0.4000	0.4749	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.310	4.307	0.003	93	94740	0.4000	0.4672	
11 Acetaldehyde	44	4.477	4.476	0.001	97	86354	2.00	2.27	
12 Vinyl chloride	62	4.498	4.497	0.001	99	55811	0.4000	0.4698	
13 Butane	43	4.595	4.597	-0.002	87	99559	0.4000	0.4795	
14 Butadiene	54	4.600	4.598	0.002	61	44283	0.4000	0.4695	
15 Bromomethane	94	4.966	4.968	-0.002	99	46423	0.4000	0.4605	
16 Chloroethane	64	5.128	5.127	0.001	94	24468	0.4000	0.4703	
17 Ethanol	31	5.219	5.223	-0.004	95	83182	2.00	2.17	
18 Vinyl bromide	106	5.472	5.470	0.002	99	40783	0.4000	0.4616	
19 2-Methylbutane	43	5.515	5.520	-0.005	92	62797	0.4000	0.4502	
20 Trichlorofluoromethane	101	5.762	5.766	-0.004	99	125854	0.4000	0.4643	
21 Acrolein	56	5.773	5.774	-0.001	30	11176	0.4000	0.3566	
22 Acetonitrile	40	5.848	5.850	-0.002	94	15421	0.4000	0.4670	
23 Acetone	58	5.902	5.899	0.003	99	59706	1.20	1.69	
24 Isopropyl alcohol	45	5.972	5.979	-0.007	92	190752	1.20	1.34	
25 Pentane	72	6.004	6.005	0.000	97	7656	0.4000	0.4616	
26 Ethyl ether	31	6.187	6.184	0.003	91	37146	0.4000	0.3841	
27 1,1-Dichloroethene	96	6.537	6.540	-0.003	95	39787	0.4000	0.4554	
28 2-Methyl-2-propanol	59	6.618	6.627	-0.009	96	72191	0.4000	0.4446	
29 Acrylonitrile	53	6.650	6.650	0.000	97	20358	0.4000	0.4162	
30 1,1,2-Trichloro-1,2,2-trif	101	6.720	6.722	-0.002	95	82806	0.4000	0.4540	
31 Methylene Chloride	84	6.914	6.915	-0.001	97	43037	0.4000	0.4882	

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	6.930	6.930	0.000	94	42284	0.4000	0.4418	
33 Carbon disulfide	76	7.096	7.098	-0.002	99	143653	0.4000	0.4664	
34 trans-1,2-Dichloroethene	96	7.774	7.774	0.000	95	46737	0.4000	0.4692	
35 2-Methylpentane	43	7.785	7.783	0.002	96	117748	0.4000	0.4512	
36 Methyl tert-butyl ether	73	7.898	7.898	0.000	97	71035	0.4000	0.4236	
37 1,1-Dichloroethane	63	8.215	8.219	-0.004	99	70804	0.4000	0.4226	
38 Vinyl acetate	43	8.318	8.317	0.001	100	62583	0.4000	0.3600	
39 2-Butanone (MEK)	72	8.786	8.788	-0.002	95	13810	0.4000	0.4218	
40 Hexane	56	8.807	8.811	-0.004	89	39474	0.4000	0.4306	
139 Isopropyl ether	45	8.969	8.966	0.003	97	116839	0.4000	0.4164	
41 cis-1,2-Dichloroethene	96	9.237	9.246	-0.009	97	36673	0.4000	0.4276	
42 Ethyl acetate	43	9.415	9.417	-0.002	98	62629	0.4000	0.3917	
43 Chloroform	83	9.593	9.599	-0.006	34	72858	0.4000	0.4197	
142 Tert-butyl ethyl ether	59	9.668	9.667	0.001	97	91084	0.4000	0.4330	
44 Tetrahydrofuran	42	10.018	10.018	0.000	95	34658	0.4000	0.3952	
45 1,1,1-Trichloroethane	97	10.642	10.643	-0.001	97	77564	0.4000	0.4262	
46 1,2-Dichloroethane	62	10.749	10.750	-0.001	97	40539	0.4000	0.4221	
47 n-Butanol	31	11.142	11.144	-0.002	87	16216	0.4000	0.4648	
49 Cyclohexane	69	11.223	11.222	0.000	88	22926	0.4000	0.5208	
48 Benzene	78	11.223	11.226	-0.004	96	86310	0.4000	0.4052	
50 Carbon tetrachloride	117	11.244	11.247	-0.003	98	66767	0.4000	0.4248	
51 2,3-Dimethylpentane	71	11.319	11.320	-0.001	92	25958	0.4000	0.4785	
52 Thiophene	84	11.491	11.493	-0.002	97	49998	0.4000	0.4145	
140 Tert-amyl methyl ether	73	11.658	11.660	-0.002	95	76260	0.4000	0.4518	
53 Isooctane	57	11.938	11.939	-0.001	98	192544	0.4000	0.4547	
54 n-Heptane	71	12.293	12.295	-0.002	95	35713	0.4000	0.4573	
55 1,2-Dichloropropane	63	12.406	12.405	0.001	90	31968	0.4000	0.4204	
56 Trichloroethene	130	12.433	12.437	-0.004	95	42837	0.4000	0.4617	
57 Dibromomethane	93	12.524	12.528	-0.004	94	38789	0.4000	0.4348	
59 Dichlorobromomethane	83	12.659	12.661	-0.002	98	64200	0.4000	0.4207	
58 1,4-Dioxane	88	12.670	12.670	0.000	92	14676	0.4000	0.4892	
60 Methyl methacrylate	41	12.723	12.724	-0.001	94	35036	0.4000	0.4113	
61 Methylcyclohexane	83	13.186	13.185	0.001	91	82063	0.4000	0.4744	
62 4-Methyl-2-pentanone (MIBK)	43	13.563	13.560	0.003	98	82553	0.4000	0.4712	
63 cis-1,3-Dichloropropene	75	13.627	13.630	-0.003	97	40533	0.4000	0.4117	
64 trans-1,3-Dichloropropene	75	14.305	14.306	-0.001	99	37546	0.4000	0.4223	
65 Toluene	91	14.434	14.436	-0.002	93	85756	0.4000	0.4363	
66 1,1,2-Trichloroethane	83	14.509	14.507	0.002	98	28171	0.4000	0.4268	
67 2-Methylthiophene	97	14.585	14.588	-0.003	97	71024	0.4000	0.4155	
68 3-Methylthiophene	97	14.784	14.786	-0.002	100	67221	0.4000	0.4021	
69 2-Hexanone	58	14.864	14.866	-0.002	91	37426	0.4000	0.4770	
70 n-Octane	85	15.080	15.081	-0.001	97	31044	0.4000	0.4244	
71 Chlorodibromomethane	129	15.209	15.209	0.000	97	55052	0.4000	0.4151	
72 Ethylene Dibromide	107	15.499	15.500	-0.001	99	48660	0.4000	0.4424	
73 Tetrachloroethene	129	15.558	15.561	-0.003	95	38238	0.4000	0.4469	
74 2,3-Dimethylheptane	43	16.408	16.411	-0.003	95	111490	0.4000	0.4394	
75 Chlorobenzene	112	16.430	16.429	0.001	93	68232	0.4000	0.4354	
76 Ethylbenzene	91	16.699	16.703	-0.004	99	104105	0.4000	0.4530	
77 2-Ethylthiophene	97	16.806	16.807	-0.001	98	78773	0.4000	0.4444	
78 m-Xylene & p-Xylene	91	16.860	16.861	-0.001	99	164123	0.8000	0.8865	
79 n-Nonane	57	17.242	17.245	-0.003	95	64902	0.4000	0.4198	
80 Styrene	104	17.323	17.326	-0.003	98	57296	0.4000	0.4392	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
81 Bromoform	173	17.328	17.328	0.000	93	49248	0.4000	0.4281	
82 o-Xylene	91	17.387	17.386	0.001	99	91841	0.4000	0.4548	
83 1,1,2,2-Tetrachloroethane	83	17.705	17.704	0.001	99	72048	0.4000	0.4553	
84 1,2,3-Trichloropropane	110	17.861	17.860	0.001	97	16612	0.4000	0.4555	
85 Isopropylbenzene	105	17.952	17.953	-0.001	93	120638	0.4000	0.4575	
86 N-Propylbenzene	120	18.463	18.463	0.000	99	30429	0.4000	0.4314	
87 2-Chlorotoluene	126	18.517	18.517	0.000	98	31380	0.4000	0.4447	
88 4-Ethyltoluene	105	18.603	18.605	-0.002	98	112001	0.4000	0.4398	
89 1,3,5-Trimethylbenzene	120	18.673	18.673	0.000	92	54216	0.4000	0.4475	
90 Alpha Methyl Styrene	118	18.894	18.896	-0.002	87	41756	0.4000	0.4307	
91 n-Decane	57	18.926	18.925	0.001	88	80467	0.4000	0.4570	
92 tert-Butylbenzene	119	19.082	19.083	-0.001	91	105370	0.4000	0.4431	
93 1,2,4-Trimethylbenzene	105	19.093	19.097	-0.004	96	98024	0.4000	0.4504	
94 sec-Butylbenzene	105	19.340	19.341	-0.001	99	142130	0.4000	0.4453	
95 1,3-Dichlorobenzene	146	19.372	19.370	0.002	98	54244	0.4000	0.4335	
96 Benzyl chloride	91	19.437	19.439	-0.002	97	63695	0.4000	0.4362	
97 1,4-Dichlorobenzene	146	19.453	19.453	0.000	93	50329	0.4000	0.4347	
98 4-Isopropyltoluene	119	19.496	19.496	0.000	97	116989	0.4000	0.4610	
99 1,2,3-Trimethylbenzene	105	19.555	19.554	0.001	98	78769	0.4000	0.4513	
100 Butylcyclohexane	83	19.598	19.597	0.001	89	82036	0.4000	0.4369	
101 2,3-Dihydroindene	117	19.797	19.799	-0.002	94	90069	0.4000	0.4623	
102 1,2-Dichlorobenzene	146	19.803	19.805	-0.002	94	56467	0.4000	0.4565	
103 n-Butylbenzene	91	19.916	19.916	0.000	98	105027	0.4000	0.4564	
104 Indene	116	19.926	19.927	-0.001	88	55104	0.4000	0.4244	
105 Undecane	57	20.195	20.195	0.000	95	87943	0.4000	0.4770	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.276	20.278	-0.002	98	86542	0.4000	0.4638	
141 1,2-Dibromo-3-Chloropropan	157	20.395	20.393	0.001	92	22303	0.4000	0.4335	
108 1,2,4,5-Tetramethylbenzene	119	20.669	20.668	0.001	97	108430	0.4000	0.4709	
107 1,2,3,5-Tetramethylbenzene	119	20.723	20.725	-0.002	95	67239	0.4000	0.4666	
109 1,2,3,4-Tetramethylbenzene	119	21.148	21.147	0.001	97	88622	0.4000	0.4760	
110 Dodecane	57	21.282	21.282	0.000	93	78965	0.4000	0.4814	
111 1,2,4-Trichlorobenzene	180	21.524	21.525	-0.001	94	18639	0.4000	0.3738	
112 Naphthalene	128	21.653	21.655	-0.002	99	45619	0.4000	0.4095	
113 Benzo(b)thiophene	134	21.739	21.741	-0.002	99	20810	0.4000	0.3778	
114 Hexachlorobutadiene	225	21.809	21.810	-0.001	95	44388	0.4000	0.4641	
115 1,2,3-Trichlorobenzene	180	21.868	21.872	-0.004	95	17743	0.4000	0.4032	
116 2-Methylnaphthalene	142	22.401	22.402	-0.001	98	15379	1.25	1.32	
117 1-Methylnaphthalene	142	22.530	22.528	0.002	98	15808	1.25	1.28	
A 118 C6 Range	1	8.807	(8.748-8.866)		0	457447	0.4000	0.4343	
A 122 Toluene Range	1	14.434	(14.404-14.464)		0	207864	0.4000	0.4305	
A 123 C8 Range	1	15.104	(15.056-15.152)		0	345651	0.4000	0.4363	
S 124 Xylenes, Total	100				0		1.20	1.34	
S 144 1,2-Dichloroethene, Total	1				0			0.8968	

Reagents:

MAic5_00013

Amount Added: 40.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL4.D

Injection Date: 02-Feb-2015 15:32:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: IC L4

Worklist Smp#: 5

Client ID:

Purge Vol: 500.000 mL

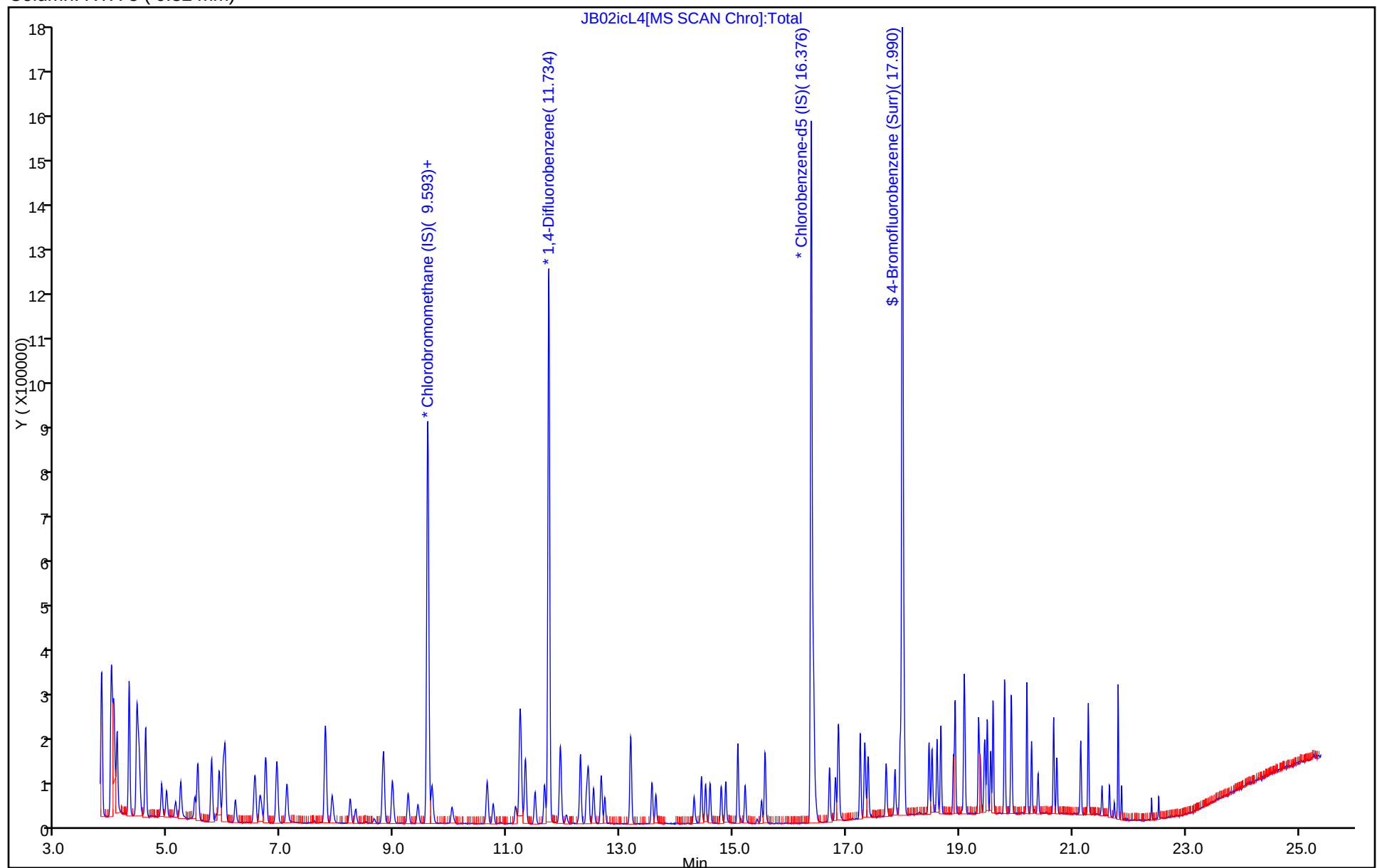
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL4.D

Injection Date: 02-Feb-2015 15:32:30

Instrument ID: MJ

Lims ID: IC L4

Client ID:

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 5

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

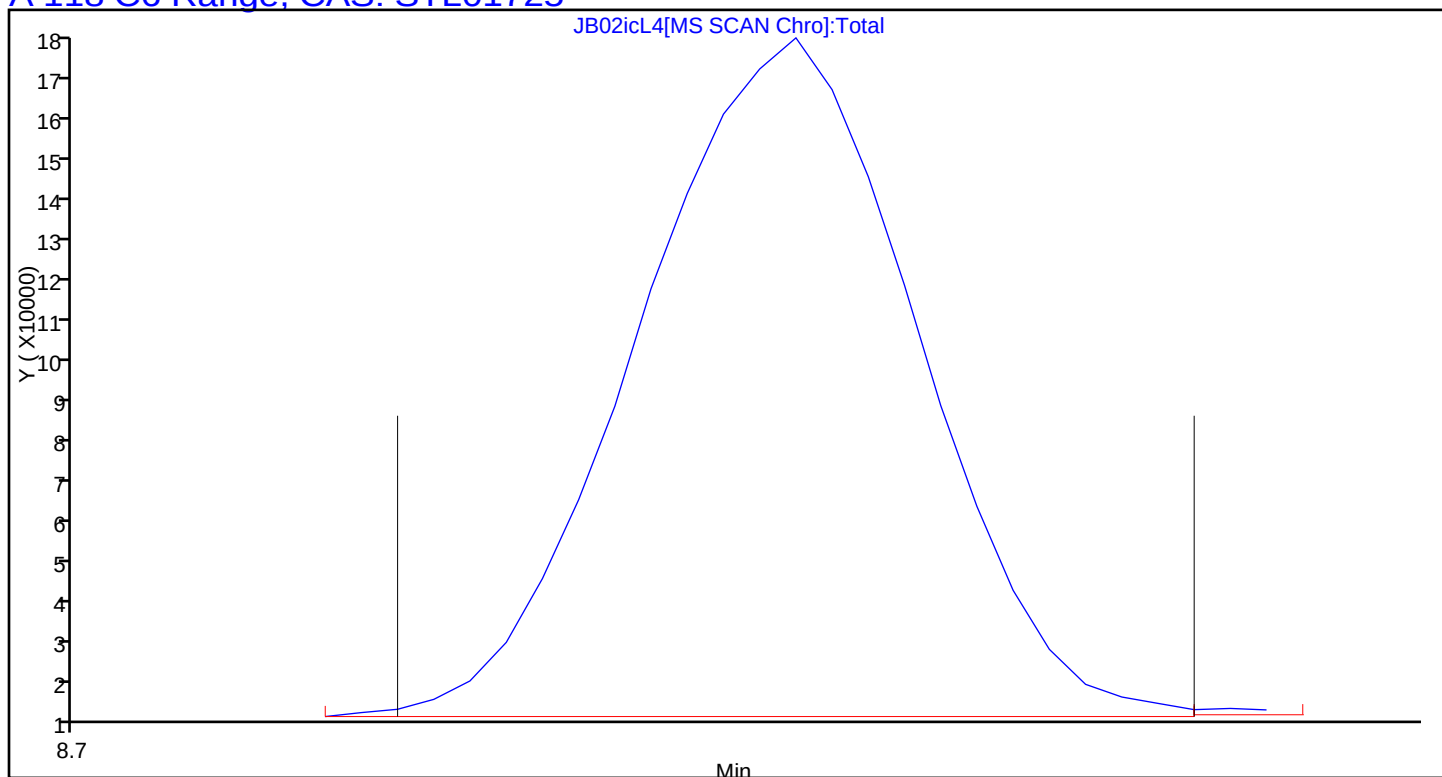
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL4.D

Injection Date: 02-Feb-2015 15:32:30

Instrument ID: MJ

Lims ID: IC L4

Client ID:

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 5

Purge Vol: 500.000 mL

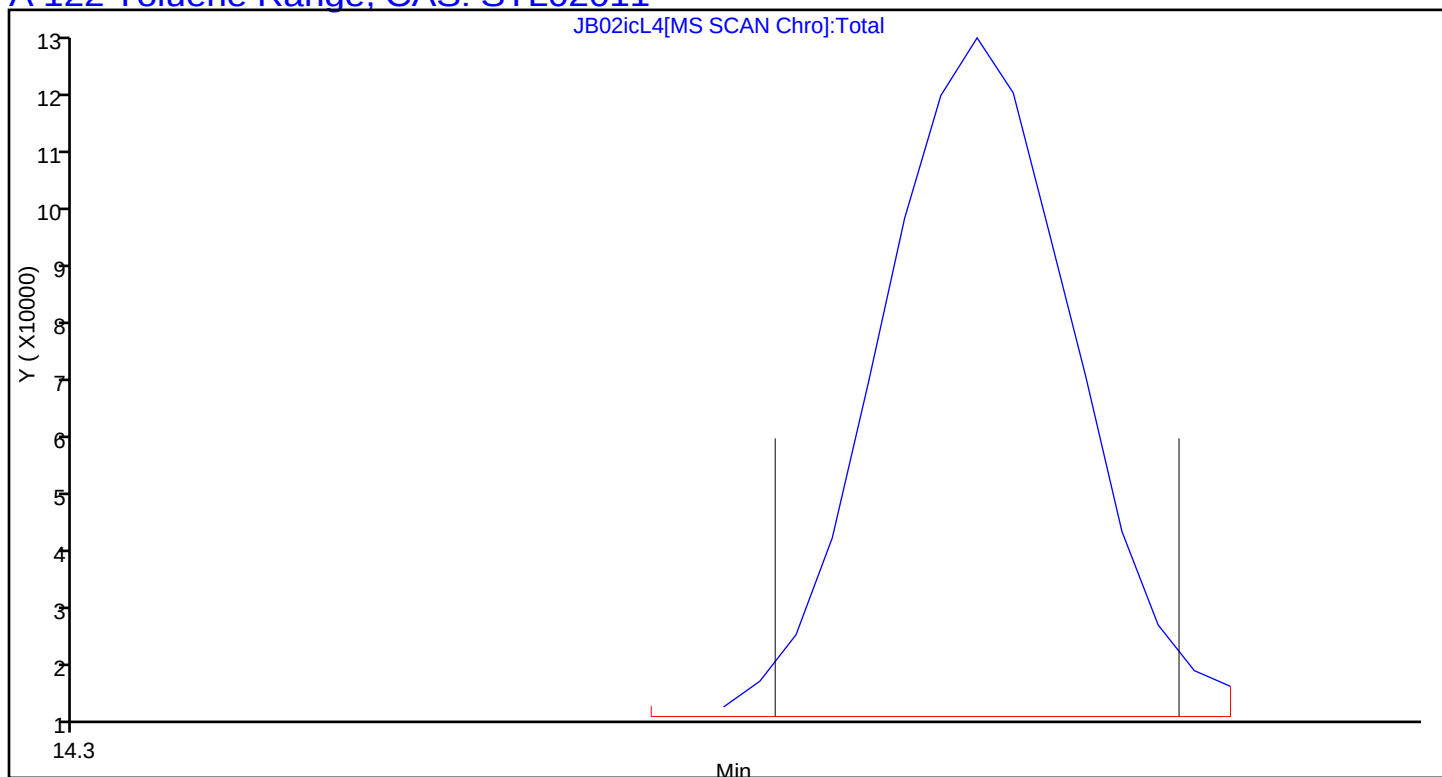
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Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 122 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL4.D

Injection Date: 02-Feb-2015 15:32:30

Instrument ID: MJ

Lims ID: IC L4

Client ID:

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 5

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

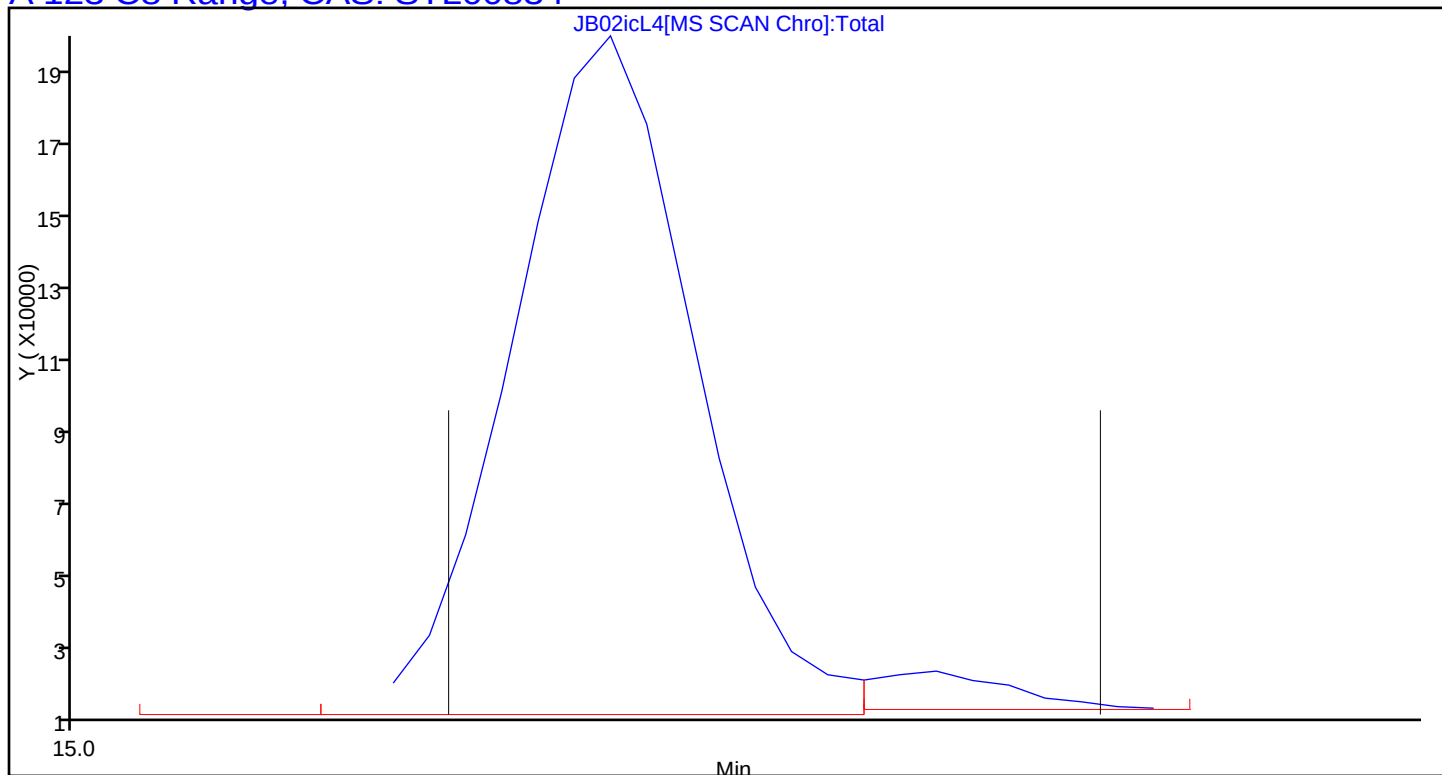
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 123 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL5.D
 Lims ID: IC L5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 02-Feb-2015 16:27:30 ALS Bottle#: 12 Worklist Smp#: 6
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 022287,,1,5,,ICAL 1
 Misc. Info.: J020215I,TO15,,140-0001328-006
 Operator ID: 7126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub3
 Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Feb-2015 08:51:18 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: tajh

Date: 03-Feb-2015 10:16:54

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	9.587	9.593	-0.006	97	307264	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.734	11.736	-0.002	96	1486491	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.381	16.380	0.001	89	1317855	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.990	17.991	-0.001	90	869463	4.00	4.03	
6 Chlorodifluoromethane	67	4.019	4.021	-0.002	97	32955	1.00	0.8872	
7 Propene	41	4.030	4.036	-0.006	98	132305	1.00	0.9078	
8 Dichlorodifluoromethane	85	4.089	4.093	-0.004	100	325851	1.00	0.9420	
9 Chloromethane	52	4.299	4.302	-0.003	98	43576	1.00	0.8859	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.305	4.307	-0.003	93	209418	1.00	0.9242	
11 Acetaldehyde	44	4.471	4.476	-0.005	100	193433	5.00	4.56	
12 Vinyl chloride	62	4.493	4.497	-0.004	99	122506	1.00	0.9229	
13 Butane	43	4.595	4.597	-0.002	86	217307	1.00	0.9367	
14 Butadiene	54	4.595	4.598	-0.003	62	95618	1.00	0.9072	
15 Bromomethane	94	4.966	4.968	-0.002	99	101275	1.00	0.8990	
16 Chloroethane	64	5.128	5.127	0.001	93	52424	1.00	0.9017	
17 Ethanol	31	5.214	5.223	-0.009	96	174738	5.00	4.09	
18 Vinyl bromide	106	5.466	5.470	-0.004	99	88520	1.00	0.8966	
19 2-Methylbutane	43	5.520	5.520	0.000	92	136811	1.00	0.8777	
20 Trichlorofluoromethane	101	5.762	5.766	-0.004	100	281649	1.00	0.9298	
21 Acrolein	56	5.773	5.774	-0.001	30	21172	1.00	0.6046	
22 Acetonitrile	40	5.848	5.850	-0.002	99	28527	1.00	0.7731	
23 Acetone	58	5.897	5.899	-0.002	99	121002	3.00	3.06	
24 Isopropyl alcohol	45	5.967	5.979	-0.012	98	414752	3.00	2.60	
25 Pentane	72	5.999	6.005	-0.005	97	17062	1.00	0.9205	
26 Ethyl ether	31	6.182	6.184	-0.002	91	77865	1.00	0.7205	
27 1,1-Dichloroethene	96	6.537	6.540	-0.003	95	89173	1.00	0.9133	
28 2-Methyl-2-propanol	59	6.618	6.627	-0.009	96	152052	1.00	0.8380	
29 Acrylonitrile	53	6.645	6.650	-0.005	96	41067	1.00	0.7513	
30 1,1,2-Trichloro-1,2,2-trif	101	6.720	6.722	-0.002	94	190514	1.00	0.9347	
31 Methylene Chloride	84	6.914	6.915	-0.001	96	91824	1.00	0.9321	

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	6.930	6.930	0.000	93	96937	1.00	0.9064	
33 Carbon disulfide	76	7.096	7.098	-0.002	99	322755	1.00	0.9377	
34 trans-1,2-Dichloroethene	96	7.774	7.774	0.000	95	104152	1.00	0.9356	
35 2-Methylpentane	43	7.780	7.783	-0.003	97	268820	1.00	0.9219	
36 Methyl tert-butyl ether	73	7.898	7.898	0.000	97	142235	1.00	0.7591	
37 1,1-Dichloroethane	63	8.215	8.219	-0.004	100	170750	1.00	0.9120	
38 Vinyl acetate	43	8.312	8.317	-0.005	100	130681	1.00	0.6727	
39 2-Butanone (MEK)	72	8.786	8.788	-0.002	95	30213	1.00	0.8258	
40 Hexane	56	8.813	8.811	0.001	92	90771	1.00	0.8861	
139 Isopropyl ether	45	8.963	8.966	-0.003	97	235216	1.00	0.7502	
41 cis-1,2-Dichloroethene	96	9.248	9.246	0.002	97	86254	1.00	0.9000	
42 Ethyl acetate	43	9.415	9.417	-0.002	98	134435	1.00	0.7524	
43 Chloroform	83	9.598	9.599	-0.001	94	170732	1.00	0.8802	
142 Tert-butyl ethyl ether	59	9.668	9.667	0.001	97	181863	1.00	0.7737	
44 Tetrahydrofuran	42	10.018	10.018	0.000	94	71698	1.00	0.7316	
45 1,1,1-Trichloroethane	97	10.642	10.643	-0.001	97	189252	1.00	0.9306	
46 1,2-Dichloroethane	62	10.749	10.750	-0.001	97	108883	1.00	0.8794	
47 n-Butanol	31	11.136	11.144	-0.008	91	36780	1.00	0.8176	
49 Cyclohexane	69	11.217	11.222	-0.005	83	51385	1.00	0.9055	
48 Benzene	78	11.223	11.226	-0.004	97	232144	1.00	0.8454	
50 Carbon tetrachloride	117	11.244	11.247	-0.003	98	161764	1.00	0.7983	
51 2,3-Dimethylpentane	71	11.319	11.320	-0.001	93	59612	1.00	0.8524	
52 Thiophene	84	11.491	11.493	-0.002	97	135004	1.00	0.8681	
140 Tert-amyl methyl ether	73	11.658	11.660	-0.002	95	158012	1.00	0.7653	
53 Isooctane	57	11.938	11.939	-0.001	98	452989	1.00	0.8297	
54 n-Heptane	71	12.293	12.295	-0.002	95	81056	1.00	0.8051	
55 1,2-Dichloropropane	63	12.401	12.405	-0.004	90	75149	1.00	0.7664	
56 Trichloroethene	130	12.433	12.437	-0.004	96	100360	1.00	0.8391	
57 Dibromomethane	93	12.524	12.528	-0.004	95	96908	1.00	0.8425	
59 Dichlorobromomethane	83	12.659	12.661	-0.002	99	163139	1.00	0.8292	
58 1,4-Dioxane	88	12.670	12.670	0.000	95	29376	1.00	0.7595	
60 Methyl methacrylate	41	12.723	12.724	-0.001	95	75660	1.00	0.6888	
61 Methylcyclohexane	83	13.186	13.185	0.001	92	196019	1.00	0.8788	
62 4-Methyl-2-pentanone (MIBK)	43	13.557	13.560	-0.003	98	165821	1.00	0.7341	
63 cis-1,3-Dichloropropene	75	13.627	13.630	-0.003	97	94684	1.00	0.7459	
64 trans-1,3-Dichloropropene	75	14.305	14.306	-0.001	98	78959	1.00	0.7260	
65 Toluene	91	14.434	14.436	-0.002	93	178095	1.00	0.7406	
66 1,1,2-Trichloroethane	83	14.504	14.507	-0.003	97	61191	1.00	0.7579	
67 2-Methylthiophene	97	14.585	14.588	-0.003	98	154183	1.00	0.7374	
68 3-Methylthiophene	97	14.784	14.786	-0.002	99	144312	1.00	0.7056	
69 2-Hexanone	58	14.864	14.866	-0.002	91	76652	1.00	0.7985	
70 n-Octane	85	15.080	15.081	-0.001	97	74508	1.00	0.8327	
71 Chlorodibromomethane	129	15.209	15.209	0.000	98	131962	1.00	0.8134	
72 Ethylene Dibromide	107	15.499	15.500	-0.001	98	102354	1.00	0.7607	
73 Tetrachloroethene	129	15.558	15.561	-0.003	96	87178	1.00	0.8328	
74 2,3-Dimethylheptane	43	16.408	16.411	-0.003	95	268292	1.00	0.8643	
75 Chlorobenzene	112	16.430	16.429	0.001	97	142301	1.00	0.7423	
76 Ethylbenzene	91	16.704	16.703	0.001	99	202896	1.00	0.7217	
77 2-Ethylthiophene	97	16.806	16.807	-0.001	98	155636	1.00	0.7178	
78 m-Xylene & p-Xylene	91	16.860	16.861	-0.001	99	318841	2.00	1.41	
79 n-Nonane	57	17.242	17.245	-0.003	95	149048	1.00	0.7880	
80 Styrene	104	17.323	17.326	-0.003	99	110576	1.00	0.6929	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
81 Bromoform	173	17.328	17.328	0.000	96	105000	1.00	0.7460	
82 o-Xylene	91	17.382	17.386	-0.004	99	173902	1.00	0.7040	
83 1,1,2,2-Tetrachloroethane	83	17.705	17.704	0.001	98	142468	1.00	0.7359	
84 1,2,3-Trichloropropane	110	17.861	17.860	0.001	98	33297	1.00	0.7464	
85 Isopropylbenzene	105	17.952	17.953	-0.001	97	238383	1.00	0.7390	
86 N-Propylbenzene	120	18.463	18.463	0.000	98	60259	1.00	0.6984	
87 2-Chlorotoluene	126	18.517	18.517	0.000	93	62446	1.00	0.7234	
88 4-Ethyltoluene	105	18.603	18.605	-0.002	98	220642	1.00	0.7082	
89 1,3,5-Trimethylbenzene	120	18.673	18.673	0.000	92	107543	1.00	0.7256	
90 Alpha Methyl Styrene	118	18.894	18.896	-0.002	87	80612	1.00	0.6797	
91 n-Decane	57	18.926	18.925	0.001	87	150935	1.00	0.7007	
92 tert-Butylbenzene	119	19.082	19.083	-0.001	91	212848	1.00	0.7316	
93 1,2,4-Trimethylbenzene	105	19.098	19.097	0.001	96	194096	1.00	0.7290	
94 sec-Butylbenzene	105	19.340	19.341	-0.001	99	286712	1.00	0.7342	
95 1,3-Dichlorobenzene	146	19.367	19.370	-0.003	99	103715	1.00	0.6776	
96 Benzyl chloride	91	19.437	19.439	-0.002	97	118897	1.00	0.6655	
97 1,4-Dichlorobenzene	146	19.453	19.453	0.000	94	91835	1.00	0.6484	
98 4-Isopropyltoluene	119	19.496	19.496	0.000	97	223257	1.00	0.7192	
99 1,2,3-Trimethylbenzene	105	19.555	19.554	0.001	98	157089	1.00	0.7357	
100 Butylcyclohexane	83	19.598	19.597	0.001	90	179037	1.00	0.7794	
101 2,3-Dihydroindene	117	19.797	19.799	-0.002	94	175381	1.00	0.7358	
102 1,2-Dichlorobenzene	146	19.803	19.805	-0.002	95	105420	1.00	0.6967	
103 n-Butylbenzene	91	19.916	19.916	0.000	97	193152	1.00	0.6861	
104 Indene	116	19.926	19.927	-0.001	90	105535	1.00	0.6644	
105 Undecane	57	20.195	20.195	0.000	95	161550	1.00	0.7163	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.276	20.278	-0.002	98	155168	1.00	0.6798	
141 1,2-Dibromo-3-Chloropropan	157	20.394	20.393	0.001	93	43812	1.00	0.6961	
108 1,2,4,5-Tetramethylbenzene	119	20.669	20.668	0.001	97	194644	1.00	0.6910	
107 1,2,3,5-Tetramethylbenzene	119	20.723	20.725	-0.002	95	121580	1.00	0.6897	
109 1,2,3,4-Tetramethylbenzene	119	21.148	21.147	0.001	97	161331	1.00	0.7083	
110 Dodecane	57	21.282	21.282	0.000	93	155825	1.00	0.7766	
111 1,2,4-Trichlorobenzene	180	21.524	21.525	-0.001	95	39424	1.00	0.6463	
112 Naphthalene	128	21.653	21.655	-0.002	99	95333	1.00	0.6995	
113 Benzo(b)thiophene	134	21.745	21.741	0.004	99	44465	1.00	0.6598	
114 Hexachlorobutadiene	225	21.809	21.810	-0.001	96	83096	1.00	0.7102	
115 1,2,3-Trichlorobenzene	180	21.874	21.872	0.002	95	37937	1.00	0.7047	
116 2-Methylnaphthalene	142	22.401	22.402	-0.001	99	31630	3.13	2.22	
117 1-Methylnaphthalene	142	22.530	22.528	0.002	99	34839	3.13	2.31	
A 118 C6 Range	1	8.807	(8.748-8.866)		0	1046587	1.00	0.8892	
A 122 Toluene Range	1	14.434	(14.404-14.464)		0	437179	1.00	0.7401	
A 123 C8 Range	1	15.104	(15.056-15.152)		0	827615	1.00	0.8539	
S 124 Xylenes, Total	100				0		3.00	2.11	
S 144 1,2-Dichloroethene, Total	1				0			1.84	

Reagents:

MAic5_00013

Amount Added: 100.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL5.D

Injection Date: 02-Feb-2015 16:27:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: IC L5

Worklist Smp#: 6

Client ID:

Purge Vol: 500.000 mL

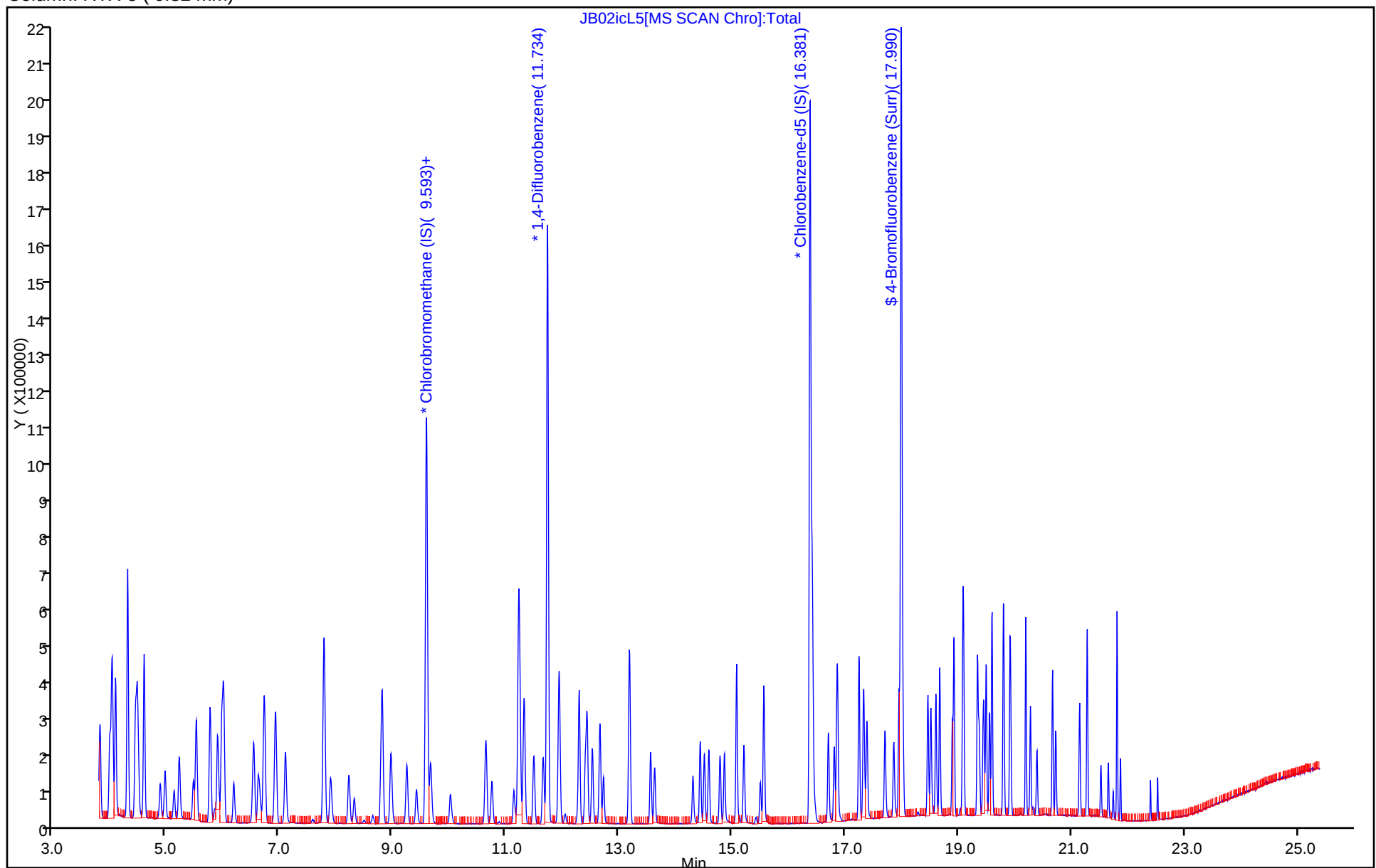
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL5.D

Injection Date: 02-Feb-2015 16:27:30

Instrument ID: MJ

Lims ID: IC L5

Client ID:

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 6

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

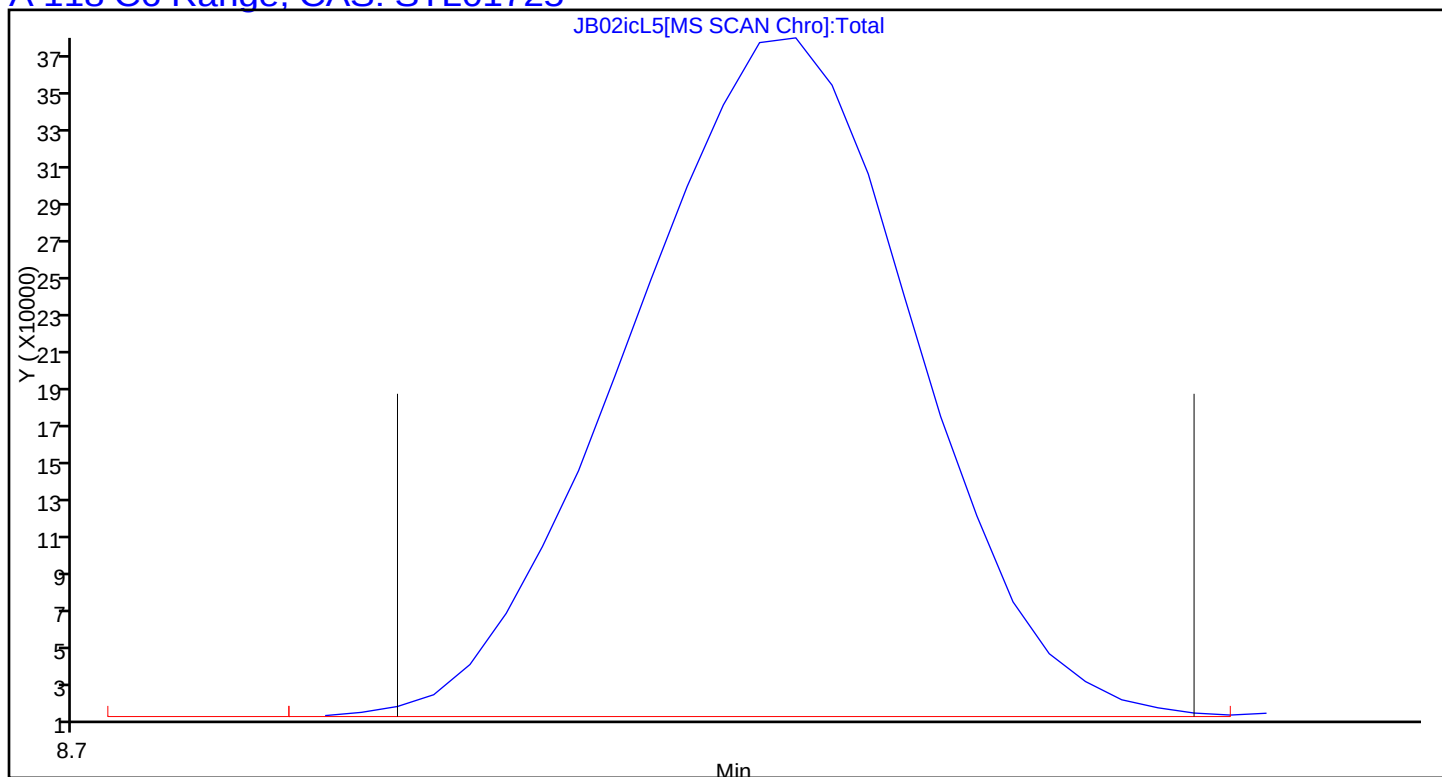
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL5.D

