



Department of
Environmental
Conservation

2017 SOIL VAPOR INTRUSION SAMPLING SUMMARY

Former Ithaca Gun Factory – Off-site, C755019A

August 2017

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	4

Attachments

Attachment A – Site Figure

Attachment B – Laboratory Analytical Results Summary Table

Attachment C – Laboratory Analytical Reports

Attachment D – Data Validation Usability Summary Reports

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 March and April 2017 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 at 121-125 Lake Street in the City of Ithaca, Tompkins County, New York (site) (Attachment A).

Based on results of site characterization work conducted in the off-site area 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 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 and has included additional sampling events during the 2014-2015, and 2015-2016 heating seasons. Each sampling event has been summarized in individual sampling reports.

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 Tioga 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 ranges; 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 2001 to 2004, 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 Technologies, Inc. (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 ($\mu\text{g/l}$); the groundwater standard for TCE is 5 $\mu\text{g/l}$. 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 in June 2014 and September/October 2015 indicated similar conditions to those reported for the site characterization. Detectable concentrations of TCE ranged from 1.3 to 3.8 $\mu\text{g/l}$ and detections occurred in the same five wells. Results for these groundwater sampling events are summarized in individual sampling reports.

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 11 locations,
- Completion of Structural Sampling Questionnaires and Building Inventory Logs, and;
- Collection of Quality Assurance/Quality Control (QA/QC) duplicate samples.

4.0 Methodology

In March 2017; the NYSDEC contacted the owners of 38 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 provided two methods for contacting the DEC project manager; the recipient can choose to use electronic mail or telephone. Of the 38 properties, five were locations where mitigation systems had previously been installed, one was a location where the owner opted for resampling prior to mitigation system installation, one was a location to be monitored, four were previous declines, and 30 were previously unresponsive. As a result, 11 owners accepted the sampling offer; all other owners did not respond. Five of the respondents were owners of homes that had not been sampled previously and two of the five homes were duplexes. The sampling locations are shown on Attachment A.

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 indoor basement air sample and one sub-slab soil vapor 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 an isolated location (i.e. crawlspace). In these cases, an additional sampling canister was placed in those areas. For basements with earthen floors, no sub-slab 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.

5.0 Results

Laboratory analysis indicated that TCE concentrations in indoor air samples ranged from below detection limits (<0.21) to 3.3 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). The NYSDOH guideline for TCE in air is $2 \mu\text{g}/\text{m}^3$. TCE concentrations in sub-slab samples ranged from <0.21 to $410 \mu\text{g}/\text{m}^3$. It is typical that concentrations of VOCs in the indoor air will be lower than those found below concrete slabs (sub-slab). The table included as Attachment B provides a summary of TCE results. The full list of compounds and sampling results can be found in the laboratory analytical reports included as Attachment C.

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, NYSDEC and NYSDOH have recommended mitigation of two structures, and monitoring of one structure. No further actions were recommended for the other properties sampled during this event. Letters transmitting sampling results and recommendations were sent to property owners and tenants at each sampling location by the NYSDOH.

It is anticipated that all mitigation systems will be installed before November 2017. At monitoring locations, the NYSDEC will offer resampling during the 2017-2018 heating season. Additionally, sampling will be offered to any locations that previously declined or

were unresponsive. New sample locations may be added as determined through review by the NYSDEC and NYSDOH.

NYSDOH fact sheets providing information on the health effects seen in humans exposed to TCE and information about the NYSDOH air guideline are available at the following webpage: <https://www.health.ny.gov/environmental/chemicals/trichloroethene/>.

Attachment A – Site Figure



- MW-7 Monitoring Well
- SB-1/VP-1 Soil Boring and/or Vapor Point Location
- Previously Sampled Structure
- New Structure Sampled in 2017

**Former Ithaca Gun Factory - Offsite
NYSDEC Site #C755019A
Ithaca, New York**

Figure 1
March 2017 Scale 1" = 100'

SITE MAP



Aztech Environmental
TECHNOLOGIES

Woman Owned Business
5 McCrea Hill Road, Ballston Spa, NY 12020
518.885-5383 | aztechenv.com

Attachment B – Laboratory Analytical
Results Summary Table - TCE only

Former Ithaca Gun Factory - Off-site
 Site Number: C755019A
 City of Ithaca, Tompkins County

2017 SVI Sampling Summary
 Attachment B

Field Sample ID	H15-BA	H16-BA	H16-OA	H19-BA	H19-FF	H33-BA-1	H33-BA-2
Lab Sample ID	140-7685-8	140-7685-7	140-7685-6	140-7685-11	140-7685-12	140-7685-2	140-7685-3
Sampling End Time	3/28/2017 8:59	3/28/2017 9:00	3/28/2017 9:01	3/28/2017 13:01	3/28/2017 13:02	3/28/2017 8:31	3/28/2017 8:32
Matrix	Indoor Air	Indoor Air	Ambient Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air
TRICHLOROETHYLENE (TCE)	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U

Field Sample ID	H33-CS	H35-BA	H36-BA	H36-SS	H-37-BA	H-37-FF	H-37-SS
Lab Sample ID	140-7685-1	140-7685-4	140-7685-10	140-7685-9	140-7698-1	140-7698-2	140-7698-3
Sampling End Time	3/28/2017 0:00	3/28/2017 8:42	3/28/2017 10:02	3/28/2017 10:01	3/28/2017 16:33	3/28/2017 16:30	3/28/2017 16:32
Matrix	Indoor Air	Indoor Air	Indoor Air	Sub-slab Air	Indoor Air	Indoor Air	Sub-slab Air
TRICHLOROETHYLENE (TCE)	< 0.43 U	< 0.21 U	< 0.21 U	60	0.28	0.23	64

Field Sample ID	H40-BA	H40-SS	H41A-BA	H41A-SS	H42-BA	H42-SS	H43-BA-1018
Lab Sample ID	140-7831-2	140-7831-1	140-7831-4	140-7831-3	140-7831-6	140-7831-5	140-7831-8
Sampling End Time	4/12/2017 7:58	4/12/2017 7:58	4/12/2017 9:03	4/12/2017 9:02	4/12/2017 10:03	4/12/2017 10:02	4/12/2017 13:08
Matrix	Indoor Air	Sub-slab Air	Indoor Air	Sub-slab Air	Indoor Air	Sub-slab Air	Indoor Air
TRICHLOROETHYLENE (TCE)	< 0.21 U	< 0.21 U	3.3	410	< 0.21 U	5.5	< 0.21 U

Field Sample ID	H43-SS-1018	H43-BA-1020	H43-SS-1020	H43-OA-1	H44-BA	H44-SS
Lab Sample ID	140-7831-7	140-7831-11	140-7831-10	140-7831-9	140-7831-13	140-7831-12
Sampling End Time	4/12/2017 13:09	4/12/2017 13:14	4/12/2017 13:13	4/12/2017 13:06	4/12/2017 14:47	4/12/2017 14:48
Matrix	Sub-slab Air	Indoor Air	Sub-slab Air	Ambient Air	Indoor Air	Sub-slab Air
TRICHLOROETHYLENE (TCE)	< 0.21 U	< 0.21 U	0.34	< 0.21 U	< 0.21 U	0.54

Notes/Qualifiers:

Results in **bold** text = detected compounds

Results are in units of $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter of air

BA = Indoor basement air sample

SS = Sub-slab air sample

OA = Outdoor (ambient) air sample

CS = Crawlspace air sample

U = Analyzed for but, not detected at reported quantitation limit

Attachment C – Laboratory Analytical Reports

ANALYTICAL REPORT

Job Number: 140-7685-1

Job Description: Former Ithaca Gun Factory # C755019A

Contract Number: C008010

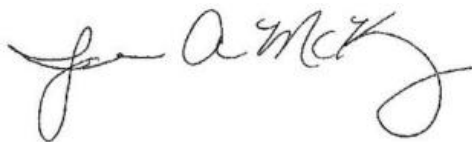
For:

New York State D.E.C.

1679 Rte. 11

Kirkwood, NY 13795

Attention: Gary Priscott



Approved for release.
Jamie A McKinney
Senior Project Manager
4/14/2017 12:49 PM

Jamie A McKinney, Senior Project Manager
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04/14/2017

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	14
Default Detection Limits	43
Surrogate Summary	45
QC Sample Results	46
QC Association	56
Chronicle	57
Certification Summary	60
Method Summary	61
Sample Summary	62
Organic Sample Data	63
Air - GC/MS VOA	63
Method TO15 Low Level	63
Method TO15 Low Level QC Summary	64
Method TO15 Low Level Sample Data	79
Standards Data	344
Method TO15 Low Level ICAL Data	344
Method TO15 Low Level CCAL Data	483
Raw QC Data	511
Method TO15 Low Level Tune Data	511
Method TO15 Low Level Blank Data	527
Method TO15 Low Level LCS/LCSD Data	541

Table of Contents

Method TO15 Low Level Run Logs	555
Clean Canister Certification	569
Clean Canister Data	569
Shipping and Receiving Documents	581
Client Chain of Custody	582
Sample Receipt Checklist	585

Definitions/Glossary

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

TestAmerica Job ID: 140-7685-1

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
140-7685-1

Comments

No additional comments.

Receipt

The samples were received on 4/3/2017 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air - GC/MS VOA

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

Method(s) TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-10155 exhibited % difference of > 30% for the following analyte(s) Bromoform; 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.

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: 140-7685-1

Client Sample ID: H33-CS

Lab Sample ID: 140-7685-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.35		0.16		ppb v/v	1		TO 15 LL	Total/NA
2,2,4-Trimethylpentane	0.48		0.40		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.90		0.64		ppb v/v	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	0.91		0.40		ppb v/v	1		TO 15 LL	Total/NA
Benzene	1.8		0.16		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.17		0.16		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.44		0.40		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.3		0.16		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	38		4.0		ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.50		0.16		ppb v/v	1		TO 15 LL	Total/NA
Hexane	0.50		0.40		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	1.8		0.16		ppb v/v	1		TO 15 LL	Total/NA
o-Xylene	0.62		0.16		ppb v/v	1		TO 15 LL	Total/NA
Toluene	6.1		0.24		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.47		0.16		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	1.7		0.79		ug/m3	1		TO 15 LL	Total/NA
2,2,4-Trimethylpentane	2.2		1.9		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	2.6		1.9		ug/m3	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	3.7		1.6		ug/m3	1		TO 15 LL	Total/NA
Benzene	5.8		0.51		ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.85		0.78		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.90		0.83		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	6.3		0.79		ug/m3	1		TO 15 LL	Total/NA
Ethanol	72		7.5		ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	2.2		0.69		ug/m3	1		TO 15 LL	Total/NA
Hexane	1.8		1.4		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	7.6		0.69		ug/m3	1		TO 15 LL	Total/NA
o-Xylene	2.7		0.69		ug/m3	1		TO 15 LL	Total/NA
Toluene	23		0.90		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	2.7		0.90		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H33-BA-1

Lab Sample ID: 140-7685-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.27		0.080		ppb v/v	1		TO 15 LL	Total/NA
2,2,4-Trimethylpentane	0.35		0.20		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.87		0.32		ppb v/v	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	0.21		0.20		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.51		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
Chloroform	0.18		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	1.2		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	27		2.0		ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.31		0.080		ppb v/v	1		TO 15 LL	Total/NA
Hexane	0.23		0.20		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.22		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	1.2		0.080		ppb v/v	1		TO 15 LL	Total/NA
o-Xylene	0.44		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: 140-7685-1

Client Sample ID: H33-BA-1 (Continued)

Lab Sample ID: 140-7685-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	4.6		0.12		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
1,2,4-Trimethylbenzene	1.3		0.39		ug/m3	1		TO 15 LL	Total/NA
2,2,4-Trimethylpentane	1.7		0.93		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	2.6		0.94		ug/m3	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	0.87		0.82		ug/m3	1		TO 15 LL	Total/NA
Benzene	1.6		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.47		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	6.1		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	50		3.8		ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	1.3		0.35		ug/m3	1		TO 15 LL	Total/NA
Hexane	0.80		0.70		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	0.76		0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	5.2		0.35		ug/m3	1		TO 15 LL	Total/NA
o-Xylene	1.9		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	17		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	2.3		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H33-BA-2

Lab Sample ID: 140-7685-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.58		0.080		ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.14		0.080		ppb v/v	1		TO 15 LL	Total/NA
2,2,4-Trimethylpentane	0.75		0.20		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	1.1		0.32		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.56		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.073		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.092		0.080		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.38		0.20		ppb v/v	1		TO 15 LL	Total/NA
Cyclohexane	0.20		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.0		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	16		2.0		ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.63		0.080		ppb v/v	1		TO 15 LL	Total/NA
Hexane	0.35		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	2.4		0.080		ppb v/v	1		TO 15 LL	Total/NA
o-Xylene	0.87		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	10		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.38		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	2.8		0.39		ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.68		0.39		ug/m3	1		TO 15 LL	Total/NA
2,2,4-Trimethylpentane	3.5		0.93		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	3.1		0.94		ug/m3	1		TO 15 LL	Total/NA
Benzene	1.8		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.46		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.45		0.39		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.78		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: 140-7685-1

Client Sample ID: H33-BA-2 (Continued)

Lab Sample ID: 140-7685-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyclohexane	0.68		0.69		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	5.0		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	31		3.8		ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	2.7		0.35		ug/m3	1		TO 15 LL	Total/NA
Hexane	1.2		0.70		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	11		0.35		ug/m3	1		TO 15 LL	Total/NA
o-Xylene	3.8		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	39		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	2.1		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H35-BA

Lab Sample ID: 140-7685-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	0.60		0.32		ppb v/v	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	0.72		0.20		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.13		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
Chloromethane	0.38		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.52		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	3.6		2.0		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.42		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.089		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.44		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	1.8		0.94		ug/m3	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	3.0		0.82		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.40		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.42		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.79		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.6		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	6.7		3.8		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	1.4		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
Toluene	1.7		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.3		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: FIELD DUP 1

Lab Sample ID: 140-7685-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	0.73		0.32		ppb v/v	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	4.4		0.20		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.14		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	0.38		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.59		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	4.8		2.0		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.89		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	0.50		0.12		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: 140-7685-1

Client Sample ID: FIELD DUP 1 (Continued)

Lab Sample ID: 140-7685-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichlorofluoromethane	0.28		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	2.1		0.94		ug/m3	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	18		0.82		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.45		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	0.77		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.9		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	9.0		3.8		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	3.1		0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.45		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	1.9		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.6		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H16-OA

Lab Sample ID: 140-7685-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.19		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.071		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	0.46		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	2.5		2.0		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	0.23		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.23		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.61		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.45		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.89		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.3		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	4.8		3.8		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.59		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	0.87		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.3		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H16-BA

Lab Sample ID: 140-7685-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.12		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.71		0.32		ppb v/v	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	0.29		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	0.077		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.40		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	23		2.0		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.15		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.19		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

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: 140-7685-1

Client Sample ID: H16-BA (Continued)

Lab Sample ID: 140-7685-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.57		0.39		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	2.1		0.94		ug/m3	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	1.2		0.82		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.51		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	0.83		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.5		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	44		3.8		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.65		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	0.73		0.45		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-BA

Lab Sample ID: 140-7685-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.33		0.080		ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.10		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
Benzene	0.18		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	0.43		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	25		2.0		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	0.15		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	0.24		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	1.6		0.39		ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.50		0.39		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	3.5		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	0.45		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.88		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.4		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	47		3.8		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	0.71		0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.65		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	1.1		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: H36-SS

Lab Sample ID: 140-7685-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	5.6		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
1,3,5-Trimethylbenzene	0.097		0.080		ppb v/v	1		TO 15 LL	Total/NA
1,4-Dichlorobenzene	0.21		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.38		0.32		ppb v/v	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	0.23		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: 140-7685-1

Client Sample ID: H36-SS (Continued)

Lab Sample ID: 140-7685-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.19		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	1.8		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	1.4		0.080		ppb v/v	1		TO 15 LL	Total/NA
Cyclohexane	0.26		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.54		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	2.1		2.0		ppb v/v	1		TO 15 LL	Total/NA
Hexane	0.53		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.39		0.080		ppb v/v	1		TO 15 LL	Total/NA
o-Xylene	0.14		0.080		ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.11		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.7		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	11		0.040		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.37		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	31		0.44		ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.62		0.39		ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.48		0.39		ug/m3	1		TO 15 LL	Total/NA
1,4-Dichlorobenzene	1.3		0.48		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)	0.95		0.82		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.61		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	11		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	6.7		0.39		ug/m3	1		TO 15 LL	Total/NA
Cyclohexane	0.90		0.69		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.7		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	3.9		3.8		ug/m3	1		TO 15 LL	Total/NA
Hexane	1.9		0.70		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	1.7		0.35		ug/m3	1		TO 15 LL	Total/NA
o-Xylene	0.61		0.35		ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	0.72		0.54		ug/m3	1		TO 15 LL	Total/NA
Toluene	6.6		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	60		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	2.1		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H36-BA

Lab Sample ID: 140-7685-10

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	0.57		0.32		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.17		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
Chloromethane	0.32		0.20		ppb v/v	1		TO 15 LL	Total/NA
Cyclohexane	0.49		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.48		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	5.6		2.0		ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.10		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	0.13		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	4.1		0.12		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: 140-7685-1

Client Sample ID: H36-BA (Continued)

Lab Sample ID: 140-7685-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichlorofluoromethane	0.54		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	0.52		0.39		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	1.7		0.94		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.56		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	0.65		0.41		ug/m3	1		TO 15 LL	Total/NA
Cyclohexane	1.7		0.69		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.4		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	11		3.8		ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.45		0.35		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	0.80		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	0.55		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	16		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	3.1		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H19-BA

Lab Sample ID: 140-7685-11

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	0.13		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.073		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	0.66		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	16		2.0		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	3.5		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.18		0.080		ppb v/v	1		TO 15 LL	Total/NA
Styrene	0.11		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.31		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.3		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	0.40		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	0.80		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	3.2		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	31		3.8		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	12		0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.78		0.35		ug/m3	1		TO 15 LL	Total/NA
Styrene	0.48		0.34		ug/m3	1		TO 15 LL	Total/NA
Toluene	1.2		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	7.5		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H19-FF

Lab Sample ID: 140-7685-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.16		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.79		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

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: 140-7685-1

Client Sample ID: H19-FF (Continued)

Lab Sample ID: 140-7685-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.076		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	0.46		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.63		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	170	E	2.0		ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.22		0.080		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	1.9		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	1.3		0.080		ppb v/v	1		TO 15 LL	Total/NA
o-Xylene	0.61		0.080		ppb v/v	1		TO 15 LL	Total/NA
Styrene	2.4		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
Trichlorofluoromethane	5.8		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol - DL	280	D	10		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	0.78		0.39		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	2.3		0.94		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.53		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.48		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.40		0.39		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.95		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	3.1		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	320	E	3.8		ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.94		0.35		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	6.5		0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	5.8		0.35		ug/m3	1		TO 15 LL	Total/NA
o-Xylene	2.7		0.35		ug/m3	1		TO 15 LL	Total/NA
Styrene	10		0.34		ug/m3	1		TO 15 LL	Total/NA
Toluene	4.5		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	33		0.45		ug/m3	1		TO 15 LL	Total/NA
Ethanol - DL	530	D	19		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: 140-7685-1

Client Sample ID: H33-CS

Date Collected: 03/28/17 08:31

Date Received: 04/03/17 10:00

Sample Container: Summa Canister 6L

Lab Sample ID: 140-7685-1

Matrix: Air

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		0.16		ppb v/v			04/04/17 15:02	1
1,1,2,2-Tetrachloroethane	ND		0.16		ppb v/v			04/04/17 15:02	1
1,1,2-Trichloroethane	ND		0.16		ppb v/v			04/04/17 15:02	1
1,1,2-Trichlorotrifluoroethane	ND		0.16		ppb v/v			04/04/17 15:02	1
1,1-Dichloroethane	ND		0.16		ppb v/v			04/04/17 15:02	1
1,1-Dichloroethene	ND		0.16		ppb v/v			04/04/17 15:02	1
1,2,4-Trichlorobenzene	ND		0.16		ppb v/v			04/04/17 15:02	1
1,2,4-Trimethylbenzene	0.35		0.16		ppb v/v			04/04/17 15:02	1
1,2-Dibromoethane	ND		0.16		ppb v/v			04/04/17 15:02	1
1,2-Dichlorobenzene	ND		0.16		ppb v/v			04/04/17 15:02	1
1,2-Dichloroethane	ND		0.16		ppb v/v			04/04/17 15:02	1
1,2-Dichloropropane	ND		0.16		ppb v/v			04/04/17 15:02	1
1,2-Dichlorotetrafluoroethane	ND		0.16		ppb v/v			04/04/17 15:02	1
1,3,5-Trimethylbenzene	ND		0.16		ppb v/v			04/04/17 15:02	1
1,3-Dichlorobenzene	ND		0.16		ppb v/v			04/04/17 15:02	1
1,4-Dichlorobenzene	ND		0.16		ppb v/v			04/04/17 15:02	1
1,4-Dioxane	ND		0.40		ppb v/v			04/04/17 15:02	1
2,2,4-Trimethylpentane	0.48		0.40		ppb v/v			04/04/17 15:02	1
2-Butanone	0.90		0.64		ppb v/v			04/04/17 15:02	1
4-Methyl-2-pentanone (MIBK)	0.91		0.40		ppb v/v			04/04/17 15:02	1
Benzene	1.8		0.16		ppb v/v			04/04/17 15:02	1
Benzyl chloride	ND		0.32		ppb v/v			04/04/17 15:02	1
Bromodichloromethane	ND		0.16		ppb v/v			04/04/17 15:02	1
Bromoform	ND		0.16		ppb v/v			04/04/17 15:02	1
Bromomethane	ND		0.16		ppb v/v			04/04/17 15:02	1
Carbon tetrachloride	ND		0.080		ppb v/v			04/04/17 15:02	1
Chlorobenzene	ND		0.16		ppb v/v			04/04/17 15:02	1
Chloroethane	ND		0.16		ppb v/v			04/04/17 15:02	1
Chloroform	0.17		0.16		ppb v/v			04/04/17 15:02	1
Chloromethane	0.44		0.40		ppb v/v			04/04/17 15:02	1
cis-1,2-Dichloroethene	ND		0.16		ppb v/v			04/04/17 15:02	1
cis-1,3-Dichloropropene	ND		0.16		ppb v/v			04/04/17 15:02	1
Cyclohexane	ND		0.40		ppb v/v			04/04/17 15:02	1
Dibromochloromethane	ND		0.16		ppb v/v			04/04/17 15:02	1
Dichlorodifluoromethane	1.3		0.16		ppb v/v			04/04/17 15:02	1
Ethanol	38		4.0		ppb v/v			04/04/17 15:02	1
Ethylbenzene	0.50		0.16		ppb v/v			04/04/17 15:02	1
Hexachlorobutadiene	ND		0.16		ppb v/v			04/04/17 15:02	1
Hexane	0.50		0.40		ppb v/v			04/04/17 15:02	1
Methyl tert-butyl ether	ND		0.32		ppb v/v			04/04/17 15:02	1
Methylene Chloride	ND		0.40		ppb v/v			04/04/17 15:02	1
m-Xylene & p-Xylene	1.8		0.16		ppb v/v			04/04/17 15:02	1
o-Xylene	0.62		0.16		ppb v/v			04/04/17 15:02	1
Styrene	ND		0.16		ppb v/v			04/04/17 15:02	1
t-Butyl alcohol	ND		0.64		ppb v/v			04/04/17 15:02	1
Tetrachloroethene	ND		0.16		ppb v/v			04/04/17 15:02	1
Toluene	6.1		0.24		ppb v/v			04/04/17 15:02	1
trans-1,2-Dichloroethene	ND		0.16		ppb v/v			04/04/17 15:02	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H33-CS

Lab Sample ID: 140-7685-1

Date Collected: 03/28/17 08:31

Matrix: Air

Date Received: 04/03/17 10:00

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		0.16		ppb v/v			04/04/17 15:02	1
Trichloroethene	ND		0.080		ppb v/v			04/04/17 15:02	1
Trichlorofluoromethane	0.47		0.16		ppb v/v			04/04/17 15:02	1
Vinyl chloride	ND		0.080		ppb v/v			04/04/17 15:02	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.87		ug/m3			04/04/17 15:02	1
1,1,2,2-Tetrachloroethane	ND		1.1		ug/m3			04/04/17 15:02	1
1,1,2-Trichloroethane	ND		0.87		ug/m3			04/04/17 15:02	1
1,1,2-Trichlorotrifluoroethane	ND		1.2		ug/m3			04/04/17 15:02	1
1,1-Dichloroethane	ND		0.65		ug/m3			04/04/17 15:02	1
1,1-Dichloroethene	ND		0.63		ug/m3			04/04/17 15:02	1
1,2,4-Trichlorobenzene	ND		1.2		ug/m3			04/04/17 15:02	1
1,2,4-Trimethylbenzene	1.7		0.79		ug/m3			04/04/17 15:02	1
1,2-Dibromoethane	ND		1.2		ug/m3			04/04/17 15:02	1
1,2-Dichlorobenzene	ND		0.96		ug/m3			04/04/17 15:02	1
1,2-Dichloroethane	ND		0.65		ug/m3			04/04/17 15:02	1
1,2-Dichloropropane	ND		0.74		ug/m3			04/04/17 15:02	1
1,2-Dichlorotetrafluoroethane	ND		1.1		ug/m3			04/04/17 15:02	1
1,3,5-Trimethylbenzene	ND		0.79		ug/m3			04/04/17 15:02	1
1,3-Dichlorobenzene	ND		0.96		ug/m3			04/04/17 15:02	1
1,4-Dichlorobenzene	ND		0.96		ug/m3			04/04/17 15:02	1
1,4-Dioxane	ND		1.4		ug/m3			04/04/17 15:02	1
2,2,4-Trimethylpentane	2.2		1.9		ug/m3			04/04/17 15:02	1
2-Butanone	2.6		1.9		ug/m3			04/04/17 15:02	1
4-Methyl-2-pentanone (MIBK)	3.7		1.6		ug/m3			04/04/17 15:02	1
Benzene	5.8		0.51		ug/m3			04/04/17 15:02	1
Benzyl chloride	ND		1.7		ug/m3			04/04/17 15:02	1
Bromodichloromethane	ND		1.1		ug/m3			04/04/17 15:02	1
Bromoform	ND		1.7		ug/m3			04/04/17 15:02	1
Bromomethane	ND		0.62		ug/m3			04/04/17 15:02	1
Carbon tetrachloride	ND		0.50		ug/m3			04/04/17 15:02	1
Chlorobenzene	ND		0.74		ug/m3			04/04/17 15:02	1
Chloroethane	ND		0.42		ug/m3			04/04/17 15:02	1
Chloroform	0.85		0.78		ug/m3			04/04/17 15:02	1
Chloromethane	0.90		0.83		ug/m3			04/04/17 15:02	1
cis-1,2-Dichloroethene	ND		0.63		ug/m3			04/04/17 15:02	1
cis-1,3-Dichloropropene	ND		0.73		ug/m3			04/04/17 15:02	1
Cyclohexane	ND		1.4		ug/m3			04/04/17 15:02	1
Dibromochloromethane	ND		1.4		ug/m3			04/04/17 15:02	1
Dichlorodifluoromethane	6.3		0.79		ug/m3			04/04/17 15:02	1
Ethanol	72		7.5		ug/m3			04/04/17 15:02	1
Ethylbenzene	2.2		0.69		ug/m3			04/04/17 15:02	1
Hexachlorobutadiene	ND		1.7		ug/m3			04/04/17 15:02	1
Hexane	1.8		1.4		ug/m3			04/04/17 15:02	1
Methyl tert-butyl ether	ND		1.2		ug/m3			04/04/17 15:02	1
Methylene Chloride	ND		1.4		ug/m3			04/04/17 15:02	1
m-Xylene & p-Xylene	7.6		0.69		ug/m3			04/04/17 15:02	1
o-Xylene	2.7		0.69		ug/m3			04/04/17 15:02	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H33-CS

Lab Sample ID: 140-7685-1

Date Collected: 03/28/17 08:31

Matrix: Air

Date Received: 04/03/17 10:00

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		0.68		ug/m3			04/04/17 15:02	1
t-Butyl alcohol	ND		1.9		ug/m3			04/04/17 15:02	1
Tetrachloroethene	ND		1.1		ug/m3			04/04/17 15:02	1
Toluene	23		0.90		ug/m3			04/04/17 15:02	1
trans-1,2-Dichloroethene	ND		0.63		ug/m3			04/04/17 15:02	1
trans-1,3-Dichloropropene	ND		0.73		ug/m3			04/04/17 15:02	1
Trichloroethene	ND		0.43		ug/m3			04/04/17 15:02	1
Trichlorofluoromethane	2.7		0.90		ug/m3			04/04/17 15:02	1
Vinyl chloride	ND		0.20		ug/m3			04/04/17 15:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		60 - 140		04/04/17 15:02	1

Client Sample ID: H33-BA-1

Lab Sample ID: 140-7685-2

Date Collected: 03/28/17 08:31

Matrix: Air

Date Received: 04/03/17 10:00

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			04/04/17 15:51	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/04/17 15:51	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/04/17 15:51	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/04/17 15:51	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/04/17 15:51	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/04/17 15:51	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/04/17 15:51	1
1,2,4-Trimethylbenzene	0.27		0.080		ppb v/v			04/04/17 15:51	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/04/17 15:51	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 15:51	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/04/17 15:51	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/04/17 15:51	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/04/17 15:51	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/04/17 15:51	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 15:51	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 15:51	1
1,4-Dioxane	ND		0.20		ppb v/v			04/04/17 15:51	1
2,2,4-Trimethylpentane	0.35		0.20		ppb v/v			04/04/17 15:51	1
2-Butanone	0.87		0.32		ppb v/v			04/04/17 15:51	1
4-Methyl-2-pentanone (MIBK)	0.21		0.20		ppb v/v			04/04/17 15:51	1
Benzene	0.51		0.080		ppb v/v			04/04/17 15:51	1
Benzyl chloride	ND		0.16		ppb v/v			04/04/17 15:51	1
Bromodichloromethane	ND		0.080		ppb v/v			04/04/17 15:51	1
Bromoform	ND		0.080		ppb v/v			04/04/17 15:51	1
Bromomethane	ND		0.080		ppb v/v			04/04/17 15:51	1
Carbon tetrachloride	0.075		0.040		ppb v/v			04/04/17 15:51	1
Chlorobenzene	ND		0.080		ppb v/v			04/04/17 15:51	1
Chloroethane	ND		0.080		ppb v/v			04/04/17 15:51	1
Chloroform	0.18		0.080		ppb v/v			04/04/17 15:51	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H33-BA-1

Lab Sample ID: 140-7685-2

Date Collected: 03/28/17 08:31

Matrix: Air

Date Received: 04/03/17 10:00

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	0.41		0.20		ppb v/v			04/04/17 15:51	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 15:51	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/04/17 15:51	1
Cyclohexane	ND		0.20		ppb v/v			04/04/17 15:51	1
Dibromochloromethane	ND		0.080		ppb v/v			04/04/17 15:51	1
Dichlorodifluoromethane	1.2		0.080		ppb v/v			04/04/17 15:51	1
Ethanol	27		2.0		ppb v/v			04/04/17 15:51	1
Ethylbenzene	0.31		0.080		ppb v/v			04/04/17 15:51	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/04/17 15:51	1
Hexane	0.23		0.20		ppb v/v			04/04/17 15:51	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/04/17 15:51	1
Methylene Chloride	0.22		0.20		ppb v/v			04/04/17 15:51	1
m-Xylene & p-Xylene	1.2		0.080		ppb v/v			04/04/17 15:51	1
o-Xylene	0.44		0.080		ppb v/v			04/04/17 15:51	1
Styrene	ND		0.080		ppb v/v			04/04/17 15:51	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/04/17 15:51	1
Tetrachloroethene	ND		0.080		ppb v/v			04/04/17 15:51	1
Toluene	4.6		0.12		ppb v/v			04/04/17 15:51	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 15:51	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/04/17 15:51	1
Trichloroethene	ND		0.040		ppb v/v			04/04/17 15:51	1
Trichlorofluoromethane	0.41		0.080		ppb v/v			04/04/17 15:51	1
Vinyl chloride	ND		0.040		ppb v/v			04/04/17 15:51	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/04/17 15:51	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/04/17 15:51	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/04/17 15:51	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/04/17 15:51	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/04/17 15:51	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/04/17 15:51	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/04/17 15:51	1
1,2,4-Trimethylbenzene	1.3		0.39		ug/m3			04/04/17 15:51	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/04/17 15:51	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 15:51	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/04/17 15:51	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/04/17 15:51	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/04/17 15:51	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/04/17 15:51	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 15:51	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 15:51	1
1,4-Dioxane	ND		0.72		ug/m3			04/04/17 15:51	1
2,2,4-Trimethylpentane	1.7		0.93		ug/m3			04/04/17 15:51	1
2-Butanone	2.6		0.94		ug/m3			04/04/17 15:51	1
4-Methyl-2-pentanone (MIBK)	0.87		0.82		ug/m3			04/04/17 15:51	1
Benzene	1.6		0.26		ug/m3			04/04/17 15:51	1
Benzyl chloride	ND		0.83		ug/m3			04/04/17 15:51	1
Bromodichloromethane	ND		0.54		ug/m3			04/04/17 15:51	1
Bromoform	ND		0.83		ug/m3			04/04/17 15:51	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H33-BA-1

Lab Sample ID: 140-7685-2

Date Collected: 03/28/17 08:31

Matrix: Air

Date Received: 04/03/17 10:00

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			04/04/17 15:51	1
Carbon tetrachloride	0.47		0.25		ug/m3			04/04/17 15:51	1
Chlorobenzene	ND		0.37		ug/m3			04/04/17 15:51	1
Chloroethane	ND		0.21		ug/m3			04/04/17 15:51	1
Chloroform	0.90		0.39		ug/m3			04/04/17 15:51	1
Chloromethane	0.85		0.41		ug/m3			04/04/17 15:51	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 15:51	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 15:51	1
Cyclohexane	ND		0.69		ug/m3			04/04/17 15:51	1
Dibromochloromethane	ND		0.68		ug/m3			04/04/17 15:51	1
Dichlorodifluoromethane	6.1		0.40		ug/m3			04/04/17 15:51	1
Ethanol	50		3.8		ug/m3			04/04/17 15:51	1
Ethylbenzene	1.3		0.35		ug/m3			04/04/17 15:51	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/04/17 15:51	1
Hexane	0.80		0.70		ug/m3			04/04/17 15:51	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/04/17 15:51	1
Methylene Chloride	0.76		0.69		ug/m3			04/04/17 15:51	1
m-Xylene & p-Xylene	5.2		0.35		ug/m3			04/04/17 15:51	1
o-Xylene	1.9		0.35		ug/m3			04/04/17 15:51	1
Styrene	ND		0.34		ug/m3			04/04/17 15:51	1
t-Butyl alcohol	ND		0.97		ug/m3			04/04/17 15:51	1
Tetrachloroethene	ND		0.54		ug/m3			04/04/17 15:51	1
Toluene	17		0.45		ug/m3			04/04/17 15:51	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 15:51	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 15:51	1
Trichloroethene	ND		0.21		ug/m3			04/04/17 15:51	1
Trichlorofluoromethane	2.3		0.45		ug/m3			04/04/17 15:51	1
Vinyl chloride	ND		0.10		ug/m3			04/04/17 15:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		60 - 140		04/04/17 15:51	1

Client Sample ID: H33-BA-2

Lab Sample ID: 140-7685-3

Date Collected: 03/28/17 08:32

Matrix: Air

Date Received: 04/03/17 10:00

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			04/04/17 16:41	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/04/17 16:41	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/04/17 16:41	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/04/17 16:41	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/04/17 16:41	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/04/17 16:41	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/04/17 16:41	1
1,2,4-Trimethylbenzene	0.58		0.080		ppb v/v			04/04/17 16:41	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/04/17 16:41	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 16:41	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H33-BA-2

Lab Sample ID: 140-7685-3

Date Collected: 03/28/17 08:32

Matrix: Air

Date Received: 04/03/17 10:00

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			04/04/17 16:41	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/04/17 16:41	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/04/17 16:41	1
1,3,5-Trimethylbenzene	0.14		0.080		ppb v/v			04/04/17 16:41	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 16:41	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 16:41	1
1,4-Dioxane	ND		0.20		ppb v/v			04/04/17 16:41	1
2,2,4-Trimethylpentane	0.75		0.20		ppb v/v			04/04/17 16:41	1
2-Butanone	1.1		0.32		ppb v/v			04/04/17 16:41	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/04/17 16:41	1
Benzene	0.56		0.080		ppb v/v			04/04/17 16:41	1
Benzyl chloride	ND		0.16		ppb v/v			04/04/17 16:41	1
Bromodichloromethane	ND		0.080		ppb v/v			04/04/17 16:41	1
Bromoform	ND		0.080		ppb v/v			04/04/17 16:41	1
Bromomethane	ND		0.080		ppb v/v			04/04/17 16:41	1
Carbon tetrachloride	0.073		0.040		ppb v/v			04/04/17 16:41	1
Chlorobenzene	ND		0.080		ppb v/v			04/04/17 16:41	1
Chloroethane	ND		0.080		ppb v/v			04/04/17 16:41	1
Chloroform	0.092		0.080		ppb v/v			04/04/17 16:41	1
Chloromethane	0.38		0.20		ppb v/v			04/04/17 16:41	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 16:41	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/04/17 16:41	1
Cyclohexane	0.20		0.20		ppb v/v			04/04/17 16:41	1
Dibromochloromethane	ND		0.080		ppb v/v			04/04/17 16:41	1
Dichlorodifluoromethane	1.0		0.080		ppb v/v			04/04/17 16:41	1
Ethanol	16		2.0		ppb v/v			04/04/17 16:41	1
Ethylbenzene	0.63		0.080		ppb v/v			04/04/17 16:41	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/04/17 16:41	1
Hexane	0.35		0.20		ppb v/v			04/04/17 16:41	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/04/17 16:41	1
Methylene Chloride	ND		0.20		ppb v/v			04/04/17 16:41	1
m-Xylene & p-Xylene	2.4		0.080		ppb v/v			04/04/17 16:41	1
o-Xylene	0.87		0.080		ppb v/v			04/04/17 16:41	1
Styrene	ND		0.080		ppb v/v			04/04/17 16:41	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/04/17 16:41	1
Tetrachloroethene	ND		0.080		ppb v/v			04/04/17 16:41	1
Toluene	10		0.12		ppb v/v			04/04/17 16:41	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 16:41	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/04/17 16:41	1
Trichloroethene	ND		0.040		ppb v/v			04/04/17 16:41	1
Trichlorofluoromethane	0.38		0.080		ppb v/v			04/04/17 16:41	1
Vinyl chloride	ND		0.040		ppb v/v			04/04/17 16:41	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/04/17 16:41	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/04/17 16:41	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/04/17 16:41	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/04/17 16:41	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/04/17 16:41	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H33-BA-2

Lab Sample ID: 140-7685-3

Date Collected: 03/28/17 08:32

Matrix: Air

Date Received: 04/03/17 10:00

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			04/04/17 16:41	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/04/17 16:41	1
1,2,4-Trimethylbenzene	2.8		0.39		ug/m3			04/04/17 16:41	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/04/17 16:41	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 16:41	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/04/17 16:41	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/04/17 16:41	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/04/17 16:41	1
1,3,5-Trimethylbenzene	0.68		0.39		ug/m3			04/04/17 16:41	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 16:41	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 16:41	1
1,4-Dioxane	ND		0.72		ug/m3			04/04/17 16:41	1
2,2,4-Trimethylpentane	3.5		0.93		ug/m3			04/04/17 16:41	1
2-Butanone	3.1		0.94		ug/m3			04/04/17 16:41	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/04/17 16:41	1
Benzene	1.8		0.26		ug/m3			04/04/17 16:41	1
Benzyl chloride	ND		0.83		ug/m3			04/04/17 16:41	1
Bromodichloromethane	ND		0.54		ug/m3			04/04/17 16:41	1
Bromoform	ND		0.83		ug/m3			04/04/17 16:41	1
Bromomethane	ND		0.31		ug/m3			04/04/17 16:41	1
Carbon tetrachloride	0.46		0.25		ug/m3			04/04/17 16:41	1
Chlorobenzene	ND		0.37		ug/m3			04/04/17 16:41	1
Chloroethane	ND		0.21		ug/m3			04/04/17 16:41	1
Chloroform	0.45		0.39		ug/m3			04/04/17 16:41	1
Chloromethane	0.78		0.41		ug/m3			04/04/17 16:41	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 16:41	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 16:41	1
Cyclohexane	0.68		0.69		ug/m3			04/04/17 16:41	1
Dibromochloromethane	ND		0.68		ug/m3			04/04/17 16:41	1
Dichlorodifluoromethane	5.0		0.40		ug/m3			04/04/17 16:41	1
Ethanol	31		3.8		ug/m3			04/04/17 16:41	1
Ethylbenzene	2.7		0.35		ug/m3			04/04/17 16:41	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/04/17 16:41	1
Hexane	1.2		0.70		ug/m3			04/04/17 16:41	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/04/17 16:41	1
Methylene Chloride	ND		0.69		ug/m3			04/04/17 16:41	1
m-Xylene & p-Xylene	11		0.35		ug/m3			04/04/17 16:41	1
o-Xylene	3.8		0.35		ug/m3			04/04/17 16:41	1
Styrene	ND		0.34		ug/m3			04/04/17 16:41	1
t-Butyl alcohol	ND		0.97		ug/m3			04/04/17 16:41	1
Tetrachloroethene	ND		0.54		ug/m3			04/04/17 16:41	1
Toluene	39		0.45		ug/m3			04/04/17 16:41	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 16:41	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 16:41	1
Trichloroethene	ND		0.21		ug/m3			04/04/17 16:41	1
Trichlorofluoromethane	2.1		0.45		ug/m3			04/04/17 16:41	1
Vinyl chloride	ND		0.10		ug/m3			04/04/17 16:41	1

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H33-BA-2

Date Collected: 03/28/17 08:32

Date Received: 04/03/17 10:00

Sample Container: Summa Canister 6L

Lab Sample ID: 140-7685-3

Matrix: Air

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		60 - 140		04/04/17 16:41	1

Client Sample ID: H35-BA

Date Collected: 03/28/17 08:42

Date Received: 04/03/17 10:00

Sample Container: Summa Canister 6L

Lab Sample ID: 140-7685-4

Matrix: Air

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			04/05/17 10:09	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/05/17 10:09	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/05/17 10:09	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/05/17 10:09	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/05/17 10:09	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/05/17 10:09	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/05/17 10:09	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			04/05/17 10:09	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/05/17 10:09	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/05/17 10:09	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/05/17 10:09	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/05/17 10:09	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/05/17 10:09	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/05/17 10:09	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/05/17 10:09	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/05/17 10:09	1
1,4-Dioxane	ND		0.20		ppb v/v			04/05/17 10:09	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/05/17 10:09	1
2-Butanone	0.60		0.32		ppb v/v			04/05/17 10:09	1
4-Methyl-2-pentanone (MIBK)	0.72		0.20		ppb v/v			04/05/17 10:09	1
Benzene	0.13		0.080		ppb v/v			04/05/17 10:09	1
Benzyl chloride	ND		0.16		ppb v/v			04/05/17 10:09	1
Bromodichloromethane	ND		0.080		ppb v/v			04/05/17 10:09	1
Bromoform	ND		0.080		ppb v/v			04/05/17 10:09	1
Bromomethane	ND		0.080		ppb v/v			04/05/17 10:09	1
Carbon tetrachloride	0.067		0.040		ppb v/v			04/05/17 10:09	1
Chlorobenzene	ND		0.080		ppb v/v			04/05/17 10:09	1
Chloroethane	ND		0.080		ppb v/v			04/05/17 10:09	1
Chloroform	ND		0.080		ppb v/v			04/05/17 10:09	1
Chloromethane	0.38		0.20		ppb v/v			04/05/17 10:09	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/05/17 10:09	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/05/17 10:09	1
Cyclohexane	ND		0.20		ppb v/v			04/05/17 10:09	1
Dibromochloromethane	ND		0.080		ppb v/v			04/05/17 10:09	1
Dichlorodifluoromethane	0.52		0.080		ppb v/v			04/05/17 10:09	1
Ethanol	3.6		2.0		ppb v/v			04/05/17 10:09	1
Ethylbenzene	ND		0.080		ppb v/v			04/05/17 10:09	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/05/17 10:09	1
Hexane	ND		0.20		ppb v/v			04/05/17 10:09	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/05/17 10:09	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H35-BA

Lab Sample ID: 140-7685-4

Date Collected: 03/28/17 08:42

Matrix: Air

Date Received: 04/03/17 10:00

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	0.42		0.20		ppb v/v			04/05/17 10:09	1
m-Xylene & p-Xylene	0.089		0.080		ppb v/v			04/05/17 10:09	1
o-Xylene	ND		0.080		ppb v/v			04/05/17 10:09	1
Styrene	ND		0.080		ppb v/v			04/05/17 10:09	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/05/17 10:09	1
Tetrachloroethene	ND		0.080		ppb v/v			04/05/17 10:09	1
Toluene	0.44		0.12		ppb v/v			04/05/17 10:09	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/05/17 10:09	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/05/17 10:09	1
Trichloroethene	ND		0.040		ppb v/v			04/05/17 10:09	1
Trichlorofluoromethane	0.24		0.080		ppb v/v			04/05/17 10:09	1
Vinyl chloride	ND		0.040		ppb v/v			04/05/17 10:09	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/05/17 10:09	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/05/17 10:09	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/05/17 10:09	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/05/17 10:09	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/05/17 10:09	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/05/17 10:09	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/05/17 10:09	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			04/05/17 10:09	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/05/17 10:09	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/05/17 10:09	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/05/17 10:09	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/05/17 10:09	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/05/17 10:09	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/05/17 10:09	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/05/17 10:09	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/05/17 10:09	1
1,4-Dioxane	ND		0.72		ug/m3			04/05/17 10:09	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/05/17 10:09	1
2-Butanone	1.8		0.94		ug/m3			04/05/17 10:09	1
4-Methyl-2-pentanone (MIBK)	3.0		0.82		ug/m3			04/05/17 10:09	1
Benzene	0.40		0.26		ug/m3			04/05/17 10:09	1
Benzyl chloride	ND		0.83		ug/m3			04/05/17 10:09	1
Bromodichloromethane	ND		0.54		ug/m3			04/05/17 10:09	1
Bromoform	ND		0.83		ug/m3			04/05/17 10:09	1
Bromomethane	ND		0.31		ug/m3			04/05/17 10:09	1
Carbon tetrachloride	0.42		0.25		ug/m3			04/05/17 10:09	1
Chlorobenzene	ND		0.37		ug/m3			04/05/17 10:09	1
Chloroethane	ND		0.21		ug/m3			04/05/17 10:09	1
Chloroform	ND		0.39		ug/m3			04/05/17 10:09	1
Chloromethane	0.79		0.41		ug/m3			04/05/17 10:09	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/05/17 10:09	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/05/17 10:09	1
Cyclohexane	ND		0.69		ug/m3			04/05/17 10:09	1
Dibromochloromethane	ND		0.68		ug/m3			04/05/17 10:09	1
Dichlorodifluoromethane	2.6		0.40		ug/m3			04/05/17 10:09	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H35-BA

Lab Sample ID: 140-7685-4

Date Collected: 03/28/17 08:42

Matrix: Air

Date Received: 04/03/17 10:00

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	6.7		3.8		ug/m3			04/05/17 10:09	1
Ethylbenzene	ND		0.35		ug/m3			04/05/17 10:09	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/05/17 10:09	1
Hexane	ND		0.70		ug/m3			04/05/17 10:09	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/05/17 10:09	1
Methylene Chloride	1.4		0.69		ug/m3			04/05/17 10:09	1
m-Xylene & p-Xylene	0.39		0.35		ug/m3			04/05/17 10:09	1
o-Xylene	ND		0.35		ug/m3			04/05/17 10:09	1
Styrene	ND		0.34		ug/m3			04/05/17 10:09	1
t-Butyl alcohol	ND		0.97		ug/m3			04/05/17 10:09	1
Tetrachloroethene	ND		0.54		ug/m3			04/05/17 10:09	1
Toluene	1.7		0.45		ug/m3			04/05/17 10:09	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/05/17 10:09	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/05/17 10:09	1
Trichloroethene	ND		0.21		ug/m3			04/05/17 10:09	1
Trichlorofluoromethane	1.3		0.45		ug/m3			04/05/17 10:09	1
Vinyl chloride	ND		0.10		ug/m3			04/05/17 10:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		60 - 140					04/05/17 10:09	1

Client Sample ID: FIELD DUP 1

Lab Sample ID: 140-7685-5

Date Collected: 03/28/17 00:00

Matrix: Air

Date Received: 04/03/17 10:00

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			04/05/17 10:54	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/05/17 10:54	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/05/17 10:54	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/05/17 10:54	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/05/17 10:54	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/05/17 10:54	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/05/17 10:54	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			04/05/17 10:54	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/05/17 10:54	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/05/17 10:54	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/05/17 10:54	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/05/17 10:54	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/05/17 10:54	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/05/17 10:54	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/05/17 10:54	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/05/17 10:54	1
1,4-Dioxane	ND		0.20		ppb v/v			04/05/17 10:54	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/05/17 10:54	1
2-Butanone	0.73		0.32		ppb v/v			04/05/17 10:54	1
4-Methyl-2-pentanone (MIBK)	4.4		0.20		ppb v/v			04/05/17 10:54	1
Benzene	0.14		0.080		ppb v/v			04/05/17 10:54	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: FIELD DUP 1

Lab Sample ID: 140-7685-5

Date Collected: 03/28/17 00:00

Matrix: Air

Date Received: 04/03/17 10:00

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			04/05/17 10:54	1
Bromodichloromethane	ND		0.080		ppb v/v			04/05/17 10:54	1
Bromoform	ND		0.080		ppb v/v			04/05/17 10:54	1
Bromomethane	ND		0.080		ppb v/v			04/05/17 10:54	1
Carbon tetrachloride	0.076		0.040		ppb v/v			04/05/17 10:54	1
Chlorobenzene	ND		0.080		ppb v/v			04/05/17 10:54	1
Chloroethane	ND		0.080		ppb v/v			04/05/17 10:54	1
Chloroform	ND		0.080		ppb v/v			04/05/17 10:54	1
Chloromethane	0.38		0.20		ppb v/v			04/05/17 10:54	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/05/17 10:54	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/05/17 10:54	1
Cyclohexane	ND		0.20		ppb v/v			04/05/17 10:54	1
Dibromochloromethane	ND		0.080		ppb v/v			04/05/17 10:54	1
Dichlorodifluoromethane	0.59		0.080		ppb v/v			04/05/17 10:54	1
Ethanol	4.8		2.0		ppb v/v			04/05/17 10:54	1
Ethylbenzene	ND		0.080		ppb v/v			04/05/17 10:54	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/05/17 10:54	1
Hexane	ND		0.20		ppb v/v			04/05/17 10:54	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/05/17 10:54	1
Methylene Chloride	0.89		0.20		ppb v/v			04/05/17 10:54	1
m-Xylene & p-Xylene	0.10		0.080		ppb v/v			04/05/17 10:54	1
o-Xylene	ND		0.080		ppb v/v			04/05/17 10:54	1
Styrene	ND		0.080		ppb v/v			04/05/17 10:54	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/05/17 10:54	1
Tetrachloroethene	ND		0.080		ppb v/v			04/05/17 10:54	1
Toluene	0.50		0.12		ppb v/v			04/05/17 10:54	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/05/17 10:54	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/05/17 10:54	1
Trichloroethene	ND		0.040		ppb v/v			04/05/17 10:54	1
Trichlorofluoromethane	0.28		0.080		ppb v/v			04/05/17 10:54	1
Vinyl chloride	ND		0.040		ppb v/v			04/05/17 10:54	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/05/17 10:54	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/05/17 10:54	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/05/17 10:54	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/05/17 10:54	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/05/17 10:54	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/05/17 10:54	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/05/17 10:54	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			04/05/17 10:54	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/05/17 10:54	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/05/17 10:54	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/05/17 10:54	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/05/17 10:54	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/05/17 10:54	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/05/17 10:54	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/05/17 10:54	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/05/17 10:54	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: FIELD DUP 1

Lab Sample ID: 140-7685-5

Date Collected: 03/28/17 00:00

Matrix: Air

Date Received: 04/03/17 10:00

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			04/05/17 10:54	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/05/17 10:54	1
2-Butanone	2.1		0.94		ug/m3			04/05/17 10:54	1
4-Methyl-2-pentanone (MIBK)	18		0.82		ug/m3			04/05/17 10:54	1
Benzene	0.45		0.26		ug/m3			04/05/17 10:54	1
Benzyl chloride	ND		0.83		ug/m3			04/05/17 10:54	1
Bromodichloromethane	ND		0.54		ug/m3			04/05/17 10:54	1
Bromoform	ND		0.83		ug/m3			04/05/17 10:54	1
Bromomethane	ND		0.31		ug/m3			04/05/17 10:54	1
Carbon tetrachloride	0.48		0.25		ug/m3			04/05/17 10:54	1
Chlorobenzene	ND		0.37		ug/m3			04/05/17 10:54	1
Chloroethane	ND		0.21		ug/m3			04/05/17 10:54	1
Chloroform	ND		0.39		ug/m3			04/05/17 10:54	1
Chloromethane	0.77		0.41		ug/m3			04/05/17 10:54	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/05/17 10:54	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/05/17 10:54	1
Cyclohexane	ND		0.69		ug/m3			04/05/17 10:54	1
Dibromochloromethane	ND		0.68		ug/m3			04/05/17 10:54	1
Dichlorodifluoromethane	2.9		0.40		ug/m3			04/05/17 10:54	1
Ethanol	9.0		3.8		ug/m3			04/05/17 10:54	1
Ethylbenzene	ND		0.35		ug/m3			04/05/17 10:54	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/05/17 10:54	1
Hexane	ND		0.70		ug/m3			04/05/17 10:54	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/05/17 10:54	1
Methylene Chloride	3.1		0.69		ug/m3			04/05/17 10:54	1
m-Xylene & p-Xylene	0.45		0.35		ug/m3			04/05/17 10:54	1
o-Xylene	ND		0.35		ug/m3			04/05/17 10:54	1
Styrene	ND		0.34		ug/m3			04/05/17 10:54	1
t-Butyl alcohol	ND		0.97		ug/m3			04/05/17 10:54	1
Tetrachloroethene	ND		0.54		ug/m3			04/05/17 10:54	1
Toluene	1.9		0.45		ug/m3			04/05/17 10:54	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/05/17 10:54	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/05/17 10:54	1
Trichloroethene	ND		0.21		ug/m3			04/05/17 10:54	1
Trichlorofluoromethane	1.6		0.45		ug/m3			04/05/17 10:54	1
Vinyl chloride	ND		0.10		ug/m3			04/05/17 10:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		60 - 140		04/05/17 10:54	1

Client Sample ID: H16-OA

Lab Sample ID: 140-7685-6

Date Collected: 03/28/17 09:01

Matrix: Air

Date Received: 04/03/17 10:00

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			04/04/17 19:01	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/04/17 19:01	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H16-OA

Lab Sample ID: 140-7685-6

Date Collected: 03/28/17 09:01

Matrix: Air

Date Received: 04/03/17 10:00

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			04/04/17 19:01	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/04/17 19:01	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/04/17 19:01	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/04/17 19:01	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/04/17 19:01	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			04/04/17 19:01	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/04/17 19:01	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 19:01	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/04/17 19:01	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/04/17 19:01	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/04/17 19:01	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/04/17 19:01	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 19:01	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 19:01	1
1,4-Dioxane	ND		0.20		ppb v/v			04/04/17 19:01	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/04/17 19:01	1
2-Butanone	ND		0.32		ppb v/v			04/04/17 19:01	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/04/17 19:01	1
Benzene	0.19		0.080		ppb v/v			04/04/17 19:01	1
Benzyl chloride	ND		0.16		ppb v/v			04/04/17 19:01	1
Bromodichloromethane	ND		0.080		ppb v/v			04/04/17 19:01	1
Bromoform	ND		0.080		ppb v/v			04/04/17 19:01	1
Bromomethane	ND		0.080		ppb v/v			04/04/17 19:01	1
Carbon tetrachloride	0.071		0.040		ppb v/v			04/04/17 19:01	1
Chlorobenzene	ND		0.080		ppb v/v			04/04/17 19:01	1
Chloroethane	ND		0.080		ppb v/v			04/04/17 19:01	1
Chloroform	ND		0.080		ppb v/v			04/04/17 19:01	1
Chloromethane	0.43		0.20		ppb v/v			04/04/17 19:01	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 19:01	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/04/17 19:01	1
Cyclohexane	ND		0.20		ppb v/v			04/04/17 19:01	1
Dibromochloromethane	ND		0.080		ppb v/v			04/04/17 19:01	1
Dichlorodifluoromethane	0.46		0.080		ppb v/v			04/04/17 19:01	1
Ethanol	2.5		2.0		ppb v/v			04/04/17 19:01	1
Ethylbenzene	ND		0.080		ppb v/v			04/04/17 19:01	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/04/17 19:01	1
Hexane	ND		0.20		ppb v/v			04/04/17 19:01	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/04/17 19:01	1
Methylene Chloride	ND		0.20		ppb v/v			04/04/17 19:01	1
m-Xylene & p-Xylene	0.14		0.080		ppb v/v			04/04/17 19:01	1
o-Xylene	ND		0.080		ppb v/v			04/04/17 19:01	1
Styrene	ND		0.080		ppb v/v			04/04/17 19:01	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/04/17 19:01	1
Tetrachloroethene	ND		0.080		ppb v/v			04/04/17 19:01	1
Toluene	0.23		0.12		ppb v/v			04/04/17 19:01	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 19:01	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/04/17 19:01	1
Trichloroethene	ND		0.040		ppb v/v			04/04/17 19:01	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H16-OA