Injection Date: 02-Feb-2015 16:27:30

Instrument ID: MJ

Lims ID: IC L5

Client ID:

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 6

Purge Vol: 500.000 mL

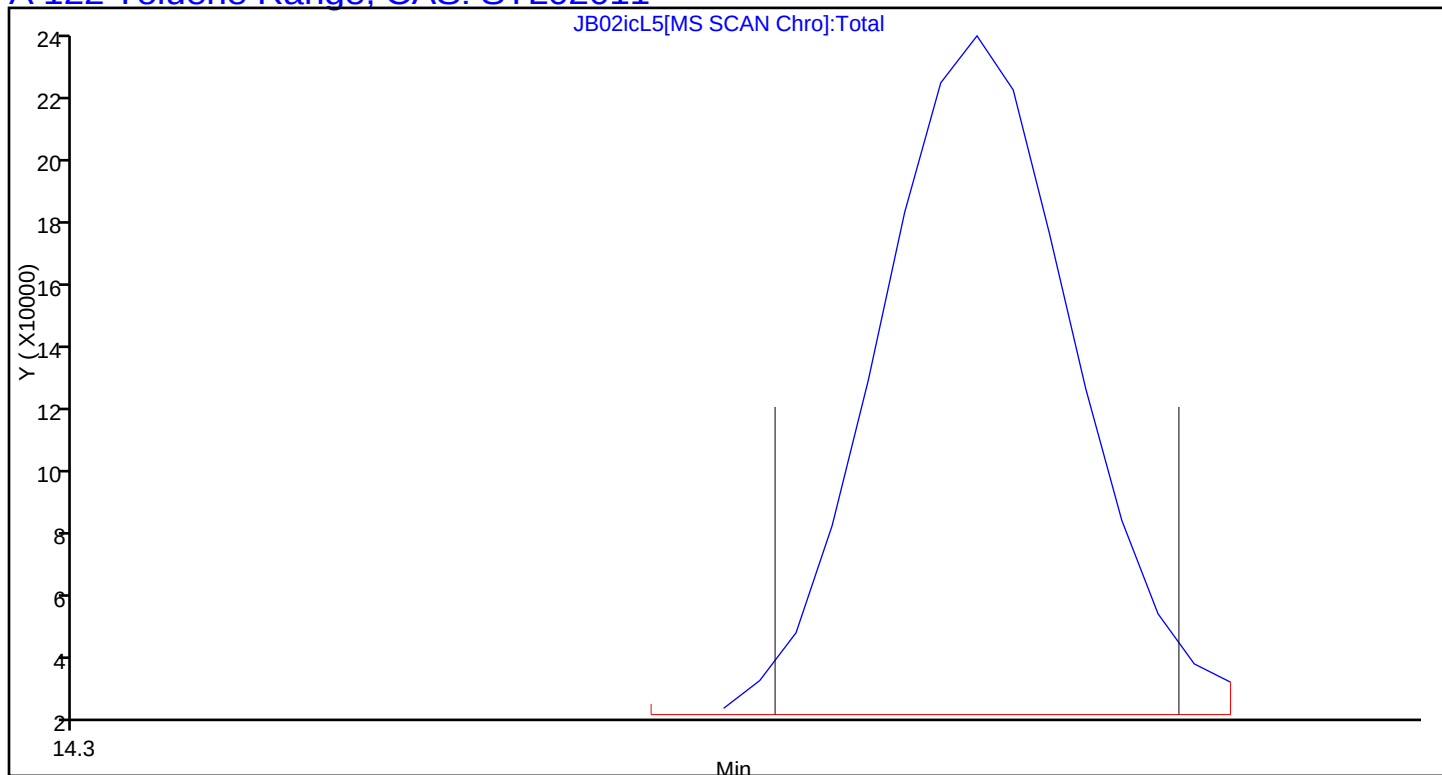
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

[A 122 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL5.D

Injection Date: 02-Feb-2015 16:27:30

Instrument ID: MJ

Lims ID: IC L5

Client ID:

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 6

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

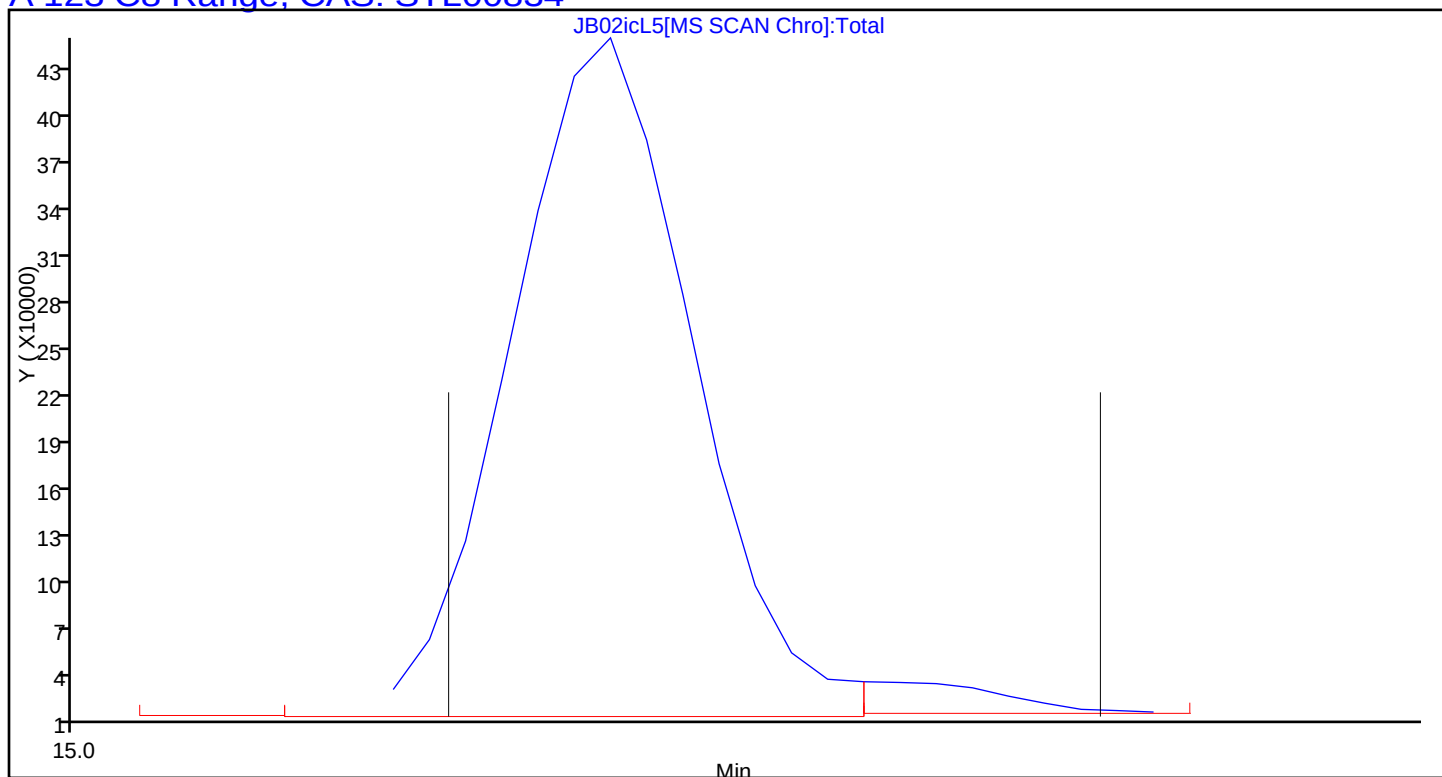
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 123 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icisL6.D
 Lims ID: ICIS 6
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 02-Feb-2015 17:21:30 ALS Bottle#: 13 Worklist Smp#: 7
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 022287,,1,6,,ICAL 2
 Misc. Info.: J020215I,TO15,,140-0001328-007
 Operator ID: 7126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub3
 Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Feb-2015 08:51:22 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: barlozhetskayaa

Date: 02-Feb-2015 18:40:46

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	9.595	9.593	0.002	95	289189	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.736	11.736	0.000	96	1333947	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.379	16.380	-0.001	89	1321331	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.992	17.991	0.001	90	873686	4.00	4.04	
6 Chlorodifluoromethane	67	4.017	4.021	-0.004	97	73369	2.00	2.10	
7 Propene	41	4.033	4.036	-0.003	99	279142	2.00	2.03	
8 Dichlorodifluoromethane	85	4.092	4.093	-0.001	100	712382	2.00	2.19	
9 Chloromethane	52	4.302	4.302	0.000	98	93053	2.00	2.01	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.307	4.307	0.000	92	461044	2.00	2.16	
11 Acetaldehyde	44	4.474	4.476	-0.002	99	460018	10.0	11.5	
12 Vinyl chloride	62	4.495	4.497	-0.002	99	267849	2.00	2.14	
13 Butane	43	4.598	4.597	0.001	86	440683	2.00	2.02	
14 Butadiene	54	4.598	4.598	0.000	65	211780	2.00	2.13	
15 Bromomethane	94	4.969	4.968	0.001	99	223862	2.00	2.11	
16 Chloroethane	64	5.130	5.127	0.003	94	115555	2.00	2.11	
17 Ethanol	31	5.222	5.223	-0.001	96	402629	10.0	10.0	
18 Vinyl bromide	106	5.469	5.470	-0.001	99	197531	2.00	2.13	
19 2-Methylbutane	43	5.517	5.520	-0.003	92	293654	2.00	2.00	
20 Trichlorofluoromethane	101	5.765	5.766	-0.001	100	626895	2.00	2.20	
21 Acrolein	56	5.770	5.774	-0.004	94	59615	2.00	1.81	
22 Acetonitrile	40	5.851	5.850	0.001	98	78425	2.00	2.26	
23 Acetone	58	5.894	5.899	-0.005	99	263015	6.00	7.07	
24 Isopropyl alcohol	45	5.975	5.979	-0.004	98	956109	6.00	6.38	
25 Pentane	72	6.002	6.005	-0.002	97	37923	2.00	2.17	
26 Ethyl ether	31	6.179	6.184	-0.005	91	195750	2.00	1.92	
27 1,1-Dichloroethene	96	6.540	6.540	0.000	95	196396	2.00	2.14	
28 2-Methyl-2-propanol	59	6.615	6.627	-0.012	96	364383	2.00	2.13	
29 Acrylonitrile	53	6.653	6.650	0.003	94	117234	2.00	2.28	
30 1,1,2-Trichloro-1,2,2-trif	101	6.722	6.722	0.000	95	414416	2.00	2.16	
31 Methylene Chloride	84	6.911	6.915	-0.004	97	190357	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
32 3-Chloro-1-propene	39	6.932	6.930	0.002	93	210397	2.00	2.09	
33 Carbon disulfide	76	7.099	7.098	0.001	99	709227	2.00	2.19	
34 trans-1,2-Dichloroethene	96	7.771	7.774	-0.003	95	227185	2.00	2.17	
35 2-Methylpentane	43	7.782	7.783	-0.001	96	583813	2.00	2.13	
36 Methyl tert-butyl ether	73	7.890	7.898	-0.008	97	377086	2.00	2.14	
37 1,1-Dichloroethane	63	8.218	8.219	-0.001	100	373428	2.00	2.12	
38 Vinyl acetate	43	8.315	8.317	-0.002	100	373840	2.00	2.04	
39 2-Butanone (MEK)	72	8.783	8.788	-0.005	96	75250	2.00	2.19	
40 Hexane	56	8.810	8.811	-0.001	93	201062	2.00	2.09	
139 Isopropyl ether	45	8.960	8.966	-0.006	97	630327	2.00	2.14	
41 cis-1,2-Dichloroethene	96	9.245	9.246	-0.001	97	189453	2.00	2.10	
42 Ethyl acetate	43	9.412	9.417	-0.005	98	347626	2.00	2.07	
43 Chloroform	83	9.600	9.599	0.001	96	366179	2.00	2.01	
142 Tert-butyl ethyl ether	59	9.660	9.667	-0.007	97	488593	2.00	2.21	
44 Tetrahydrofuran	42	10.009	10.018	-0.009	94	188789	2.00	2.05	
45 1,1,1-Trichloroethane	97	10.644	10.643	0.001	97	397886	2.00	2.08	
46 1,2-Dichloroethane	62	10.752	10.750	0.002	97	208212	2.00	1.87	
47 n-Butanol	31	11.134	11.144	-0.010	93	92621	2.00	2.29	
49 Cyclohexane	69	11.220	11.222	-0.002	88	106942	2.00	2.10	
48 Benzene	78	11.225	11.226	-0.001	97	444457	2.00	1.80	
50 Carbon tetrachloride	117	11.247	11.247	0.000	97	427542	2.00	2.35	
51 2,3-Dimethylpentane	71	11.322	11.320	0.002	93	128091	2.00	2.04	
52 Thiophene	84	11.494	11.493	0.001	97	268671	2.00	1.93	
140 Tert-amyl methyl ether	73	11.655	11.660	-0.005	95	423837	2.00	2.05	
53 Isooctane	57	11.935	11.939	-0.004	98	980897	2.00	2.00	
54 n-Heptane	71	12.296	12.295	0.001	95	184125	2.00	2.04	
55 1,2-Dichloropropane	63	12.403	12.405	-0.002	90	167458	2.00	1.90	
56 Trichloroethene	130	12.435	12.437	-0.002	96	220680	2.00	2.06	
57 Dibromomethane	93	12.527	12.528	-0.001	95	208058	2.00	2.02	
59 Dichlorobromomethane	83	12.661	12.661	0.000	98	371303	2.00	2.10	
58 1,4-Dioxane	88	12.661	12.670	-0.009	89	73038	2.00	2.10	
60 Methyl methacrylate	41	12.721	12.724	-0.003	95	207175	2.00	2.10	
61 Methylcyclohexane	83	13.183	13.185	-0.002	91	411526	2.00	2.06	
62 4-Methyl-2-pentanone (MIBK)	43	13.554	13.560	-0.006	98	438930	2.00	2.17	
63 cis-1,3-Dichloropropene	75	13.630	13.630	0.000	97	222341	2.00	1.95	
64 trans-1,3-Dichloropropene	75	14.302	14.306	-0.004	99	212168	2.00	1.95	
65 Toluene	91	14.437	14.436	0.001	93	452462	2.00	1.88	
66 1,1,2-Trichloroethane	83	14.507	14.507	0.000	97	147163	2.00	1.82	
67 2-Methylthiophene	97	14.587	14.588	-0.001	98	384728	2.00	1.84	
68 3-Methylthiophene	97	14.786	14.786	0.000	99	374640	2.00	1.83	
69 2-Hexanone	58	14.862	14.866	-0.004	91	210993	2.00	2.19	
70 n-Octane	85	15.082	15.081	0.001	97	174854	2.00	1.95	
71 Chlorodibromomethane	129	15.211	15.209	0.002	98	310253	2.00	1.91	
72 Ethylene Dibromide	107	15.502	15.500	0.002	98	259344	2.00	1.92	
73 Tetrachloroethene	129	15.561	15.561	0.000	96	197241	2.00	1.88	
74 2,3-Dimethylheptane	43	16.411	16.411	0.000	95	567430	2.00	1.82	
75 Chlorobenzene	112	16.427	16.429	-0.002	92	351581	2.00	1.83	
76 Ethylbenzene	91	16.701	16.703	-0.002	99	564283	2.00	2.00	
77 2-Ethylthiophene	97	16.804	16.807	-0.003	98	429043	2.00	1.97	
78 m-Xylene & p-Xylene	91	16.857	16.861	-0.004	99	880871	4.00	3.88	
79 n-Nonane	57	17.245	17.245	0.000	95	360199	2.00	1.90	
80 Styrene	104	17.325	17.326	-0.001	99	326941	2.00	2.04	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
81 Bromoform	173	17.325	17.328	-0.003	95	285129	2.00	2.02	
82 o-Xylene	91	17.385	17.386	-0.001	99	477117	2.00	1.93	
83 1,1,2,2-Tetrachloroethane	83	17.702	17.704	-0.002	99	395176	2.00	2.04	
84 1,2,3-Trichloropropane	110	17.858	17.860	-0.002	98	91715	2.00	2.05	
85 Isopropylbenzene	105	17.949	17.953	-0.004	96	659703	2.00	2.04	
86 N-Propylbenzene	120	18.460	18.463	-0.003	98	179690	2.00	2.08	
87 2-Chlorotoluene	126	18.514	18.517	-0.003	98	167171	2.00	1.93	
88 4-Ethyltoluene	105	18.606	18.605	0.001	98	650578	2.00	2.08	
89 1,3,5-Trimethylbenzene	120	18.670	18.673	-0.003	92	306387	2.00	2.06	
90 Alpha Methyl Styrene	118	18.896	18.896	0.000	87	254025	2.00	2.14	
91 n-Decane	57	18.923	18.925	-0.002	88	428443	2.00	1.98	
92 tert-Butylbenzene	119	19.084	19.083	0.001	91	595558	2.00	2.04	
93 1,2,4-Trimethylbenzene	105	19.095	19.097	-0.002	96	556397	2.00	2.08	
94 sec-Butylbenzene	105	19.343	19.341	0.002	98	812671	2.00	2.08	
95 1,3-Dichlorobenzene	146	19.370	19.370	0.000	99	307594	2.00	2.00	
96 Benzyl chloride	91	19.440	19.439	0.001	97	389116	2.00	2.17	
97 1,4-Dichlorobenzene	146	19.450	19.453	-0.003	93	280978	2.00	1.98	
98 4-Isopropyltoluene	119	19.493	19.496	-0.003	97	640395	2.00	2.06	
99 1,2,3-Trimethylbenzene	105	19.552	19.554	-0.002	99	439173	2.00	2.05	
100 Butylcyclohexane	83	19.596	19.597	-0.001	89	456578	2.00	1.98	
101 2,3-Dihydroindene	117	19.800	19.799	0.001	94	505040	2.00	2.11	
102 1,2-Dichlorobenzene	146	19.805	19.805	0.000	96	311215	2.00	2.05	
103 n-Butylbenzene	91	19.913	19.916	-0.003	98	592548	2.00	2.10	
104 Indene	116	19.924	19.927	-0.003	97	340799	2.00	2.14	
105 Undecane	57	20.193	20.195	-0.002	95	482089	2.00	2.13	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.279	20.278	0.001	98	467559	2.00	2.04	
141 1,2-Dibromo-3-Chloropropan	157	20.392	20.393	-0.001	94	137741	2.00	2.18	
108 1,2,4,5-Tetramethylbenzene	119	20.666	20.668	-0.002	97	567879	2.00	2.01	
107 1,2,3,5-Tetramethylbenzene	119	20.725	20.725	0.000	95	347340	2.00	1.97	
109 1,2,3,4-Tetramethylbenzene	119	21.145	21.147	-0.002	97	454371	2.00	1.99	
110 Dodecane	57	21.279	21.282	-0.003	93	420435	2.00	2.09	
111 1,2,4-Trichlorobenzene	180	21.527	21.525	0.002	94	130070	2.00	2.13	
112 Naphthalene	128	21.656	21.655	0.001	99	297395	2.00	2.18	
113 Benzo(b)thiophene	134	21.742	21.741	0.001	99	139849	2.00	2.07	
114 Hexachlorobutadiene	225	21.812	21.810	0.002	96	221411	2.00	1.89	
115 1,2,3-Trichlorobenzene	180	21.871	21.872	-0.001	96	111816	2.00	2.07	
116 2-Methylnaphthalene	142	22.404	22.402	0.002	99	77436	6.25	5.43	
117 1-Methylnaphthalene	142	22.527	22.528	-0.001	99	78839	6.25	5.21	
A 118 C6 Range	1	8.810	(8.740-8.880)		0	2319650	2.00	2.09	
A 122 Toluene Range	1	14.437	(14.407-14.467)		0	1110449	2.00	1.87	
A 123 C8 Range	1	15.104	(15.056-15.152)		0	1940288	2.00	2.00	
S 124 Xylenes, Total	100				0		6.00	5.81	

Reagents:

MAic10_00014

Amount Added: 100.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icisL6.D

Injection Date: 02-Feb-2015 17:21:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: ICIS 6

Worklist Smp#: 7

Client ID:

Purge Vol: 500.000 mL

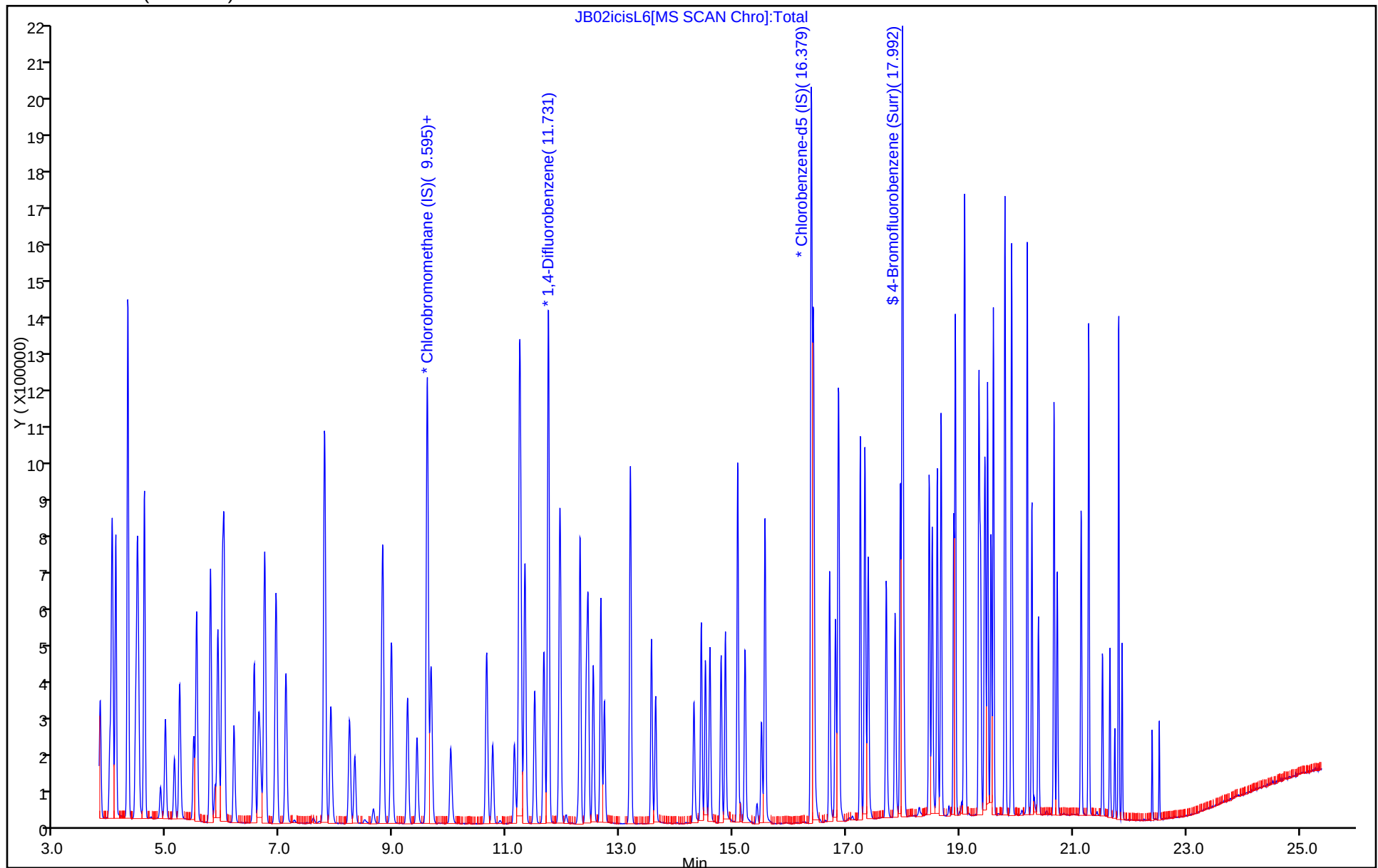
Dil. Factor: 1.0000

ALS Bottle#: 13

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icisL6.D

Injection Date: 02-Feb-2015 17:21:30

Instrument ID: MJ

Lims ID: ICIS 6

Client ID:

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 7

Purge Vol: 500.000 mL

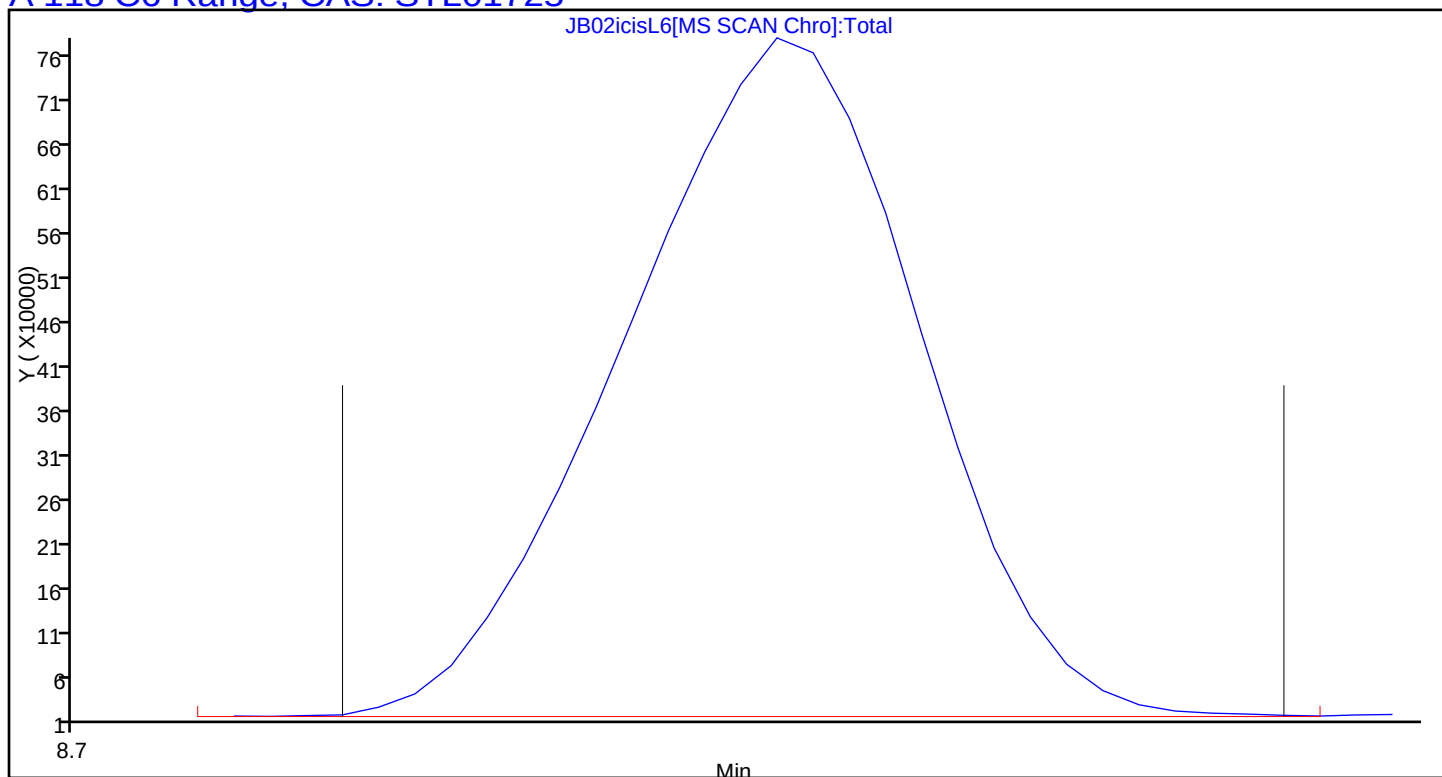
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icisL6.D

Injection Date: 02-Feb-2015 17:21:30

Instrument ID: MJ

Lims ID: ICIS 6

Client ID:

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 7

Purge Vol: 500.000 mL

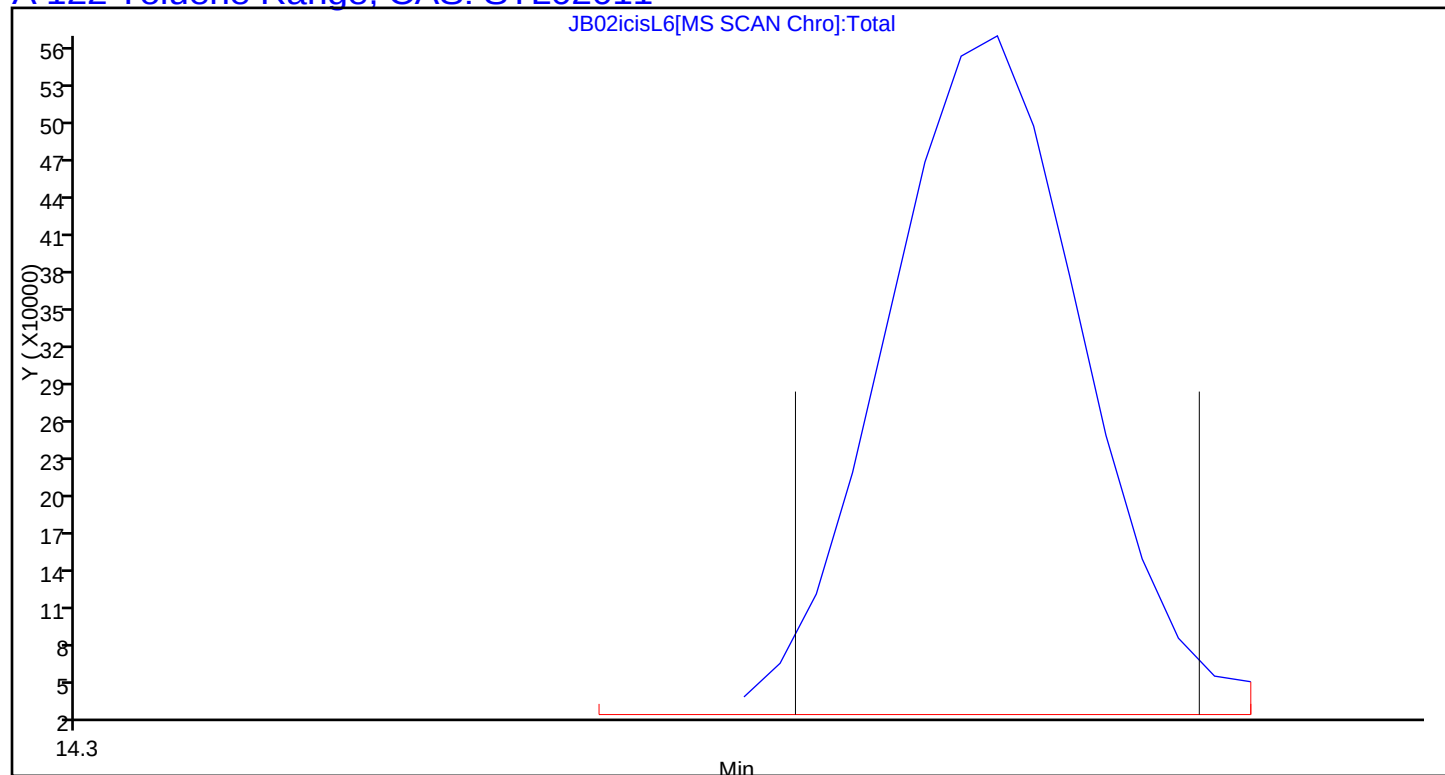
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

[A 122 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icisL6.D

Injection Date: 02-Feb-2015 17:21:30

Instrument ID: MJ

Lims ID: ICIS 6

Client ID:

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 7

Purge Vol: 500.000 mL

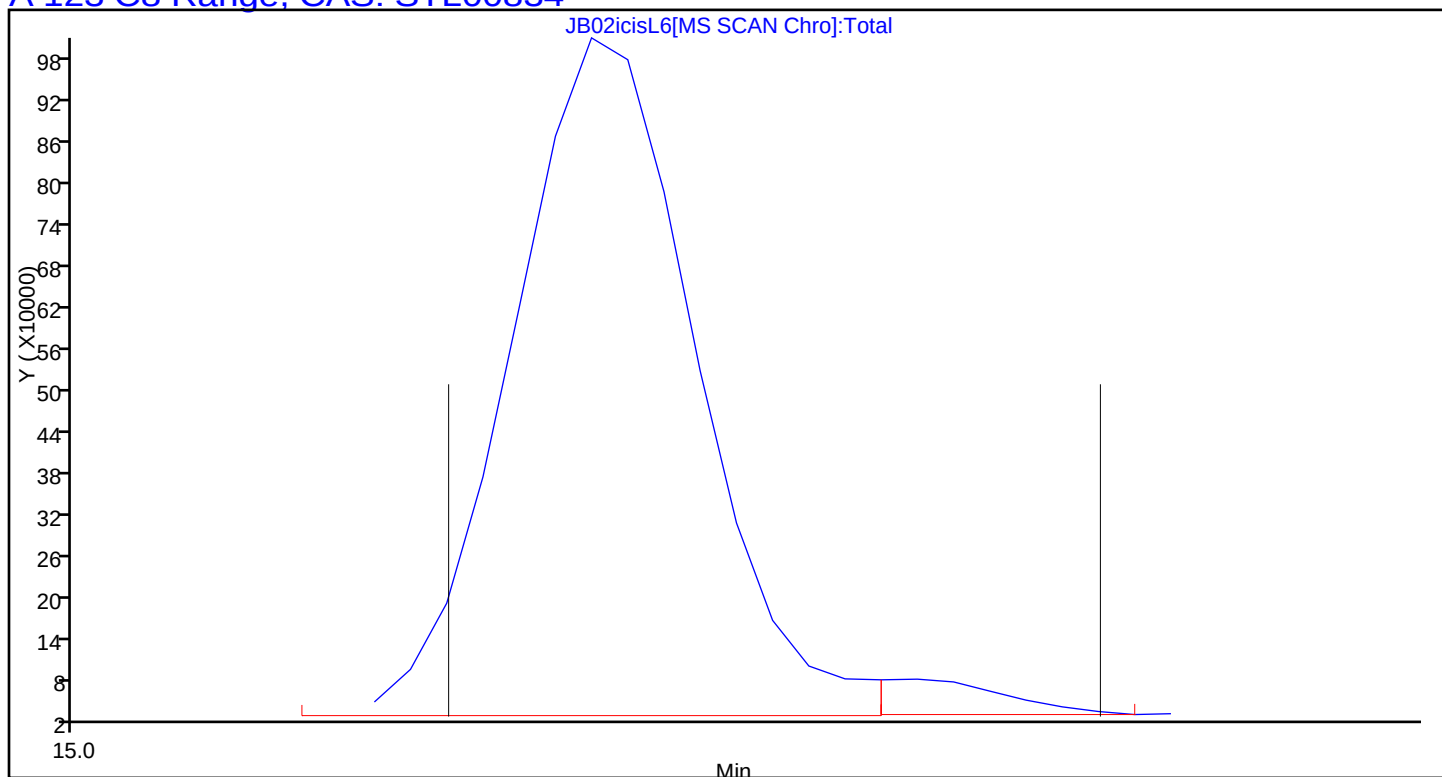
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 123 C8 Range, CAS: STL00834

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL7.D
 Lims ID: IC L7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 02-Feb-2015 18:16:30 ALS Bottle#: 14 Worklist Smp#: 8
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 022286,,1,7,,ICAL 4
 Misc. Info.: J020215I,TO15,,140-0001328-008
 Operator ID: 7126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub3
 Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Feb-2015 08:51:26 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: tajh

Date: 03-Feb-2015 10:18:09

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	9.593	9.593	0.000	96	302699	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.739	11.736	0.003	96	1459853	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.382	16.380	0.001	89	1389950	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.990	17.991	-0.001	90	948768	4.00	4.17	
6 Chlorodifluoromethane	67	4.019	4.021	-0.002	97	139030	4.00	3.80	
7 Propene	41	4.030	4.036	-0.006	99	523001	4.00	3.64	
8 Dichlorodifluoromethane	85	4.089	4.093	-0.004	100	1345206	4.00	3.95	
9 Chloromethane	52	4.299	4.302	-0.003	61	171399	4.00	3.54	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.305	4.307	-0.002	92	883226	4.00	3.96	
11 Acetaldehyde	44	4.477	4.476	0.001	99	918159	20.0	22.0	
12 Vinyl chloride	62	4.498	4.497	0.001	99	509003	4.00	3.89	
13 Butane	43	4.595	4.597	-0.002	86	828963	4.00	3.63	
14 Butadiene	54	4.595	4.598	-0.003	66	404323	4.00	3.89	
15 Bromomethane	94	4.966	4.968	-0.002	99	429197	4.00	3.87	
16 Chloroethane	64	5.128	5.127	0.001	96	222490	4.00	3.88	
17 Ethanol	31	5.224	5.223	0.001	96	733956	20.0	17.4	
18 Vinyl bromide	106	5.467	5.470	-0.003	99	377459	4.00	3.88	
19 2-Methylbutane	43	5.520	5.520	0.000	92	548772	4.00	3.57	
20 Trichlorofluoromethane	101	5.762	5.766	-0.004	100	1190242	4.00	3.99	
21 Acrolein	56	5.773	5.774	-0.001	94	121783	4.00	3.53	
22 Acetonitrile	40	5.849	5.850	-0.002	100	153373	4.00	4.22	
23 Acetone	58	5.897	5.899	-0.002	99	507711	12.0	13.0	
24 Isopropyl alcohol	45	5.978	5.979	-0.001	98	1736744	12.0	11.1	
25 Pentane	72	6.005	6.005	0.000	97	72775	4.00	3.99	
26 Ethyl ether	31	6.177	6.184	-0.007	91	418905	4.00	3.93	
27 1,1-Dichloroethene	96	6.537	6.540	-0.003	95	379393	4.00	3.94	
28 2-Methyl-2-propanol	59	6.623	6.627	-0.004	96	667284	4.00	3.73	
29 Acrylonitrile	53	6.650	6.650	0.000	94	232603	4.00	4.32	
30 1,1,2-Trichloro-1,2,2-trif	101	6.720	6.722	-0.002	95	793825	4.00	3.95	
31 Methylene Chloride	84	6.914	6.915	-0.001	97	360167	4.00	3.71	

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	6.930	6.930	0.000	94	390186	4.00	3.70	
33 Carbon disulfide	76	7.097	7.098	-0.001	99	1351244	4.00	3.98	
34 trans-1,2-Dichloroethene	96	7.774	7.774	0.000	94	439892	4.00	4.01	
35 2-Methylpentane	43	7.785	7.783	0.002	96	1104518	4.00	3.84	
36 Methyl tert-butyl ether	73	7.887	7.898	-0.011	97	708984	4.00	3.84	
37 1,1-Dichloroethane	63	8.221	8.219	0.002	100	711643	4.00	3.86	
38 Vinyl acetate	43	8.312	8.317	-0.005	100	748230	4.00	3.91	
39 2-Butanone (MEK)	72	8.780	8.788	-0.008	96	147275	4.00	4.09	
40 Hexane	56	8.813	8.811	0.002	91	381457	4.00	3.78	
139 Isopropyl ether	45	8.958	8.966	-0.008	97	1163550	4.00	3.77	
41 cis-1,2-Dichloroethene	96	9.248	9.246	0.002	97	362314	4.00	3.84	
42 Ethyl acetate	43	9.415	9.417	-0.002	98	683079	4.00	3.88	
43 Chloroform	83	9.603	9.599	0.004	96	699491	4.00	3.66	
142 Tert-butyl ethyl ether	59	9.663	9.667	-0.004	96	889084	4.00	3.84	
44 Tetrahydrofuran	42	10.007	10.018	-0.011	94	366881	4.00	3.80	
45 1,1,1-Trichloroethane	97	10.647	10.643	0.004	97	769030	4.00	3.84	
46 1,2-Dichloroethane	62	10.749	10.750	-0.001	97	470172	4.00	3.87	
47 n-Butanol	31	11.137	11.144	-0.007	90	170470	4.00	3.86	
49 Cyclohexane	69	11.223	11.222	0.001	82	206842	4.00	3.71	
48 Benzene	78	11.223	11.226	-0.003	97	975273	4.00	3.62	
50 Carbon tetrachloride	117	11.249	11.247	0.002	98	834144	4.00	4.19	
51 2,3-Dimethylpentane	71	11.319	11.320	-0.001	92	241958	4.00	3.52	
52 Thiophene	84	11.492	11.493	-0.001	97	579718	4.00	3.80	
140 Tert-amyl methyl ether	73	11.653	11.660	-0.007	96	759639	4.00	3.49	
53 Isooctane	57	11.938	11.939	-0.001	97	1854422	4.00	3.46	
54 n-Heptane	71	12.298	12.295	0.003	95	349391	4.00	3.53	
55 1,2-Dichloropropane	63	12.406	12.405	0.001	90	379911	4.00	3.95	
56 Trichloroethene	130	12.438	12.437	0.001	95	416123	4.00	3.54	
57 Dibromomethane	93	12.530	12.528	0.002	96	418582	4.00	3.71	
59 Dichlorobromomethane	83	12.664	12.661	0.003	99	743446	4.00	3.85	
58 1,4-Dioxane	88	12.664	12.670	-0.006	39	139540	4.00	3.67	
60 Methyl methacrylate	41	12.723	12.724	-0.001	95	419174	4.00	3.89	
61 Methylcyclohexane	83	13.186	13.185	0.001	91	789531	4.00	3.60	
62 4-Methyl-2-pentanone (MIBK)	43	13.557	13.560	-0.003	98	829084	4.00	3.74	
63 cis-1,3-Dichloropropene	75	13.633	13.630	0.003	97	499796	4.00	4.01	
64 trans-1,3-Dichloropropene	75	14.305	14.306	-0.001	99	459032	4.00	4.00	
65 Toluene	91	14.440	14.436	0.004	93	960784	4.00	3.79	
66 1,1,2-Trichloroethane	83	14.509	14.507	0.002	98	317612	4.00	3.73	
67 2-Methylthiophene	97	14.590	14.588	0.002	98	840106	4.00	3.81	
68 3-Methylthiophene	97	14.789	14.786	0.003	99	821973	4.00	3.81	
69 2-Hexanone	58	14.859	14.866	-0.007	91	391088	4.00	3.86	
70 n-Octane	85	15.080	15.081	-0.001	97	351104	4.00	3.72	
71 Chlorodibromomethane	129	15.209	15.209	0.000	98	686011	4.00	4.01	
72 Ethylene Dibromide	107	15.499	15.500	-0.001	98	553685	4.00	3.90	
73 Tetrachloroethene	129	15.564	15.561	0.003	96	385841	4.00	3.49	
74 2,3-Dimethylheptane	43	16.414	16.411	0.003	95	1220814	4.00	3.73	
75 Chlorobenzene	112	16.430	16.429	0.001	95	748137	4.00	3.70	
76 Ethylbenzene	91	16.704	16.703	0.001	99	1097171	4.00	3.70	
77 2-Ethylthiophene	97	16.806	16.807	-0.001	98	874188	4.00	3.82	
78 m-Xylene & p-Xylene	91	16.860	16.861	-0.001	99	1675287	8.00	7.01	
79 n-Nonane	57	17.248	17.245	0.003	95	796594	4.00	3.99	
80 Styrene	104	17.328	17.326	0.002	99	649833	4.00	3.86	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
81 Bromoform	173	17.328	17.328	0.000	96	617093	4.00	4.16	
82 o-Xylene	91	17.387	17.386	0.001	99	897431	4.00	3.44	
83 1,1,2,2-Tetrachloroethane	83	17.705	17.704	0.001	99	752518	4.00	3.69	
84 1,2,3-Trichloropropane	110	17.861	17.860	0.001	98	179115	4.00	3.81	
85 Isopropylbenzene	105	17.952	17.953	-0.001	96	1245518	4.00	3.66	
86 N-Propylbenzene	120	18.463	18.463	0.000	99	340422	4.00	3.74	
87 2-Chlorotoluene	126	18.517	18.517	0.000	98	339076	4.00	3.72	
88 4-Ethyltoluene	105	18.603	18.605	-0.002	98	1215330	4.00	3.70	
89 1,3,5-Trimethylbenzene	120	18.673	18.673	0.000	92	562124	4.00	3.60	
90 Alpha Methyl Styrene	118	18.894	18.896	-0.002	86	498059	4.00	3.98	
91 n-Decane	57	18.926	18.925	0.001	88	867371	4.00	3.82	
92 tert-Butylbenzene	119	19.082	19.083	-0.001	91	1083048	4.00	3.53	
93 1,2,4-Trimethylbenzene	105	19.098	19.097	0.001	96	1018993	4.00	3.63	
94 sec-Butylbenzene	105	19.340	19.341	-0.001	98	1493413	4.00	3.63	
95 1,3-Dichlorobenzene	146	19.367	19.370	-0.003	99	600787	4.00	3.72	
96 Benzyl chloride	91	19.437	19.439	-0.002	98	753863	4.00	4.00	
97 1,4-Dichlorobenzene	146	19.453	19.453	0.000	95	550794	4.00	3.69	
98 4-Isopropyltoluene	119	19.496	19.496	0.000	96	1201806	4.00	3.67	
99 1,2,3-Trimethylbenzene	105	19.555	19.554	0.001	98	799833	4.00	3.55	
100 Butylcyclohexane	83	19.598	19.597	0.001	89	923937	4.00	3.81	
101 2,3-Dihydroindene	117	19.797	19.799	-0.002	94	931126	4.00	3.70	
102 1,2-Dichlorobenzene	146	19.803	19.805	-0.002	96	593910	4.00	3.72	
103 n-Butylbenzene	91	19.916	19.916	0.000	98	1118397	4.00	3.77	
104 Indene	116	19.927	19.927	0.000	89	652622	4.00	3.90	
105 Undecane	57	20.196	20.195	0.001	96	883826	4.00	3.72	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.276	20.278	-0.002	98	895008	4.00	3.72	
141 1,2-Dibromo-3-Chloropropan	157	20.395	20.393	0.002	96	267988	4.00	4.04	
108 1,2,4,5-Tetramethylbenzene	119	20.669	20.668	0.001	97	1082335	4.00	3.64	
107 1,2,3,5-Tetramethylbenzene	119	20.723	20.725	-0.002	95	664567	4.00	3.57	
109 1,2,3,4-Tetramethylbenzene	119	21.148	21.147	0.001	98	874226	4.00	3.64	
110 Dodecane	57	21.282	21.282	0.000	93	751872	4.00	3.55	
111 1,2,4-Trichlorobenzene	180	21.524	21.525	-0.001	94	261358	4.00	4.06	
112 Naphthalene	128	21.653	21.655	-0.002	99	583681	4.00	4.06	
113 Benzo(b)thiophene	134	21.739	21.741	-0.002	99	288619	4.00	4.06	
114 Hexachlorobutadiene	225	21.809	21.810	-0.001	96	431913	4.00	3.50	
115 1,2,3-Trichlorobenzene	180	21.869	21.872	-0.003	96	222581	4.00	3.92	
116 2-Methylnaphthalene	142	22.401	22.402	-0.001	99	180845	12.5	12.1	
117 1-Methylnaphthalene	142	22.525	22.528	-0.003	99	170215	12.5	10.7	
A 118 C6 Range	1	8.802	(8.727-8.877)		0	4434032	4.00	3.82	
A 122 Toluene Range	1	14.440	(14.410-14.470)		0	2381997	4.00	3.82	
A 123 C8 Range	1	15.104	(15.056-15.152)		0	3839953	4.00	3.76	
S 124 Xylenes, Total	100				0		12.0	10.5	
S 144 1,2-Dichloroethene, Total	1				0			7.85	