Lab Sample ID: 140-7685-6

Date Collected: 03/28/17 09:01

Matrix: Air

Date Received: 04/03/17 10:00

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	0.23		0.080		ppb v/v			04/04/17 19:01	1
Vinyl chloride	ND		0.040		ppb v/v			04/04/17 19:01	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/04/17 19:01	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/04/17 19:01	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/04/17 19:01	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/04/17 19:01	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/04/17 19:01	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/04/17 19:01	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/04/17 19:01	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			04/04/17 19:01	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/04/17 19:01	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 19:01	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/04/17 19:01	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/04/17 19:01	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/04/17 19:01	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/04/17 19:01	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 19:01	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 19:01	1
1,4-Dioxane	ND		0.72		ug/m3			04/04/17 19:01	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/04/17 19:01	1
2-Butanone	ND		0.94		ug/m3			04/04/17 19:01	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/04/17 19:01	1
Benzene	0.61		0.26		ug/m3			04/04/17 19:01	1
Benzyl chloride	ND		0.83		ug/m3			04/04/17 19:01	1
Bromodichloromethane	ND		0.54		ug/m3			04/04/17 19:01	1
Bromoform	ND		0.83		ug/m3			04/04/17 19:01	1
Bromomethane	ND		0.31		ug/m3			04/04/17 19:01	1
Carbon tetrachloride	0.45		0.25		ug/m3			04/04/17 19:01	1
Chlorobenzene	ND		0.37		ug/m3			04/04/17 19:01	1
Chloroethane	ND		0.21		ug/m3			04/04/17 19:01	1
Chloroform	ND		0.39		ug/m3			04/04/17 19:01	1
Chloromethane	0.89		0.41		ug/m3			04/04/17 19:01	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 19:01	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 19:01	1
Cyclohexane	ND		0.69		ug/m3			04/04/17 19:01	1
Dibromochloromethane	ND		0.68		ug/m3			04/04/17 19:01	1
Dichlorodifluoromethane	2.3		0.40		ug/m3			04/04/17 19:01	1
Ethanol	4.8		3.8		ug/m3			04/04/17 19:01	1
Ethylbenzene	ND		0.35		ug/m3			04/04/17 19:01	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/04/17 19:01	1
Hexane	ND		0.70		ug/m3			04/04/17 19:01	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/04/17 19:01	1
Methylene Chloride	ND		0.69		ug/m3			04/04/17 19:01	1
m-Xylene & p-Xylene	0.59		0.35		ug/m3			04/04/17 19:01	1
o-Xylene	ND		0.35		ug/m3			04/04/17 19:01	1
Styrene	ND		0.34		ug/m3			04/04/17 19:01	1
t-Butyl alcohol	ND		0.97		ug/m3			04/04/17 19:01	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H16-OA

Lab Sample ID: 140-7685-6

Date Collected: 03/28/17 09:01

Matrix: Air

Date Received: 04/03/17 10:00

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			04/04/17 19:01	1
Toluene	0.87		0.45		ug/m3			04/04/17 19:01	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 19:01	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 19:01	1
Trichloroethene	ND		0.21		ug/m3			04/04/17 19:01	1
Trichlorofluoromethane	1.3		0.45		ug/m3			04/04/17 19:01	1
Vinyl chloride	ND		0.10		ug/m3			04/04/17 19:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		60 - 140		04/04/17 19:01	1

Client Sample ID: H16-BA

Lab Sample ID: 140-7685-7

Date Collected: 03/28/17 09:00

Matrix: Air

Date Received: 04/03/17 10:00

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			04/04/17 19:49	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/04/17 19:49	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/04/17 19:49	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/04/17 19:49	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/04/17 19:49	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/04/17 19:49	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/04/17 19:49	1
1,2,4-Trimethylbenzene	0.12		0.080		ppb v/v			04/04/17 19:49	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/04/17 19:49	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 19:49	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/04/17 19:49	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/04/17 19:49	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/04/17 19:49	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/04/17 19:49	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 19:49	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 19:49	1
1,4-Dioxane	ND		0.20		ppb v/v			04/04/17 19:49	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/04/17 19:49	1
2-Butanone	0.71		0.32		ppb v/v			04/04/17 19:49	1
4-Methyl-2-pentanone (MIBK)	0.29		0.20		ppb v/v			04/04/17 19:49	1
Benzene	0.16		0.080		ppb v/v			04/04/17 19:49	1
Benzyl chloride	ND		0.16		ppb v/v			04/04/17 19:49	1
Bromodichloromethane	ND		0.080		ppb v/v			04/04/17 19:49	1
Bromoform	ND		0.080		ppb v/v			04/04/17 19:49	1
Bromomethane	ND		0.080		ppb v/v			04/04/17 19:49	1
Carbon tetrachloride	0.077		0.040		ppb v/v			04/04/17 19:49	1
Chlorobenzene	ND		0.080		ppb v/v			04/04/17 19:49	1
Chloroethane	ND		0.080		ppb v/v			04/04/17 19:49	1
Chloroform	ND		0.080		ppb v/v			04/04/17 19:49	1
Chloromethane	0.40		0.20		ppb v/v			04/04/17 19:49	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 19:49	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H16-BA

Lab Sample ID: 140-7685-7

Date Collected: 03/28/17 09:00

Matrix: Air

Date Received: 04/03/17 10:00

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			04/04/17 19:49	1
Cyclohexane	ND		0.20		ppb v/v			04/04/17 19:49	1
Dibromochloromethane	ND		0.080		ppb v/v			04/04/17 19:49	1
Dichlorodifluoromethane	0.50		0.080		ppb v/v			04/04/17 19:49	1
Ethanol	23		2.0		ppb v/v			04/04/17 19:49	1
Ethylbenzene	ND		0.080		ppb v/v			04/04/17 19:49	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/04/17 19:49	1
Hexane	ND		0.20		ppb v/v			04/04/17 19:49	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/04/17 19:49	1
Methylene Chloride	ND		0.20		ppb v/v			04/04/17 19:49	1
m-Xylene & p-Xylene	0.15		0.080		ppb v/v			04/04/17 19:49	1
o-Xylene	ND		0.080		ppb v/v			04/04/17 19:49	1
Styrene	ND		0.080		ppb v/v			04/04/17 19:49	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/04/17 19:49	1
Tetrachloroethene	ND		0.080		ppb v/v			04/04/17 19:49	1
Toluene	0.19		0.12		ppb v/v			04/04/17 19:49	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 19:49	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/04/17 19:49	1
Trichloroethene	ND		0.040		ppb v/v			04/04/17 19:49	1
Trichlorofluoromethane	0.24		0.080		ppb v/v			04/04/17 19:49	1
Vinyl chloride	ND		0.040		ppb v/v			04/04/17 19:49	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/04/17 19:49	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/04/17 19:49	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/04/17 19:49	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/04/17 19:49	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/04/17 19:49	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/04/17 19:49	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/04/17 19:49	1
1,2,4-Trimethylbenzene	0.57		0.39		ug/m3			04/04/17 19:49	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/04/17 19:49	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 19:49	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/04/17 19:49	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/04/17 19:49	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/04/17 19:49	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/04/17 19:49	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 19:49	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 19:49	1
1,4-Dioxane	ND		0.72		ug/m3			04/04/17 19:49	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/04/17 19:49	1
2-Butanone	2.1		0.94		ug/m3			04/04/17 19:49	1
4-Methyl-2-pentanone (MIBK)	1.2		0.82		ug/m3			04/04/17 19:49	1
Benzene	0.51		0.26		ug/m3			04/04/17 19:49	1
Benzyl chloride	ND		0.83		ug/m3			04/04/17 19:49	1
Bromodichloromethane	ND		0.54		ug/m3			04/04/17 19:49	1
Bromoform	ND		0.83		ug/m3			04/04/17 19:49	1
Bromomethane	ND		0.31		ug/m3			04/04/17 19:49	1
Carbon tetrachloride	0.48		0.25		ug/m3			04/04/17 19:49	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H16-BA

Lab Sample ID: 140-7685-7

Date Collected: 03/28/17 09:00

Matrix: Air

Date Received: 04/03/17 10:00

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			04/04/17 19:49	1
Chloroethane	ND		0.21		ug/m3			04/04/17 19:49	1
Chloroform	ND		0.39		ug/m3			04/04/17 19:49	1
Chloromethane	0.83		0.41		ug/m3			04/04/17 19:49	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 19:49	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 19:49	1
Cyclohexane	ND		0.69		ug/m3			04/04/17 19:49	1
Dibromochloromethane	ND		0.68		ug/m3			04/04/17 19:49	1
Dichlorodifluoromethane	2.5		0.40		ug/m3			04/04/17 19:49	1
Ethanol	44		3.8		ug/m3			04/04/17 19:49	1
Ethylbenzene	ND		0.35		ug/m3			04/04/17 19:49	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/04/17 19:49	1
Hexane	ND		0.70		ug/m3			04/04/17 19:49	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/04/17 19:49	1
Methylene Chloride	ND		0.69		ug/m3			04/04/17 19:49	1
m-Xylene & p-Xylene	0.65		0.35		ug/m3			04/04/17 19:49	1
o-Xylene	ND		0.35		ug/m3			04/04/17 19:49	1
Styrene	ND		0.34		ug/m3			04/04/17 19:49	1
t-Butyl alcohol	ND		0.97		ug/m3			04/04/17 19:49	1
Tetrachloroethene	ND		0.54		ug/m3			04/04/17 19:49	1
Toluene	0.73		0.45		ug/m3			04/04/17 19:49	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 19:49	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 19:49	1
Trichloroethene	ND		0.21		ug/m3			04/04/17 19:49	1
Trichlorofluoromethane	1.3		0.45		ug/m3			04/04/17 19:49	1
Vinyl chloride	ND		0.10		ug/m3			04/04/17 19:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		60 - 140		04/04/17 19:49	1

Client Sample ID: H15-BA

Lab Sample ID: 140-7685-8

Date Collected: 03/28/17 08:59

Matrix: Air

Date Received: 04/03/17 10:00

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			04/04/17 20:38	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/04/17 20:38	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/04/17 20:38	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/04/17 20:38	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/04/17 20:38	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/04/17 20:38	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/04/17 20:38	1
1,2,4-Trimethylbenzene	0.33		0.080		ppb v/v			04/04/17 20:38	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/04/17 20:38	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 20:38	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/04/17 20:38	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/04/17 20:38	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H15-BA

Lab Sample ID: 140-7685-8

Date Collected: 03/28/17 08:59

Matrix: Air

Date Received: 04/03/17 10:00

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			04/04/17 20:38	1
1,3,5-Trimethylbenzene	0.10		0.080		ppb v/v			04/04/17 20:38	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 20:38	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 20:38	1
1,4-Dioxane	ND		0.20		ppb v/v			04/04/17 20:38	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/04/17 20:38	1
2-Butanone	1.2		0.32		ppb v/v			04/04/17 20:38	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/04/17 20:38	1
Benzene	0.18		0.080		ppb v/v			04/04/17 20:38	1
Benzyl chloride	ND		0.16		ppb v/v			04/04/17 20:38	1
Bromodichloromethane	ND		0.080		ppb v/v			04/04/17 20:38	1
Bromoform	ND		0.080		ppb v/v			04/04/17 20:38	1
Bromomethane	ND		0.080		ppb v/v			04/04/17 20:38	1
Carbon tetrachloride	0.072		0.040		ppb v/v			04/04/17 20:38	1
Chlorobenzene	ND		0.080		ppb v/v			04/04/17 20:38	1
Chloroethane	ND		0.080		ppb v/v			04/04/17 20:38	1
Chloroform	ND		0.080		ppb v/v			04/04/17 20:38	1
Chloromethane	0.43		0.20		ppb v/v			04/04/17 20:38	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 20:38	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/04/17 20:38	1
Cyclohexane	ND		0.20		ppb v/v			04/04/17 20:38	1
Dibromochloromethane	ND		0.080		ppb v/v			04/04/17 20:38	1
Dichlorodifluoromethane	0.49		0.080		ppb v/v			04/04/17 20:38	1
Ethanol	25		2.0		ppb v/v			04/04/17 20:38	1
Ethylbenzene	ND		0.080		ppb v/v			04/04/17 20:38	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/04/17 20:38	1
Hexane	ND		0.20		ppb v/v			04/04/17 20:38	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/04/17 20:38	1
Methylene Chloride	0.20		0.20		ppb v/v			04/04/17 20:38	1
m-Xylene & p-Xylene	0.15		0.080		ppb v/v			04/04/17 20:38	1
o-Xylene	ND		0.080		ppb v/v			04/04/17 20:38	1
Styrene	ND		0.080		ppb v/v			04/04/17 20:38	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/04/17 20:38	1
Tetrachloroethene	ND		0.080		ppb v/v			04/04/17 20:38	1
Toluene	0.30		0.12		ppb v/v			04/04/17 20:38	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 20:38	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/04/17 20:38	1
Trichloroethene	ND		0.040		ppb v/v			04/04/17 20:38	1
Trichlorofluoromethane	0.24		0.080		ppb v/v			04/04/17 20:38	1
Vinyl chloride	ND		0.040		ppb v/v			04/04/17 20:38	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/04/17 20:38	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/04/17 20:38	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/04/17 20:38	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/04/17 20:38	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/04/17 20:38	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/04/17 20:38	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/04/17 20:38	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H15-BA

Lab Sample ID: 140-7685-8

Date Collected: 03/28/17 08:59

Matrix: Air

Date Received: 04/03/17 10:00

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	1.6		0.39		ug/m3			04/04/17 20:38	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/04/17 20:38	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 20:38	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/04/17 20:38	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/04/17 20:38	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/04/17 20:38	1
1,3,5-Trimethylbenzene	0.50		0.39		ug/m3			04/04/17 20:38	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 20:38	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 20:38	1
1,4-Dioxane	ND		0.72		ug/m3			04/04/17 20:38	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/04/17 20:38	1
2-Butanone	3.5		0.94		ug/m3			04/04/17 20:38	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/04/17 20:38	1
Benzene	0.57		0.26		ug/m3			04/04/17 20:38	1
Benzyl chloride	ND		0.83		ug/m3			04/04/17 20:38	1
Bromodichloromethane	ND		0.54		ug/m3			04/04/17 20:38	1
Bromoform	ND		0.83		ug/m3			04/04/17 20:38	1
Bromomethane	ND		0.31		ug/m3			04/04/17 20:38	1
Carbon tetrachloride	0.45		0.25		ug/m3			04/04/17 20:38	1
Chlorobenzene	ND		0.37		ug/m3			04/04/17 20:38	1
Chloroethane	ND		0.21		ug/m3			04/04/17 20:38	1
Chloroform	ND		0.39		ug/m3			04/04/17 20:38	1
Chloromethane	0.88		0.41		ug/m3			04/04/17 20:38	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 20:38	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 20:38	1
Cyclohexane	ND		0.69		ug/m3			04/04/17 20:38	1
Dibromochloromethane	ND		0.68		ug/m3			04/04/17 20:38	1
Dichlorodifluoromethane	2.4		0.40		ug/m3			04/04/17 20:38	1
Ethanol	47		3.8		ug/m3			04/04/17 20:38	1
Ethylbenzene	ND		0.35		ug/m3			04/04/17 20:38	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/04/17 20:38	1
Hexane	ND		0.70		ug/m3			04/04/17 20:38	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/04/17 20:38	1
Methylene Chloride	0.71		0.69		ug/m3			04/04/17 20:38	1
m-Xylene & p-Xylene	0.65		0.35		ug/m3			04/04/17 20:38	1
o-Xylene	ND		0.35		ug/m3			04/04/17 20:38	1
Styrene	ND		0.34		ug/m3			04/04/17 20:38	1
t-Butyl alcohol	ND		0.97		ug/m3			04/04/17 20:38	1
Tetrachloroethene	ND		0.54		ug/m3			04/04/17 20:38	1
Toluene	1.1		0.45		ug/m3			04/04/17 20:38	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 20:38	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 20:38	1
Trichloroethene	ND		0.21		ug/m3			04/04/17 20:38	1
Trichlorofluoromethane	1.4		0.45		ug/m3			04/04/17 20:38	1
Vinyl chloride	ND		0.10		ug/m3			04/04/17 20:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		60 - 140		04/04/17 20:38	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H36-SS

Lab Sample ID: 140-7685-9

Date Collected: 03/28/17 10:01

Matrix: Air

Date Received: 04/03/17 10:00

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	5.6		0.080		ppb v/v			04/04/17 21:26	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/04/17 21:26	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/04/17 21:26	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/04/17 21:26	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/04/17 21:26	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/04/17 21:26	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/04/17 21:26	1
1,2,4-Trimethylbenzene	0.13		0.080		ppb v/v			04/04/17 21:26	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/04/17 21:26	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 21:26	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/04/17 21:26	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/04/17 21:26	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/04/17 21:26	1
1,3,5-Trimethylbenzene	0.097		0.080		ppb v/v			04/04/17 21:26	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 21:26	1
1,4-Dichlorobenzene	0.21		0.080		ppb v/v			04/04/17 21:26	1
1,4-Dioxane	ND		0.20		ppb v/v			04/04/17 21:26	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/04/17 21:26	1
2-Butanone	0.38		0.32		ppb v/v			04/04/17 21:26	1
4-Methyl-2-pentanone (MIBK)	0.23		0.20		ppb v/v			04/04/17 21:26	1
Benzene	0.19		0.080		ppb v/v			04/04/17 21:26	1
Benzyl chloride	ND		0.16		ppb v/v			04/04/17 21:26	1
Bromodichloromethane	ND		0.080		ppb v/v			04/04/17 21:26	1
Bromoform	ND		0.080		ppb v/v			04/04/17 21:26	1
Bromomethane	ND		0.080		ppb v/v			04/04/17 21:26	1
Carbon tetrachloride	1.8		0.040		ppb v/v			04/04/17 21:26	1
Chlorobenzene	ND		0.080		ppb v/v			04/04/17 21:26	1
Chloroethane	ND		0.080		ppb v/v			04/04/17 21:26	1
Chloroform	1.4		0.080		ppb v/v			04/04/17 21:26	1
Chloromethane	ND		0.20		ppb v/v			04/04/17 21:26	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 21:26	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/04/17 21:26	1
Cyclohexane	0.26		0.20		ppb v/v			04/04/17 21:26	1
Dibromochloromethane	ND		0.080		ppb v/v			04/04/17 21:26	1
Dichlorodifluoromethane	0.54		0.080		ppb v/v			04/04/17 21:26	1
Ethanol	2.1		2.0		ppb v/v			04/04/17 21:26	1
Ethylbenzene	ND		0.080		ppb v/v			04/04/17 21:26	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/04/17 21:26	1
Hexane	0.53		0.20		ppb v/v			04/04/17 21:26	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/04/17 21:26	1
Methylene Chloride	ND		0.20		ppb v/v			04/04/17 21:26	1
m-Xylene & p-Xylene	0.39		0.080		ppb v/v			04/04/17 21:26	1
o-Xylene	0.14		0.080		ppb v/v			04/04/17 21:26	1
Styrene	ND		0.080		ppb v/v			04/04/17 21:26	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/04/17 21:26	1
Tetrachloroethene	0.11		0.080		ppb v/v			04/04/17 21:26	1
Toluene	1.7		0.12		ppb v/v			04/04/17 21:26	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 21:26	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H36-SS

Lab Sample ID: 140-7685-9

Date Collected: 03/28/17 10:01

Matrix: Air

Date Received: 04/03/17 10:00

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			04/04/17 21:26	1
Trichloroethene	11		0.040		ppb v/v			04/04/17 21:26	1
Trichlorofluoromethane	0.37		0.080		ppb v/v			04/04/17 21:26	1
Vinyl chloride	ND		0.040		ppb v/v			04/04/17 21:26	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	31		0.44		ug/m3			04/04/17 21:26	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/04/17 21:26	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/04/17 21:26	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/04/17 21:26	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/04/17 21:26	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/04/17 21:26	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/04/17 21:26	1
1,2,4-Trimethylbenzene	0.62		0.39		ug/m3			04/04/17 21:26	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/04/17 21:26	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 21:26	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/04/17 21:26	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/04/17 21:26	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/04/17 21:26	1
1,3,5-Trimethylbenzene	0.48		0.39		ug/m3			04/04/17 21:26	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 21:26	1
1,4-Dichlorobenzene	1.3		0.48		ug/m3			04/04/17 21:26	1
1,4-Dioxane	ND		0.72		ug/m3			04/04/17 21:26	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/04/17 21:26	1
2-Butanone	1.1		0.94		ug/m3			04/04/17 21:26	1
4-Methyl-2-pentanone (MIBK)	0.95		0.82		ug/m3			04/04/17 21:26	1
Benzene	0.61		0.26		ug/m3			04/04/17 21:26	1
Benzyl chloride	ND		0.83		ug/m3			04/04/17 21:26	1
Bromodichloromethane	ND		0.54		ug/m3			04/04/17 21:26	1
Bromoform	ND		0.83		ug/m3			04/04/17 21:26	1
Bromomethane	ND		0.31		ug/m3			04/04/17 21:26	1
Carbon tetrachloride	11		0.25		ug/m3			04/04/17 21:26	1
Chlorobenzene	ND		0.37		ug/m3			04/04/17 21:26	1
Chloroethane	ND		0.21		ug/m3			04/04/17 21:26	1
Chloroform	6.7		0.39		ug/m3			04/04/17 21:26	1
Chloromethane	ND		0.41		ug/m3			04/04/17 21:26	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 21:26	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 21:26	1
Cyclohexane	0.90		0.69		ug/m3			04/04/17 21:26	1
Dibromochloromethane	ND		0.68		ug/m3			04/04/17 21:26	1
Dichlorodifluoromethane	2.7		0.40		ug/m3			04/04/17 21:26	1
Ethanol	3.9		3.8		ug/m3			04/04/17 21:26	1
Ethylbenzene	ND		0.35		ug/m3			04/04/17 21:26	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/04/17 21:26	1
Hexane	1.9		0.70		ug/m3			04/04/17 21:26	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/04/17 21:26	1
Methylene Chloride	ND		0.69		ug/m3			04/04/17 21:26	1
m-Xylene & p-Xylene	1.7		0.35		ug/m3			04/04/17 21:26	1
o-Xylene	0.61		0.35		ug/m3			04/04/17 21:26	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H36-SS

Lab Sample ID: 140-7685-9

Date Collected: 03/28/17 10:01

Matrix: Air

Date Received: 04/03/17 10:00

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			04/04/17 21:26	1
t-Butyl alcohol	ND		0.97		ug/m3			04/04/17 21:26	1
Tetrachloroethene	0.72		0.54		ug/m3			04/04/17 21:26	1
Toluene	6.6		0.45		ug/m3			04/04/17 21:26	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 21:26	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 21:26	1
Trichloroethene	60		0.21		ug/m3			04/04/17 21:26	1
Trichlorofluoromethane	2.1		0.45		ug/m3			04/04/17 21:26	1
Vinyl chloride	ND		0.10		ug/m3			04/04/17 21:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		60 - 140					04/04/17 21:26	1

Client Sample ID: H36-BA

Lab Sample ID: 140-7685-10

Date Collected: 03/28/17 10:02

Matrix: Air

Date Received: 04/03/17 10:00

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			04/04/17 22:16	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/04/17 22:16	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/04/17 22:16	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/04/17 22:16	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/04/17 22:16	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/04/17 22:16	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/04/17 22:16	1
1,2,4-Trimethylbenzene	0.11		0.080		ppb v/v			04/04/17 22:16	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/04/17 22:16	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 22:16	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/04/17 22:16	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/04/17 22:16	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/04/17 22:16	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/04/17 22:16	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 22:16	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 22:16	1
1,4-Dioxane	ND		0.20		ppb v/v			04/04/17 22:16	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/04/17 22:16	1
2-Butanone	0.57		0.32		ppb v/v			04/04/17 22:16	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/04/17 22:16	1
Benzene	0.17		0.080		ppb v/v			04/04/17 22:16	1
Benzyl chloride	ND		0.16		ppb v/v			04/04/17 22:16	1
Bromodichloromethane	ND		0.080		ppb v/v			04/04/17 22:16	1
Bromoform	ND		0.080		ppb v/v			04/04/17 22:16	1
Bromomethane	ND		0.080		ppb v/v			04/04/17 22:16	1
Carbon tetrachloride	0.078		0.040		ppb v/v			04/04/17 22:16	1
Chlorobenzene	ND		0.080		ppb v/v			04/04/17 22:16	1
Chloroethane	ND		0.080		ppb v/v			04/04/17 22:16	1
Chloroform	ND		0.080		ppb v/v			04/04/17 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: 140-7685-1

Client Sample ID: H36-BA

Lab Sample ID: 140-7685-10

Date Collected: 03/28/17 10:02

Matrix: Air

Date Received: 04/03/17 10:00

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	0.32		0.20		ppb v/v			04/04/17 22:16	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 22:16	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/04/17 22:16	1
Cyclohexane	0.49		0.20		ppb v/v			04/04/17 22:16	1
Dibromochloromethane	ND		0.080		ppb v/v			04/04/17 22:16	1
Dichlorodifluoromethane	0.48		0.080		ppb v/v			04/04/17 22:16	1
Ethanol	5.6		2.0		ppb v/v			04/04/17 22:16	1
Ethylbenzene	0.10		0.080		ppb v/v			04/04/17 22:16	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/04/17 22:16	1
Hexane	ND		0.20		ppb v/v			04/04/17 22:16	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/04/17 22:16	1
Methylene Chloride	0.23		0.20		ppb v/v			04/04/17 22:16	1
m-Xylene & p-Xylene	0.36		0.080		ppb v/v			04/04/17 22:16	1
o-Xylene	0.13		0.080		ppb v/v			04/04/17 22:16	1
Styrene	ND		0.080		ppb v/v			04/04/17 22:16	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/04/17 22:16	1
Tetrachloroethene	ND		0.080		ppb v/v			04/04/17 22:16	1
Toluene	4.1		0.12		ppb v/v			04/04/17 22:16	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 22:16	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/04/17 22:16	1
Trichloroethene	ND		0.040		ppb v/v			04/04/17 22:16	1
Trichlorofluoromethane	0.54		0.080		ppb v/v			04/04/17 22:16	1
Vinyl chloride	ND		0.040		ppb v/v			04/04/17 22:16	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/04/17 22:16	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/04/17 22:16	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/04/17 22:16	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/04/17 22:16	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/04/17 22:16	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/04/17 22:16	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/04/17 22:16	1
1,2,4-Trimethylbenzene	0.52		0.39		ug/m3			04/04/17 22:16	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/04/17 22:16	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 22:16	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/04/17 22:16	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/04/17 22:16	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/04/17 22:16	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/04/17 22:16	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 22:16	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 22:16	1
1,4-Dioxane	ND		0.72		ug/m3			04/04/17 22:16	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/04/17 22:16	1
2-Butanone	1.7		0.94		ug/m3			04/04/17 22:16	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/04/17 22:16	1
Benzene	0.56		0.26		ug/m3			04/04/17 22:16	1
Benzyl chloride	ND		0.83		ug/m3			04/04/17 22:16	1
Bromodichloromethane	ND		0.54		ug/m3			04/04/17 22:16	1
Bromoform	ND		0.83		ug/m3			04/04/17 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: 140-7685-1

Client Sample ID: H36-BA

Date Collected: 03/28/17 10:02

Date Received: 04/03/17 10:00

Sample Container: Summa Canister 6L

Lab Sample ID: 140-7685-10

Matrix: Air

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			04/04/17 22:16	1
Carbon tetrachloride	0.49		0.25		ug/m3			04/04/17 22:16	1
Chlorobenzene	ND		0.37		ug/m3			04/04/17 22:16	1
Chloroethane	ND		0.21		ug/m3			04/04/17 22:16	1
Chloroform	ND		0.39		ug/m3			04/04/17 22:16	1
Chloromethane	0.65		0.41		ug/m3			04/04/17 22:16	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 22:16	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 22:16	1
Cyclohexane	1.7		0.69		ug/m3			04/04/17 22:16	1
Dibromochloromethane	ND		0.68		ug/m3			04/04/17 22:16	1
Dichlorodifluoromethane	2.4		0.40		ug/m3			04/04/17 22:16	1
Ethanol	11		3.8		ug/m3			04/04/17 22:16	1
Ethylbenzene	0.45		0.35		ug/m3			04/04/17 22:16	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/04/17 22:16	1
Hexane	ND		0.70		ug/m3			04/04/17 22:16	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/04/17 22:16	1
Methylene Chloride	0.80		0.69		ug/m3			04/04/17 22:16	1
m-Xylene & p-Xylene	1.5		0.35		ug/m3			04/04/17 22:16	1
o-Xylene	0.55		0.35		ug/m3			04/04/17 22:16	1
Styrene	ND		0.34		ug/m3			04/04/17 22:16	1
t-Butyl alcohol	ND		0.97		ug/m3			04/04/17 22:16	1
Tetrachloroethene	ND		0.54		ug/m3			04/04/17 22:16	1
Toluene	16		0.45		ug/m3			04/04/17 22:16	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 22:16	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 22:16	1
Trichloroethene	ND		0.21		ug/m3			04/04/17 22:16	1
Trichlorofluoromethane	3.1		0.45		ug/m3			04/04/17 22:16	1
Vinyl chloride	ND		0.10		ug/m3			04/04/17 22:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		60 - 140		04/04/17 22:16	1

Client Sample ID: H19-BA

Date Collected: 03/28/17 13:01

Date Received: 04/03/17 10:00

Sample Container: Summa Canister 6L

Lab Sample ID: 140-7685-11

Matrix: Air

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			04/04/17 23:08	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/04/17 23:08	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/04/17 23:08	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/04/17 23:08	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/04/17 23:08	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/04/17 23:08	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/04/17 23:08	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			04/04/17 23:08	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/04/17 23:08	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 23:08	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H19-BA

Lab Sample ID: 140-7685-11

Date Collected: 03/28/17 13:01

Matrix: Air

Date Received: 04/03/17 10:00

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			04/04/17 23:08	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/04/17 23:08	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/04/17 23:08	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/04/17 23:08	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 23:08	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 23:08	1
1,4-Dioxane	ND		0.20		ppb v/v			04/04/17 23:08	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/04/17 23:08	1
2-Butanone	0.58		0.32		ppb v/v			04/04/17 23:08	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/04/17 23:08	1
Benzene	0.13		0.080		ppb v/v			04/04/17 23:08	1
Benzyl chloride	ND		0.16		ppb v/v			04/04/17 23:08	1
Bromodichloromethane	ND		0.080		ppb v/v			04/04/17 23:08	1
Bromoform	ND		0.080		ppb v/v			04/04/17 23:08	1
Bromomethane	ND		0.080		ppb v/v			04/04/17 23:08	1
Carbon tetrachloride	0.073		0.040		ppb v/v			04/04/17 23:08	1
Chlorobenzene	ND		0.080		ppb v/v			04/04/17 23:08	1
Chloroethane	ND		0.080		ppb v/v			04/04/17 23:08	1
Chloroform	ND		0.080		ppb v/v			04/04/17 23:08	1
Chloromethane	0.39		0.20		ppb v/v			04/04/17 23:08	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 23:08	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/04/17 23:08	1
Cyclohexane	ND		0.20		ppb v/v			04/04/17 23:08	1
Dibromochloromethane	ND		0.080		ppb v/v			04/04/17 23:08	1
Dichlorodifluoromethane	0.66		0.080		ppb v/v			04/04/17 23:08	1
Ethanol	16		2.0		ppb v/v			04/04/17 23:08	1
Ethylbenzene	ND		0.080		ppb v/v			04/04/17 23:08	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/04/17 23:08	1
Hexane	ND		0.20		ppb v/v			04/04/17 23:08	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/04/17 23:08	1
Methylene Chloride	3.5		0.20		ppb v/v			04/04/17 23:08	1
m-Xylene & p-Xylene	0.18		0.080		ppb v/v			04/04/17 23:08	1
o-Xylene	ND		0.080		ppb v/v			04/04/17 23:08	1
Styrene	0.11		0.080		ppb v/v			04/04/17 23:08	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/04/17 23:08	1
Tetrachloroethene	ND		0.080		ppb v/v			04/04/17 23:08	1
Toluene	0.31		0.12		ppb v/v			04/04/17 23:08	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 23:08	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/04/17 23:08	1
Trichloroethene	ND		0.040		ppb v/v			04/04/17 23:08	1
Trichlorofluoromethane	1.3		0.080		ppb v/v			04/04/17 23:08	1
Vinyl chloride	ND		0.040		ppb v/v			04/04/17 23:08	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/04/17 23:08	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/04/17 23:08	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/04/17 23:08	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/04/17 23:08	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/04/17 23:08	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H19-BA

Lab Sample ID: 140-7685-11

Date Collected: 03/28/17 13:01

Matrix: Air

Date Received: 04/03/17 10:00

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			04/04/17 23:08	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/04/17 23:08	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			04/04/17 23:08	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/04/17 23:08	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 23:08	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/04/17 23:08	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/04/17 23:08	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/04/17 23:08	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/04/17 23:08	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 23:08	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 23:08	1
1,4-Dioxane	ND		0.72		ug/m3			04/04/17 23:08	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/04/17 23:08	1
2-Butanone	1.7		0.94		ug/m3			04/04/17 23:08	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/04/17 23:08	1
Benzene	0.40		0.26		ug/m3			04/04/17 23:08	1
Benzyl chloride	ND		0.83		ug/m3			04/04/17 23:08	1
Bromodichloromethane	ND		0.54		ug/m3			04/04/17 23:08	1
Bromoform	ND		0.83		ug/m3			04/04/17 23:08	1
Bromomethane	ND		0.31		ug/m3			04/04/17 23:08	1
Carbon tetrachloride	0.46		0.25		ug/m3			04/04/17 23:08	1
Chlorobenzene	ND		0.37		ug/m3			04/04/17 23:08	1
Chloroethane	ND		0.21		ug/m3			04/04/17 23:08	1
Chloroform	ND		0.39		ug/m3			04/04/17 23:08	1
Chloromethane	0.80		0.41		ug/m3			04/04/17 23:08	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 23:08	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 23:08	1
Cyclohexane	ND		0.69		ug/m3			04/04/17 23:08	1
Dibromochloromethane	ND		0.68		ug/m3			04/04/17 23:08	1
Dichlorodifluoromethane	3.2		0.40		ug/m3			04/04/17 23:08	1
Ethanol	31		3.8		ug/m3			04/04/17 23:08	1
Ethylbenzene	ND		0.35		ug/m3			04/04/17 23:08	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/04/17 23:08	1
Hexane	ND		0.70		ug/m3			04/04/17 23:08	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/04/17 23:08	1
Methylene Chloride	12		0.69		ug/m3			04/04/17 23:08	1
m-Xylene & p-Xylene	0.78		0.35		ug/m3			04/04/17 23:08	1
o-Xylene	ND		0.35		ug/m3			04/04/17 23:08	1
Styrene	0.48		0.34		ug/m3			04/04/17 23:08	1
t-Butyl alcohol	ND		0.97		ug/m3			04/04/17 23:08	1
Tetrachloroethene	ND		0.54		ug/m3			04/04/17 23:08	1
Toluene	1.2		0.45		ug/m3			04/04/17 23:08	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 23:08	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 23:08	1
Trichloroethene	ND		0.21		ug/m3			04/04/17 23:08	1
Trichlorofluoromethane	7.5		0.45		ug/m3			04/04/17 23:08	1
Vinyl chloride	ND		0.10		ug/m3			04/04/17 23:08	1

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H19-BA

Date Collected: 03/28/17 13:01

Date Received: 04/03/17 10:00

Sample Container: Summa Canister 6L

Lab Sample ID: 140-7685-11

Matrix: Air

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		60 - 140		04/04/17 23:08	1

Client Sample ID: H19-FF

Date Collected: 03/28/17 13:02

Date Received: 04/03/17 10:00

Sample Container: Summa Canister 6L

Lab Sample ID: 140-7685-12

Matrix: Air

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			04/04/17 23:57	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/04/17 23:57	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/04/17 23:57	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/04/17 23:57	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/04/17 23:57	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/04/17 23:57	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/04/17 23:57	1
1,2,4-Trimethylbenzene	0.16		0.080		ppb v/v			04/04/17 23:57	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/04/17 23:57	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 23:57	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/04/17 23:57	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/04/17 23:57	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/04/17 23:57	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/04/17 23:57	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 23:57	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 23:57	1
1,4-Dioxane	ND		0.20		ppb v/v			04/04/17 23:57	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/04/17 23:57	1
2-Butanone	0.79		0.32		ppb v/v			04/04/17 23:57	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/04/17 23:57	1
Benzene	0.16		0.080		ppb v/v			04/04/17 23:57	1
Benzyl chloride	ND		0.16		ppb v/v			04/04/17 23:57	1
Bromodichloromethane	ND		0.080		ppb v/v			04/04/17 23:57	1
Bromoform	ND		0.080		ppb v/v			04/04/17 23:57	1
Bromomethane	ND		0.080		ppb v/v			04/04/17 23:57	1
Carbon tetrachloride	0.076		0.040		ppb v/v			04/04/17 23:57	1
Chlorobenzene	ND		0.080		ppb v/v			04/04/17 23:57	1
Chloroethane	ND		0.080		ppb v/v			04/04/17 23:57	1
Chloroform	0.082		0.080		ppb v/v			04/04/17 23:57	1
Chloromethane	0.46		0.20		ppb v/v			04/04/17 23:57	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 23:57	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/04/17 23:57	1
Cyclohexane	ND		0.20		ppb v/v			04/04/17 23:57	1
Dibromochloromethane	ND		0.080		ppb v/v			04/04/17 23:57	1
Dichlorodifluoromethane	0.63		0.080		ppb v/v			04/04/17 23:57	1
Ethanol	170	E	2.0		ppb v/v			04/04/17 23:57	1
Ethylbenzene	0.22		0.080		ppb v/v			04/04/17 23:57	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/04/17 23:57	1
Hexane	ND		0.20		ppb v/v			04/04/17 23:57	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/04/17 23:57	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H19-FF

Lab Sample ID: 140-7685-12

Date Collected: 03/28/17 13:02

Matrix: Air

Date Received: 04/03/17 10:00

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	1.9		0.20		ppb v/v			04/04/17 23:57	1
m-Xylene & p-Xylene	1.3		0.080		ppb v/v			04/04/17 23:57	1
o-Xylene	0.61		0.080		ppb v/v			04/04/17 23:57	1
Styrene	2.4		0.080		ppb v/v			04/04/17 23:57	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/04/17 23:57	1
Tetrachloroethene	ND		0.080		ppb v/v			04/04/17 23:57	1
Toluene	1.2		0.12		ppb v/v			04/04/17 23:57	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 23:57	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/04/17 23:57	1
Trichloroethene	ND		0.040		ppb v/v			04/04/17 23:57	1
Trichlorofluoromethane	5.8		0.080		ppb v/v			04/04/17 23:57	1
Vinyl chloride	ND		0.040		ppb v/v			04/04/17 23:57	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/04/17 23:57	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/04/17 23:57	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/04/17 23:57	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/04/17 23:57	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/04/17 23:57	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/04/17 23:57	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/04/17 23:57	1
1,2,4-Trimethylbenzene	0.78		0.39		ug/m3			04/04/17 23:57	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/04/17 23:57	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 23:57	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/04/17 23:57	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/04/17 23:57	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/04/17 23:57	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/04/17 23:57	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 23:57	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 23:57	1
1,4-Dioxane	ND		0.72		ug/m3			04/04/17 23:57	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/04/17 23:57	1
2-Butanone	2.3		0.94		ug/m3			04/04/17 23:57	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/04/17 23:57	1
Benzene	0.53		0.26		ug/m3			04/04/17 23:57	1
Benzyl chloride	ND		0.83		ug/m3			04/04/17 23:57	1
Bromodichloromethane	ND		0.54		ug/m3			04/04/17 23:57	1
Bromoform	ND		0.83		ug/m3			04/04/17 23:57	1
Bromomethane	ND		0.31		ug/m3			04/04/17 23:57	1
Carbon tetrachloride	0.48		0.25		ug/m3			04/04/17 23:57	1
Chlorobenzene	ND		0.37		ug/m3			04/04/17 23:57	1
Chloroethane	ND		0.21		ug/m3			04/04/17 23:57	1
Chloroform	0.40		0.39		ug/m3			04/04/17 23:57	1
Chloromethane	0.95		0.41		ug/m3			04/04/17 23:57	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 23:57	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 23:57	1
Cyclohexane	ND		0.69		ug/m3			04/04/17 23:57	1
Dibromochloromethane	ND		0.68		ug/m3			04/04/17 23:57	1
Dichlorodifluoromethane	3.1		0.40		ug/m3			04/04/17 23:57	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H19-FF

Lab Sample ID: 140-7685-12

Date Collected: 03/28/17 13:02

Matrix: Air

Date Received: 04/03/17 10:00

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	320	E	3.8		ug/m3			04/04/17 23:57	1
Ethylbenzene	0.94		0.35		ug/m3			04/04/17 23:57	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/04/17 23:57	1
Hexane	ND		0.70		ug/m3			04/04/17 23:57	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/04/17 23:57	1
Methylene Chloride	6.5		0.69		ug/m3			04/04/17 23:57	1
m-Xylene & p-Xylene	5.8		0.35		ug/m3			04/04/17 23:57	1
o-Xylene	2.7		0.35		ug/m3			04/04/17 23:57	1
Styrene	10		0.34		ug/m3			04/04/17 23:57	1
t-Butyl alcohol	ND		0.97		ug/m3			04/04/17 23:57	1
Tetrachloroethene	ND		0.54		ug/m3			04/04/17 23:57	1
Toluene	4.5		0.45		ug/m3			04/04/17 23:57	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 23:57	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 23:57	1
Trichloroethene	ND		0.21		ug/m3			04/04/17 23:57	1
Trichlorofluoromethane	33		0.45		ug/m3			04/04/17 23:57	1
Vinyl chloride	ND		0.10		ug/m3			04/04/17 23:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		60 - 140		04/04/17 23:57	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
Ethanol	280	D	10		ppb v/v			04/05/17 10:50	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	530	D	19		ug/m3			04/05/17 10:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		60 - 140		04/05/17 10:50	1

Default Detection Limits

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

TestAmerica Job ID: 140-7685-1

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

Default Detection Limits

Client: New York State D.E.C.

TestAmerica Job ID: 140-7685-1

Project/Site: Former Ithaca Gun Factory # C755019A

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

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	2.0	0.64	ppb v/v	TO 15 LL
Ethanol	3.8	1.2	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	0.040	0.029	ppb v/v	TO 15 LL
Vinyl chloride	0.10	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: 140-7685-1

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)
140-7685-1	H33-CS	105
140-7685-2	H33-BA-1	104
140-7685-3	H33-BA-2	104
140-7685-4	H35-BA	99
140-7685-5	FIELD DUP 1	103
140-7685-6	H16-OA	102
140-7685-7	H16-BA	103
140-7685-8	H15-BA	103
140-7685-9	H36-SS	108
140-7685-10	H36-BA	103
140-7685-11	H19-BA	102
140-7685-12	H19-FF	102
140-7685-12 - DL	H19-FF	98
LCS 140-10155/1006	Lab Control Sample	108
LCS 140-10158/1008	Lab Control Sample	104
MB 140-10155/8	Method Blank	105
MB 140-10158/15	Method Blank	97

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: 140-7685-1

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

Lab Sample ID: MB 140-10155/8

Matrix: Air

Analysis Batch: 10155

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			04/04/17 14:18	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/04/17 14:18	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/04/17 14:18	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/04/17 14:18	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/04/17 14:18	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/04/17 14:18	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/04/17 14:18	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			04/04/17 14:18	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/04/17 14:18	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 14:18	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/04/17 14:18	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/04/17 14:18	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/04/17 14:18	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/04/17 14:18	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 14:18	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 14:18	1
1,4-Dioxane	ND		0.20		ppb v/v			04/04/17 14:18	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/04/17 14:18	1
2-Butanone	ND		0.32		ppb v/v			04/04/17 14:18	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/04/17 14:18	1
Benzene	ND		0.080		ppb v/v			04/04/17 14:18	1
Benzyl chloride	ND		0.16		ppb v/v			04/04/17 14:18	1
Bromodichloromethane	ND		0.080		ppb v/v			04/04/17 14:18	1
Bromoform	ND		0.080		ppb v/v			04/04/17 14:18	1
Bromomethane	ND		0.080		ppb v/v			04/04/17 14:18	1
Carbon tetrachloride	ND		0.040		ppb v/v			04/04/17 14:18	1
Chlorobenzene	ND		0.080		ppb v/v			04/04/17 14:18	1
Chloroethane	ND		0.080		ppb v/v			04/04/17 14:18	1
Chloroform	ND		0.080		ppb v/v			04/04/17 14:18	1
Chloromethane	ND		0.20		ppb v/v			04/04/17 14:18	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 14:18	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/04/17 14:18	1
Cyclohexane	ND		0.20		ppb v/v			04/04/17 14:18	1
Dibromochloromethane	ND		0.080		ppb v/v			04/04/17 14:18	1
Dichlorodifluoromethane	ND		0.080		ppb v/v			04/04/17 14:18	1
Ethanol	ND		2.0		ppb v/v			04/04/17 14:18	1
Ethylbenzene	ND		0.080		ppb v/v			04/04/17 14:18	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/04/17 14:18	1
Hexane	ND		0.20		ppb v/v			04/04/17 14:18	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/04/17 14:18	1
Methylene Chloride	ND		0.20		ppb v/v			04/04/17 14:18	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			04/04/17 14:18	1
o-Xylene	ND		0.080		ppb v/v			04/04/17 14:18	1
Styrene	ND		0.080		ppb v/v			04/04/17 14:18	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/04/17 14:18	1
Tetrachloroethene	ND		0.080		ppb v/v			04/04/17 14:18	1
Toluene	ND		0.12		ppb v/v			04/04/17 14:18	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 14:18	1

TestAmerica Knoxville

QC Sample Results

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

TestAmerica Job ID: 140-7685-1

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

Lab Sample ID: MB 140-10155/8
Matrix: Air
Analysis Batch: 10155

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			04/04/17 14:18	1
Trichloroethene	ND		0.040		ppb v/v			04/04/17 14:18	1
Trichlorofluoromethane	ND		0.080		ppb v/v			04/04/17 14:18	1
Vinyl chloride	ND		0.040		ppb v/v			04/04/17 14:18	1
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/04/17 14:18	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/04/17 14:18	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/04/17 14:18	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/04/17 14:18	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/04/17 14:18	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/04/17 14:18	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/04/17 14:18	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			04/04/17 14:18	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/04/17 14:18	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 14:18	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/04/17 14:18	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/04/17 14:18	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/04/17 14:18	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/04/17 14:18	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 14:18	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 14:18	1
1,4-Dioxane	ND		0.72		ug/m3			04/04/17 14:18	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/04/17 14:18	1
2-Butanone	ND		0.94		ug/m3			04/04/17 14:18	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/04/17 14:18	1
Benzene	ND		0.26		ug/m3			04/04/17 14:18	1
Benzyl chloride	ND		0.83		ug/m3			04/04/17 14:18	1
Bromodichloromethane	ND		0.54		ug/m3			04/04/17 14:18	1
Bromoform	ND		0.83		ug/m3			04/04/17 14:18	1
Bromomethane	ND		0.31		ug/m3			04/04/17 14:18	1
Carbon tetrachloride	ND		0.25		ug/m3			04/04/17 14:18	1
Chlorobenzene	ND		0.37		ug/m3			04/04/17 14:18	1
Chloroethane	ND		0.21		ug/m3			04/04/17 14:18	1
Chloroform	ND		0.39		ug/m3			04/04/17 14:18	1
Chloromethane	ND		0.41		ug/m3			04/04/17 14:18	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 14:18	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 14:18	1
Cyclohexane	ND		0.69		ug/m3			04/04/17 14:18	1
Dibromochloromethane	ND		0.68		ug/m3			04/04/17 14:18	1
Dichlorodifluoromethane	ND		0.40		ug/m3			04/04/17 14:18	1
Ethanol	ND		3.8		ug/m3			04/04/17 14:18	1
Ethylbenzene	ND		0.35		ug/m3			04/04/17 14:18	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/04/17 14:18	1
Hexane	ND		0.70		ug/m3			04/04/17 14:18	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/04/17 14:18	1
Methylene Chloride	ND		0.69		ug/m3			04/04/17 14:18	1

TestAmerica Knoxville

QC Sample Results

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

TestAmerica Job ID: 140-7685-1

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

Lab Sample ID: MB 140-10155/8

Matrix: Air

Analysis Batch: 10155

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			04/04/17 14:18	1
o-Xylene	ND		0.35		ug/m3			04/04/17 14:18	1
Styrene	ND		0.34		ug/m3			04/04/17 14:18	1
t-Butyl alcohol	ND		0.97		ug/m3			04/04/17 14:18	1
Tetrachloroethene	ND		0.54		ug/m3			04/04/17 14:18	1
Toluene	ND		0.45		ug/m3			04/04/17 14:18	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 14:18	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 14:18	1
Trichloroethene	ND		0.21		ug/m3			04/04/17 14:18	1
Trichlorofluoromethane	ND		0.45		ug/m3			04/04/17 14:18	1
Vinyl chloride	ND		0.10		ug/m3			04/04/17 14:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		60 - 140		04/04/17 14:18	1

Lab Sample ID: LCS 140-10155/1006

Matrix: Air

Analysis Batch: 10155

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	2.35		ppb v/v		118	70 - 130
1,1,2,2-Tetrachloroethane	2.00	1.73		ppb v/v		86	70 - 130
1,1,2-Trichloroethane	2.00	1.88		ppb v/v		94	70 - 130
1,1,2-Trichlorotrifluoroethane	2.00	2.32		ppb v/v		116	70 - 130
1,1-Dichloroethane	2.00	1.83		ppb v/v		92	70 - 130
1,1-Dichloroethene	2.00	2.11		ppb v/v		105	70 - 130
1,2,4-Trichlorobenzene	2.00	2.03		ppb v/v		101	60 - 140
1,2,4-Trimethylbenzene	2.00	1.82		ppb v/v		91	70 - 130
1,2-Dibromoethane	2.00	2.15		ppb v/v		107	70 - 130
1,2-Dichlorobenzene	2.00	1.90		ppb v/v		95	70 - 130
1,2-Dichloroethane	2.00	2.25		ppb v/v		112	70 - 130
1,2-Dichloropropane	2.00	1.79		ppb v/v		90	70 - 130
1,2-Dichlorotetrafluoroethane	2.00	2.37		ppb v/v		119	60 - 140
1,3,5-Trimethylbenzene	2.00	1.79		ppb v/v		90	70 - 130
1,3-Dichlorobenzene	2.00	1.97		ppb v/v		98	70 - 130
1,4-Dichlorobenzene	2.00	1.94		ppb v/v		97	70 - 130
1,4-Dioxane	2.00	1.59		ppb v/v		79	60 - 140
2,2,4-Trimethylpentane	2.00	1.78		ppb v/v		89	70 - 130
2-Butanone	2.00	1.47		ppb v/v		73	60 - 140
4-Methyl-2-pentanone (MIBK)	2.00	1.44		ppb v/v		72	60 - 140
Benzene	2.00	1.88		ppb v/v		94	70 - 130
Benzyl chloride	2.00	1.89		ppb v/v		95	70 - 130
Bromodichloromethane	2.00	2.36		ppb v/v		118	70 - 130
Bromoform	2.00	2.68		ppb v/v		134	60 - 140
Bromomethane	2.00	2.02		ppb v/v		101	70 - 130
Carbon tetrachloride	2.00	2.58		ppb v/v		129	70 - 130
Chlorobenzene	2.00	1.99		ppb v/v		99	70 - 130

TestAmerica Knoxville

QC Sample Results

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

TestAmerica Job ID: 140-7685-1

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

Lab Sample ID: LCS 140-10155/1006

Matrix: Air

Analysis Batch: 10155

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	2.00	1.77		ppb v/v		89	70 - 130
Chloroform	2.00	2.18		ppb v/v		109	70 - 130
Chloromethane	2.00	1.63		ppb v/v		81	60 - 140
cis-1,2-Dichloroethene	2.00	1.95		ppb v/v		98	70 - 130
cis-1,3-Dichloropropene	2.00	2.12		ppb v/v		106	70 - 130
Cyclohexane	2.00	1.97		ppb v/v		98	70 - 130
Dibromochloromethane	2.00	2.47		ppb v/v		123	70 - 130
Dichlorodifluoromethane	2.00	2.37		ppb v/v		118	60 - 140
Ethanol	10.0	7.57		ppb v/v		76	60 - 140
Ethylbenzene	2.00	1.83		ppb v/v		91	70 - 130
Hexachlorobutadiene	2.00	2.18		ppb v/v		109	60 - 140
Hexane	2.00	1.68		ppb v/v		84	70 - 130
Methyl tert-butyl ether	2.00	1.68		ppb v/v		84	60 - 140
Methylene Chloride	2.00	1.97		ppb v/v		98	70 - 130
m-Xylene & p-Xylene	4.00	3.70		ppb v/v		92	70 - 130
o-Xylene	2.00	1.79		ppb v/v		89	70 - 130
Styrene	2.00	1.98		ppb v/v		99	70 - 130
t-Butyl alcohol	2.00	1.78		ppb v/v		89	60 - 140
Tetrachloroethene	2.00	2.18		ppb v/v		109	70 - 130
Toluene	2.00	1.90		ppb v/v		95	70 - 130
trans-1,2-Dichloroethene	2.00	1.95		ppb v/v		97	70 - 130
trans-1,3-Dichloropropene	2.00	2.10		ppb v/v		105	70 - 130
Trichloroethene	2.00	2.23		ppb v/v		111	70 - 130
Trichlorofluoromethane	2.00	2.55		ppb v/v		128	60 - 140
Vinyl chloride	2.00	1.82		ppb v/v		91	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	11	12.8		ug/m3		118	70 - 130
1,1,1,2-Tetrachloroethane	14	11.8		ug/m3		86	70 - 130
1,1,2-Trichloroethane	11	10.3		ug/m3		94	70 - 130
1,1,2-Trichlorotrifluoroethane	15	17.7		ug/m3		116	70 - 130
1,1-Dichloroethane	8.1	7.41		ug/m3		92	70 - 130
1,1-Dichloroethene	7.9	8.35		ug/m3		105	70 - 130
1,2,4-Trichlorobenzene	15	15.0		ug/m3		101	60 - 140
1,2,4-Trimethylbenzene	9.8	8.95		ug/m3		91	70 - 130
1,2-Dibromoethane	15	16.5		ug/m3		107	70 - 130
1,2-Dichlorobenzene	12	11.4		ug/m3		95	70 - 130
1,2-Dichloroethane	8.1	9.11		ug/m3		112	70 - 130
1,2-Dichloropropane	9.2	8.28		ug/m3		90	70 - 130
1,2-Dichlorotetrafluoroethane	14	16.6		ug/m3		119	60 - 140
1,3,5-Trimethylbenzene	9.8	8.81		ug/m3		90	70 - 130
1,3-Dichlorobenzene	12	11.8		ug/m3		98	70 - 130
1,4-Dichlorobenzene	12	11.7		ug/m3		97	70 - 130
1,4-Dioxane	7.2	5.72		ug/m3		79	60 - 140
2,2,4-Trimethylpentane	9.3	8.33		ug/m3		89	70 - 130
2-Butanone	5.9	4.33		ug/m3		73	60 - 140
4-Methyl-2-pentanone (MIBK)	8.2	5.90		ug/m3		72	60 - 140

TestAmerica Knoxville

QC Sample Results

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

TestAmerica Job ID: 140-7685-1

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

Lab Sample ID: LCS 140-10155/1006

Matrix: Air

Analysis Batch: 10155

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	6.01		ug/m3		94	70 - 130
Benzyl chloride	10	9.79		ug/m3		95	70 - 130
Bromodichloromethane	13	15.8		ug/m3		118	70 - 130
Bromoform	21	27.7		ug/m3		134	60 - 140
Bromomethane	7.8	7.85		ug/m3		101	70 - 130
Carbon tetrachloride	13	16.3		ug/m3		129	70 - 130
Chlorobenzene	9.2	9.15		ug/m3		99	70 - 130
Chloroethane	5.3	4.68		ug/m3		89	70 - 130
Chloroform	9.8	10.6		ug/m3		109	70 - 130
Chloromethane	4.1	3.36		ug/m3		81	60 - 140
cis-1,2-Dichloroethene	7.9	7.74		ug/m3		98	70 - 130
cis-1,3-Dichloropropene	9.1	9.63		ug/m3		106	70 - 130
Cyclohexane	6.9	6.77		ug/m3		98	70 - 130
Dibromochloromethane	17	21.0		ug/m3		123	70 - 130
Dichlorodifluoromethane	9.9	11.7		ug/m3		118	60 - 140
Ethanol	19	14.3		ug/m3		76	60 - 140
Ethylbenzene	8.7	7.94		ug/m3		91	70 - 130
Hexachlorobutadiene	21	23.2		ug/m3		109	60 - 140
Hexane	7.1	5.91		ug/m3		84	70 - 130
Methyl tert-butyl ether	7.2	6.07		ug/m3		84	60 - 140
Methylene Chloride	7.0	6.83		ug/m3		98	70 - 130
m-Xylene & p-Xylene	17	16.1		ug/m3		92	70 - 130
o-Xylene	8.7	7.76		ug/m3		89	70 - 130
Styrene	8.5	8.44		ug/m3		99	70 - 130
t-Butyl alcohol	6.1	5.39		ug/m3		89	60 - 140
Tetrachloroethene	14	14.8		ug/m3		109	70 - 130
Toluene	7.5	7.15		ug/m3		95	70 - 130
trans-1,2-Dichloroethene	7.9	7.73		ug/m3		97	70 - 130
trans-1,3-Dichloropropene	9.1	9.51		ug/m3		105	70 - 130
Trichloroethene	11	12.0		ug/m3		111	70 - 130
Trichlorofluoromethane	11	14.3		ug/m3		128	60 - 140
Vinyl chloride	5.1	4.65		ug/m3		91	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		60 - 140

Lab Sample ID: MB 140-10158/15

Matrix: Air

Analysis Batch: 10158

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			04/04/17 19:15	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/04/17 19:15	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/04/17 19:15	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/04/17 19:15	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/04/17 19:15	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/04/17 19:15	1

TestAmerica Knoxville

QC Sample Results

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

TestAmerica Job ID: 140-7685-1

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

Lab Sample ID: MB 140-10158/15

Matrix: Air

Analysis Batch: 10158

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			04/04/17 19:15	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			04/04/17 19:15	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/04/17 19:15	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 19:15	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/04/17 19:15	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/04/17 19:15	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/04/17 19:15	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/04/17 19:15	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 19:15	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/04/17 19:15	1
1,4-Dioxane	ND		0.20		ppb v/v			04/04/17 19:15	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/04/17 19:15	1
2-Butanone	ND		0.32		ppb v/v			04/04/17 19:15	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/04/17 19:15	1
Benzene	ND		0.080		ppb v/v			04/04/17 19:15	1
Benzyl chloride	ND		0.16		ppb v/v			04/04/17 19:15	1
Bromodichloromethane	ND		0.080		ppb v/v			04/04/17 19:15	1
Bromoform	ND		0.080		ppb v/v			04/04/17 19:15	1
Bromomethane	ND		0.080		ppb v/v			04/04/17 19:15	1
Carbon tetrachloride	ND		0.040		ppb v/v			04/04/17 19:15	1
Chlorobenzene	ND		0.080		ppb v/v			04/04/17 19:15	1
Chloroethane	ND		0.080		ppb v/v			04/04/17 19:15	1
Chloroform	ND		0.080		ppb v/v			04/04/17 19:15	1
Chloromethane	ND		0.20		ppb v/v			04/04/17 19:15	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 19:15	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/04/17 19:15	1
Cyclohexane	ND		0.20		ppb v/v			04/04/17 19:15	1
Dibromochloromethane	ND		0.080		ppb v/v			04/04/17 19:15	1
Dichlorodifluoromethane	ND		0.080		ppb v/v			04/04/17 19:15	1
Ethanol	ND		2.0		ppb v/v			04/04/17 19:15	1
Ethylbenzene	ND		0.080		ppb v/v			04/04/17 19:15	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/04/17 19:15	1
Hexane	ND		0.20		ppb v/v			04/04/17 19:15	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/04/17 19:15	1
Methylene Chloride	ND		0.20		ppb v/v			04/04/17 19:15	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			04/04/17 19:15	1
o-Xylene	ND		0.080		ppb v/v			04/04/17 19:15	1
Styrene	ND		0.080		ppb v/v			04/04/17 19:15	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/04/17 19:15	1
Tetrachloroethene	ND		0.080		ppb v/v			04/04/17 19:15	1
Toluene	ND		0.12		ppb v/v			04/04/17 19:15	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/04/17 19:15	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/04/17 19:15	1
Trichloroethene	ND		0.040		ppb v/v			04/04/17 19:15	1
Trichlorofluoromethane	ND		0.080		ppb v/v			04/04/17 19:15	1
Vinyl chloride	ND		0.040		ppb v/v			04/04/17 19:15	1

TestAmerica Knoxville

QC Sample Results

Client: New York State D.E.C.