Reagents:

MAic10_00014

Amount Added: 200.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL7.D

Injection Date: 02-Feb-2015 18:16:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: IC L7

Worklist Smp#: 8

Client ID:

Purge Vol: 500.000 mL

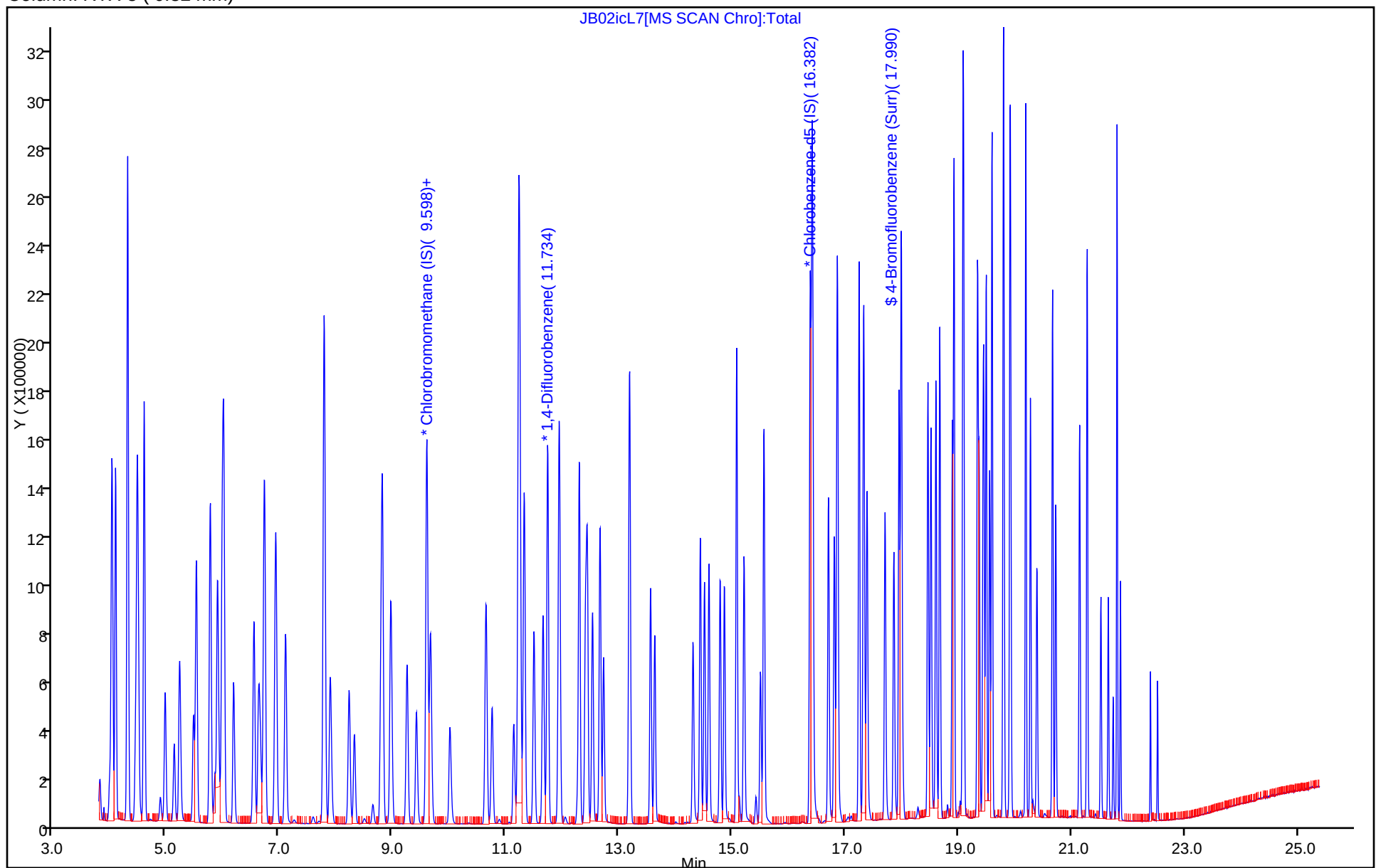
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL7.D

Injection Date: 02-Feb-2015 18:16:30

Instrument ID: MJ

Lims ID: IC L7

Client ID:

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 8

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

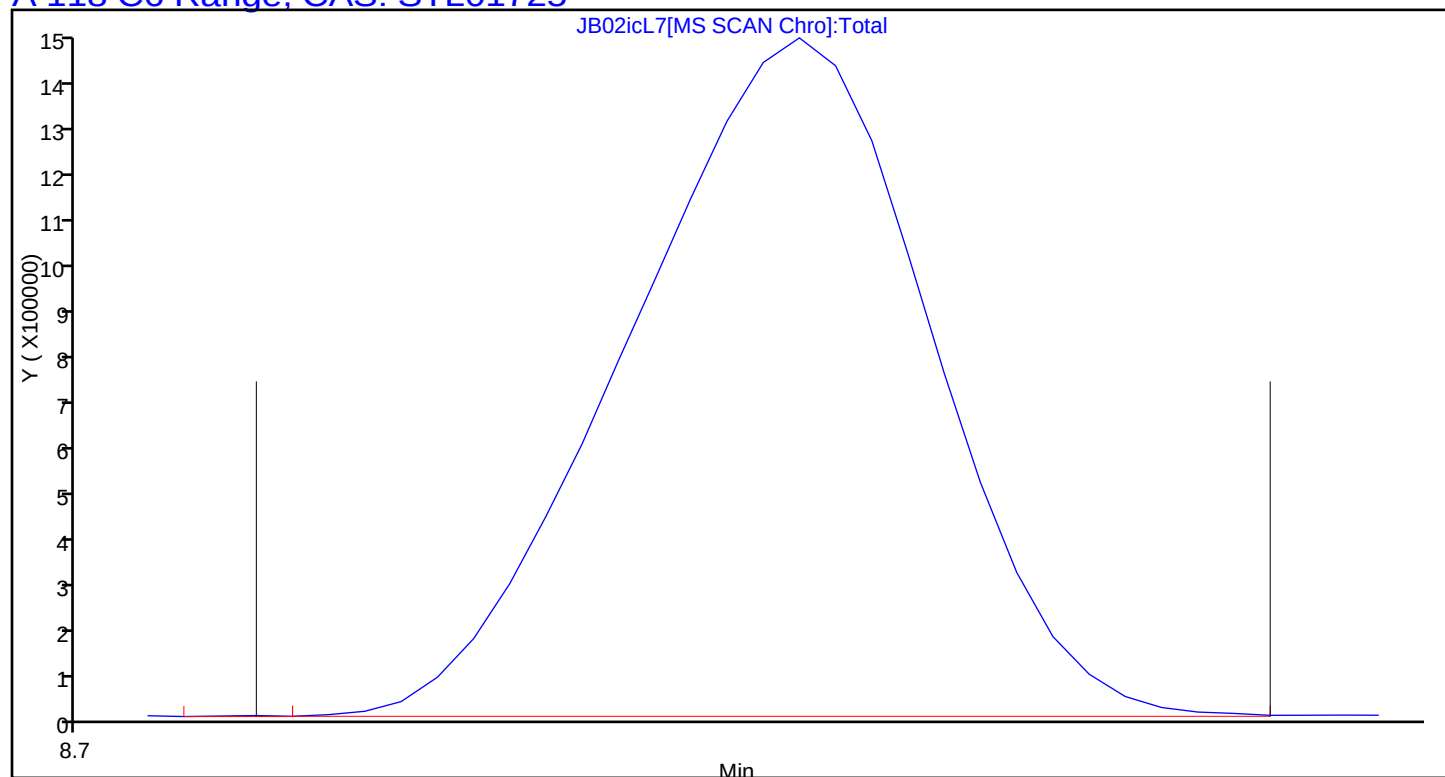
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL7.D

Injection Date: 02-Feb-2015 18:16:30

Instrument ID: MJ

Lims ID: IC L7

Client ID:

Operator ID: 7126

ALS Bottle#:

14

Worklist Smp#:

8

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MJ_TO15

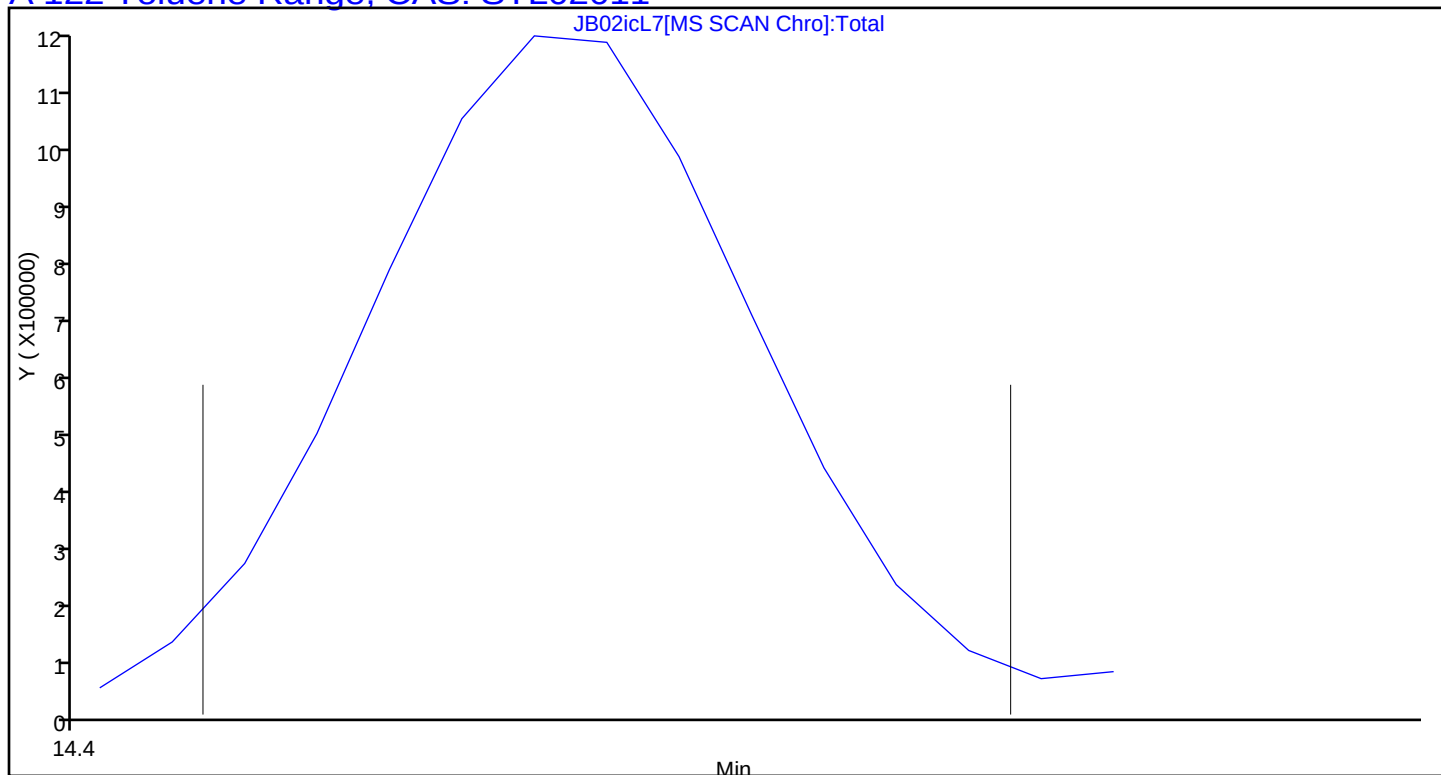
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

A 122 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL7.D

Injection Date: 02-Feb-2015 18:16:30

Instrument ID: MJ

Lims ID: IC L7

Client ID:

Operator ID: 7126

ALS Bottle#:

14

Worklist Smp#:

8

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MJ_TO15

Limit Group:

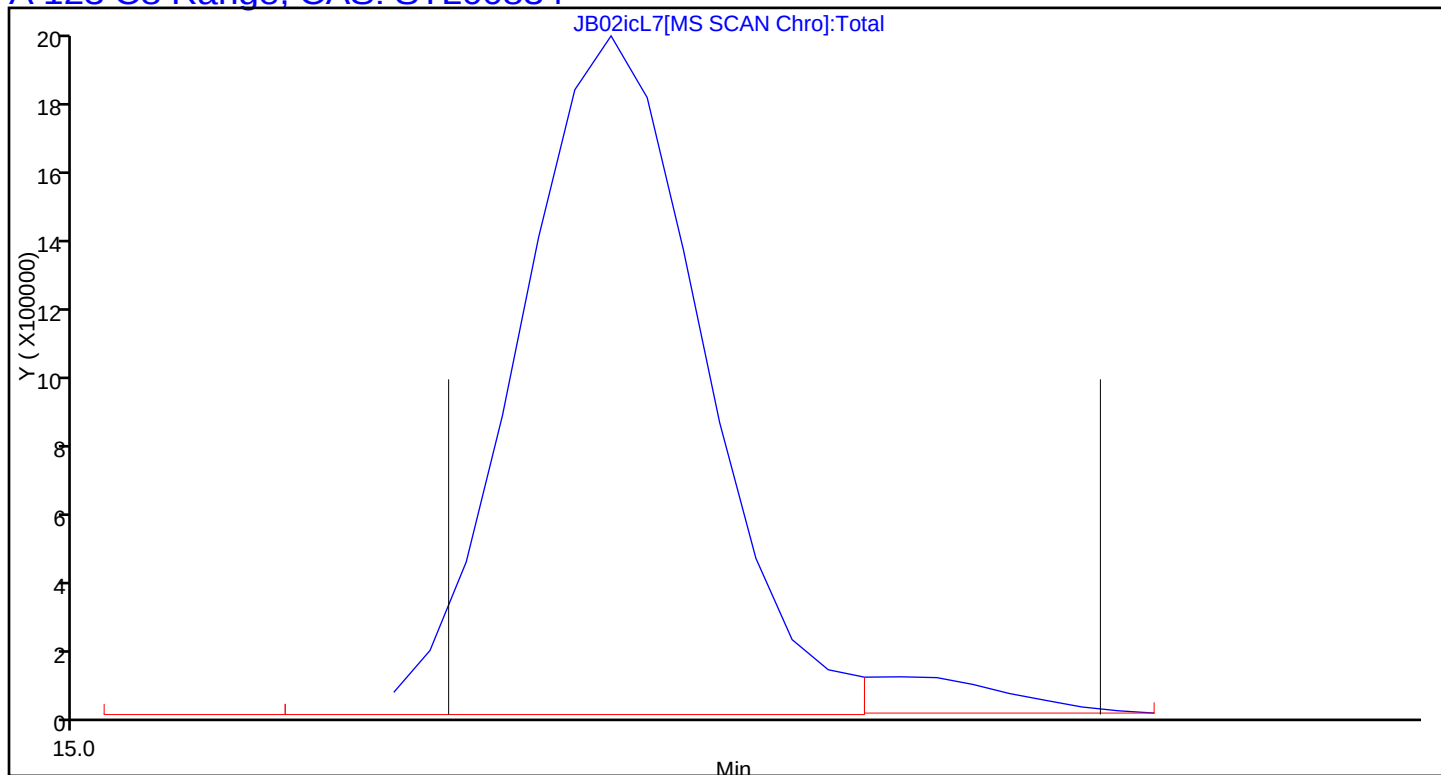
MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

A 123 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL8.D
 Lims ID: IC L8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 02-Feb-2015 19:10:30 ALS Bottle#: 15 Worklist Smp#: 9
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 023170,,1,8,,ICAL 8
 Misc. Info.: J020215I,TO15,,140-0001328-009
 Operator ID: 7126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub3
 Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Feb-2015 08:51:30 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: tajh

Date: 03-Feb-2015 10:18:51

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	9.598	9.593	0.005	96	289600	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.739	11.736	0.003	96	1330796	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.381	16.380	0.001	89	1260199	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.990	17.991	-0.001	90	908244	4.00	4.40	
6 Chlorodifluoromethane	67	4.019	4.021	-0.002	97	246192	8.00	7.03	
7 Propene	41	4.030	4.036	-0.006	99	858998	8.00	6.25	
8 Dichlorodifluoromethane	85	4.089	4.093	-0.004	99	2220880	8.00	6.81	
9 Chloromethane	52	4.305	4.302	0.003	60	290411	8.00	6.26	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.305	4.307	-0.002	91	1472653	8.00	6.90	
11 Acetaldehyde	44	4.477	4.476	0.001	99	1337471	40.0	33.5	
12 Vinyl chloride	62	4.498	4.497	0.001	99	861009	8.00	6.88	
13 Butane	43	4.595	4.597	-0.002	85	1376936	8.00	6.30	
14 Butadiene	54	4.595	4.598	-0.003	67	690799	8.00	6.95	
15 Bromomethane	94	4.966	4.968	-0.002	99	729644	8.00	6.87	
16 Chloroethane	64	5.128	5.127	0.001	94	372958	8.00	6.81	
17 Ethanol	31	5.224	5.223	0.001	96	1028478	40.0	25.5	
18 Vinyl bromide	106	5.472	5.470	0.002	99	641424	8.00	6.89	
19 2-Methylbutane	43	5.520	5.520	0.000	92	907660	8.00	6.18	
20 Trichlorofluoromethane	101	5.768	5.766	0.002	100	1970709	8.00	6.90	
21 Acrolein	56	5.779	5.774	0.005	94	207242	8.00	6.28	
22 Acetonitrile	40	5.848	5.850	-0.002	99	246422	8.00	7.09	
23 Acetone	58	5.897	5.899	-0.002	98	558708	24.0	15.0	
24 Isopropyl alcohol	45	5.983	5.979	0.004	97	2564747	24.0	17.1	
25 Pentane	72	6.010	6.005	0.006	97	119661	8.00	6.85	
26 Ethyl ether	31	6.177	6.184	-0.007	92	674189	8.00	6.62	
27 1,1-Dichloroethene	96	6.542	6.540	0.002	96	626243	8.00	6.81	
28 2-Methyl-2-propanol	59	6.623	6.627	-0.004	96	1077056	8.00	6.30	
29 Acrylonitrile	53	6.650	6.650	0.000	94	387279	8.00	7.52	
30 1,1,2-Trichloro-1,2,2-trif	101	6.725	6.722	0.003	96	1230455	8.00	6.40	
31 Methylene Chloride	84	6.919	6.915	0.004	97	536859	8.00	5.78	

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	6.930	6.930	0.000	94	515698	8.00	5.12	
33 Carbon disulfide	76	7.097	7.098	-0.001	99	2234586	8.00	6.89	
34 trans-1,2-Dichloroethene	96	7.774	7.774	0.000	95	651321	8.00	6.21	
35 2-Methylpentane	43	7.785	7.783	0.002	96	1647824	8.00	6.00	
36 Methyl tert-butyl ether	73	7.887	7.898	-0.011	97	1036143	8.00	5.87	
37 1,1-Dichloroethane	63	8.221	8.219	0.002	100	1121361	8.00	6.35	
38 Vinyl acetate	43	8.318	8.317	0.001	100	1184112	8.00	6.47	
39 2-Butanone (MEK)	72	8.780	8.788	-0.008	96	192577	8.00	5.58	
40 Hexane	56	8.813	8.811	0.002	91	574959	8.00	5.95	
139 Isopropyl ether	45	8.963	8.966	-0.003	97	1686677	8.00	5.71	
41 cis-1,2-Dichloroethene	96	9.248	9.246	0.002	97	571755	8.00	6.33	
42 Ethyl acetate	43	9.415	9.417	-0.002	98	1005122	8.00	5.97	
43 Chloroform	83	9.603	9.599	0.004	96	1135194	8.00	6.21	
142 Tert-butyl ethyl ether	59	9.663	9.667	-0.004	96	1330879	8.00	6.01	
44 Tetrahydrofuran	42	10.007	10.018	-0.011	95	560530	8.00	6.07	
45 1,1,1-Trichloroethane	97	10.647	10.643	0.004	97	1185383	8.00	6.18	
46 1,2-Dichloroethane	62	10.755	10.750	0.005	96	749644	8.00	6.76	
47 n-Butanol	31	11.137	11.144	-0.008	89	260136	8.00	6.46	
49 Cyclohexane	69	11.223	11.222	0.001	91	301035	8.00	5.93	
48 Benzene	78	11.228	11.226	0.002	98	1564537	8.00	6.36	
50 Carbon tetrachloride	117	11.249	11.247	0.002	98	1210447	8.00	6.67	
51 2,3-Dimethylpentane	71	11.319	11.320	-0.001	92	388956	8.00	6.21	
52 Thiophene	84	11.492	11.493	-0.001	97	924914	8.00	6.64	
140 Tert-amyl methyl ether	73	11.658	11.660	-0.002	96	1163690	8.00	5.89	
53 Isooctane	57	11.938	11.939	-0.001	97	2976164	8.00	6.09	
54 n-Heptane	71	12.298	12.295	0.003	94	566164	8.00	6.28	
55 1,2-Dichloropropane	63	12.406	12.405	0.001	91	611640	8.00	6.97	
56 Trichloroethene	130	12.438	12.437	0.001	96	661074	8.00	6.17	
57 Dibromomethane	93	12.530	12.528	0.002	96	666985	8.00	6.48	
59 Dichlorobromomethane	83	12.664	12.661	0.003	99	1204865	8.00	6.84	
58 1,4-Dioxane	88	12.659	12.670	-0.011	68	212876	8.00	6.15	
60 Methyl methacrylate	41	12.723	12.724	-0.001	94	621512	8.00	6.32	
61 Methylcyclohexane	83	13.186	13.185	0.001	92	1227126	8.00	6.15	
62 4-Methyl-2-pentanone (MIBK)	43	13.557	13.560	-0.003	98	1291012	8.00	6.38	
63 cis-1,3-Dichloropropene	75	13.633	13.630	0.003	97	817502	8.00	7.19	
64 trans-1,3-Dichloropropene	75	14.305	14.306	-0.001	99	715096	8.00	6.88	
65 Toluene	91	14.440	14.436	0.004	93	1522934	8.00	6.62	
66 1,1,2-Trichloroethane	83	14.509	14.507	0.002	98	510378	8.00	6.61	
67 2-Methylthiophene	97	14.590	14.588	0.002	98	1332270	8.00	6.66	
68 3-Methylthiophene	97	14.789	14.786	0.003	99	1313774	8.00	6.72	
69 2-Hexanone	58	14.864	14.866	-0.002	92	604250	8.00	6.58	
70 n-Octane	85	15.080	15.081	-0.001	96	573265	8.00	6.70	
71 Chlorodibromomethane	129	15.209	15.209	0.000	98	1114615	8.00	7.18	
72 Ethylene Dibromide	107	15.499	15.500	-0.001	98	892760	8.00	6.94	
73 Tetrachloroethene	129	15.564	15.561	0.003	97	619114	8.00	6.19	
74 2,3-Dimethylheptane	43	16.414	16.411	0.003	95	1916286	8.00	6.46	
75 Chlorobenzene	112	16.430	16.429	0.001	92	1206328	8.00	6.58	
76 Ethylbenzene	91	16.704	16.703	0.001	98	1731979	8.00	6.44	
77 2-Ethylthiophene	97	16.806	16.807	-0.001	98	1379714	8.00	6.65	
78 m-Xylene & p-Xylene	91	16.860	16.861	-0.001	98	2584852	16.0	11.9	
79 n-Nonane	57	17.248	17.245	0.003	94	1298235	8.00	7.18	
80 Styrene	104	17.328	17.326	0.002	99	1058356	8.00	6.93	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
81 Bromoform	173	17.328	17.328	0.000	96	999215	8.00	7.42	
82 o-Xylene	91	17.387	17.386	0.001	99	1417298	8.00	6.00	
83 1,1,2,2-Tetrachloroethane	83	17.705	17.704	0.001	99	1221582	8.00	6.60	
84 1,2,3-Trichloropropane	110	17.861	17.860	0.001	97	295930	8.00	6.94	
85 Isopropylbenzene	105	17.952	17.953	-0.001	97	1958677	8.00	6.35	
86 N-Propylbenzene	120	18.463	18.463	0.000	99	551761	8.00	6.69	
87 2-Chlorotoluene	126	18.517	18.517	0.000	98	546325	8.00	6.62	
88 4-Ethyltoluene	105	18.603	18.605	-0.002	98	1954170	8.00	6.56	
89 1,3,5-Trimethylbenzene	120	18.673	18.673	0.000	93	910938	8.00	6.43	
90 Alpha Methyl Styrene	118	18.899	18.896	0.003	86	863924	8.00	7.62	
91 n-Decane	57	18.926	18.925	0.001	89	1409402	8.00	6.84	
92 tert-Butylbenzene	119	19.082	19.083	-0.001	90	1718951	8.00	6.18	
93 1,2,4-Trimethylbenzene	105	19.098	19.097	0.001	96	1640694	8.00	6.44	
94 sec-Butylbenzene	105	19.340	19.341	-0.001	97	2384356	8.00	6.39	
95 1,3-Dichlorobenzene	146	19.367	19.370	-0.003	99	1021760	8.00	6.98	
96 Benzyl chloride	91	19.437	19.439	-0.002	98	1209361	8.00	7.08	
97 1,4-Dichlorobenzene	146	19.453	19.453	0.000	94	958044	8.00	7.07	
98 4-Isopropyltoluene	119	19.496	19.496	0.000	96	1937413	8.00	6.53	
99 1,2,3-Trimethylbenzene	105	19.555	19.554	0.001	98	1303753	8.00	6.39	
100 Butylcyclohexane	83	19.598	19.597	0.001	89	1502351	8.00	6.84	
101 2,3-Dihydroindene	117	19.797	19.799	-0.002	94	1532701	8.00	6.72	
102 1,2-Dichlorobenzene	146	19.803	19.805	-0.002	95	1003547	8.00	6.94	
103 n-Butylbenzene	91	19.916	19.916	0.000	99	1829707	8.00	6.80	
104 Indene	116	19.927	19.927	0.000	93	1135584	8.00	7.48	
105 Undecane	57	20.196	20.195	0.001	96	1412079	8.00	6.55	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.276	20.278	-0.002	98	1469826	8.00	6.73	
141 1,2-Dibromo-3-Chloropropan	157	20.395	20.393	0.002	96	441219	8.00	7.33	
108 1,2,4,5-Tetramethylbenzene	119	20.669	20.668	0.001	97	1760180	8.00	6.53	
107 1,2,3,5-Tetramethylbenzene	119	20.728	20.725	0.003	95	1091723	8.00	6.48	
109 1,2,3,4-Tetramethylbenzene	119	21.148	21.147	0.001	98	1424220	8.00	6.54	
110 Dodecane	57	21.282	21.282	0.000	94	1237355	8.00	6.45	
111 1,2,4-Trichlorobenzene	180	21.524	21.525	-0.001	94	482865	8.00	8.28	
112 Naphthalene	128	21.653	21.655	-0.002	99	1029922	8.00	7.90	
113 Benzo(b)thiophene	134	21.739	21.741	-0.002	99	513760	8.00	7.97	
114 Hexachlorobutadiene	225	21.809	21.810	-0.001	96	751618	8.00	6.72	
115 1,2,3-Trichlorobenzene	180	21.869	21.872	-0.003	95	399699	8.00	7.76	
116 2-Methylnaphthalene	142	22.401	22.402	-0.001	99	314249	25.0	23.1	
117 1-Methylnaphthalene	142	22.530	22.528	0.002	99	378573	25.0	26.2	
A 118 C6 Range	1	8.807	(8.732-8.883)		0	6416009	8.00	5.78	
A 122 Toluene Range	1	14.440	(14.410-14.470)		0	3748206	8.00	6.64	
A 123 C8 Range	1	15.104	(15.056-15.152)		0	5917096	8.00	6.38	
S 124 Xylenes, Total	100				0		24.0	17.9	
S 144 1,2-Dichloroethene, Total	1				0			12.5	

Reagents:

CBN2C00X40_00001

Amount Added: 100.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL8.D

Injection Date: 02-Feb-2015 19:10:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: IC L8

Worklist Smp#: 9

Client ID:

Purge Vol: 500.000 mL

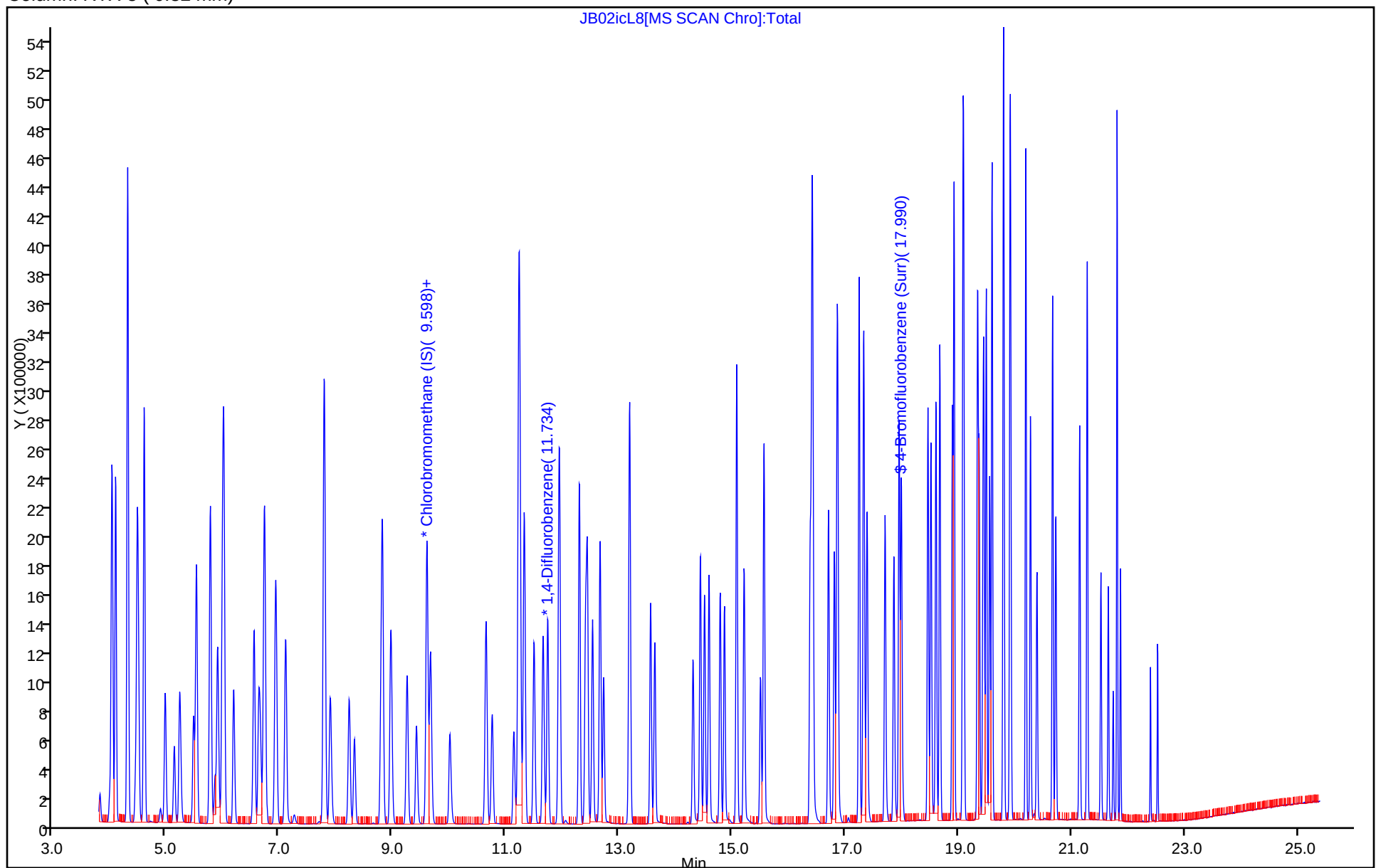
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL8.D

Injection Date: 02-Feb-2015 19:10:30

Instrument ID: MJ

Lims ID: IC L8

Client ID:

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 9

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

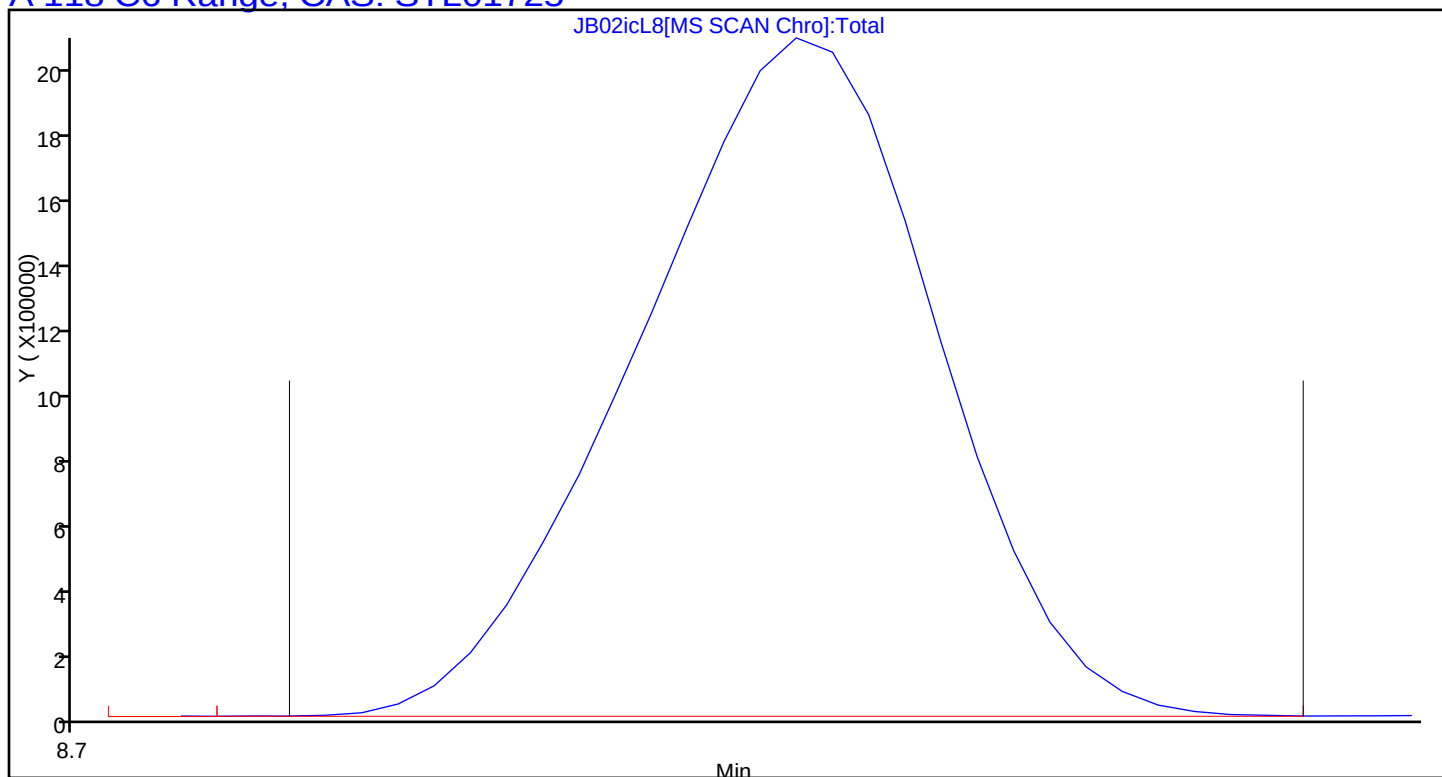
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL8.D

Injection Date: 02-Feb-2015 19:10:30

Instrument ID: MJ

Lims ID: IC L8

Client ID:

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 9

Purge Vol: 500.000 mL

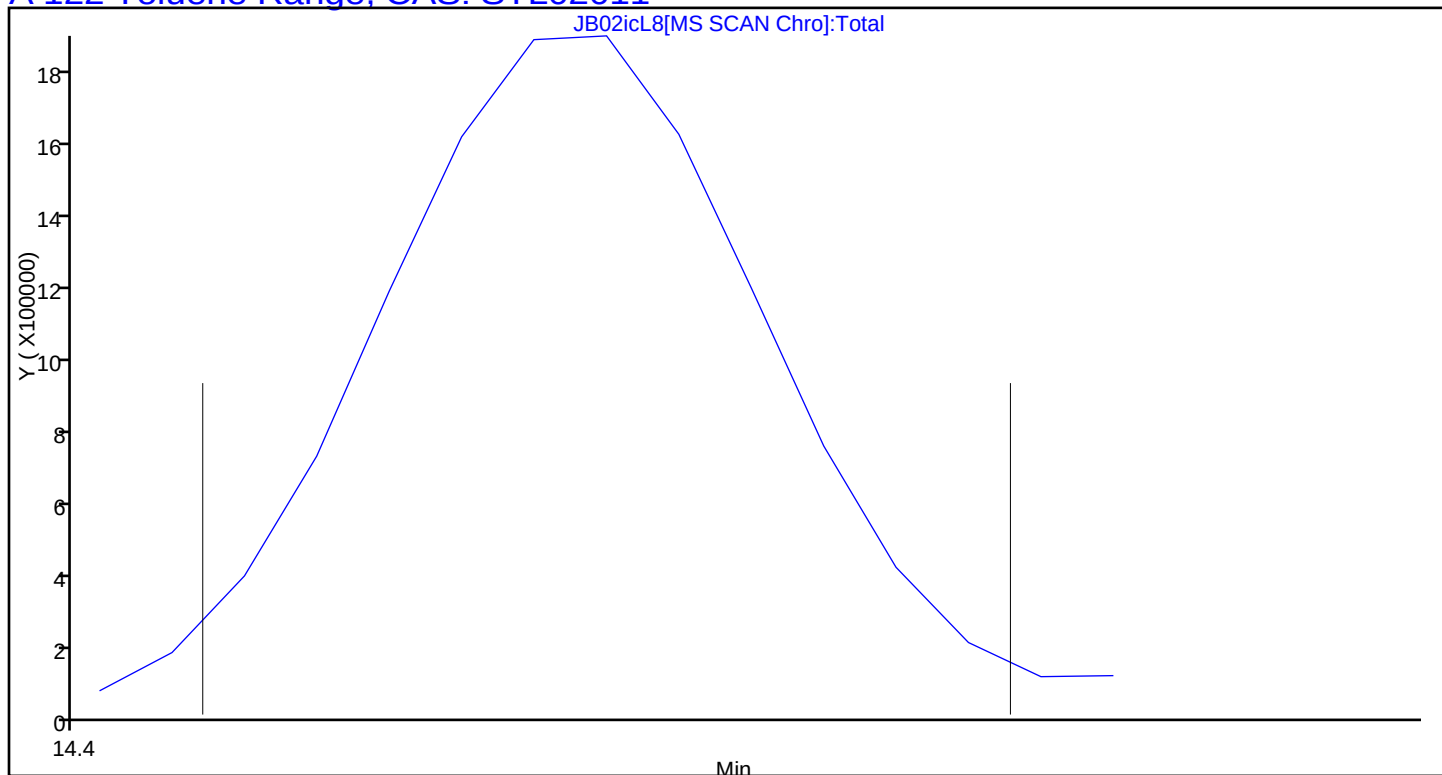
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL8.D

Injection Date: 02-Feb-2015 19:10:30

Instrument ID: MJ

Lims ID: IC L8

Client ID:

Operator ID: 7126

ALS Bottle#:

15

Worklist Smp#:

9

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MJ_TO15

Limit Group:

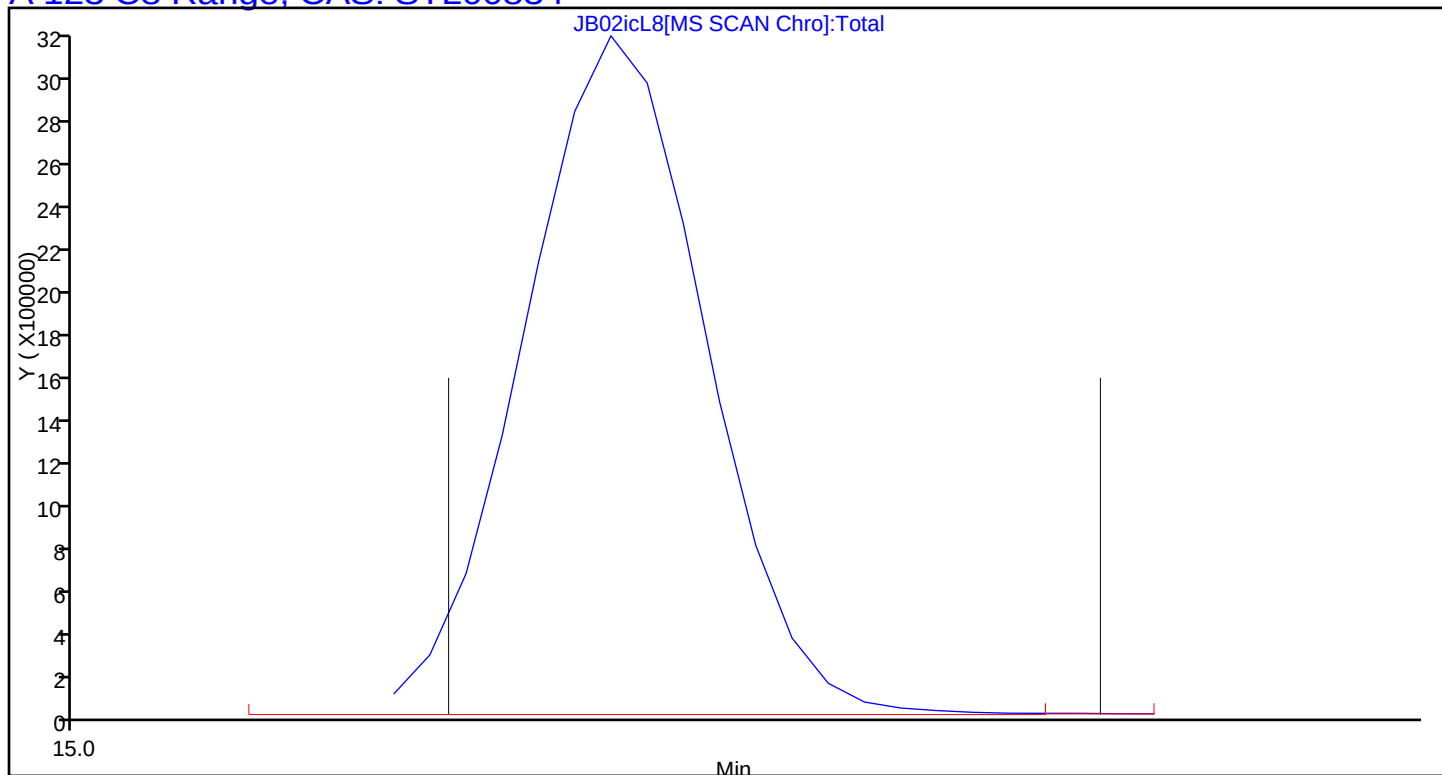
MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

A 123 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Lims ID: IC L9
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 02-Feb-2015 20:05:30 ALS Bottle#: 15 Worklist Smp#: 10
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 023170,,1,9,,ICAL 16
 Misc. Info.: J020215I,TO15,,140-0001328-010
 Operator ID: 7126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub3
 Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Feb-2015 08:51:33 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: tajh