TestAmerica Job ID: 140-7685-1

Project/Site: Former Ithaca Gun Factory # C755019A

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/04/17 19:15	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/04/17 19:15	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/04/17 19:15	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/04/17 19:15	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/04/17 19:15	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/04/17 19:15	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/04/17 19:15	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			04/04/17 19:15	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/04/17 19:15	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 19:15	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/04/17 19:15	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/04/17 19:15	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/04/17 19:15	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/04/17 19:15	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 19:15	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/04/17 19:15	1
1,4-Dioxane	ND		0.72		ug/m3			04/04/17 19:15	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/04/17 19:15	1
2-Butanone	ND		0.94		ug/m3			04/04/17 19:15	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/04/17 19:15	1
Benzene	ND		0.26		ug/m3			04/04/17 19:15	1
Benzyl chloride	ND		0.83		ug/m3			04/04/17 19:15	1
Bromodichloromethane	ND		0.54		ug/m3			04/04/17 19:15	1
Bromoform	ND		0.83		ug/m3			04/04/17 19:15	1
Bromomethane	ND		0.31		ug/m3			04/04/17 19:15	1
Carbon tetrachloride	ND		0.25		ug/m3			04/04/17 19:15	1
Chlorobenzene	ND		0.37		ug/m3			04/04/17 19:15	1
Chloroethane	ND		0.21		ug/m3			04/04/17 19:15	1
Chloroform	ND		0.39		ug/m3			04/04/17 19:15	1
Chloromethane	ND		0.41		ug/m3			04/04/17 19:15	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 19:15	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 19:15	1
Cyclohexane	ND		0.69		ug/m3			04/04/17 19:15	1
Dibromochloromethane	ND		0.68		ug/m3			04/04/17 19:15	1
Dichlorodifluoromethane	ND		0.40		ug/m3			04/04/17 19:15	1
Ethanol	ND		3.8		ug/m3			04/04/17 19:15	1
Ethylbenzene	ND		0.35		ug/m3			04/04/17 19:15	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/04/17 19:15	1
Hexane	ND		0.70		ug/m3			04/04/17 19:15	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/04/17 19:15	1
Methylene Chloride	ND		0.69		ug/m3			04/04/17 19:15	1
m-Xylene & p-Xylene	ND		0.35		ug/m3			04/04/17 19:15	1
o-Xylene	ND		0.35		ug/m3			04/04/17 19:15	1
Styrene	ND		0.34		ug/m3			04/04/17 19:15	1
t-Butyl alcohol	ND		0.97		ug/m3			04/04/17 19:15	1
Tetrachloroethene	ND		0.54		ug/m3			04/04/17 19:15	1
Toluene	ND		0.45		ug/m3			04/04/17 19:15	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/04/17 19:15	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/04/17 19:15	1
Trichloroethene	ND		0.21		ug/m3			04/04/17 19:15	1
Trichlorofluoromethane	ND		0.45		ug/m3			04/04/17 19:15	1
Vinyl chloride	ND		0.10		ug/m3			04/04/17 19:15	1

TestAmerica Knoxville

QC Sample Results

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

TestAmerica Job ID: 140-7685-1

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

Lab Sample ID: MB 140-10158/15
Matrix: Air
Analysis Batch: 10158

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		60 - 140		04/04/17 19:15	1

Lab Sample ID: LCS 140-10158/1008
Matrix: Air
Analysis Batch: 10158

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	2.17		ppb v/v		109	70 - 130
1,1,2,2-Tetrachloroethane	2.00	1.72		ppb v/v		86	70 - 130
1,1,2-Trichloroethane	2.00	1.75		ppb v/v		88	70 - 130
1,1,2-Trichlorotrifluoroethane	2.00	2.38		ppb v/v		119	70 - 130
1,1-Dichloroethane	2.00	2.03		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	1.41		ppb v/v		70	60 - 140
1,2,4-Trimethylbenzene	2.00	1.88		ppb v/v		94	70 - 130
1,2-Dibromoethane	2.00	1.91		ppb v/v		95	70 - 130
1,2-Dichlorobenzene	2.00	1.52		ppb v/v		76	70 - 130
1,2-Dichloroethane	2.00	2.23		ppb v/v		112	70 - 130
1,2-Dichloropropane	2.00	1.69		ppb v/v		84	70 - 130
1,2-Dichlorotetrafluoroethane	2.00	2.47		ppb v/v		123	60 - 140
1,3,5-Trimethylbenzene	2.00	1.80		ppb v/v		90	70 - 130
1,3-Dichlorobenzene	2.00	1.50		ppb v/v		75	70 - 130
1,4-Dichlorobenzene	2.00	1.43		ppb v/v		72	70 - 130
1,4-Dioxane	2.00	2.25		ppb v/v		112	60 - 140
2,2,4-Trimethylpentane	2.00	1.91		ppb v/v		95	70 - 130
2-Butanone	2.00	1.88		ppb v/v		94	60 - 140
4-Methyl-2-pentanone (MIBK)	2.00	2.22		ppb v/v		111	60 - 140
Benzene	2.00	1.85		ppb v/v		92	70 - 130
Benzyl chloride	2.00	1.69		ppb v/v		84	70 - 130
Bromodichloromethane	2.00	2.11		ppb v/v		105	70 - 130
Bromoform	2.00	1.97		ppb v/v		99	60 - 140
Bromomethane	2.00	2.10		ppb v/v		105	70 - 130
Carbon tetrachloride	2.00	2.39		ppb v/v		120	70 - 130
Chlorobenzene	2.00	1.83		ppb v/v		92	70 - 130
Chloroethane	2.00	2.26		ppb v/v		113	70 - 130
Chloroform	2.00	2.04		ppb v/v		102	70 - 130
Chloromethane	2.00	1.76		ppb v/v		88	60 - 140
cis-1,2-Dichloroethene	2.00	1.97		ppb v/v		99	70 - 130
cis-1,3-Dichloropropene	2.00	1.99		ppb v/v		99	70 - 130
Cyclohexane	2.00	2.21		ppb v/v		110	70 - 130
Dibromochloromethane	2.00	2.21		ppb v/v		110	70 - 130
Dichlorodifluoromethane	2.00	2.44		ppb v/v		122	60 - 140
Ethanol	10.0	11.7		ppb v/v		117	60 - 140
Ethylbenzene	2.00	1.52		ppb v/v		76	70 - 130
Hexachlorobutadiene	2.00	1.83		ppb v/v		92	60 - 140
Hexane	2.00	2.08		ppb v/v		104	70 - 130
Methyl tert-butyl ether	2.00	1.88		ppb v/v		94	60 - 140

TestAmerica Knoxville

QC Sample Results

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

TestAmerica Job ID: 140-7685-1

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

Lab Sample ID: LCS 140-10158/1008

Matrix: Air

Analysis Batch: 10158

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	2.00	1.99		ppb v/v		99	70 - 130
m-Xylene & p-Xylene	4.00	3.14		ppb v/v		78	70 - 130
o-Xylene	2.00	1.56		ppb v/v		78	70 - 130
Styrene	2.00	1.58		ppb v/v		79	70 - 130
t-Butyl alcohol	2.00	2.76		ppb v/v		138	60 - 140
Tetrachloroethene	2.00	2.04		ppb v/v		102	70 - 130
Toluene	2.00	1.70		ppb v/v		85	70 - 130
trans-1,2-Dichloroethene	2.00	2.13		ppb v/v		106	70 - 130
trans-1,3-Dichloropropene	2.00	1.85		ppb v/v		93	70 - 130
Trichloroethene	2.00	1.89		ppb v/v		94	70 - 130
Trichlorofluoromethane	2.00	2.69		ppb v/v		134	60 - 140
Vinyl chloride	2.00	1.95		ppb v/v		98	70 - 130
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	11	11.9		ug/m3		109	70 - 130
1,1,2,2-Tetrachloroethane	14	11.8		ug/m3		86	70 - 130
1,1,2-Trichloroethane	11	9.57		ug/m3		88	70 - 130
1,1,2-Trichlorotrifluoroethane	15	18.2		ug/m3		119	70 - 130
1,1-Dichloroethane	8.1	8.21		ug/m3		101	70 - 130
1,1-Dichloroethene	7.9	9.95		ug/m3		125	70 - 130
1,2,4-Trichlorobenzene	15	10.4		ug/m3		70	60 - 140
1,2,4-Trimethylbenzene	9.8	9.22		ug/m3		94	70 - 130
1,2-Dibromoethane	15	14.6		ug/m3		95	70 - 130
1,2-Dichlorobenzene	12	9.15		ug/m3		76	70 - 130
1,2-Dichloroethane	8.1	9.03		ug/m3		112	70 - 130
1,2-Dichloropropane	9.2	7.80		ug/m3		84	70 - 130
1,2-Dichlorotetrafluoroethane	14	17.2		ug/m3		123	60 - 140
1,3,5-Trimethylbenzene	9.8	8.83		ug/m3		90	70 - 130
1,3-Dichlorobenzene	12	8.99		ug/m3		75	70 - 130
1,4-Dichlorobenzene	12	8.60		ug/m3		72	70 - 130
1,4-Dioxane	7.2	8.10		ug/m3		112	60 - 140
2,2,4-Trimethylpentane	9.3	8.91		ug/m3		95	70 - 130
2-Butanone	5.9	5.53		ug/m3		94	60 - 140
4-Methyl-2-pentanone (MIBK)	8.2	9.11		ug/m3		111	60 - 140
Benzene	6.4	5.90		ug/m3		92	70 - 130
Benzyl chloride	10	8.75		ug/m3		84	70 - 130
Bromodichloromethane	13	14.1		ug/m3		105	70 - 130
Bromoform	21	20.4		ug/m3		99	60 - 140
Bromomethane	7.8	8.14		ug/m3		105	70 - 130
Carbon tetrachloride	13	15.0		ug/m3		120	70 - 130
Chlorobenzene	9.2	8.44		ug/m3		92	70 - 130
Chloroethane	5.3	5.97		ug/m3		113	70 - 130
Chloroform	9.8	9.94		ug/m3		102	70 - 130
Chloromethane	4.1	3.63		ug/m3		88	60 - 140
cis-1,2-Dichloroethene	7.9	7.82		ug/m3		99	70 - 130
cis-1,3-Dichloropropene	9.1	9.03		ug/m3		99	70 - 130
Cyclohexane	6.9	7.60		ug/m3		110	70 - 130

TestAmerica Knoxville

QC Sample Results

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

TestAmerica Job ID: 140-7685-1

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

Lab Sample ID: LCS 140-10158/1008

Matrix: Air

Analysis Batch: 10158

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibromochloromethane	17	18.8		ug/m3		110	70 - 130
Dichlorodifluoromethane	9.9	12.0		ug/m3		122	60 - 140
Ethanol	19	22.1		ug/m3		117	60 - 140
Ethylbenzene	8.7	6.61		ug/m3		76	70 - 130
Hexachlorobutadiene	21	19.6		ug/m3		92	60 - 140
Hexane	7.1	7.33		ug/m3		104	70 - 130
Methyl tert-butyl ether	7.2	6.77		ug/m3		94	60 - 140
Methylene Chloride	7.0	6.91		ug/m3		99	70 - 130
m-Xylene & p-Xylene	17	13.6		ug/m3		78	70 - 130
o-Xylene	8.7	6.77		ug/m3		78	70 - 130
Styrene	8.5	6.73		ug/m3		79	70 - 130
t-Butyl alcohol	6.1	8.35		ug/m3		138	60 - 140
Tetrachloroethene	14	13.8		ug/m3		102	70 - 130
Toluene	7.5	6.39		ug/m3		85	70 - 130
trans-1,2-Dichloroethene	7.9	8.43		ug/m3		106	70 - 130
trans-1,3-Dichloropropene	9.1	8.41		ug/m3		93	70 - 130
Trichloroethene	11	10.1		ug/m3		94	70 - 130
Trichlorofluoromethane	11	15.1		ug/m3		134	60 - 140
Vinyl chloride	5.1	4.99		ug/m3		98	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	104		60 - 140				

QC Association Summary

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

TestAmerica Job ID: 140-7685-1

Air - GC/MS VOA

Analysis Batch: 10155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-7685-1	H33-CS	Total/NA	Air	TO 15 LL	
140-7685-2	H33-BA-1	Total/NA	Air	TO 15 LL	
140-7685-3	H33-BA-2	Total/NA	Air	TO 15 LL	
140-7685-4	H35-BA	Total/NA	Air	TO 15 LL	
140-7685-5	FIELD DUP 1	Total/NA	Air	TO 15 LL	
140-7685-6	H16-OA	Total/NA	Air	TO 15 LL	
140-7685-7	H16-BA	Total/NA	Air	TO 15 LL	
140-7685-8	H15-BA	Total/NA	Air	TO 15 LL	
140-7685-9	H36-SS	Total/NA	Air	TO 15 LL	
140-7685-10	H36-BA	Total/NA	Air	TO 15 LL	
140-7685-11	H19-BA	Total/NA	Air	TO 15 LL	
140-7685-12	H19-FF	Total/NA	Air	TO 15 LL	
MB 140-10155/8	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-10155/1006	Lab Control Sample	Total/NA	Air	TO 15 LL	

Analysis Batch: 10158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-7685-12 - DL	H19-FF	Total/NA	Air	TO 15 LL	
MB 140-10158/15	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-10158/1008	Lab Control Sample	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: 140-7685-1

Client Sample ID: H33-CS

Date Collected: 03/28/17 08:31

Date Received: 04/03/17 10:00

Lab Sample ID: 140-7685-1

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	250 mL	500 mL	10155	04/04/17 15:02	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H33-BA-1

Date Collected: 03/28/17 08:31

Date Received: 04/03/17 10:00

Lab Sample ID: 140-7685-2

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	10155	04/04/17 15:51	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H33-BA-2

Date Collected: 03/28/17 08:32

Date Received: 04/03/17 10:00

Lab Sample ID: 140-7685-3

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	10155	04/04/17 16:41	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H35-BA

Date Collected: 03/28/17 08:42

Date Received: 04/03/17 10:00

Lab Sample ID: 140-7685-4

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	10155	04/05/17 10:09	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: FIELD DUP 1

Date Collected: 03/28/17 00:00

Date Received: 04/03/17 10:00

Lab Sample ID: 140-7685-5

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	10155	04/05/17 10:54	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H16-OA

Date Collected: 03/28/17 09:01

Date Received: 04/03/17 10:00

Lab Sample ID: 140-7685-6

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	10155	04/04/17 19:01	HMT	TAL KNX
Instrument ID: MG										

TestAmerica Knoxville

Lab Chronicle

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H16-BA

Date Collected: 03/28/17 09:00

Date Received: 04/03/17 10:00

Lab Sample ID: 140-7685-7

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	10155	04/04/17 19:49	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H15-BA

Date Collected: 03/28/17 08:59

Date Received: 04/03/17 10:00

Lab Sample ID: 140-7685-8

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	10155	04/04/17 20:38	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H36-SS

Date Collected: 03/28/17 10:01

Date Received: 04/03/17 10:00

Lab Sample ID: 140-7685-9

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	10155	04/04/17 21:26	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H36-BA

Date Collected: 03/28/17 10:02

Date Received: 04/03/17 10:00

Lab Sample ID: 140-7685-10

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	10155	04/04/17 22:16	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H19-BA

Date Collected: 03/28/17 13:01

Date Received: 04/03/17 10:00

Lab Sample ID: 140-7685-11

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	10155	04/04/17 23:08	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H19-FF

Date Collected: 03/28/17 13:02

Date Received: 04/03/17 10:00

Lab Sample ID: 140-7685-12

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	10155	04/04/17 23:57	HMT	TAL KNX
Instrument ID: MG										

Lab Chronicle

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

TestAmerica Job ID: 140-7685-1

Client Sample ID: H19-FF

Date Collected: 03/28/17 13:02

Date Received: 04/03/17 10:00

Lab Sample ID: 140-7685-12

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	DL	1	100 mL	500 mL	10158	04/05/17 10:50	HMT	TAL KNX
Instrument ID: MJ										

Client Sample ID: Method Blank

Date Collected: N/A

Date Received: N/A

Lab Sample ID: MB 140-10155/8

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	10155	04/04/17 14:18	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: Method Blank

Date Collected: N/A

Date Received: N/A

Lab Sample ID: MB 140-10158/15

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	10158	04/04/17 19:15	HMT	TAL KNX
Instrument ID: MJ										

Client Sample ID: Lab Control Sample

Date Collected: N/A

Date Received: N/A

Lab Sample ID: LCS 140-10155/1006

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	10155	04/04/17 12:01	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: Lab Control Sample

Date Collected: N/A

Date Received: N/A

Lab Sample ID: LCS 140-10158/1008

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	10158	04/04/17 13:50	HMT	TAL KNX
Instrument ID: MJ										

Laboratory References:

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

Accreditation/Certification Summary

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

TestAmerica Job ID: 140-7685-1

Laboratory: TestAmerica Knoxville

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10781	03-31-18

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

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

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

Analysis Method	Prep Method	Matrix	Analyte
TO 15 LL		Air	Ethanol

Method Summary

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

TestAmerica Job ID: 140-7685-1

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

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

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

Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 140-7685-1

Project/Site: Former Ithaca Gun Factory # C755019A

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
140-7685-1	H33-CS	Air	03/28/17 08:31	04/03/17 10:00
140-7685-2	H33-BA-1	Air	03/28/17 08:31	04/03/17 10:00
140-7685-3	H33-BA-2	Air	03/28/17 08:32	04/03/17 10:00
140-7685-4	H35-BA	Air	03/28/17 08:42	04/03/17 10:00
140-7685-5	FIELD DUP 1	Air	03/28/17 00:00	04/03/17 10:00
140-7685-6	H16-OA	Air	03/28/17 09:01	04/03/17 10:00
140-7685-7	H16-BA	Air	03/28/17 09:00	04/03/17 10:00
140-7685-8	H15-BA	Air	03/28/17 08:59	04/03/17 10:00
140-7685-9	H36-SS	Air	03/28/17 10:01	04/03/17 10:00
140-7685-10	H36-BA	Air	03/28/17 10:02	04/03/17 10:00
140-7685-11	H19-BA	Air	03/28/17 13:01	04/03/17 10:00
140-7685-12	H19-FF	Air	03/28/17 13:02	04/03/17 10:00

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.: 140-7685-1
 SDG No.: _____
 Matrix: Air Level: Low
 GC Column (1): RTX-5 ID: 0.32 (mm)

Client Sample ID	Lab Sample ID	BFB #
H33-CS	140-7685-1	105
H33-BA-1	140-7685-2	104
H33-BA-2	140-7685-3	104
H35-BA	140-7685-4	99
FIELD DUP 1	140-7685-5	103
H16-OA	140-7685-6	102
H16-BA	140-7685-7	103
H15-BA	140-7685-8	103
H36-SS	140-7685-9	108
H36-BA	140-7685-10	103
H19-BA	140-7685-11	102
H19-FF	140-7685-12	102
H19-FF DL	140-7685-12 DL	98
	MB 140-10155/8	105
	MB 140-10158/15	97
	LCS 140-10155/1006	108
	LCS 140-10158/1008	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.: 140-7685-1
 SDG No.: _____
 Matrix: Air Level: Low Lab File ID: GCCVD04A-LCS.d
 Lab ID: LCS 140-10155/1006 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	2.00	2.35	118	70-130	
1,1,2,2-Tetrachloroethane	2.00	1.73	86	70-130	
1,1,2-Trichloroethane	2.00	1.88	94	70-130	
1,1,2-Trichlorotrifluoroethane	2.00	2.32	116	70-130	
1,1-Dichloroethane	2.00	1.83	92	70-130	
1,1-Dichloroethene	2.00	2.11	105	70-130	
1,2,4-Trichlorobenzene	2.00	2.03	101	60-140	
1,2,4-Trimethylbenzene	2.00	1.82	91	70-130	
1,2-Dibromoethane	2.00	2.15	107	70-130	
1,2-Dichlorobenzene	2.00	1.90	95	70-130	
1,2-Dichloroethane	2.00	2.25	112	70-130	
1,2-Dichloropropane	2.00	1.79	90	70-130	
1,2-Dichlorotetrafluoroethane	2.00	2.37	119	60-140	
1,3,5-Trimethylbenzene	2.00	1.79	90	70-130	
1,3-Dichlorobenzene	2.00	1.97	98	70-130	
1,4-Dichlorobenzene	2.00	1.94	97	70-130	
1,4-Dioxane	2.00	1.59	79	60-140	
2,2,4-Trimethylpentane	2.00	1.78	89	70-130	
2-Butanone	2.00	1.47	73	60-140	
4-Methyl-2-pentanone (MIBK)	2.00	1.44	72	60-140	
Benzene	2.00	1.88	94	70-130	
Benzyl chloride	2.00	1.89	95	70-130	
Bromodichloromethane	2.00	2.36	118	70-130	
Bromoform	2.00	2.68	134	60-140	
Bromomethane	2.00	2.02	101	70-130	
Carbon tetrachloride	2.00	2.58	129	70-130	
Chlorobenzene	2.00	1.99	99	70-130	
Chloroethane	2.00	1.77	89	70-130	
Chloroform	2.00	2.18	109	70-130	
Chloromethane	2.00	1.63	81	60-140	
cis-1,2-Dichloroethene	2.00	1.95	98	70-130	
cis-1,3-Dichloropropene	2.00	2.12	106	70-130	
Cyclohexane	2.00	1.97	98	70-130	
Dibromochloromethane	2.00	2.47	123	70-130	
Dichlorodifluoromethane	2.00	2.37	118	60-140	
Ethanol	10.0	7.57	76	60-140	
Ethylbenzene	2.00	1.83	91	70-130	
Hexachlorobutadiene	2.00	2.18	109	60-140	
Hexane	2.00	1.68	84	70-130	
Methyl tert-butyl ether	2.00	1.68	84	60-140	
Methylene Chloride	2.00	1.97	98	70-130	
m-Xylene & p-Xylene	4.00	3.70	92	70-130	

Column to be used to flag recovery and RPD values

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Matrix: Air Level: Low Lab File ID: GCCVD04A-LCS.d
 Lab ID: LCS 140-10155/1006 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
o-Xylene	2.00	1.79	89	70-130	
Styrene	2.00	1.98	99	70-130	
t-Butyl alcohol	2.00	1.78	89	60-140	
Tetrachloroethene	2.00	2.18	109	70-130	
Toluene	2.00	1.90	95	70-130	
trans-1,2-Dichloroethene	2.00	1.95	97	70-130	
trans-1,3-Dichloropropene	2.00	2.10	105	70-130	
Trichloroethene	2.00	2.23	111	70-130	
Trichlorofluoromethane	2.00	2.55	128	60-140	
Vinyl chloride	2.00	1.82	91	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.: 140-7685-1
 SDG No.: _____
 Matrix: Air Level: Low Lab File ID: JCCVD04B-LCS.d
 Lab ID: LCS 140-10158/1008 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	2.00	2.17	109	70-130	
1,1,2,2-Tetrachloroethane	2.00	1.72	86	70-130	
1,1,2-Trichloroethane	2.00	1.75	88	70-130	
1,1,2-Trichlorotrifluoroethane	2.00	2.38	119	70-130	
1,1-Dichloroethane	2.00	2.03	101	70-130	
1,1-Dichloroethene	2.00	2.51	125	70-130	
1,2,4-Trichlorobenzene	2.00	1.41	70	60-140	
1,2,4-Trimethylbenzene	2.00	1.88	94	70-130	
1,2-Dibromoethane	2.00	1.91	95	70-130	
1,2-Dichlorobenzene	2.00	1.52	76	70-130	
1,2-Dichloroethane	2.00	2.23	112	70-130	
1,2-Dichloropropane	2.00	1.69	84	70-130	
1,2-Dichlorotetrafluoroethane	2.00	2.47	123	60-140	
1,3,5-Trimethylbenzene	2.00	1.80	90	70-130	
1,3-Dichlorobenzene	2.00	1.50	75	70-130	
1,4-Dichlorobenzene	2.00	1.43	72	70-130	
1,4-Dioxane	2.00	2.25	112	60-140	
2,2,4-Trimethylpentane	2.00	1.91	95	70-130	
2-Butanone	2.00	1.88	94	60-140	
4-Methyl-2-pentanone (MIBK)	2.00	2.22	111	60-140	
Benzene	2.00	1.85	92	70-130	
Benzyl chloride	2.00	1.69	84	70-130	
Bromodichloromethane	2.00	2.11	105	70-130	
Bromoform	2.00	1.97	99	60-140	
Bromomethane	2.00	2.10	105	70-130	
Carbon tetrachloride	2.00	2.39	120	70-130	
Chlorobenzene	2.00	1.83	92	70-130	
Chloroethane	2.00	2.26	113	70-130	
Chloroform	2.00	2.04	102	70-130	
Chloromethane	2.00	1.76	88	60-140	
cis-1,2-Dichloroethene	2.00	1.97	99	70-130	
cis-1,3-Dichloropropene	2.00	1.99	99	70-130	
Cyclohexane	2.00	2.21	110	70-130	
Dibromochloromethane	2.00	2.21	110	70-130	
Dichlorodifluoromethane	2.00	2.44	122	60-140	
Ethanol	10.0	11.7	117	60-140	
Ethylbenzene	2.00	1.52	76	70-130	
Hexachlorobutadiene	2.00	1.83	92	60-140	
Hexane	2.00	2.08	104	70-130	
Methyl tert-butyl ether	2.00	1.88	94	60-140	
Methylene Chloride	2.00	1.99	99	70-130	
m-Xylene & p-Xylene	4.00	3.14	78	70-130	

Column to be used to flag recovery and RPD values

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Matrix: Air Level: Low Lab File ID: JCCVD04B-LCS.d
 Lab ID: LCS 140-10158/1008 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
o-Xylene	2.00	1.56	78	70-130	
Styrene	2.00	1.58	79	70-130	
t-Butyl alcohol	2.00	2.76	138	60-140	
Tetrachloroethene	2.00	2.04	102	70-130	
Toluene	2.00	1.70	85	70-130	
trans-1,2-Dichloroethene	2.00	2.13	106	70-130	
trans-1,3-Dichloropropene	2.00	1.85	93	70-130	
Trichloroethene	2.00	1.89	94	70-130	
Trichlorofluoromethane	2.00	2.69	134	60-140	
Vinyl chloride	2.00	1.95	98	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.: 140-7685-1
 SDG No.: _____
 Lab File ID: GMB500D04.D Lab Sample ID: MB 140-10155/8
 Matrix: Air Heated Purge: (Y/N) N
 Instrument ID: MG Date Analyzed: 04/04/2017 14:18
 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
	LCS 140-10155/1006	GCCVD04A-LC S.d	04/04/2017 12:01
H33-CS	140-7685-1	GD04P101.D	04/04/2017 15:02
H33-BA-1	140-7685-2	GD04P102.D	04/04/2017 15:51
H33-BA-2	140-7685-3	GD04P103.D	04/04/2017 16:41
H16-OA	140-7685-6	GD04P106.D	04/04/2017 19:01
H16-BA	140-7685-7	GD04P107.D	04/04/2017 19:49
H15-BA	140-7685-8	GD04P108.D	04/04/2017 20:38
H36-SS	140-7685-9	GD04P109.D	04/04/2017 21:26
H36-BA	140-7685-10	GD04P110.D	04/04/2017 22:16
H19-BA	140-7685-11	GD04P111.D	04/04/2017 23:08
H19-FF	140-7685-12	GD04P112.D	04/04/2017 23:57
H35-BA	140-7685-4	GD04P104R.D	04/05/2017 10:09
FIELD DUP 1	140-7685-5	GD04P105R.D	04/05/2017 10:54

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
SDG No.: _____
Lab File ID: J500D04.D Lab Sample ID: MB 140-10158/15
Matrix: Air Heated Purge: (Y/N) N
Instrument ID: MJ Date Analyzed: 04/04/2017 19:15
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
H19-FF DL	140-7685-12 DL	JD04P106DL. D	04/05/2017 10:50

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Lab File ID: GBFBC15.D BFB Injection Date: 03/15/2017
 Instrument ID: MG BFB Injection Time: 14:04
 Analysis Batch No.: 9482

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	18.5
75	30.0 - 60.0 % of mass 95	57.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.8
173	Less than 2.0 % of mass 174	0.5 (0.6) 1
174	50.0 - 120.00 % of mass 95	88.1
175	5.0 - 9.0 % of mass 174	6.1 (6.9) 1
176	95.0 - 101.0 % of mass 174	85.3 (96.8) 1
177	5.0 - 9.0 % of mass 176	5.3 (6.3) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-9482/3	GC15IC01.D	03/15/2017	14:36
	IC 140-9482/4	GC15IC02.D	03/15/2017	15:20
	IC 140-9482/5	GC15IC03.D	03/15/2017	16:02
	IC 140-9482/6	GC15IC04.D	03/15/2017	16:45
	IC 140-9482/7	GC15IC05.D	03/15/2017	17:29
	ICIS 140-9482/8	GC15IC06.D	03/15/2017	18:13
	IC 140-9482/9	GC15IC07.D	03/15/2017	18:56
	IC 140-9482/10	GC15IC08.D	03/15/2017	19:39
	IC 140-9482/11	GC15IC09.D	03/15/2017	20:21
	ICV 140-9482/13	GICVC15.D	03/15/2017	21:46

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Lab File ID: GBFBD04A.D BFB Injection Date: 04/04/2017
 Instrument ID: MG BFB Injection Time: 11:30
 Analysis Batch No.: 10155

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	17.6
75	30.0 - 60.0 % of mass 95	59.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.8
173	Less than 2.0 % of mass 174	0.6 (0.5) 1
174	50.0 - 120.00 % of mass 95	102.6
175	5.0 - 9.0 % of mass 174	7.1 (6.9) 1
176	95.0 - 101.0 % of mass 174	100.3 (97.8) 1
177	5.0 - 9.0 % of mass 176	6.4 (6.3) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-10155/6	GCCVD04A.D	04/04/2017	12:01
	LCS 140-10155/1006	GCCVD04A-LCS .d	04/04/2017	12:01
	MB 140-10155/8	GMB500D04.D	04/04/2017	14:18
H33-CS	140-7685-1	GD04P101.D	04/04/2017	15:02
H33-BA-1	140-7685-2	GD04P102.D	04/04/2017	15:51
H33-BA-2	140-7685-3	GD04P103.D	04/04/2017	16:41
H16-OA	140-7685-6	GD04P106.D	04/04/2017	19:01
H16-BA	140-7685-7	GD04P107.D	04/04/2017	19:49
H15-BA	140-7685-8	GD04P108.D	04/04/2017	20:38
H36-SS	140-7685-9	GD04P109.D	04/04/2017	21:26
H36-BA	140-7685-10	GD04P110.D	04/04/2017	22:16
H19-BA	140-7685-11	GD04P111.D	04/04/2017	23:08
H19-FF	140-7685-12	GD04P112.D	04/04/2017	23:57
H35-BA	140-7685-4	GD04P104R.D	04/05/2017	10:09
FIELD DUP 1	140-7685-5	GD04P105R.D	04/05/2017	10:54

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Lab File ID: JBFBC24.D BFB Injection Date: 03/24/2017
 Instrument ID: MJ BFB Injection Time: 11:04
 Analysis Batch No.: 9602

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	19.5
75	30.0 - 60.0 % of mass 95	46.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.8
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	100.8
175	5.0 - 9.0 % of mass 174	8.1 (8.1) 1
176	95.0 - 101.0 % of mass 174	97.9 (97.1) 1
177	5.0 - 9.0 % of mass 176	6.6 (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
	IC 140-9602/2	JC24IC01.D	03/24/2017	11:31
	IC 140-9602/3	JC24IC02.D	03/24/2017	12:16
	IC 140-9602/4	JC24IC03.D	03/24/2017	13:02
	IC 140-9602/5	JC24IC04.D	03/24/2017	13:48
	IC 140-9602/6	JC24IC05.D	03/24/2017	14:35
	ICIS 140-9602/7	JC24IC06.D	03/24/2017	15:21
	IC 140-9602/8	JC24IC07.D	03/24/2017	16:06
	IC 140-9602/9	JC24IC08.D	03/24/2017	16:50
	IC 140-9602/10	JC24IC09.D	03/24/2017	17:35
	ICV 140-9602/18	JLCSC24.D	03/24/2017	23:36

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Lab File ID: JBFBD04B.D BFB Injection Date: 04/04/2017
 Instrument ID: MJ BFB Injection Time: 13:22
 Analysis Batch No.: 10158

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	19.6
75	30.0 - 60.0 % of mass 95	46.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.2
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	105.3
175	5.0 - 9.0 % of mass 174	8.0 (7.6) 1
176	95.0 - 101.0 % of mass 174	100.7 (95.7) 1
177	5.0 - 9.0 % of mass 176	6.4 (6.3) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-10158/8	JCCVD04B.D	04/04/2017	13:50
	LCS 140-10158/1008	JCCVD04B-LCS.d	04/04/2017	13:50
	MB 140-10158/15	J500D04.D	04/04/2017	19:15
H19-FF DL	140-7685-12 DL	JD04P106DL.D	04/05/2017	10:50

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Sample No.: ICIS 140-9482/8 Date Analyzed: 03/15/2017 18:13
 Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm)
 Lab File ID (Standard): GC15IC06.D Heated Purge: (Y/N) N
 Calibration ID: 962

	CBM		DFBZ		CBZd5	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	356237	7.99	1693700	10.16	1673092	15.03
UPPER LIMIT	498732	8.32	2371180	10.49	2342329	15.36
LOWER LIMIT	213742	7.66	1016220	9.83	1003855	14.70
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 140-9482/13		414852	7.99	2002906	10.16	1960813

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

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

Column used to flag values outside QC limits

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Sample No.: CCVIS 140-10155/6 Date Analyzed: 04/04/2017 12:01
 Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm)
 Lab File ID (Standard): GCCVD04A.D Heated Purge: (Y/N) N
 Calibration ID: 962

	CBM		DFBZ		CBZd5	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	244231	7.98	1213084	10.15	1220793	15.02
UPPER LIMIT	341923	8.31	1698318	10.48	1709110	15.35
LOWER LIMIT	146539	7.65	727850	9.82	732476	14.69
LAB SAMPLE ID	CLIENT SAMPLE ID					
LCS 140-10155/1006		244231	7.98	1213084	10.15	1220793
MB 140-10155/8		244042	7.98	1217189	10.14	1195456
140-7685-1	H33-CS	250209	7.98	1257332	10.14	1238032
140-7685-2	H33-BA-1	249215	7.97	1254015	10.14	1267726
140-7685-3	H33-BA-2	254662	7.98	1268055	10.14	1268063
140-7685-6	H16-OA	271299	7.98	1372815	10.14	1333616
140-7685-7	H16-BA	253185	7.97	1266855	10.14	1264157
140-7685-8	H15-BA	253127	7.97	1249099	10.14	1231665
140-7685-9	H36-SS	247611	7.99	1225333	10.15	1271762
140-7685-10	H36-BA	263773	7.97	1297065	10.14	1308926
140-7685-11	H19-BA	266425	7.98	1321188	10.14	1311228
140-7685-12	H19-FF	271022	7.99	1352154	10.15	1352469
140-7685-4	H35-BA	308577	8.00	1531412	10.16	1476302
140-7685-5	FIELD DUP 1	244561	7.97	1237077	10.14	1249837

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

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

Column used to flag values outside QC limits

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Sample No.: ICIS 140-9602/7 Date Analyzed: 03/24/2017 15:21
 Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm)
 Lab File ID (Standard): JC24IC06.D Heated Purge: (Y/N) N
 Calibration ID: 978

	CBM		DFBZ		CBZd5	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	231580	8.55	1083209	10.75	1056687	15.53
UPPER LIMIT	324212	8.88	1516493	11.08	1479362	15.86
LOWER LIMIT	138948	8.22	649925	10.42	634012	15.20
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 140-9602/18		256445	8.55	1157126	10.75	1073197
						15.52

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

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

Column used to flag values outside QC limits

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Sample No.: CCVIS 140-10158/8 Date Analyzed: 04/04/2017 13:50
 Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm)
 Lab File ID (Standard): JCCVD04B.D Heated Purge: (Y/N) N
 Calibration ID: 978

	CBM		DFBZ		CBZd5	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	203985	8.54	928483	10.74	837978	15.52
UPPER LIMIT	285579	8.87	1299876	11.07	1173169	15.85
LOWER LIMIT	122391	8.21	557090	10.41	502787	15.19
LAB SAMPLE ID	CLIENT SAMPLE ID					
LCS 140-10158/1008		203985	8.54	928483	10.74	837978
MB 140-10158/15		184654	8.54	827113	10.73	715251
140-7685-12 DL	H19-FF DL	182564	8.54	807231	10.74	726564

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

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

Column used to flag values outside QC limits

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H33-CS Lab Sample ID: 140-7685-1
 Matrix: Air Lab File ID: GD04P101.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 08:31
 Sample wt/vol: 250 (mL) Date Analyzed: 04/04/2017 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.: 10155 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.16	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.16	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.16	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.16	
75-34-3	1,1-Dichloroethane	98.96	ND		0.16	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.16	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.35		0.16	
106-93-4	1,2-Dibromoethane	187.87	ND		0.16	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.16	
107-06-2	1,2-Dichloroethane	98.96	ND		0.16	
78-87-5	1,2-Dichloropropane	112.99	ND		0.16	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.16	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.16	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.16	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.16	
123-91-1	1,4-Dioxane	88.11	ND		0.40	
540-84-1	2,2,4-Trimethylpentane	114.23	0.48		0.40	
78-93-3	2-Butanone	72.11	0.90		0.64	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	0.91		0.40	
71-43-2	Benzene	78.11	1.8		0.16	
100-44-7	Benzyl chloride	126.58	ND		0.32	
75-27-4	Bromodichloromethane	163.83	ND		0.16	
75-25-2	Bromoform	252.75	ND		0.16	
74-83-9	Bromomethane	94.94	ND		0.16	
56-23-5	Carbon tetrachloride	153.81	ND		0.080	
108-90-7	Chlorobenzene	112.56	ND		0.16	
75-00-3	Chloroethane	64.52	ND		0.16	
67-66-3	Chloroform	119.38	0.17		0.16	
74-87-3	Chloromethane	50.49	0.44		0.40	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.16	
110-82-7	Cyclohexane	84.16	ND		0.40	

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H33-CS Lab Sample ID: 140-7685-1
 Matrix: Air Lab File ID: GD04P101.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 08:31
 Sample wt/vol: 250 (mL) Date Analyzed: 04/04/2017 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.: 10155 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.16	
75-71-8	Dichlorodifluoromethane	120.91	1.3		0.16	
64-17-5	Ethanol	46.07	38		4.0	
100-41-4	Ethylbenzene	106.17	0.50		0.16	
87-68-3	Hexachlorobutadiene	260.76	ND		0.16	
110-54-3	Hexane	86.17	0.50		0.40	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.32	
75-09-2	Methylene Chloride	84.93	ND		0.40	
179601-23-1	m-Xylene & p-Xylene	106.17	1.8		0.16	
95-47-6	o-Xylene	106.17	0.62		0.16	
100-42-5	Styrene	104.15	ND		0.16	
75-65-0	t-Butyl alcohol	74.12	ND		0.64	
127-18-4	Tetrachloroethene	165.83	ND		0.16	
108-88-3	Toluene	92.14	6.1		0.24	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.16	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.16	
79-01-6	Trichloroethene	131.39	ND		0.080	
75-69-4	Trichlorofluoromethane	137.37	0.47		0.16	
75-01-4	Vinyl chloride	62.50	ND		0.080	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	105		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H33-CS Lab Sample ID: 140-7685-1
 Matrix: Air Lab File ID: GD04P101.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 08:31
 Sample wt/vol: 250 (mL) Date Analyzed: 04/04/2017 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.: 10155 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.87	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		1.1	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.87	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		1.2	
75-34-3	1,1-Dichloroethane	98.96	ND		0.65	
75-35-4	1,1-Dichloroethene	96.94	ND		0.63	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		1.2	
95-63-6	1,2,4-Trimethylbenzene	120.20	1.7		0.79	
106-93-4	1,2-Dibromoethane	187.87	ND		1.2	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.96	
107-06-2	1,2-Dichloroethane	98.96	ND		0.65	
78-87-5	1,2-Dichloropropane	112.99	ND		0.74	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		1.1	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.79	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.96	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.96	
123-91-1	1,4-Dioxane	88.11	ND		1.4	
540-84-1	2,2,4-Trimethylpentane	114.23	2.2		1.9	
78-93-3	2-Butanone	72.11	2.6		1.9	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	3.7		1.6	
71-43-2	Benzene	78.11	5.8		0.51	
100-44-7	Benzyl chloride	126.58	ND		1.7	
75-27-4	Bromodichloromethane	163.83	ND		1.1	
75-25-2	Bromoform	252.75	ND		1.7	
74-83-9	Bromomethane	94.94	ND		0.62	
56-23-5	Carbon tetrachloride	153.81	ND		0.50	
108-90-7	Chlorobenzene	112.56	ND		0.74	
75-00-3	Chloroethane	64.52	ND		0.42	
67-66-3	Chloroform	119.38	0.85		0.78	
74-87-3	Chloromethane	50.49	0.90		0.83	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.63	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.73	
110-82-7	Cyclohexane	84.16	ND		1.4	

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H33-CS Lab Sample ID: 140-7685-1
 Matrix: Air Lab File ID: GD04P101.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 08:31
 Sample wt/vol: 250 (mL) Date Analyzed: 04/04/2017 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.: 10155 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		1.4	
75-71-8	Dichlorodifluoromethane	120.91	6.3		0.79	
64-17-5	Ethanol	46.07	72		7.5	
100-41-4	Ethylbenzene	106.17	2.2		0.69	
87-68-3	Hexachlorobutadiene	260.76	ND		1.7	
110-54-3	Hexane	86.17	1.8		1.4	
1634-04-4	Methyl tert-butyl ether	88.15	ND		1.2	
75-09-2	Methylene Chloride	84.93	ND		1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	7.6		0.69	
95-47-6	o-Xylene	106.17	2.7		0.69	
100-42-5	Styrene	104.15	ND		0.68	
75-65-0	t-Butyl alcohol	74.12	ND		1.9	
127-18-4	Tetrachloroethene	165.83	ND		1.1	
108-88-3	Toluene	92.14	23		0.90	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.63	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.73	
79-01-6	Trichloroethene	131.39	ND		0.43	
75-69-4	Trichlorofluoromethane	137.37	2.7		0.90	
75-01-4	Vinyl chloride	62.50	ND		0.20	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	105		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P101.D
 Lims ID: 140-7685-A-1
 Client ID: H33-CS
 Sample Type: Client
 Inject. Date: 04-Apr-2017 15:02:30 ALS Bottle#: 1 Worklist Smp#: 9
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004508-009
 Misc. Info.: 140-7685-a-1
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Apr-2017 15:43:30 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK008

First Level Reviewer: tajh

Date: 04-Apr-2017 15:43:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.975	7.980	-0.005	73	250209	4.00	
* 2 1,4-Difluorobenzene	114	10.142	10.148	-0.006	95	1257332	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.017	15.022	-0.005	89	1238032	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.689	16.694	-0.005	93	1028484	4.20	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	100	168747	0.6372	
9 Chloromethane	52	3.661	3.666	-0.005	99	3886	0.2181	M
17 Ethanol	31	4.356	4.356	0.000	96	482206	19.2	
20 Trichlorofluoromethane	101	4.739	4.744	-0.005	99	62488	0.2369	
29 2-Methyl-2-propanol	59	5.462	5.456	0.006	94	6469	0.0637	
30 1,1,2-Trichloro-1,2,2-trif	101	5.521	5.521	0.000	91	5133	0.0334	
31 Methylene Chloride	84	5.645	5.650	-0.005	85	9664	0.1606	
39 2-Butanone (MEK)	72	7.268	7.268	0.000	99	12759	0.4481	
40 Hexane	56	7.322	7.327	-0.005	83	12290	0.2488	
44 Chloroform	83	7.996	8.007	-0.011	92	15256	0.0869	
49 Benzene	78	9.560	9.565	-0.005	97	195189	0.9138	
50 Cyclohexane	69	9.571	9.576	-0.005	75	5321	0.1480	
51 Carbon tetrachloride	117	9.587	9.598	-0.011	92	8450	0.0379	
56 Isooctane	57	10.396	10.396	0.000	95	76301	0.2406	
65 4-Methyl-2-pentanone (MIBK	43	12.110	12.116	-0.006	95	55734	0.4542	
68 Toluene	91	13.000	13.006	-0.006	93	758090	3.07	
79 Ethylbenzene	91	15.373	15.378	-0.005	99	86244	0.2503	
81 m-Xylene & p-Xylene	91	15.540	15.545	-0.005	99	244340	0.8781	
83 Styrene	104	16.009	16.014	-0.005	70	6041	0.0329	
85 o-Xylene	91	16.068	16.074	-0.006	97	87905	0.3090	
92 1,3,5-Trimethylbenzene	120	17.471	17.481	-0.011	91	8427	0.0462	
96 1,2,4-Trimethylbenzene	105	17.934	17.940	-0.006	97	61332	0.1755	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P101.D

Injection Date: 04-Apr-2017 15:02:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7685-A-1

Lab Sample ID: 140-7685-1

Worklist Smp#: 9

Client ID: H33-CS

Purge Vol: 500.000 mL

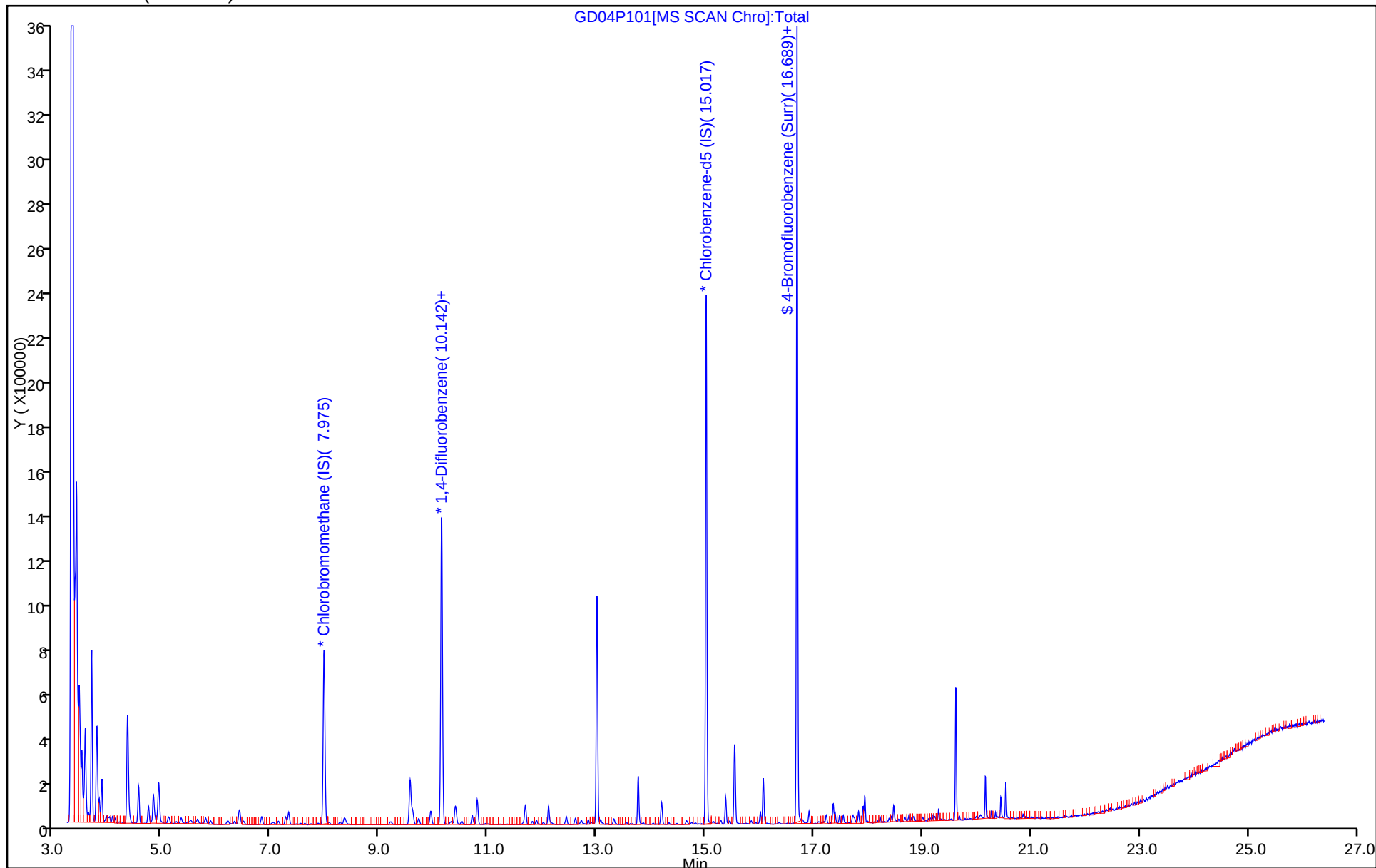
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P101.D
Lims ID: 140-7685-A-1
Client ID: H33-CS
Sample Type: Client
Inject. Date: 04-Apr-2017 15:02:30 ALS Bottle#: 1 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004508-009
Misc. Info.: 140-7685-a-1
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Apr-2017 15:43:30 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: tajh

Date: 04-Apr-2017 15:43:30

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.20	105.09

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P101.D

Injection Date: 04-Apr-2017 15:02:30

Instrument ID: MG

Lims ID: 140-7685-A-1

Lab Sample ID: 140-7685-1

Client ID: H33-CS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 9

Purge Vol: 500.000 mL

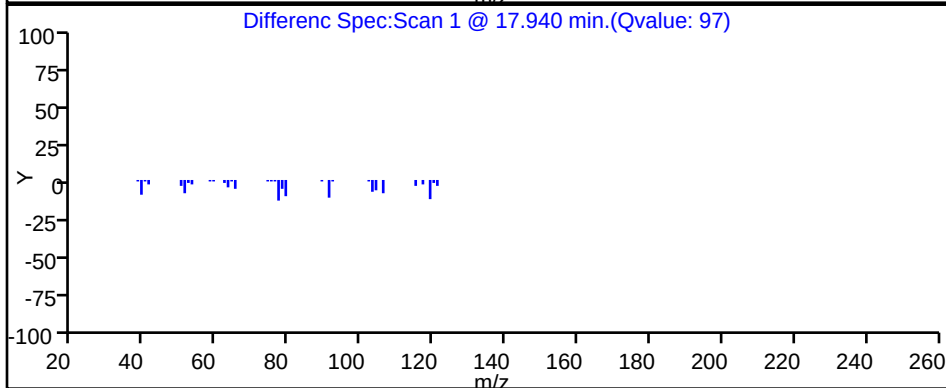
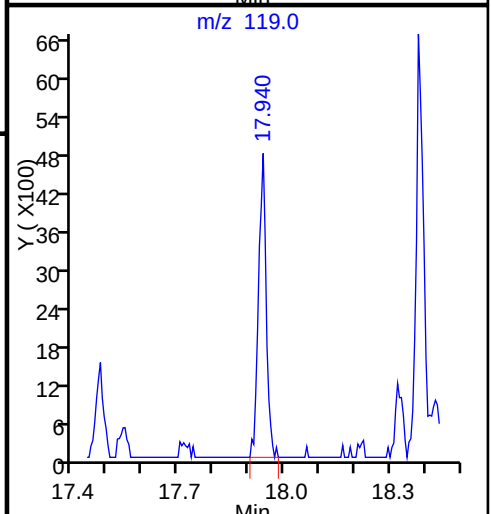
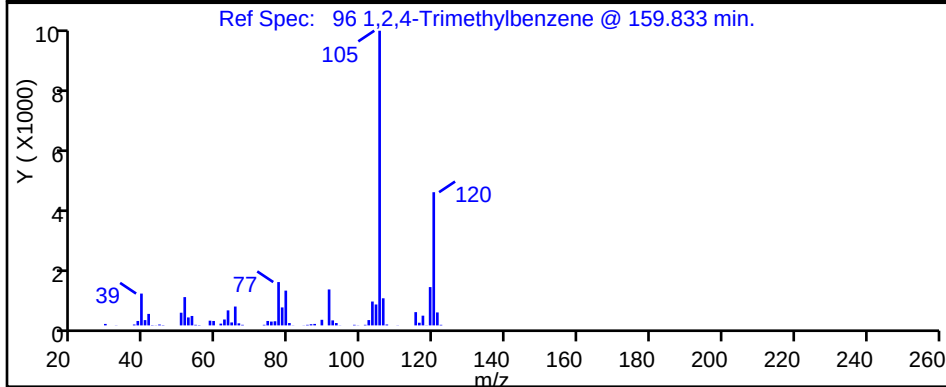
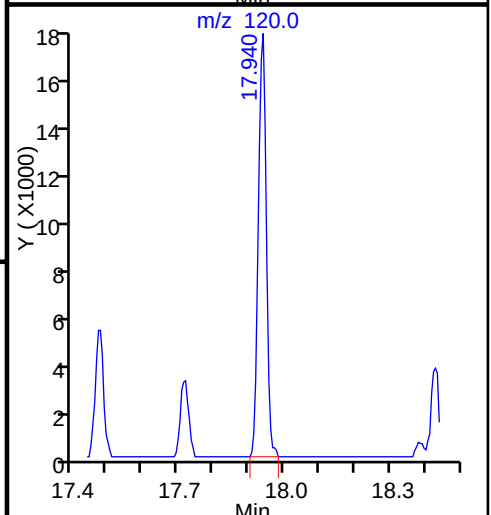
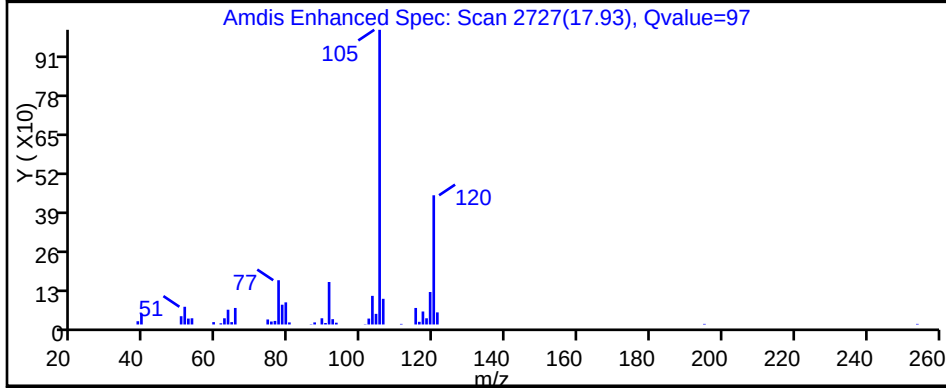
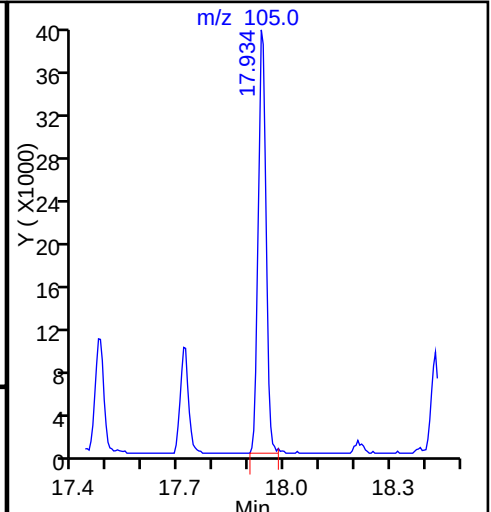
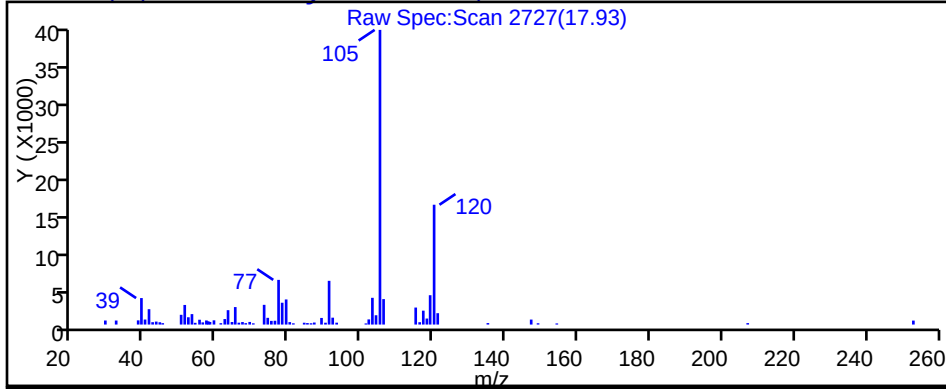
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

96 1,2,4-Trimethylbenzene, CAS: 95-63-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P101.D

Injection Date: 04-Apr-2017 15:02:30

Instrument ID: MG

Lims ID: 140-7685-A-1

Lab Sample ID: 140-7685-1

Client ID: H33-CS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 9

Purge Vol: 500.000 mL

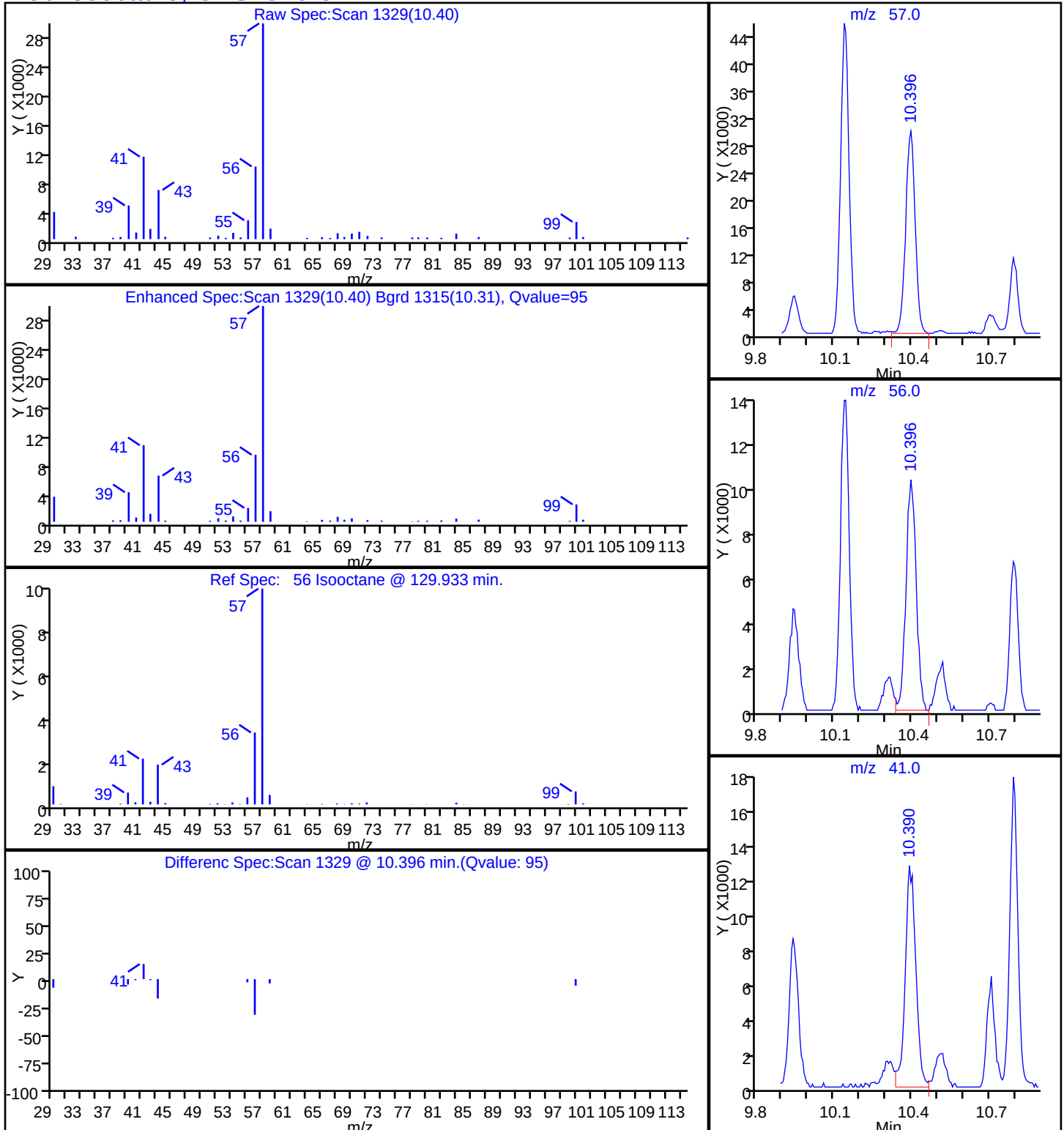
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

56 Isooctane, CAS: 540-84-1

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P101.D

Injection Date: 04-Apr-2017 15:02:30

Instrument ID: MG

Lims ID: 140-7685-A-1

Lab Sample ID: 140-7685-1

Client ID: H33-CS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 9

Purge Vol: 500.000 mL

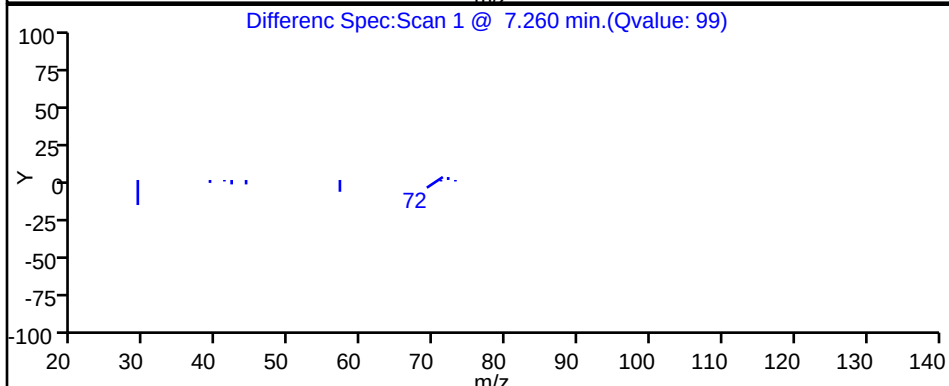
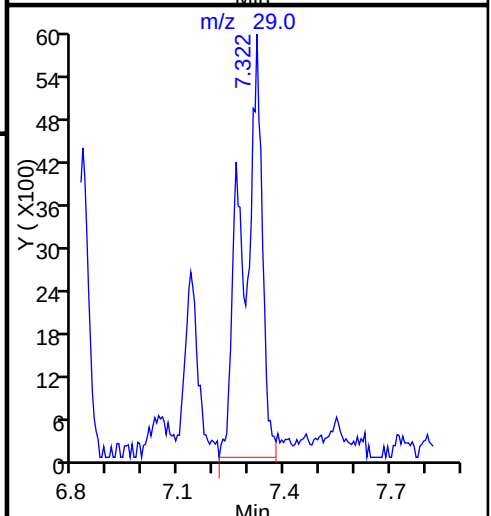
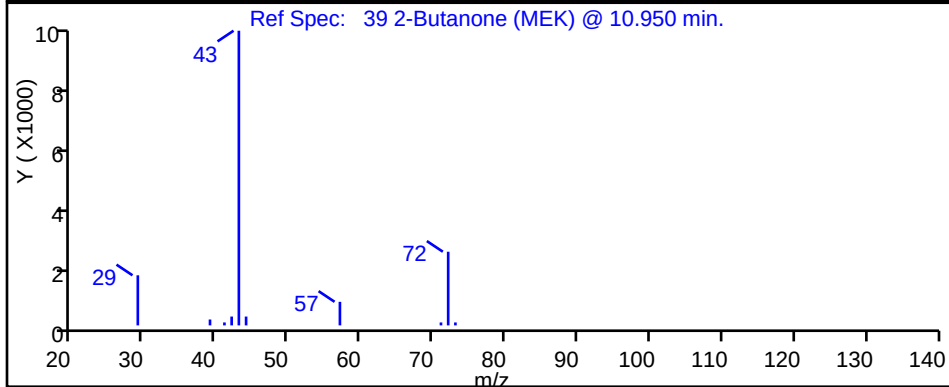
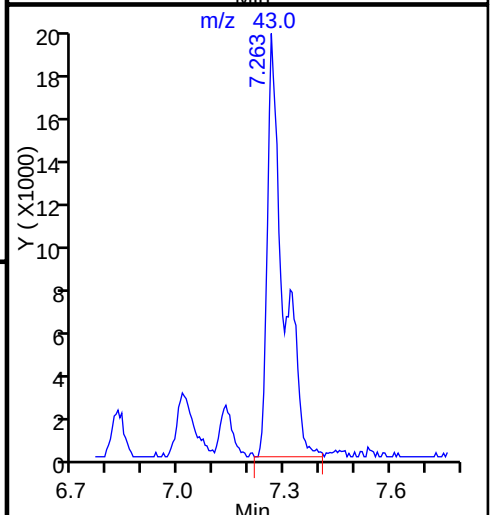
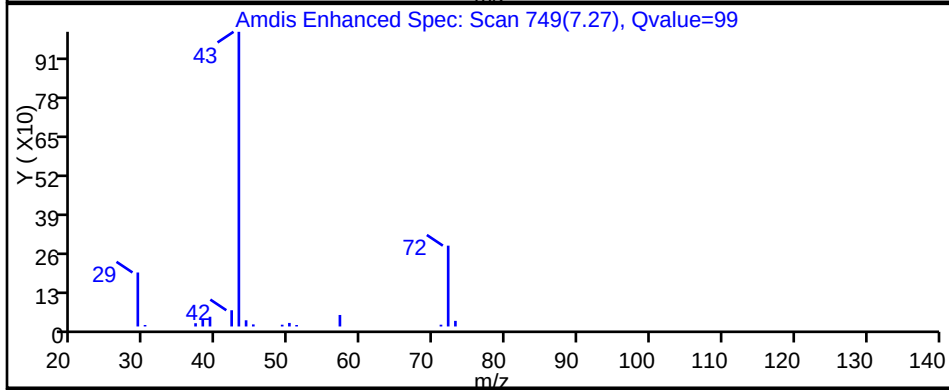
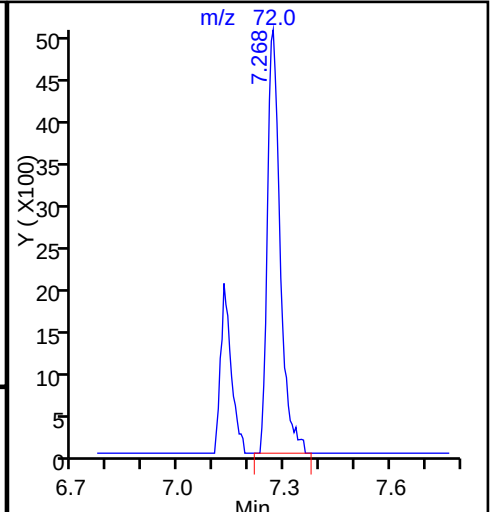
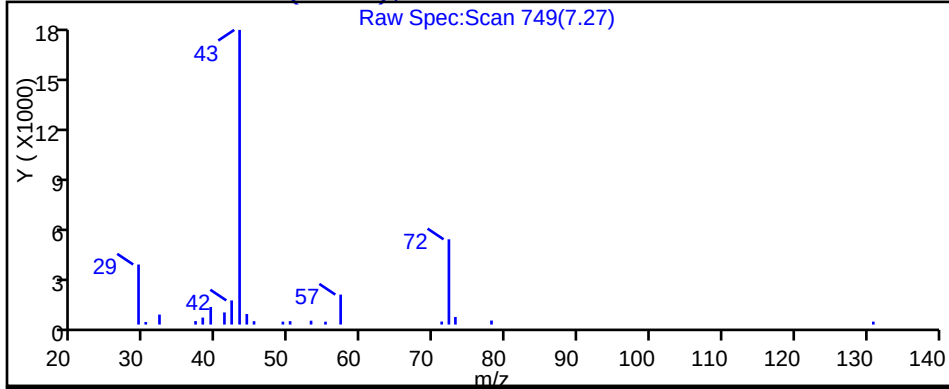
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P101.D

Injection Date: 04-Apr-2017 15:02:30

Instrument ID: MG

Lims ID: 140-7685-A-1

Lab Sample ID: 140-7685-1

Client ID: H33-CS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 9

Purge Vol: 500.000 mL

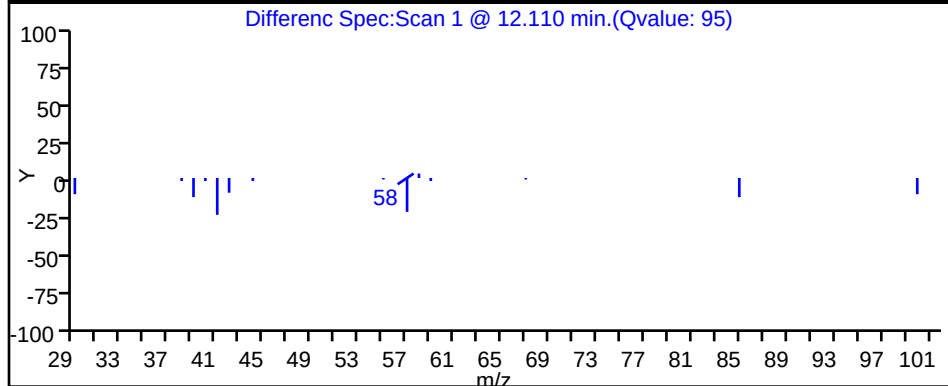
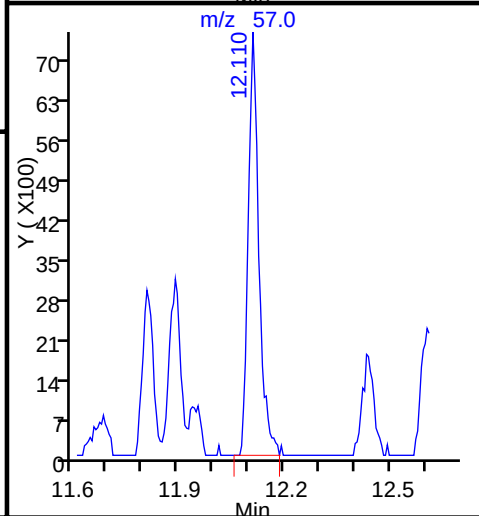
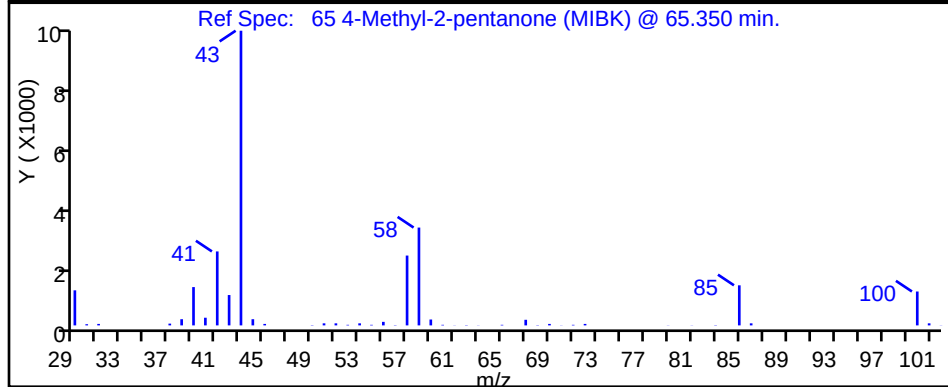
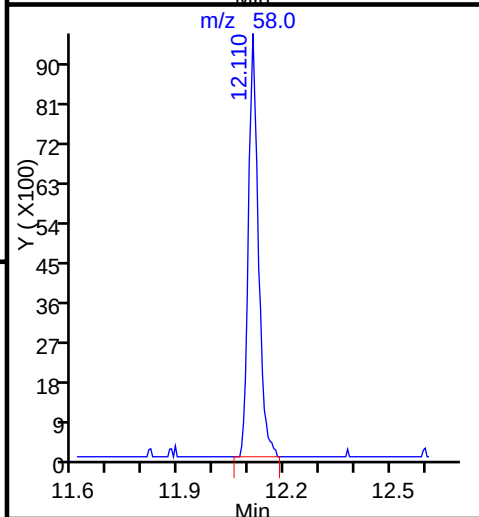
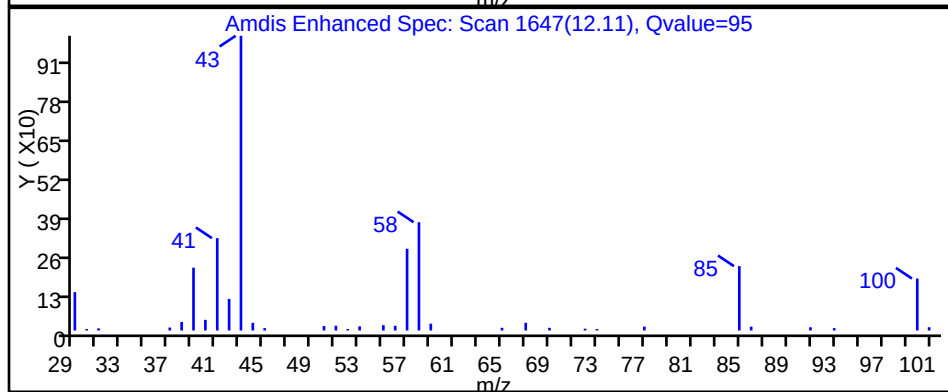
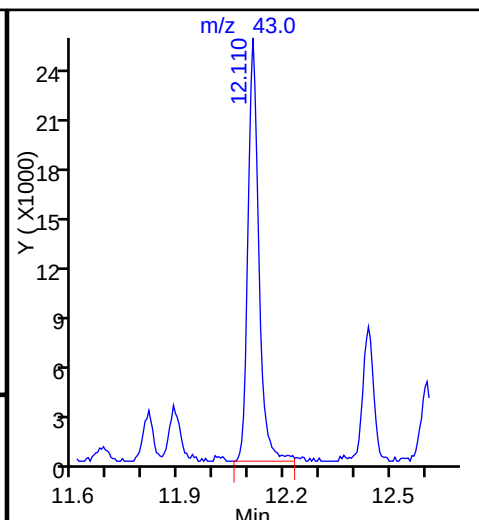
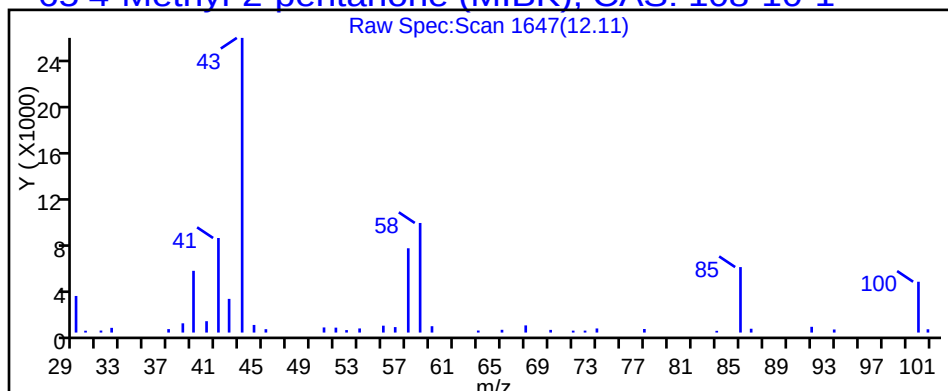
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P101.D

Injection Date: 04-Apr-2017 15:02:30

Instrument ID: MG

Lims ID: 140-7685-A-1

Lab Sample ID: 140-7685-1

Client ID: H33-CS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 9

Purge Vol: 500.000 mL

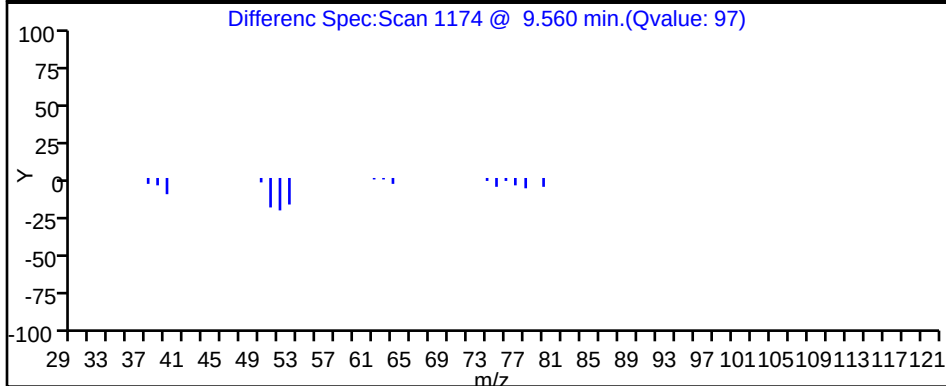
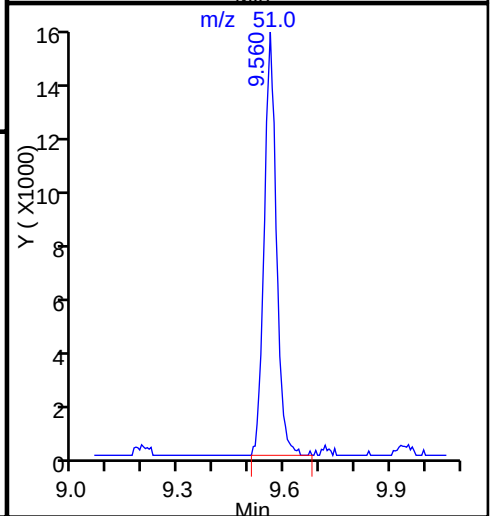
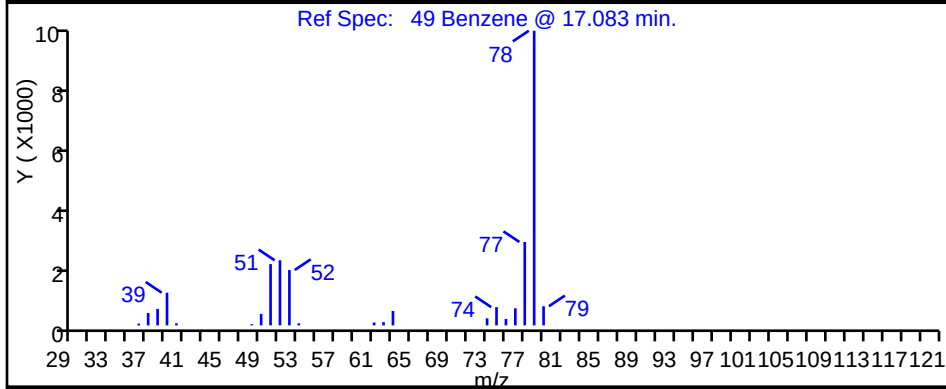
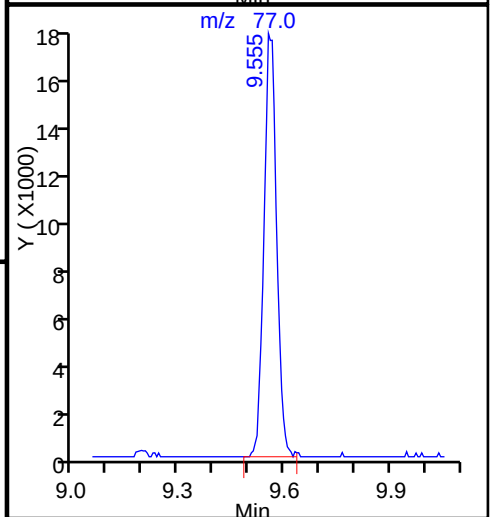
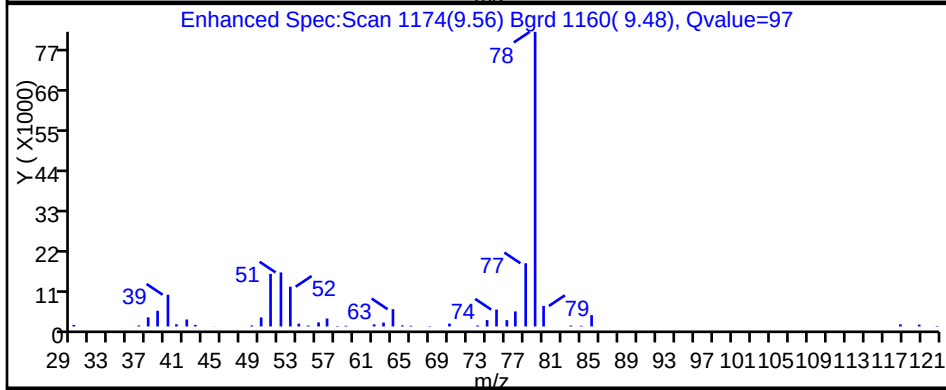
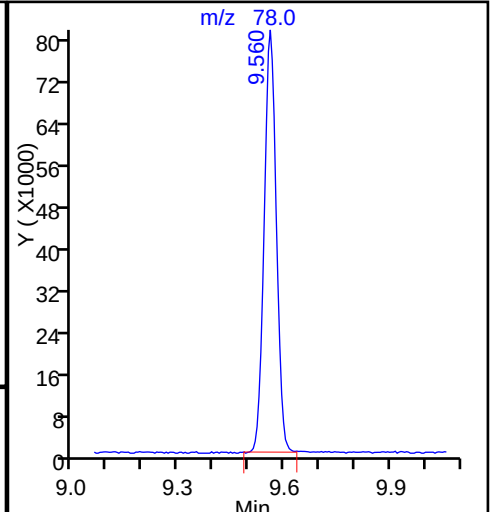
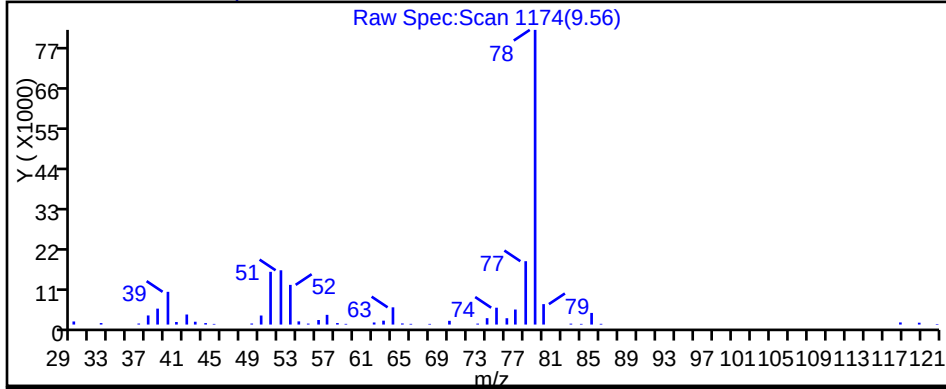
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P101.D

Injection Date: 04-Apr-2017 15:02:30

Instrument ID: MG

Lims ID: 140-7685-A-1

Lab Sample ID: 140-7685-1

Client ID: H33-CS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 9

Purge Vol: 500.000 mL

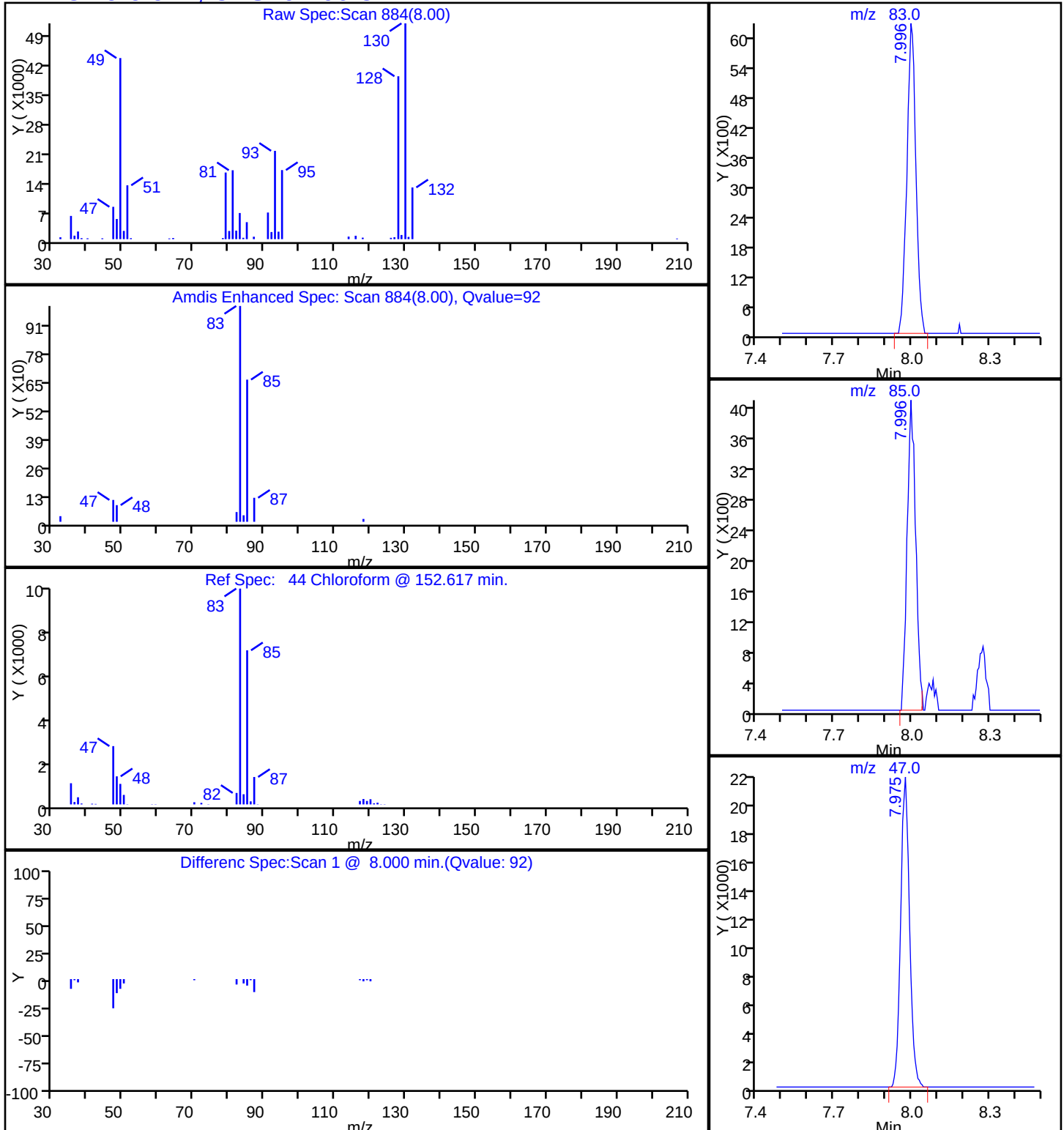
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

44 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P101.D

Injection Date: 04-Apr-2017 15:02:30

Instrument ID: MG

Lims ID: 140-7685-A-1

Lab Sample ID: 140-7685-1

Client ID: H33-CS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 9

Purge Vol: 500.000 mL

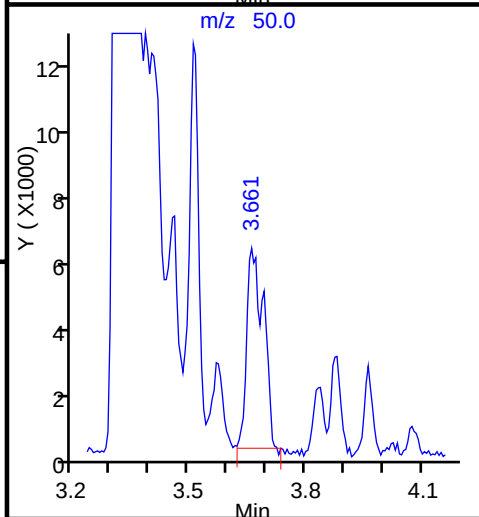
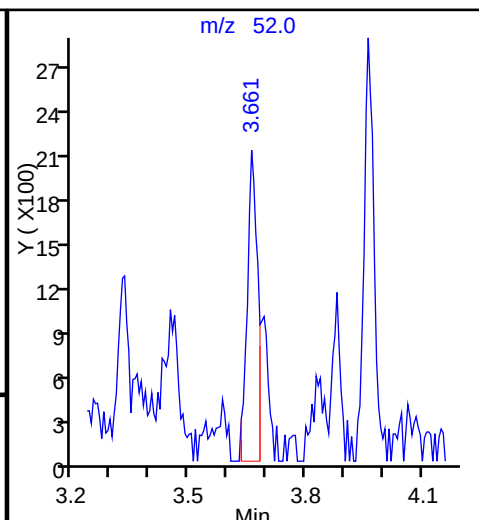
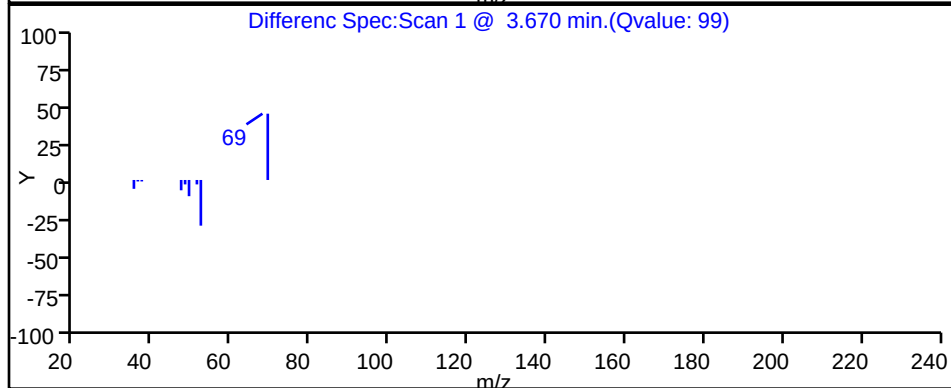
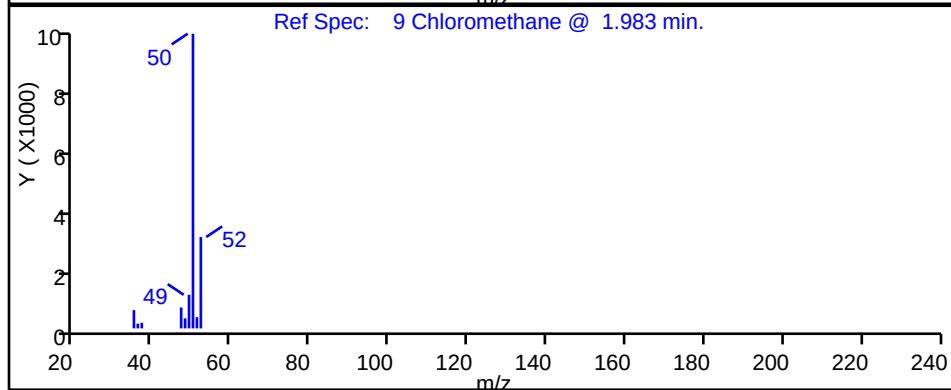
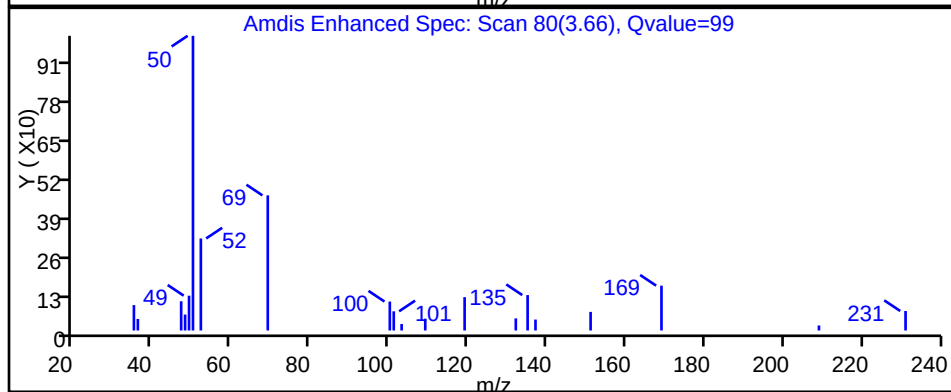
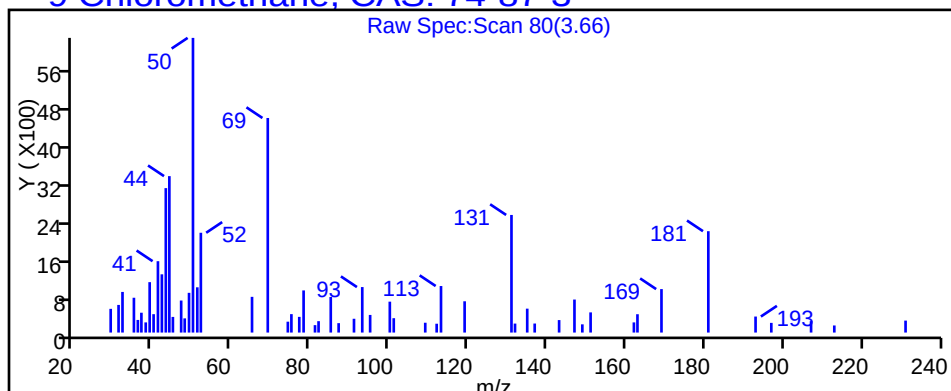
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P101.D

Injection Date: 04-Apr-2017 15:02:30

Instrument ID: MG

Lims ID: 140-7685-A-1

Lab Sample ID: 140-7685-1

Client ID: H33-CS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 9

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

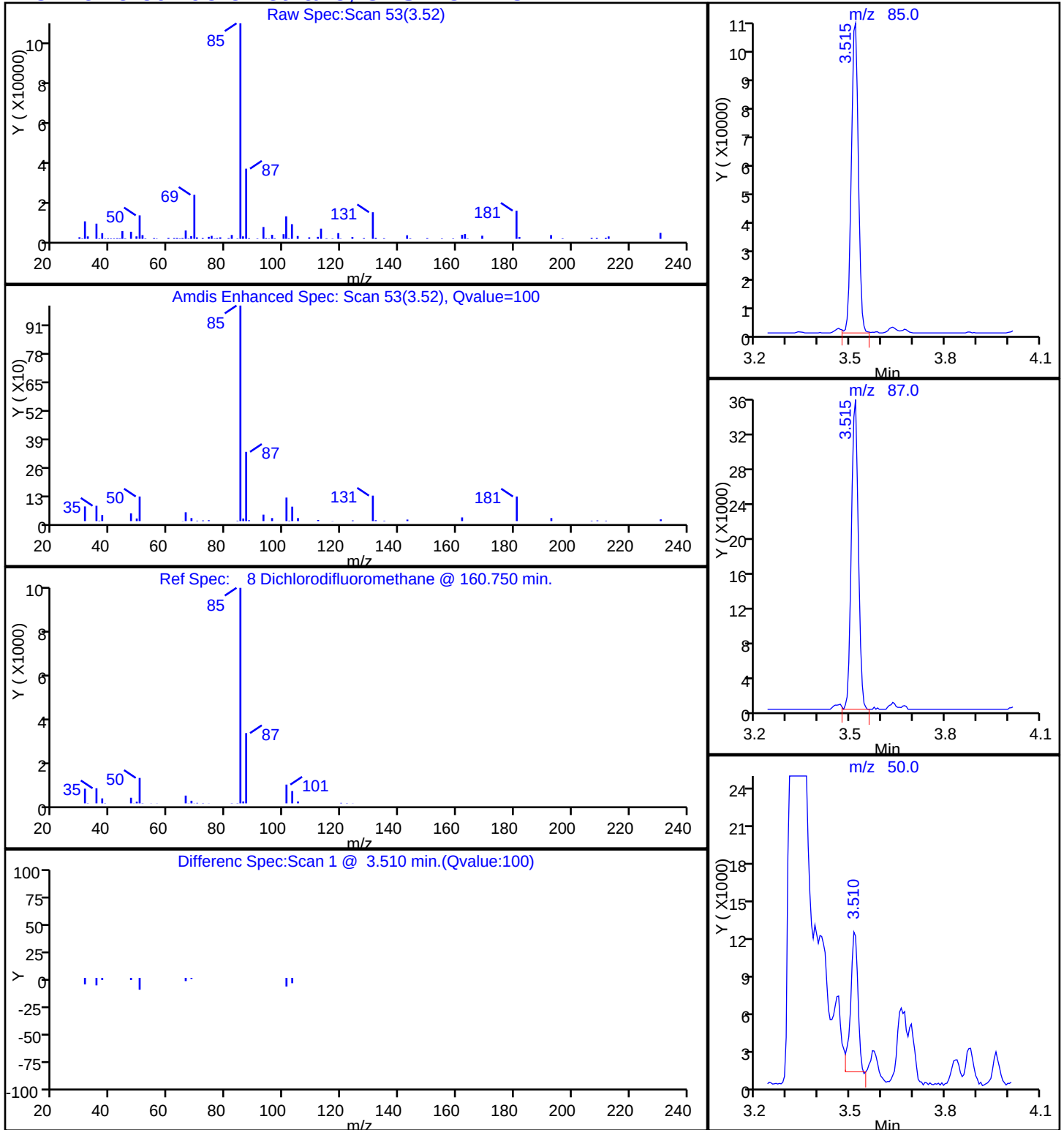
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P101.D

Injection Date: 04-Apr-2017 15:02:30

Instrument ID: MG

Lims ID: 140-7685-A-1

Lab Sample ID: 140-7685-1

Client ID: H33-CS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 9

Purge Vol: 500.000 mL

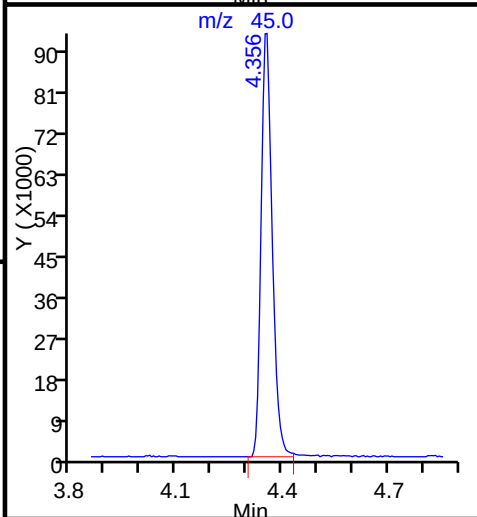
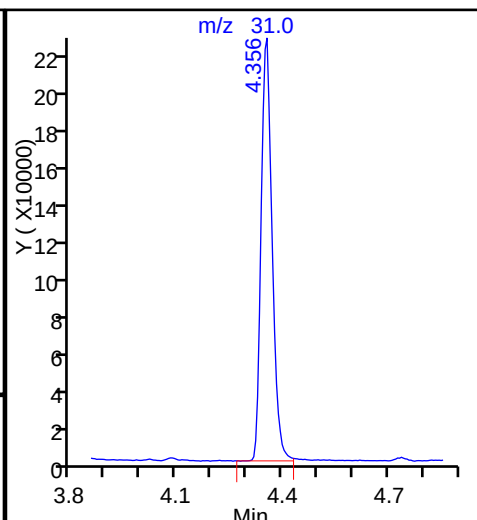
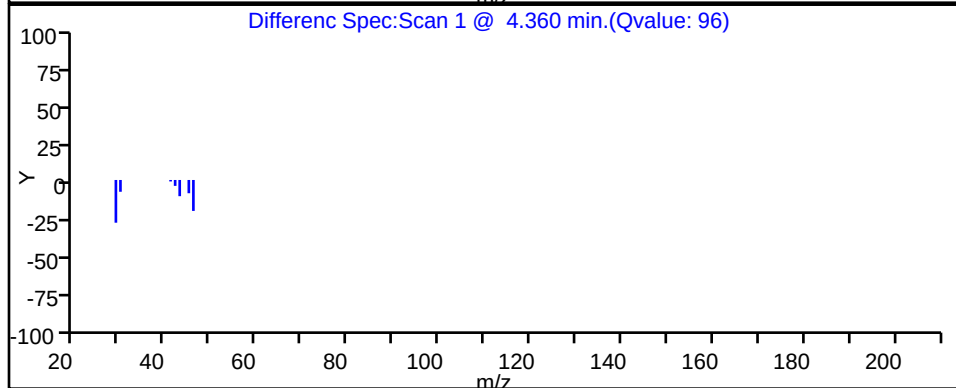
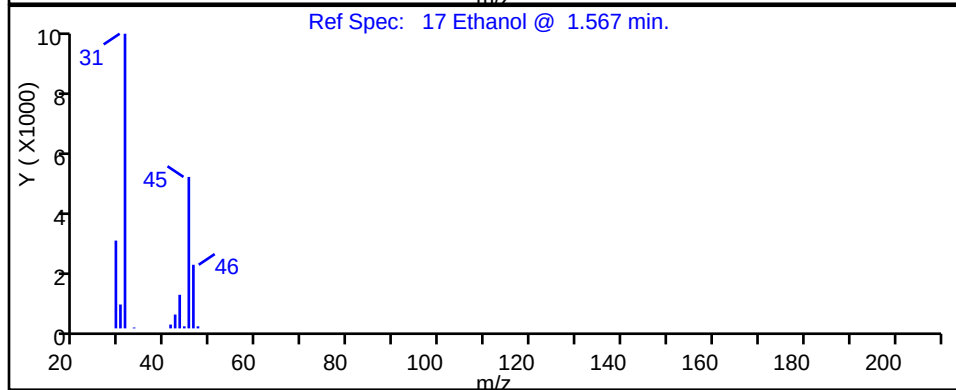
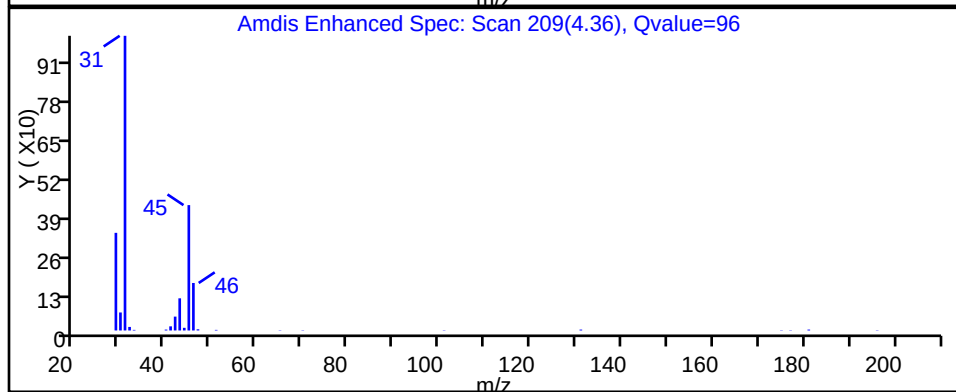
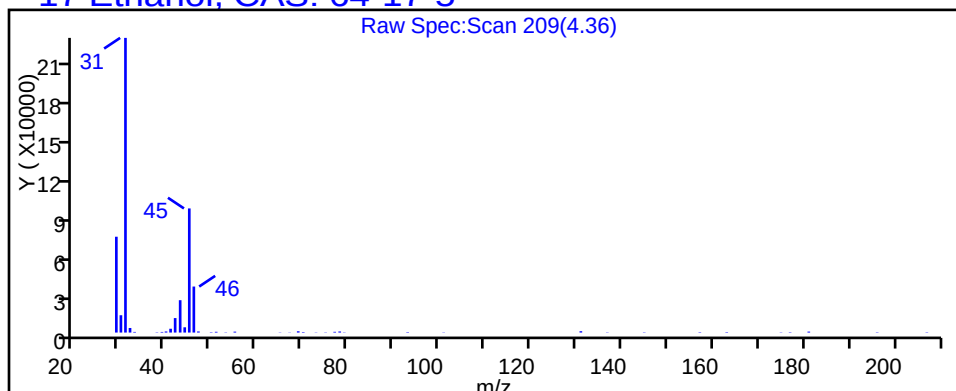
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P101.D

Injection Date: 04-Apr-2017 15:02:30

Instrument ID: MG

Lims ID: 140-7685-A-1

Lab Sample ID: 140-7685-1

Client ID: H33-CS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 9

Purge Vol: 500.000 mL

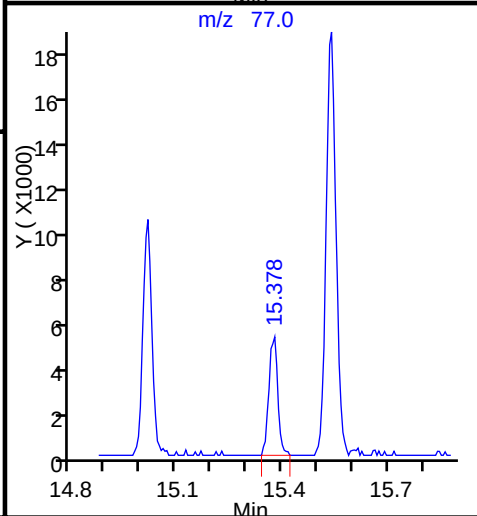
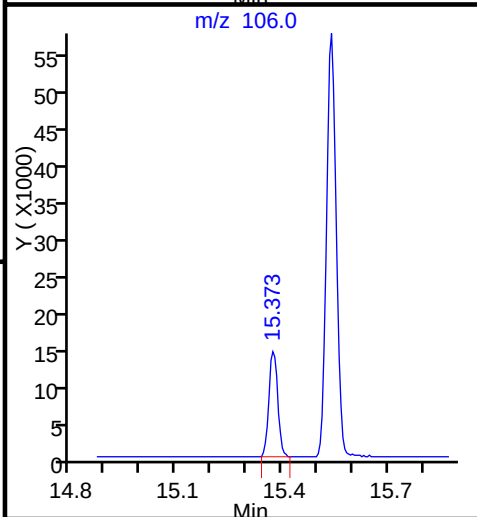
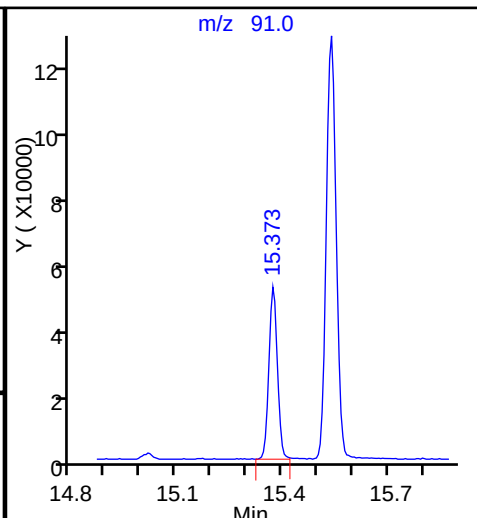
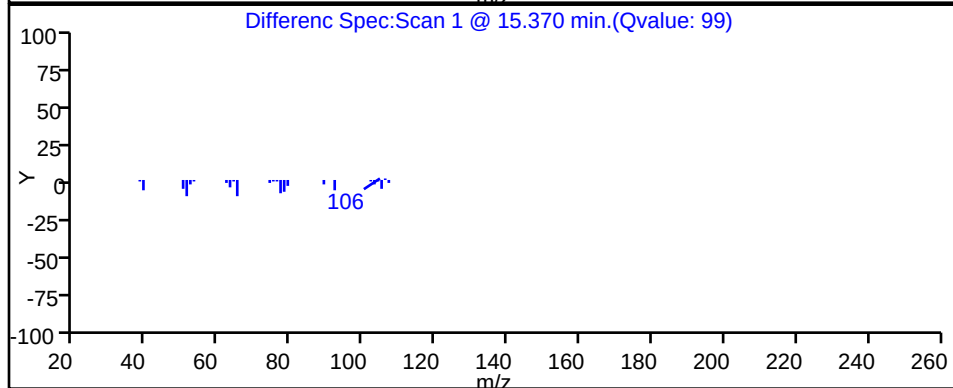
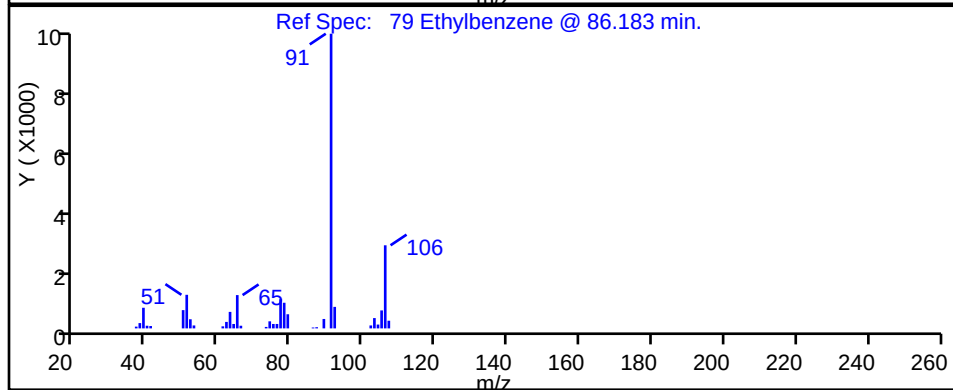
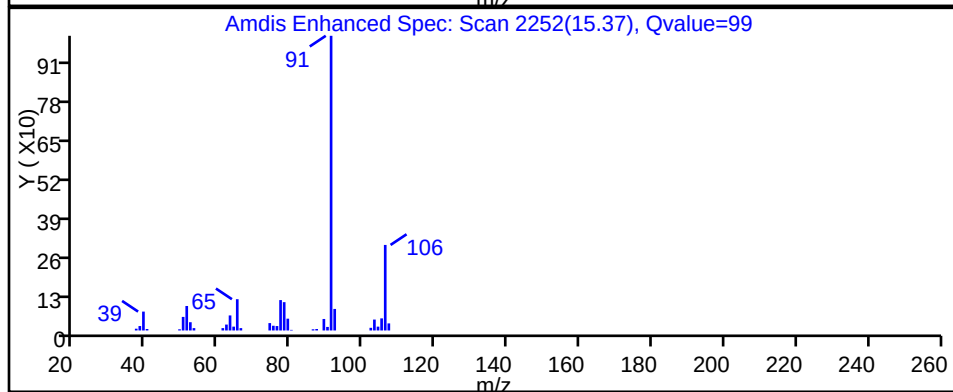
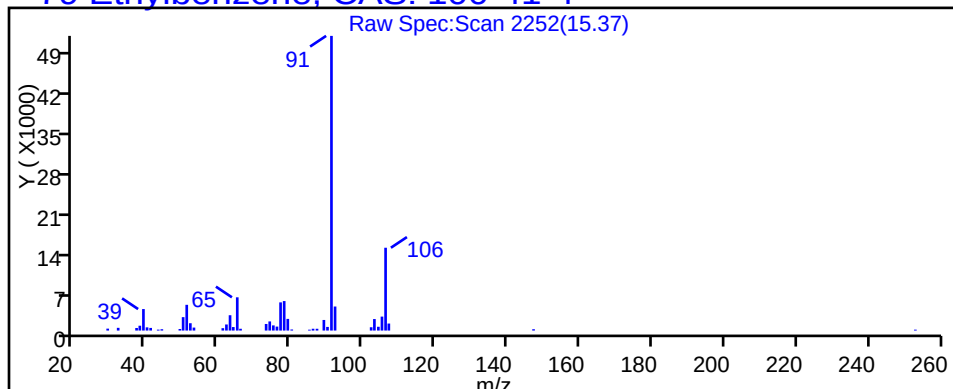
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