Date: 03-Feb-2015 10:19:25

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	9.604	9.593	0.011	95	281493	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.740	11.736	0.004	96	1328201	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.382	16.380	0.002	89	1296640	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.996	17.991	0.005	90	926977	4.00	4.37	
6 Chlorodifluoromethane	67	4.020	4.021	-0.001	97	456091	16.0	13.4	
7 Propene	41	4.036	4.036	0.000	99	1565043	16.0	11.7	
8 Dichlorodifluoromethane	85	4.095	4.093	0.002	98	4023663	16.0	12.7	
9 Chloromethane	52	4.305	4.302	0.003	62	533733	16.0	11.8	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.311	4.307	0.004	89	2732986	16.0	13.2	
11 Acetaldehyde	44	4.477	4.476	0.001	97	2684944	80.0	69.1	
12 Vinyl chloride	62	4.499	4.497	0.002	98	1612356	16.0	13.3	
13 Butane	43	4.601	4.597	0.004	85	2526819	16.0	11.9	
14 Butadiene	54	4.601	4.598	0.003	69	1287411	16.0	13.3	
15 Bromomethane	94	4.972	4.968	0.004	99	1405706	16.0	13.6	
16 Chloroethane	64	5.134	5.127	0.007	96	731868	16.0	13.7	
17 Ethanol	31	5.236	5.223	0.013	95	2118175	80.0	54.1	
18 Vinyl bromide	106	5.472	5.470	0.002	99	1259030	16.0	13.9	
19 2-Methylbutane	43	5.521	5.520	0.001	91	1746402	16.0	12.2	
20 Trichlorofluoromethane	101	5.768	5.766	0.002	100	3654003	16.0	13.2	
21 Acrolein	56	5.779	5.774	0.005	93	464276	16.0	14.5	
22 Acetonitrile	40	5.854	5.850	0.004	99	535163	16.0	15.8	
23 Acetone	58	5.897	5.899	-0.002	98	1191572	48.0	32.9	
24 Isopropyl alcohol	45	6.000	5.979	0.021	94	5129253	48.0	35.1	
25 Pentane	72	6.010	6.005	0.006	98	231477	16.0	13.6	
26 Ethyl ether	31	6.183	6.184	-0.001	92	1310999	16.0	13.2	
27 1,1-Dichloroethene	96	6.543	6.540	0.003	96	1223778	16.0	13.7	
28 2-Methyl-2-propanol	59	6.645	6.627	0.018	96	2277047	16.0	13.7	
29 Acrylonitrile	53	6.656	6.650	0.006	94	840602	16.0	16.8	
30 1,1,2-Trichloro-1,2,2-trif	101	6.726	6.722	0.004	95	2470886	16.0	13.2	
31 Methylene Chloride	84	6.920	6.915	0.005	98	1081220	16.0	12.0	

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	6.936	6.930	0.006	94	1034161	16.0	10.6	
33 Carbon disulfide	76	7.102	7.098	0.004	99	4177657	16.0	13.2	
34 trans-1,2-Dichloroethene	96	7.780	7.774	0.006	95	1277566	16.0	12.5	
35 2-Methylpentane	43	7.791	7.783	0.008	95	3261067	16.0	12.2	
36 Methyl tert-butyl ether	73	7.893	7.898	-0.005	97	2121045	16.0	12.4	
37 1,1-Dichloroethane	63	8.227	8.219	0.008	100	2245258	16.0	13.1	
38 Vinyl acetate	43	8.324	8.317	0.007	100	2481272	16.0	13.9	
39 2-Butanone (MEK)	72	8.786	8.788	-0.002	96	405025	16.0	12.1	
40 Hexane	56	8.813	8.811	0.002	91	1180131	16.0	12.6	
139 Isopropyl ether	45	8.964	8.966	-0.002	99	3332719	16.0	11.6	
41 cis-1,2-Dichloroethene	96	9.254	9.246	0.008	97	1146045	16.0	13.1	
42 Ethyl acetate	43	9.421	9.417	0.004	98	2099963	16.0	12.8	
43 Chloroform	83	9.609	9.599	0.010	97	2255531	16.0	12.7	
142 Tert-butyl ethyl ether	59	9.668	9.667	0.001	97	2669450	16.0	12.4	
44 Tetrahydrofuran	42	10.007	10.018	-0.011	94	1215789	16.0	13.5	
45 1,1,1-Trichloroethane	97	10.648	10.643	0.005	97	2323629	16.0	12.5	
46 1,2-Dichloroethane	62	10.761	10.750	0.010	96	1489491	16.0	13.5	
47 n-Butanol	31	11.148	11.144	0.004	89	577894	16.0	14.4	
49 Cyclohexane	69	11.223	11.222	0.001	93	574799	16.0	11.3	
48 Benzene	78	11.234	11.226	0.008	99	2960278	16.0	12.1	
50 Carbon tetrachloride	117	11.250	11.247	0.003	98	2367862	16.0	13.1	
51 2,3-Dimethylpentane	71	11.325	11.320	0.005	92	781028	16.0	12.5	
52 Thiophene	84	11.497	11.493	0.004	97	1858435	16.0	13.4	
140 Tert-amyl methyl ether	73	11.659	11.660	-0.001	95	2393639	16.0	11.8	
53 Isooctane	57	11.944	11.939	0.005	96	5653514	16.0	11.6	
54 n-Heptane	71	12.299	12.295	0.004	94	1129883	16.0	12.6	
55 1,2-Dichloropropane	63	12.412	12.405	0.007	90	1229456	16.0	14.0	
56 Trichloroethene	130	12.444	12.437	0.007	95	1311549	16.0	12.3	
57 Dibromomethane	93	12.536	12.528	0.008	96	1348312	16.0	13.1	
59 Dichlorobromomethane	83	12.665	12.661	0.004	99	2369348	16.0	13.5	
58 1,4-Dioxane	88	12.665	12.670	-0.005	41	455676	16.0	13.2	
60 Methyl methacrylate	41	12.729	12.724	0.005	94	1310001	16.0	13.3	
61 Methylcyclohexane	83	13.187	13.185	0.002	91	2372870	16.0	11.9	
62 4-Methyl-2-pentanone (MIBK)	43	13.563	13.560	0.003	98	2730173	16.0	13.5	
63 cis-1,3-Dichloropropene	75	13.633	13.630	0.003	96	1661597	16.0	14.6	
64 trans-1,3-Dichloropropene	75	14.311	14.306	0.005	99	1514639	16.0	14.2	
65 Toluene	91	14.440	14.436	0.004	94	3023734	16.0	12.8	
66 1,1,2-Trichloroethane	83	14.515	14.507	0.008	98	1028843	16.0	13.0	
67 2-Methylthiophene	97	14.596	14.588	0.008	97	2724049	16.0	13.2	
68 3-Methylthiophene	97	14.790	14.786	0.004	98	2672064	16.0	13.3	
69 2-Hexanone	58	14.870	14.866	0.004	93	1358936	16.0	14.4	
70 n-Octane	85	15.086	15.081	0.005	94	1137688	16.0	12.9	
71 Chlorodibromomethane	129	15.215	15.209	0.006	97	2263093	16.0	14.2	
72 Ethylene Dibromide	107	15.505	15.500	0.005	98	1876913	16.0	14.2	
73 Tetrachloroethene	129	15.564	15.561	0.003	96	1260721	16.0	12.2	
74 2,3-Dimethylheptane	43	16.414	16.411	0.003	95	3477383	16.0	11.4	
75 Chlorobenzene	112	16.436	16.429	0.007	93	2452735	16.0	13.0	
76 Ethylbenzene	91	16.705	16.703	0.002	98	3517516	16.0	12.7	
77 2-Ethylthiophene	97	16.812	16.807	0.005	98	2855581	16.0	13.4	
78 m-Xylene & p-Xylene	91	16.866	16.861	0.005	96	5144380	32.0	23.1	
79 n-Nonane	57	17.248	17.245	0.003	92	2529868	16.0	13.6	
80 Styrene	104	17.329	17.326	0.003	99	2188134	16.0	13.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
81 Bromoform	173	17.334	17.328	0.006	96	2141767	16.0	15.5	
82 o-Xylene	91	17.393	17.386	0.007	100	2908413	16.0	12.0	
83 1,1,2,2-Tetrachloroethane	83	17.711	17.704	0.007	99	2559502	16.0	13.4	
84 1,2,3-Trichloropropane	110	17.867	17.860	0.007	97	647877	16.0	14.8	
85 Isopropylbenzene	105	17.958	17.953	0.005	97	3945641	16.0	12.4	
86 N-Propylbenzene	120	18.469	18.463	0.006	98	1209554	16.0	14.2	
87 2-Chlorotoluene	126	18.523	18.517	0.006	97	1162874	16.0	13.7	
88 4-Ethyltoluene	105	18.609	18.605	0.004	96	4061702	16.0	13.3	
89 1,3,5-Trimethylbenzene	120	18.679	18.673	0.006	93	1948422	16.0	13.4	
90 Alpha Methyl Styrene	118	18.900	18.896	0.004	86	1904974	16.0	16.3	
91 n-Decane	57	18.932	18.925	0.007	92	2756738	16.0	13.0	
92 tert-Butylbenzene	119	19.088	19.083	0.005	93	3627062	16.0	12.7	
93 1,2,4-Trimethylbenzene	105	19.104	19.097	0.007	95	3413188	16.0	13.0	
94 sec-Butylbenzene	105	19.346	19.341	0.005	96	4833755	16.0	12.6	
95 1,3-Dichlorobenzene	146	19.373	19.370	0.003	98	2282246	16.0	15.2	
96 Benzyl chloride	91	19.443	19.439	0.004	98	2793035	16.0	15.9	
97 1,4-Dichlorobenzene	146	19.459	19.453	0.006	93	2174777	16.0	15.6	
98 4-Isopropyltoluene	119	19.497	19.496	0.001	94	4005716	16.0	13.1	
99 1,2,3-Trimethylbenzene	105	19.561	19.554	0.007	98	2761285	16.0	13.1	
100 Butylcyclohexane	83	19.599	19.597	0.002	90	2918010	16.0	12.9	
101 2,3-Dihydroindene	117	19.803	19.799	0.004	94	3201210	16.0	13.7	
102 1,2-Dichlorobenzene	146	19.809	19.805	0.004	94	2199254	16.0	14.8	
103 n-Butylbenzene	91	19.916	19.916	0.000	99	3818089	16.0	13.8	
104 Indene	116	19.933	19.927	0.005	89	2486930	16.0	15.9	
105 Undecane	57	20.196	20.195	0.001	96	2991407	16.0	13.5	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.282	20.278	0.004	98	3185170	16.0	14.2	
141 1,2-Dibromo-3-Chloropropan	157	20.395	20.393	0.002	97	1086555	16.0	17.5	
108 1,2,4,5-Tetramethylbenzene	119	20.669	20.668	0.001	98	3777909	16.0	13.6	
107 1,2,3,5-Tetramethylbenzene	119	20.729	20.725	0.004	96	2390272	16.0	13.8	
109 1,2,3,4-Tetramethylbenzene	119	21.148	21.147	0.001	98	3147228	16.0	14.0	
110 Dodecane	57	21.283	21.282	0.001	95	2794574	16.0	14.2	
111 1,2,4-Trichlorobenzene	180	21.525	21.525	0.000	95	1327570	16.0	22.1	
112 Naphthalene	128	21.654	21.655	-0.001	98	2564117	16.0	19.1	
113 Benzo(b)thiophene	134	21.740	21.741	-0.001	99	1444640	16.0	21.8	
114 Hexachlorobutadiene	225	21.810	21.810	0.000	95	1731386	16.0	15.0	
115 1,2,3-Trichlorobenzene	180	21.874	21.872	0.002	95	1088532	16.0	20.6	
116 2-Methylnaphthalene	142	22.402	22.402	0.000	99	937834	50.0	67.0	
117 1-Methylnaphthalene	142	22.525	22.528	-0.003	99	1028106	50.0	69.2	
A 118 C6 Range	1	8.814	(8.738-8.910)		0	13006005	16.0	12.1	
A 122 Toluene Range	1	14.440	(14.410-14.470)		0	7607152	16.0	13.1	
A 123 C8 Range	1	15.104	(15.056-15.152)		0	11525806	16.0	12.1	
S 124 Xylenes, Total	100				0		48.0	35.1	
S 144 1,2-Dichloroethene, Total	1				0			25.6	

Reagents:

CBN2C00X40_00001

Amount Added: 200.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D

Injection Date: 02-Feb-2015 20:05:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: IC L9

Worklist Smp#: 10

Client ID:

Purge Vol: 500.000 mL

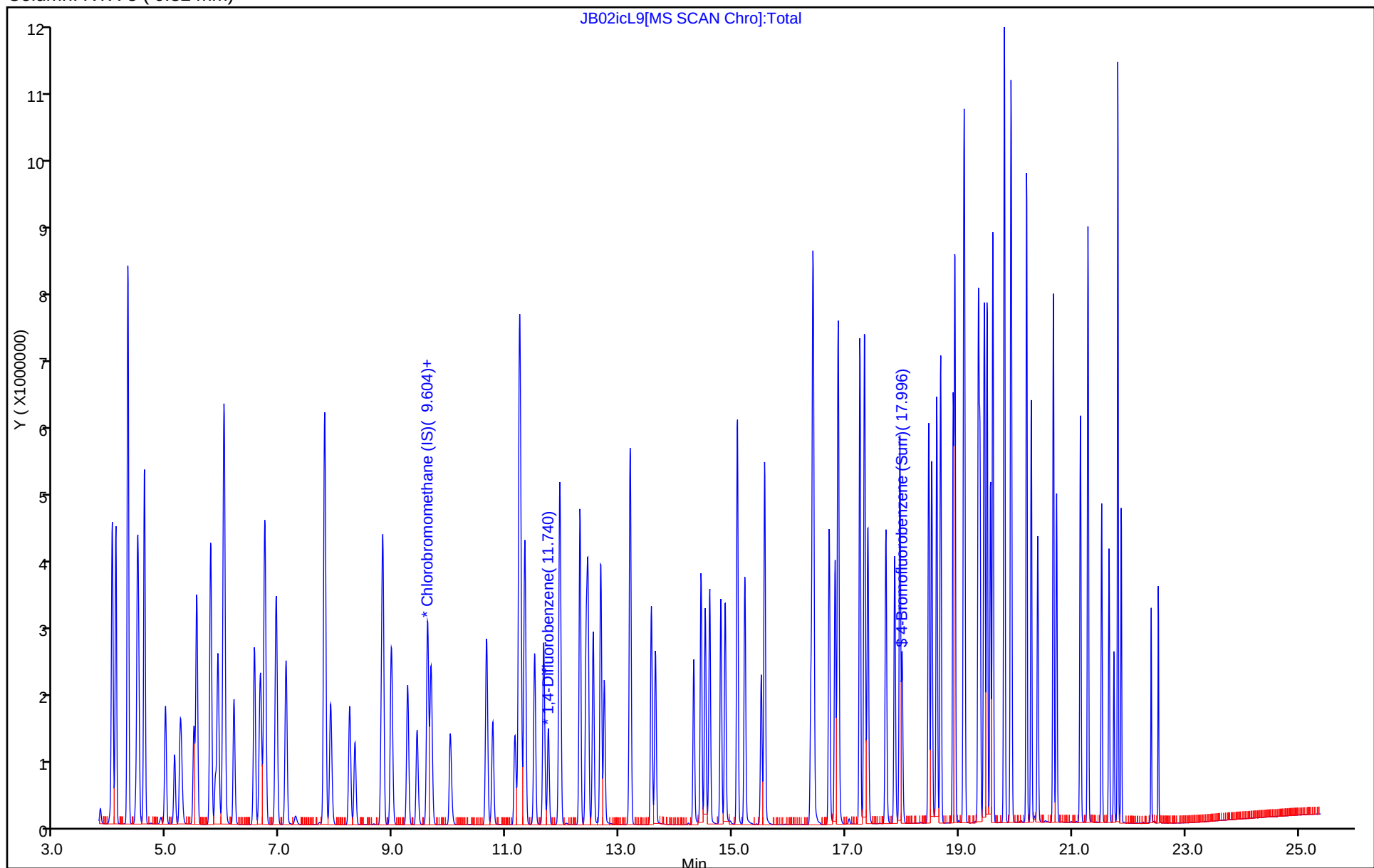
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D

Injection Date: 02-Feb-2015 20:05:30

Instrument ID: MJ

Lims ID: IC L9

Client ID:

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 10

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

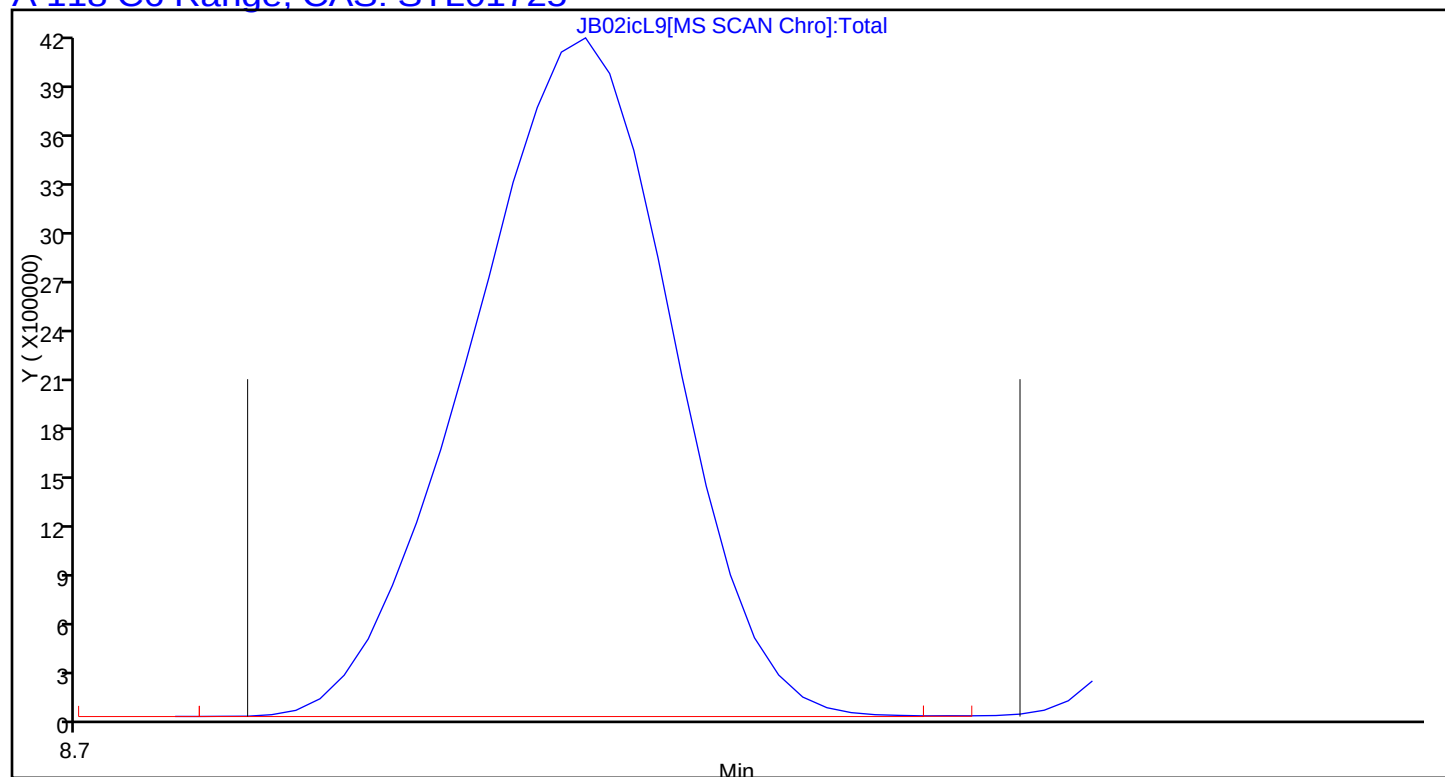
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 118 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D

Injection Date: 02-Feb-2015 20:05:30

Instrument ID: MJ

Lims ID: IC L9

Client ID:

Operator ID: 7126

ALS Bottle#:

15

Worklist Smp#:

10

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MJ_TO15

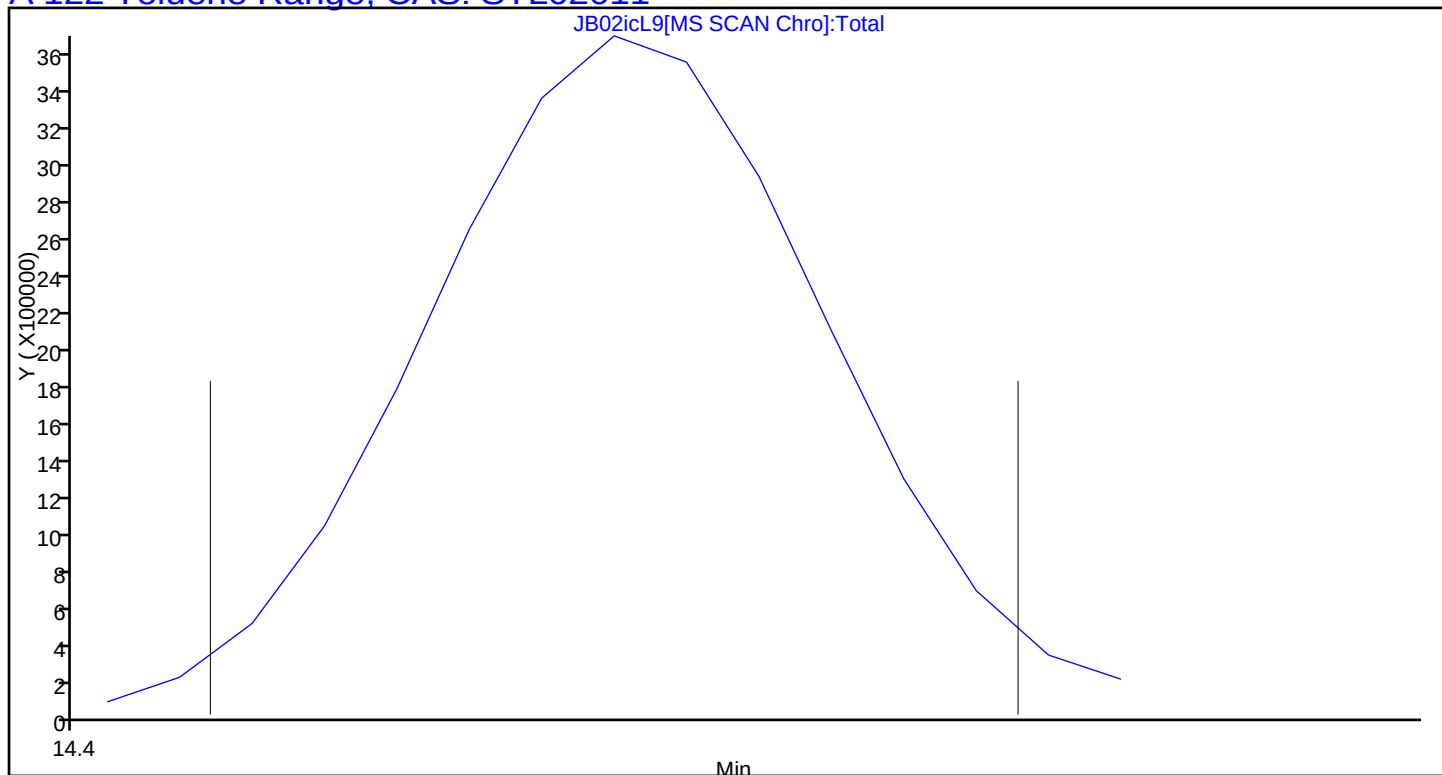
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

A 122 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D

Injection Date: 02-Feb-2015 20:05:30

Instrument ID: MJ

Lims ID: IC L9

Client ID:

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 10

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

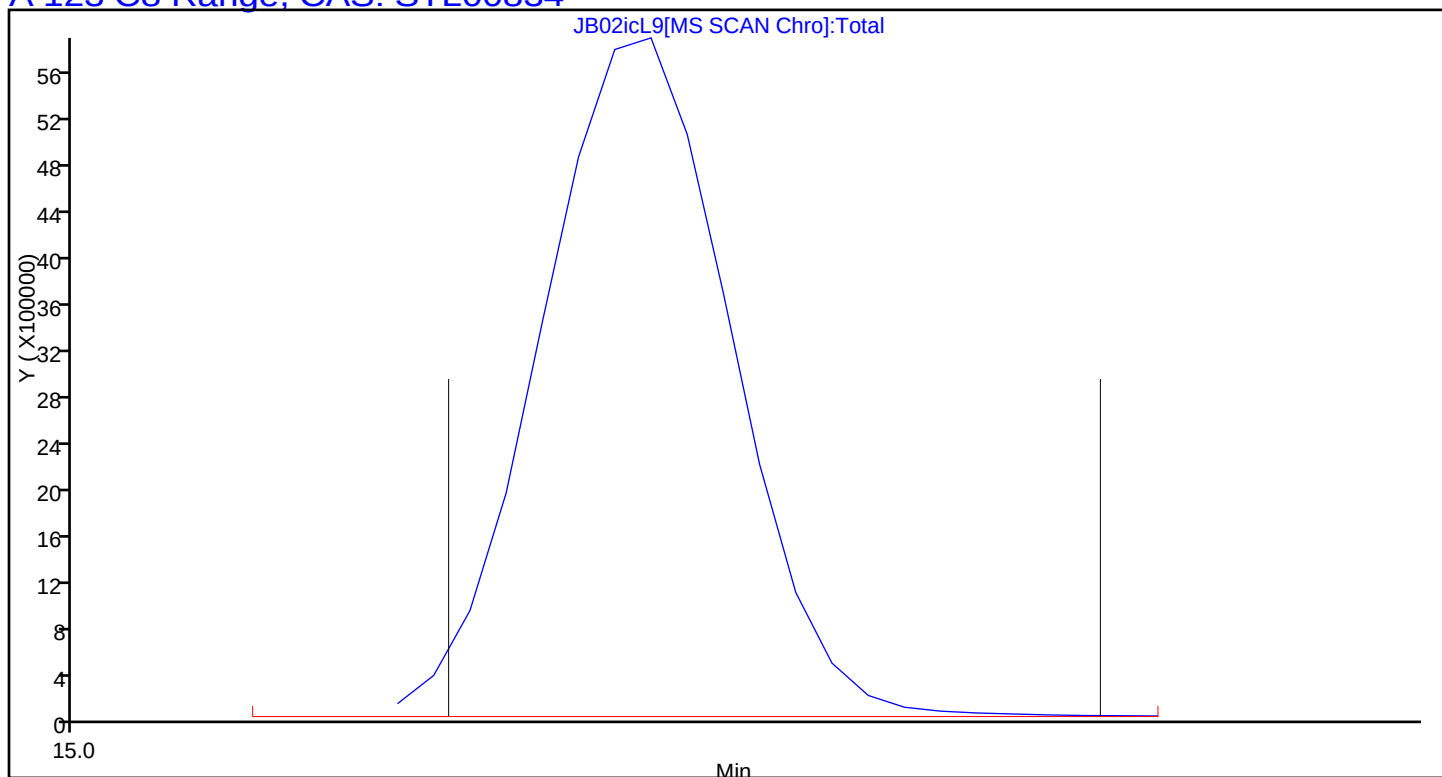
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 123 C8 Range, CAS: STL00834



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1

SDG No.: _____

Lab Sample ID: ICV 140-2321/13 Calibration Date: 02/02/2015 22:48

Instrument ID: MJ Calib Start Date: 02/02/2015 12:48

GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 02/02/2015 20:05

Lab File ID: JB02LCS.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	0.4836	0.4126		3.41	4.00	-14.7	35.0
Propene	Ave	1.897	1.570		3.31	4.00	-17.3	35.0
Dichlorodifluoromethane	Ave	4.503	3.893		3.46	4.00	-13.5	35.0
1,2-Dichlorotetrafluoroethane	Ave	2.950	2.466		3.34	4.00	-16.4	35.0
Chloromethane	Ave	0.6404	0.5103		3.19	4.00	-20.3	35.0
Acetaldehyde	Ave	0.5522	0.3967		14.4	20.0	-28.2	80.0
Vinyl chloride	Ave	1.728	1.496		3.46	4.00	-13.4	35.0
1,3-Butadiene	Ave	1.372	1.214		3.54	4.00	-11.5	35.0
Butane	Ave	3.020	2.451		3.25	4.00	-18.9	35.0
Bromomethane	Ave	1.466	1.218		3.32	4.00	-17.0	35.0
Chloroethane	Ave	0.7569	0.6347		3.35	4.00	-16.1	35.0
Ethanol	Ave	0.5564	0.4142		14.9	20.0	-25.6	80.0
Vinyl bromide	Ave	1.285	1.166		3.63	4.00	-9.3	35.0
2-Methylbutane	Ave	2.029	1.621		3.20	4.00	-20.1	35.0
Trichlorofluoromethane	Ave	3.943	3.367		3.42	4.00	-14.6	35.0
Acrolein	Ave	0.4559	0.3491		3.06	4.00	-23.4	35.0
Acetonitrile	Ave	0.4803	0.4487		3.74	4.00	-6.6	35.0
Acetone	Ave	0.5147	0.3763		8.77	12.0	-26.9	35.0
Isopropyl alcohol	Ave	2.074	1.800		10.4	12.0	-13.2	35.0
Pentane	Ave	0.2413	0.2096		3.47	4.00	-13.1	35.0
Ethyl ether	Ave	1.407	1.117		3.18	4.00	-20.6	35.0
1,1-Dichloroethene	Ave	1.271	1.278		4.02	4.00	0.6	35.0
t-Butyl alcohol	Ave	2.362	2.097		3.55	4.00	-11.2	35.0
Acrylonitrile	Ave	0.7116	0.7084		3.98	4.00	-0.5	35.0
1,1,2-Trichlorotrifluoroethane	Ave	2.653	2.675		4.03	4.00	0.8	35.0
Methylene Chloride	Ave	1.282	1.165		3.63	4.00	-9.2	35.0
3-Chloropropene	Ave	1.392	0.9824		2.82	4.00	-29.4	35.0
Carbon disulfide	Ave	4.481	3.854		3.44	4.00	-14.0	35.0
trans-1,2-Dichloroethene	Ave	1.449	1.243		3.43	4.00	-14.2	35.0
2-Methylpentane	Ave	3.796	3.441		3.63	4.00	-9.3	80.0
Methyl tert-butyl ether	Ave	2.439	2.117		3.47	4.00	-13.2	35.0
1,1-Dichloroethane	Ave	2.437	2.240		3.68	4.00	-8.1	35.0
Vinyl acetate	Ave	2.529	2.366		3.74	4.00	-6.4	35.0
2-Butanone	Ave	0.4763	0.3960		3.33	4.00	-16.9	35.0
Hexane	Ave	1.334	1.077		3.23	4.00	-19.2	35.0
Isopropyl ether	Ave	4.081	3.512		3.44	4.00	-14.0	
cis-1,2-Dichloroethene	Ave	1.248	1.159		3.72	4.00	-7.1	35.0
Ethyl acetate	Ave	2.326	1.996		3.43	4.00	-14.2	35.0
Chloroform	Ave	2.525	2.246		3.56	4.00	-11.0	35.0
Tert-butyl ethyl ether	Ave	3.060	2.597		3.39	4.00	-15.1	

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Lab Sample ID: ICV 140-2321/13 Calibration Date: 02/02/2015 22:48
 Instrument ID: MJ Calib Start Date: 02/02/2015 12:48
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 02/02/2015 20:05
 Lab File ID: JB02LCS.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	1.276	1.083		3.39	4.00	-15.1	35.0
1,1,1-Trichloroethane	Ave	2.647	2.372		3.58	4.00	-10.4	35.0
1,2-Dichloroethane	Ave	0.3332	0.3055		3.67	4.00	-8.3	35.0
1-Butanol	Ave	0.1210	0.1160		3.83	4.00	-4.1	35.0
Cyclohexane	Ave	0.1527	0.1242		3.25	4.00	-18.7	35.0
Benzene	Ave	0.7389	0.6515		3.53	4.00	-11.8	35.0
Carbon tetrachloride	Ave	0.5452	0.5314		3.90	4.00	-2.5	35.0
2,3-Dimethylpentane	Ave	0.1882	0.1402		2.98	4.00	-25.5	80.0
Thiophene	Ave	0.4185	0.3732		3.57	4.00	-10.8	80.0
Tert-amyl methyl ether	Ave	0.6267	0.5606		3.58	4.00	-10.5	
2,2,4-Trimethylpentane	Ave	1.469	1.190		3.24	4.00	-19.0	35.0
Heptane	Ave	0.2709	0.2201		3.25	4.00	-18.8	35.0
1,2-Dichloropropane	Ave	0.2638	0.2419		3.67	4.00	-8.3	35.0
Trichloroethene	Ave	0.3218	0.2692		3.35	4.00	-16.4	35.0
Dibromomethane	Ave	0.3095	0.2642		3.41	4.00	-14.7	35.0
1,4-Dioxane	Ave	0.1041	0.0877		3.37	4.00	-15.7	35.0
Bromodichloromethane	Ave	0.5294	0.4652		3.51	4.00	-12.1	35.0
Methyl methacrylate	Ave	0.2956	0.2482		3.36	4.00	-16.0	35.0
Methylcyclohexane	Ave	0.6002	0.3949		2.63	4.00	-34.2	80.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6078	0.5211		3.43	4.00	-14.3	35.0
cis-1,3-Dichloropropene	Ave	0.3416	0.3411		3.99	4.00	-0.1	35.0
trans-1,3-Dichloropropene	Ave	0.3301	0.2907		3.52	4.00	-11.9	35.0
Toluene	Ave	0.7298	0.6669		3.65	4.00	-8.6	35.0
1,1,2-Trichloroethane	Ave	0.2451	0.2096		3.42	4.00	-14.5	35.0
2-Methylthiophene	Ave	0.6347	0.5701		3.59	4.00	-10.2	80.0
3-Methylthiophene	Ave	0.6208	0.5746		3.70	4.00	-7.4	80.0
2-Hexanone	Ave	0.2914	0.2648		3.63	4.00	-9.1	35.0
Octane	Ave	0.2716	0.2389		3.52	4.00	-12.0	35.0
Dibromochloromethane	Ave	0.4924	0.4650		3.78	4.00	-5.6	35.0
1,2-Dibromoethane	Ave	0.4084	0.3691		3.61	4.00	-9.6	35.0
Tetrachloroethene	Ave	0.3177	0.2679		3.37	4.00	-15.7	35.0
2,3-Dimethylheptane	Ave	0.9422	0.8392		3.56	4.00	-10.9	80.0
Chlorobenzene	Ave	0.5818	0.5133		3.53	4.00	-11.8	35.0
Ethylbenzene	Ave	0.8533	0.7630		3.58	4.00	-10.6	35.0
2-Ethylthiophene	Ave	0.6581	0.5616		3.41	4.00	-14.7	80.0
m-Xylene & p-Xylene	Ave	0.6874	0.5779		6.73	8.00	-15.9	35.0
Nonane	Ave	0.5741	0.5262		3.67	4.00	-8.3	35.0
Styrene	Ave	0.4844	0.4643		3.83	4.00	-4.1	35.0
Bromoform	Ave	0.4272	0.4028		3.77	4.00	-5.7	35.0
o-Xylene	Ave	0.7498	0.6129		3.27	4.00	-18.2	35.0
1,1,2,2-Tetrachloroethane	Ave	0.5876	0.5208		3.55	4.00	-11.4	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Lab Sample ID: ICV 140-2321/13 Calibration Date: 02/02/2015 22:48
 Instrument ID: MJ Calib Start Date: 02/02/2015 12:48
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 02/02/2015 20:05
 Lab File ID: JB02LCS.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
1,2,3-Trichloropropane	Ave	0.1354	0.1240		3.66	4.00	-8.5	35.0
Isopropylbenzene	Ave	0.9791	0.8538		3.49	4.00	-12.8	35.0
Propylbenzene	Ave	0.2619	0.2355		3.60	4.00	-10.1	35.0
2-Chlorotoluene	Ave	0.2620	0.2281		3.48	4.00	-12.9	35.0
4-Ethyltoluene	Ave	0.9456	0.8003		3.39	4.00	-15.4	35.0
1,3,5-Trimethylbenzene	Ave	0.4499	0.4042		3.59	4.00	-10.2	35.0
Alpha Methyl Styrene	Ave	0.3600	0.3633		4.04	4.00	0.9	35.0
Decane	Ave	0.6538	0.5959		3.65	4.00	-8.9	35.0
tert-Butylbenzene	Ave	0.8830	0.7626		3.45	4.00	-13.6	35.0
1,2,4-Trimethylbenzene	Ave	0.8081	0.7271		3.60	4.00	-10.0	35.0
sec-Butylbenzene	Ave	1.185	1.059		3.57	4.00	-10.7	35.0
1,3-Dichlorobenzene	Ave	0.4646	0.4264		3.67	4.00	-8.2	35.0
Benzyl chloride	Ave	0.5422	0.5311		3.92	4.00	-2.1	35.0
1,4-Dichlorobenzene	Ave	0.4299	0.3961		3.69	4.00	-7.9	35.0
4-Isopropyltoluene	Ave	0.9422	0.8552		3.63	4.00	-9.2	35.0
1,2,3-Trimethylbenzene	Ave	0.6481	0.5970		3.68	4.00	-7.9	80.0
Butylcyclohexane	Ave	0.6972	0.5965		3.42	4.00	-14.5	80.0
1,2-Dichlorobenzene	Ave	0.4593	0.4326		3.77	4.00	-5.8	35.0
Indane	Ave	0.7235	0.6032		3.33	4.00	-16.6	80.0
Butylbenzene	Ave	0.8544	0.8224		3.85	4.00	-3.8	35.0
Indene	Ave	0.4821	0.5822		4.83	4.00	20.7	80.0
Undecane	Ave	0.6845	0.6229		3.64	4.00	-9.0	35.0
1,2-Dimethyl-4-Ethylbenzene	Ave	0.6928	0.7679		4.43	4.00	10.8	80.0
1,2-Dibromo-3-Chloropropane	Ave	0.1910	0.1360		2.85	4.00	-28.8	
1,2,4,5-Tetramethylbenzene	Ave	0.8550	0.8002		3.74	4.00	-6.4	80.0
1,2,3,5-Tetramethylbenzene	Ave	0.5350	0.5047		3.77	4.00	-5.7	80.0
1,2,3,4-Tetramethylbenzene	Ave	0.6913	0.6365		3.68	4.00	-7.9	80.0
Dodecane	Ave	0.6090	0.6284		4.13	4.00	3.2	35.0
1,2,4-Trichlorobenzene	Ave	0.1851	0.2236		4.83	4.00	20.8	35.0
Naphthalene	Ave	0.4137	0.5099		4.93	4.00	23.3	35.0
Benzo (b) thiophene	Ave	0.2045	0.2277		4.45	4.00	11.3	80.0
Hexachlorobutadiene	Ave	0.3552	0.3312		3.73	4.00	-6.8	35.0
1,2,3-Trichlorobenzene	Ave	0.1634	0.1971		4.82	4.00	20.6	35.0
2-Methylnaphthalene	Ave	0.0432	0.0405		11.7	12.5	-6.2	80.0
1-Methylnaphthalene	Ave	0.0458	0.0411		11.2	12.5	-10.3	80.0
4-Bromofluorobenzene (Surr)	Ave	0.6548	0.6834		4.17	4.00	4.4	35.0

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02LCS.D

Lims ID: ICV

Client ID:

Sample Type: ICV

Inject. Date: 02-Feb-2015 22:48:30

ALS Bottle#: 1

Worklist Smp#: 13

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

Sample Info: ICV-LCS,,3,,,023171

Misc. Info.: J020215I,TO15,,140-0001328-013

Operator ID: 7126

Instrument ID: MJ

Sublist:

Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m

Limit Group: MSA TO14A_15 Routine ICAL

Last Update: 04-Feb-2015 08:51:33

Calib Date: 02-Feb-2015 20:05:30

Integrator: RTE

ID Type: Deconvolution ID

Quant Method: Internal Standard

Quant By: Initial Calibration

Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D

Column 1 : RTX-5 (0.32 mm)

Det: MS SCAN

Process Host: XAWRK011

First Level Reviewer: tajh

Date: 03-Feb-2015 10:32:46

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	9.590	9.593	-0.003	96	299316	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.737	11.736	0.001	96	1429867	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.379	16.380	-0.001	89	1314806	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.988	17.991	-0.003	90	898563	4.00	4.17	
6 Chlorodifluoromethane	67	4.017	4.021	-0.004	97	123504	4.00	3.41	
7 Propene	41	4.033	4.036	-0.003	99	469903	4.00	3.31	
8 Dichlorodifluoromethane	85	4.093	4.093	0.000	100	1165251	4.00	3.46	
9 Chloromethane	52	4.302	4.302	0.000	62	152742	4.00	3.19	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.302	4.307	-0.005	91	738084	4.00	3.34	
11 Acetaldehyde	44	4.475	4.476	-0.001	100	593676	20.0	14.4	
12 Vinyl chloride	62	4.496	4.497	-0.001	99	447878	4.00	3.46	
13 Butane	43	4.593	4.597	-0.004	86	733593	4.00	3.25	
14 Butadiene	54	4.593	4.598	-0.005	66	363398	4.00	3.54	
15 Bromomethane	94	4.964	4.968	-0.004	99	364419	4.00	3.32	
16 Chloroethane	64	5.125	5.127	-0.002	94	189985	4.00	3.35	
17 Ethanol	31	5.222	5.223	-0.001	95	619895	20.0	14.9	
18 Vinyl bromide	106	5.464	5.470	-0.006	99	349106	4.00	3.63	
19 2-Methylbutane	43	5.518	5.520	-0.002	92	485197	4.00	3.20	
20 Trichlorofluoromethane	101	5.760	5.766	-0.006	100	1007817	4.00	3.42	
21 Acrolein	56	5.771	5.774	-0.003	94	104493	4.00	3.06	
22 Acetonitrile	40	5.846	5.850	-0.004	99	134297	4.00	3.74	
23 Acetone	58	5.895	5.899	-0.004	98	337957	12.0	8.77	
24 Isopropyl alcohol	45	5.975	5.979	-0.004	95	1616861	12.0	10.4	
25 Pentane	72	6.002	6.005	-0.002	97	62737	4.00	3.47	
26 Ethyl ether	31	6.180	6.184	-0.004	92	334447	4.00	3.18	
27 1,1-Dichloroethene	96	6.540	6.540	0.000	95	382599	4.00	4.02	
28 2-Methyl-2-propanol	59	6.621	6.627	-0.006	96	627583	4.00	3.55	
29 Acrylonitrile	53	6.648	6.650	-0.002	95	212021	4.00	3.98	
30 1,1,2-Trichloro-1,2,2-trif	101	6.723	6.722	0.001	95	800588	4.00	4.03	
31 Methylene Chloride	84	6.917	6.915	0.002	97	348607	4.00	3.63	

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	6.928	6.930	-0.002	93	294034	4.00	2.82	
33 Carbon disulfide	76	7.094	7.098	-0.004	99	1153487	4.00	3.44	
34 trans-1,2-Dichloroethene	96	7.772	7.774	-0.002	95	372135	4.00	3.43	
35 2-Methylpentane	43	7.783	7.783	0.000	96	1029985	4.00	3.63	
36 Methyl tert-butyl ether	73	7.891	7.898	-0.007	97	633605	4.00	3.47	
37 1,1-Dichloroethane	63	8.219	8.219	0.000	100	670330	4.00	3.68	
38 Vinyl acetate	43	8.316	8.317	-0.001	100	708175	4.00	3.74	
39 2-Butanone (MEK)	72	8.784	8.788	-0.004	96	118520	4.00	3.33	
40 Hexane	56	8.810	8.811	-0.001	92	322342	4.00	3.23	
139 Isopropyl ether	45	8.961	8.966	-0.005	97	1051302	4.00	3.44	
41 cis-1,2-Dichloroethene	96	9.246	9.246	0.000	97	346926	4.00	3.72	
42 Ethyl acetate	43	9.413	9.417	-0.004	98	597508	4.00	3.43	
43 Chloroform	83	9.601	9.599	0.002	96	672370	4.00	3.56	
142 Tert-butyl ethyl ether	59	9.660	9.667	-0.007	96	777352	4.00	3.39	
44 Tetrahydrofuran	42	10.005	10.018	-0.013	95	324063	4.00	3.39	
45 1,1,1-Trichloroethane	97	10.639	10.643	-0.004	97	709957	4.00	3.58	
46 1,2-Dichloroethane	62	10.752	10.750	0.002	97	436794	4.00	3.67	
47 n-Butanol	31	11.134	11.144	-0.010	91	165923	4.00	3.83	
49 Cyclohexane	69	11.220	11.222	-0.002	93	177563	4.00	3.25	
48 Benzene	78	11.226	11.226	0.000	98	931568	4.00	3.53	
50 Carbon tetrachloride	117	11.247	11.247	0.000	98	759789	4.00	3.90	
51 2,3-Dimethylpentane	71	11.317	11.320	-0.003	92	200454	4.00	2.98	
52 Thiophene	84	11.495	11.493	0.002	97	533637	4.00	3.57	
140 Tert-amyl methyl ether	73	11.651	11.660	-0.009	96	737215	4.00	3.58	
53 Isooctane	57	11.936	11.939	-0.003	98	1701421	4.00	3.24	
54 n-Heptane	71	12.291	12.295	-0.004	95	314637	4.00	3.25	
55 1,2-Dichloropropane	63	12.404	12.405	-0.001	90	345865	4.00	3.67	
56 Trichloroethene	130	12.436	12.437	-0.001	95	384915	4.00	3.35	
57 Dibromomethane	93	12.528	12.528	0.000	95	377720	4.00	3.41	
59 Dichlorobromomethane	83	12.662	12.661	0.001	99	665204	4.00	3.51	
58 1,4-Dioxane	88	12.662	12.670	-0.008	41	125443	4.00	3.37	
60 Methyl methacrylate	41	12.721	12.724	-0.003	94	354878	4.00	3.36	
61 Methylcyclohexane	83	13.184	13.185	-0.001	92	564674	4.00	2.63	
62 4-Methyl-2-pentanone (MIBK)	43	13.555	13.560	-0.005	98	745109	4.00	3.43	
63 cis-1,3-Dichloropropene	75	13.630	13.630	0.000	97	487720	4.00	3.99	
64 trans-1,3-Dichloropropene	75	14.308	14.306	0.002	99	382270	4.00	3.52	
65 Toluene	91	14.437	14.436	0.001	93	876841	4.00	3.65	
66 1,1,2-Trichloroethane	83	14.507	14.507	0.000	97	275542	4.00	3.42	
67 2-Methylthiophene	97	14.588	14.588	0.000	98	749544	4.00	3.59	
68 3-Methylthiophene	97	14.787	14.786	0.001	99	755520	4.00	3.70	
69 2-Hexanone	58	14.862	14.866	-0.004	91	348119	4.00	3.63	
70 n-Octane	85	15.077	15.081	-0.004	97	314070	4.00	3.52	
71 Chlorodibromomethane	129	15.207	15.209	-0.002	98	611434	4.00	3.78	
72 Ethylene Dibromide	107	15.497	15.500	-0.003	98	485234	4.00	3.61	
73 Tetrachloroethene	129	15.562	15.561	0.001	96	352286	4.00	3.37	
74 2,3-Dimethylheptane	43	16.412	16.411	0.001	95	1103317	4.00	3.56	
75 Chlorobenzene	112	16.428	16.429	-0.001	92	674862	4.00	3.53	
76 Ethylbenzene	91	16.702	16.703	-0.001	99	1003134	4.00	3.58	
77 2-Ethylthiophene	97	16.804	16.807	-0.003	98	738346	4.00	3.41	
78 m-Xylene & p-Xylene	91	16.858	16.861	-0.003	99	1519699	8.00	6.73	
79 n-Nonane	57	17.245	17.245	0.000	95	691900	4.00	3.67	
80 Styrene	104	17.321	17.326	-0.005	99	610514	4.00	3.83	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
81 Bromoform	173	17.326	17.328	-0.002	95	529663	4.00	3.77	
82 o-Xylene	91	17.385	17.386	-0.001	99	805898	4.00	3.27	
83 1,1,2,2-Tetrachloroethane	83	17.703	17.704	-0.001	99	684722	4.00	3.55	
84 1,2,3-Trichloropropane	110	17.859	17.860	-0.001	98	162965	4.00	3.66	
85 Isopropylbenzene	105	17.950	17.953	-0.003	96	1122580	4.00	3.49	
86 N-Propylbenzene	120	18.461	18.463	-0.002	99	309577	4.00	3.60	
87 2-Chlorotoluene	126	18.515	18.517	-0.002	98	299902	4.00	3.48	
88 4-Ethyltoluene	105	18.606	18.605	0.001	98	1052230	4.00	3.39	
89 1,3,5-Trimethylbenzene	120	18.671	18.673	-0.002	92	531411	4.00	3.59	
90 Alpha Methyl Styrene	118	18.897	18.896	0.001	86	477639	4.00	4.04	
91 n-Decane	57	18.924	18.925	-0.001	88	783440	4.00	3.65	
92 tert-Butylbenzene	119	19.080	19.083	-0.003	92	1002715	4.00	3.45	
93 1,2,4-Trimethylbenzene	105	19.096	19.097	-0.001	96	956010	4.00	3.60	
94 sec-Butylbenzene	105	19.338	19.341	-0.003	98	1392118	4.00	3.57	
95 1,3-Dichlorobenzene	146	19.370	19.370	0.000	99	560576	4.00	3.67	
96 Benzyl chloride	91	19.435	19.439	-0.004	98	698320	4.00	3.92	
97 1,4-Dichlorobenzene	146	19.451	19.453	-0.002	95	520786	4.00	3.69	
98 4-Isopropyltoluene	119	19.494	19.496	-0.002	96	1124413	4.00	3.63	
99 1,2,3-Trimethylbenzene	105	19.553	19.554	-0.001	98	784923	4.00	3.68	
100 Butylcyclohexane	83	19.596	19.597	-0.001	89	784227	4.00	3.42	
101 2,3-Dihydroindene	117	19.801	19.799	0.002	94	793024	4.00	3.33	
102 1,2-Dichlorobenzene	146	19.801	19.805	-0.004	95	568827	4.00	3.77	
103 n-Butylbenzene	91	19.914	19.916	-0.002	98	1081256	4.00	3.85	
104 Indene	116	19.924	19.927	-0.003	89	765437	4.00	4.83	
105 Undecane	57	20.193	20.195	-0.002	95	819012	4.00	3.64	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.279	20.278	0.001	98	1009612	4.00	4.43	
141 1,2-Dibromo-3-Chloropropan	157	20.392	20.393	-0.001	95	178857	4.00	2.85	
108 1,2,4,5-Tetramethylbenzene	119	20.667	20.668	-0.001	97	1052097	4.00	3.74	
107 1,2,3,5-Tetramethylbenzene	119	20.726	20.725	0.001	95	663580	4.00	3.77	
109 1,2,3,4-Tetramethylbenzene	119	21.146	21.147	-0.001	98	836841	4.00	3.68	
110 Dodecane	57	21.280	21.282	-0.002	94	826279	4.00	4.13	
111 1,2,4-Trichlorobenzene	180	21.522	21.525	-0.003	94	293949	4.00	4.83	
112 Naphthalene	128	21.657	21.655	0.002	99	670417	4.00	4.93	
113 Benzo(b)thiophene	134	21.743	21.741	0.002	99	299382	4.00	4.45	
114 Hexachlorobutadiene	225	21.807	21.810	-0.003	96	435406	4.00	3.73	
115 1,2,3-Trichlorobenzene	180	21.872	21.872	0.000	96	259079	4.00	4.82	
116 2-Methylnaphthalene	142	22.399	22.402	-0.003	99	166377	12.5	11.7	
117 1-Methylnaphthalene	142	22.528	22.528	0.000	99	168946	12.5	11.2	
A 118 C6 Range	1	8.807	(8.738-8.910)		0	3671021	4.00	3.20	
A 122 Toluene Range	1	14.440	(14.410-14.470)		0	2167652	4.00	3.68	
A 123 C8 Range	1	15.104	(15.056-15.152)		0	3252944	4.00	3.36	
S 124 Xylenes, Total	100				0		12.0	10.0	
S 144 1,2-Dichloroethene, Total	1				0		8.00	7.15	

Reagents:

ICM2C00X10_00004

Amount Added: 200.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02LCS.D

Injection Date: 02-Feb-2015 22:48:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: ICV

Worklist Smp#: 13

Client ID:

Purge Vol: 500.000 mL

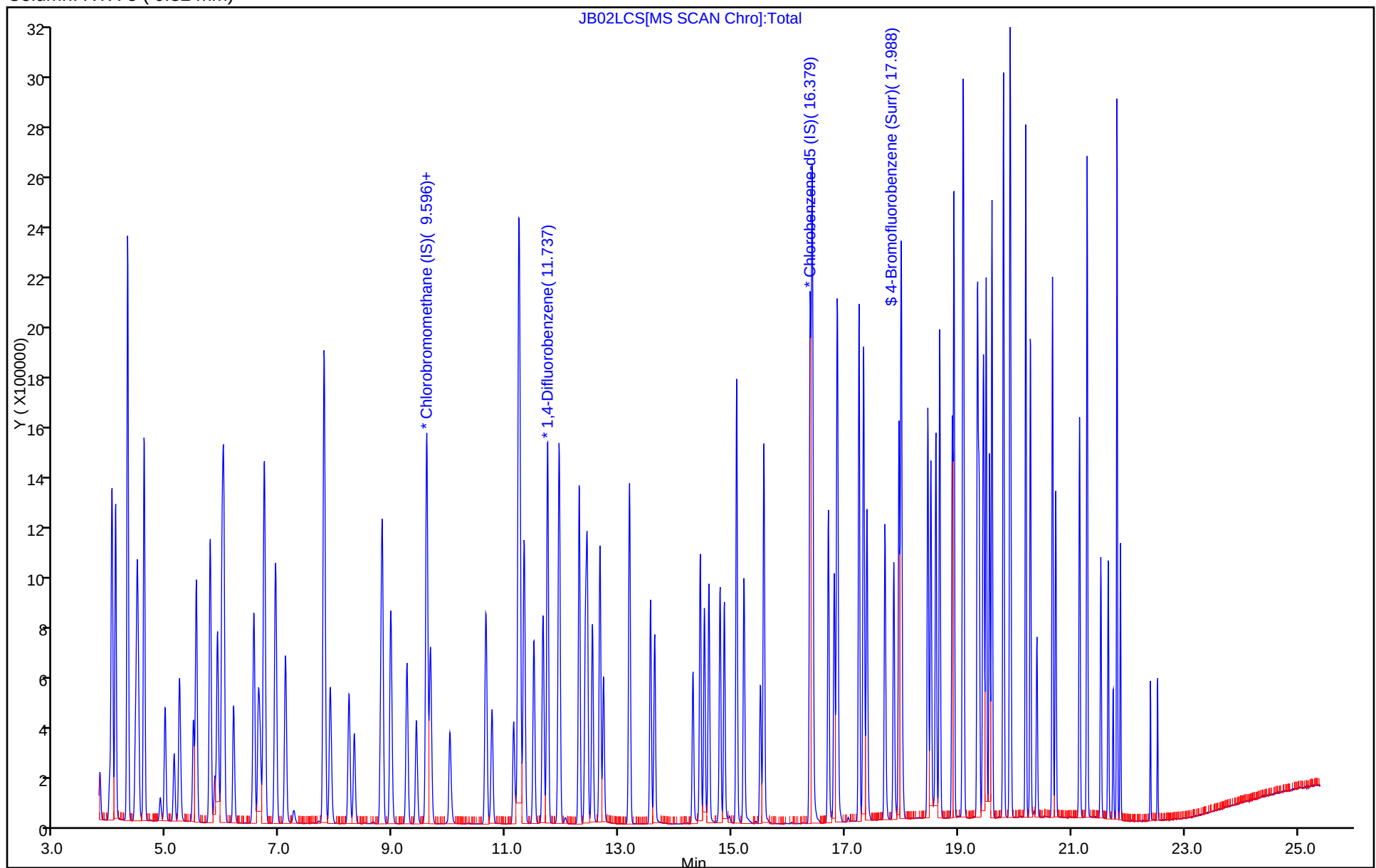
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MJ_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: TestAmerica Knoxville Job No.: 140-2950-1

SDG No.: _____

Lab Sample ID: CCVIS 140-2576/2 Calibration Date: 03/31/2015 10:08

Instrument ID: MJ Calib Start Date: 02/02/2015 12:48

GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 02/02/2015 20:05

Lab File ID: JCCVC31A.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	0.4836	0.4682		1.94	2.00	-3.2	30.0
Propene	Ave	1.897	1.835		1.93	2.00	-3.3	30.0
Dichlorodifluoromethane	Ave	4.503	4.657		2.07	2.00	3.4	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.950	3.083		2.09	2.00	4.5	30.0
Chloromethane	Ave	0.6404	0.6212		1.94	2.00	-3.0	30.0
Acetaldehyde	Ave	0.5522	0.4692		8.50	10.0	-15.0	50.0
Vinyl chloride	Ave	1.728	1.840		2.13	2.00	6.5	30.0
1,3-Butadiene	Ave	1.372	1.455		2.12	2.00	6.1	30.0
Butane	Ave	3.020	3.122		2.07	2.00	3.4	30.0
Bromomethane	Ave	1.466	1.543		2.11	2.00	5.3	30.0
Chloroethane	Ave	0.7569	0.7996		2.11	2.00	5.6	30.0
Ethanol	Ave	0.5564	0.5640		10.1	10.0	1.4	50.0
Vinyl bromide	Ave	1.285	1.333		2.08	2.00	3.7	30.0
2-Methylbutane	Ave	2.029	2.114		2.08	2.00	4.2	30.0
Trichlorofluoromethane	Ave	3.943	4.041		2.05	2.00	2.5	30.0
Acrolein	Ave	0.4559	0.3988		1.75	2.00	-12.5	30.0
Acetonitrile	Ave	0.4803	0.5574		2.32	2.00	16.0	30.0
Acetone	Ave	0.5147	0.4703		5.48	6.00	-8.6	30.0
Isopropyl alcohol	Ave	2.074	1.840		5.32	6.00	-11.3	30.0
Pentane	Ave	0.2413	0.2375		1.97	2.00	-1.6	30.0
Ethyl ether	Ave	1.407	1.488		2.12	2.00	5.8	30.0
1,1-Dichloroethene	Ave	1.271	1.273		2.00	2.00	0.2	30.0
t-Butyl alcohol	Ave	2.362	2.108		1.79	2.00	-10.8	30.0
Acrylonitrile	Ave	0.7116	0.8168		2.30	2.00	14.8	30.0
1,1,2-Trichlorotrifluoroethane	Ave	2.653	2.593		1.96	2.00	-2.3	30.0
Methylene Chloride	Ave	1.282	1.176		1.83	2.00	-8.3	30.0
3-Chloropropene	Ave	1.392	1.241		1.78	2.00	-10.9	30.0
Carbon disulfide	Ave	4.481	4.573		2.04	2.00	2.1	30.0
trans-1,2-Dichloroethene	Ave	1.449	1.408		1.94	2.00	-2.9	30.0
2-Methylpentane	Ave	3.796	4.055		2.14	2.00	6.8	50.0
Methyl tert-butyl ether	Ave	2.439	2.533		2.08	2.00	3.8	30.0
1,1-Dichloroethane	Ave	2.437	2.419		1.99	2.00	-0.8	30.0
Vinyl acetate	Ave	2.529	2.639		2.09	2.00	4.3	30.0
2-Butanone	Ave	0.4763	0.4487		1.89	2.00	-5.8	30.0
Hexane	Ave	1.334	1.253		1.88	2.00	-6.0	30.0
Isopropyl ether	Ave	4.081	4.261		2.09	2.00	4.4	
cis-1,2-Dichloroethene	Ave	1.248	1.228		1.97	2.00	-1.6	30.0
Ethyl acetate	Ave	2.326	2.478		2.13	2.00	6.5	30.0
Chloroform	Ave	2.525	2.475		1.96	2.00	-2.0	30.0
Tert-butyl ethyl ether	Ave	3.060	3.270		2.14	2.00	6.8	

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-2576/2 Calibration Date: 03/31/2015 10:08
 Instrument ID: MJ Calib Start Date: 02/02/2015 12:48
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 02/02/2015 20:05
 Lab File ID: JCCVC31A.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	1.276	1.333		2.09	2.00	4.5	30.0
1,1,1-Trichloroethane	Ave	2.647	2.625		1.98	2.00	-0.8	30.0
1,2-Dichloroethane	Ave	0.3332	0.3560		2.14	2.00	6.8	30.0
1-Butanol	Ave	0.1210	0.1107		1.83	2.00	-8.5	30.0
Benzene	Ave	0.7389	0.7334		1.99	2.00	-0.7	30.0
Cyclohexane	Ave	0.1527	0.1578		2.07	2.00	3.3	30.0
Carbon tetrachloride	Ave	0.5452	0.3918		1.44	2.00	-28.1	30.0
2,3-Dimethylpentane	Ave	0.1882	0.1749		1.86	2.00	-7.0	50.0
Thiophene	Ave	0.4185	0.4596		2.20	2.00	9.8	50.0
Tert-amyl methyl ether	Ave	0.6267	0.7486		2.39	2.00	19.4	
2,2,4-Trimethylpentane	Ave	1.469	1.501		2.04	2.00	2.1	30.0
Heptane	Ave	0.2709	0.2670		1.97	2.00	-1.5	30.0
1,2-Dichloropropane	Ave	0.2638	0.2619		1.99	2.00	-0.7	30.0
Trichloroethene	Ave	0.3218	0.3153		1.96	2.00	-2.0	30.0
Dibromomethane	Ave	0.3095	0.3168		2.05	2.00	2.4	30.0
Bromodichloromethane	Ave	0.5294	0.5563		2.10	2.00	5.1	30.0
1,4-Dioxane	Ave	0.1041	0.0971		1.87	2.00	-6.7	30.0
Methyl methacrylate	Ave	0.2956	0.3242		2.20	2.00	9.7	30.0
Methylcyclohexane	Ave	0.6002	0.4983		1.66	2.00	-17.0	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6078	0.6068		2.00	2.00	-0.2	30.0
cis-1,3-Dichloropropene	Ave	0.3416	0.3222		1.89	2.00	-5.7	30.0
trans-1,3-Dichloropropene	Ave	0.3301	0.3471		2.10	2.00	5.2	30.0
Toluene	Ave	0.7298	0.8225		2.25	2.00	12.7	30.0
1,1,2-Trichloroethane	Ave	0.2451	0.2607		2.13	2.00	6.4	30.0
2-Methylthiophene	Ave	0.6347	0.6992		2.20	2.00	10.2	50.0
3-Methylthiophene	Ave	0.6208	0.6781		2.19	2.00	9.2	50.0
2-Hexanone	Ave	0.2914	0.3128		2.15	2.00	7.4	30.0
Octane	Ave	0.2716	0.3021		2.23	2.00	11.2	30.0
Dibromochloromethane	Ave	0.4924	0.5263		2.14	2.00	6.9	30.0
1,2-Dibromoethane	Ave	0.4084	0.4300		2.11	2.00	5.3	30.0
Tetrachloroethene	Ave	0.3177	0.3474		2.19	2.00	9.3	30.0
2,3-Dimethylheptane	Ave	0.9422	1.139		2.42	2.00	20.8	50.0
Chlorobenzene	Ave	0.5818	0.5908		2.03	2.00	1.5	30.0
Ethylbenzene	Ave	0.8533	0.9475		2.22	2.00	11.0	30.0
2-Ethylthiophene	Ave	0.6581	0.7147		2.17	2.00	8.6	50.0
m-Xylene & p-Xylene	Ave	0.6874	0.7377		4.29	4.00	7.3	30.0
Nonane	Ave	0.5741	0.6416		2.24	2.00	11.8	30.0
Styrene	Ave	0.4844	0.5193		2.15	2.00	7.2	30.0
Bromoform	Ave	0.4272	0.3773		1.77	2.00	-11.7	30.0
o-Xylene	Ave	0.7498	0.7988		2.13	2.00	6.5	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5876	0.6356		2.16	2.00	8.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-2576/2 Calibration Date: 03/31/2015 10:08
 Instrument ID: MJ Calib Start Date: 02/02/2015 12:48
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 02/02/2015 20:05
 Lab File ID: JCCVC31A.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
1,2,3-Trichloropropane	Ave	0.1354	0.1490		2.20	2.00	10.1	30.0
Isopropylbenzene	Ave	0.9791	1.100		2.25	2.00	12.3	30.0
Propylbenzene	Ave	0.2619	0.2889		2.21	2.00	10.3	30.0
2-Chlorotoluene	Ave	0.2620	0.2659		2.03	2.00	1.5	30.0
4-Ethyltoluene	Ave	0.9456	1.049		2.22	2.00	10.9	30.0
1,3,5-Trimethylbenzene	Ave	0.4499	0.4938		2.20	2.00	9.8	30.0
Alpha Methyl Styrene	Ave	0.3600	0.3860		2.15	2.00	7.2	30.0
Decane	Ave	0.6538	0.7077		2.17	2.00	8.2	30.0
tert-Butylbenzene	Ave	0.8830	0.9478		2.15	2.00	7.3	30.0
1,2,4-Trimethylbenzene	Ave	0.8081	0.8630		2.14	2.00	6.8	30.0
sec-Butylbenzene	Ave	1.185	1.293		2.18	2.00	9.1	30.0
1,3-Dichlorobenzene	Ave	0.4646	0.4241		1.83	2.00	-8.7	30.0
Benzyl chloride	Ave	0.5422	0.5041		1.86	2.00	-7.0	30.0
1,4-Dichlorobenzene	Ave	0.4299	0.3820		1.78	2.00	-11.1	30.0
4-Isopropyltoluene	Ave	0.9422	0.997		2.12	2.00	5.8	30.0
1,2,3-Trimethylbenzene	Ave	0.6481	0.7423		2.29	2.00	14.5	50.0
Butylcyclohexane	Ave	0.6972	0.7391		2.12	2.00	6.0	50.0
Indane	Ave	0.7235	0.7228		2.00	2.00	-0.1	50.0
1,2-Dichlorobenzene	Ave	0.4593	0.4317		1.88	2.00	-6.0	30.0
Butylbenzene	Ave	0.8544	0.8650		2.03	2.00	1.2	30.0
Indene	Ave	0.4821	0.6252		2.60	2.00	29.7	50.0
Undecane	Ave	0.6845	0.7166		2.09	2.00	4.7	30.0
1,2-Dimethyl-4-Ethylbenzene	Ave	0.6928	0.8570		2.48	2.00	23.7	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1910	0.1157		1.21	2.00	-39.4	
1,2,4,5-Tetramethylbenzene	Ave	0.8550	0.8933		2.09	2.00	4.5	50.0
1,2,3,5-Tetramethylbenzene	Ave	0.5350	0.5678		2.12	2.00	6.1	50.0
1,2,3,4-Tetramethylbenzene	Ave	0.6913	0.7083		2.05	2.00	2.5	50.0
Dodecane	Ave	0.6090	0.6770		2.22	2.00	11.2	30.0
1,2,4-Trichlorobenzene	Ave	0.1851	0.1401		1.51	2.00	-24.3	30.0
Naphthalene	Ave	0.4137	0.3533		1.71	2.00	-14.6	30.0
Benzo(b)thiophene	Ave	0.2045	0.1583		1.55	2.00	-22.6	50.0
Hexachlorobutadiene	Ave	0.3552	0.3174		1.79	2.00	-10.6	30.0
1,2,3-Trichlorobenzene	Ave	0.1634	0.1264		1.55	2.00	-22.6	30.0
2-Methylnaphthalene	Ave	0.0432	0.0199		2.88	6.25	-53.9*	50.0
1-Methylnaphthalene	Ave	0.0458	0.0258		3.52	6.25	-43.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6548	0.6382		3.90	4.00	-2.5	30.0

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JCCVC31A.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 31-Mar-2015 10:08:30 ALS Bottle#: 1 Worklist Smp#: 2
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: CCV/LCS,,2,6,,CCV10
 Misc. Info.: J033115,TO15,,140-0001518-002
 Operator ID: 7126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub3
 Method: \\KNXCHROM\ChromData\MJ\20150330-1518.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 01-Apr-2015 09:18:11 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK018

First Level Reviewer: tajh

Date: 01-Apr-2015 09:17:52

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	9.577	9.577	0.000	95	263584	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.718	11.718	0.000	76	1153398	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.360	16.360	0.000	89	968292	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.969	17.969	0.000	86	617938	4.00	3.90	
6 Chlorodifluoromethane	67	4.047	4.047	0.000	93	61742	2.00	1.94	
7 Propene	41	4.057	4.057	0.000	90	241919	2.00	1.93	
8 Dichlorodifluoromethane	85	4.117	4.117	0.000	100	614129	2.00	2.07	
9 Chloromethane	52	4.326	4.326	0.000	60	81914	2.00	1.94	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.326	4.326	0.000	92	406486	2.00	2.09	
11 Acetaldehyde	44	4.493	4.493	0.000	93	309317	10.0	8.50	
12 Vinyl chloride	62	4.520	4.520	0.000	98	242575	2.00	2.13	
13 Butane	43	4.617	4.617	0.000	86	411693	2.00	2.07	
14 Butadiene	54	4.617	4.617	0.000	64	191888	2.00	2.12	
15 Bromomethane	94	4.988	4.988	0.000	99	203527	2.00	2.11	
16 Chloroethane	64	5.144	5.144	0.000	91	105440	2.00	2.11	
17 Ethanol	31	5.246	5.246	0.000	96	371816	10.0	10.1	
18 Vinyl bromide	106	5.483	5.483	0.000	97	175813	2.00	2.08	
19 2-Methylbutane	43	5.531	5.531	0.000	93	278710	2.00	2.08	
20 Trichlorofluoromethane	101	5.779	5.779	0.000	97	532811	2.00	2.05	
21 Acrolein	56	5.790	5.790	0.000	9	52586	2.00	1.75	
22 Acetonitrile	40	5.859	5.859	0.000	95	73500	2.00	2.32	
23 Acetone	58	5.908	5.908	0.000	73	186040	6.00	5.48	
24 Isopropyl alcohol	45	5.994	5.994	0.000	93	727855	6.00	5.32	
25 Pentane	72	6.015	6.015	0.000	95	31318	2.00	1.97	
26 Ethyl ether	31	6.193	6.193	0.000	90	196224	2.00	2.12	
27 1,1-Dichloroethene	96	6.543	6.543	0.000	91	167915	2.00	2.00	
28 2-Methyl-2-propanol	59	6.640	6.640	0.000	95	277978	2.00	1.79	
29 Acrylonitrile	53	6.656	6.656	0.000	78	107704	2.00	2.30	
30 1,1,2-Trichloro-1,2,2-trif	101	6.726	6.726	0.000	94	341947	2.00	1.96	
31 Methylene Chloride	84	6.919	6.919	0.000	94	155032	2.00	1.83	

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	6.935	6.935	0.000	89	163635	2.00	1.78	
33 Carbon disulfide	76	7.102	7.102	0.000	99	603014	2.00	2.04	
34 trans-1,2-Dichloroethene	96	7.769	7.769	0.000	90	185615	2.00	1.94	
35 2-Methylpentane	43	7.785	7.785	0.000	97	534675	2.00	2.14	
36 Methyl tert-butyl ether	73	7.893	7.893	0.000	97	333985	2.00	2.08	
37 1,1-Dichloroethane	63	8.216	8.216	0.000	100	318941	2.00	1.99	
38 Vinyl acetate	43	8.313	8.313	0.000	100	347949	2.00	2.09	
39 2-Butanone (MEK)	72	8.781	8.781	0.000	89	59163	2.00	1.89	
40 Hexane	56	8.802	8.802	0.000	89	165244	2.00	1.88	
139 Isopropyl ether	45	8.958	8.958	0.000	97	561907	2.00	2.09	
41 cis-1,2-Dichloroethene	96	9.232	9.232	0.000	97	161865	2.00	1.97	
42 Ethyl acetate	43	9.410	9.410	0.000	97	326759	2.00	2.13	
43 Chloroform	83	9.587	9.587	0.000	64	326302	2.00	1.96	
142 Tert-butyl ethyl ether	59	9.652	9.652	0.000	96	431205	2.00	2.14	
44 Tetrahydrofuran	42	10.002	10.002	0.000	94	175762	2.00	2.09	
45 1,1,1-Trichloroethane	97	10.626	10.626	0.000	88	346181	2.00	1.98	
46 1,2-Dichloroethane	62	10.733	10.733	0.000	94	205394	2.00	2.14	
47 n-Butanol	31	11.137	11.137	0.000	74	63885	2.00	1.83	
49 Cyclohexane	69	11.207	11.207	0.000	66	91033	2.00	2.07	
48 Benzene	78	11.207	11.207	0.000	97	423160	2.00	1.99	
50 Carbon tetrachloride	117	11.228	11.228	0.000	93	226092	2.00	1.44	
51 2,3-Dimethylpentane	71	11.304	11.304	0.000	92	100938	2.00	1.86	
52 Thiophene	84	11.476	11.476	0.000	97	265211	2.00	2.20	
140 Tert-amyl methyl ether	73	11.637	11.637	0.000	81	362653	2.00	2.39	
53 Isooctane	57	11.922	11.922	0.000	98	865802	2.00	2.04	
54 n-Heptane	71	12.277	12.277	0.000	95	154046	2.00	1.97	
55 1,2-Dichloropropane	63	12.385	12.385	0.000	88	151118	2.00	1.99	
56 Trichloroethene	130	12.417	12.417	0.000	95	181924	2.00	1.96	
57 Dibromomethane	93	12.509	12.509	0.000	92	182805	2.00	2.05	
59 Dichlorobromomethane	83	12.643	12.643	0.000	98	320973	2.00	2.10	
58 1,4-Dioxane	88	12.648	12.648	0.000	38	56023	2.00	1.87	
60 Methyl methacrylate	41	12.708	12.708	0.000	84	187070	2.00	2.20	
61 Methylcyclohexane	83	13.165	13.165	0.000	90	287508	2.00	1.66	
62 4-Methyl-2-pentanone (MIBK)	43	13.541	13.541	0.000	97	350144	2.00	2.00	
63 cis-1,3-Dichloropropene	75	13.606	13.606	0.000	95	185933	2.00	1.89	
64 trans-1,3-Dichloropropene	75	14.284	14.284	0.000	97	168153	2.00	2.10	
65 Toluene	91	14.413	14.413	0.000	93	398401	2.00	2.25	
66 1,1,2-Trichloroethane	83	14.488	14.488	0.000	72	126269	2.00	2.13	
67 2-Methylthiophene	97	14.569	14.569	0.000	98	338670	2.00	2.20	
68 3-Methylthiophene	97	14.768	14.768	0.000	99	328491	2.00	2.19	
69 2-Hexanone	58	14.843	14.843	0.000	90	151527	2.00	2.15	
70 n-Octane	85	15.058	15.058	0.000	97	146314	2.00	2.23	
71 Chlorodibromomethane	129	15.187	15.187	0.000	96	254961	2.00	2.14	
72 Ethylene Dibromide	107	15.478	15.478	0.000	98	208277	2.00	2.11	
73 Tetrachloroethene	129	15.537	15.537	0.000	94	168290	2.00	2.19	
74 2,3-Dimethylheptane	43	16.392	16.392	0.000	94	551499	2.00	2.42	
75 Chlorobenzene	112	16.409	16.409	0.000	89	286196	2.00	2.03	
76 Ethylbenzene	91	16.683	16.683	0.000	97	458990	2.00	2.22	
77 2-Ethylthiophene	97	16.785	16.785	0.000	98	346219	2.00	2.17	
78 m-Xylene & p-Xylene	91	16.839	16.839	0.000	99	714649	4.00	4.29	
79 n-Nonane	57	17.226	17.226	0.000	95	310803	2.00	2.24	
80 Styrene	104	17.302	17.302	0.000	98	251542	2.00	2.15	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
81 Bromoform	173	17.307	17.307	0.000	81	182749	2.00	1.77	
82 o-Xylene	91	17.366	17.366	0.000	80	386917	2.00	2.13	
83 1,1,2,2-Tetrachloroethane	83	17.684	17.684	0.000	99	307862	2.00	2.16	
84 1,2,3-Trichloropropane	110	17.840	17.840	0.000	95	72188	2.00	2.20	
85 Isopropylbenzene	105	17.931	17.931	0.000	95	532703	2.00	2.25	
86 N-Propylbenzene	120	18.447	18.447	0.000	95	139952	2.00	2.21	
87 2-Chlorotoluene	126	18.496	18.496	0.000	70	128823	2.00	2.03	
88 4-Ethyltoluene	105	18.587	18.587	0.000	85	507958	2.00	2.22	
89 1,3,5-Trimethylbenzene	120	18.657	18.657	0.000	92	239211	2.00	2.20	
90 Alpha Methyl Styrene	118	18.878	18.878	0.000	87	186994	2.00	2.15	
91 n-Decane	57	18.910	18.910	0.000	86	342827	2.00	2.17	
92 tert-Butylbenzene	119	19.066	19.066	0.000	83	459095	2.00	2.15	
93 1,2,4-Trimethylbenzene	105	19.077	19.077	0.000	89	418047	2.00	2.14	
94 sec-Butylbenzene	105	19.324	19.324	0.000	98	626530	2.00	2.18	
95 1,3-Dichlorobenzene	146	19.351	19.351	0.000	97	205414	2.00	1.83	
96 Benzyl chloride	91	19.421	19.421	0.000	97	244177	2.00	1.86	
97 1,4-Dichlorobenzene	146	19.437	19.437	0.000	93	185064	2.00	1.78	
98 4-Isopropyltoluene	119	19.475	19.475	0.000	81	483068	2.00	2.12	
99 1,2,3-Trimethylbenzene	105	19.534	19.534	0.000	84	359554	2.00	2.29	
100 Butylcyclohexane	83	19.583	19.583	0.000	86	358031	2.00	2.12	
101 2,3-Dihydroindene	117	19.782	19.782	0.000	93	350113	2.00	2.00	
102 1,2-Dichlorobenzene	146	19.787	19.787	0.000	80	209128	2.00	1.88	
103 n-Butylbenzene	91	19.900	19.900	0.000	96	418999	2.00	2.03	
104 Indene	116	19.911	19.911	0.000	85	302867	2.00	2.60	
105 Undecane	57	20.180	20.180	0.000	93	347114	2.00	2.09	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.260	20.260	0.000	97	415151	2.00	2.48	
141 1,2-Dibromo-3-Chloropropan	157	20.373	20.373	0.000	88	56047	2.00	1.21	
108 1,2,4,5-Tetramethylbenzene	119	20.653	20.653	0.000	96	432709	2.00	2.09	
107 1,2,3,5-Tetramethylbenzene	119	20.707	20.707	0.000	94	275052	2.00	2.12	
109 1,2,3,4-Tetramethylbenzene	119	21.132	21.132	0.000	97	343106	2.00	2.05	
110 Dodecane	57	21.266	21.266	0.000	92	327940	2.00	2.22	
111 1,2,4-Trichlorobenzene	180	21.508	21.508	0.000	93	67851	2.00	1.51	
112 Naphthalene	128	21.637	21.637	0.000	99	171125	2.00	1.71	
113 Benzo(b)thiophene	134	21.729	21.729	0.000	97	76677	2.00	1.55	
114 Hexachlorobutadiene	225	21.799	21.799	0.000	86	153742	2.00	1.79	
115 1,2,3-Trichlorobenzene	180	21.858	21.858	0.000	95	61246	2.00	1.55	
116 2-Methylnaphthalene	142	22.391	22.391	0.000	93	30133	6.25	2.88	
117 1-Methylnaphthalene	142	22.514	22.514	0.000	96	39093	6.25	3.52	
A 118 C6 Range	1	8.802	(8.738-8.867)		0	1928903	2.00	1.91	
A 122 Toluene Range	1	14.413	(14.383-14.443)		0	986022	2.00	2.27	
A 123 C8 Range	1	15.092	(15.078-15.152)		0	1601675	2.00	2.25	
S 124 Xylenes, Total	100				0		6.00	6.43	

Reagents:

IBM2C00X10_00002

Amount Added: 100.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 01-Apr-2015 09:18:12

Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JCCVC31A.D

Injection Date: 31-Mar-2015 10:08:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 500.000 mL

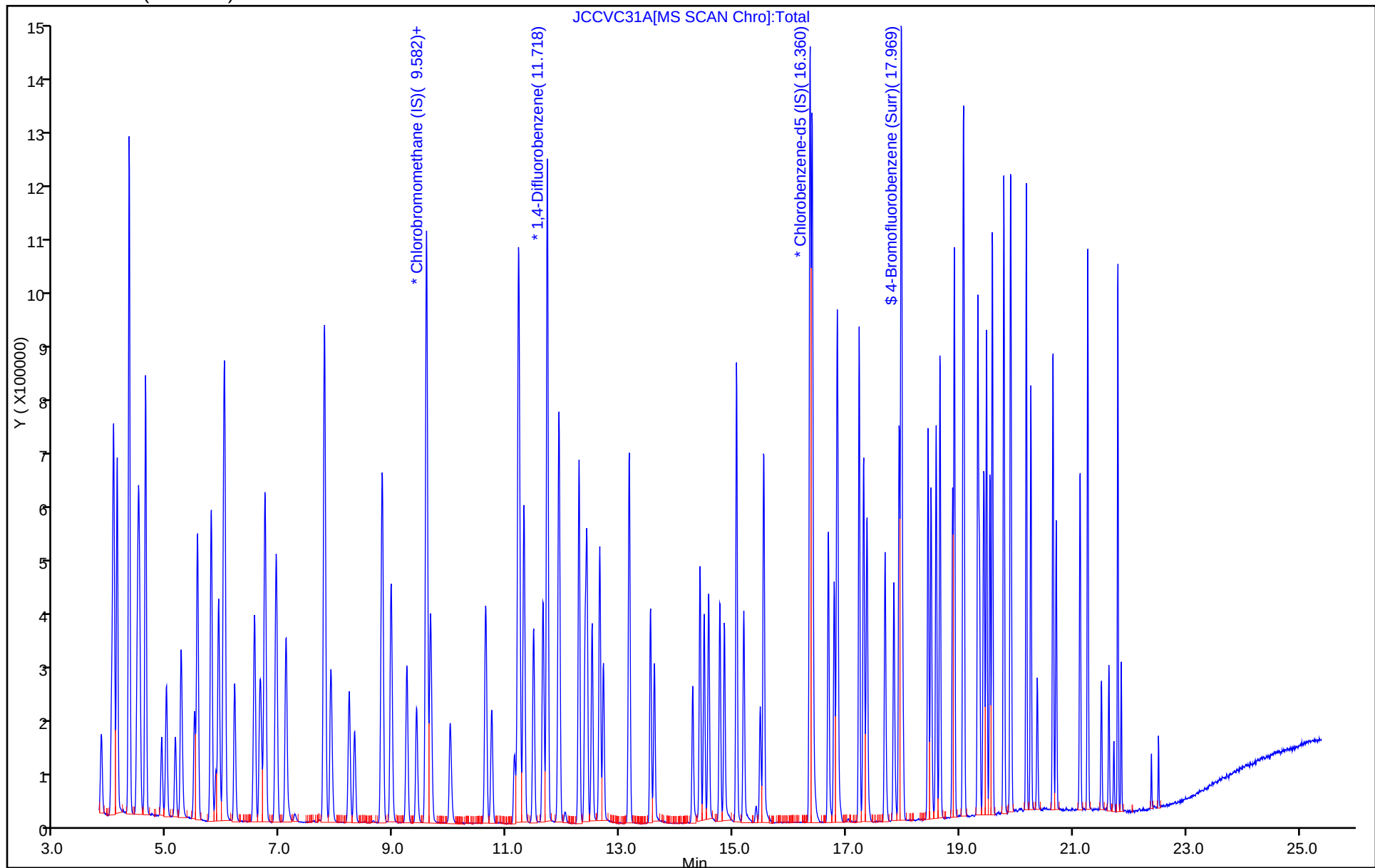
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JBFBB02.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 02-Feb-2015 12:20:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: BFB,,3,,,BFB
Misc. Info.: J020215I,BFB,,,140-0001328-001
Operator ID: 7126 Instrument ID: MJ
Method: \\KNXCHROM\ChromData\MJ\20150131-1328.b\MJ_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Feb-2015 08:50:59 Calib Date: 02-Feb-2015 20:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: tajh

Date: 03-Feb-2015 10:04:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags

\$ 4 BFB	95	4.207	4.207	0.000	0	367779	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

MAbfb1_00003

Amount Added: 40.00

Units: ml

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JBFBB02.D

Injection Date: 02-Feb-2015 12:20:30

Instrument ID: MJ

Lims ID: BFB

Client ID:

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 1

Injection Vol: 500.0 mL

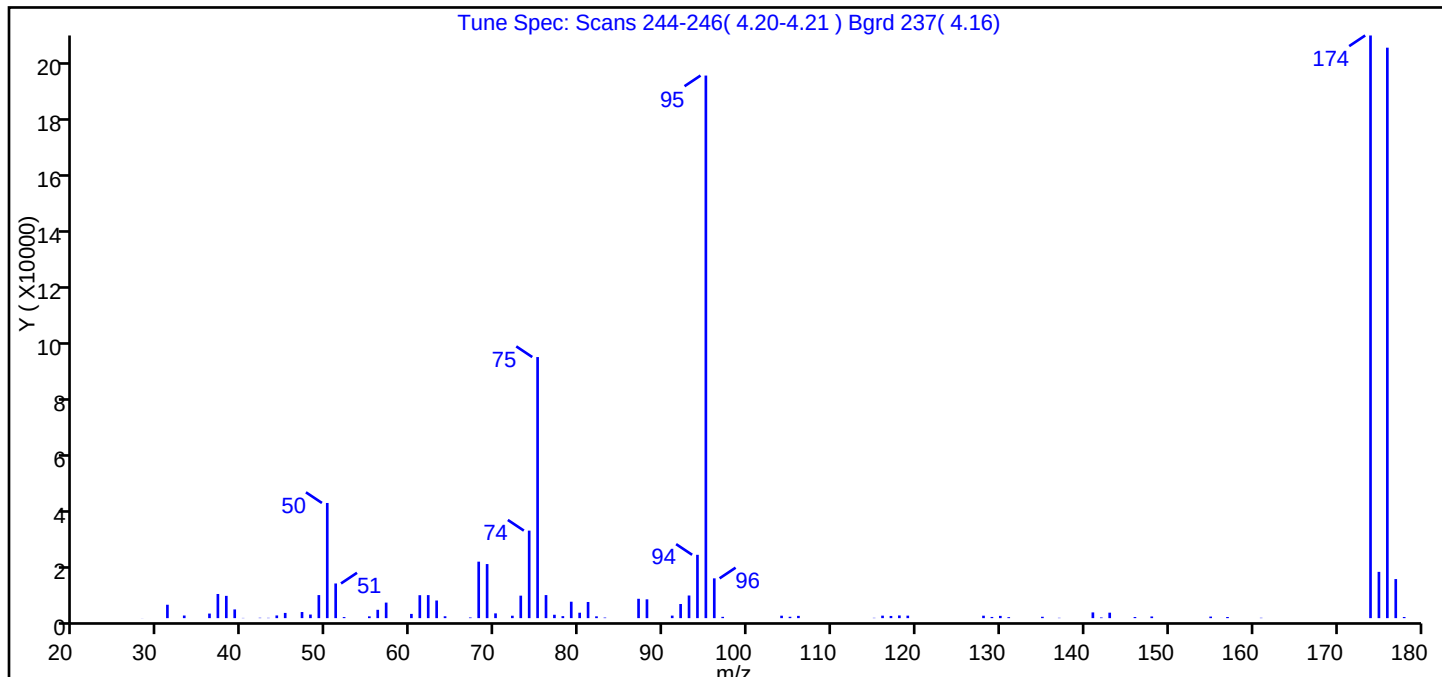
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Tune Method: BFB Method 8260

\$ 4 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.2
75	30 to 60% of m/z 95	48.1
96	5 to 9% of m/z 95	7.3
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	107.4
175	5 to 9% of m/z 174	8.5 (7.9)
176	Greater than 95% but less than 101% of m/z 174	105.1 (97.9)
177	5 to 9% of m/z 176	7.2 (6.8)

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JBFB02.D\MJ_TO15.rslt\spectra.d
Injection Date: 02-Feb-2015 12:20:30
Spectrum: Tune Spec: Scans 244-246(4.20-4.21) Bgrd 237(4.16)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 79

m/z	Y	m/z	Y	m/z	Y	m/z	Y
28.00	26	56.00	2929	81.00	5678	128.00	863
29.00	2	57.00	5460	82.00	633	129.00	419
31.00	4706	60.00	1487	83.00	203	130.00	796
33.00	925	61.00	8059	87.00	6801	131.00	342
36.00	1606	62.00	8093	88.00	6611	135.00	485
37.00	8488	63.00	6196	91.00	892	137.00	115
38.00	7826	64.00	656	92.00	4967	141.00	2017
39.00	3061	67.00	232	93.00	7955	142.00	237
40.00	78	68.00	19840	94.00	22248	143.00	1921
42.00	133	69.00	19000	95.00	190592	146.00	394
43.00	107	70.00	1674	96.00	13981	148.00	589
44.00	948	72.00	853	97.00	459	155.00	546
45.00	1836	73.00	7900	104.00	861	157.00	398
47.00	2153	74.00	30744	105.00	487	161.00	123
48.00	1264	75.00	91712	106.00	799	174.00	204672
49.00	8099	76.00	8101	115.00	109	175.00	16258
50.00	40456	77.00	1190	116.00	878	176.00	200384
51.00	12180	78.00	704	117.00	772	177.00	13726
52.00	378	79.00	5772	118.00	943	178.00	402
55.00	628	80.00	1906	119.00	876		

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JBFBB02.D

Injection Date: 02-Feb-2015 12:20:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 500.0 mL