79 Ethylbenzene, CAS: 100-41-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P101.D

Injection Date: 04-Apr-2017 15:02:30

Instrument ID: MG

Lims ID: 140-7685-A-1

Lab Sample ID: 140-7685-1

Client ID: H33-CS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 9

Purge Vol: 500.000 mL

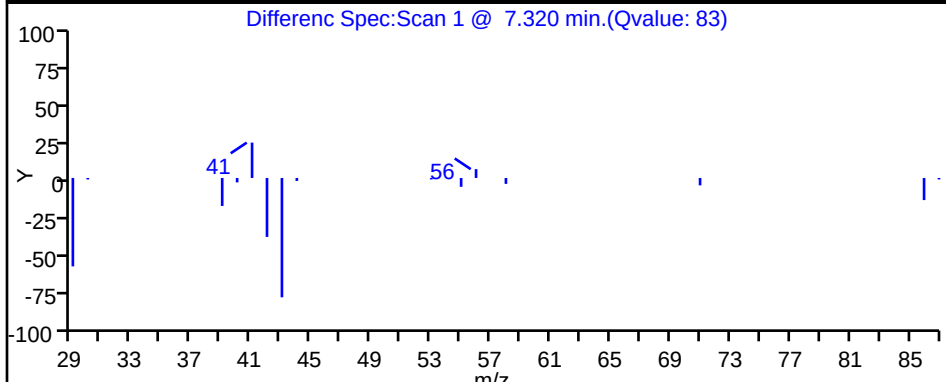
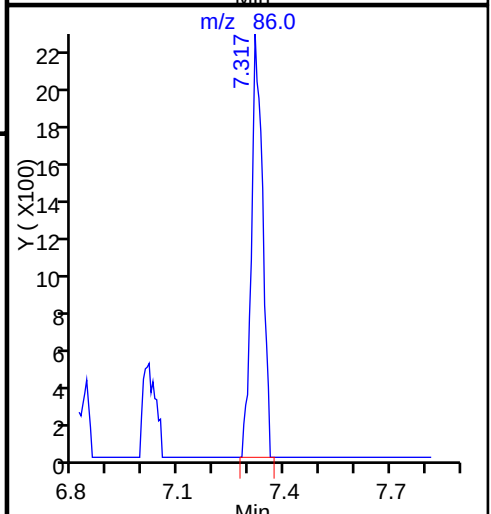
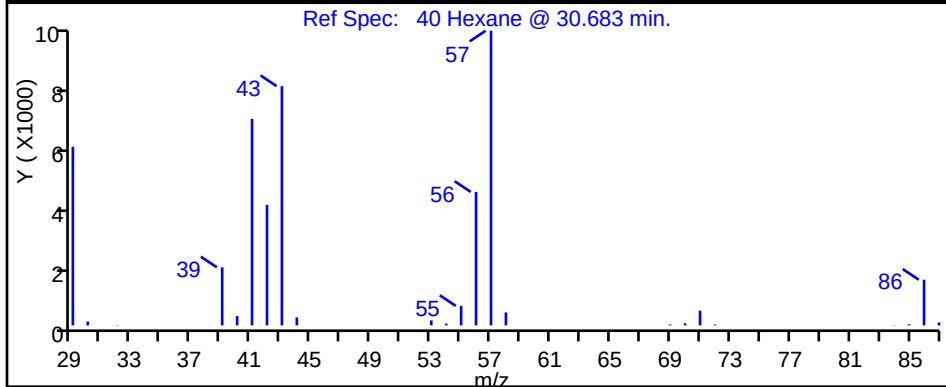
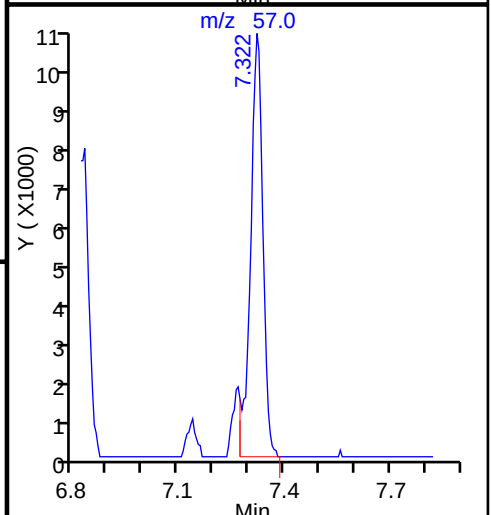
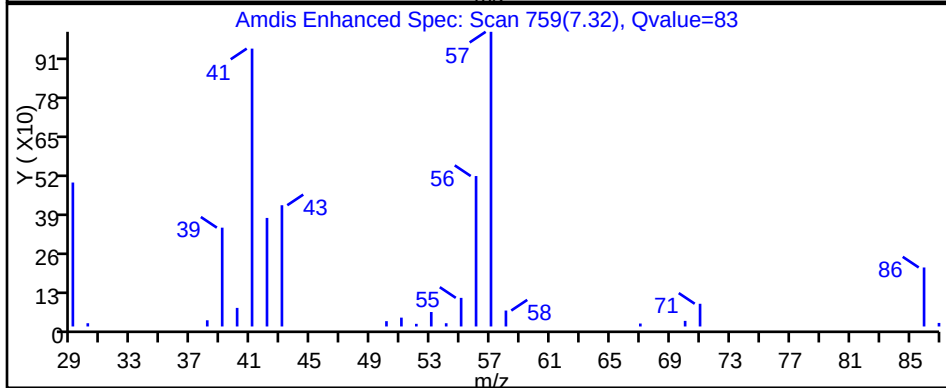
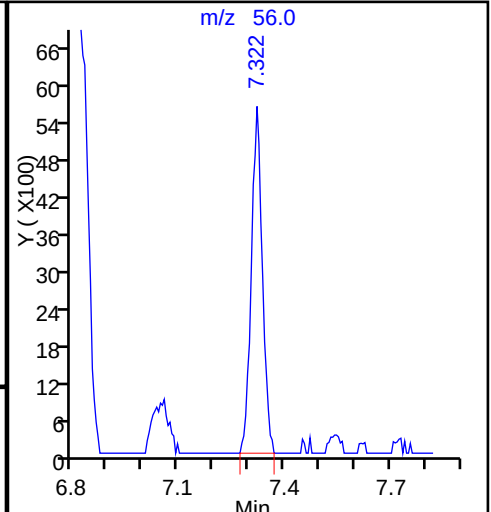
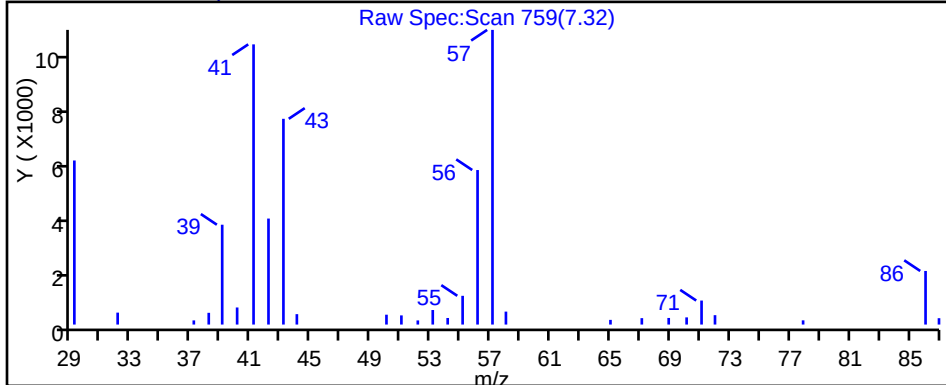
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P101.D

Injection Date: 04-Apr-2017 15:02:30

Instrument ID: MG

Lims ID: 140-7685-A-1

Lab Sample ID: 140-7685-1

Client ID: H33-CS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 9

Purge Vol: 500.000 mL

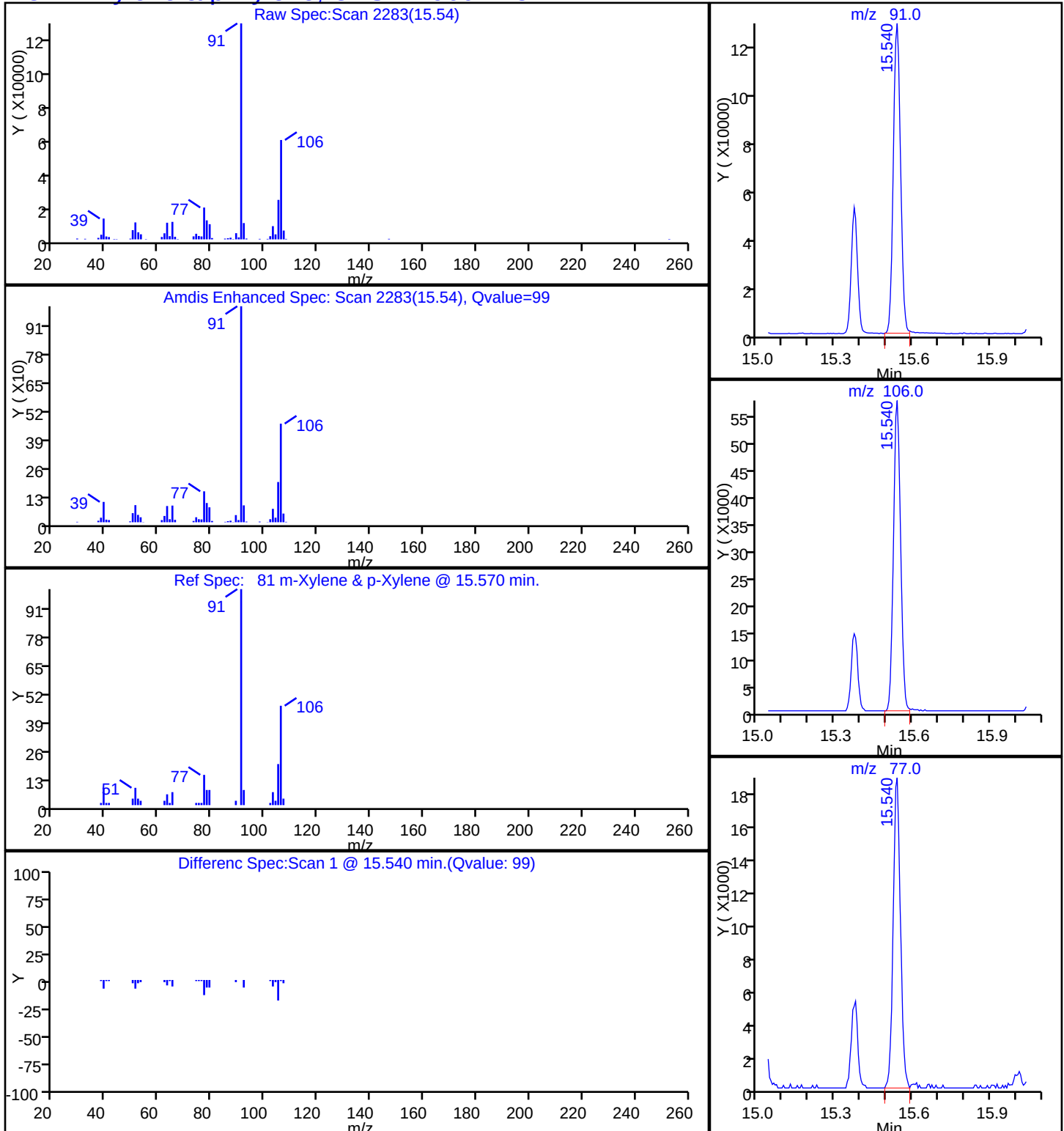
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P101.D

Injection Date: 04-Apr-2017 15:02:30

Instrument ID: MG

Lims ID: 140-7685-A-1

Lab Sample ID: 140-7685-1

Client ID: H33-CS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 9

Purge Vol: 500.000 mL

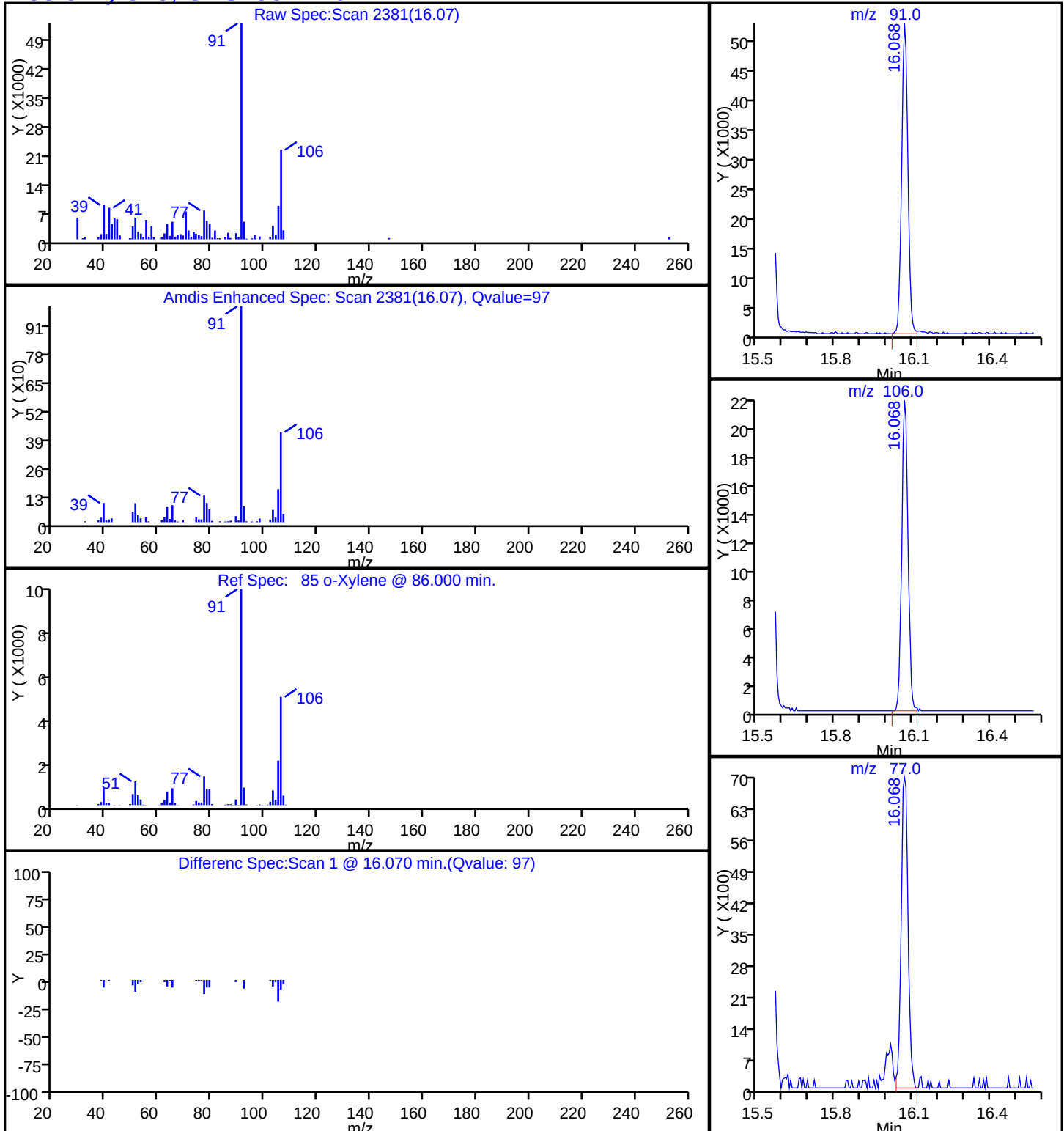
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P101.D

Injection Date: 04-Apr-2017 15:02:30

Instrument ID: MG

Lims ID: 140-7685-A-1

Lab Sample ID: 140-7685-1

Client ID: H33-CS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 9

Purge Vol: 500.000 mL

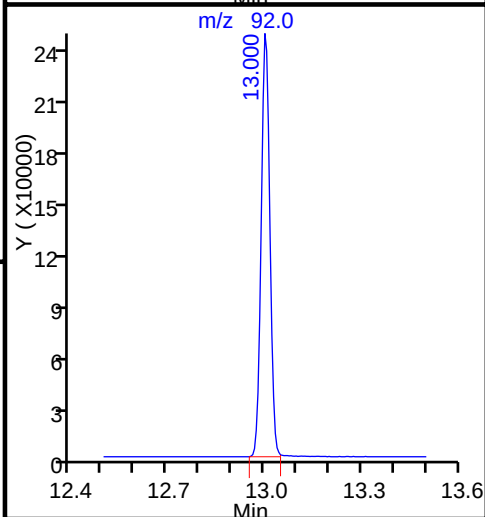
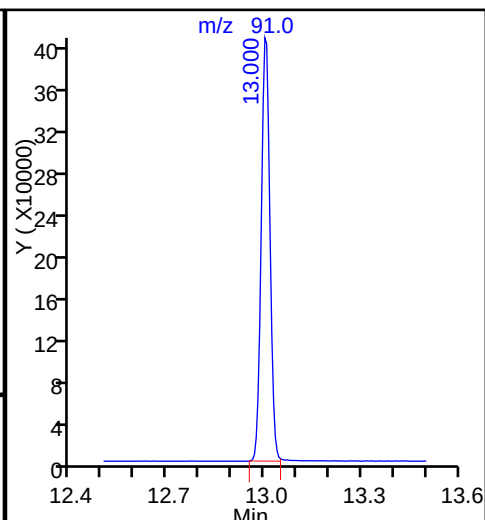
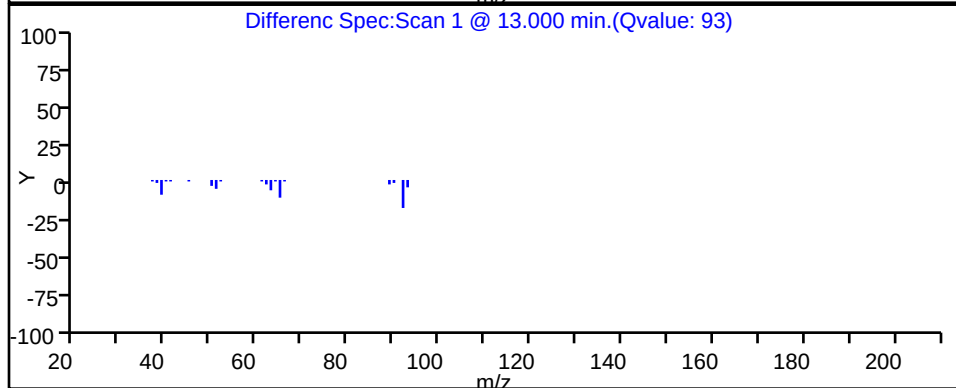
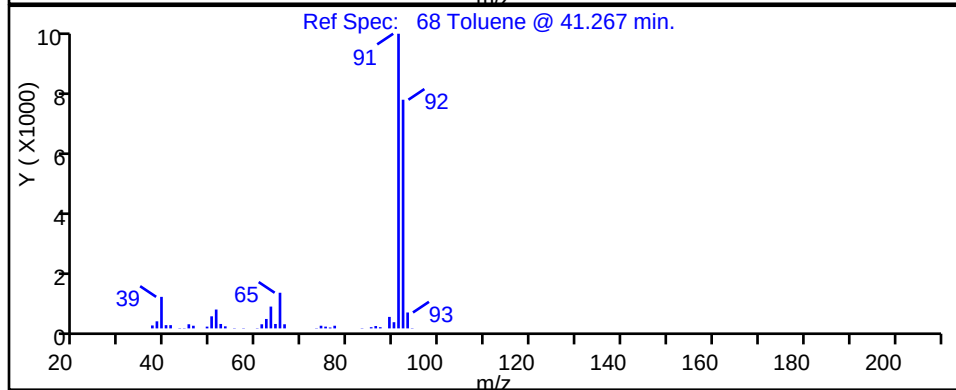
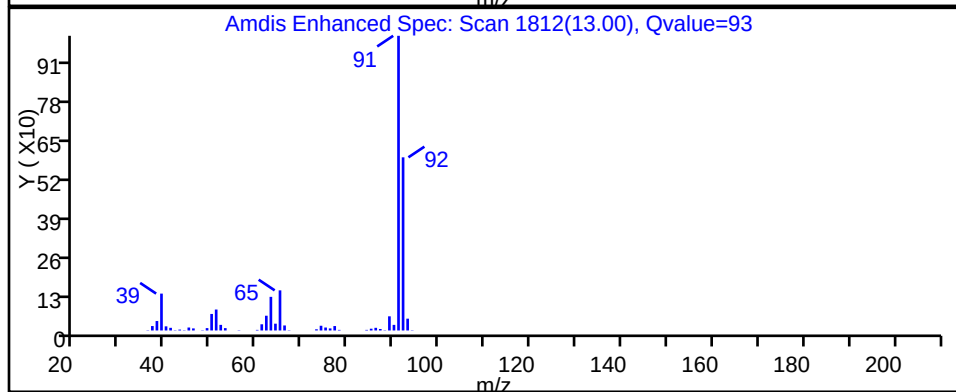
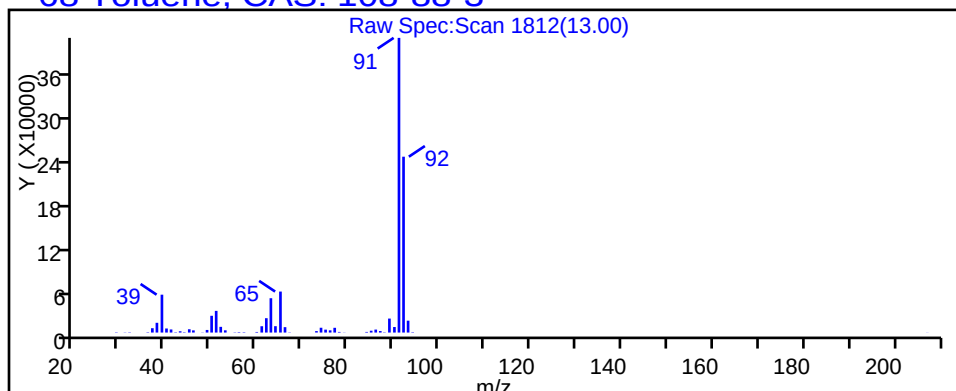
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P101.D

Injection Date: 04-Apr-2017 15:02:30

Instrument ID: MG

Lims ID: 140-7685-A-1

Lab Sample ID: 140-7685-1

Client ID: H33-CS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 9

Purge Vol: 500.000 mL

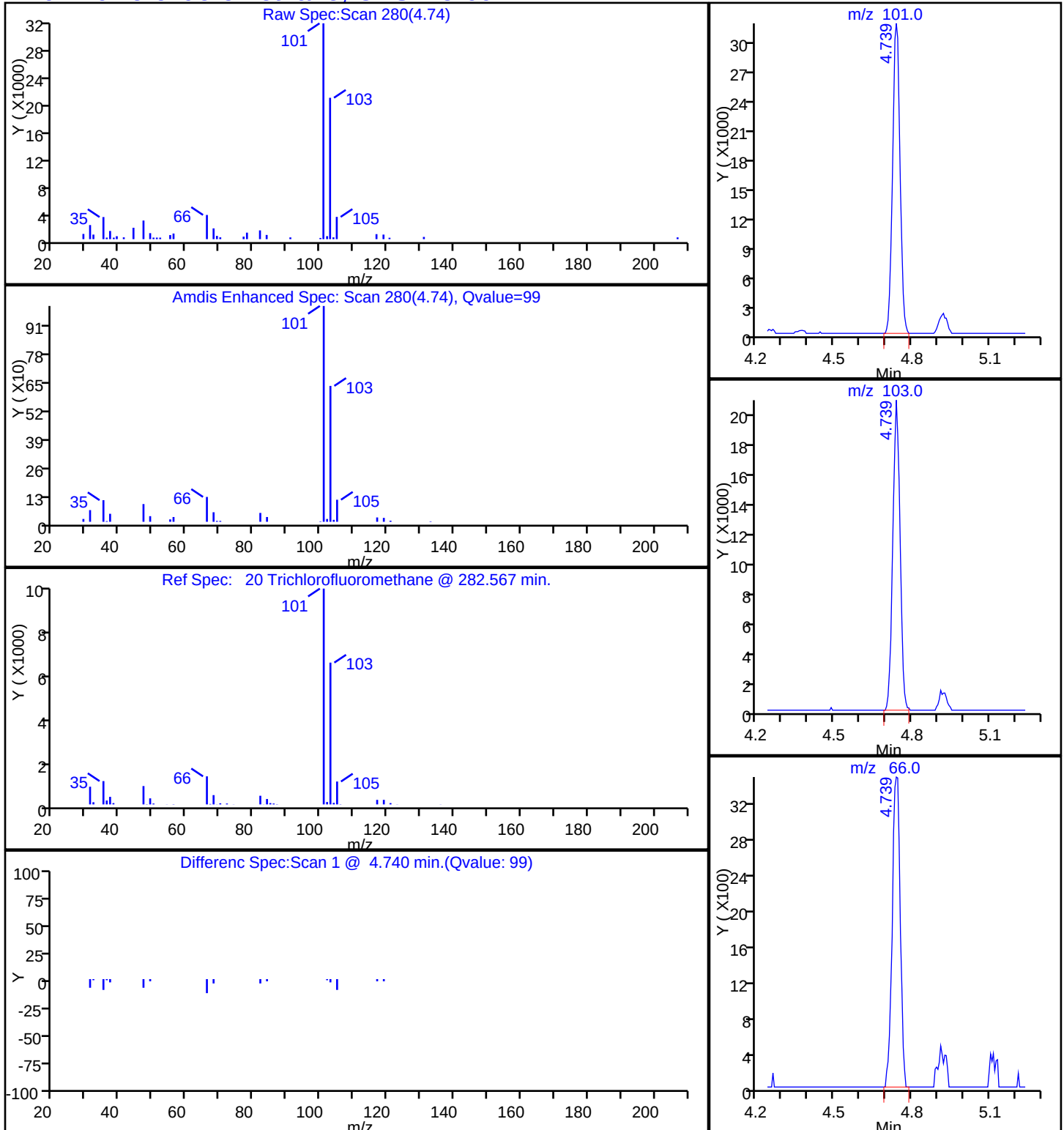
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P101.D

Injection Date: 04-Apr-2017 15:02:30

Instrument ID: MG

Lims ID: 140-7685-A-1

Lab Sample ID: 140-7685-1

Client ID: H33-CS

Operator ID: 7126

ALS Bottle#: 1 Worklist Smp#: 9

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

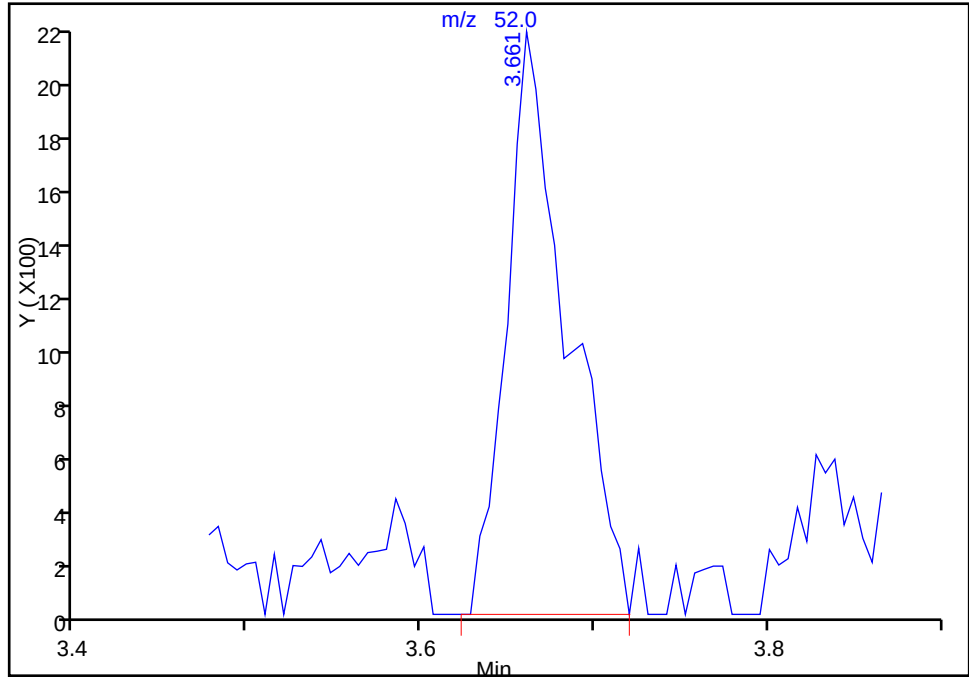
Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

Signal: 1

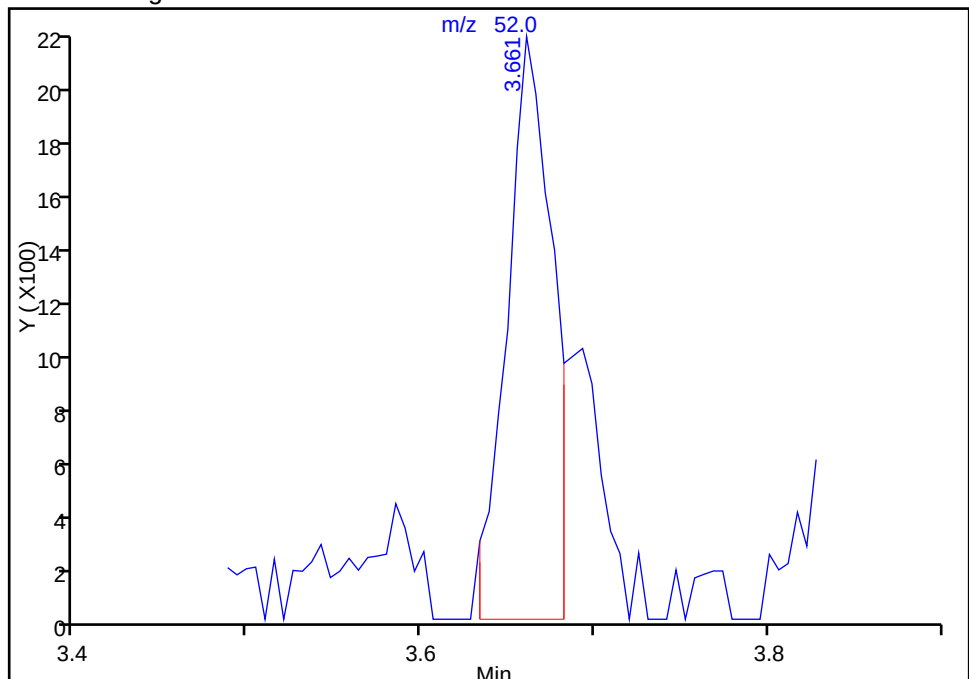
RT: 3.66
Area: 5138
Amount: 0.288404
Amount Units: ppb v/v

Processing Integration Results



RT: 3.66
Area: 3886
Amount: 0.218127
Amount Units: ppb v/v

Manual Integration Results



Reviewer: tajh, 04-Apr-2017 15:41:50

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H33-BA-1 Lab Sample ID: 140-7685-2
 Matrix: Air Lab File ID: GD04P102.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 08:31
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 15:51
 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.: 10155 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	0.27		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	0.35		0.20	
78-93-3	2-Butanone	72.11	0.87		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	0.21		0.20	
71-43-2	Benzene	78.11	0.51		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	0.18		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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H33-BA-1 Lab Sample ID: 140-7685-2
 Matrix: Air Lab File ID: GD04P102.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 08:31
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 15:51
 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.: 10155 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	1.2		0.080	
64-17-5	Ethanol	46.07	27		2.0	
100-41-4	Ethylbenzene	106.17	0.31		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	0.23		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	0.22		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	1.2		0.080	
95-47-6	o-Xylene	106.17	0.44		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	4.6		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	0.41		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H33-BA-1 Lab Sample ID: 140-7685-2
 Matrix: Air Lab File ID: GD04P102.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 08:31
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 15:51
 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.: 10155 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	1.3		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	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	1.7		0.93	
78-93-3	2-Butanone	72.11	2.6		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	0.87		0.82	
71-43-2	Benzene	78.11	1.6		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	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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H33-BA-1 Lab Sample ID: 140-7685-2
 Matrix: Air Lab File ID: GD04P102.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 08:31
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 15:51
 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.: 10155 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	6.1		0.40	
64-17-5	Ethanol	46.07	50		3.8	
100-41-4	Ethylbenzene	106.17	1.3		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	0.80		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	0.76		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	5.2		0.35	
95-47-6	o-Xylene	106.17	1.9		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	17		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	2.3		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D
 Lims ID: 140-7685-A-2
 Client ID: H33-BA-1
 Sample Type: Client
 Inject. Date: 04-Apr-2017 15:51:30 ALS Bottle#: 2 Worklist Smp#: 10
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004508-010
 Misc. Info.: 140-7685-a-2
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 05-Apr-2017 10:01:21 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 09:54:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.974	7.980	-0.006	73	249215	4.00	
* 2 1,4-Difluorobenzene	114	10.142	10.148	-0.006	95	1254015	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.017	15.022	-0.005	89	1267726	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.689	16.694	-0.005	93	1042240	4.16	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	100	322749	1.22	
9 Chloromethane	52	3.661	3.666	-0.005	99	7305	0.4117	M
10 1,2-Dichloro-1,1,2,2-tetra	135	3.677	3.671	0.006	30	2378	0.0151	
17 Ethanol	31	4.362	4.356	0.006	96	670809	26.8	
20 Trichlorofluoromethane	101	4.739	4.744	-0.005	99	106664	0.4060	
29 2-Methyl-2-propanol	59	5.462	5.456	0.006	88	4175	0.0413	
30 1,1,2-Trichloro-1,2,2-trif	101	5.516	5.521	-0.005	91	9889	0.0645	
31 Methylene Chloride	84	5.645	5.650	-0.005	87	13048	0.2177	
39 2-Butanone (MEK)	72	7.268	7.268	0.000	98	24586	0.8669	
40 Hexane	56	7.322	7.327	-0.005	78	11143	0.2264	
44 Chloroform	83	7.996	8.007	-0.011	95	32156	0.1839	
49 Benzene	78	9.560	9.565	-0.005	97	108741	0.5104	
50 Cyclohexane	69	9.565	9.576	-0.011	68	5125	0.1429	
51 Carbon tetrachloride	117	9.592	9.598	-0.006	95	16779	0.0754	
56 Isooctane	57	10.396	10.396	0.000	93	112106	0.3545	
62 1,4-Dioxane	88	11.140	11.129	0.011	80	1620	0.0562	
65 4-Methyl-2-pentanone (MIBK	43	12.116	12.116	0.000	95	25950	0.2121	
68 Toluene	91	13.000	13.006	-0.006	93	1151609	4.56	
79 Ethylbenzene	91	15.373	15.378	-0.005	99	109445	0.3102	
81 m-Xylene & p-Xylene	91	15.540	15.545	-0.005	100	343382	1.21	
83 Styrene	104	16.014	16.014	0.000	94	9693	0.0516	
85 o-Xylene	91	16.068	16.074	-0.006	96	126845	0.4354	
92 1,3,5-Trimethylbenzene	120	17.476	17.481	-0.005	91	12391	0.0663	
96 1,2,4-Trimethylbenzene	105	17.940	17.940	0.000	97	95264	0.2662	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D

Injection Date: 04-Apr-2017 15:51:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7685-A-2

Lab Sample ID: 140-7685-2

Worklist Smp#: 10

Client ID: H33-BA-1

Purge Vol: 500.000 mL

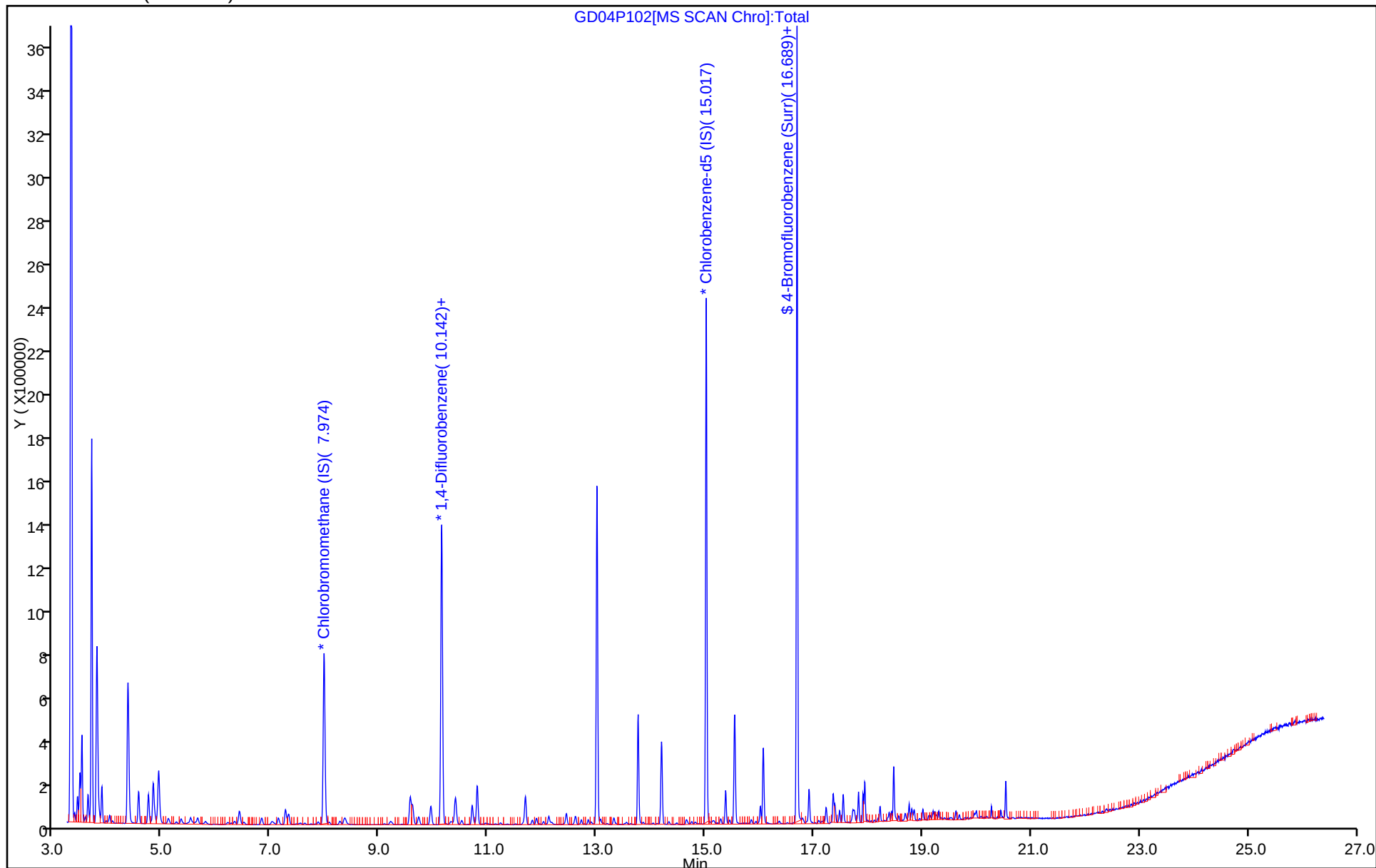
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D
Lims ID: 140-7685-A-2
Client ID: H33-BA-1
Sample Type: Client
Inject. Date: 04-Apr-2017 15:51:30 ALS Bottle#: 2 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004508-010
Misc. Info.: 140-7685-a-2
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 05-Apr-2017 10:01:21 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 09:54:39

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.16	104.00

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D

Injection Date: 04-Apr-2017 15:51:30

Instrument ID: MG

Lims ID: 140-7685-A-2

Lab Sample ID: 140-7685-2

Client ID: H33-BA-1

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 10

Purge Vol: 500.000 mL

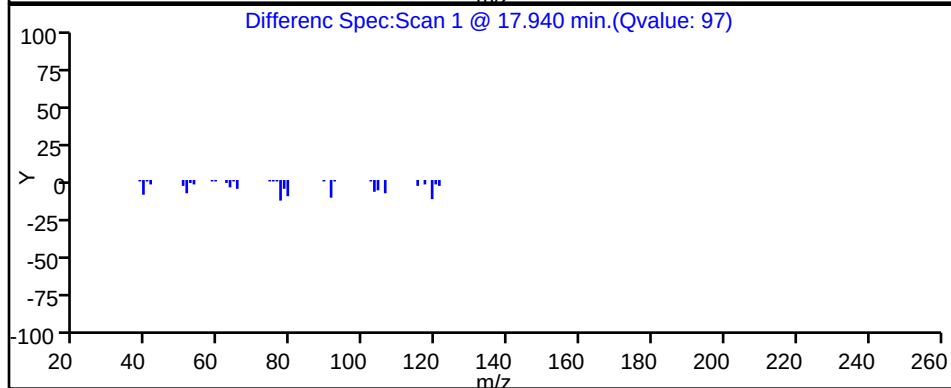
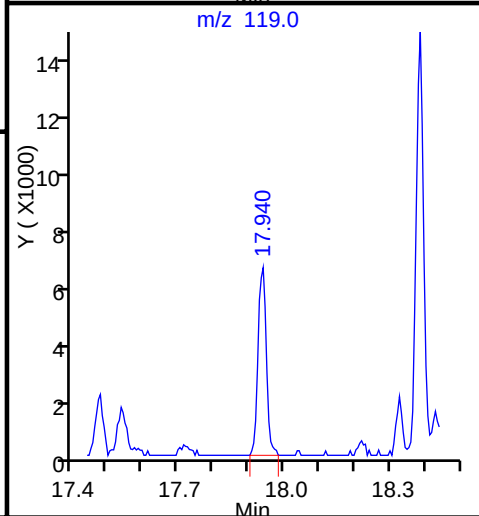
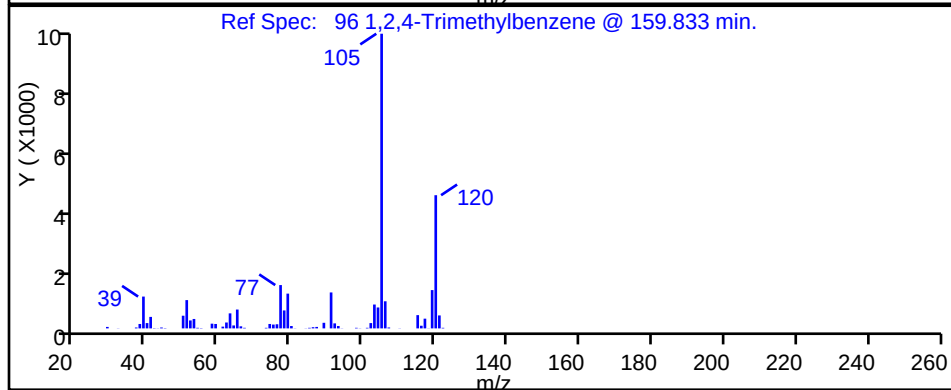
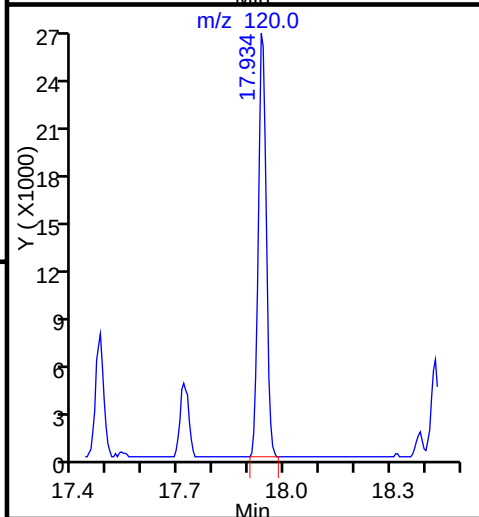
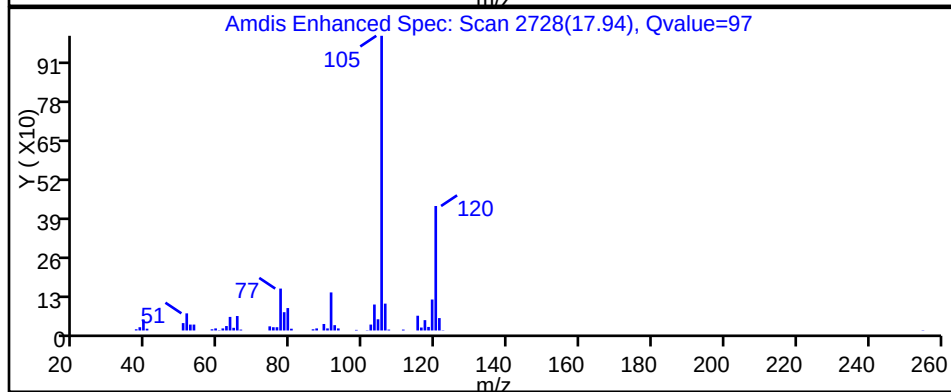
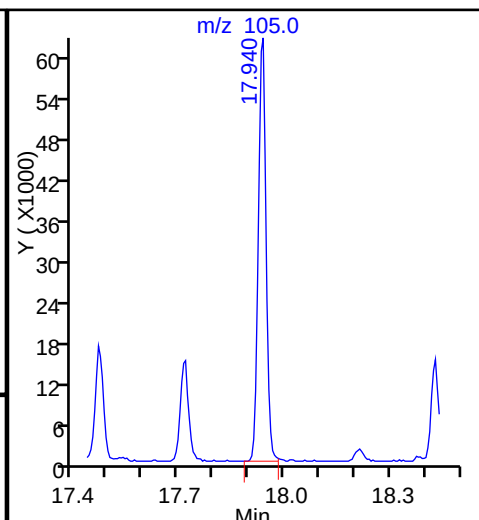
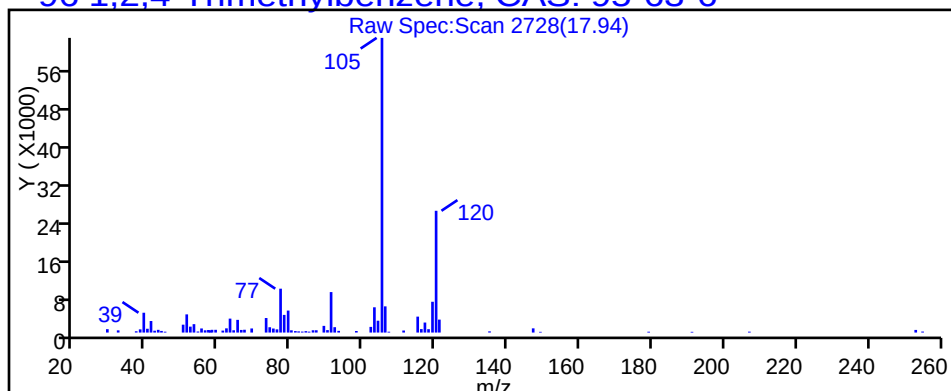
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

96 1,2,4-Trimethylbenzene, CAS: 95-63-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D

Injection Date: 04-Apr-2017 15:51:30

Instrument ID: MG

Lims ID: 140-7685-A-2

Lab Sample ID: 140-7685-2

Client ID: H33-BA-1

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 10

Purge Vol: 500.000 mL

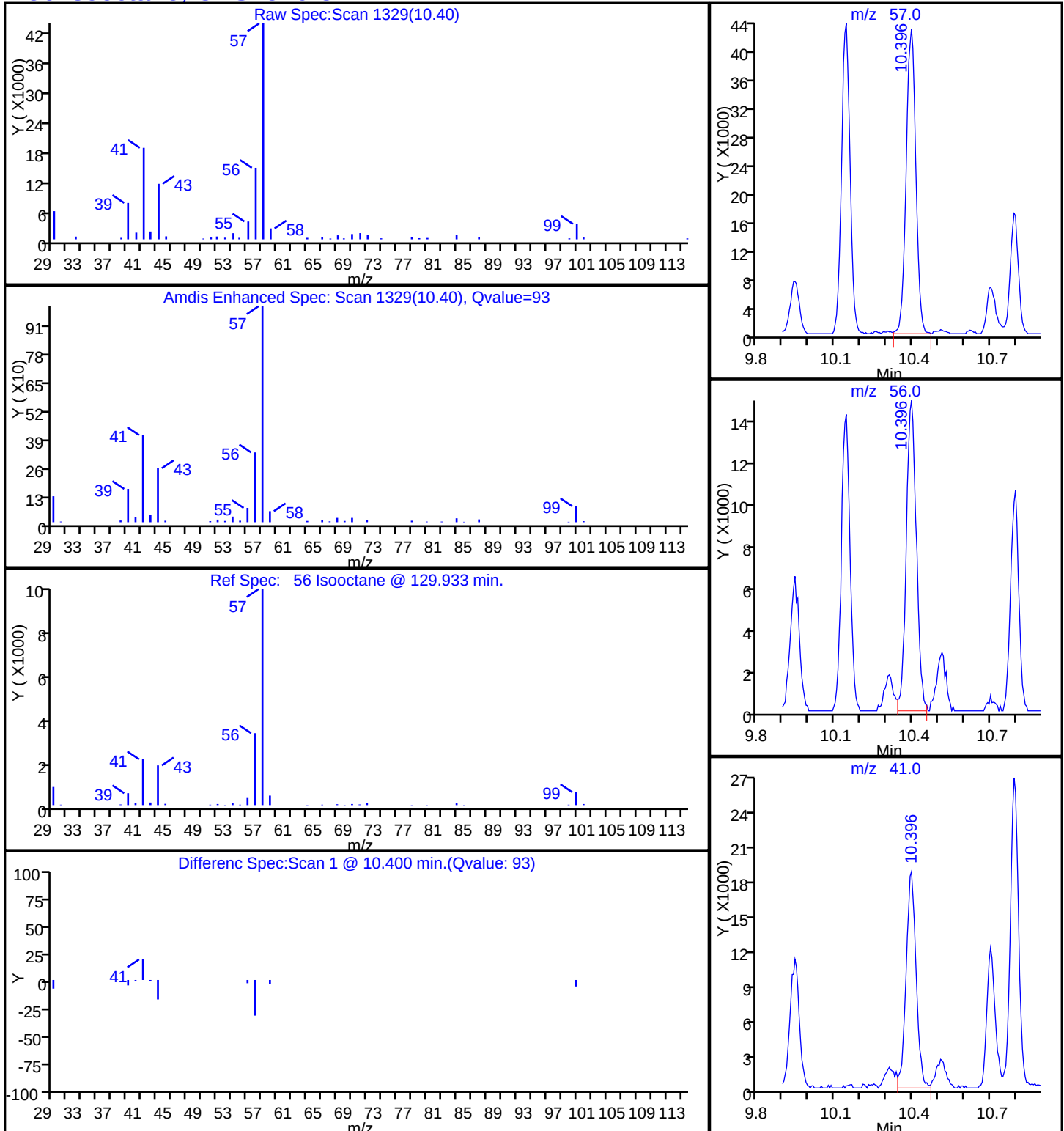
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

56 Isooctane, CAS: 540-84-1

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D

Injection Date: 04-Apr-2017 15:51:30

Instrument ID: MG

Lims ID: 140-7685-A-2

Lab Sample ID: 140-7685-2

Client ID: H33-BA-1

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 10

Purge Vol: 500.000 mL

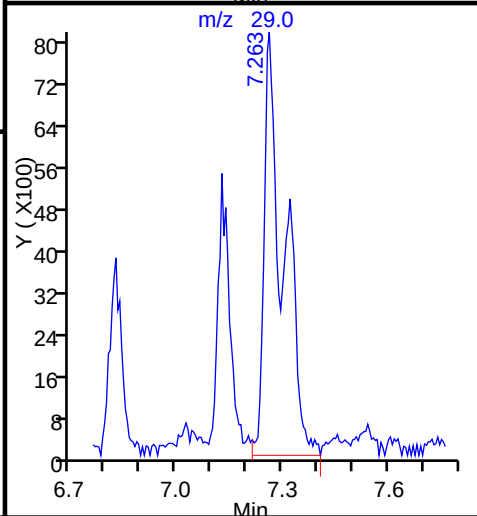
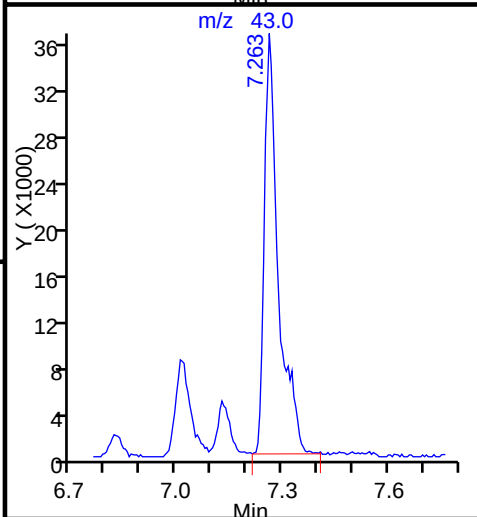
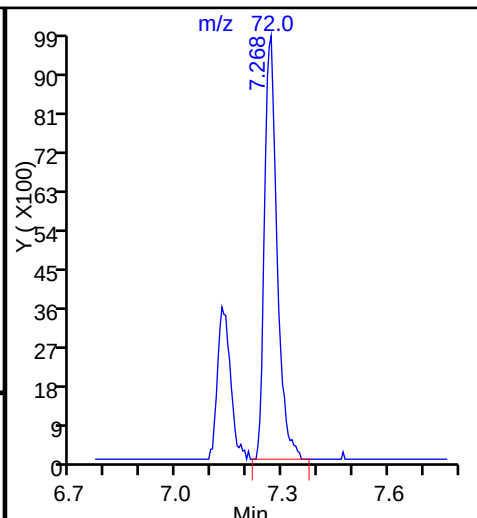
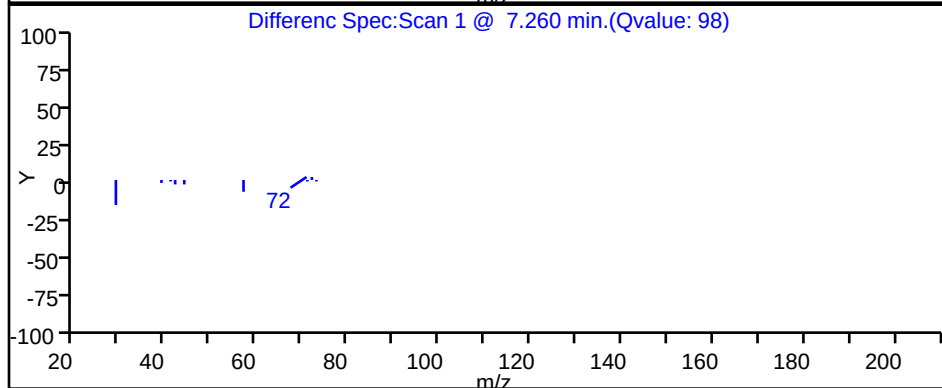
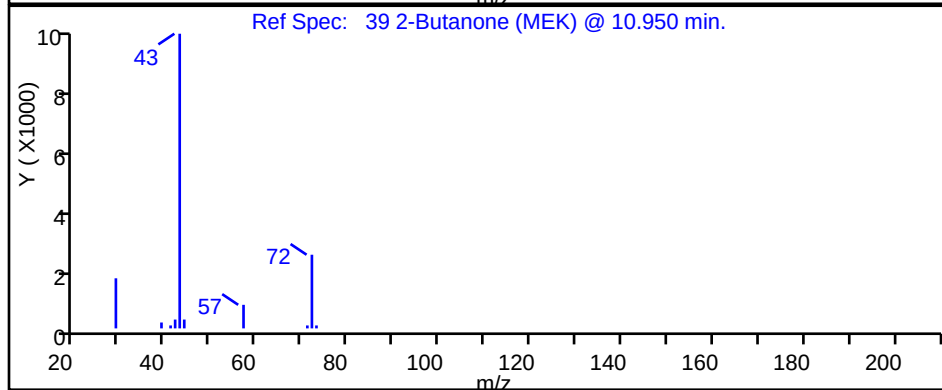
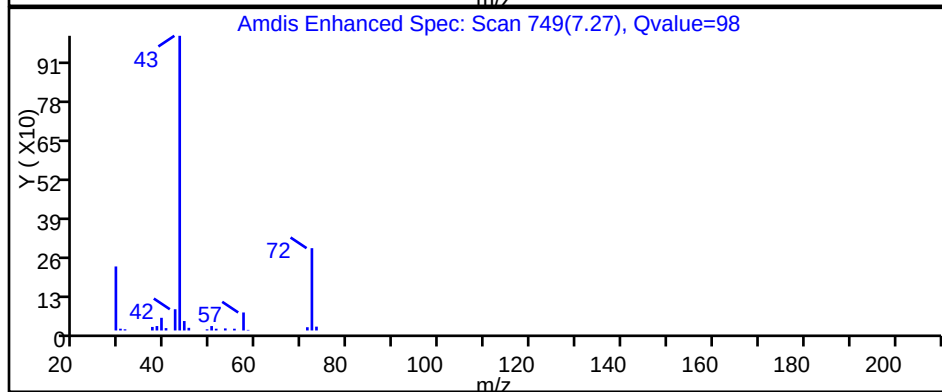
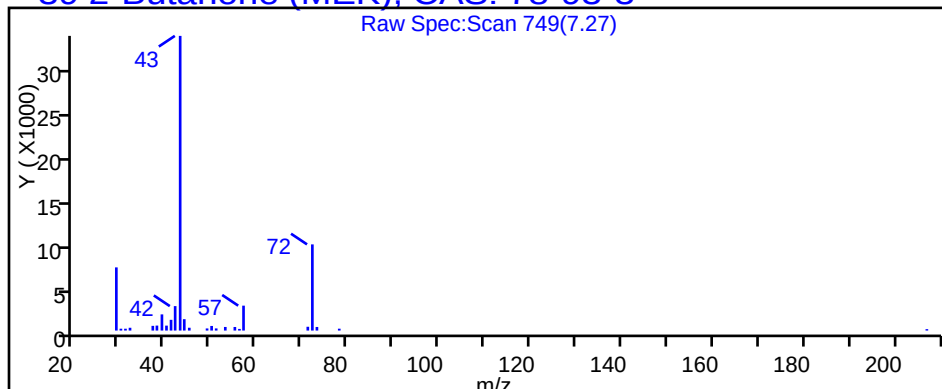
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D

Injection Date: 04-Apr-2017 15:51:30

Instrument ID: MG

Lims ID: 140-7685-A-2

Lab Sample ID: 140-7685-2

Client ID: H33-BA-1

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 10

Purge Vol: 500.000 mL

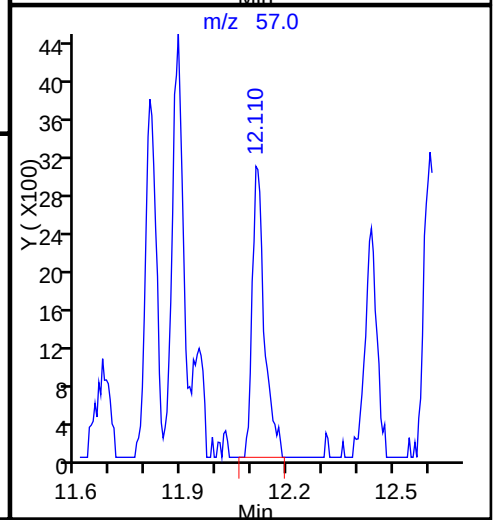
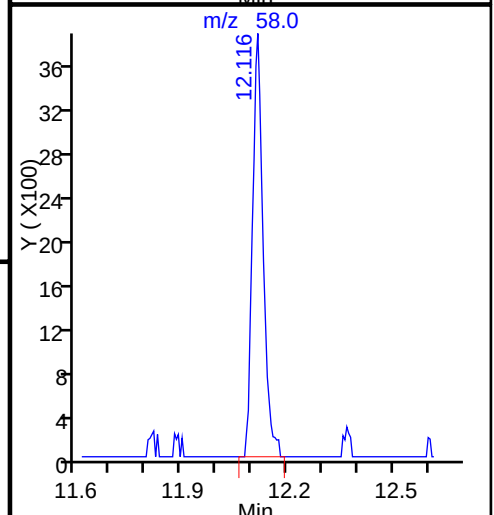
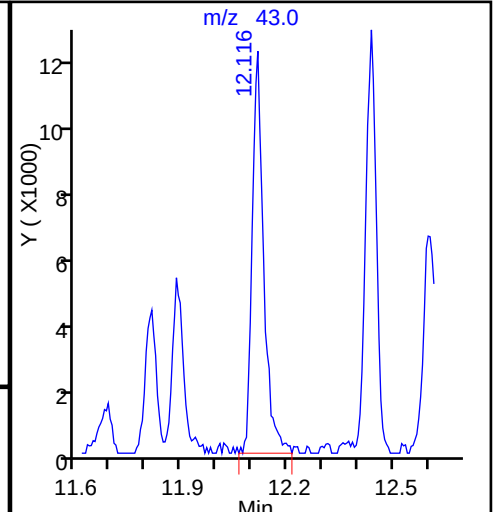
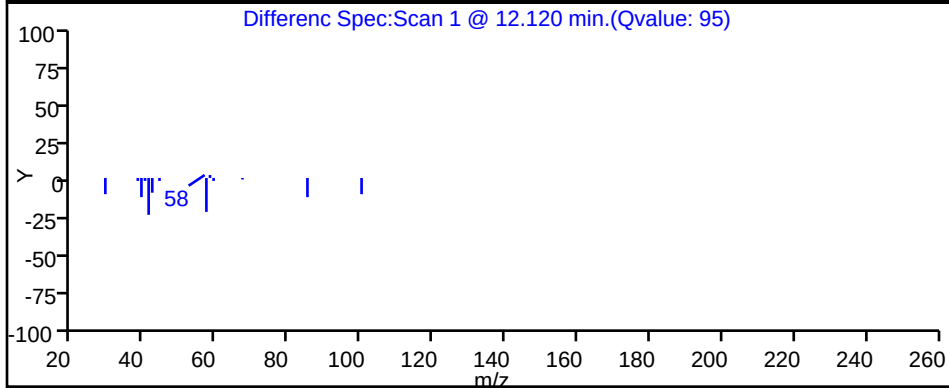
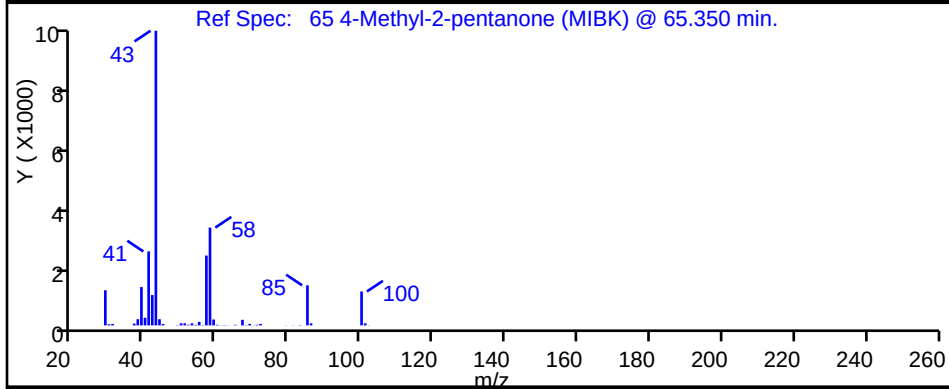
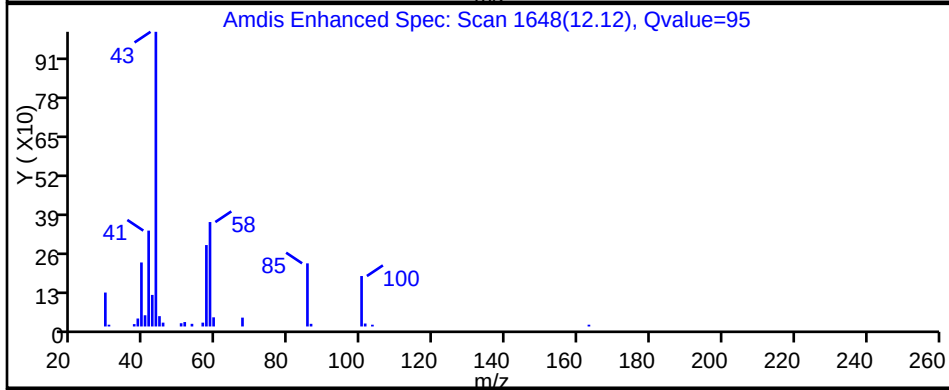
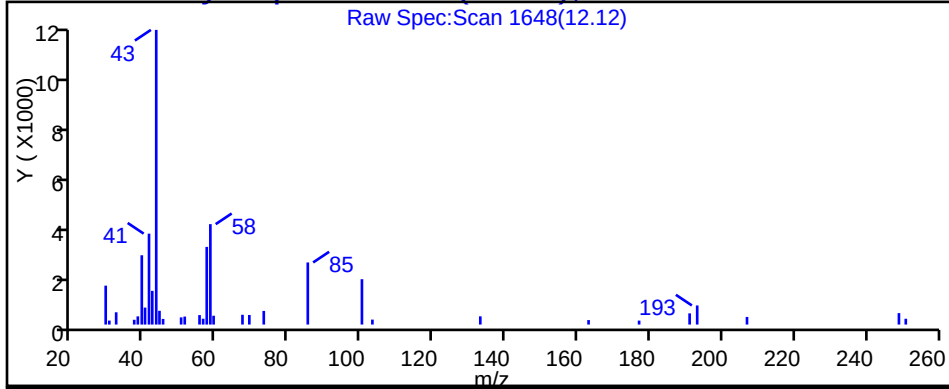
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D

Injection Date: 04-Apr-2017 15:51:30

Instrument ID: MG

Lims ID: 140-7685-A-2

Lab Sample ID: 140-7685-2

Client ID: H33-BA-1

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 10

Purge Vol: 500.000 mL

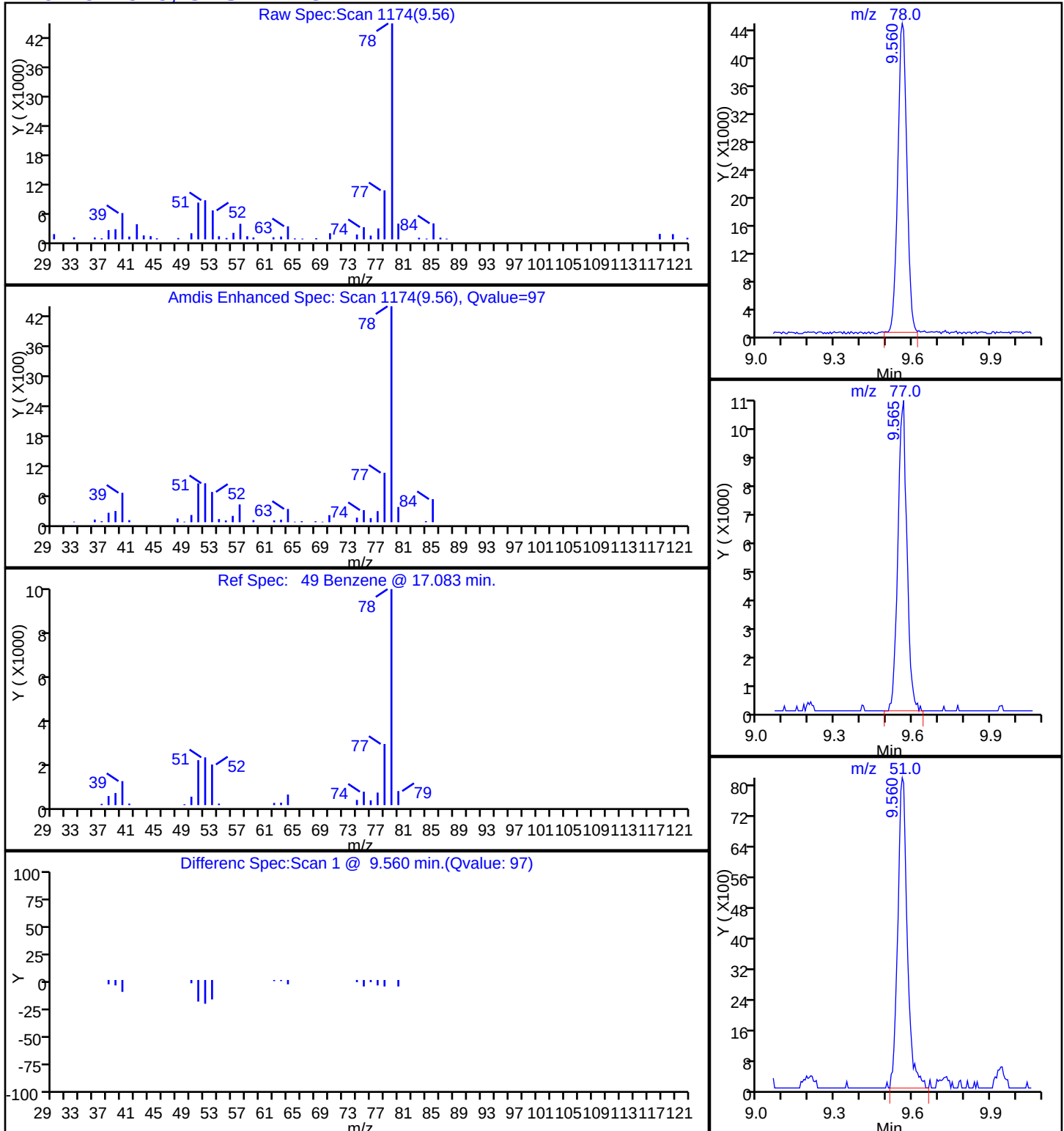
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D

Injection Date: 04-Apr-2017 15:51:30

Instrument ID: MG

Lims ID: 140-7685-A-2

Lab Sample ID: 140-7685-2

Client ID: H33-BA-1

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 10

Purge Vol: 500.000 mL

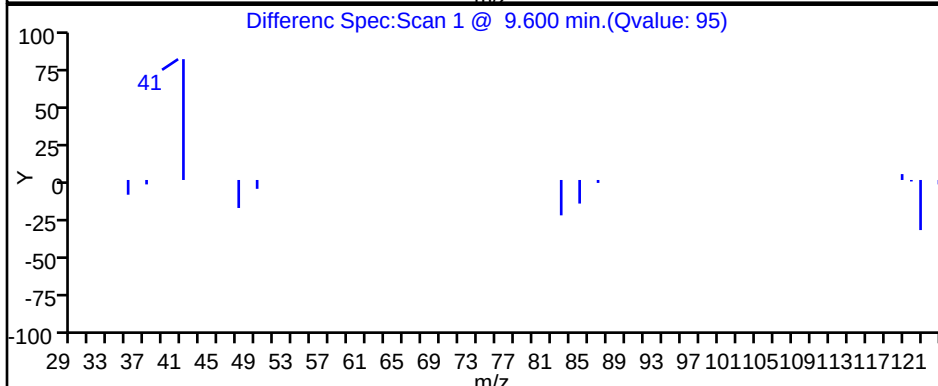
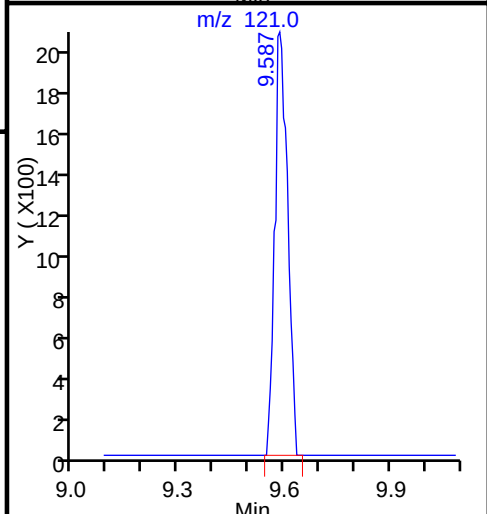
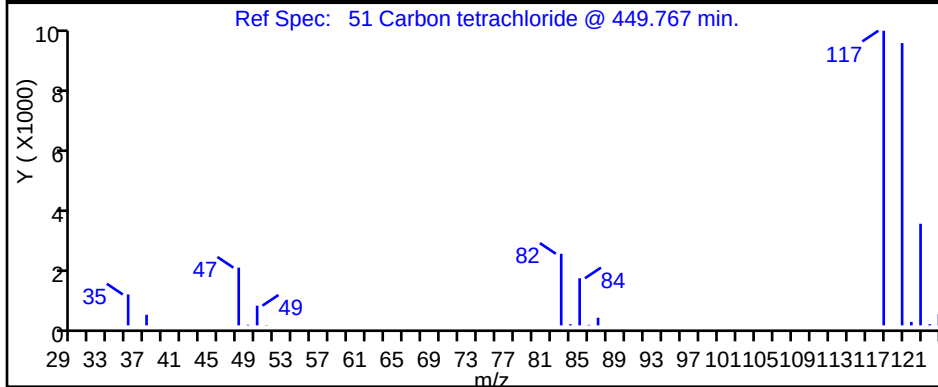
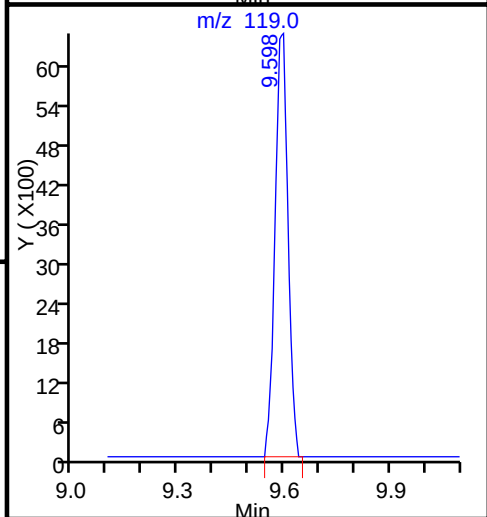
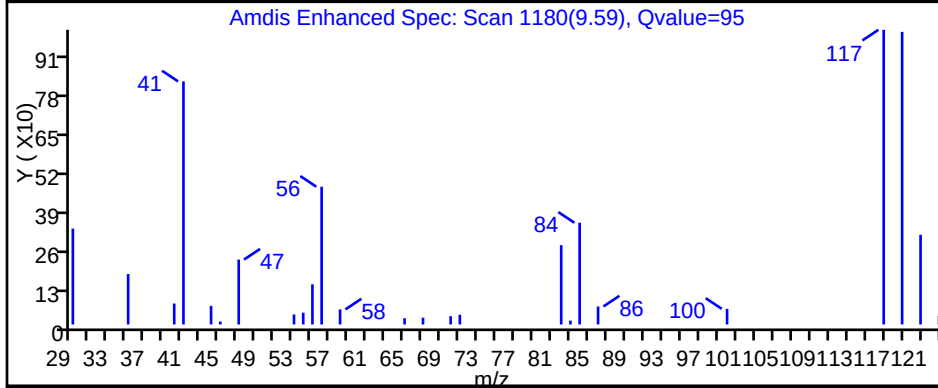
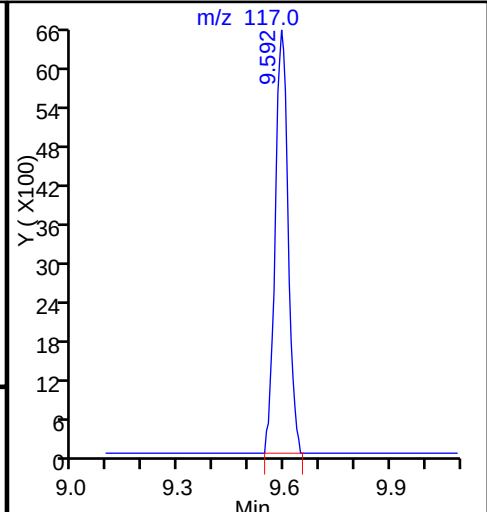
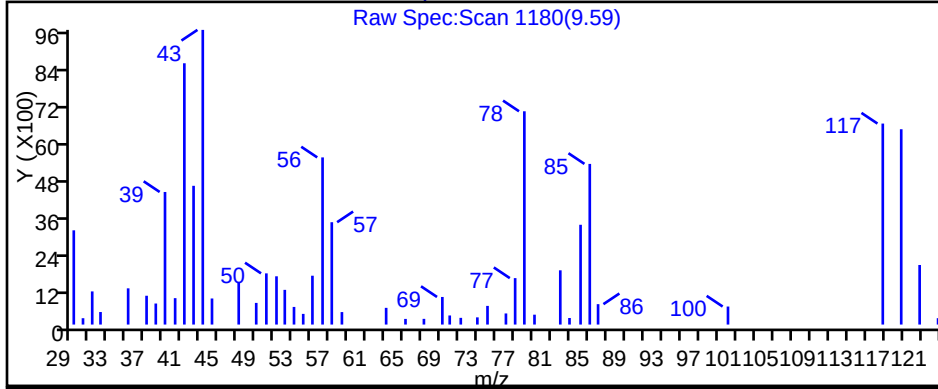
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D

Injection Date: 04-Apr-2017 15:51:30

Instrument ID: MG

Lims ID: 140-7685-A-2

Lab Sample ID: 140-7685-2

Client ID: H33-BA-1

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 10

Purge Vol: 500.000 mL

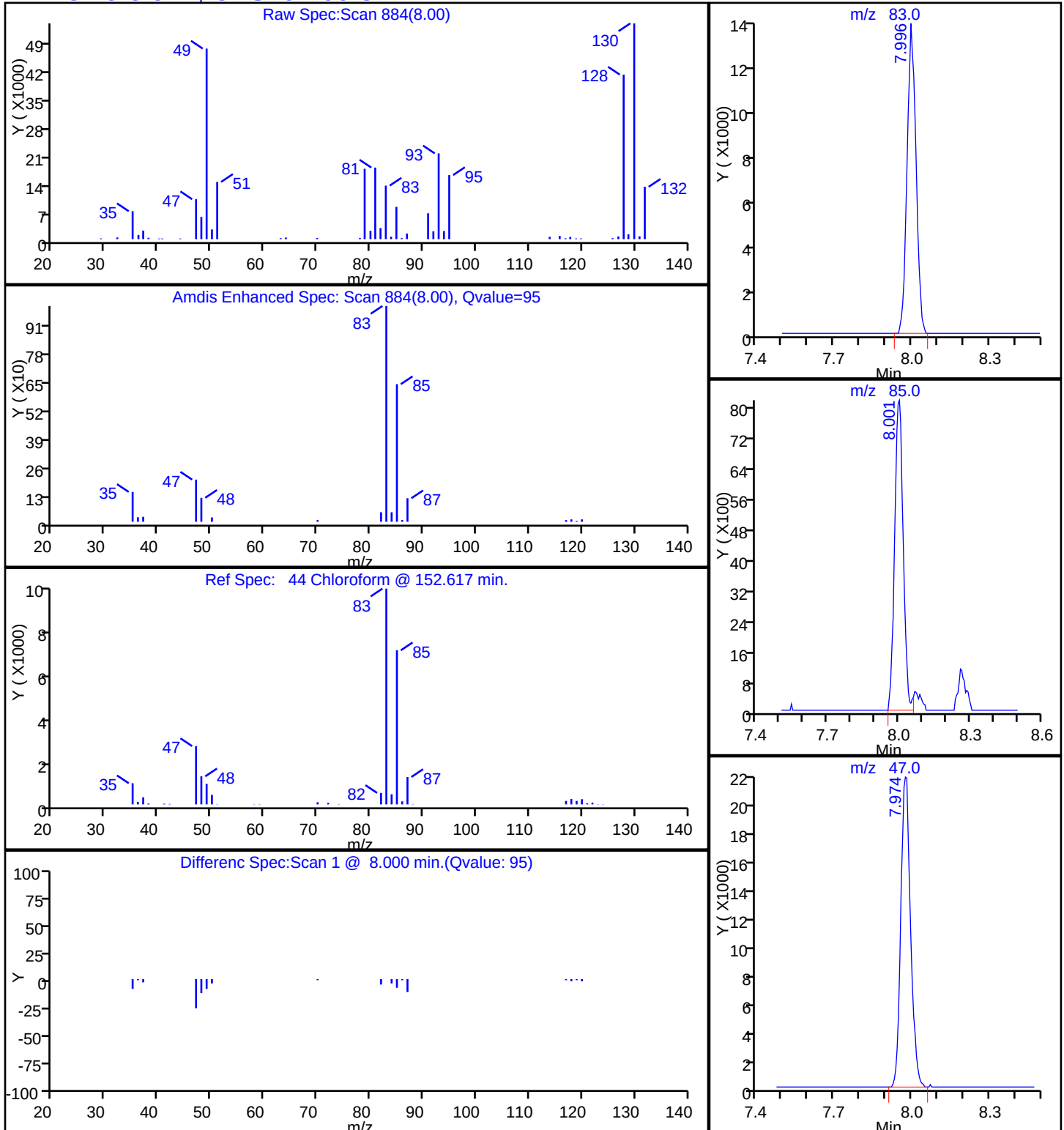
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

44 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D

Injection Date: 04-Apr-2017 15:51:30

Instrument ID: MG

Lims ID: 140-7685-A-2

Lab Sample ID: 140-7685-2

Client ID: H33-BA-1

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 10

Purge Vol: 500.000 mL

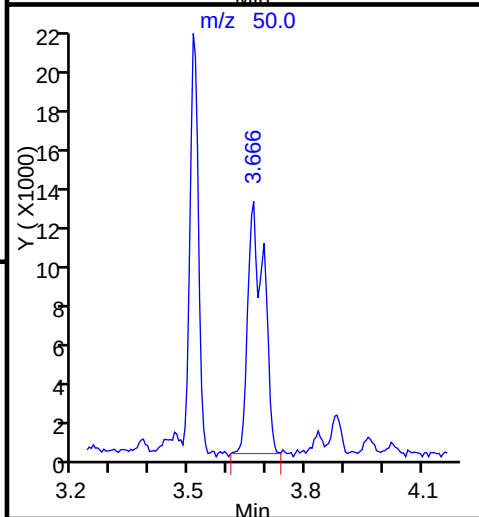
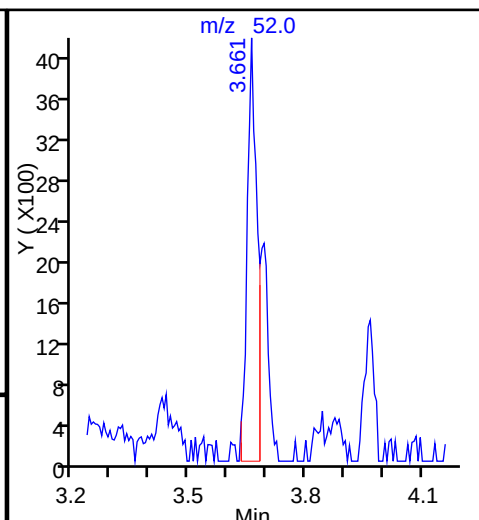
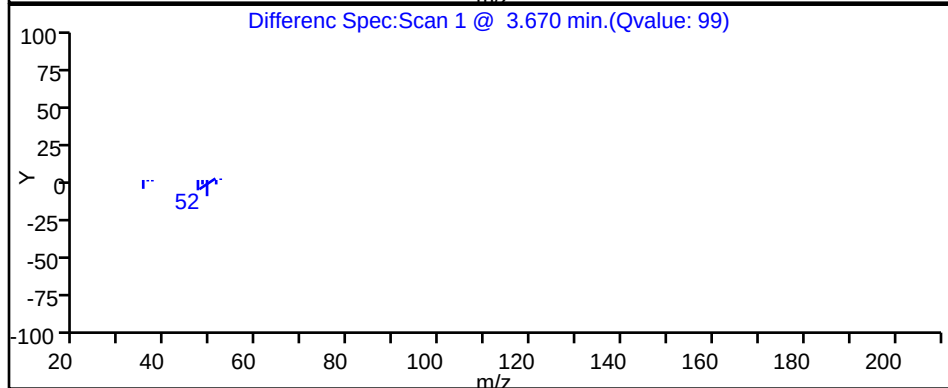
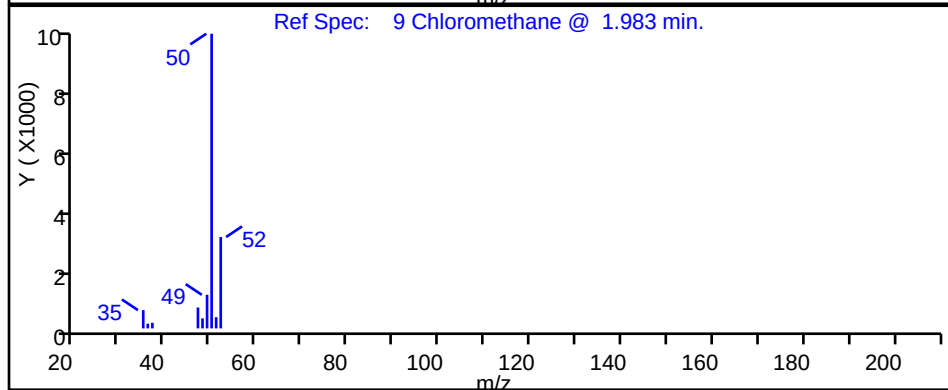
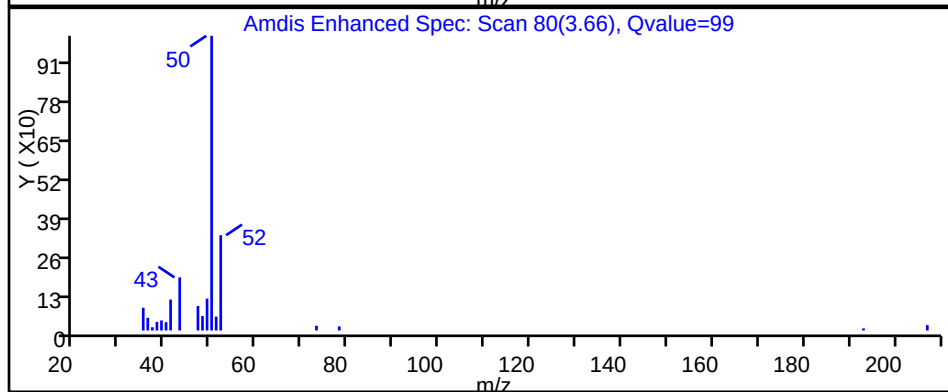
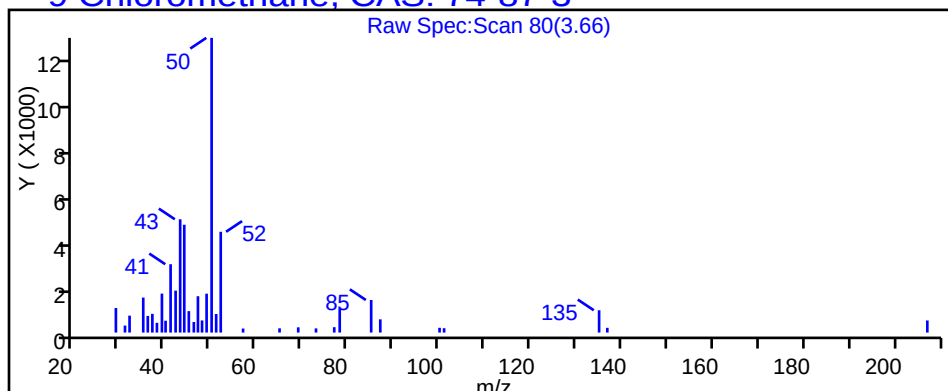
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D

Injection Date: 04-Apr-2017 15:51:30

Instrument ID: MG

Lims ID: 140-7685-A-2

Lab Sample ID: 140-7685-2

Client ID: H33-BA-1

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 10

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

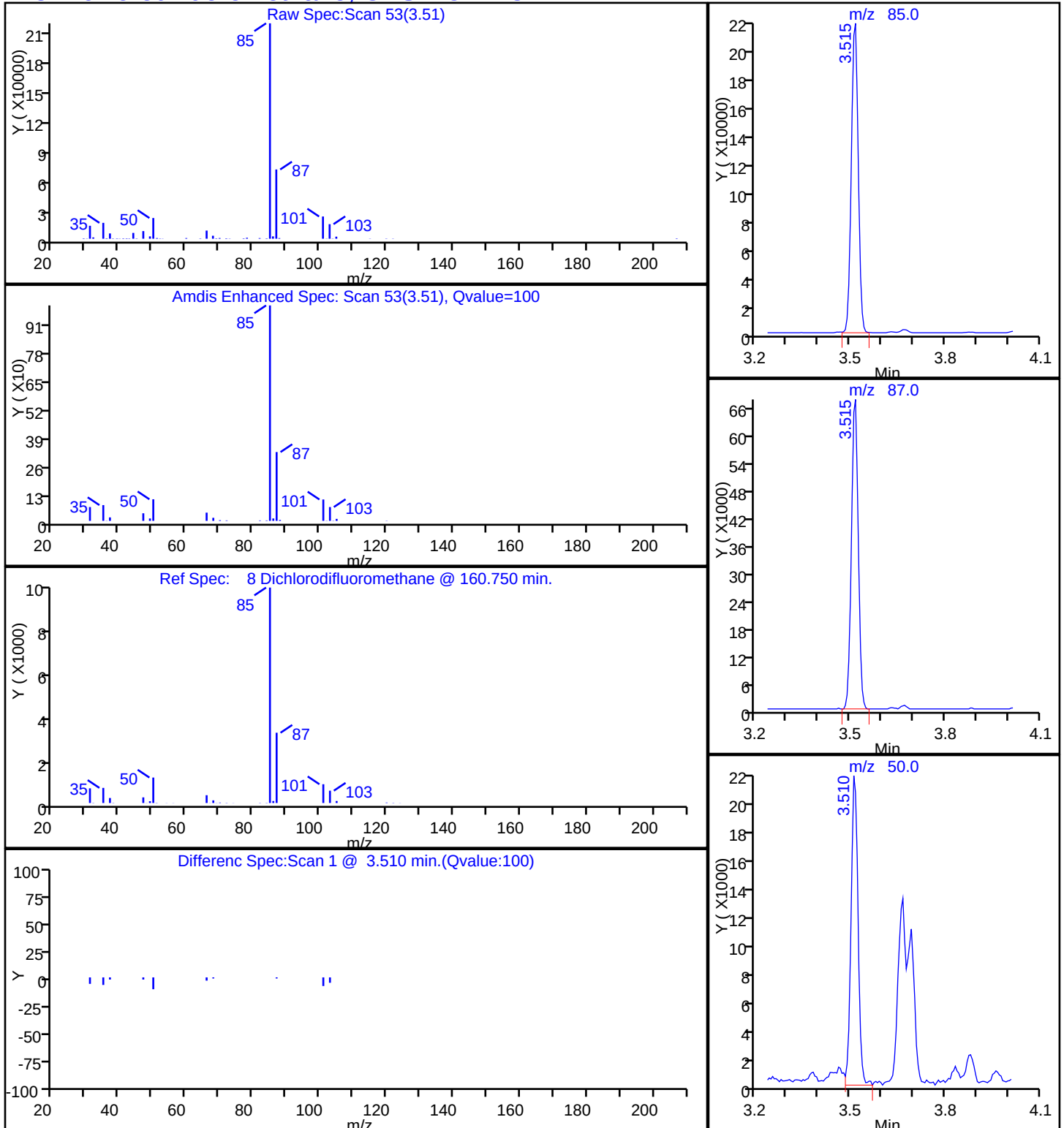
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D

Injection Date: 04-Apr-2017 15:51:30

Instrument ID: MG

Lims ID: 140-7685-A-2

Lab Sample ID: 140-7685-2

Client ID: H33-BA-1

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 10

Purge Vol: 500.000 mL

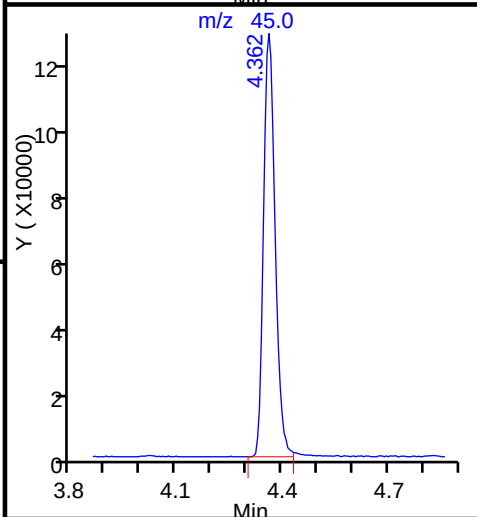
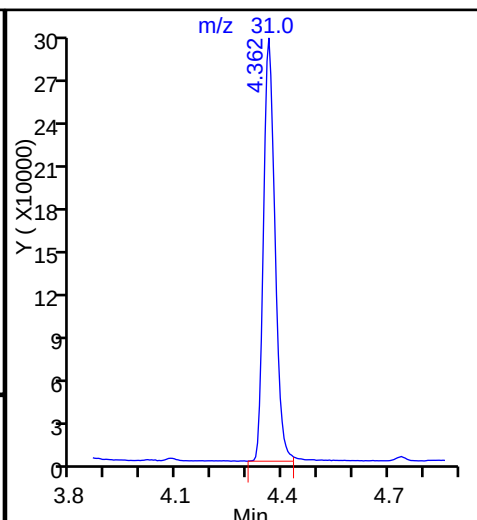
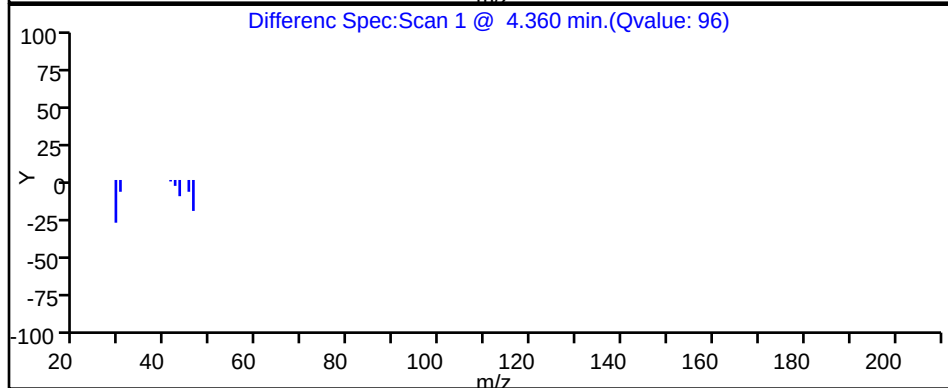
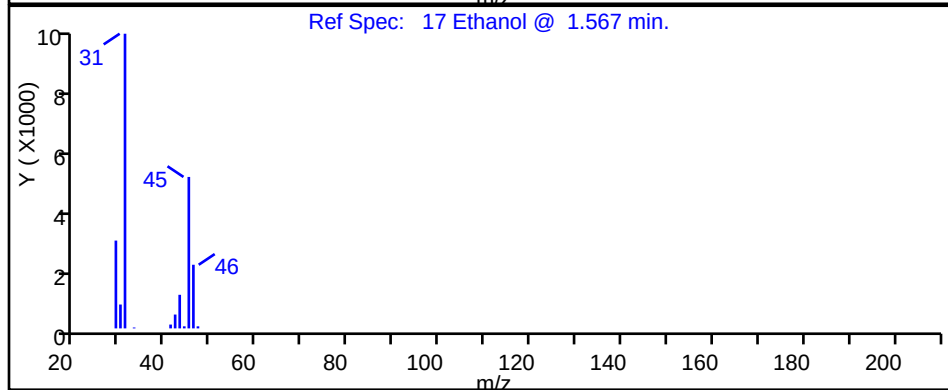
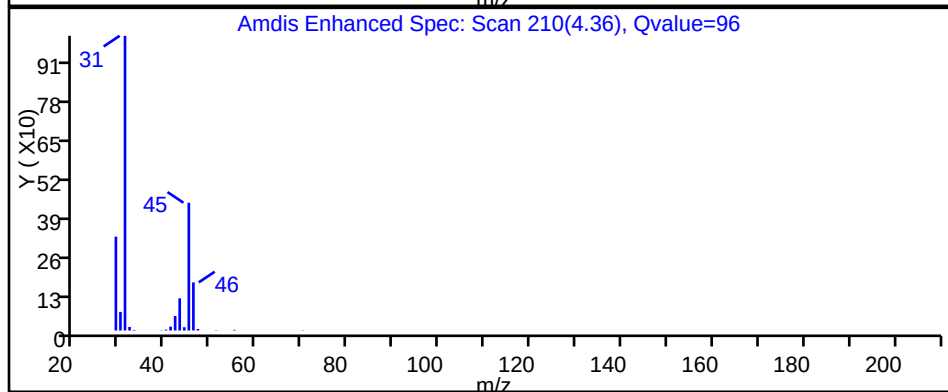
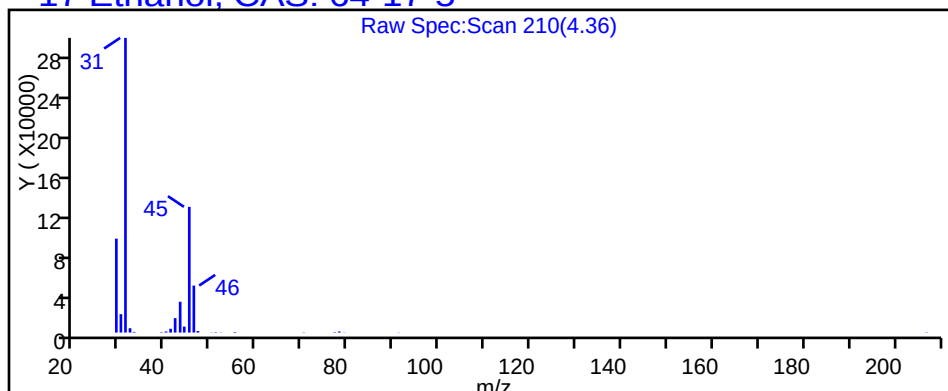
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D

Injection Date: 04-Apr-2017 15:51:30

Instrument ID: MG

Lims ID: 140-7685-A-2

Lab Sample ID: 140-7685-2

Client ID: H33-BA-1

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 10

Purge Vol: 500.000 mL

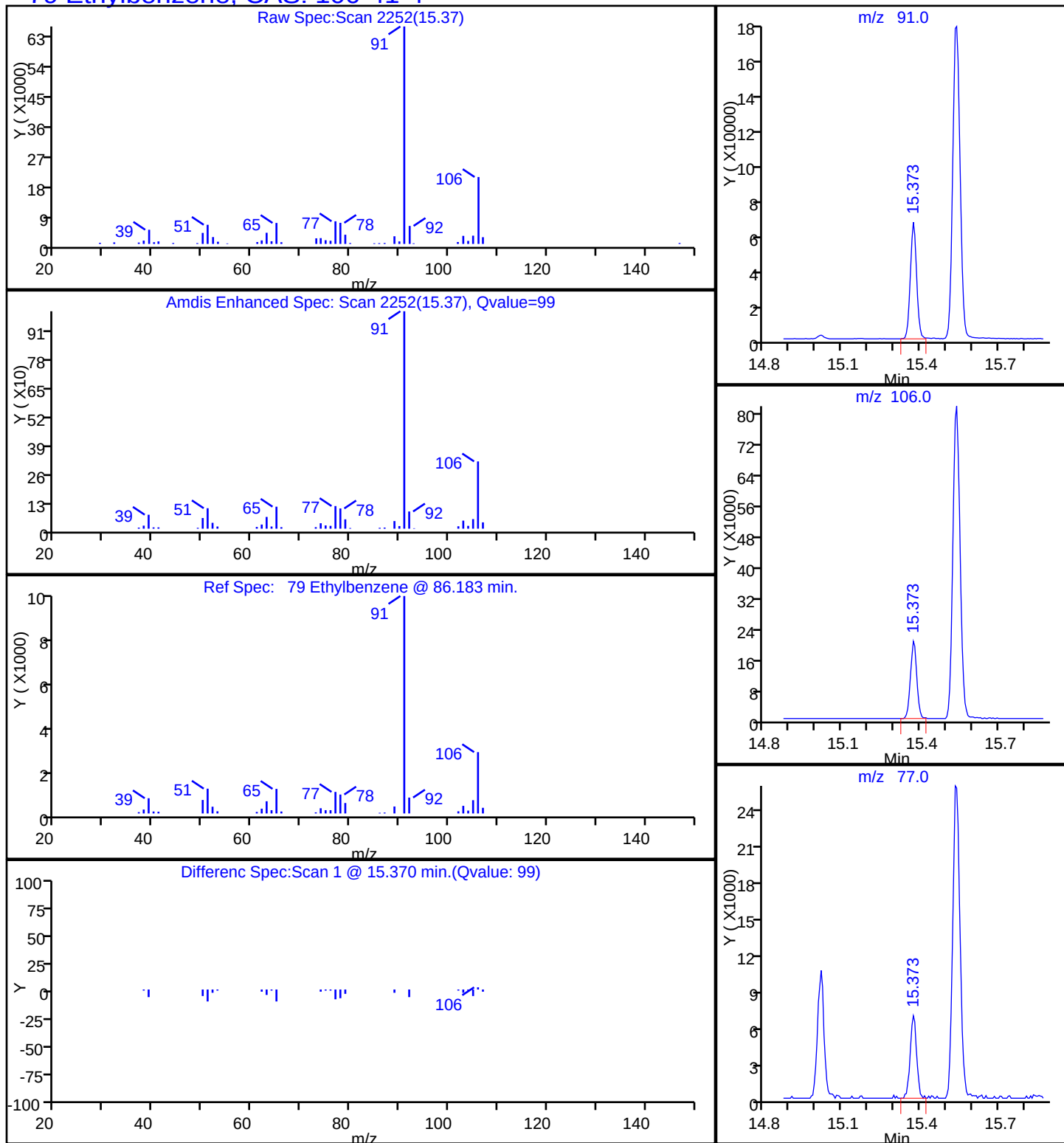
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

79 Ethylbenzene, CAS: 100-41-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D

Injection Date: 04-Apr-2017 15:51:30

Instrument ID: MG

Lims ID: 140-7685-A-2

Lab Sample ID: 140-7685-2

Client ID: H33-BA-1

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 10

Purge Vol: 500.000 mL

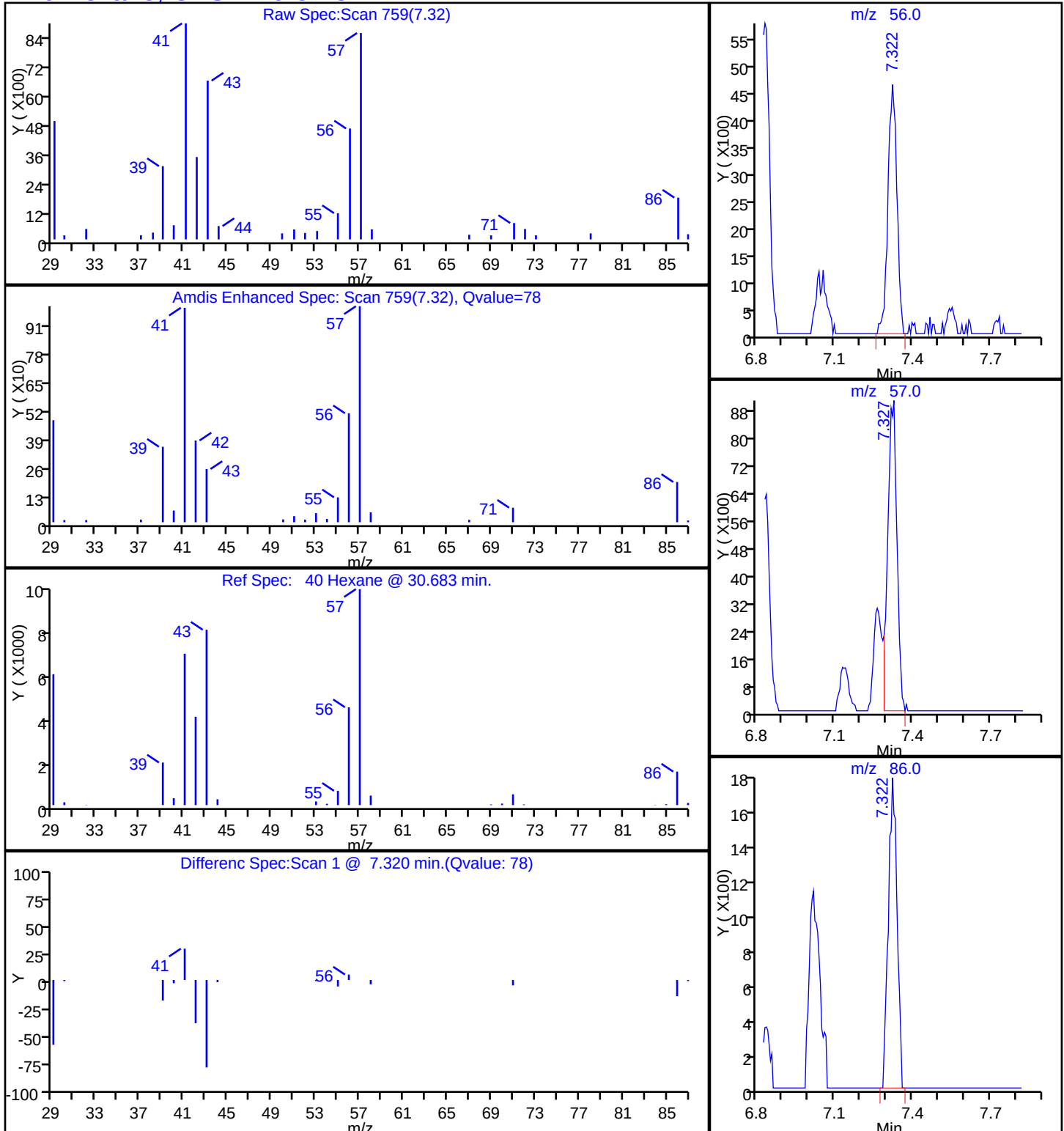
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D

Injection Date: 04-Apr-2017 15:51:30

Instrument ID: MG

Lims ID: 140-7685-A-2

Lab Sample ID: 140-7685-2

Client ID: H33-BA-1

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 10

Purge Vol: 500.000 mL

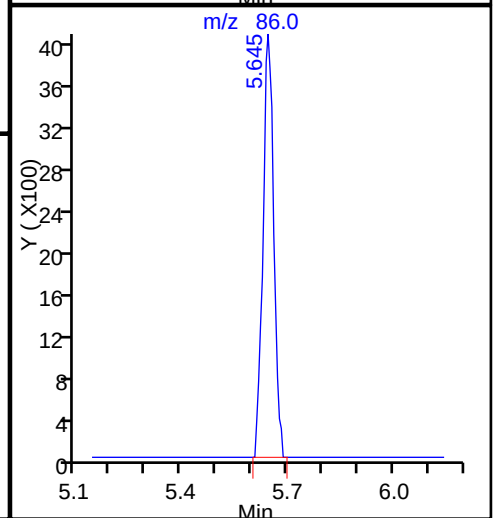
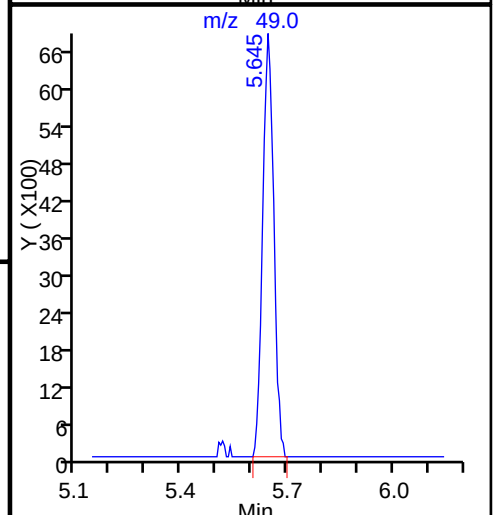
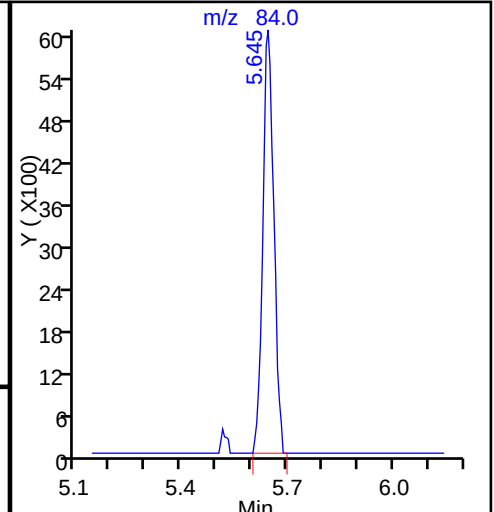
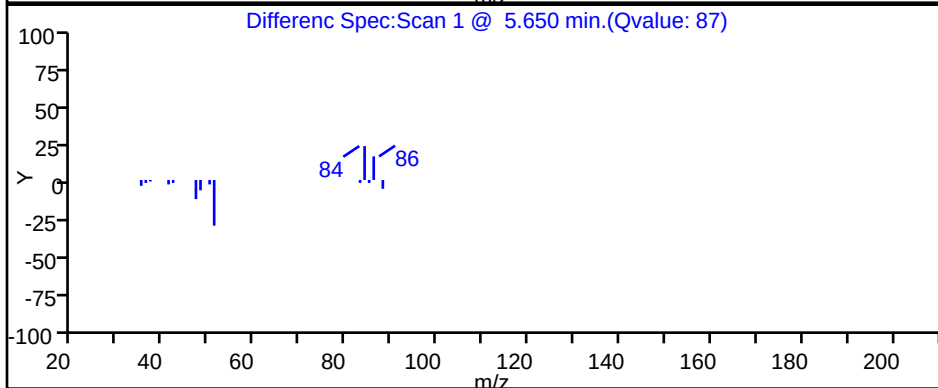
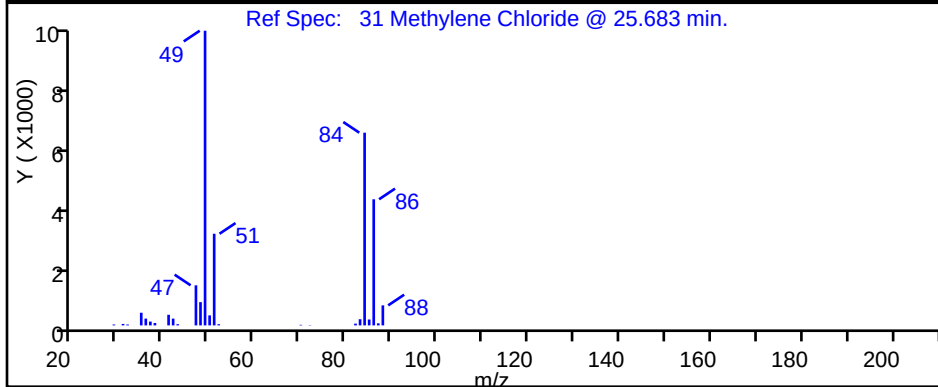
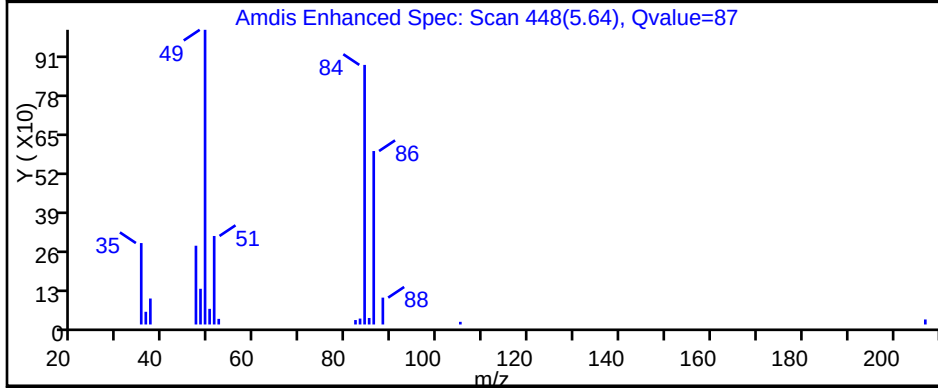
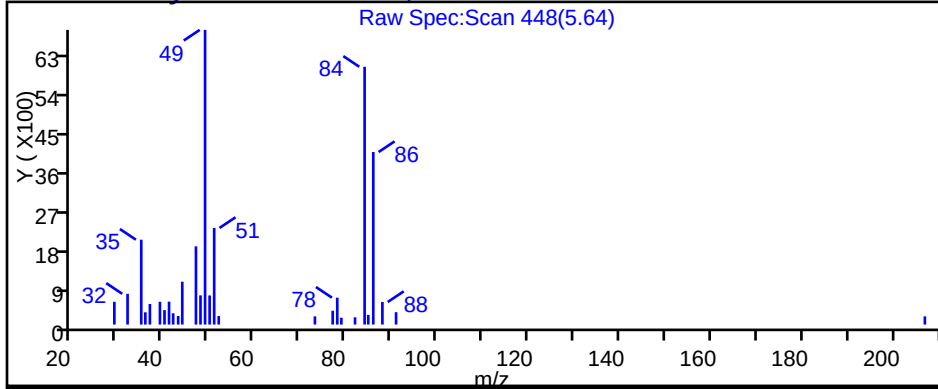
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D