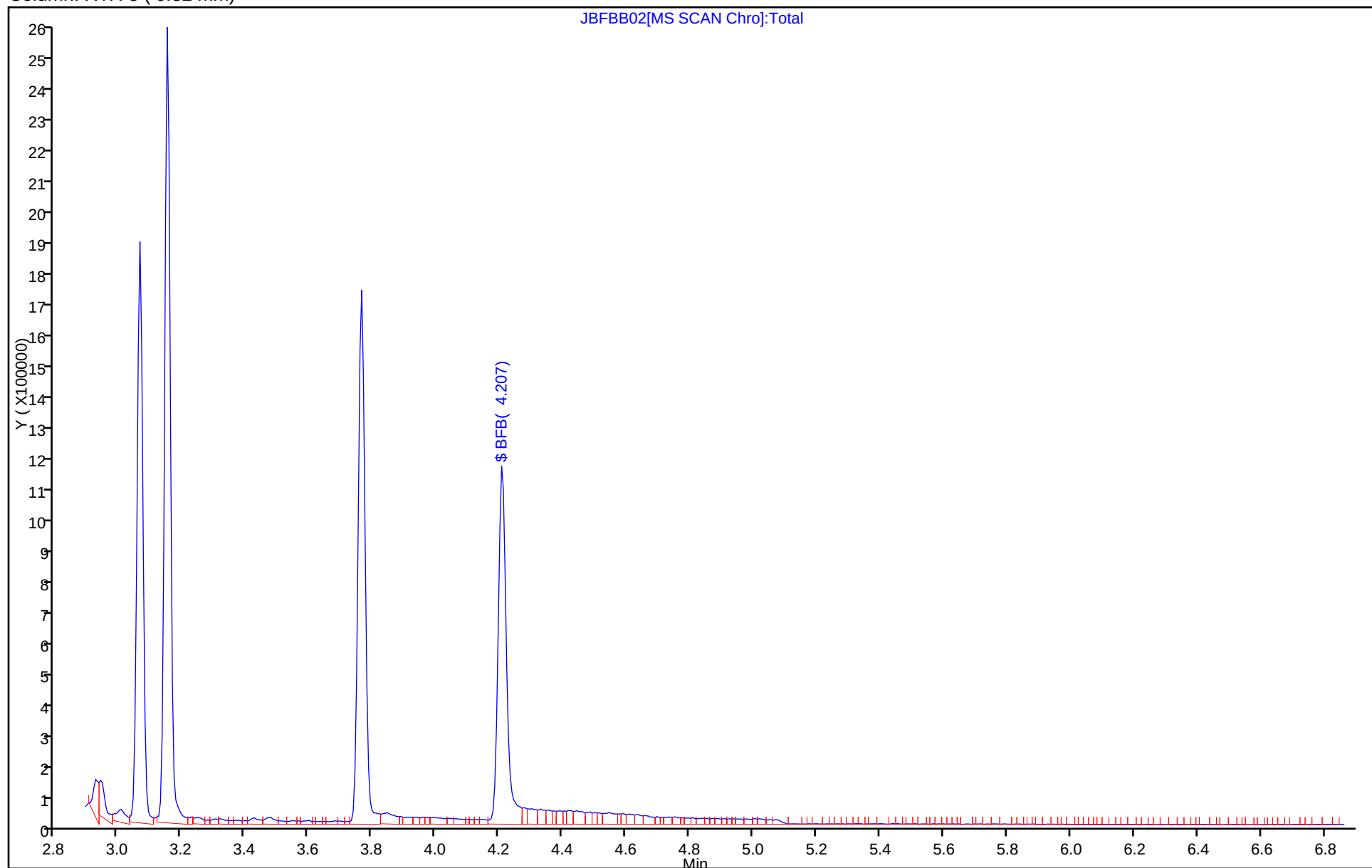
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JBFB31A.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 31-Mar-2015 09:40:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: BFB,,3,,,bfb
Misc. Info.: J033115,BFB,,140-0001518-001
Operator ID: 7126 Instrument ID: MJ
Method: \\KNXCHROM\ChromData\MJ\20150330-1518.b\MJ_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 01-Apr-2015 09:18:11 Calib Date: 02-Feb-2015 20:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK018

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
\$ 4 BFB	95	4.230	4.230	0.000	0	333410	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

MAbfb1_00003

Amount Added: 40.00

Units: ml

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JBFBC31A.D

Injection Date: 31-Mar-2015 09:40:30

Instrument ID: MJ

Lims ID: BFB

Client ID:

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 1

Injection Vol: 500.0 mL

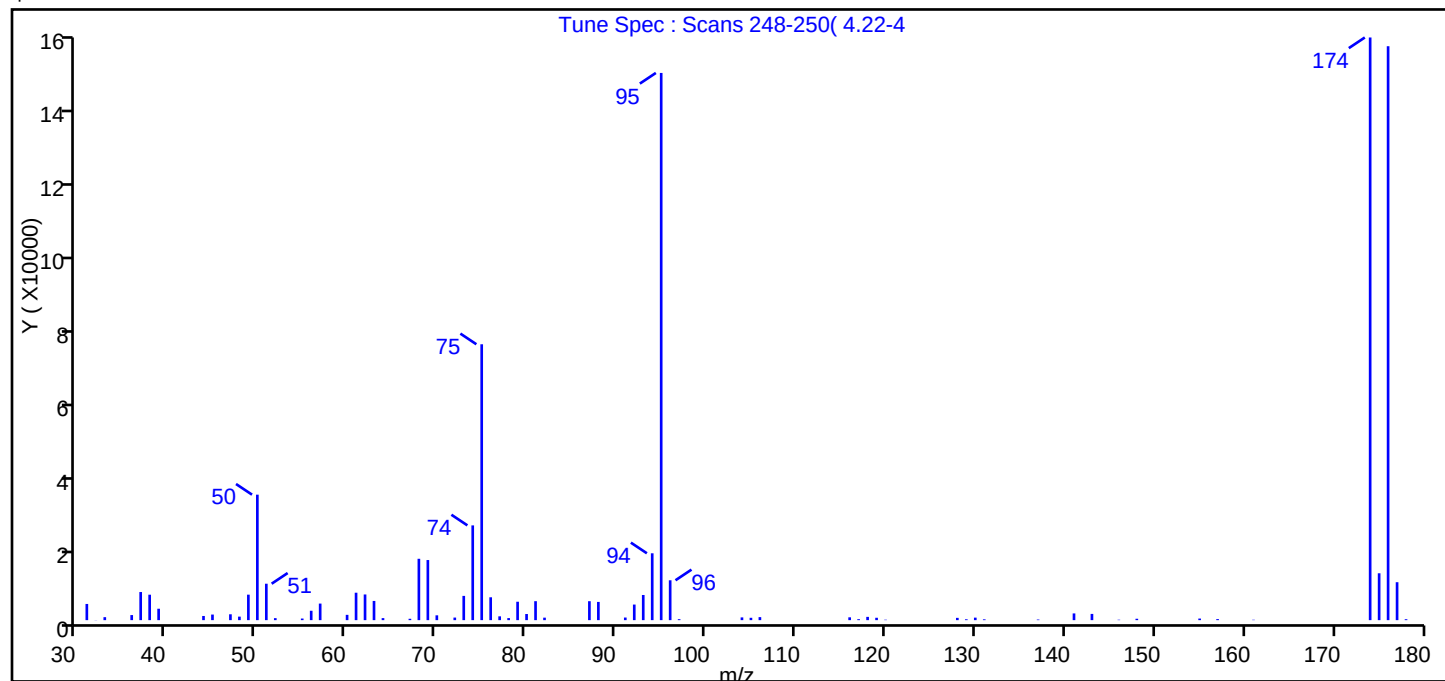
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Tune Method: BFB Method 8260

\$ 4 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.9
75	30 to 60% of m/z 95	50.4
96	5 to 9% of m/z 95	7.3
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	106.5
175	5 to 9% of m/z 174	8.6 (8.0)
176	Greater than 95% but less than 101% of m/z 174	104.9 (98.5)
177	5 to 9% of m/z 176	6.9 (6.6)

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JBFB31A.D\MJ_TO15.rslt\spectra.d
Injection Date: 31-Mar-2015 09:40:30
Spectrum: Tune Spec : Scans 248-250(4.22-4
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 72

m/z	Y	m/z	Y	m/z	Y	m/z	Y
31.00	4266	60.00	1395	81.00	4995	120.00	113
32.00	38	61.00	7227	82.00	656	128.00	601
33.00	784	62.00	6768	87.00	4992	129.00	227
36.00	1336	63.00	5059	88.00	4804	130.00	660
37.00	7408	64.00	534	91.00	687	131.00	214
38.00	6704	67.00	360	92.00	4108	137.00	162
39.00	3007	68.00	16169	93.00	6628	141.00	1771
44.00	1098	69.00	15837	94.00	17616	143.00	1642
45.00	1474	70.00	1270	95.00	144192	146.00	111
47.00	1546	72.00	678	96.00	10504	148.00	365
48.00	929	73.00	6391	97.00	253	155.00	418
49.00	6715	74.00	24968	104.00	722	157.00	272
50.00	33064	75.00	72696	105.00	620	161.00	101
51.00	9599	76.00	6023	106.00	795	174.00	153536
52.00	525	77.00	1005	116.00	744	175.00	12349
55.00	424	78.00	541	117.00	253	176.00	151232
56.00	2473	79.00	4850	118.00	861	177.00	9996
57.00	4366	80.00	1614	119.00	625	178.00	242

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JBFB31A.D

Injection Date: 31-Mar-2015 09:40:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 500.0 mL

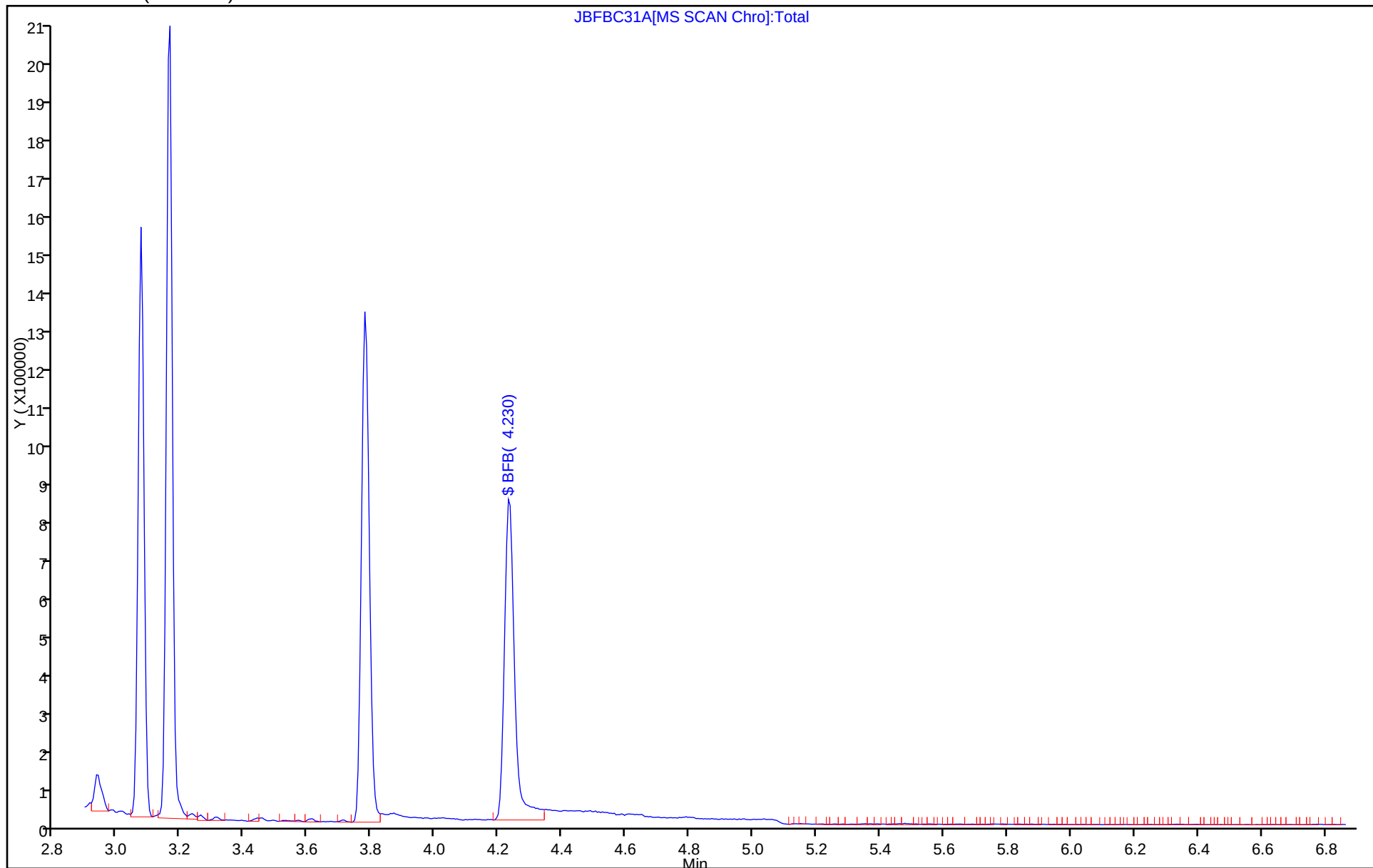
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MJ_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: TestAmerica Knoxville Job No.: 140-2950-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: MB 140-2576/4

Matrix: Air Lab File ID: J500BC31.D

Analysis Method: TO 15 LL Date Collected: _____

Sample wt/vol: 500 (mL) Date Analyzed: 03/31/2015 11:56

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.: 2576 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		0.080	
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		0.040	
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		0.080	
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: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-2576/4
 Matrix: Air Lab File ID: J500BC31.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 03/31/2015 11:56
 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.: 2576 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		0.80	
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		0.040	
75-69-4	Trichlorofluoromethane	137.37	ND		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: MB 140-2576/4

Matrix: Air Lab File ID: J500BC31.D

Analysis Method: TO 15 LL Date Collected: _____

Sample wt/vol: 500 (mL) Date Analyzed: 03/31/2015 11:56

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.: 2576 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		0.32	
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		0.25	
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		0.32	
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: TestAmerica Knoxville Job No.: 140-2950-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: MB 140-2576/4

Matrix: Air Lab File ID: J500BC31.D

Analysis Method: TO 15 LL Date Collected: _____

Sample wt/vol: 500 (mL) Date Analyzed: 03/31/2015 11:56

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.: 2576 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		1.5	
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		0.21	
75-69-4	Trichlorofluoromethane	137.37	ND		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\J500BC31.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 31-Mar-2015 11:56:30 ALS Bottle#: 16 Worklist Smp#: 4
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: MB500mL
 Misc. Info.: J033115,TO15,,140-0001518-004
 Operator ID: 7126 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150330-1518.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 01-Apr-2015 09:18:38 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK018

First Level Reviewer: tajh

Date: 31-Mar-2015 13:18:05

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	9.569	9.577	-0.008	97	282796	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.705	11.718	-0.013	96	1240200	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.353	16.360	-0.007	90	1062006	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.966	17.969	-0.003	89	697224	4.00	4.01	
19 2-Methylbutane	43	5.524	5.531	-0.007	25	1996		0.0139	
31 Methylene Chloride	84	6.901	6.919	-0.018	98	5488		0.0605	
T 130 Propane TIC	44	4.061	4.100	-0.040	90	215444		3.05	
T 136 Methanol TIC	31	4.453	4.400	0.053	4	266136		3.76	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\J500BC31.D

Injection Date: 31-Mar-2015 11:56:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: MB

Worklist Smp#: 4

Client ID:

Purge Vol: 500.000 mL

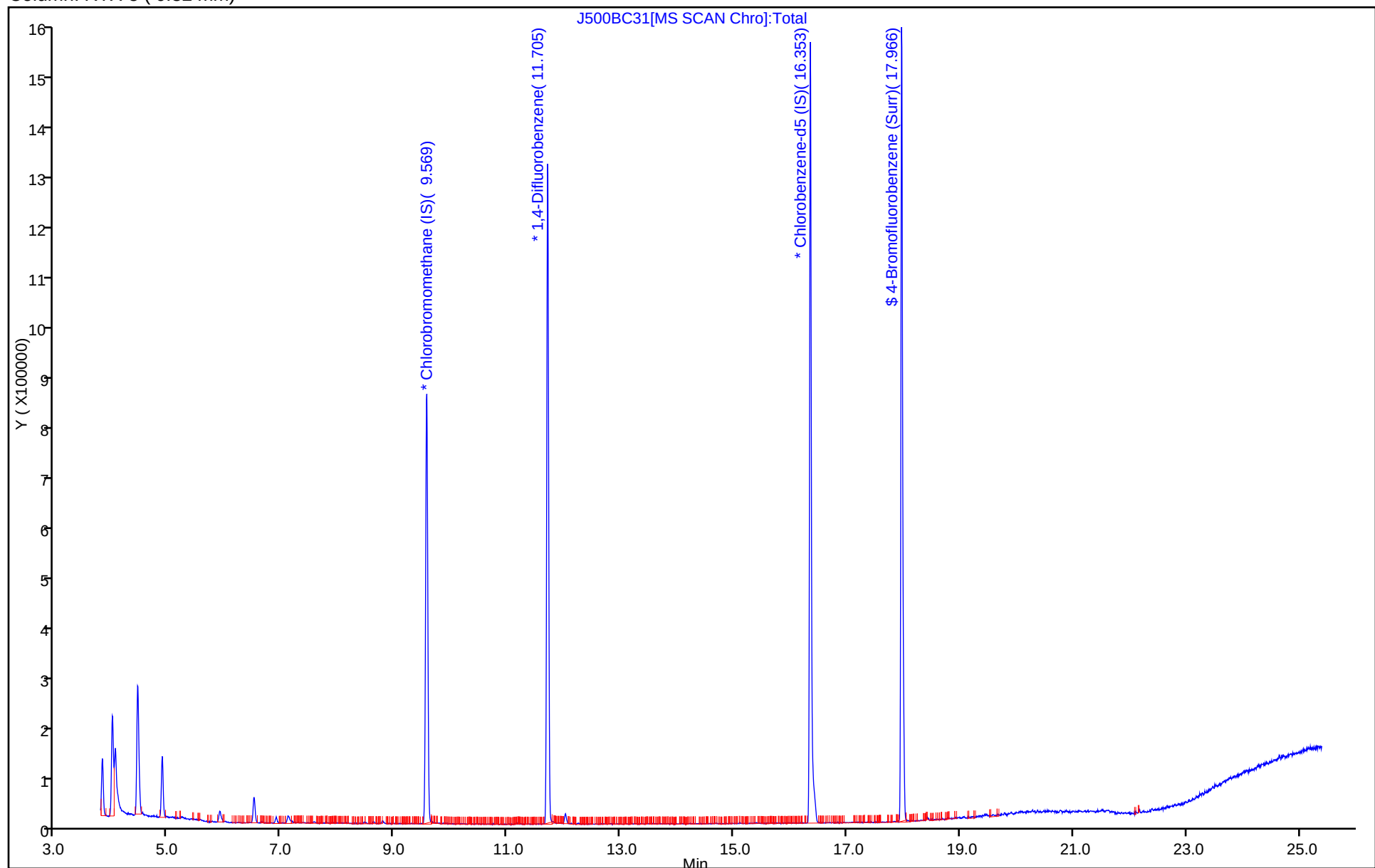
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MJ_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: TestAmerica Knoxville Job No.: 140-2950-1

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCS 140-2576/1002

Matrix: Air Lab File ID: JCCVC31A-LCS.d

Analysis Method: TO 15 LL Date Collected: _____

Sample wt/vol: 500 (mL) Date Analyzed: 03/31/2015 10:08

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.: 2576 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	1.98		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	2.16		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	2.13		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	1.96		0.080	
75-34-3	1,1-Dichloroethane	98.96	1.99		0.080	
75-35-4	1,1-Dichloroethene	96.94	2.00		0.080	
120-82-1	1,2,4-Trichlorobenzene	181.45	1.51		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	2.14		0.080	
106-93-4	1,2-Dibromoethane	187.87	2.11		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	1.88		0.080	
107-06-2	1,2-Dichloroethane	98.96	2.14		0.080	
78-87-5	1,2-Dichloropropane	112.99	1.99		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.09		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	2.20		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	1.83		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	1.78		0.080	
123-91-1	1,4-Dioxane	88.11	1.87		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	2.04		0.20	
78-93-3	2-Butanone	72.11	1.89		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	2.00		0.20	
71-43-2	Benzene	78.11	1.99		0.080	
100-44-7	Benzyl chloride	126.58	1.86		0.16	
75-27-4	Bromodichloromethane	163.83	2.10		0.080	
75-25-2	Bromoform	252.75	1.77		0.080	
74-83-9	Bromomethane	94.94	2.11		0.080	
56-23-5	Carbon tetrachloride	153.81	1.44		0.040	
108-90-7	Chlorobenzene	112.56	2.03		0.080	
75-00-3	Chloroethane	64.52	2.11		0.080	
67-66-3	Chloroform	119.38	1.96		0.080	
74-87-3	Chloromethane	50.49	1.94		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	1.97		0.080	
10061-01-5	cis-1,3-Dichloropropene	110.97	1.89		0.080	
110-82-7	Cyclohexane	84.16	2.07		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 140-2576/1002
 Matrix: Air Lab File ID: JCCVC31A-LCS.d
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 03/31/2015 10:08
 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.: 2576 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	2.14		0.080	
75-71-8	Dichlorodifluoromethane	120.91	2.07		0.080	
64-17-5	Ethanol	46.07	10.1		0.80	
100-41-4	Ethylbenzene	106.17	2.22		0.080	
87-68-3	Hexachlorobutadiene	260.76	1.79		0.080	
110-54-3	Hexane	86.17	1.88		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	2.08		0.16	
75-09-2	Methylene Chloride	84.93	1.83		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	4.29		0.080	
95-47-6	o-Xylene	106.17	2.13		0.080	
100-42-5	Styrene	104.15	2.15		0.080	
75-65-0	t-Butyl alcohol	74.12	1.79		0.32	
127-18-4	Tetrachloroethene	165.83	2.19		0.080	
108-88-3	Toluene	92.14	2.25		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	1.94		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	2.10		0.080	
79-01-6	Trichloroethene	131.39	1.96		0.040	
75-69-4	Trichlorofluoromethane	137.37	2.05		0.080	
75-01-4	Vinyl chloride	62.50	2.13		0.080	

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

TestAmerica Laboratories
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JCCVC31A-LCS.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 31-Mar-2015 10:08:30 ALS Bottle#: 1 Worklist Smp#: 1002
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: CCV/LCS,,2,6,,CCV10
 Misc. Info.: J033115,TO15,,140-0001518-002
 Operator ID: 7126 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150330-1518.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 01-Apr-2015 09:18:11 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK018

First Level Reviewer: tajh

Date: 01-Apr-2015 09:17:52

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	9.577	9.577	0.000	95	263584	4.00	4.00	
* 2 1,4-Difluorobenzene	114	11.718	11.718	0.000	76	1153398	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.360	16.360	0.000	89	968292	4.00	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.969	17.969	0.000	86	617938	4.00	3.90	
6 Chlorodifluoromethane	67	4.047	4.047	0.000	93	61742	2.00	1.94	
7 Propene	41	4.057	4.057	0.000	90	241919	2.00	1.93	
8 Dichlorodifluoromethane	85	4.117	4.117	0.000	100	614129	2.00	2.07	
9 Chloromethane	52	4.326	4.326	0.000	60	81914	2.00	1.94	
10 1,2-Dichloro-1,1,2,2-tetra	135	4.326	4.326	0.000	92	406486	2.00	2.09	
11 Acetaldehyde	44	4.493	4.493	0.000	93	309317	10.0	8.50	
12 Vinyl chloride	62	4.520	4.520	0.000	98	242575	2.00	2.13	
13 Butane	43	4.617	4.617	0.000	86	411693	2.00	2.07	
14 Butadiene	54	4.617	4.617	0.000	64	191888	2.00	2.12	
15 Bromomethane	94	4.988	4.988	0.000	99	203527	2.00	2.11	
16 Chloroethane	64	5.144	5.144	0.000	91	105440	2.00	2.11	
17 Ethanol	31	5.246	5.246	0.000	96	371816	10.0	10.1	
18 Vinyl bromide	106	5.483	5.483	0.000	97	175813	2.00	2.08	
19 2-Methylbutane	43	5.531	5.531	0.000	93	278710	2.00	2.08	
20 Trichlorofluoromethane	101	5.779	5.779	0.000	97	532811	2.00	2.05	
21 Acrolein	56	5.790	5.790	0.000	9	52586	2.00	1.75	
22 Acetonitrile	40	5.859	5.859	0.000	95	73500	2.00	2.32	
23 Acetone	58	5.908	5.908	0.000	73	186040	6.00	5.48	
24 Isopropyl alcohol	45	5.994	5.994	0.000	93	727855	6.00	5.32	
25 Pentane	72	6.015	6.015	0.000	95	31318	2.00	1.97	
26 Ethyl ether	31	6.193	6.193	0.000	90	196224	2.00	2.12	
27 1,1-Dichloroethene	96	6.543	6.543	0.000	91	167915	2.00	2.00	
28 2-Methyl-2-propanol	59	6.640	6.640	0.000	95	277978	2.00	1.79	
29 Acrylonitrile	53	6.656	6.656	0.000	78	107704	2.00	2.30	
30 1,1,2-Trichloro-1,2,2-trif	101	6.726	6.726	0.000	94	341947	2.00	1.96	
31 Methylene Chloride	84	6.919	6.919	0.000	94	155032	2.00	1.83	
32 3-Chloro-1-propene	39	6.935	6.935	0.000	89	163635	2.00	1.78	

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	7.102	7.102	0.000	99	603014	2.00	2.04	
34 trans-1,2-Dichloroethene	96	7.769	7.769	0.000	90	185615	2.00	1.94	
35 2-Methylpentane	43	7.785	7.785	0.000	97	534675	2.00	2.14	
36 Methyl tert-butyl ether	73	7.893	7.893	0.000	97	333985	2.00	2.08	
37 1,1-Dichloroethane	63	8.216	8.216	0.000	100	318941	2.00	1.99	
38 Vinyl acetate	43	8.313	8.313	0.000	100	347949	2.00	2.09	
39 2-Butanone (MEK)	72	8.781	8.781	0.000	89	59163	2.00	1.89	
40 Hexane	56	8.802	8.802	0.000	89	165244	2.00	1.88	
139 Isopropyl ether	45	8.958	8.958	0.000	97	561907	2.00	2.09	
41 cis-1,2-Dichloroethene	96	9.232	9.232	0.000	97	161865	2.00	1.97	
42 Ethyl acetate	43	9.410	9.410	0.000	97	326759	2.00	2.13	
43 Chloroform	83	9.587	9.587	0.000	64	326302	2.00	1.96	
142 Tert-butyl ethyl ether	59	9.652	9.652	0.000	96	431205	2.00	2.14	
44 Tetrahydrofuran	42	10.002	10.002	0.000	94	175762	2.00	2.09	
45 1,1,1-Trichloroethane	97	10.626	10.626	0.000	88	346181	2.00	1.98	
46 1,2-Dichloroethane	62	10.733	10.733	0.000	94	205394	2.00	2.14	
47 n-Butanol	31	11.137	11.137	0.000	74	63885	2.00	1.83	
49 Cyclohexane	69	11.207	11.207	0.000	66	91033	2.00	2.07	
48 Benzene	78	11.207	11.207	0.000	97	423160	2.00	1.99	
50 Carbon tetrachloride	117	11.228	11.228	0.000	93	226092	2.00	1.44	
51 2,3-Dimethylpentane	71	11.304	11.304	0.000	92	100938	2.00	1.86	
52 Thiophene	84	11.476	11.476	0.000	97	265211	2.00	2.20	
140 Tert-amyl methyl ether	73	11.637	11.637	0.000	81	362653	2.00	2.39	
53 Isooctane	57	11.922	11.922	0.000	98	865802	2.00	2.04	
54 n-Heptane	71	12.277	12.277	0.000	95	154046	2.00	1.97	
55 1,2-Dichloropropane	63	12.385	12.385	0.000	88	151118	2.00	1.99	
56 Trichloroethene	130	12.417	12.417	0.000	95	181924	2.00	1.96	
57 Dibromomethane	93	12.509	12.509	0.000	92	182805	2.00	2.05	
59 Dichlorobromomethane	83	12.643	12.643	0.000	98	320973	2.00	2.10	
58 1,4-Dioxane	88	12.648	12.648	0.000	38	56023	2.00	1.87	
60 Methyl methacrylate	41	12.708	12.708	0.000	84	187070	2.00	2.20	
61 Methylcyclohexane	83	13.165	13.165	0.000	90	287508	2.00	1.66	
62 4-Methyl-2-pentanone (MIBK)	43	13.541	13.541	0.000	97	350144	2.00	2.00	
63 cis-1,3-Dichloropropene	75	13.606	13.606	0.000	95	185933	2.00	1.89	
64 trans-1,3-Dichloropropene	75	14.284	14.284	0.000	97	168153	2.00	2.10	
65 Toluene	91	14.413	14.413	0.000	93	398401	2.00	2.25	
66 1,1,2-Trichloroethane	83	14.488	14.488	0.000	72	126269	2.00	2.13	
67 2-Methylthiophene	97	14.569	14.569	0.000	98	338670	2.00	2.20	
68 3-Methylthiophene	97	14.768	14.768	0.000	99	328491	2.00	2.19	
69 2-Hexanone	58	14.843	14.843	0.000	90	151527	2.00	2.15	
70 n-Octane	85	15.058	15.058	0.000	97	146314	2.00	2.23	
71 Chlorodibromomethane	129	15.187	15.187	0.000	96	254961	2.00	2.14	
72 Ethylene Dibromide	107	15.478	15.478	0.000	98	208277	2.00	2.11	
73 Tetrachloroethene	129	15.537	15.537	0.000	94	168290	2.00	2.19	
74 2,3-Dimethylheptane	43	16.392	16.392	0.000	94	551499	2.00	2.42	
75 Chlorobenzene	112	16.409	16.409	0.000	89	286196	2.00	2.03	
76 Ethylbenzene	91	16.683	16.683	0.000	97	458990	2.00	2.22	
77 2-Ethylthiophene	97	16.785	16.785	0.000	98	346219	2.00	2.17	
78 m-Xylene & p-Xylene	91	16.839	16.839	0.000	99	714649	4.00	4.29	
79 n-Nonane	57	17.226	17.226	0.000	95	310803	2.00	2.24	
80 Styrene	104	17.302	17.302	0.000	98	251542	2.00	2.15	
81 Bromoform	173	17.307	17.307	0.000	81	182749	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
82 o-Xylene	91	17.366	17.366	0.000	80	386917	2.00	2.13	
83 1,1,2,2-Tetrachloroethane	83	17.684	17.684	0.000	99	307862	2.00	2.16	
84 1,2,3-Trichloropropane	110	17.840	17.840	0.000	95	72188	2.00	2.20	
85 Isopropylbenzene	105	17.931	17.931	0.000	95	532703	2.00	2.25	
86 N-Propylbenzene	120	18.447	18.447	0.000	95	139952	2.00	2.21	
87 2-Chlorotoluene	126	18.496	18.496	0.000	70	128823	2.00	2.03	
88 4-Ethyltoluene	105	18.587	18.587	0.000	85	507958	2.00	2.22	
89 1,3,5-Trimethylbenzene	120	18.657	18.657	0.000	92	239211	2.00	2.20	
90 Alpha Methyl Styrene	118	18.878	18.878	0.000	87	186994	2.00	2.15	
91 n-Decane	57	18.910	18.910	0.000	86	342827	2.00	2.17	
92 tert-Butylbenzene	119	19.066	19.066	0.000	83	459095	2.00	2.15	
93 1,2,4-Trimethylbenzene	105	19.077	19.077	0.000	89	418047	2.00	2.14	
94 sec-Butylbenzene	105	19.324	19.324	0.000	98	626530	2.00	2.18	
95 1,3-Dichlorobenzene	146	19.351	19.351	0.000	97	205414	2.00	1.83	
96 Benzyl chloride	91	19.421	19.421	0.000	97	244177	2.00	1.86	
97 1,4-Dichlorobenzene	146	19.437	19.437	0.000	93	185064	2.00	1.78	
98 4-Isopropyltoluene	119	19.475	19.475	0.000	81	483068	2.00	2.12	
99 1,2,3-Trimethylbenzene	105	19.534	19.534	0.000	84	359554	2.00	2.29	
100 Butylcyclohexane	83	19.583	19.583	0.000	86	358031	2.00	2.12	
101 2,3-Dihydroindene	117	19.782	19.782	0.000	93	350113	2.00	2.00	
102 1,2-Dichlorobenzene	146	19.787	19.787	0.000	80	209128	2.00	1.88	
103 n-Butylbenzene	91	19.900	19.900	0.000	96	418999	2.00	2.03	
104 Indene	116	19.911	19.911	0.000	85	302867	2.00	2.60	
105 Undecane	57	20.180	20.180	0.000	93	347114	2.00	2.09	
106 1,2-Dimethyl-4-Ethylbenzen	119	20.260	20.260	0.000	97	415151	2.00	2.48	
141 1,2-Dibromo-3-Chloropropan	157	20.373	20.373	0.000	88	56047	2.00	1.21	
108 1,2,4,5-Tetramethylbenzene	119	20.653	20.653	0.000	96	432709	2.00	2.09	
107 1,2,3,5-Tetramethylbenzene	119	20.707	20.707	0.000	94	275052	2.00	2.12	
109 1,2,3,4-Tetramethylbenzene	119	21.132	21.132	0.000	97	343106	2.00	2.05	
110 Dodecane	57	21.266	21.266	0.000	92	327940	2.00	2.22	
111 1,2,4-Trichlorobenzene	180	21.508	21.508	0.000	93	67851	2.00	1.51	
112 Naphthalene	128	21.637	21.637	0.000	99	171125	2.00	1.71	
113 Benzo(b)thiophene	134	21.729	21.729	0.000	97	76677	2.00	1.55	
114 Hexachlorobutadiene	225	21.799	21.799	0.000	86	153742	2.00	1.79	
115 1,2,3-Trichlorobenzene	180	21.858	21.858	0.000	95	61246	2.00	1.55	
116 2-Methylnaphthalene	142	22.391	22.391	0.000	93	30133	6.25	2.88	
117 1-Methylnaphthalene	142	22.514	22.514	0.000	96	39093	6.25	3.52	
A 118 C6 Range	1	8.802	(8.738-8.867)		0	1928903	2.00	1.91	
A 122 Toluene Range	1	14.413	(14.383-14.443)		0	986022	2.00	2.27	
A 123 C8 Range	1	15.092	(15.078-15.152)		0	1601675	2.00	2.25	
S 124 Xylenes, Total	100				0		6.00	6.43	

Reagents:

IBM2C00X10_00002

Amount Added: 100.00

Units: mL

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 01-Apr-2015 09:18:13

Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Laboratories

Data File: \\KNXCHROM\ChromData\MJ\20150330-1518.b\JCCVC31A-LCS.d

Injection Date: 31-Mar-2015 10:08:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: LCS

Worklist Smp#: 1002

Client ID:

Purge Vol: 500.000 mL

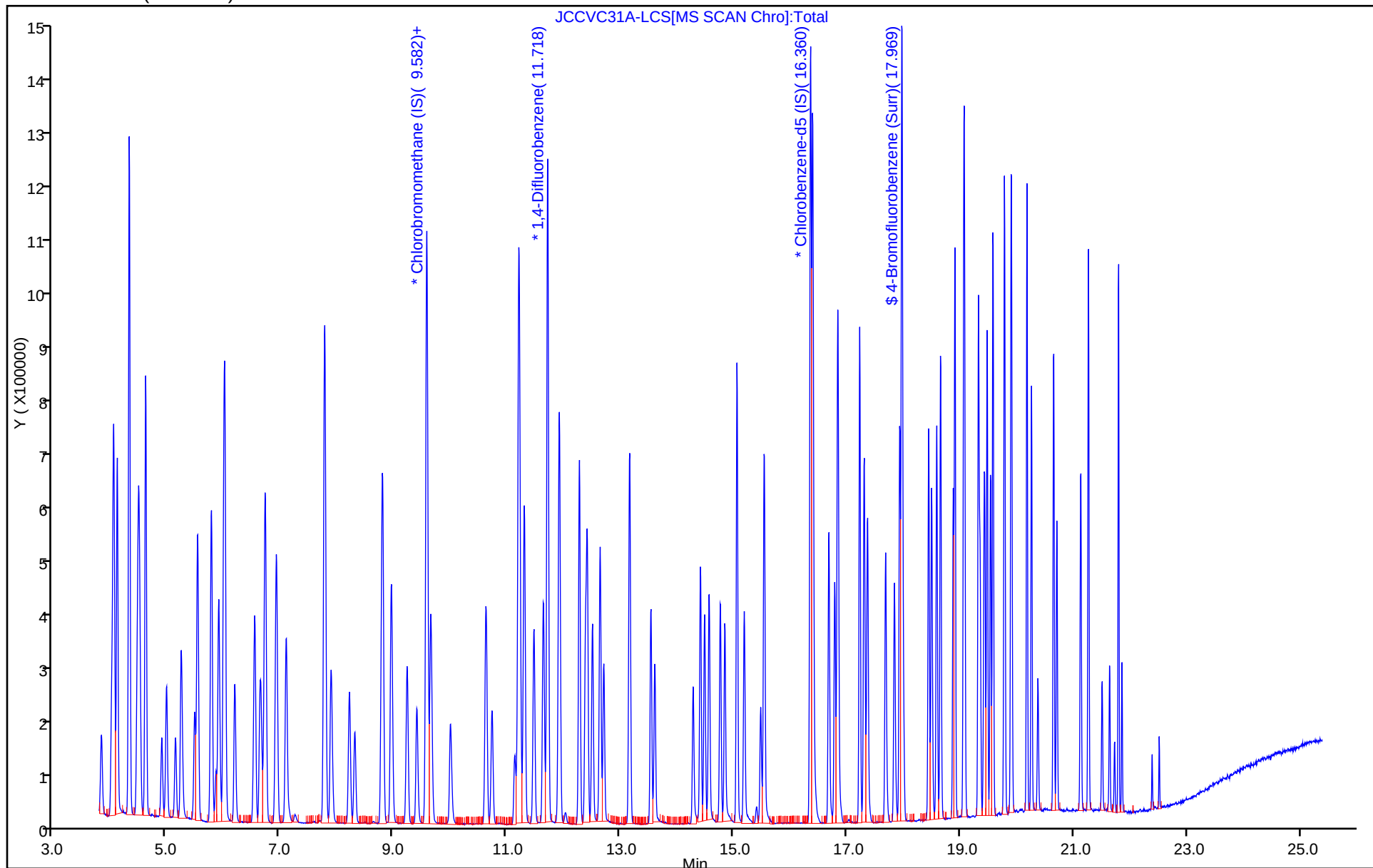
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Knoxville Job No.: 140-2950-1

SDG No.: _____

Instrument ID: MJ Start Date: 02/02/2015 12:20Analysis Batch Number: 2321 End Date: 02/03/2015 01:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-2321/1		02/02/2015 12:20	1	JBFB02.D	RTX-5 0.32 (mm)
IC 140-2321/2		02/02/2015 12:48	1	JB02icL1.D	RTX-5 0.32 (mm)
IC 140-2321/3		02/02/2015 13:43	1	JB02icL2.D	RTX-5 0.32 (mm)
IC 140-2321/4		02/02/2015 14:37	1	JB02icL3.D	RTX-5 0.32 (mm)
IC 140-2321/5		02/02/2015 15:32	1	JB02icL4.D	RTX-5 0.32 (mm)
IC 140-2321/6		02/02/2015 16:27	1	JB02icL5.D	RTX-5 0.32 (mm)
ICIS 140-2321/7		02/02/2015 17:21	1	JB02icisL6.D	RTX-5 0.32 (mm)
IC 140-2321/8		02/02/2015 18:16	1	JB02icL7.D	RTX-5 0.32 (mm)
IC 140-2321/9		02/02/2015 19:10	1	JB02icL8.D	RTX-5 0.32 (mm)
IC 140-2321/10		02/02/2015 20:05	1	JB02icL9.D	RTX-5 0.32 (mm)
ICV 140-2321/13		02/02/2015 22:48	1	JB02LCS.D	RTX-5 0.32 (mm)
ZZZZZ		02/03/2015 00:45	1		RTX-5 0.32 (mm)
ZZZZZ		02/03/2015 01:39	1		RTX-5 0.32 (mm)

150202

TA-Knoxville
TO-14 Autosampler Log

Sample	Position/Volume	psia	Date	Time
BFB	16 - 100 mL	21.1	2/2/2015	12:20:26 PM
ICLV01	11 - 101 mL	20.1	2/2/2015	12:48:29 PM
ICLV02	11 - 201 mL	19.7	2/2/2015	1:43:09 PM
ICLV03	12 - 20 mL	21	2/2/2015	2:37:50 PM
ICLV04	12 - 41 mL	20.4	2/2/2015	3:32:24 PM
ICLV05	12 - 101 mL	19.6	2/2/2015	4:27:00 PM
ICLV06	13 - 101 mL	19.9	2/2/2015	5:21:40 PM
ICLV07	13 - 201 mL	18.8	2/2/2015	6:16:14 PM
ICLV08	14 - 101 mL	29	2/2/2015	7:10:51 PM
ICLV09	14 - 201 mL	27.6	2/2/2015	8:05:16 PM
FLUSH	15 - 50 mL	29.7	2/2/2015	8:59:48 PM
ICV-LCS	15 - 101 mL	28.6	2/2/2015	9:54:12 PM
LCS-ICV	15 - 201 mL	27.3	2/2/2015	10:48:42 PM
MB500mL	16 - 501 mL	20.3	2/2/2015	11:44:23 PM
2643-04	11 - 1001 mL	17.7	2/3/2015	12:45:14 AM
2643-03	14 - 10 mL	27.1	2/3/2015	1:39:34 AM

TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 15 & KNOX-MS-0023, Rev 1

Analysis Date:	2/2/15	Instrument:	MS	Chrom WL #:	1328	TALS Batch & Event #	TO14/15: 2321 / 275 DOD: 2326 / 276	AFCEE: 2327 / 277 OHIO: 2328 / 278	
Chrom/Worklist Review						1 st	Comments		2 nd
1. Re-read each Limit Group [method editor-limit groups]						✓			
2. Verify LODV in Chrom [method editor -> edit -> MDL]						✓			
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]						✓			✓
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						✓			✓
• 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						✓			✓
• tert-butylbenzene/4-isopropyltoluene						✓			✓
• 1,3-, 1,4-, and 1,2-dichlorobenzene						✓			✓
• 1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes						✓			✓
• 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?						✓	cf LV2-7		✓
MEG Review						TO	ATC	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) [F6 Σ] <i>MTXylene Acrolein</i>						✓	✓	✓	✓
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	NA	NA	NA
18. If curves were used, is correlation coefficient >0.990? [F6]						NA	NA	NA	NA
19. Is the intercept less than the RL for each curve? [F6]						NA	NA	NA	NA
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Chart-C, details]						NA	NA	NA	NA
21. Is the second source analysis within limits? [F8 - iev] <i>LCS</i>						✓	✓	✓	✓
22. Analyst/Date: <i>MS 2/3/15</i>						2nd Level Reviewer/Date: <i>RS 2/3/15</i>			
Comments:									
TALS Review						TO	ATC	DOD	OH
23. Upload ICAL						✓	✓	✓	✓
24. Graphics uploaded? [Sample List Tab]						✓	✓	✓	✓
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. If criteria not met, was a NCM generated?						NA	NA	NA	NA
28. After review in TALS, approve the method in TALS.						✓	✓	✓	✓
29. After verifying TALS is correct, lock method in Chrom <resolve any error issues>						✓	✓	✓	✓
30. Checklist & Entech report scanned, attached & assigned properly?						✓	✓	✓	✓
Analyst: <i>MS</i> Date: <i>2/2/15</i>						2nd Level Reviewer: <i>RS</i> Date: <i>2/2/15</i>			
Comments:									

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica KnoxvilleJob No.: 140-2950-1

SDG No.: _____

Instrument ID: MJStart Date: 03/31/2015 09:40Analysis Batch Number: 2576End Date: 04/01/2015 07:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-2576/1		03/31/2015 09:40	1	JBFBC31A.D	RTX-5 0.32 (mm)
CCVIS 140-2576/2		03/31/2015 10:08	1	JCCVC31A.D	RTX-5 0.32 (mm)
LCS 140-2576/1002		03/31/2015 10:08	1	JCCVC31A-LCS.d	RTX-5 0.32 (mm)
MB 140-2576/4		03/31/2015 11:56	1	J500BC31.D	RTX-5 0.32 (mm)
ZZZZZ		03/31/2015 12:51	1		RTX-5 0.32 (mm)
ZZZZZ		03/31/2015 14:58	1		RTX-5 0.32 (mm)
ZZZZZ		03/31/2015 15:52	1		RTX-5 0.32 (mm)
ZZZZZ		03/31/2015 16:46	11.96		RTX-5 0.32 (mm)
ZZZZZ		03/31/2015 17:41	3.15		RTX-5 0.32 (mm)
ZZZZZ		03/31/2015 18:37	4.53		RTX-5 0.32 (mm)
ZZZZZ		03/31/2015 19:32	10.4		RTX-5 0.32 (mm)
140-2950-1	H29-SS-2015	03/31/2015 20:27	1	JC31P107.D	RTX-5 0.32 (mm)
140-2950-2	H29-BA-2015	03/31/2015 21:22	1	JC31P108.D	RTX-5 0.32 (mm)
140-2950-3	D4-OA-2015	03/31/2015 22:16	1	JC31P109.D	RTX-5 0.32 (mm)
140-2950-4	H30-SS-2015	03/31/2015 23:11	1	JC31P110.D	RTX-5 0.32 (mm)
140-2950-5	H30-BA-2015	04/01/2015 00:07	1	JC31P111.D	RTX-5 0.32 (mm)
ZZZZZ		04/01/2015 01:03	1		RTX-5 0.32 (mm)
ZZZZZ		04/01/2015 01:57	1		RTX-5 0.32 (mm)
ZZZZZ		04/01/2015 02:51	3.04		RTX-5 0.32 (mm)
ZZZZZ		04/01/2015 03:46	35.8		RTX-5 0.32 (mm)
ZZZZZ		04/01/2015 04:41	10.71		RTX-5 0.32 (mm)
ZZZZZ		04/01/2015 05:35	15.29		RTX-5 0.32 (mm)
140-2950-1 DL	H29-SS-2015 DL	04/01/2015 07:03	1	JC31P107DL.D	RTX-5 0.32 (mm)
140-2950-5 DL	H30-BA-2015 DL	04/01/2015 07:57	1	JC31P111DL.D	RTX-5 0.32 (mm)

150331

TA-Knoxville
TO-14 Autosampler Log *1518*

Sample	Position/Volume	psia	Date	Time
BFB	16 - 102 mL	25	3/31/2015	9:39:58 AM
CCV	15 - 101 mL	19.4	3/31/2015	10:08:01 AM
dnuleak	16 - 22 mL	24.9	3/31/2015	11:26:36 AM
BLANK	16 - 502 mL	24.6	3/31/2015	11:56:58 AM
BLANK	16 - 201 mL	24.4	3/31/2015	12:51:58 PM
dnuleak	16 - 21 mL	24.3	3/31/2015	2:30:29 PM
50839BAG	1 - 10 mL	12.1	3/31/2015	2:58:37 PM
2948-01	2 - 12 mL	10.8	3/31/2015	3:52:20 PM
2948-02	3 - 10 mL	13	3/31/2015	4:46:46 PM
2948-03	4 - 10 mL	13.1	3/31/2015	5:41:49 PM
2948-04	5 - 10 mL	12.5	3/31/2015	6:37:01 PM
2948-05	6 - 10 mL	12.9	3/31/2015	7:32:04 PM
2950-01	7 - 502 mL	8.3	3/31/2015	8:27:21 PM
2950-02	8 - 502 mL	9.1	3/31/2015	9:22:07 PM
2950-03	9 - 502 mL	10	3/31/2015	10:16:43 PM
2950-04	10 - 502 mL	9	3/31/2015	11:11:53 PM
2950-05	11 - 502 mL	9.5	4/1/2015	12:07:29 AM
2950-05	11 - 501 mL	7.2	4/1/2015	1:03:20 AM
LOT2958	12 - 501 mL	20.3	4/1/2015	1:57:29 AM
2948-01R	2 - 20 mL	12.7	4/1/2015	2:51:43 AM
2948-02R	3 - 20 mL	13.4	4/1/2015	3:46:22 AM
2948-03R	4 - 10 mL	13.2	4/1/2015	4:41:04 AM
2948-04	5 - 10 mL	13.6	4/1/2015	5:35:23 AM
2950-01	7 - 201 mL	7.7	4/1/2015	7:03:43 AM
2950-05	11 - 201 mL	6.3	4/1/2015	7:57:51 AM