Injection Date: 04-Apr-2017 15:51:30

Instrument ID: MG

Lims ID: 140-7685-A-2

Lab Sample ID: 140-7685-2

Client ID: H33-BA-1

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 10

Purge Vol: 500.000 mL

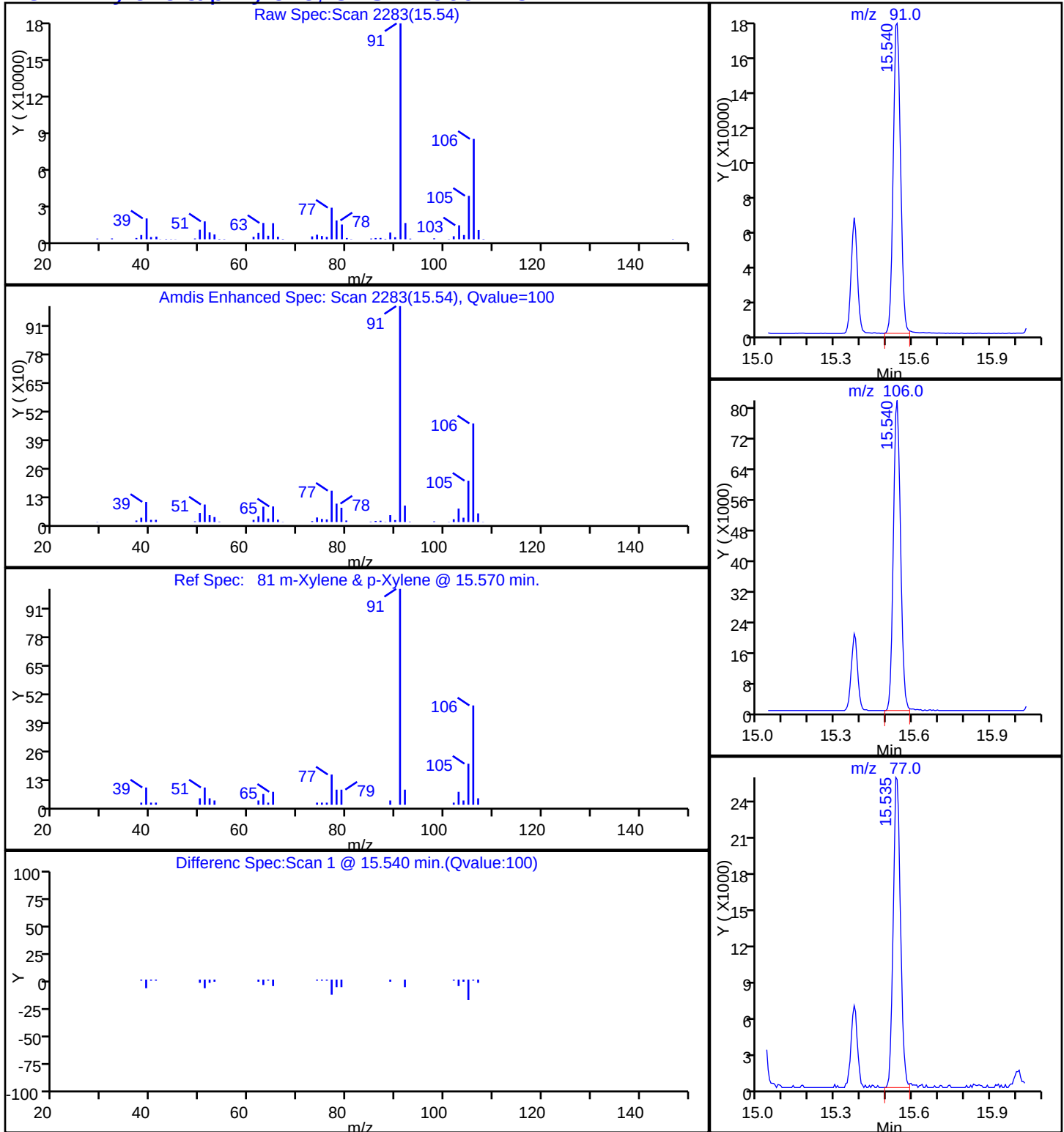
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D

Injection Date: 04-Apr-2017 15:51:30

Instrument ID: MG

Lims ID: 140-7685-A-2

Lab Sample ID: 140-7685-2

Client ID: H33-BA-1

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 10

Purge Vol: 500.000 mL

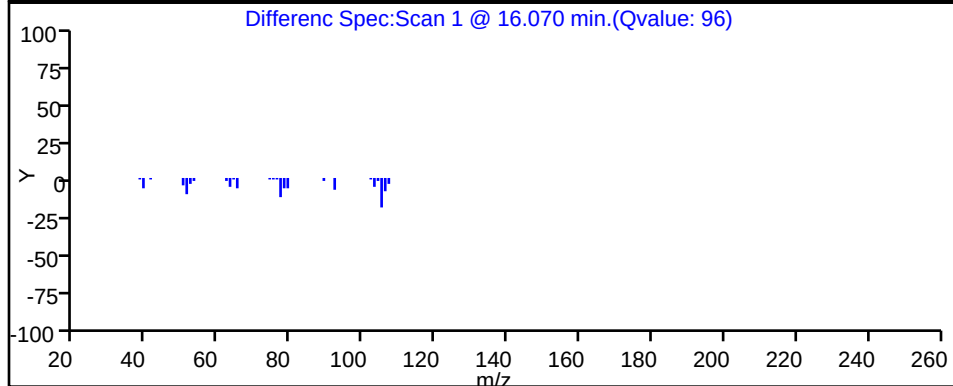
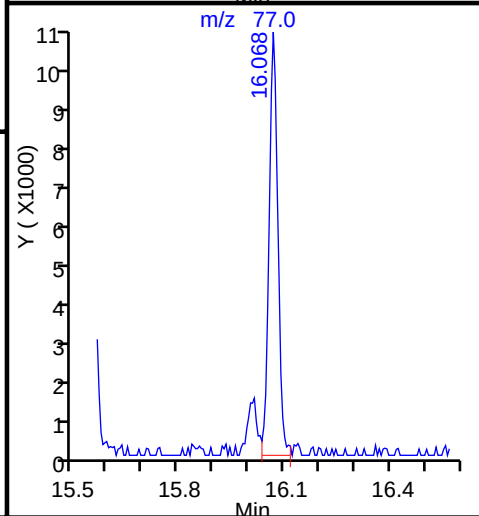
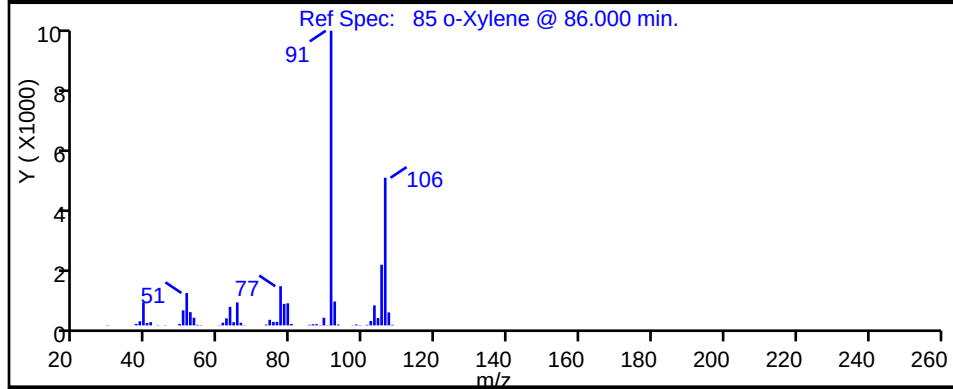
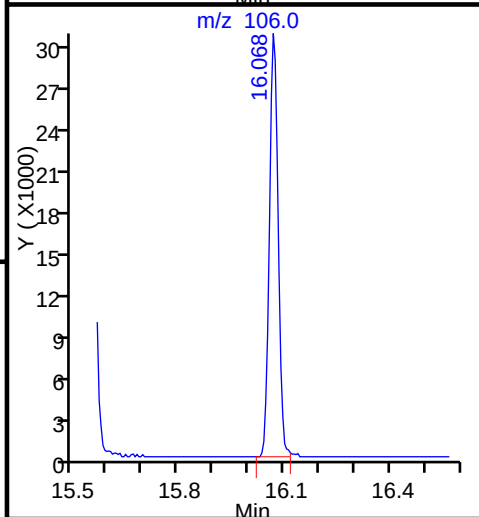
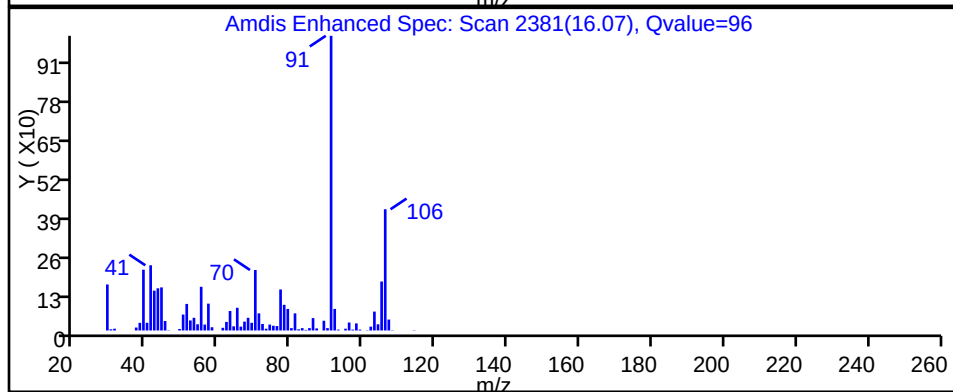
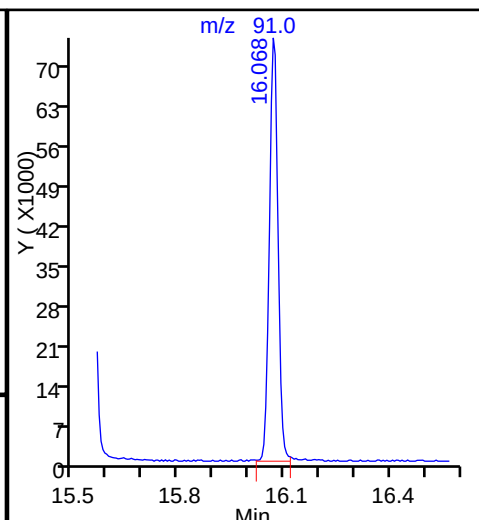
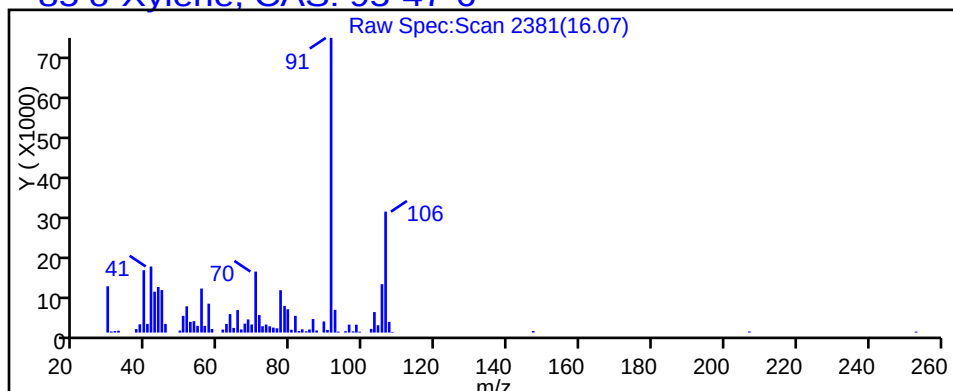
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D

Injection Date: 04-Apr-2017 15:51:30

Instrument ID: MG

Lims ID: 140-7685-A-2

Lab Sample ID: 140-7685-2

Client ID: H33-BA-1

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 10

Purge Vol: 500.000 mL

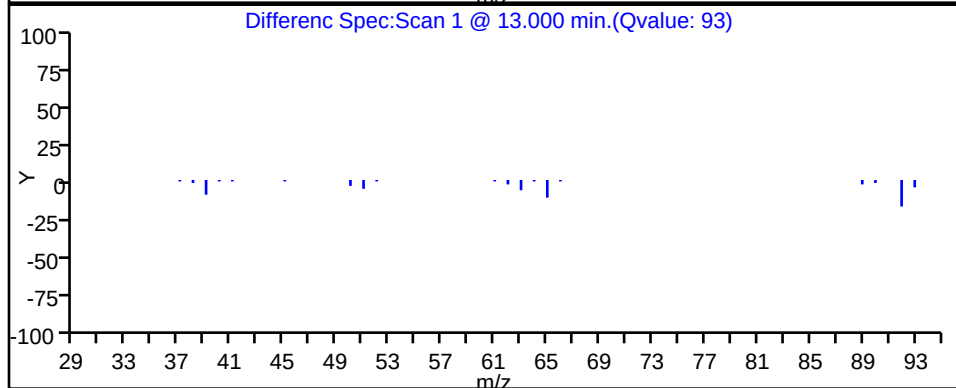
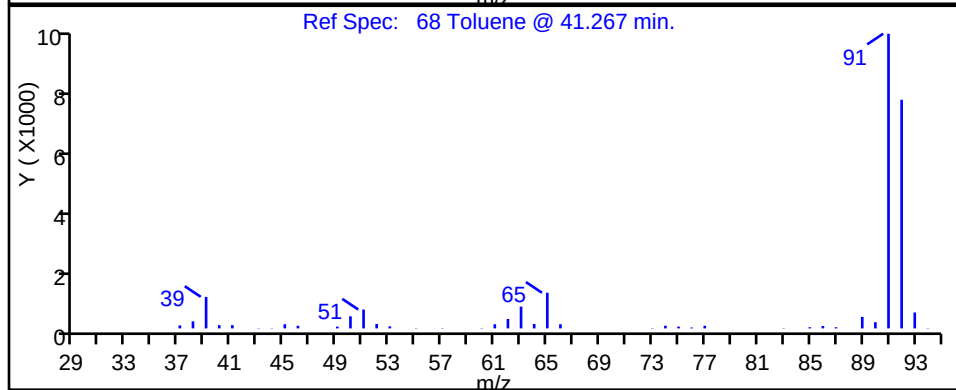
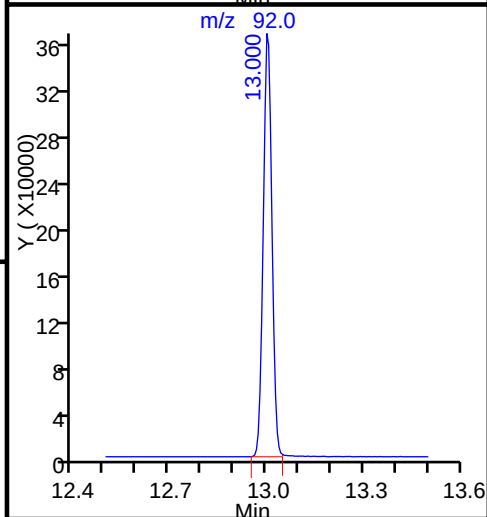
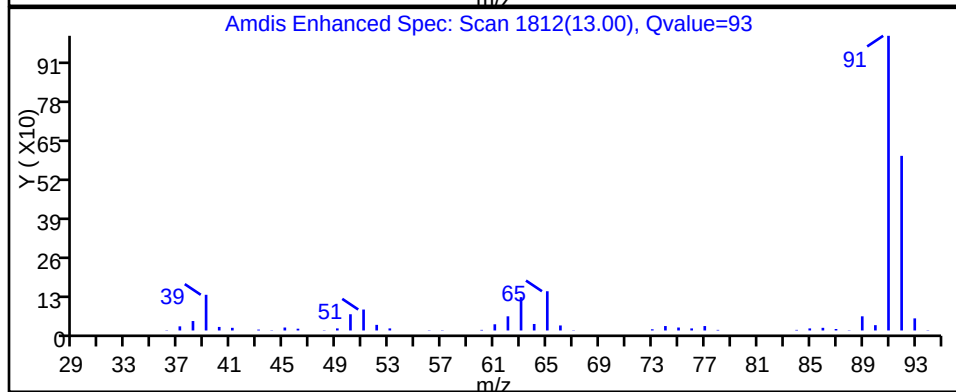
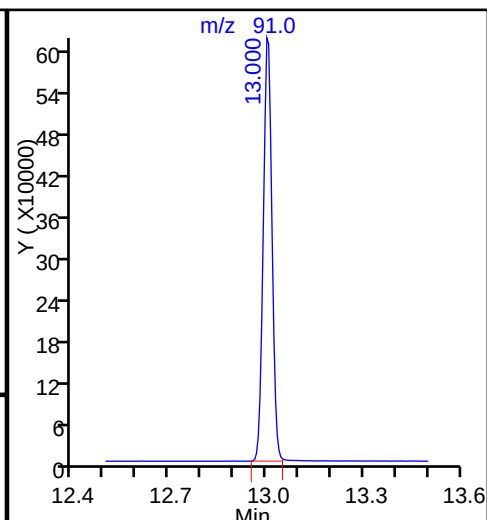
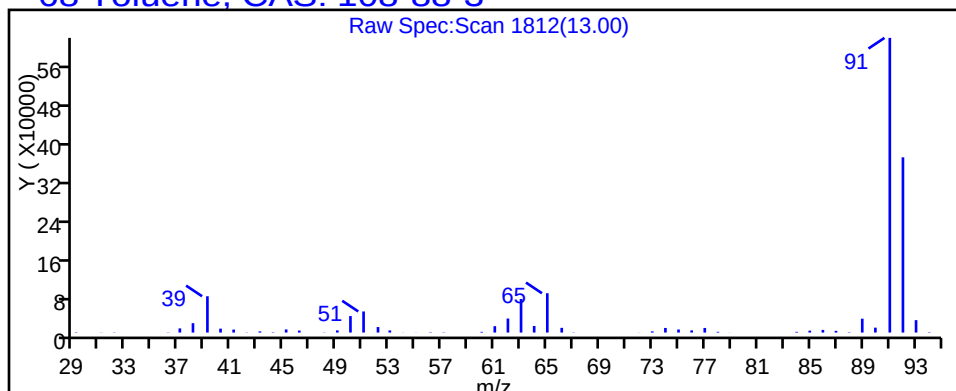
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D

Injection Date: 04-Apr-2017 15:51:30

Instrument ID: MG

Lims ID: 140-7685-A-2

Lab Sample ID: 140-7685-2

Client ID: H33-BA-1

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 10

Purge Vol: 500.000 mL

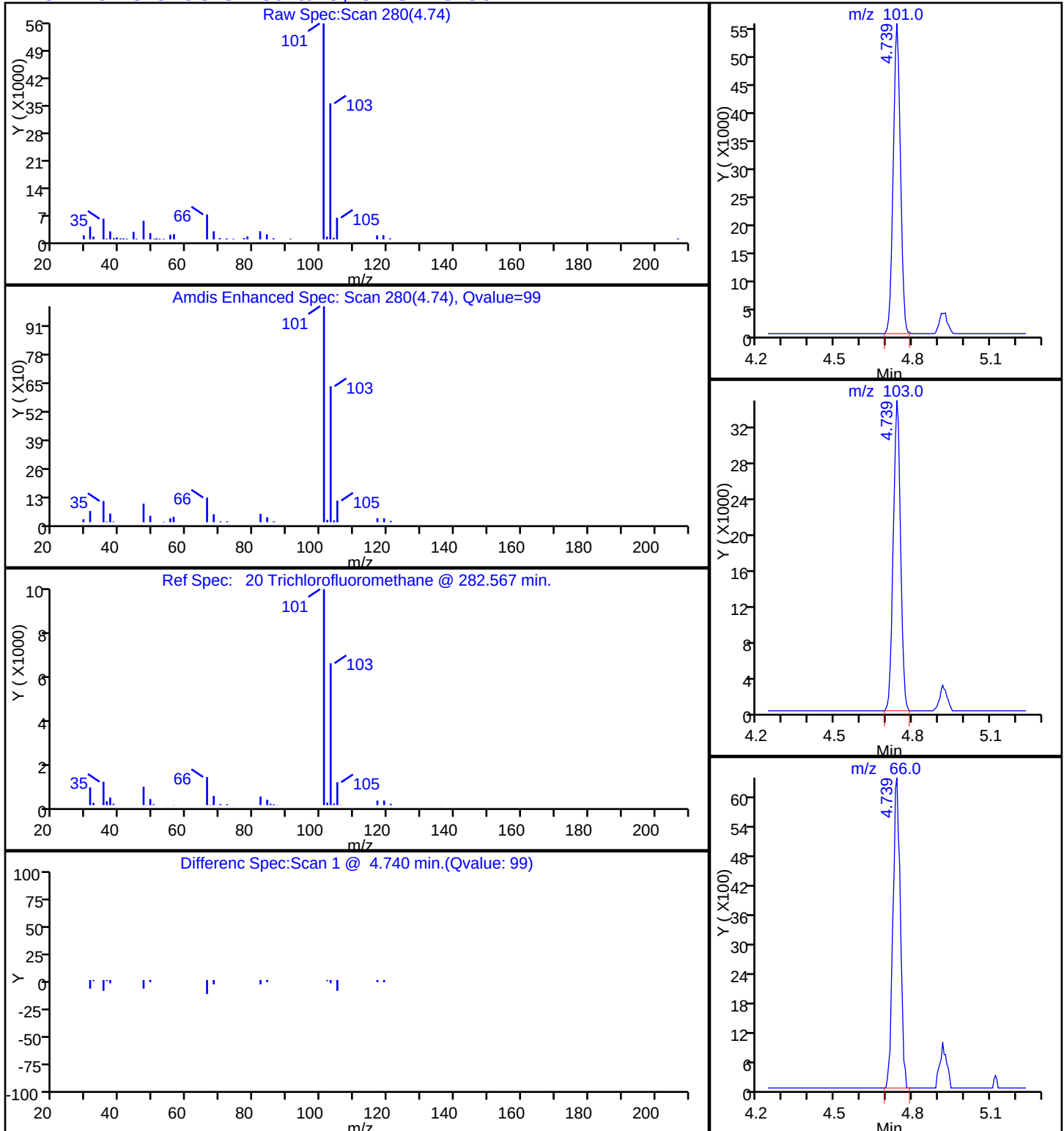
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P102.D

Injection Date: 04-Apr-2017 15:51:30

Instrument ID: MG

Lims ID: 140-7685-A-2

Lab Sample ID: 140-7685-2

Client ID: H33-BA-1

Operator ID: 7126

ALS Bottle#: 2 Worklist Smp#: 10

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

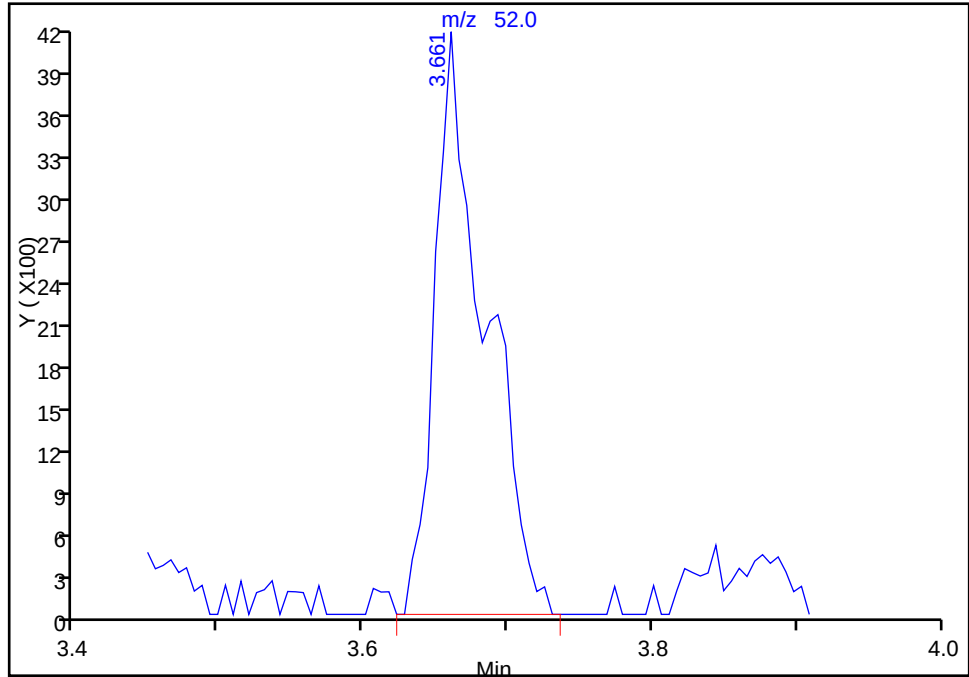
Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

Signal: 1

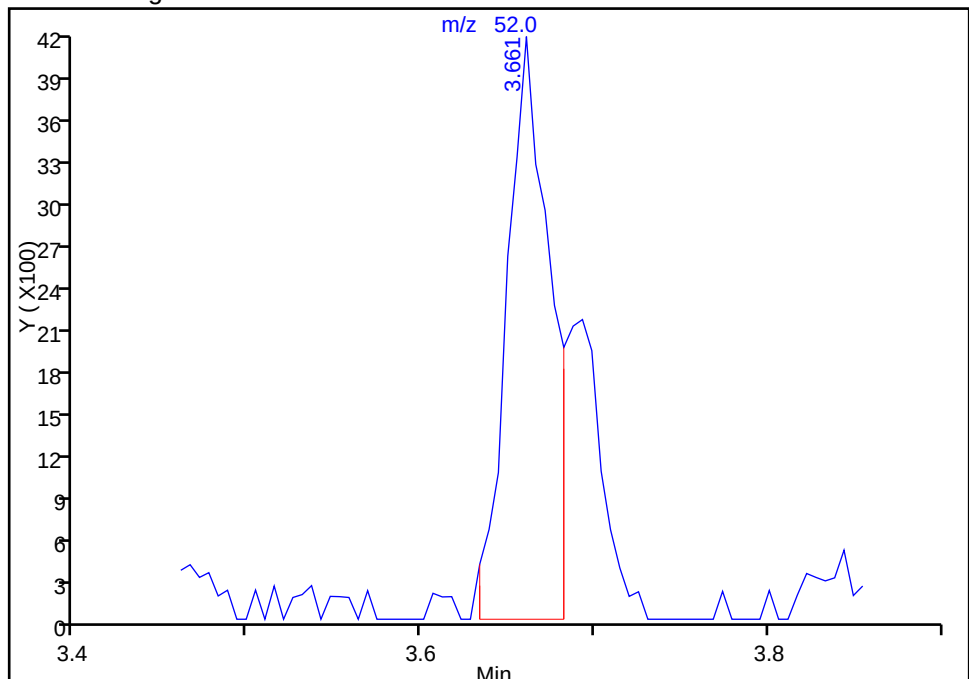
RT: 3.66
Area: 10092
Amount: 0.568738
Amount Units: ppb v/v

Processing Integration Results



RT: 3.66
Area: 7305
Amount: 0.411676
Amount Units: ppb v/v

Manual Integration Results



Reviewer: tajh, 05-Apr-2017 10:01:32

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H33-BA-2 Lab Sample ID: 140-7685-3
 Matrix: Air Lab File ID: GD04P103.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 08:32
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 16:41
 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.: 10155 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	0.58		0.080	
106-93-4	1,2-Dibromoethane	187.87	ND		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.080	
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	
78-87-5	1,2-Dichloropropane	112.99	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.14		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.080	
123-91-1	1,4-Dioxane	88.11	ND		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	0.75		0.20	
78-93-3	2-Butanone	72.11	1.1		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	0.56		0.080	
100-44-7	Benzyl chloride	126.58	ND		0.16	
75-27-4	Bromodichloromethane	163.83	ND		0.080	
75-25-2	Bromoform	252.75	ND		0.080	
74-83-9	Bromomethane	94.94	ND		0.080	
56-23-5	Carbon tetrachloride	153.81	0.073		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	0.092		0.080	
74-87-3	Chloromethane	50.49	0.38		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	0.20		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H33-BA-2 Lab Sample ID: 140-7685-3
 Matrix: Air Lab File ID: GD04P103.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 08:32
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 16:41
 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.: 10155 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	1.0		0.080	
64-17-5	Ethanol	46.07	16		2.0	
100-41-4	Ethylbenzene	106.17	0.63		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	0.35		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	2.4		0.080	
95-47-6	o-Xylene	106.17	0.87		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	10		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	0.38		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1

SDG No.: _____

Client Sample ID: H33-BA-2 Lab Sample ID: 140-7685-3

Matrix: Air Lab File ID: GD04P103.D

Analysis Method: TO 15 LL Date Collected: 03/28/2017 08:32

Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 16:41

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.: 10155 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	2.8		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.68		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	3.5		0.93	
78-93-3	2-Butanone	72.11	3.1		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	1.8		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.46		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	0.45		0.39	
74-87-3	Chloromethane	50.49	0.78		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	0.68		0.69	

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H33-BA-2 Lab Sample ID: 140-7685-3
 Matrix: Air Lab File ID: GD04P103.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 08:32
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 16:41
 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.: 10155 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	5.0		0.40	
64-17-5	Ethanol	46.07	31		3.8	
100-41-4	Ethylbenzene	106.17	2.7		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	1.2		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	11		0.35	
95-47-6	o-Xylene	106.17	3.8		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	39		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	2.1		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D
 Lims ID: 140-7685-A-3
 Client ID: H33-BA-2
 Sample Type: Client
 Inject. Date: 04-Apr-2017 16:41:30 ALS Bottle#: 3 Worklist Smp#: 11
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004508-011
 Misc. Info.: 140-7685-a-3
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 05-Apr-2017 10:01:21 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 09:55:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.980	7.980	0.000	73	254662	4.00	
* 2 1,4-Difluorobenzene	114	10.142	10.148	-0.006	95	1268055	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.017	15.022	-0.005	89	1268063	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.688	16.694	-0.006	93	1038694	4.14	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	274463	1.02	
9 Chloromethane	52	3.666	3.666	0.000	99	6825	0.3764	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.677	3.671	0.006	43	2434	0.0152	
17 Ethanol	31	4.361	4.356	0.005	96	421955	16.5	
20 Trichlorofluoromethane	101	4.739	4.744	-0.005	99	102602	0.3822	
29 2-Methyl-2-propanol	59	5.483	5.456	0.027	41	2178	0.0211	
30 1,1,2-Trichloro-1,2,2-trif	101	5.515	5.521	-0.006	93	9837	0.0628	
31 Methylene Chloride	84	5.656	5.650	0.006	88	11300	0.1845	
39 2-Butanone (MEK)	72	7.268	7.268	0.000	98	30806	1.06	
40 Hexane	56	7.322	7.327	-0.005	81	17497	0.3479	
44 Chloroform	83	8.001	8.007	-0.006	93	16368	0.0916	
49 Benzene	78	9.565	9.565	0.000	96	120833	0.5609	
50 Cyclohexane	69	9.576	9.576	0.000	81	7128	0.1966	M
51 Carbon tetrachloride	117	9.597	9.598	-0.001	93	16517	0.0734	
56 Isooctane	57	10.401	10.396	0.005	95	240292	0.7515	
62 1,4-Dioxane	88	11.145	11.129	0.016	72	1520	0.0521	
65 4-Methyl-2-pentanone (MIBK	43	12.127	12.116	0.010	94	9222	0.0745	
68 Toluene	91	13.005	13.006	-0.001	94	2621787	10.4	
76 Tetrachloroethene	129	14.181	14.181	0.000	64	6934	0.0600	
79 Ethylbenzene	91	15.373	15.378	-0.005	99	222994	0.6319	
81 m-Xylene & p-Xylene	91	15.540	15.545	-0.005	99	692160	2.43	
85 o-Xylene	91	16.074	16.074	0.000	97	252537	0.8667	
92 1,3,5-Trimethylbenzene	120	17.476	17.481	-0.005	91	25870	0.1384	
96 1,2,4-Trimethylbenzene	105	17.939	17.940	-0.001	98	206562	0.5770	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D

Injection Date: 04-Apr-2017 16:41:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7685-A-3

Lab Sample ID: 140-7685-3

Worklist Smp#: 11

Client ID: H33-BA-2

Purge Vol: 500.000 mL

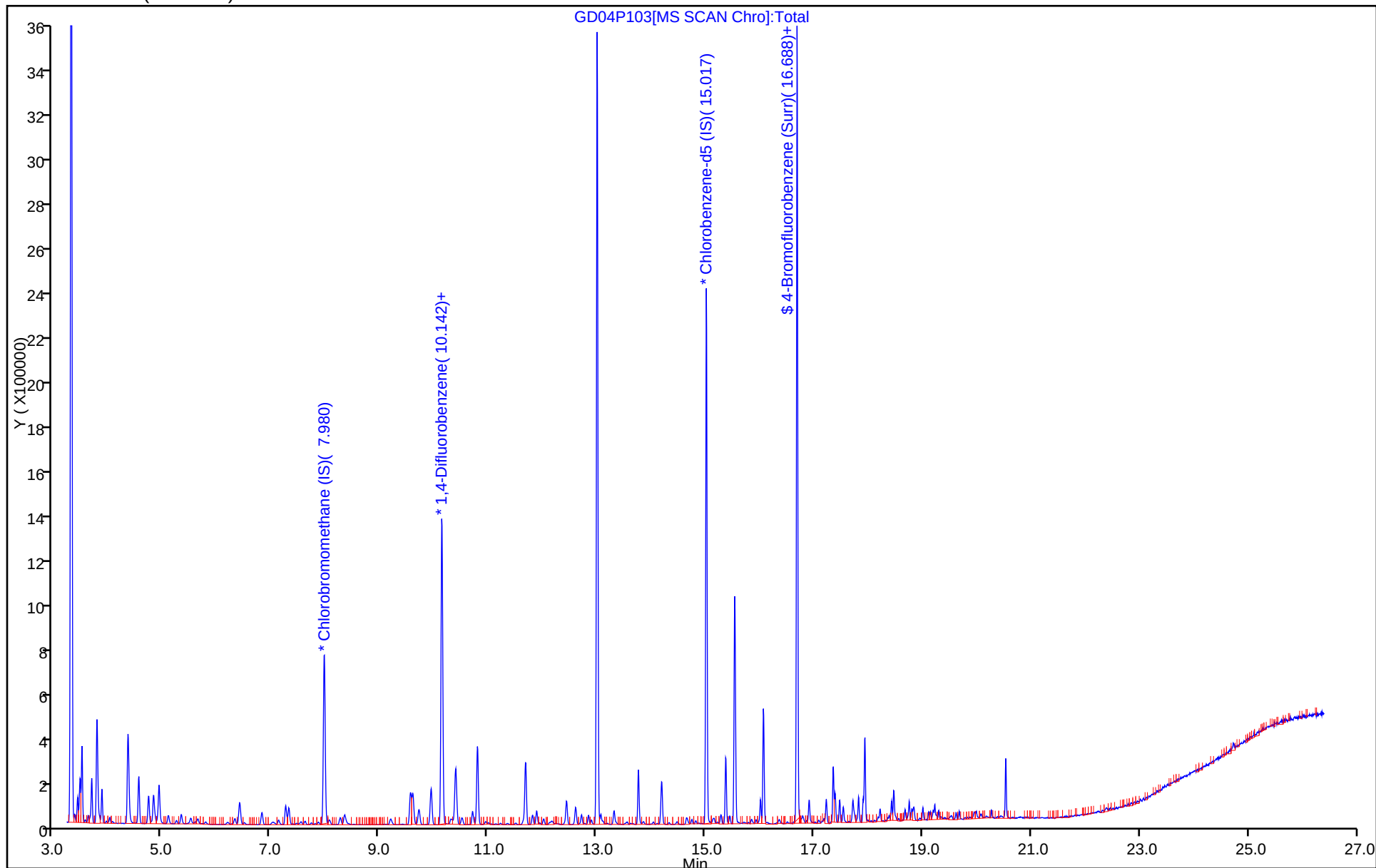
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D
Lims ID: 140-7685-A-3
Client ID: H33-BA-2
Sample Type: Client
Inject. Date: 04-Apr-2017 16:41:30 ALS Bottle#: 3 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004508-011
Misc. Info.: 140-7685-a-3
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 05-Apr-2017 10:01:21 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 09:55:33

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.14	103.62

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D

Injection Date: 04-Apr-2017 16:41:30

Instrument ID: MG

Lims ID: 140-7685-A-3

Lab Sample ID: 140-7685-3

Client ID: H33-BA-2

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 11

Purge Vol: 500.000 mL

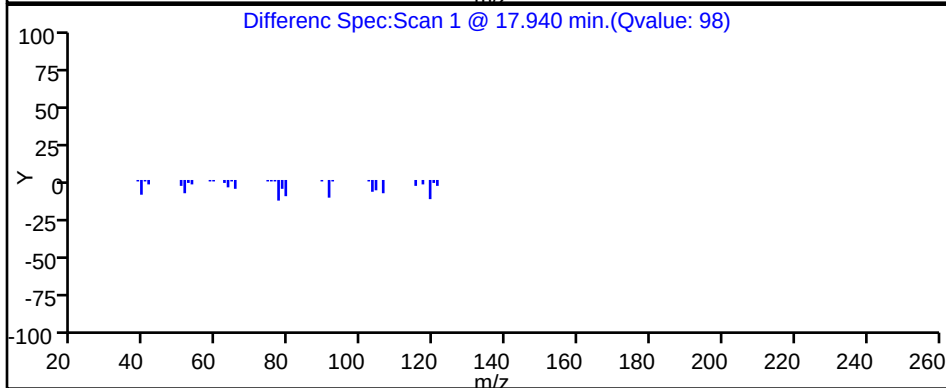
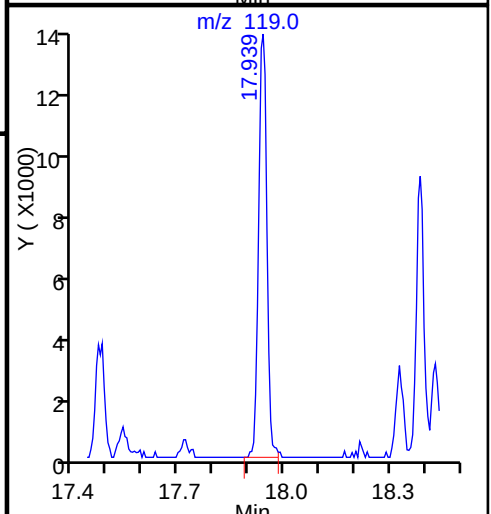
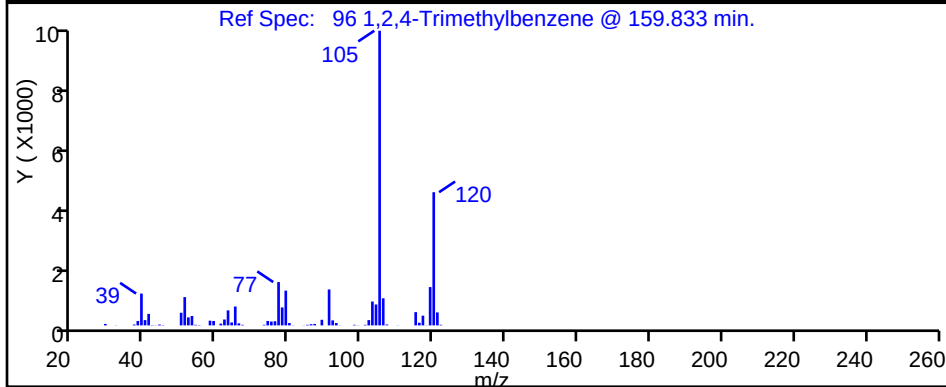
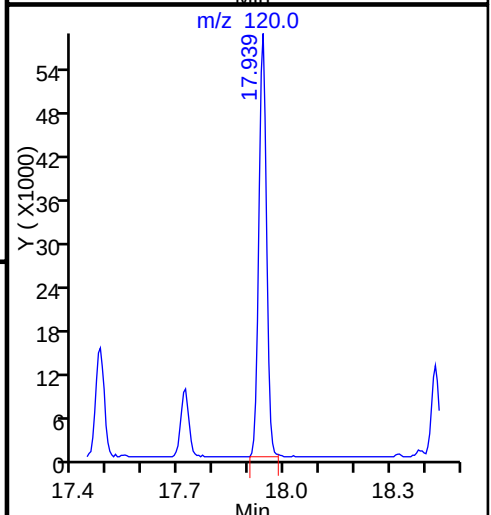
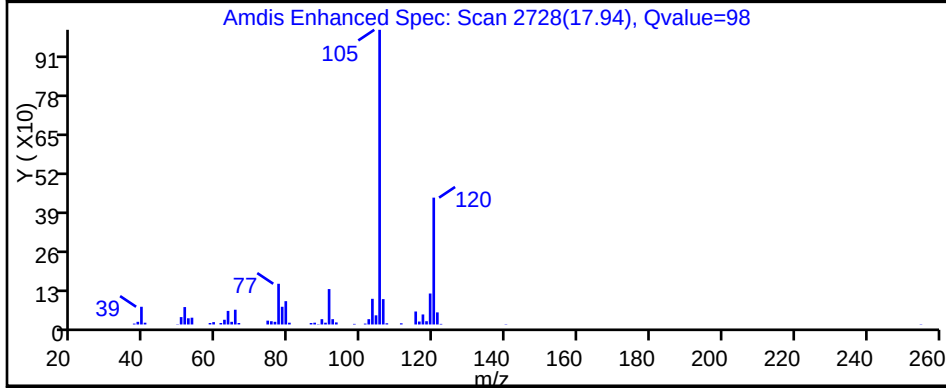
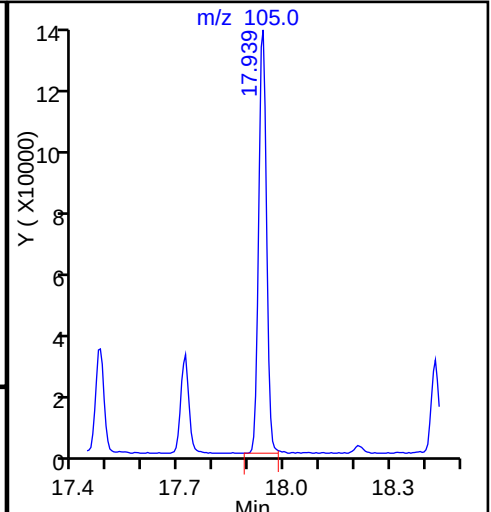
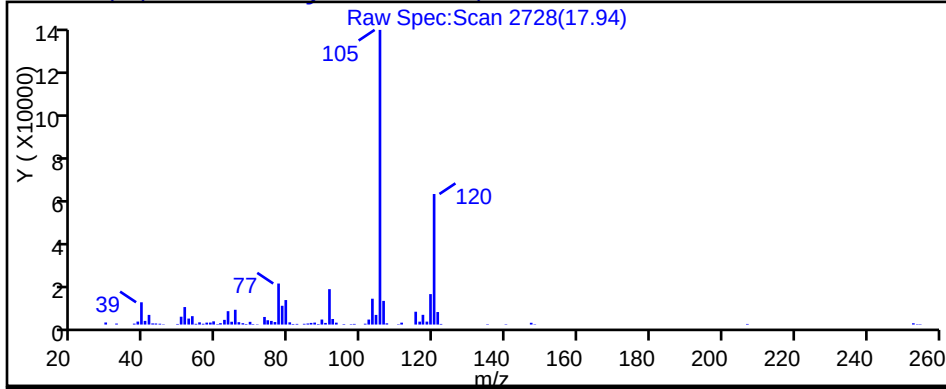
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

96 1,2,4-Trimethylbenzene, CAS: 95-63-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D

Injection Date: 04-Apr-2017 16:41:30

Instrument ID: MG

Lims ID: 140-7685-A-3

Lab Sample ID: 140-7685-3

Client ID: H33-BA-2

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 11

Purge Vol: 500.000 mL

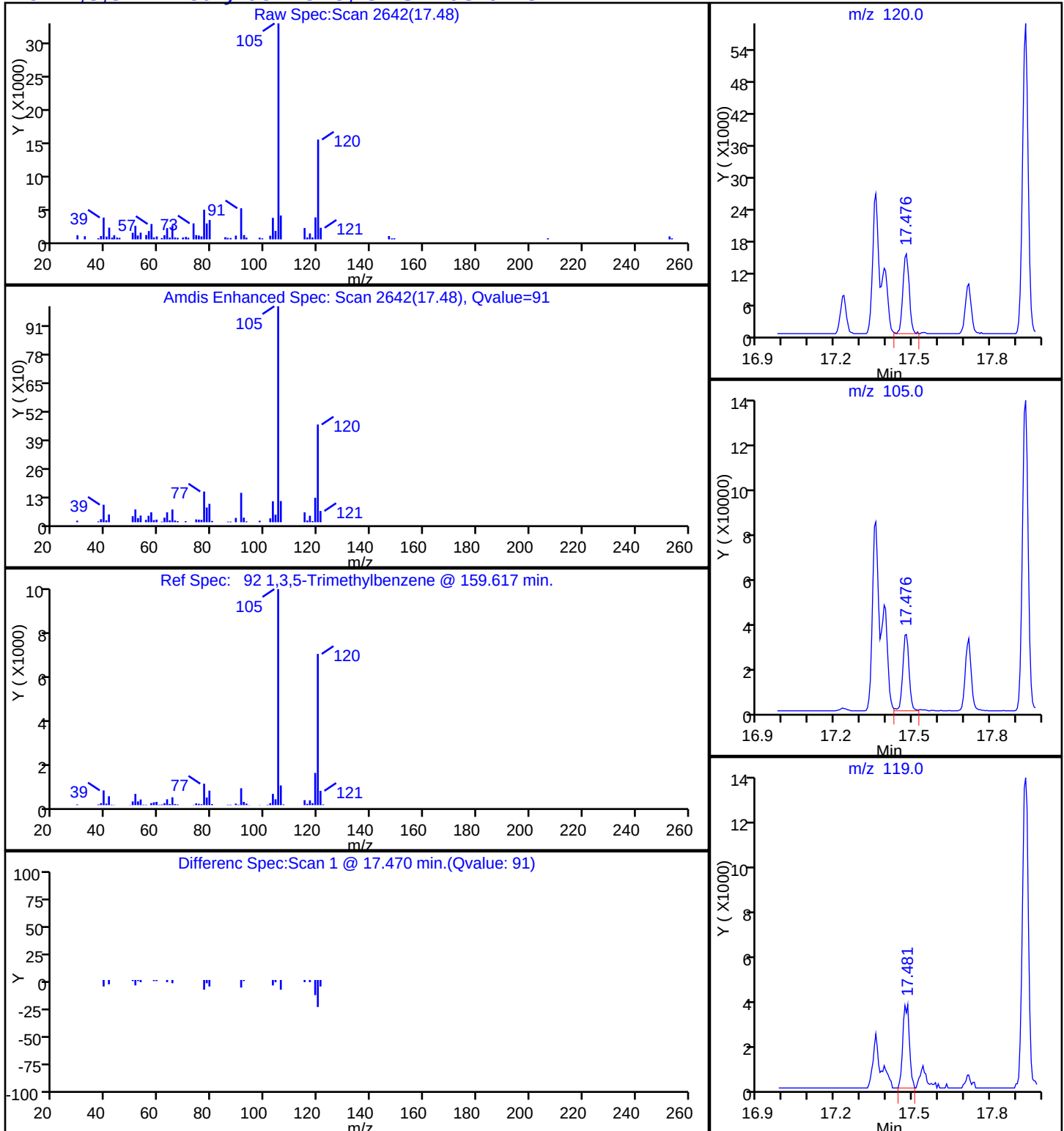
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

92 1,3,5-Trimethylbenzene, CAS: 108-67-8

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D

Injection Date: 04-Apr-2017 16:41:30

Instrument ID: MG

Lims ID: 140-7685-A-3

Lab Sample ID: 140-7685-3

Client ID: H33-BA-2

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 11

Purge Vol: 500.000 mL

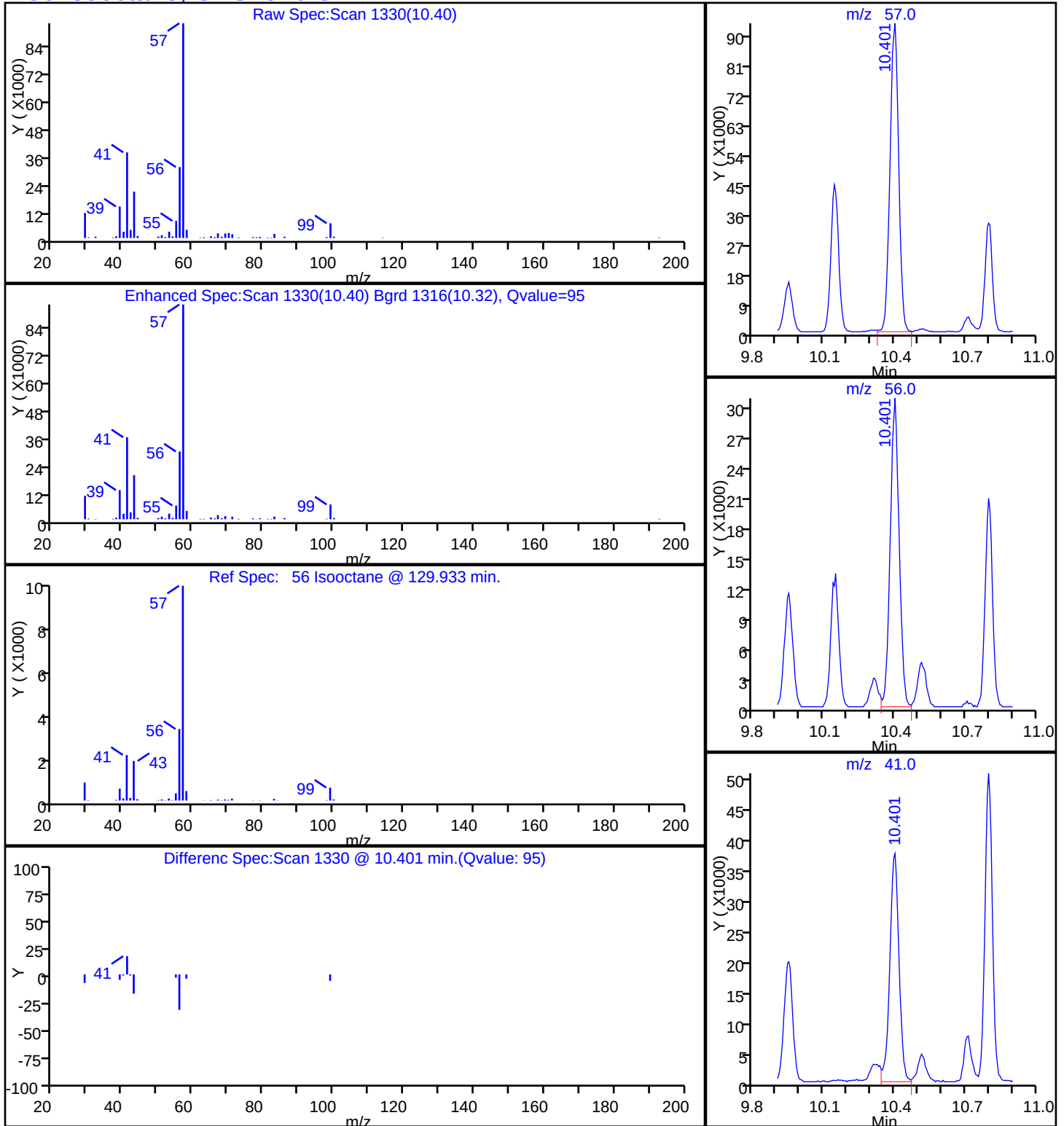
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