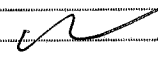
TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 15 & KNOX-MS-0023, Rev 1

Page 1 of 2

Instrument/Date	3/31/15	MJ	Routine	AFCEE	DOD	OHIO
CCAL Chrom WL #	1518	CCAL Batch #	2576			
ICAL Chrom WL #	1328	ICAL Batch # / Event #	2321 / 275	/	/	/

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]	✓		✓
2. Did BFB meet tune criteria? [F8]	✓	☐ [Failed TO-14A, but passes TO-15] (NCM# _____)	✓
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICAL File batch #/start/end Cal date/time)? [F8]	✓		✓
4. Is the %D ≤ 30% for all target analytes? [≤ 40% for AFCEE non-table analytes] [Chrom-F8] [TALS-Sample Results Tab]	✓	☐ CCV - %D - LCS criteria met (NCM# _____) ☐ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM# _____)	✓
5. 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	✓		✓
• tert-butylbenzene/4-isopropyltoluene	✓		✓
• 1,3-, 1,4-, and 1,2-dichlorobenzene	✓		✓
• 1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	✓		✓
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		✓
• 2-, and 1-methylnaphthalene	✓		✓
6. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	✓		MS
7. Has the RT been updated to the method?	✓		
Analyst: <i>[Signature]</i>	Date: 4/1/15	2nd Level Reviewer: <i>[Signature]</i>	Date: 040315
Comments:		Comments:	
8. 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]	✓		✓
9. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		✓
10. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		✓
11. 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# _____)	✓
12. All runs - peaks ID'd correctly and false positives removed?	✓		✓
13. If manual integrations performed, are they properly performed, correctly ID'd, baseline clearly identified, and reason given?	✓		✓
14. 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 concurs, Report both (NCM# _____) ☐ (5) ISTD - Matrix, DL required (NCM# _____)	✓
Sample Reason Sample Reason			
15. Samples outside calibration range scheduled for dilution?	✓	☐ ICAL - Range Exceeded; Minimum Dilution	✓
Samples:			
Chrom Review	1 st	If No, why is data reportable?	2 nd
16. 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			
17. RIC inspected for proper integration for TPH?	MS		MS
18. Obvious non-TPH peaks excluded?	✓		✓
19. Individual TPH peak area < octane high point area?	✓		✓

Page 2 of 2

Analyst: 	Date: 9/1/15	2nd Level Reviewer : 	Date: 09/03/15
Comments:		Comments:	
Example Calculation: 2948-2 1st run - IPA			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			
5.0139 x 10 x 11.96 = 2998.25			

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

Lab Name: TestAmerica Knoxville Job No.: 140-2720-1

SDG No.: _____

Client Sample ID: 10257 Lab Sample ID: 140-2720-9

Matrix: Air Lab File ID: LOT2720.D

Analysis Method: TO 15 LL Date Collected: 02/11/2015 08:00

Sample wt/vol: 500 (mL) Date Analyzed: 02/12/2015 13:59

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.: 2374 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-43-2	Benzene	ND		0.080	
100-44-7	Benzyl chloride	ND		0.16	
74-83-9	Bromomethane	ND		0.080	
56-23-5	Carbon tetrachloride	ND		0.040	
108-90-7	Chlorobenzene	ND		0.080	
75-00-3	Chloroethane	ND		0.080	
87-61-6	1,2,3-Trichlorobenzene	ND		0.40	
67-66-3	Chloroform	ND		0.080	
96-18-4	1,2,3-Trichloropropane	ND		0.20	
74-87-3	Chloromethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.080	
541-73-1	1,3-Dichlorobenzene	ND		0.080	
106-46-7	1,4-Dichlorobenzene	ND		0.080	
75-71-8	Dichlorodifluoromethane	ND		0.080	
75-34-3	1,1-Dichloroethane	ND		0.080	
107-06-2	1,2-Dichloroethane	ND		0.080	
75-35-4	1,1-Dichloroethene	ND		0.080	
156-59-2	cis-1,2-Dichloroethene	ND		0.080	
78-87-5	1,2-Dichloropropane	ND		0.080	
123-91-1	1,4-Dioxane	ND		0.20	
78-93-3	2-Butanone	ND		0.32	
10061-01-5	cis-1,3-Dichloropropene	ND		0.080	
95-49-8	2-Chlorotoluene	ND		0.16	
10061-02-6	trans-1,3-Dichloropropene	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.080	
591-78-6	2-Hexanone	ND		0.20	
107-05-1	3-Chloroprene	ND		0.080	
100-41-4	Ethylbenzene	ND		0.080	
622-96-8	4-Ethyltoluene	ND		0.16	
75-69-4	Trichlorofluoromethane	ND		0.080	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		0.080	
67-64-1	Acetone	ND		2.0	
75-09-2	Methylene Chloride	ND		0.20	
75-05-8	Acetonitrile	ND		0.40	
100-42-5	Styrene	ND		0.080	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2720-1

SDG No.: _____

Client Sample ID: 10257 Lab Sample ID: 140-2720-9

Matrix: Air Lab File ID: LOT2720.D

Analysis Method: TO 15 LL Date Collected: 02/11/2015 08:00

Sample wt/vol: 500(mL) Date Analyzed: 02/12/2015 13:59

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.: 2374 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.080	
107-02-8	Acrolein	ND		0.16	
107-13-1	Acrylonitrile	ND		0.80	
127-18-4	Tetrachloroethene	ND		0.040	
98-83-9	Alpha Methyl Styrene	ND		0.16	
108-88-3	Toluene	ND		0.12	
120-82-1	1,2,4-Trichlorobenzene	ND		0.080	
71-55-6	1,1,1-Trichloroethane	ND		0.080	
75-27-4	Bromodichloromethane	ND		0.080	
79-00-5	1,1,2-Trichloroethane	ND		0.080	
75-25-2	Bromoform	ND		0.080	
79-01-6	Trichloroethene	ND		0.040	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	ND		0.080	
106-97-8	Butane	ND		0.16	
108-67-8	1,3,5-Trimethylbenzene	ND		0.080	
75-15-0	Carbon disulfide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.040	
95-47-6	o-Xylene	ND		0.080	
75-45-6	Chlorodifluoromethane	ND		0.080	
179601-23-1	m-Xylene & p-Xylene	ND		0.080	
106-93-4	1,2-Dibromoethane	ND		0.080	
110-82-7	Cyclohexane	ND		0.20	
124-18-5	n-Decane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.080	
74-95-3	Dibromomethane	ND		0.16	
112-40-3	n-Dodecane	ND		0.40	
64-17-5	Ethanol	ND		0.80	
141-78-6	Ethyl acetate	ND		0.80	
60-29-7	Ethyl ether	ND		0.80	
142-82-5	n-Heptane	ND		0.20	
110-54-3	Hexane	ND		0.20	
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	
91-20-3	Naphthalene	ND		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2720-1
 SDG No.: _____
 Client Sample ID: 10257 Lab Sample ID: 140-2720-9
 Matrix: Air Lab File ID: LOT2720.D
 Analysis Method: TO 15 LL Date Collected: 02/11/2015 08:00
 Sample wt/vol: 500(mL) Date Analyzed: 02/12/2015 13:59
 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.: 2374 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
104-51-8	n-Butylbenzene	ND		0.16	
103-65-1	N-Propylbenzene	ND		0.16	
111-65-9	n-Octane	ND		0.16	
109-66-0	Pentane	ND		0.40	
115-07-1	Propene	ND		0.20	
135-98-8	sec-Butylbenzene	ND		0.16	
98-06-6	tert-Butylbenzene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		0.40	
156-60-5	trans-1,2-Dichloroethene	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	
488-23-3	1,2,3,4-Tetramethylbenzene	ND		0.080	
527-53-7	1,2,3,5-Tetramethylbenzene	ND		0.080	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.080	
934-80-5	1,2-Dimethyl-4-Ethylbenzene	ND		0.080	
90-12-0	1-Methylnaphthalene	ND		1.0	
3074-71-3	2,3-Dimethylheptane	ND		0.080	
872-55-9	2-Ethylthiophene	ND		0.080	
554-14-3	2-Methylthiophene	ND		0.080	
91-57-6	2-Methylnaphthalene	ND		1.0	
616-44-4	3-Methylthiophene	ND		0.080	
95-15-8	Benzo(b) thiophene	ND		0.16	
110-02-1	Thiophene	ND		0.080	
1678-93-9	Butylcyclohexane	ND		0.080	
526-73-8	1,2,3-Trimethylbenzene	ND		0.080	
106-99-0	1,3-Butadiene	ND		0.16	
540-84-1	2,2,4-Trimethylpentane	ND		0.20	
71-36-3	1-Butanol	ND		0.80	
565-59-3	2,3-Dimethylpentane	ND		0.080	
78-78-4	2-Methylbutane	ND		0.20	
107-83-5	2-Methylpentane	ND		0.080	
75-07-0	Acetaldehyde	ND		4.0	
98-82-8	Cumene	ND		0.16	
496-11-7	Indane	ND		0.080	
95-13-6	Indene	ND		0.16	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2720-1
SDG No.: _____
Client Sample ID: 10257 Lab Sample ID: 140-2720-9
Matrix: Air Lab File ID: LOT2720.D
Analysis Method: TO 15 LL Date Collected: 02/11/2015 08:00
Sample wt/vol: 500 (mL) Date Analyzed: 02/12/2015 13:59
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.: 2374 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
99-87-6	p-Cymene	ND		0.080	
75-65-0	tert-Butanol	ND		0.32	
108-87-2	Methylcyclohexane	ND		0.080	
111-84-2	n-Nonane	ND		0.20	

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MJ\20150209-1362.b\LOT2720.D
 Lims ID: 140-2720-A-9 Lab Sample ID: 140-2720-9
 Client ID: 10257
 Sample Type: Client
 Inject. Date: 12-Feb-2015 13:59:30 ALS Bottle#: 15 Worklist Smp#: 4
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 10257
 Misc. Info.: J021215,TO15,,140-0001362-004
 Operator ID: 7126 Instrument ID: MJ
 Method: \\KNXCHROM\ChromData\MJ\20150209-1362.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 13-Feb-2015 10:33:58 Calib Date: 02-Feb-2015 20:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\MJ\20150131-1328.b\JB02icL9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK015

First Level Reviewer: tajh

Date: 12-Feb-2015 15:13:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.580	9.587	-0.007	98	321404	4.00	
* 2 1,4-Difluorobenzene	114	11.721	11.728	-0.007	96	1459334	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.369	16.371	-0.002	89	1200066	4.00	
\$ 5 4-Bromofluorobenzene (Surr	95	17.983	17.985	-0.002	90	743116	3.78	
31 Methylene Chloride	84	6.906	6.914	-0.008	97	6060	0.0588	
110 Dodecane	57	21.275	21.277	-0.002	92	10085	0.0552	
112 Naphthalene	128	21.651	21.648	0.003	97	4970	0.0400	
114 Hexachlorobutadiene	225	21.807	21.804	0.003	94	5257	0.0493	

Reagents:

MAissur1_00002

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\MJ\20150209-1362.b\LOT2720.D

Injection Date: 12-Feb-2015 13:59:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: 140-2720-A-9

Lab Sample ID: 140-2720-9

Worklist Smp#: 4

Client ID: 10257

Purge Vol: 500.000 mL

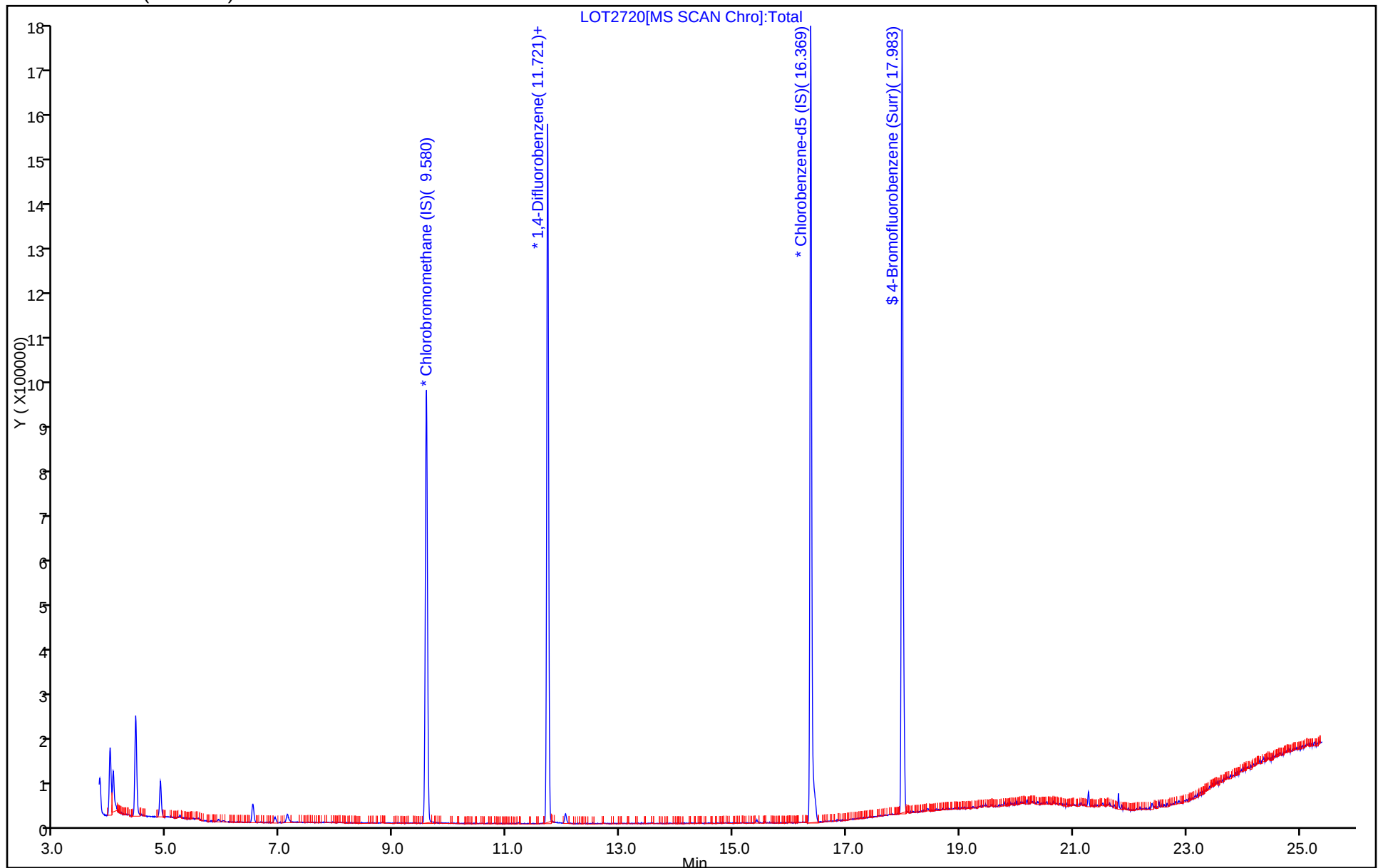
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MJ_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: TestAmerica Knoxville Job No.: 140-2826-1

SDG No.: _____

Client Sample ID: 10687 Lab Sample ID: 140-2826-6

Matrix: Air Lab File ID: LOT2826.D

Analysis Method: TO 15 LL Date Collected: 03/05/2015 07:30

Sample wt/vol: 500(mL) Date Analyzed: 03/07/2015 00:30

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.: 2465 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-43-2	Benzene	ND		0.080	
100-44-7	Benzyl chloride	ND		0.16	
74-83-9	Bromomethane	ND		0.080	
56-23-5	Carbon tetrachloride	ND		0.040	
108-90-7	Chlorobenzene	ND		0.080	
75-00-3	Chloroethane	ND		0.080	
87-61-6	1,2,3-Trichlorobenzene	ND		0.40	
67-66-3	Chloroform	ND		0.080	
96-18-4	1,2,3-Trichloropropane	ND		0.20	
74-87-3	Chloromethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.080	
541-73-1	1,3-Dichlorobenzene	ND		0.080	
106-46-7	1,4-Dichlorobenzene	ND		0.080	
75-71-8	Dichlorodifluoromethane	ND		0.080	
75-34-3	1,1-Dichloroethane	ND		0.080	
107-06-2	1,2-Dichloroethane	ND		0.080	
75-35-4	1,1-Dichloroethene	ND		0.080	
156-59-2	cis-1,2-Dichloroethene	ND		0.080	
78-87-5	1,2-Dichloropropane	ND		0.080	
123-91-1	1,4-Dioxane	ND		0.20	
78-93-3	2-Butanone	ND		0.32	
10061-01-5	cis-1,3-Dichloropropene	ND		0.080	
95-49-8	2-Chlorotoluene	ND		0.16	
10061-02-6	trans-1,3-Dichloropropene	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.080	
591-78-6	2-Hexanone	ND		0.20	
107-05-1	3-Chloroprene	ND		0.080	
100-41-4	Ethylbenzene	ND		0.080	
622-96-8	4-Ethyltoluene	ND		0.16	
75-69-4	Trichlorofluoromethane	ND		0.080	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		0.080	
67-64-1	Acetone	ND		2.0	
75-09-2	Methylene Chloride	ND		0.20	
75-05-8	Acetonitrile	ND		0.40	
100-42-5	Styrene	ND		0.080	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2826-1

SDG No.: _____

Client Sample ID: 10687 Lab Sample ID: 140-2826-6

Matrix: Air Lab File ID: LOT2826.D

Analysis Method: TO 15 LL Date Collected: 03/05/2015 07:30

Sample wt/vol: 500(mL) Date Analyzed: 03/07/2015 00:30

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.: 2465 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.080	
107-02-8	Acrolein	ND		0.16	
107-13-1	Acrylonitrile	ND		0.80	
127-18-4	Tetrachloroethene	ND		0.040	
98-83-9	Alpha Methyl Styrene	ND		0.16	
108-88-3	Toluene	ND		0.12	
120-82-1	1,2,4-Trichlorobenzene	ND		0.080	
71-55-6	1,1,1-Trichloroethane	ND		0.080	
75-27-4	Bromodichloromethane	ND		0.080	
79-00-5	1,1,2-Trichloroethane	ND		0.080	
75-25-2	Bromoform	ND		0.080	
79-01-6	Trichloroethene	ND		0.040	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	ND		0.080	
106-97-8	Butane	ND		0.16	
108-67-8	1,3,5-Trimethylbenzene	ND		0.080	
75-15-0	Carbon disulfide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.040	
95-47-6	o-Xylene	ND		0.080	
75-45-6	Chlorodifluoromethane	ND		0.080	
179601-23-1	m-Xylene & p-Xylene	ND		0.080	
106-93-4	1,2-Dibromoethane	ND		0.080	
110-82-7	Cyclohexane	ND		0.20	
124-18-5	n-Decane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.080	
74-95-3	Dibromomethane	ND		0.16	
112-40-3	n-Dodecane	ND		0.40	
64-17-5	Ethanol	ND		0.80	
141-78-6	Ethyl acetate	ND		0.80	
60-29-7	Ethyl ether	ND		0.80	
142-82-5	n-Heptane	ND		0.20	
110-54-3	Hexane	ND		0.20	
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	
91-20-3	Naphthalene	ND		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2826-1
 SDG No.: _____
 Client Sample ID: 10687 Lab Sample ID: 140-2826-6
 Matrix: Air Lab File ID: LOT2826.D
 Analysis Method: TO 15 LL Date Collected: 03/05/2015 07:30
 Sample wt/vol: 500(mL) Date Analyzed: 03/07/2015 00:30
 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.: 2465 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
104-51-8	n-Butylbenzene	ND		0.16	
103-65-1	N-Propylbenzene	ND		0.16	
111-65-9	n-Octane	ND		0.16	
109-66-0	Pentane	ND		0.40	
115-07-1	Propene	ND		0.20	
135-98-8	sec-Butylbenzene	ND		0.16	
98-06-6	tert-Butylbenzene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		0.40	
156-60-5	trans-1,2-Dichloroethene	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	
488-23-3	1,2,3,4-Tetramethylbenzene	ND		0.080	
527-53-7	1,2,3,5-Tetramethylbenzene	ND		0.080	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.080	
934-80-5	1,2-Dimethyl-4-Ethylbenzene	ND		0.080	
90-12-0	1-Methylnaphthalene	ND		1.0	
3074-71-3	2,3-Dimethylheptane	ND		0.080	
872-55-9	2-Ethylthiophene	ND		0.080	
554-14-3	2-Methylthiophene	ND		0.080	
91-57-6	2-Methylnaphthalene	ND		1.0	
616-44-4	3-Methylthiophene	ND		0.080	
95-15-8	Benzo(b) thiophene	ND		0.16	
110-02-1	Thiophene	ND		0.080	
1678-93-9	Butylcyclohexane	ND		0.080	
526-73-8	1,2,3-Trimethylbenzene	ND		0.080	
106-99-0	1,3-Butadiene	ND		0.16	
540-84-1	2,2,4-Trimethylpentane	ND		0.20	
71-36-3	1-Butanol	ND		0.80	
565-59-3	2,3-Dimethylpentane	ND		0.080	
78-78-4	2-Methylbutane	ND		0.20	
107-83-5	2-Methylpentane	ND		0.080	
75-07-0	Acetaldehyde	ND		4.0	
98-82-8	Cumene	ND		0.16	
496-11-7	Indane	ND		0.080	
95-13-6	Indene	ND		0.16	

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

Lab Name: TestAmerica Knoxville Job No.: 140-2826-1
SDG No.: _____
Client Sample ID: 10687 Lab Sample ID: 140-2826-6
Matrix: Air Lab File ID: LOT2826.D
Analysis Method: TO 15 LL Date Collected: 03/05/2015 07:30
Sample wt/vol: 500 (mL) Date Analyzed: 03/07/2015 00:30
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.: 2465 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
99-87-6	p-Cymene	ND		0.080	
75-65-0	tert-Butanol	ND		0.32	
108-87-2	Methylcyclohexane	ND		0.080	
111-84-2	n-Nonane	ND		0.20	

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\ME\20150304-1426.b\LOT2826.D
 Lims ID: 140-2826-A-6 Lab Sample ID: 140-2826-6
 Client ID: 10687
 Sample Type: Client
 Inject. Date: 07-Mar-2015 00:30:30 ALS Bottle#: 14 Worklist Smp#: 19
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 10687
 Misc. Info.: E030615,TO5,,140-0001426-019
 Operator ID: 7126 Instrument ID: ME
 Method: \\KNXCHROM\ChromData\ME\20150304-1426.b\ME_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 10-Mar-2015 10:53:07 Calib Date: 03-Mar-2015 16:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\KNXCHROM\ChromData\ME\20150302-1421.b\ic I9.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK004

First Level Reviewer: tajh

Date: 09-Mar-2015 10:44:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.485	8.491	-0.006	97	330576	4.00	
* 2 1,4-Difluorobenzene	114	10.723	10.729	-0.006	96	1507130	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.555	15.555	0.000	91	1385260	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.210	17.210	0.000	87	1058260	4.06	
24 Isopropyl alcohol	45	5.067	5.056	0.011	93	8043	0.0610	
31 Methylene Chloride	84	5.908	5.919	-0.011	93	5718	0.0632	
62 4-Methyl-2-pentanone (MIBK	43	12.670	12.664	0.006	99	7546	0.0311	

Reagents:

MAissur1_00002 Amount Added: 40.00 Units: mL Run Reagent

TestAmerica Knoxville

Data File: \\KNXCHROM\ChromData\ME\20150304-1426.b\LOT2826.D

Injection Date: 07-Mar-2015 00:30:30

Instrument ID: ME

Operator ID: 7126

Lims ID: 140-2826-A-6

Lab Sample ID: 140-2826-6

Worklist Smp#: 19

Client ID: 10687

Purge Vol: 500.000 mL

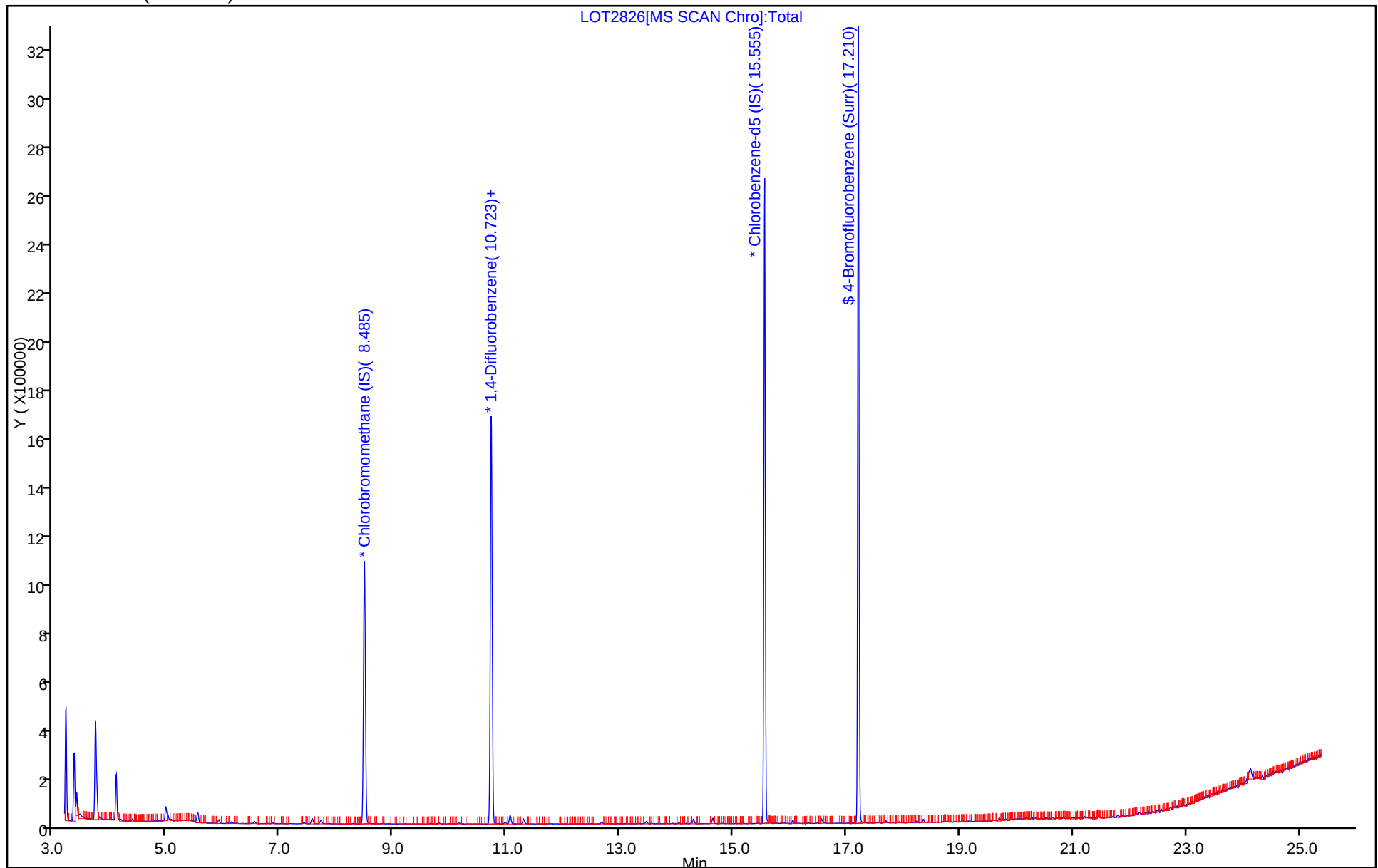
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: ME_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Shipping and Receiving Documents

Client Contact Information Company: NYSDEC Address: 1679 Rt 11 City/State/Zip: Kirkwood / NY / 13745 Phone: 607 775 2545 FAX:		Project Manager: Gary Priscott Phone: 607 775 2545 Site Contact: gary.priscott@dec.ny.gov TAL Contact:		Sampled By: Gary Priscott Joshua Cook		1 of 1 COCs													
Project Name: Fmr Ithaca Gun - off-site Site/location: CT55019A PO# Call Out 121941		Analysis Turnaround Time X Standard (Specify) 30 DAY Rush (Specify)		 140-2950 Chain of Custody		Other (Please specify in notes section)													
Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15	TO-14A	EPA 3C	EPA 25C	ASTM D-1946	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)	
H29-SS-2015	3/23/15-3/24/15	1042	1012	-30+	-5	10429	11210	X										X	
H29-BA-2015		1042	1012	-30+	-6	10156	10715	X						X					
D4-GA-2015		1047	1024	-29.5	-4	09867	09921	X							X				
H30-SS-2015		1122	1058	-28	-1.5	10077	11213	X										X	
H30-BA-2015		1122	1058	-30	-2.5	10071	10409	X						X					
Sampled by: Gary Priscott Joshua Cook		Temperature (Fahrenheit) Interior Ambient ~14° ~10°		Received @ ambient, 16.8°F Fedex #K#7803 9884 8125, 30 day TAT Completely seal intact KU3/27/15		Other (Please specify in notes section)													
Special Instructions/QC Requirements & Comments: BA = Basement Indoor Air SS = Sub-slab Vapor OA = Outdoor Ambient Air		Returning one unused canister & regulator with samples		Canisters Received by: 3/27/15 1170 Received by: Received by:		Date/Time: 3/25/2015 ~ 9:00 Date/Time: Date/Time:		Canisters Shipped by: Gary Priscott via FedEx Samples Relinquished by: Relinquished by:		6 canisters 6 flow 6 CC									

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G1
Date: 3/30/2015

[illegible]

Login Sample Receipt Checklist

Client: New York State D.E.C.

Job Number: 140-2950-1

Login Number: 2950

List Source: TestAmerica Knoxville

List Number: 1

Creator: Wilson, Ken

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

Attachment D – Data Validation Usability
Summary Report

Data Usability Summary Report

**Former Ithaca Gun Factory
Ithaca, New York**

**Soil Vapor Samples
Lot # # C755019A**

February 2015

ZDATA REPORTS

Data Management and Validation Services

118 Rose Lane Terrace, Syracuse, NY 13219, (716) 907-2341

Data Usability Summary Report

**Soil Vapor Samples
Lot # C755019A**

**Former Ithaca Gun Factory
Ithaca, New York**

Prepared By:

ZDATA REPORTS

Data Management and Validation Services

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EXECUTIVE SUMMARY

This report addresses data quality for air samples collected at the former Ithaca Gun Factory located in Ithaca, New York. The samples were analyzed for TO-15 volatile organics (VOCs) following New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) methodologies. Sample collection was performed by Aztech Environmental Technologies, Inc. located in Ballston Spa, New York. Analytical services were provided by TestAmerica Laboratories, Inc. located in Knoxville, Tennessee.

The TO-15 volatile organic analyses data were determined to be usable for qualitative and quantitative purposes as presented by the laboratory.

TABLE of CONTENTS

SECTION 1 - INTRODUCTION	1
1.1 Introduction	1
1.2 Analytical Methods	1
1.3 Validation Protocols	1
1.4 Data Qualifiers	2
SECTION 2 - DATA VALIDATION SUMMARY	4
2.1 Volatile Organics Analysis	4
3.1 Data Usability	6
3.2 PARCC Evaluation	6
3.2.1 Precision	6
3.2.2 Accuracy	6
3.2.3 Representativeness	6
3.2.4 Comparability	6
3.2.5 Completeness	7

Appendices

Appendix A - Data Validation Checklists

SECTION 1 - INTRODUCTION

1.1 Introduction

This report addresses data quality for air samples collected at the former Ithaca Gun Factory located in Ithaca, New York. The samples were analyzed for TO-15 volatile organics (VOCs) following New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) methodologies. Sample collection was performed by Aztech Technologies, Inc. located in Ballston Spa, New York. Analytical services were provided by TestAmerica Laboratories, Inc. located in Knoxville, Tennessee. The quantity and type of samples submitted for data validation are tabulated below.

Table 1: Introduction - Sample Summary Table

SDG#	Date Collected	Sample Matrix	Sample Identification	
			Client ID	Laboratory ID
140-2797-1	02/23/2015 – 02/24/2015	Soil Vapor	H24-BA-2015	140-2797-1
			H24-SS-2015	140-2797-2
			H15-BA-2015	140-2797-3
			H15-SS-2015	140-2797-4
			H16-BA-2015	140-2797-5
			H16-SS-2015	140-2797-6
			H25-BA-2015	140-2797-7
			H26-BA-2015	140-2797-8
			H26-SS-2015	140-2797-9
			H26-SS-2015	140-2797-10
			D1-0A-2015	140-2797-11
			H27-BA-2015	140-2797-12

1.2 Analytical Methods

The samples were analyzed for TO-15 volatile organics (VOCs) following New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) methodologies (2005 update). Laboratory analyses were provided by TestAmerica Laboratories, Inc. located in Knoxville, Tennessee.

1.3 Validation Protocols

Data validation is a process that involves the evaluation of analytical data against prescribed quality control criteria to determine the usefulness of the data. The analytical data addressed in this report were evaluated utilizing the quality control criteria presented in the following documents:

- *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, EPA-540-R-08-01, June 2008.
- *CLP Organics Data Review and Preliminary Review*, SOP No. HW-6 Revision #14, USEPA Region II, September 2006.
- *Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry SW-846 Method 8260B*, SOP No. HW-24 Revision #2, USEPA Hazardous Waste Support Branch, October 2006.

- *Validating Air Samples Volatile Organic Analysis of Ambient Air in Canister by Method TO-15*, SOP No. HW-31 Revision #4, USEPA Hazardous Waste Support Branch, October 2006.
- *Exhibit E of New York State Department of Environmental Conservation Analytical Services Protocol (NYSDEC ASP)*, NYSDEC June 2005.

1.3.1 Organic Parameters

The validation of organic parameters for this project followed the requirements presented in the analytical methodology and the data validation guidelines presented above. The following QA/QC parameters were evaluated:

TO-15 Volatile Organics Analyses

1. Holding Times
2. GC/MS Instrument Tuning Criteria
3. Calibration
 - a. Initial Calibration
 - b. Continuing Calibration
4. Blank Analysis
5. Surrogate Recovery
6. Matrix Spike / Matrix Spike Duplicate Analysis
7. Reference Standard Analysis
8. Internal Standards Recovery
9. Compound Identification and Quantification
10. Field Duplicate Analysis
11. System Performance
12. Documentation Completeness
13. Overall Data Assessment

1.4 Data Qualifiers

The following qualifiers as specified in the guidance documents presented in Section 1.3 of this report have been used for this data validation.

U	Indicates that the compound was analyzed for, but was not detected. The sample quantification limit is presented and adjusted for dilution. This qualifier is also used to signify that the detection limit of an analyte was raised due to blank contamination.
J	Indicates that the result should be considered approximate. This qualifier is used when the data validation procedure identifies a deficiency in the data generation process.
UJ	Indicates that the detection limit for the analyte in this sample should be considered approximate. This qualifier is used when the data validation process identifies a deficiency in the data generation process.

- R Indicates that the previously reported detection limit or sample result has been rejected due to a major deficiency in the data generation procedure. The data are considered to be unusable for both qualitative and quantitative purposes.

The following sections of this document present a summary of the data validation process. Section 2 discusses data compliance with established QA/QC criteria and qualifications performed on the sample data. A discussion of the Precision, Accuracy, Representativeness, Comparability, and Completeness (PARCC) of the data and data usability are discussed in Section 3. The USEPA Region II Data Validation Checklist is presented in Appendix A.

SECTION 2 - DATA VALIDATION SUMMARY

This section presents a discussion of QA/QC parameter compliance with established criteria and the qualification of data performed when QA/QC parameter deviations were identified. When several deviations from established QA/QC criteria were observed, the final qualifier assigned to the data was based on the cumulative effect of the deviations.

2.1 Volatile Organics Analysis

Data validation was performed for thirteen soil vapor samples. The QA/QC parameters presented in Section 1.3.1 of this report were found to be within specified limits. The overall data assessment is presented below.

Continuing Calibration

The continuing calibration percent difference (%D) limit, which requires the %D to be less than 30 percent, was exceeded for several compounds. Sample qualification included the approximation (J, UJ) of results when %D criteria were exceeded, but were less than 90 percent. Samples requiring qualification due to these deviations are tabulated below.

Table 3: Volatile Organics Analysis - Continuing Calibration Deviations

Date Analyzed	Compound	%D	Result Qualifier	Affected Samples
MJ 03/02/2015 17:45	Methyl tert-butyl ether Ethylbenzene	31.1 % 35.0 %	UJ J, UJ	H24-BA-2015 H24-SS-2015 H15-BA-2015 H15-SS-2015 H16-BA-2015 H16-SS-2015 H25-BA-2015 H26-BA-2015 H26-SS-2015 H26-SS-2015
MJ 03/04/2015 16:35	Benzene	-30.1 %	UJ	D1-OA-2015 H27-BA-2015

Laboratory Control Sample Analysis

Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recovery criteria requiring compound recoveries to be within laboratory generated control limits were exceeded for several compounds. Qualification of sample results included the approximation of results when spike recoveries were greater than the upper limit, but less than 200 percent or less than the lower limit, but greater than 10 percent. Samples qualified due to LCS recovery deviations are tabulated below.

Table 4: Volatile Organics Analyses – Laboratory Control Sample Deviations

Matrix	Compound	Percent Recovery	Control Limits	Qualifier	Affected Samples
Air	Ethylbenzene	135 %	30 % to 130 %	J	H16-BA-2015

Overall Data Assessment

Overall, the laboratory performed TO-15 volatile organic analyses in accordance with the requirements specified in the methods listed in Section 1.2. These data were determined to be usable for qualitative and quantitative purposes as presented by the laboratory.

SECTION 3 - DATA USABILITY and PARCC EVALUATION

3.1 Data Usability

This section presents a summary of the usability of the analytical data and an evaluation of the PARCC parameters. Data usability was calculated as the percentage of data that was not qualified as rejected based on a significant deviation from established QA/QC criteria. Data usability which was calculated separately for each type of analysis is tabulated below.

Table 5: Data Usability and PARCC Evaluation - Data Usability

Parameter	Usability	Deviations
TO-15 Volatile Organics	100 %	None resulting in the rejection of data.

3.2 PARCC Evaluation

The following sections provide an evaluation of the analytical data with respect to the precision, accuracy, representativeness, comparability, and completeness (PARCC) parameters.

3.2.1 Precision

Precision is measured through field duplicate samples, split samples, and laboratory duplicate samples. For this sampling program, none of the data were qualified for laboratory duplicate criteria deviations and none of the data were qualified for field duplicate criteria deviations.

3.2.2 Accuracy

Matrix spike sample, surrogate recovery, internal standard recovery, laboratory control samples, and calibration criteria indicate the accuracy of the data. For this sampling program, none of the analytical data were qualified for deviations from matrix spike recovery criteria; none of the data were qualified for surrogate recovery criteria deviations; none of the data were qualified for internal standard recovery criteria deviations; 0.16 percent of the data were qualified for laboratory control sample deviations; and 3.52 percent of the data were qualified for calibration criteria deviations.

3.2.3 Representativeness

Holding times, sample preservation, and blank analysis are indicators of the representativeness of the analytical data. For this investigation, none of the analytical data required qualification for holding time deviations and none of the analytical data required qualification for blank analysis deviations.

3.2.4 Comparability

Comparability is not compromised provided that the analytical methods did not change over time. A major component of comparability is the use of standard reference materials for calibration and QC. These standards are compared to other unknowns to verify their

concentrations. Since standard analytical methods and reporting procedures were consistently used by the laboratory, the comparability criteria for the analytical data were met.

3.2.5 Completeness

The percent usability or completeness of the data was determined to be 100 percent.

APPENDIX A

DATA VALIDATION CHECKLISTS

Table of Contents

	<u>Page</u>
I. Part A: TO-15 VOA Analyses	2

Data Validation Checklist - Part A: TO-15 VOA Analyses

No:	Parameter	YES	NO	N/A
1.0	<u>Data Completeness and Deliverables</u>			
1.1	Have any missing deliverables been received and added to the data package?	<u> </u>	<u> X </u>	<u> </u>
2.0	<u>Cover Letter, Narrative, and Data Reporting Forms</u>			
2.1	Is the Lab. Narrative and Cover Page Present?	<u> X </u>	<u> </u>	<u> </u>
2.2	Is Case Number contained in the Narrative?	<u> X </u>	<u> </u>	<u> </u>
2.3	Are the following Data Reporting Forms present?			
	Analysis Data Sheet [Form I/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	Tentatively Identified Compounds [Form I-TIC]	<u> X </u>	<u> </u>	<u> </u>
	Blank Summary [Form IV/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	Laboratory Control Sample Data Sheet [Form III/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	GC/MS Instrument Performance Check and Mass Calibration [Form V/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	Initial Calibration [Form VI/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	Continuing Calibration [Form VII/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	Internal Standard Area and RT Summary [Form VIII/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	Canister Certification [Form IX/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
3.0	<u>Canister Receipt/Log-in Sheet</u>			
3.1	Do all info items agree with each sample?	<u> X </u>	<u> </u>	<u> </u>
4.0	<u>Traffic Reports and Laboratory Narrative</u>			
4.1	Are the Traffic Report Forms present for all samples?	<u> X </u>	<u> </u>	<u> </u>
5.0	<u>Holding Times</u>			
5.1	Have any VOA technical holding times of 30 days, determined from the date of sample collection to the date of analysis, been exceeded?	<u> </u>	<u> X </u>	<u> </u>
6.0	<u>Leak Test Evaluation</u>			
6.1	Did the pressure test not vary by more than ± 13.8 kPa (± 2 psi) over the 24 hours period?	<u> X </u>	<u> </u>	<u> </u>
7.0	<u>Canister Certification Form IX/Equivalent</u>			
7.1	Blank Analysis			
	Were the <u>target</u> analytes < the required detection limits specified in the task order?	<u> X </u>	<u> </u>	<u> </u>
7.2	Is the canister certification form provided, and the associated canister sample identification included? When contamination, included contamination detected (all raw data), analyte and reference mass spectra.	<u> X </u>	<u> </u>	<u> </u>

Data Validation Checklist - Part A: TO-15 VOA Analyses

No:	Parameter	YES	NO	N/A
8.0	<u>Laboratory Control Samples</u>			
8.1	Is an LCS Data Sheet [Form III/Equivalent] present and complete for each LCS?	X		
8.2	Was an LCS prepared (10 ppbv total scan, 0.1 ppbv SIM) and analyzed at the required frequency (once per 24 hour analytical sequence, and concurrently with the samples in the SDG)?	X		
8.3	Are there any transcription/calculation errors between the raw data and Form III/Equivalent?		X	
8.4	Is the % recovery within 70 – 130 % for each LCS <u>target compound</u> reported on Form III/Equivalent?		X	
8.5	Is the RT of <u>each reported LCS compound</u> within the windows established during the most recent valid calibration?	X		
8.6	Do the Internal Standards meet the requirements specified in Sections 18.1 and 18.2?	X		
9.0	<u>GC/MS Instrument Performance Check</u>			
9.1	Are the GC/MS Instrument Performance Check Forms [Form V/Equivalent] present for Bromofluorobenzene (BFB)?	X		
9.2	Are the enhanced bar graph spectrum and mass/charge (m/z) listing for the 50 ng BFB provided for each twenty-four hour shift?	X		
9.3	Has the instrument performance compound been analyzed for every twenty-four hours of sample analysis per instrument?	X		
9.4	Have the ion abundances been normalized to m/z 95?	X		
9.5	Have the ion abundance criteria been met for each instrument used?	X		
9.6	Are there any transcription/calculation errors between mass lists and Form Vs?		X	
9.7	Have the appropriate number of significant figures (two) been reported?	X		
9.8	Are the spectra of the mass calibration compound acceptable?	X		
10.0	<u>Performance Evaluation Sample (Optional)</u>			
10.1	Was a PE sample submitted from the Agency with each SDG?			X
10.2	Do the Internal Standards meet the requirements specified in Section 18.1 and 18.2?			X
11.0	<u>Laboratory Method Blanks</u>			
11.1	Is an Analysis Data Sheet [Form IV/Equivalent] present and complete for each method blank?	X		
11.2	Frequency of Analysis:			
	Has a method blank analysis been reported per instrument for each 24-hour analytical sequence?	X		
	Has a method blank been analyzed after the initial calibration or a valid calibration check standard, and before the LCS, prior to sample analysis?	X		
11.3	Is the chromatographic performance (baseline stability) for each instrument acceptable?	X		
11.4	Was the area response of each Internal Standard (IS) in the blank within ± 40 % of the mean area response of the IS of the most recent valid calibration?	X		

Data Validation Checklist - Part A: TO-15 VOA Analyses

No:	Parameter	YES	NO	N/A
11.5	Were the RTs of each IS within ± 0.33 min (20 sec.) between blanks and most recent valid calibration?	<u> X </u>	<u> </u>	<u> </u>
12.0	<u>Blank Contamination</u>			
12.1	Do any method blanks have positive target and non-target VOA results?	<u> </u>	<u> X </u>	<u> </u>
13.0	<u>Target Compound Analytes</u>			
13.1	Are the Organic Analysis Data Sheets [Form I/Equivalent], VOA chromatograms, and data system printouts present and complete with required header information for each of the following:			
	a. Samples?	<u> X </u>	<u> </u>	<u> </u>
	b. Method blanks?	<u> X </u>	<u> </u>	<u> </u>
	c. Laboratory Control Sample (LCS)?	<u> X </u>	<u> </u>	<u> </u>
	d. Performance Evaluation Sample (PES)?	<u> X </u>	<u> </u>	<u> </u>
13.2	Is the chromatographic performance acceptable with respect to:			
	a. Baseline stability?	<u> X </u>	<u> </u>	<u> </u>
	b. Resolution?	<u> X </u>	<u> </u>	<u> </u>
	c. Peak shape?	<u> X </u>	<u> </u>	<u> </u>
	d. Full-scale graph (attenuation)?	<u> X </u>	<u> </u>	<u> </u>
	e. Other?	<u> </u>	<u> </u>	<u> X </u>
13.3	Were any electropositive displacement (negative peaks) or unusual peaks seen?	<u> </u>	<u> X </u>	<u> </u>
13.4	Is the sample component relative retention time (RRT) within ± 0.06 RRT units of the RRT of the standard component from the most recent continuing calibration?	<u> X </u>	<u> </u>	<u> </u>
13.5	Was Nafion dryer used?	<u> </u>	<u> </u>	<u> X </u>
14.0	<u>Tentatively Identified Compounds (TIC)</u>			
14.1	Are all Tentatively Identified Compound Forms [Form I-TIC] present and are retention time, estimated concentration and "JN" qualifier listed corresponding to each TIC?	<u> </u>	<u> </u>	<u> X </u>
14.2	Are the mass spectra for the tentatively identified compounds and associated "best match" spectra included in the sample package for each of the following?			
	a. Samples	<u> </u>	<u> </u>	<u> X </u>
	b. Blanks	<u> </u>	<u> </u>	<u> X </u>
14.3	Are all ions present in the reference mass spectrum with a relative intensity greater than 10 % also present in the sample mass spectrum?	<u> </u>	<u> </u>	<u> X </u>
14.4	Do TIC and "best match" standard relative ion intensities agree within 20 %?	<u> </u>	<u> </u>	<u> X </u>
15.0	<u>Initial Calibration and System Performance [Form VI/Equivalent]</u>			
15.1	Were each GC/MS system calibrated at 5 concentrations that span the monitoring range of the interest in an initial calibration sequence to determine the sensitivity and the linearity of the GC/MS response for the target compounds?	<u> X </u>	<u> </u>	<u> </u>
15.2	Was the same volume introduced into the trap consistently for all field and QC-sample analyses?	<u> X </u>	<u> </u>	<u> </u>

Data Validation Checklist - Part A: TO-15 VOA Analyses

No:	Parameter	YES	NO	N/A
15.3	Was the area response (Y) at each calibration level within $\pm 40\%$ of the mean area response (mean Y) over the initial calibration range for each Internal Standard?	X		
	Did the laboratory tabulate the area response (Y) of the primary ions and the corresponding concentration for each compound and Internal Standard?	X		
15.4	Are the relative retention times (RRTs) for each of the target compounds at each calibration level within ± 0.06 RRT units of the mean relative retention time for the compound?	X		
15.5	Are all individual RRF and average RRFs ≥ 0.050 ?	X		
15.6	Are the response factors (RF) stable i.e., % Relative Standard Deviation (%RSD) $\leq 40.0\%$?	X		
15.7	Are there any transcription/calculation errors in the reporting of average response factors (RRFs) or %RSDs?		X	
15.8	Are the RT shift for each Internal Standard (IS) at each calibration level within 20 seconds of the mean RT over the initial calibration range of each IS?	X		
16.0	<u>Daily Calibration (Form VII/Equivalent)</u>			
16.1	Are the daily Calibration Forms [Form VII/Equivalent] present and complete for the volatile fraction?	X		
16.2	Has the daily calibration standard (20 ppbv total scan, 0.1 ppbv SIM) been analyzed for every twenty-four hours of sample analysis per instrument after the BFB tuning analysis?	X		
16.3	Do any volatile compounds have a % Difference (%D) between the initial and daily RRFs which exceed the $\pm 30\%$ criteria?		X	
16.4	Are there any transcription/calculation errors in the reporting of the average response factors (RRF) or % difference (%D) between initial and daily RRFs?		X	
17.0	<u>Compound Quantitation and Reported Detection Limits</u>			
17.1	Are there any transcription/calculations errors in Form I results?		X	
17.2	Are the reported detection limits adjusted to reflect sample dilutions?	X		
17.3	Have any target compound concentrations exceeded the calibration range of the GC?		X	
17.4	Was more than one method of quantitation used to calculate sample results within a batch or 24-hour analytical sequence?		X	
17.5	Did the lab report the target compounds below CRQLs with the suffix "J"?			X
18.0	<u>Internal Standards (Form VIII/Equivalent)</u>			
18.1	Are the 3 internal standard areas [Form VIII] of every sample, LCS, PE, and blank within the upper and lower limits ($+40\%$ to -40%) for each continuing calibration or 10 ppbv level of initial calibration?	X		
18.2	Are the internal standard retention times in each sample, LCS, PE, and blank within 20 seconds of the corresponding retention times in the associated calibration standard?	X		
19.0	<u>Mass Spectral Interpretation/Identification</u>			
19.1	Are the Organic Analysis Data Sheets present with required header information on each page, for each of the following:			
	a. Samples and/or fractions as appropriate?	X		

Data Validation Checklist - Part A: TO-15 VOA Analyses

No:	Parameter	YES	NO	N/A
	b. Laboratory Control Samples?	<u> X </u>	<u> </u>	<u> </u>
	c. Blanks?	<u> X </u>	<u> </u>	<u> </u>
19.2	Are the VOA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (quant reports) included in the sample package for each of the following:			
	a. Samples and/or fractions as appropriate?	<u> X </u>	<u> </u>	<u> </u>
	b. Laboratory Control Samples?	<u> X </u>	<u> </u>	<u> </u>
	c. Blanks?	<u> X </u>	<u> </u>	<u> </u>
19.3	Is chromatographic performance acceptable with respect to:			
	a. Baseline stability?	<u> X </u>	<u> </u>	<u> </u>
	b. Resolution?	<u> X </u>	<u> </u>	<u> </u>
	c. Peak shape?	<u> X </u>	<u> </u>	<u> </u>
	d. Full-scale graph (attenuation)?	<u> X </u>	<u> </u>	<u> </u>
	e. Other:	<u> </u>	<u> </u>	<u> X </u>
19.4	Are the lab-generated standard mass spectra of the identified compounds present for each sample?	<u> X </u>	<u> </u>	<u> </u>
19.5	Is the RRT of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?	<u> X </u>	<u> </u>	<u> </u>
19.6	Are all ions present in the reference standard mass spectrum at a relative intensity greater than 10 % also present in the sample mass spectrum?	<u> X </u>	<u> </u>	<u> </u>
19.7	Do sample and reference standard relative ion intensities agree within ± 20 %?	<u> X </u>	<u> </u>	<u> </u>
20.0	<u>Field Duplicates</u>			
15.1	Were any field duplicates submitted for VOA analysis?	<u> </u>	<u> X </u>	<u> </u>

Data Usability Summary Report

**Former Ithaca Gun Factory
Ithaca, New York**

**Soil Vapor Samples
Lot # # C755019A**

February 2015

ZDATA REPORTS

Data Management and Validation Services

118 Rose Lane Terrace, Syracuse, NY 13219, (716) 907-2341

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**Soil Vapor Samples
Lot # C755019A**

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Ithaca, New York**

Prepared By:

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EXECUTIVE SUMMARY

This report addresses data quality for air samples collected at the former Ithaca Gun Factory located in Ithaca, New York. The samples were analyzed for TO-15 volatile organics (VOCs) following New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) methodologies. Sample collection was performed by Aztech Environmental Technologies, Inc. located in Ballston Spa, New York. Analytical services were provided by TestAmerica Laboratories, Inc. located in Knoxville, Tennessee.

The TO-15 volatile organic analyses data were determined to be usable for qualitative and quantitative purposes as presented by the laboratory.

TABLE of CONTENTS

SECTION 1 - INTRODUCTION	1
1.1 Introduction	1
1.2 Analytical Methods	1
1.3 Validation Protocols	1
1.4 Data Qualifiers	2
SECTION 2 - DATA VALIDATION SUMMARY	4
2.1 Volatile Organics Analysis	4
3.1 Data Usability	5
3.2 PARCC Evaluation	5
3.2.1 Precision	5
3.2.2 Accuracy	5
3.2.3 Representativeness	5
3.2.4 Comparability	5
3.2.5 Completeness	6

Appendices

Appendix A - Data Validation Checklists

SECTION 1 - INTRODUCTION

1.1 Introduction

This report addresses data quality for air samples collected at the former Ithaca Gun Factory located in Ithaca, New York. The samples were analyzed for TO-15 volatile organics (VOCs) following New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) methodologies. Sample collection was performed by Aztech Technologies, Inc. located in Ballston Spa, New York. Analytical services were provided by TestAmerica Laboratories, Inc. located in Knoxville, Tennessee. The quantity and type of samples submitted for data validation are tabulated below.

Table 1: Introduction - Sample Summary Table

SDG#	Date Collected	Sample Matrix	Sample Identification	
			Client ID	Laboratory ID
140-2815-1	02/26/2015 – 02/27/2015	Soil Vapor	H20-BA-2015	140-2815-1
			DUP1-2015	140-2815-2
			D3-OA-2015	140-2815-3
			H23-BA-2015	140-2815-4
			H23-SS-2015	140-2815-5
			DUP2-2015	140-2815-6
			D2-OA-2015	140-2815-7
			H28-BA-2015	140-2815-8
			H28-SS-2015	140-2815-9
			H3-BA-2015	140-2815-10
			H3-SS-2015	140-2815-11
			H15-BA2-2015	140-2815-12
			H2-BA-2015	140-2815-13

1.2 Analytical Methods

The samples were analyzed for TO-15 volatile organics (VOCs) following New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) methodologies (2005 update). Laboratory analyses were provided by TestAmerica Laboratories, Inc. located in Knoxville, Tennessee.

1.3 Validation Protocols

Data validation is a process that involves the evaluation of analytical data against prescribed quality control criteria to determine the usefulness of the data. The analytical data addressed in this report were evaluated utilizing the quality control criteria presented in the following documents:

- *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, EPA-540-R-08-01, June 2008.
- *CLP Organics Data Review and Preliminary Review*, SOP No. HW-6 Revision #14, USEPA Region II, September 2006.
- *Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry SW-846 Method 8260B*, SOP No. HW-24 Revision #2, USEPA Hazardous Waste Support Branch, October 2006.

- *Validating Air Samples Volatile Organic Analysis of Ambient Air in Canister by Method TO-15*, SOP No. HW-31 Revision #4, USEPA Hazardous Waste Support Branch, October 2006.
- *Exhibit E of New York State Department of Environmental Conservation Analytical Services Protocol (NYSDEC ASP)*, NYSDEC June 2005.

1.3.1 Organic Parameters

The validation of organic parameters for this project followed the requirements presented in the analytical methodology and the data validation guidelines presented above. The following QA/QC parameters were evaluated:

TO-15 Volatile Organics Analyses

1. Holding Times
2. GC/MS Instrument Tuning Criteria
3. Calibration
 - a. Initial Calibration
 - b. Continuing Calibration
4. Blank Analysis
5. Surrogate Recovery
6. Matrix Spike / Matrix Spike Duplicate Analysis
7. Reference Standard Analysis
8. Internal Standards Recovery
9. Compound Identification and Quantification
10. Field Duplicate Analysis
11. System Performance
12. Documentation Completeness
13. Overall Data Assessment

1.4 Data Qualifiers

The following qualifiers as specified in the guidance documents presented in Section 1.3 of this report have been used for this data validation.

U	Indicates that the compound was analyzed for, but was not detected. The sample quantification limit is presented and adjusted for dilution. This qualifier is also used to signify that the detection limit of an analyte was raised due to blank contamination.
J	Indicates that the result should be considered approximate. This qualifier is used when the data validation procedure identifies a deficiency in the data generation process.
UJ	Indicates that the detection limit for the analyte in this sample should be considered approximate. This qualifier is used when the data validation process identifies a deficiency in the data generation process.

- R Indicates that the previously reported detection limit or sample result has been rejected due to a major deficiency in the data generation procedure. The data are considered to be unusable for both qualitative and quantitative purposes.

The following sections of this document present a summary of the data validation process. Section 2 discusses data compliance with established QA/QC criteria and qualifications performed on the sample data. A discussion of the Precision, Accuracy, Representativeness, Comparability, and Completeness (PARCC) of the data and data usability are discussed in Section 3. The USEPA Region II Data Validation Checklist is presented in Appendix A.

SECTION 2 - DATA VALIDATION SUMMARY

This section presents a discussion of QA/QC parameter compliance with established criteria and the qualification of data performed when QA/QC parameter deviations were identified. When several deviations from established QA/QC criteria were observed, the final qualifier assigned to the data was based on the cumulative effect of the deviations.

2.1 Volatile Organics Analysis

Data validation was performed for thirteen soil vapor samples. The QA/QC parameters presented in Section 1.3.1 of this report were found to be within specified limits. The overall data assessment is presented below.

Overall Data Assessment

Overall, the laboratory performed TO-15 volatile organic analyses in accordance with the requirements specified in the methods listed in Section 1.2. These data were determined to be usable for qualitative and quantitative purposes as presented by the laboratory.

SECTION 3 - DATA USABILITY and PARCC EVALUATION

3.1 Data Usability

This section presents a summary of the usability of the analytical data and an evaluation of the PARCC parameters. Data usability was calculated as the percentage of data that was not qualified as rejected based on a significant deviation from established QA/QC criteria. Data usability which was calculated separately for each type of analysis is tabulated below.

Table 5: Data Usability and PARCC Evaluation - Data Usability

Parameter	Usability	Deviations
TO-15 Volatile Organics	100 %	None resulting in the rejection of data.

3.2 PARCC Evaluation

The following sections provide an evaluation of the analytical data with respect to the precision, accuracy, representativeness, comparability, and completeness (PARCC) parameters.

3.2.1 Precision

Precision is measured through field duplicate samples, split samples, and laboratory duplicate samples. For this sampling program, none of the data were qualified for laboratory duplicate criteria deviations and none of the data were qualified for field duplicate criteria deviations.

3.2.2 Accuracy

Matrix spike sample, surrogate recovery, internal standard recovery, laboratory control samples, and calibration criteria indicate the accuracy of the data. For this sampling program, none of the analytical data were qualified for deviations from matrix spike recovery criteria; none of the data were qualified for surrogate recovery criteria deviations; none of the data were qualified for internal standard recovery criteria deviations; none of the data were qualified for laboratory control sample deviations; and none of the data were qualified for calibration criteria deviations.

3.2.3 Representativeness

Holding times, sample preservation, and blank analysis are indicators of the representativeness of the analytical data. For this investigation, none of the analytical data required qualification for holding time deviations and none of the analytical data required qualification for blank analysis deviations.

3.2.4 Comparability

Comparability is not compromised provided that the analytical methods did not change over time. A major component of comparability is the use of standard reference materials for calibration and QC. These standards are compared to other unknowns to verify their

concentrations. Since standard analytical methods and reporting procedures were consistently used by the laboratory, the comparability criteria for the analytical data were met.

3.2.5 Completeness

The percent usability or completeness of the data was determined to be 100 percent.

APPENDIX A

DATA VALIDATION CHECKLISTS

Table of Contents

	<u>Page</u>
I. Part A: TO-15 VOA Analyses	2

Data Validation Checklist - Part A: TO-15 VOA Analyses

No:	Parameter	YES	NO	N/A
1.0	<u>Data Completeness and Deliverables</u>			
1.1	Have any missing deliverables been received and added to the data package?	<u> </u>	<u> X </u>	<u> </u>
2.0	<u>Cover Letter, Narrative, and Data Reporting Forms</u>			
2.1	Is the Lab. Narrative and Cover Page Present?	<u> X </u>	<u> </u>	<u> </u>
2.2	Is Case Number contained in the Narrative?	<u> X </u>	<u> </u>	<u> </u>
2.3	Are the following Data Reporting Forms present?			
	Analysis Data Sheet [Form I/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	Tentatively Identified Compounds [Form I-TIC]	<u> X </u>	<u> </u>	<u> </u>
	Blank Summary [Form IV/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	Laboratory Control Sample Data Sheet [Form III/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	GC/MS Instrument Performance Check and Mass Calibration [Form V/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	Initial Calibration [Form VI/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	Continuing Calibration [Form VII/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	Internal Standard Area and RT Summary [Form VIII/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	Canister Certification [Form IX/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
3.0	<u>Canister Receipt/Log-in Sheet</u>			
3.1	Do all info items agree with each sample?	<u> X </u>	<u> </u>	<u> </u>
4.0	<u>Traffic Reports and Laboratory Narrative</u>			
4.1	Are the Traffic Report Forms present for all samples?	<u> X </u>	<u> </u>	<u> </u>
5.0	<u>Holding Times</u>			
5.1	Have any VOA technical holding times of 30 days, determined from the date of sample collection to the date of analysis, been exceeded?	<u> </u>	<u> X </u>	<u> </u>
6.0	<u>Leak Test Evaluation</u>			
6.1	Did the pressure test not vary by more than ± 13.8 kPa (± 2 psi) over the 24 hours period?	<u> X </u>	<u> </u>	<u> </u>
7.0	<u>Canister Certification Form IX/Equivalent</u>			
7.1	Blank Analysis			
	Were the <u>target</u> analytes < the required detection limits specified in the task order?	<u> X </u>	<u> </u>	<u> </u>
7.2	Is the canister certification form provided, and the associated canister sample identification included? When contamination, included contamination detected (all raw data), analyte and reference mass spectra.	<u> X </u>	<u> </u>	<u> </u>

Data Validation Checklist - Part A: TO-15 VOA Analyses

No:	Parameter	YES	NO	N/A
8.0	<u>Laboratory Control Samples</u>			
8.1	Is an LCS Data Sheet [Form III/Equivalent] present and complete for each LCS?	X		
8.2	Was an LCS prepared (10 ppbv total scan, 0.1 ppbv SIM) and analyzed at the required frequency (once per 24 hour analytical sequence, and concurrently with the samples in the SDG)?	X		
8.3	Are there any transcription/calculation errors between the raw data and Form III/Equivalent?		X	
8.4	Is the % recovery within 70 – 130 % for each LCS <u>target compound</u> reported on Form III/Equivalent?	X		
8.5	Is the RT of <u>each reported LCS compound</u> within the windows established during the most recent valid calibration?	X		
8.6	Do the Internal Standards meet the requirements specified in Sections 18.1 and 18.2?	X		
9.0	<u>GC/MS Instrument Performance Check</u>			
9.1	Are the GC/MS Instrument Performance Check Forms [Form V/Equivalent] present for Bromofluorobenzene (BFB)?	X		
9.2	Are the enhanced bar graph spectrum and mass/charge (m/z) listing for the 50 ng BFB provided for each twenty-four hour shift?	X		
9.3	Has the instrument performance compound been analyzed for every twenty-four hours of sample analysis per instrument?	X		
9.4	Have the ion abundances been normalized to m/z 95?	X		
9.5	Have the ion abundance criteria been met for each instrument used?	X		
9.6	Are there any transcription/calculation errors between mass lists and Form Vs?		X	
9.7	Have the appropriate number of significant figures (two) been reported?	X		
9.8	Are the spectra of the mass calibration compound acceptable?	X		
10.0	<u>Performance Evaluation Sample (Optional)</u>			
10.1	Was a PE sample submitted from the Agency with each SDG?			X
10.2	Do the Internal Standards meet the requirements specified in Section 18.1 and 18.2?			X
11.0	<u>Laboratory Method Blanks</u>			
11.1	Is an Analysis Data Sheet [Form IV/Equivalent] present and complete for each method blank?	X		
11.2	Frequency of Analysis:			
	Has a method blank analysis been reported per instrument for each 24-hour analytical sequence?	X		
	Has a method blank been analyzed after the initial calibration or a valid calibration check standard, and before the LCS, prior to sample analysis?	X		
11.3	Is the chromatographic performance (baseline stability) for each instrument acceptable?	X		
11.4	Was the area response of each Internal Standard (IS) in the blank within ± 40 % of the mean area response of the IS of the most recent valid calibration?	X		

Data Validation Checklist - Part A: TO-15 VOA Analyses

No:	Parameter	YES	NO	N/A
11.5	Were the RTs of each IS within ± 0.33 min (20 sec.) between blanks and most recent valid calibration?	<u> X </u>	<u> </u>	<u> </u>
12.0	<u>Blank Contamination</u>			
12.1	Do any method blanks have positive target and non-target VOA results?	<u> </u>	<u> X </u>	<u> </u>
13.0	<u>Target Compound Analytes</u>			
13.1	Are the Organic Analysis Data Sheets [Form I/Equivalent], VOA chromatograms, and data system printouts present and complete with required header information for each of the following:			
	a. Samples?	<u> X </u>	<u> </u>	<u> </u>
	b. Method blanks?	<u> X </u>	<u> </u>	<u> </u>
	c. Laboratory Control Sample (LCS)?	<u> X </u>	<u> </u>	<u> </u>
	d. Performance Evaluation Sample (PES)?	<u> X </u>	<u> </u>	<u> </u>
13.2	Is the chromatographic performance acceptable with respect to:			
	a. Baseline stability?	<u> X </u>	<u> </u>	<u> </u>
	b. Resolution?	<u> X </u>	<u> </u>	<u> </u>
	c. Peak shape?	<u> X </u>	<u> </u>	<u> </u>
	d. Full-scale graph (attenuation)?	<u> X </u>	<u> </u>	<u> </u>
	e. Other?	<u> </u>	<u> </u>	<u> X </u>
13.3	Were any electropositive displacement (negative peaks) or unusual peaks seen?	<u> </u>	<u> X </u>	<u> </u>
13.4	Is the sample component relative retention time (RRT) within ± 0.06 RRT units of the RRT of the standard component from the most recent continuing calibration?	<u> X </u>	<u> </u>	<u> </u>
13.5	Was Nafion dryer used?	<u> </u>	<u> </u>	<u> X </u>
14.0	<u>Tentatively Identified Compounds (TIC)</u>			
14.1	Are all Tentatively Identified Compound Forms [Form I-TIC] present and are retention time, estimated concentration and "JN" qualifier listed corresponding to each TIC?	<u> </u>	<u> </u>	<u> X </u>
14.2	Are the mass spectra for the tentatively identified compounds and associated "best match" spectra included in the sample package for each of the following?			
	a. Samples	<u> </u>	<u> </u>	<u> X </u>
	b. Blanks	<u> </u>	<u> </u>	<u> X </u>
14.3	Are all ions present in the reference mass spectrum with a relative intensity greater than 10 % also present in the sample mass spectrum?	<u> </u>	<u> </u>	<u> X </u>
14.4	Do TIC and "best match" standard relative ion intensities agree within 20 %?	<u> </u>	<u> </u>	<u> X </u>
15.0	<u>Initial Calibration and System Performance [Form VI/Equivalent]</u>			
15.1	Were each GC/MS system calibrated at 5 concentrations that span the monitoring range of the interest in an initial calibration sequence to determine the sensitivity and the linearity of the GC/MS response for the target compounds?	<u> X </u>	<u> </u>	<u> </u>
15.2	Was the same volume introduced into the trap consistently for all field and QC-sample analyses?	<u> X </u>	<u> </u>	<u> </u>

Data Validation Checklist - Part A: TO-15 VOA Analyses

No:	Parameter	YES	NO	N/A
15.3	Was the area response (Y) at each calibration level within $\pm 40\%$ of the mean area response (mean Y) over the initial calibration range for each Internal Standard?	X		
	Did the laboratory tabulate the area response (Y) of the primary ions and the corresponding concentration for each compound and Internal Standard?	X		
15.4	Are the relative retention times (RRTs) for each of the target compounds at each calibration level within ± 0.06 RRT units of the mean relative retention time for the compound?	X		
15.5	Are all individual RRF and average RRFs ≥ 0.050 ?	X		
15.6	Are the response factors (RF) stable i.e., % Relative Standard Deviation (%RSD) $\leq 40.0\%$?	X		
15.7	Are there any transcription/calculation errors in the reporting of average response factors (RRFs) or %RSDs?		X	
15.8	Are the RT shift for each Internal Standard (IS) at each calibration level within 20 seconds of the mean RT over the initial calibration range of each IS?	X		
16.0	<u>Daily Calibration (Form VII/Equivalent)</u>			
16.1	Are the daily Calibration Forms [Form VII/Equivalent] present and complete for the volatile fraction?	X		
16.2	Has the daily calibration standard (20 ppbv total scan, 0.1 ppbv SIM) been analyzed for every twenty-four hours of sample analysis per instrument after the BFB tuning analysis?	X		
16.3	Do any volatile compounds have a % Difference (%D) between the initial and daily RRFs which exceed the $\pm 30\%$ criteria?	X		
16.4	Are there any transcription/calculation errors in the reporting of the average response factors (RRF) or % difference (%D) between initial and daily RRFs?		X	
17.0	<u>Compound Quantitation and Reported Detection Limits</u>			
17.1	Are there any transcription/calculations errors in Form I results?		X	
17.2	Are the reported detection limits adjusted to reflect sample dilutions?	X		
17.3	Have any target compound concentrations exceeded the calibration range of the GC?		X	
17.4	Was more than one method of quantitation used to calculate sample results within a batch or 24-hour analytical sequence?		X	
17.5	Did the lab report the target compounds below CRQLs with the suffix "J"?			X
18.0	<u>Internal Standards (Form VIII/Equivalent)</u>			
18.1	Are the 3 internal standard areas [Form VIII] of every sample, LCS, PE, and blank within the upper and lower limits (+ 40 % to - 40 %) for each continuing calibration or 10 ppbv level of initial calibration?	X		
18.2	Are the internal standard retention times in each sample, LCS, PE, and blank within 20 seconds of the corresponding retention times in the associated calibration standard?	X		
19.0	<u>Mass Spectral Interpretation/Identification</u>			
19.1	Are the Organic Analysis Data Sheets present with required header information on each page, for each of the following:			
	a. Samples and/or fractions as appropriate?	X		

Data Validation Checklist - Part A: TO-15 VOA Analyses

No:	Parameter	YES	NO	N/A
	b. Laboratory Control Samples?	<u> X </u>	<u> </u>	<u> </u>
	c. Blanks?	<u> X </u>	<u> </u>	<u> </u>
19.2	Are the VOA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (quant reports) included in the sample package for each of the following:			
	a. Samples and/or fractions as appropriate?	<u> X </u>	<u> </u>	<u> </u>
	b. Laboratory Control Samples?	<u> X </u>	<u> </u>	<u> </u>
	c. Blanks?	<u> X </u>	<u> </u>	<u> </u>
19.3	Is chromatographic performance acceptable with respect to:			
	a. Baseline stability?	<u> X </u>	<u> </u>	<u> </u>
	b. Resolution?	<u> X </u>	<u> </u>	<u> </u>
	c. Peak shape?	<u> X </u>	<u> </u>	<u> </u>
	d. Full-scale graph (attenuation)?	<u> X </u>	<u> </u>	<u> </u>
	e. Other:	<u> </u>	<u> </u>	<u> X </u>
19.4	Are the lab-generated standard mass spectra of the identified compounds present for each sample?	<u> X </u>	<u> </u>	<u> </u>
19.5	Is the RRT of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?	<u> X </u>	<u> </u>	<u> </u>
19.6	Are all ions present in the reference standard mass spectrum at a relative intensity greater than 10 % also present in the sample mass spectrum?	<u> X </u>	<u> </u>	<u> </u>
19.7	Do sample and reference standard relative ion intensities agree within ± 20 %?	<u> X </u>	<u> </u>	<u> </u>
20.0	<u>Field Duplicates</u>			
15.1	Were any field duplicates submitted for VOA analysis?	<u> X </u>	<u> </u>	<u> </u>

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March 2015

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Prepared By:

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TABLE of CONTENTS

SECTION 1 - INTRODUCTION	1
1.1 Introduction	1
1.2 Analytical Methods	1
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1.4 Data Qualifiers	2
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3.2.1 Precision	5
3.2.2 Accuracy	5
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			H29-BA-2015	140-2950-2
			D4-OA-2015	140-2950-3
			H30-SS-2015	140-2950-4
			H30-BA-2015	140-2950-5

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4. Blank Analysis
5. Surrogate Recovery
6. Matrix Spike / Matrix Spike Duplicate Analysis
7. Reference Standard Analysis
8. Internal Standards Recovery
9. Compound Identification and Quantification
10. Field Duplicate Analysis
11. System Performance
12. Documentation Completeness
13. Overall Data Assessment

1.4 Data Qualifiers

The following qualifiers as specified in the guidance documents presented in Section 1.3 of this report have been used for this data validation.

U	Indicates that the compound was analyzed for, but was not detected. The sample quantification limit is presented and adjusted for dilution. This qualifier is also used to signify that the detection limit of an analyte was raised due to blank contamination.
J	Indicates that the result should be considered approximate. This qualifier is used when the data validation procedure identifies a deficiency in the data generation process.
UJ	Indicates that the detection limit for the analyte in this sample should be considered approximate. This qualifier is used when the data validation process identifies a deficiency in the data generation process.
R	Indicates that the previously reported detection limit or sample result has been rejected due to a major deficiency in the data generation procedure. The data are considered to be unusable for both qualitative and quantitative purposes.

The following sections of this document present a summary of the data validation process. Section 2 discusses data compliance with established QA/QC criteria and qualifications performed on the

sample data. A discussion of the Precision, Accuracy, Representativeness, Comparability, and Completeness (PARCC) of the data and data usability are discussed in Section 3. The USEPA Region II Data Validation Checklist is presented in Appendix A.

SECTION 2 - DATA VALIDATION SUMMARY

This section presents a discussion of QA/QC parameter compliance with established criteria and the qualification of data performed when QA/QC parameter deviations were identified. When several deviations from established QA/QC criteria were observed, the final qualifier assigned to the data was based on the cumulative effect of the deviations.

2.1 Volatile Organics Analysis

Data validation was performed for thirteen soil vapor samples. The QA/QC parameters presented in Section 1.3.1 of this report were found to be within specified limits. The overall data assessment is presented below.

Overall Data Assessment

Overall, the laboratory performed TO-15 volatile organic analyses in accordance with the requirements specified in the methods listed in Section 1.2. These data were determined to be usable for qualitative and quantitative purposes as presented by the laboratory.

SECTION 3 - DATA USABILITY and PARCC EVALUATION

3.1 Data Usability

This section presents a summary of the usability of the analytical data and an evaluation of the PARCC parameters. Data usability was calculated as the percentage of data that was not qualified as rejected based on a significant deviation from established QA/QC criteria. Data usability which was calculated separately for each type of analysis is tabulated below.

Table 5: Data Usability and PARCC Evaluation - Data Usability

Parameter	Usability	Deviations
TO-15 Volatile Organics	100 %	None resulting in the rejection of data.

3.2 PARCC Evaluation

The following sections provide an evaluation of the analytical data with respect to the precision, accuracy, representativeness, comparability, and completeness (PARCC) parameters.

3.2.1 Precision

Precision is measured through field duplicate samples, split samples, and laboratory duplicate samples. For this sampling program, none of the data were qualified for laboratory duplicate criteria deviations and none of the data were qualified for field duplicate criteria deviations.

3.2.2 Accuracy

Matrix spike sample, surrogate recovery, internal standard recovery, laboratory control samples, and calibration criteria indicate the accuracy of the data. For this sampling program, none of the analytical data were qualified for deviations from matrix spike recovery criteria; none of the data were qualified for surrogate recovery criteria deviations; none of the data were qualified for internal standard recovery criteria deviations; none of the data were qualified for laboratory control sample deviations; and none of the data were qualified for calibration criteria deviations.

3.2.3 Representativeness

Holding times, sample preservation, and blank analysis are indicators of the representativeness of the analytical data. For this investigation, none of the analytical data required qualification for holding time deviations and none of the analytical data required qualification for blank analysis deviations.

3.2.4 Comparability

Comparability is not compromised provided that the analytical methods did not change over time. A major component of comparability is the use of standard reference materials for calibration and QC. These standards are compared to other unknowns to verify their

concentrations. Since standard analytical methods and reporting procedures were consistently used by the laboratory, the comparability criteria for the analytical data were met.

3.2.5 Completeness

The percent usability or completeness of the data was determined to be 100 percent.

APPENDIX A

DATA VALIDATION CHECKLISTS

Table of Contents

	<u>Page</u>
I. Part A: TO-15 VOA Analyses	2

Data Validation Checklist - Part A: TO-15 VOA Analyses

No:	Parameter	YES	NO	N/A
1.0	<u>Data Completeness and Deliverables</u>			
1.1	Have any missing deliverables been received and added to the data package?	<u> </u>	<u> X </u>	<u> </u>
2.0	<u>Cover Letter, Narrative, and Data Reporting Forms</u>			
2.1	Is the Lab. Narrative and Cover Page Present?	<u> X </u>	<u> </u>	<u> </u>
2.2	Is Case Number contained in the Narrative?	<u> X </u>	<u> </u>	<u> </u>
2.3	Are the following Data Reporting Forms present?			
	Analysis Data Sheet [Form I/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	Tentatively Identified Compounds [Form I-TIC]	<u> X </u>	<u> </u>	<u> </u>
	Blank Summary [Form IV/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	Laboratory Control Sample Data Sheet [Form III/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	GC/MS Instrument Performance Check and Mass Calibration [Form V/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	Initial Calibration [Form VI/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	Continuing Calibration [Form VII/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	Internal Standard Area and RT Summary [Form VIII/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
	Canister Certification [Form IX/Equivalent]	<u> X </u>	<u> </u>	<u> </u>
3.0	<u>Canister Receipt/Log-in Sheet</u>			
3.1	Do all info items agree with each sample?	<u> X </u>	<u> </u>	<u> </u>
4.0	<u>Traffic Reports and Laboratory Narrative</u>			
4.1	Are the Traffic Report Forms present for all samples?	<u> X </u>	<u> </u>	<u> </u>
5.0	<u>Holding Times</u>			
5.1	Have any VOA technical holding times of 30 days, determined from the date of sample collection to the date of analysis, been exceeded?	<u> </u>	<u> X </u>	<u> </u>
6.0	<u>Leak Test Evaluation</u>			
6.1	Did the pressure test not vary by more than ± 13.8 kPa (± 2 psi) over the 24 hours period?	<u> X </u>	<u> </u>	<u> </u>
7.0	<u>Canister Certification Form IX/Equivalent</u>			
7.1	Blank Analysis			
	Were the <u>target</u> analytes < the required detection limits specified in the task order?	<u> X </u>	<u> </u>	<u> </u>
7.2	Is the canister certification form provided, and the associated canister sample identification included? When contamination, included contamination detected (all raw data), analyte and reference mass spectra.	<u> X </u>	<u> </u>	<u> </u>

Data Validation Checklist - Part A: TO-15 VOA Analyses

No:	Parameter	YES	NO	N/A
8.0	<u>Laboratory Control Samples</u>			
8.1	Is an LCS Data Sheet [Form III/Equivalent] present and complete for each LCS?	<u>X</u>	<u> </u>	<u> </u>
8.2	Was an LCS prepared (10 ppbv total scan, 0.1 ppbv SIM) and analyzed at the required frequency (once per 24 hour analytical sequence, and concurrently with the samples in the SDG)?	<u>X</u>	<u> </u>	<u> </u>
8.3	Are there any transcription/calculation errors between the raw data and Form III/Equivalent?	<u> </u>	<u>X</u>	<u> </u>
8.4	Is the % recovery within 70 – 130 % for each LCS <u>target compound</u> reported on Form III/Equivalent?	<u>X</u>	<u> </u>	<u> </u>
8.5	Is the RT of <u>each reported LCS compound</u> within the windows established during the most recent valid calibration?	<u>X</u>	<u> </u>	<u> </u>
8.6	Do the Internal Standards meet the requirements specified in Sections 18.1 and 18.2?	<u>X</u>	<u> </u>	<u> </u>
9.0	<u>GC/MS Instrument Performance Check</u>			
9.1	Are the GC/MS Instrument Performance Check Forms [Form V/Equivalent] present for Bromofluorobenzene (BFB)?	<u>X</u>	<u> </u>	<u> </u>
9.2	Are the enhanced bar graph spectrum and mass/charge (m/z) listing for the 50 ng BFB provided for each twenty-four hour shift?	<u>X</u>	<u> </u>	<u> </u>
9.3	Has the instrument performance compound been analyzed for every twenty-four hours of sample analysis per instrument?	<u>X</u>	<u> </u>	<u> </u>
9.4	Have the ion abundances been normalized to m/z 95?	<u>X</u>	<u> </u>	<u> </u>
9.5	Have the ion abundance criteria been met for each instrument used?	<u>X</u>	<u> </u>	<u> </u>
9.6	Are there any transcription/calculation errors between mass lists and Form Vs?	<u> </u>	<u>X</u>	<u> </u>
9.7	Have the appropriate number of significant figures (two) been reported?	<u>X</u>	<u> </u>	<u> </u>
9.8	Are the spectra of the mass calibration compound acceptable?	<u>X</u>	<u> </u>	<u> </u>
10.0	<u>Performance Evaluation Sample (Optional)</u>			
10.1	Was a PE sample submitted from the Agency with each SDG?	<u> </u>	<u> </u>	<u>X</u>
10.2	Do the Internal Standards meet the requirements specified in Section 18.1 and 18.2?	<u> </u>	<u> </u>	<u>X</u>
11.0	<u>Laboratory Method Blanks</u>			
11.1	Is an Analysis Data Sheet [Form IV/Equivalent] present and complete for each method blank?	<u>X</u>	<u> </u>	<u> </u>
11.2	Frequency of Analysis:			
	Has a method blank analysis been reported per instrument for each 24-hour analytical sequence?	<u>X</u>	<u> </u>	<u> </u>
	Has a method blank been analyzed after the initial calibration or a valid calibration check standard, and before the LCS, prior to sample analysis?	<u>X</u>	<u> </u>	<u> </u>
11.3	Is the chromatographic performance (baseline stability) for each instrument acceptable?	<u>X</u>	<u> </u>	<u> </u>
11.4	Was the area response of each Internal Standard (IS) in the blank within ± 40 % of the mean area response of the IS of the most recent valid calibration?	<u>X</u>	<u> </u>	<u> </u>

Data Validation Checklist - Part A: TO-15 VOA Analyses

No:	Parameter	YES	NO	N/A
11.5	Were the RTs of each IS within ± 0.33 min (20 sec.) between blanks and most recent valid calibration?	<u> X </u>	<u> </u>	<u> </u>
12.0	<u>Blank Contamination</u>			
12.1	Do any method blanks have positive target and non-target VOA results?	<u> </u>	<u> X </u>	<u> </u>
13.0	<u>Target Compound Analytes</u>			
13.1	Are the Organic Analysis Data Sheets [Form I/Equivalent], VOA chromatograms, and data system printouts present and complete with required header information for each of the following:			
	a. Samples?	<u> X </u>	<u> </u>	<u> </u>
	b. Method blanks?	<u> X </u>	<u> </u>	<u> </u>
	c. Laboratory Control Sample (LCS)?	<u> X </u>	<u> </u>	<u> </u>
	d. Performance Evaluation Sample (PES)?	<u> X </u>	<u> </u>	<u> </u>
13.2	Is the chromatographic performance acceptable with respect to:			
	a. Baseline stability?	<u> X </u>	<u> </u>	<u> </u>
	b. Resolution?	<u> X </u>	<u> </u>	<u> </u>
	c. Peak shape?	<u> X </u>	<u> </u>	<u> </u>
	d. Full-scale graph (attenuation)?	<u> X </u>	<u> </u>	<u> </u>
	e. Other?	<u> </u>	<u> </u>	<u> X </u>
13.3	Were any electropositive displacement (negative peaks) or unusual peaks seen?	<u> </u>	<u> X </u>	<u> </u>
13.4	Is the sample component relative retention time (RRT) within ± 0.06 RRT units of the RRT of the standard component from the most recent continuing calibration?	<u> X </u>	<u> </u>	<u> </u>
13.5	Was Nafion dryer used?	<u> </u>	<u> </u>	<u> X </u>
14.0	<u>Tentatively Identified Compounds (TIC)</u>			
14.1	Are all Tentatively Identified Compound Forms [Form I-TIC] present and are retention time, estimated concentration and "JN" qualifier listed corresponding to each TIC?	<u> </u>	<u> </u>	<u> X </u>
14.2	Are the mass spectra for the tentatively identified compounds and associated "best match" spectra included in the sample package for each of the following?			
	a. Samples	<u> </u>	<u> </u>	<u> X </u>
	b. Blanks	<u> </u>	<u> </u>	<u> X </u>
14.3	Are all ions present in the reference mass spectrum with a relative intensity greater than 10 % also present in the sample mass spectrum?	<u> </u>	<u> </u>	<u> X </u>
14.4	Do TIC and "best match" standard relative ion intensities agree within 20 %?	<u> </u>	<u> </u>	<u> X </u>
15.0	<u>Initial Calibration and System Performance [Form VI/Equivalent]</u>			
15.1	Were each GC/MS system calibrated at 5 concentrations that span the monitoring range of the interest in an initial calibration sequence to determine the sensitivity and the linearity of the GC/MS response for the target compounds?	<u> X </u>	<u> </u>	<u> </u>
15.2	Was the same volume introduced into the trap consistently for all field and QC-sample analyses?	<u> X </u>	<u> </u>	<u> </u>

Data Validation Checklist - Part A: TO-15 VOA Analyses

No:	Parameter	YES	NO	N/A
15.3	Was the area response (Y) at each calibration level within $\pm 40\%$ of the mean area response (mean Y) over the initial calibration range for each Internal Standard?	X		
	Did the laboratory tabulate the area response (Y) of the primary ions and the corresponding concentration for each compound and Internal Standard?	X		
15.4	Are the relative retention times (RRTs) for each of the target compounds at each calibration level within ± 0.06 RRT units of the mean relative retention time for the compound?	X		
15.5	Are all individual RRF and average RRFs ≥ 0.050 ?	X		
15.6	Are the response factors (RF) stable i.e., % Relative Standard Deviation (%RSD) $\leq 40.0\%$?	X		
15.7	Are there any transcription/calculation errors in the reporting of average response factors (RRFs) or %RSDs?		X	
15.8	Are the RT shift for each Internal Standard (IS) at each calibration level within 20 seconds of the mean RT over the initial calibration range of each IS?	X		
16.0	<u>Daily Calibration (Form VII/Equivalent)</u>			
16.1	Are the daily Calibration Forms [Form VII/Equivalent] present and complete for the volatile fraction?	X		
16.2	Has the daily calibration standard (20 ppbv total scan, 0.1 ppbv SIM) been analyzed for every twenty-four hours of sample analysis per instrument after the BFB tuning analysis?	X		
16.3	Do any volatile compounds have a % Difference (%D) between the initial and daily RRFs which exceed the $\pm 30\%$ criteria?	X		
16.4	Are there any transcription/calculation errors in the reporting of the average response factors (RRF) or % difference (%D) between initial and daily RRFs?		X	
17.0	<u>Compound Quantitation and Reported Detection Limits</u>			
17.1	Are there any transcription/calculations errors in Form I results?		X	
17.2	Are the reported detection limits adjusted to reflect sample dilutions?	X		
17.3	Have any target compound concentrations exceeded the calibration range of the GC?		X	
17.4	Was more than one method of quantitation used to calculate sample results within a batch or 24-hour analytical sequence?		X	
17.5	Did the lab report the target compounds below CRQLs with the suffix "J"?			X
18.0	<u>Internal Standards (Form VIII/Equivalent)</u>			
18.1	Are the 3 internal standard areas [Form VIII] of every sample, LCS, PE, and blank within the upper and lower limits (+ 40 % to - 40 %) for each continuing calibration or 10 ppbv level of initial calibration?	X		
18.2	Are the internal standard retention times in each sample, LCS, PE, and blank within 20 seconds of the corresponding retention times in the associated calibration standard?	X		
19.0	<u>Mass Spectral Interpretation/Identification</u>			
19.1	Are the Organic Analysis Data Sheets present with required header information on each page, for each of the following:			
	a. Samples and/or fractions as appropriate?	X		

Data Validation Checklist - Part A: TO-15 VOA Analyses

No:	Parameter	YES	NO	N/A
	b. Laboratory Control Samples?	<u> X </u>	<u> </u>	<u> </u>
	c. Blanks?	<u> X </u>	<u> </u>	<u> </u>
19.2	Are the VOA Reconstructed Ion Chromatograms, the mass spectra for the identified compounds, and the data system printouts (quant reports) included in the sample package for each of the following:			
	a. Samples and/or fractions as appropriate?	<u> X </u>	<u> </u>	<u> </u>
	b. Laboratory Control Samples?	<u> X </u>	<u> </u>	<u> </u>
	c. Blanks?	<u> X </u>	<u> </u>	<u> </u>
19.3	Is chromatographic performance acceptable with respect to:			
	a. Baseline stability?	<u> X </u>	<u> </u>	<u> </u>
	b. Resolution?	<u> X </u>	<u> </u>	<u> </u>
	c. Peak shape?	<u> X </u>	<u> </u>	<u> </u>
	d. Full-scale graph (attenuation)?	<u> X </u>	<u> </u>	<u> </u>
	e. Other:	<u> </u>	<u> </u>	<u> X </u>
19.4	Are the lab-generated standard mass spectra of the identified compounds present for each sample?	<u> X </u>	<u> </u>	<u> </u>
19.5	Is the RRT of each reported compound within 0.06 RRT units of the standard RRT in the continuing calibration?	<u> X </u>	<u> </u>	<u> </u>
19.6	Are all ions present in the reference standard mass spectrum at a relative intensity greater than 10 % also present in the sample mass spectrum?	<u> X </u>	<u> </u>	<u> </u>
19.7	Do sample and reference standard relative ion intensities agree within ± 20 %?	<u> X </u>	<u> </u>	<u> </u>
20.0	<u>Field Duplicates</u>			
15.1	Were any field duplicates submitted for VOA analysis?	<u> X </u>	<u> </u>	<u> </u>