56 Isooctane, CAS: 540-84-1

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D

Injection Date: 04-Apr-2017 16:41:30

Instrument ID: MG

Lims ID: 140-7685-A-3

Lab Sample ID: 140-7685-3

Client ID: H33-BA-2

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 11

Purge Vol: 500.000 mL

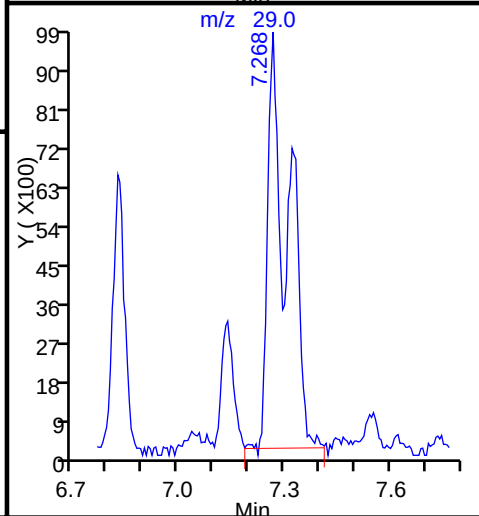
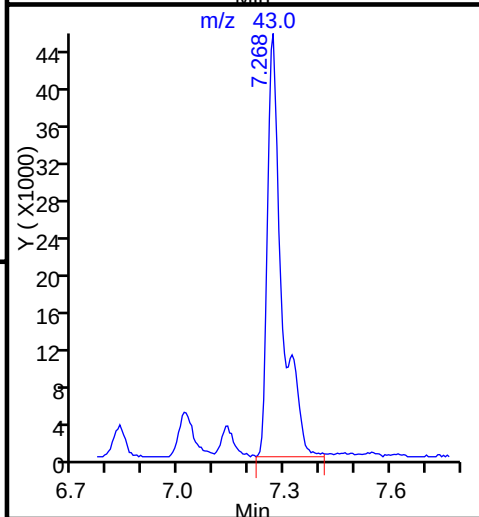
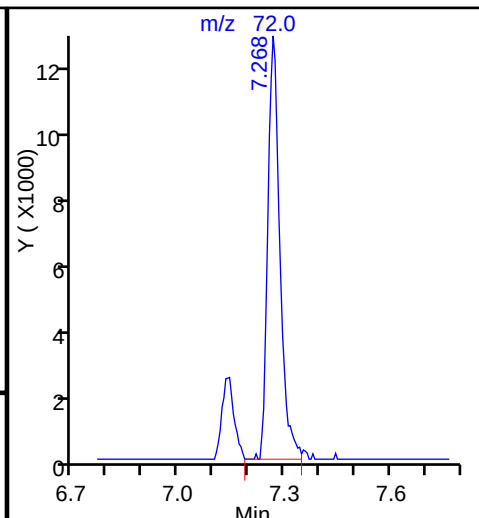
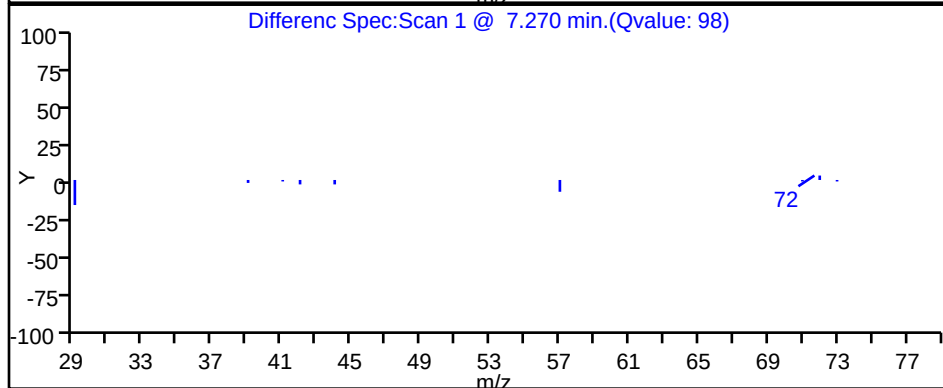
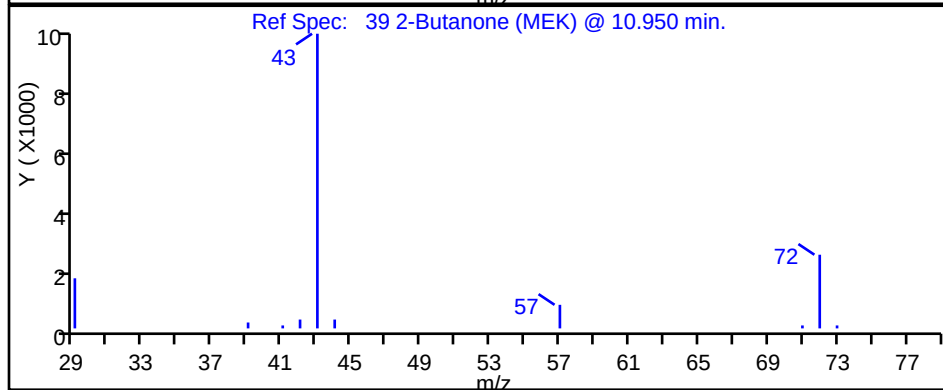
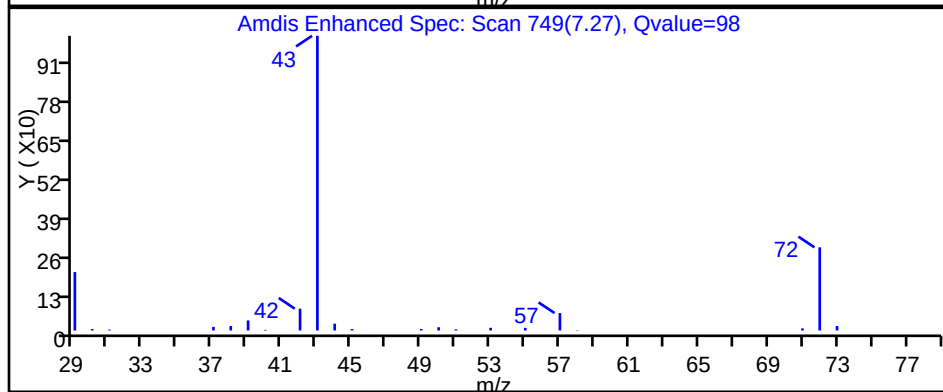
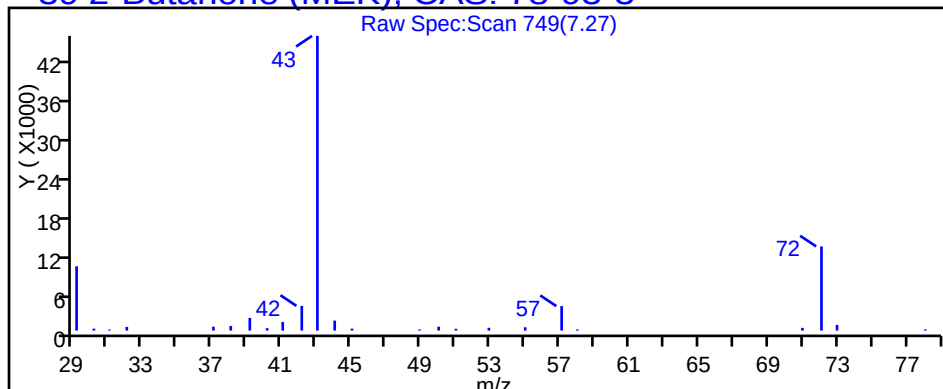
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D

Injection Date: 04-Apr-2017 16:41:30

Instrument ID: MG

Lims ID: 140-7685-A-3

Lab Sample ID: 140-7685-3

Client ID: H33-BA-2

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 11

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

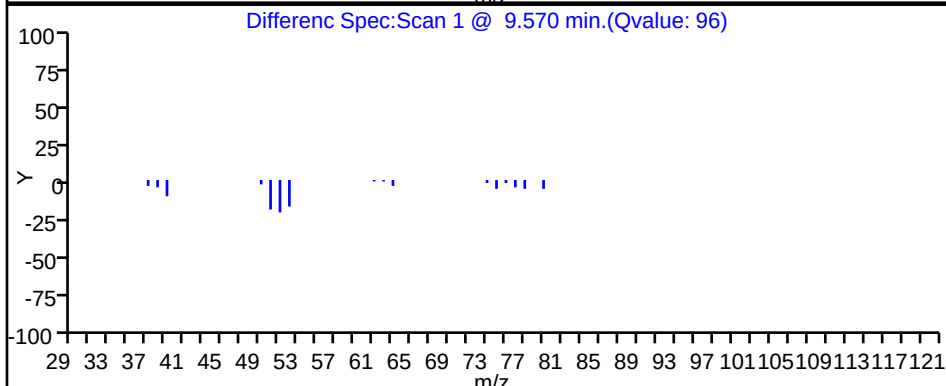
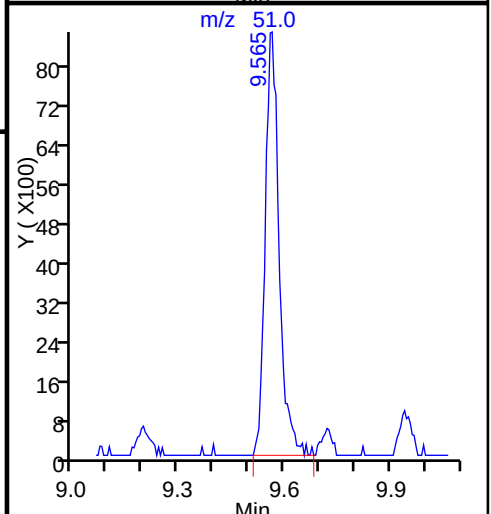
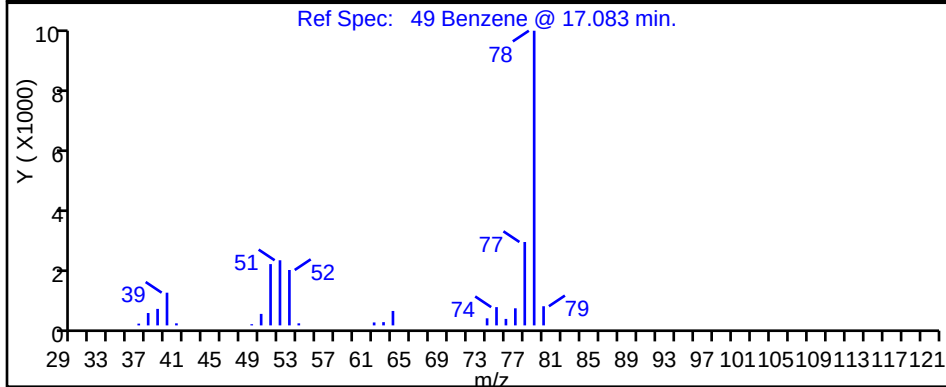
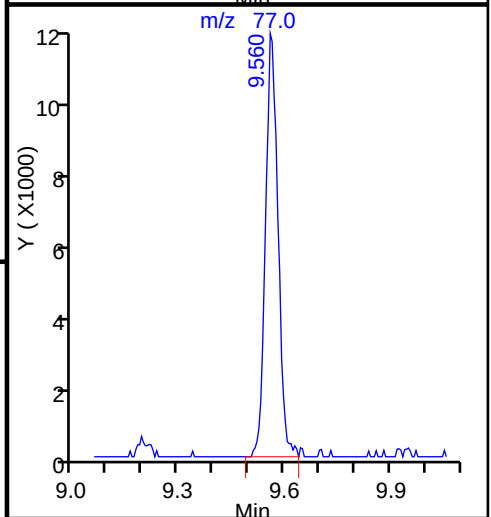
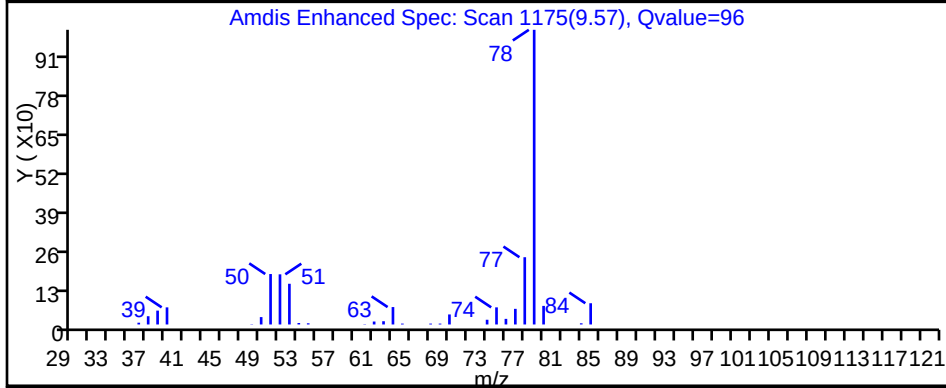
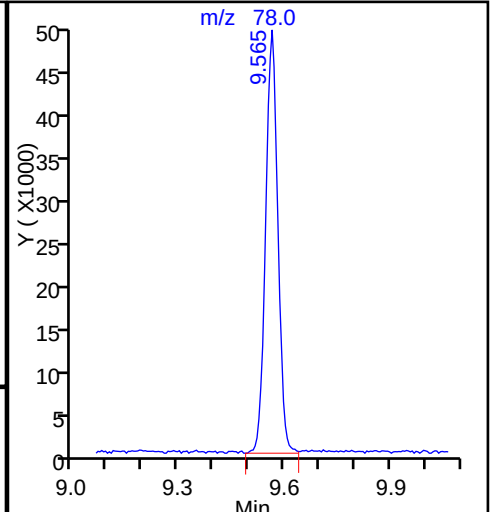
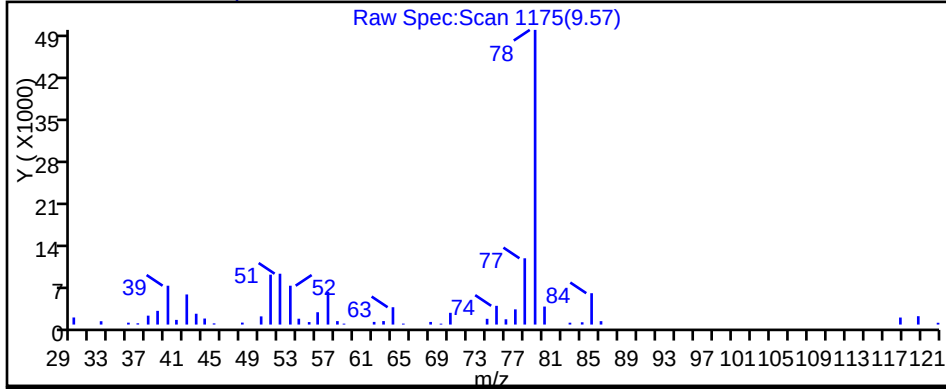
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D

Injection Date: 04-Apr-2017 16:41:30

Instrument ID: MG

Lims ID: 140-7685-A-3

Lab Sample ID: 140-7685-3

Client ID: H33-BA-2

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 11

Purge Vol: 500.000 mL

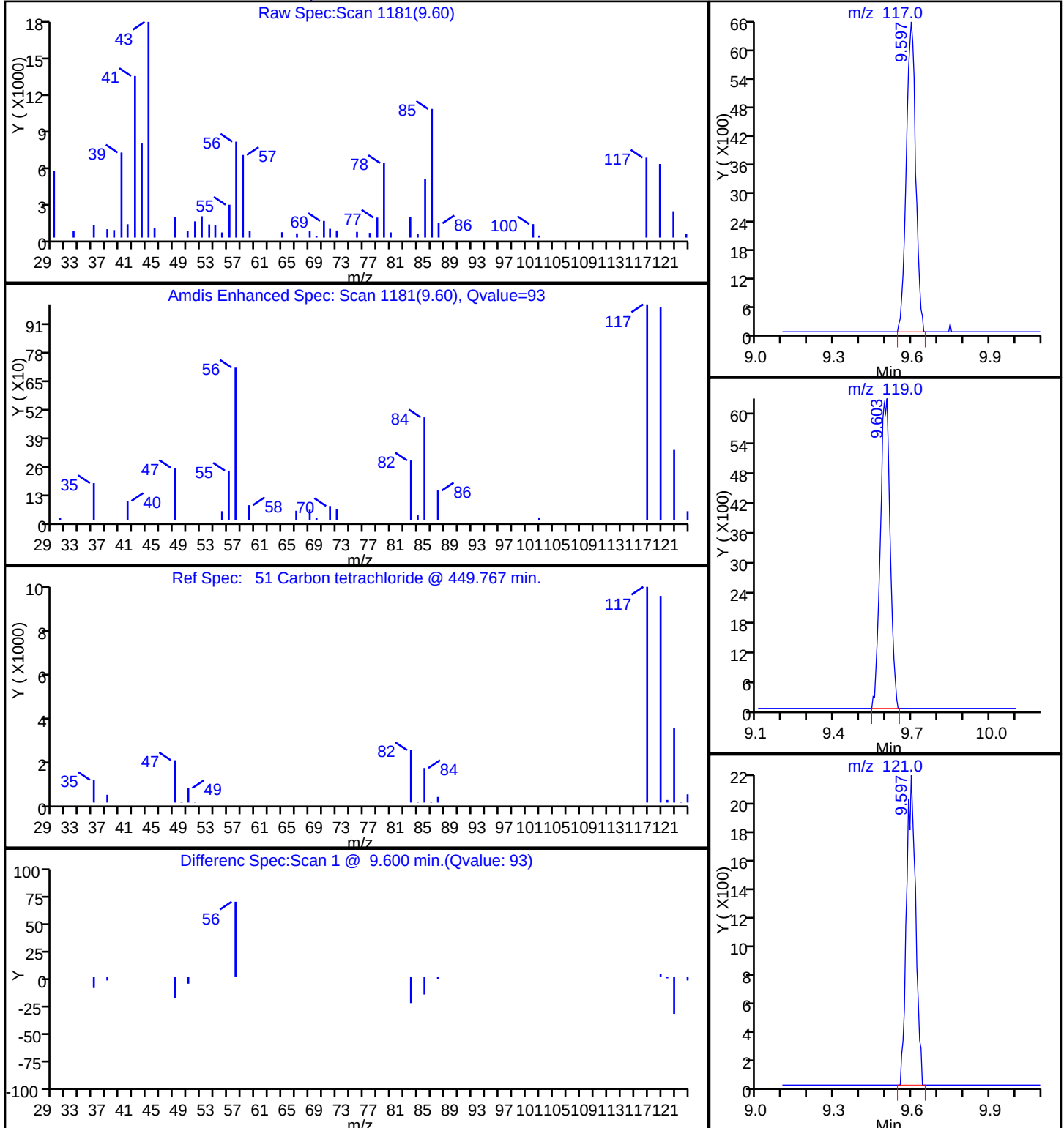
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D

Injection Date: 04-Apr-2017 16:41:30

Instrument ID: MG

Lims ID: 140-7685-A-3

Lab Sample ID: 140-7685-3

Client ID: H33-BA-2

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 11

Purge Vol: 500.000 mL

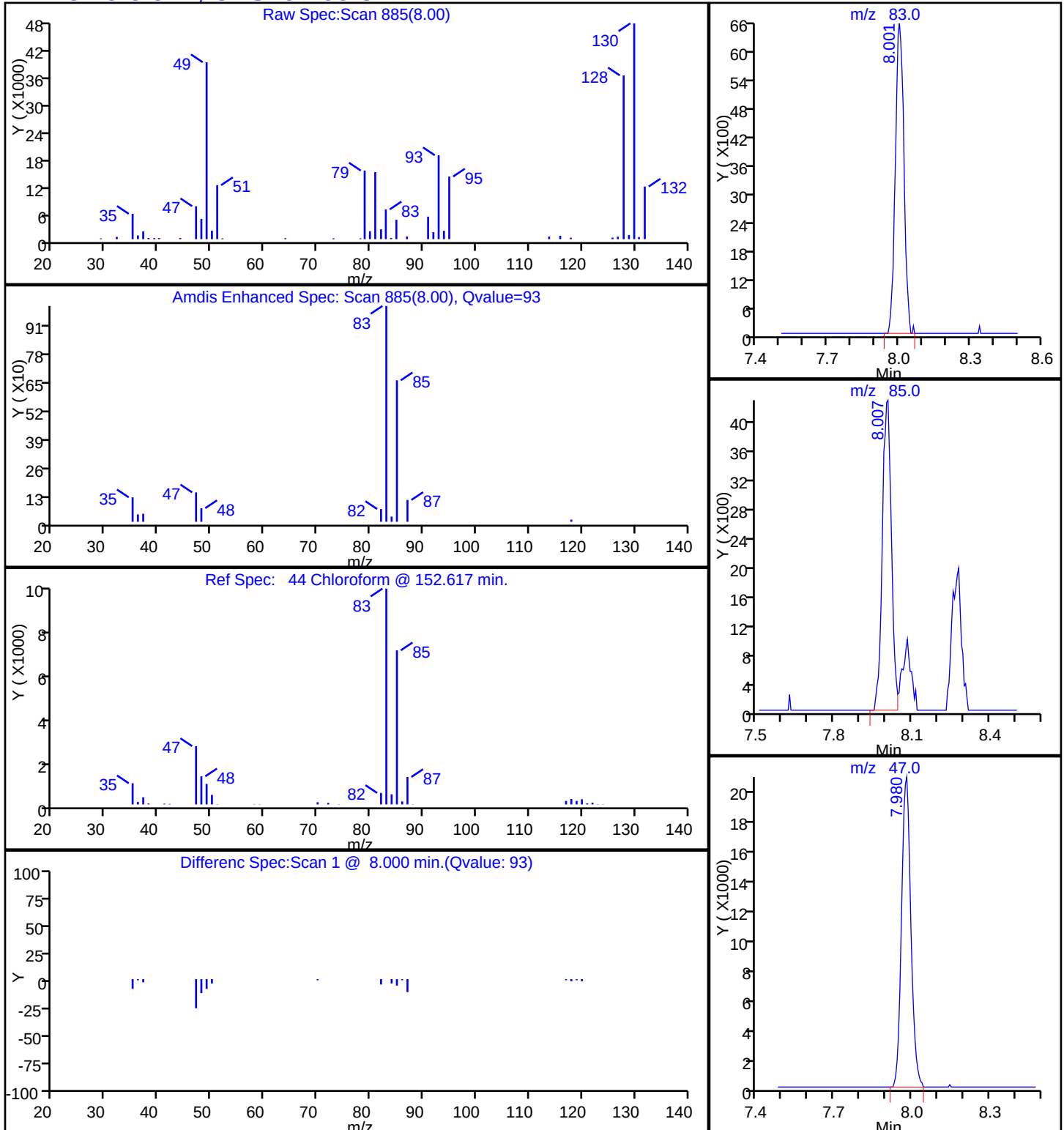
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

44 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D

Injection Date: 04-Apr-2017 16:41:30

Instrument ID: MG

Lims ID: 140-7685-A-3

Lab Sample ID: 140-7685-3

Client ID: H33-BA-2

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 11

Purge Vol: 500.000 mL

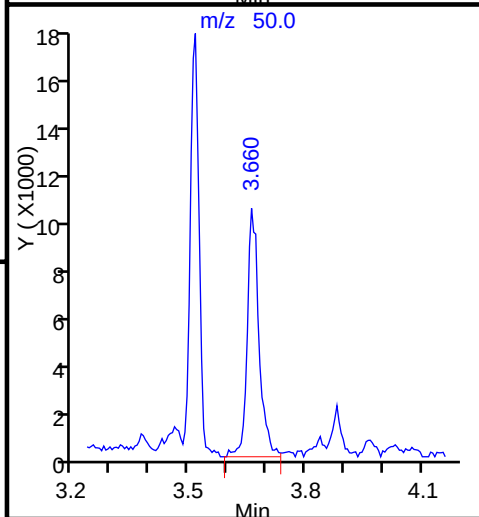
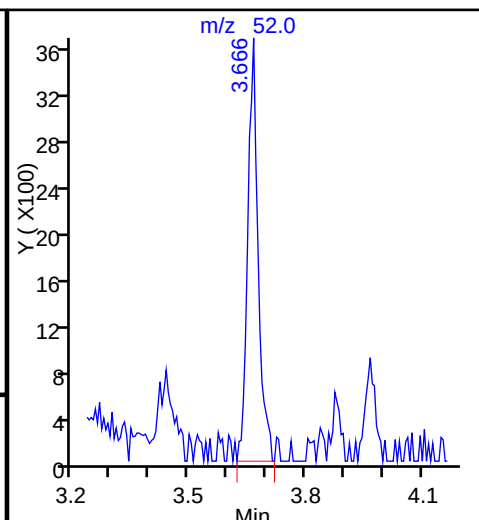
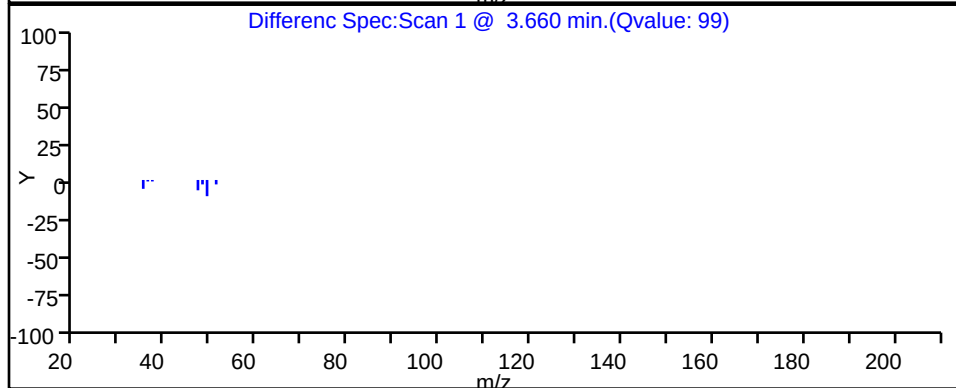
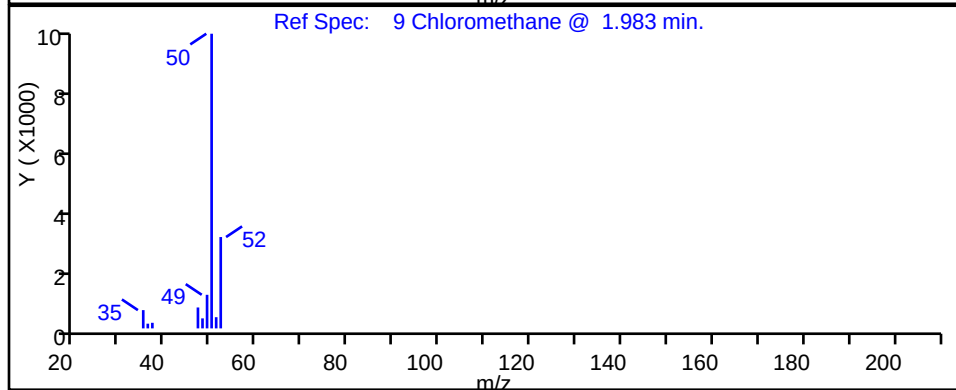
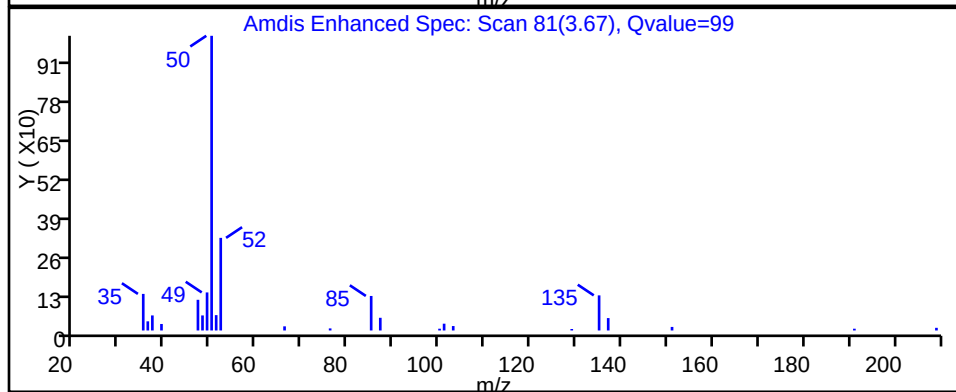
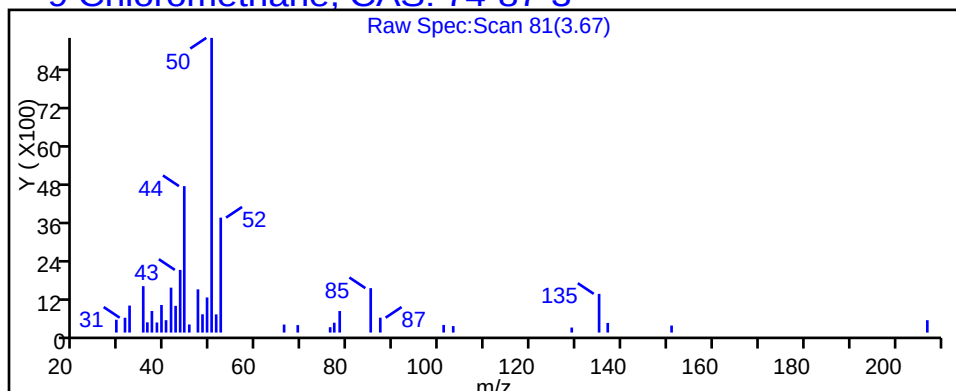
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D

Injection Date: 04-Apr-2017 16:41:30

Instrument ID: MG

Lims ID: 140-7685-A-3

Lab Sample ID: 140-7685-3

Client ID: H33-BA-2

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 11

Purge Vol: 500.000 mL

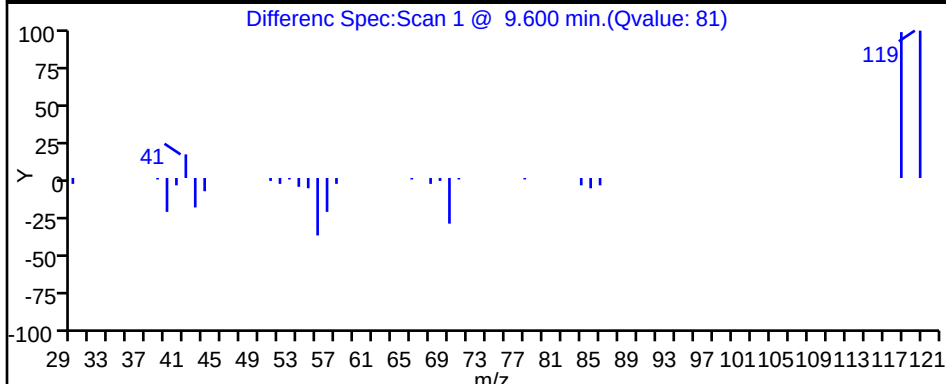
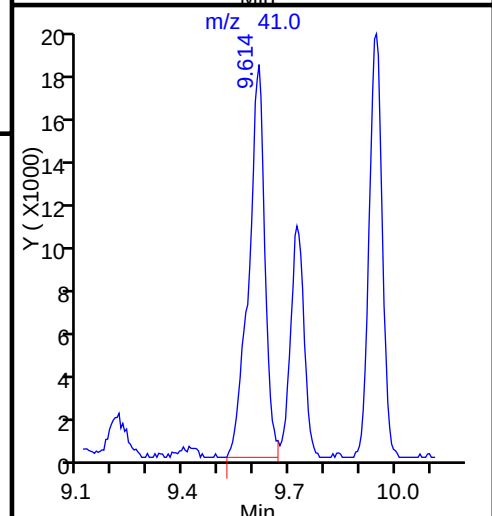
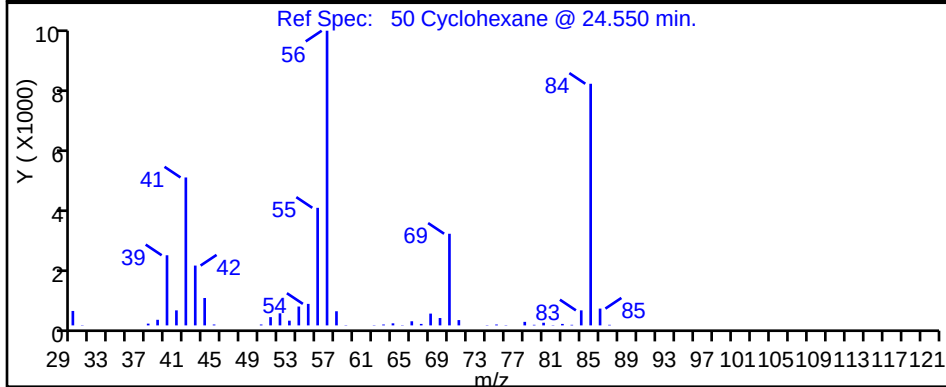
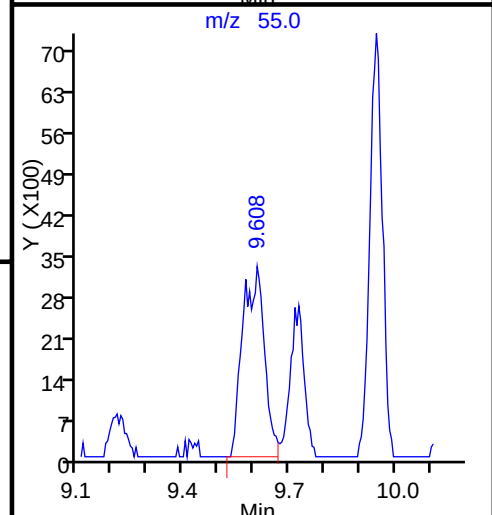
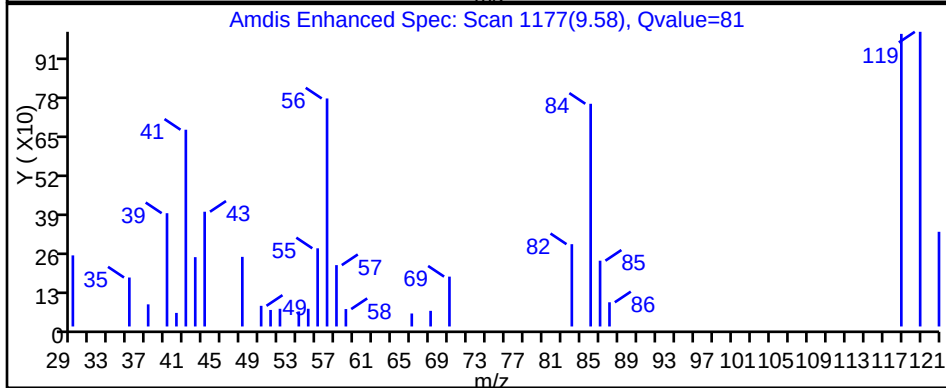
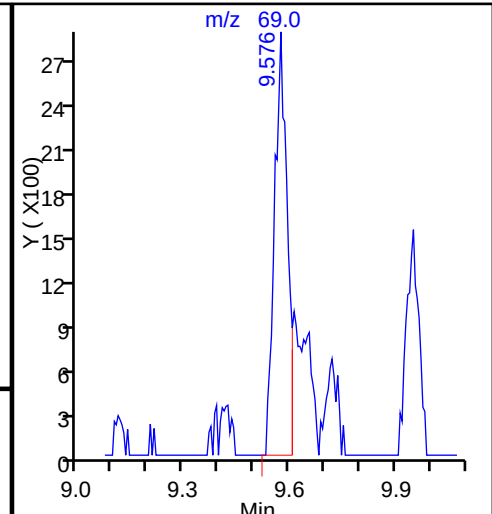
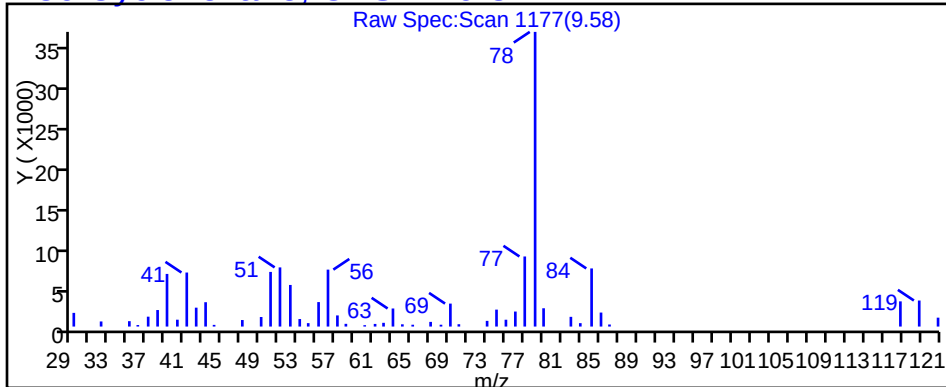
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Cyclohexane, CAS: 110-82-7

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D

Injection Date: 04-Apr-2017 16:41:30

Instrument ID: MG

Lims ID: 140-7685-A-3

Lab Sample ID: 140-7685-3

Client ID: H33-BA-2

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 11

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

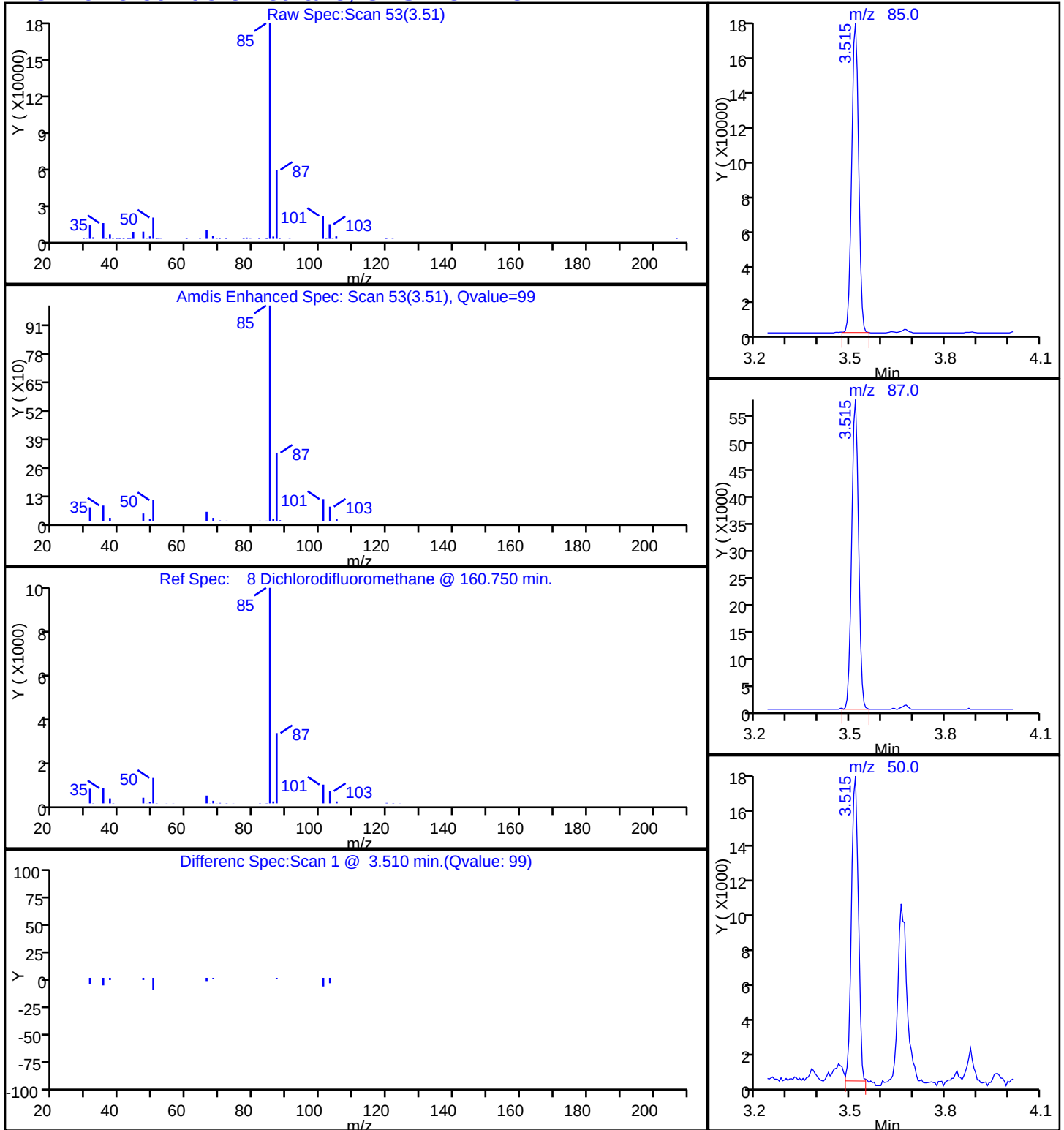
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D

Injection Date: 04-Apr-2017 16:41:30

Instrument ID: MG

Lims ID: 140-7685-A-3

Lab Sample ID: 140-7685-3

Client ID: H33-BA-2

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 11

Purge Vol: 500.000 mL

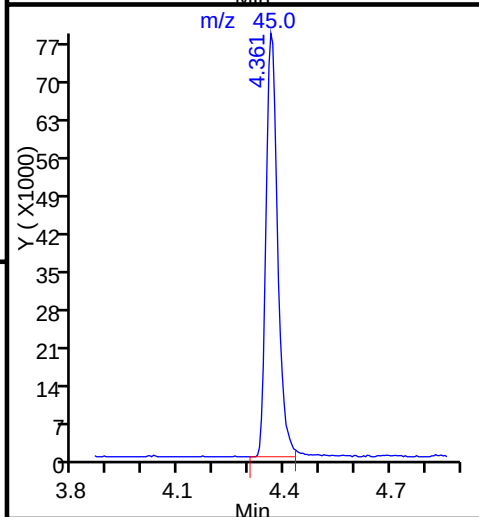
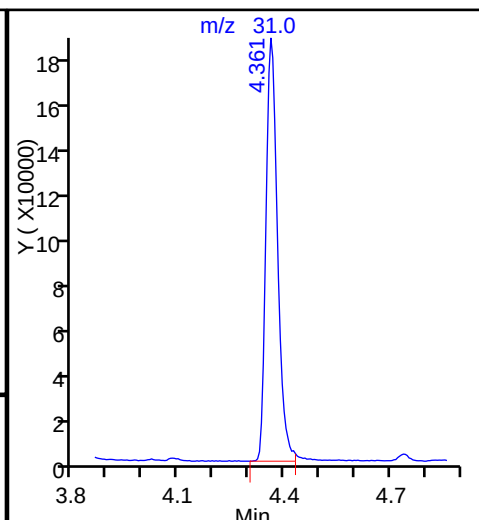
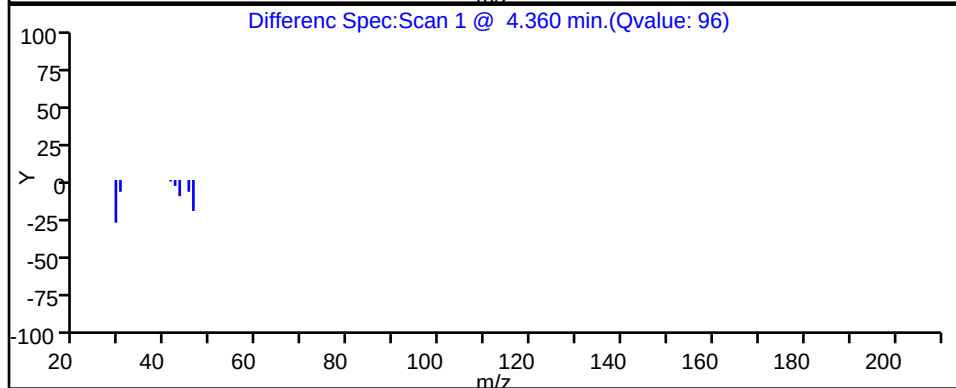
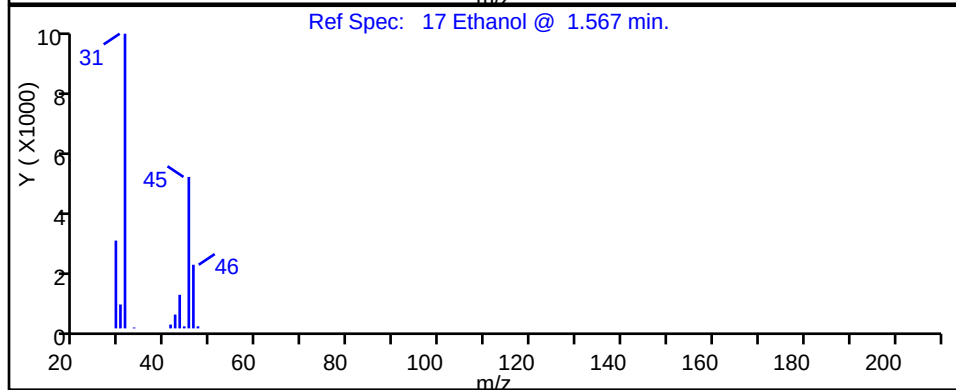
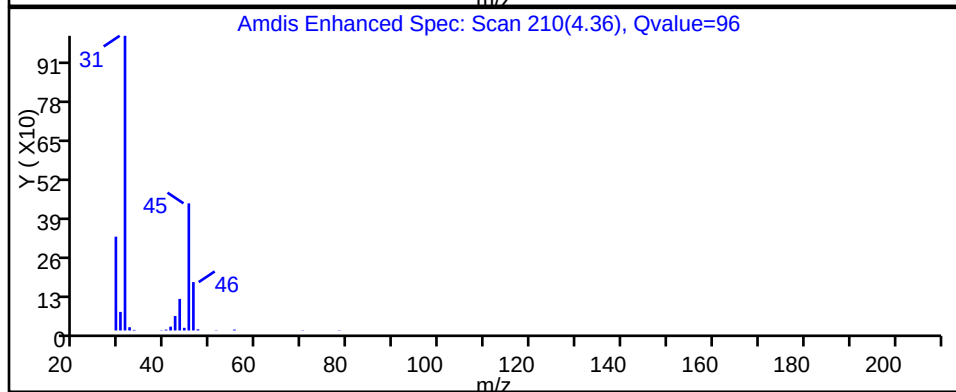
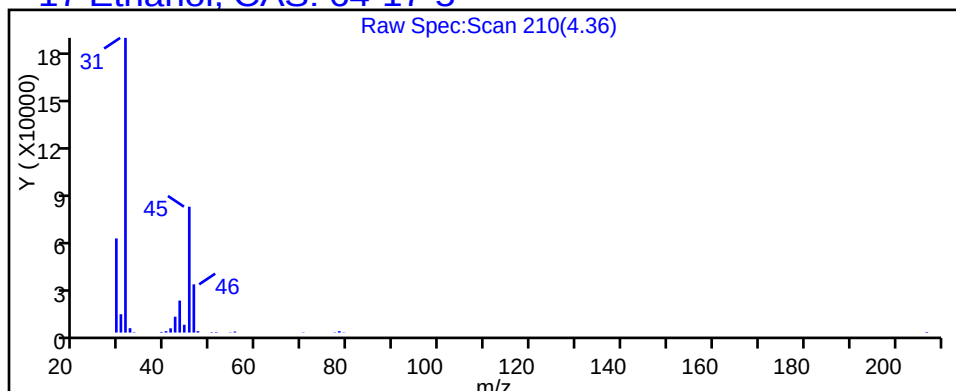
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D

Injection Date: 04-Apr-2017 16:41:30

Instrument ID: MG

Lims ID: 140-7685-A-3

Lab Sample ID: 140-7685-3

Client ID: H33-BA-2

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 11

Purge Vol: 500.000 mL

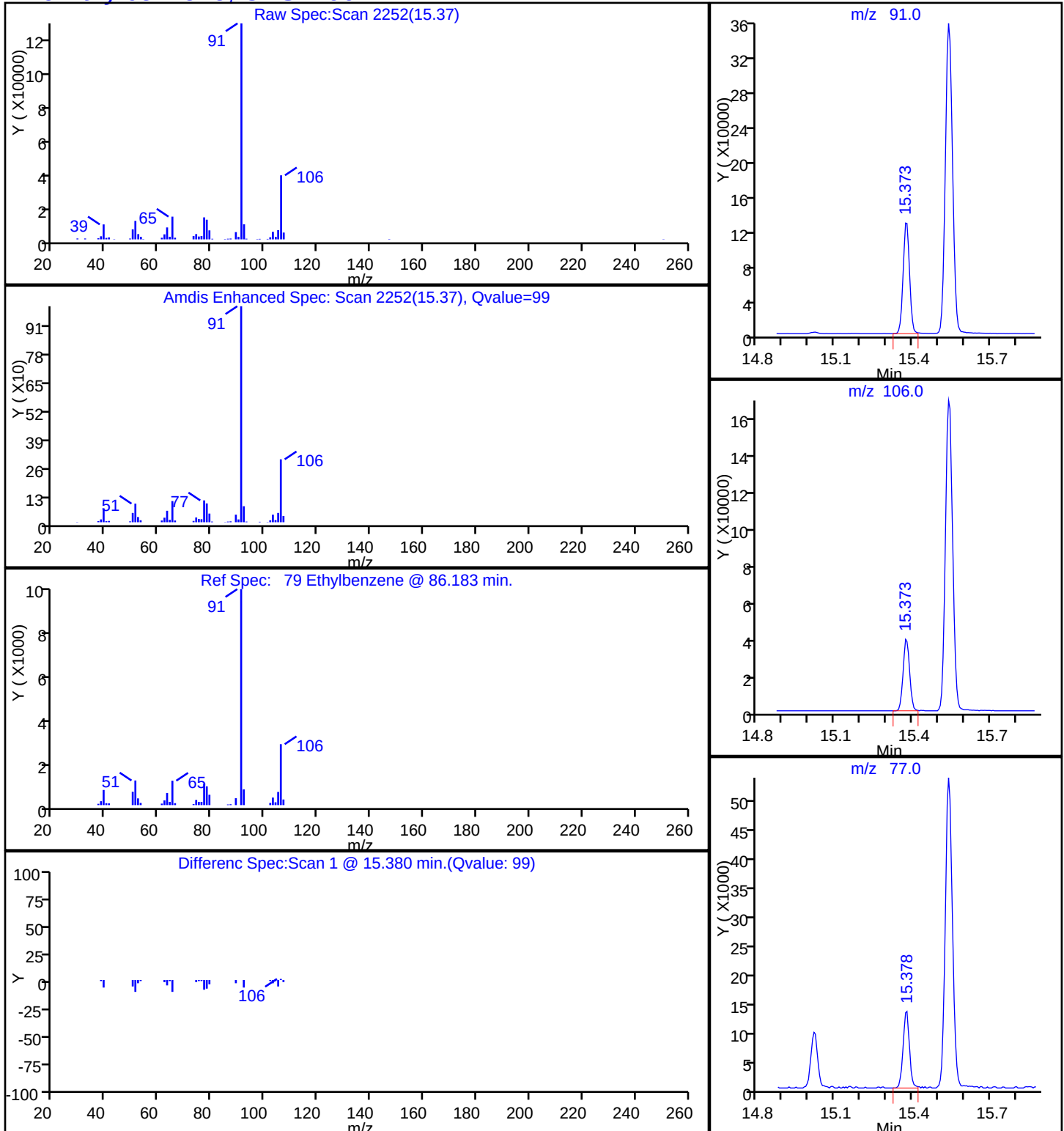
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

79 Ethylbenzene, CAS: 100-41-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D

Injection Date: 04-Apr-2017 16:41:30

Instrument ID: MG

Lims ID: 140-7685-A-3

Lab Sample ID: 140-7685-3

Client ID: H33-BA-2

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 11

Purge Vol: 500.000 mL

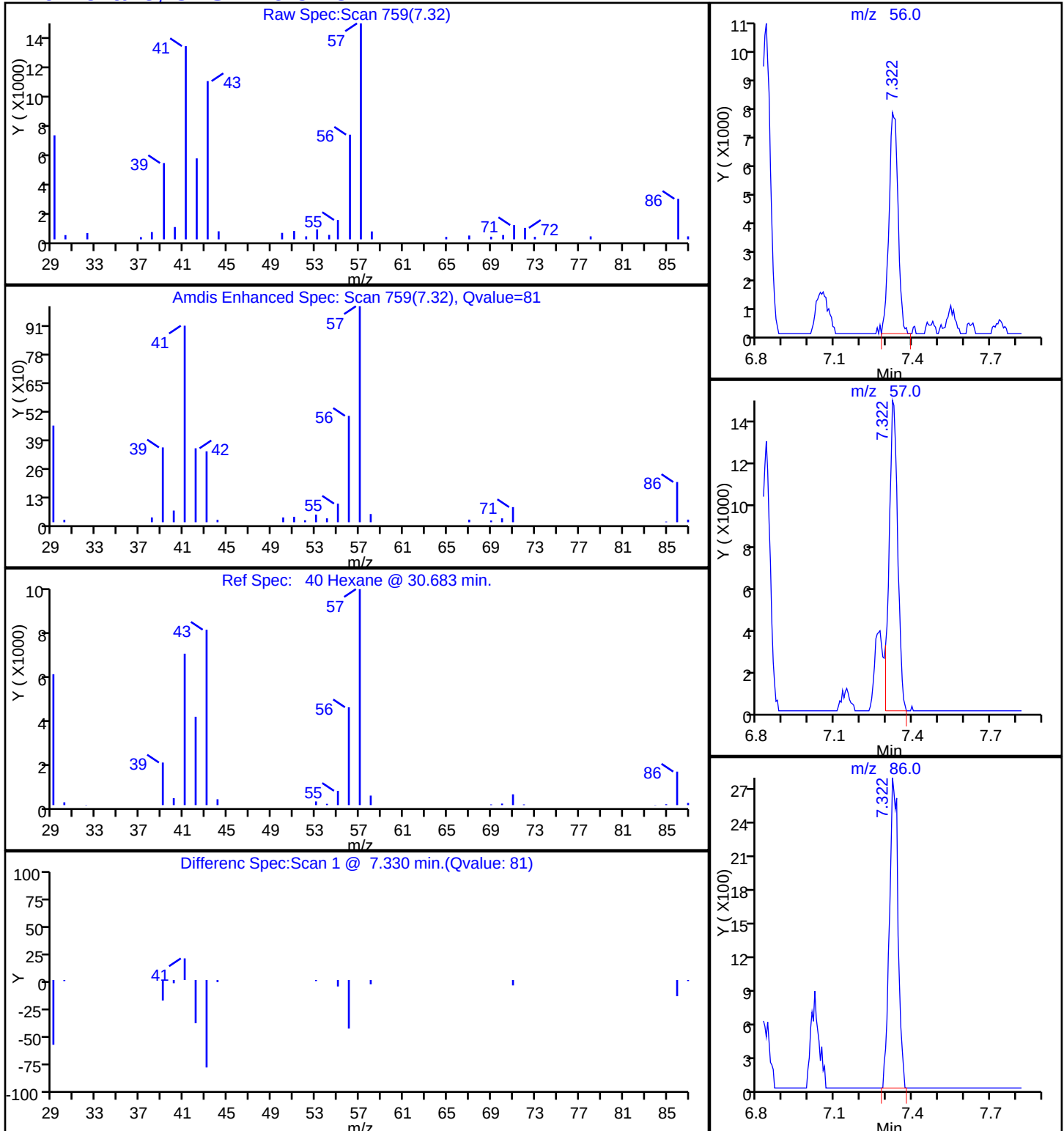
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D

Injection Date: 04-Apr-2017 16:41:30

Instrument ID: MG

Lims ID: 140-7685-A-3

Lab Sample ID: 140-7685-3

Client ID: H33-BA-2

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 11

Purge Vol: 500.000 mL

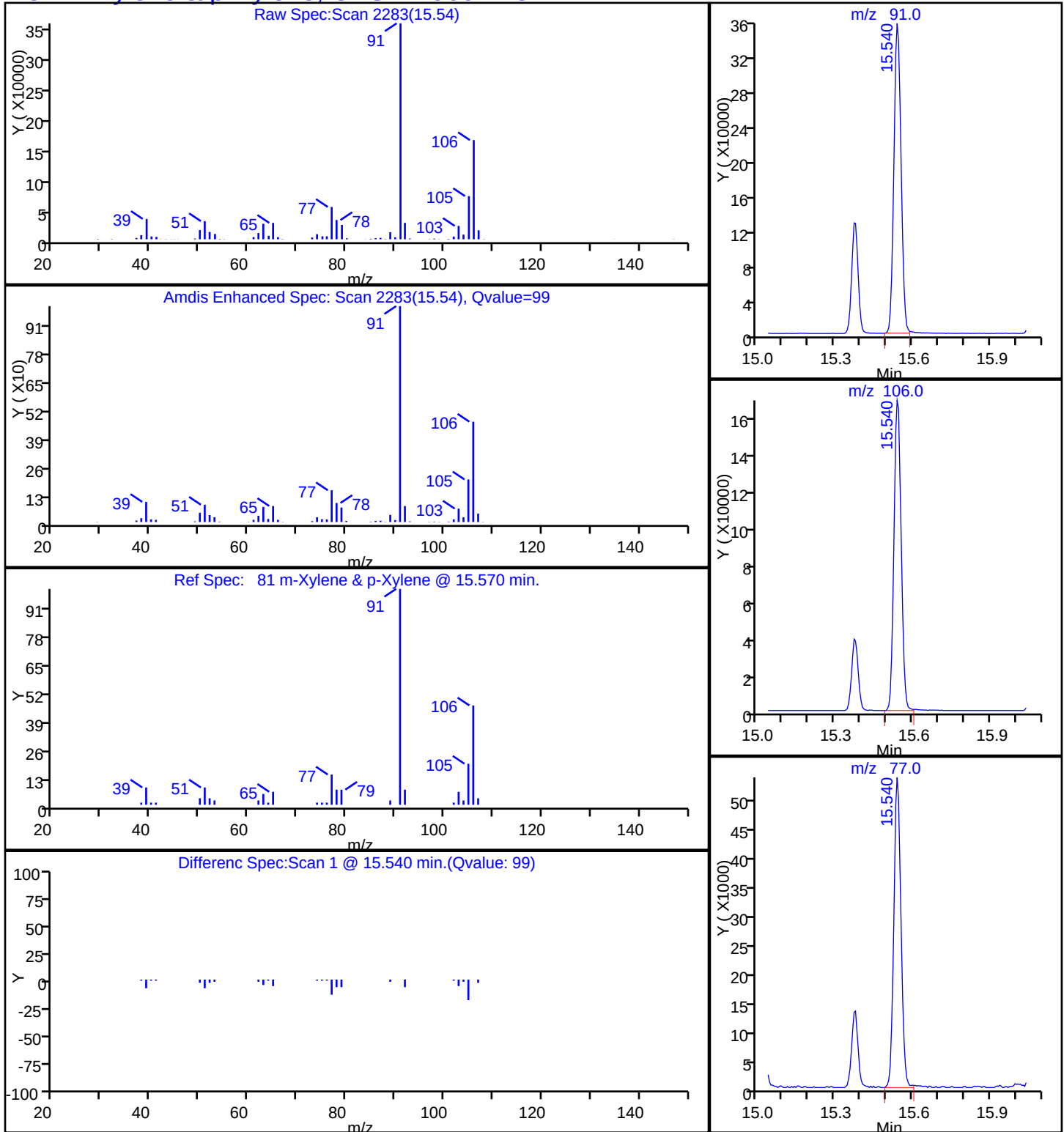
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D

Injection Date: 04-Apr-2017 16:41:30

Instrument ID: MG

Lims ID: 140-7685-A-3

Lab Sample ID: 140-7685-3

Client ID: H33-BA-2

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 11

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

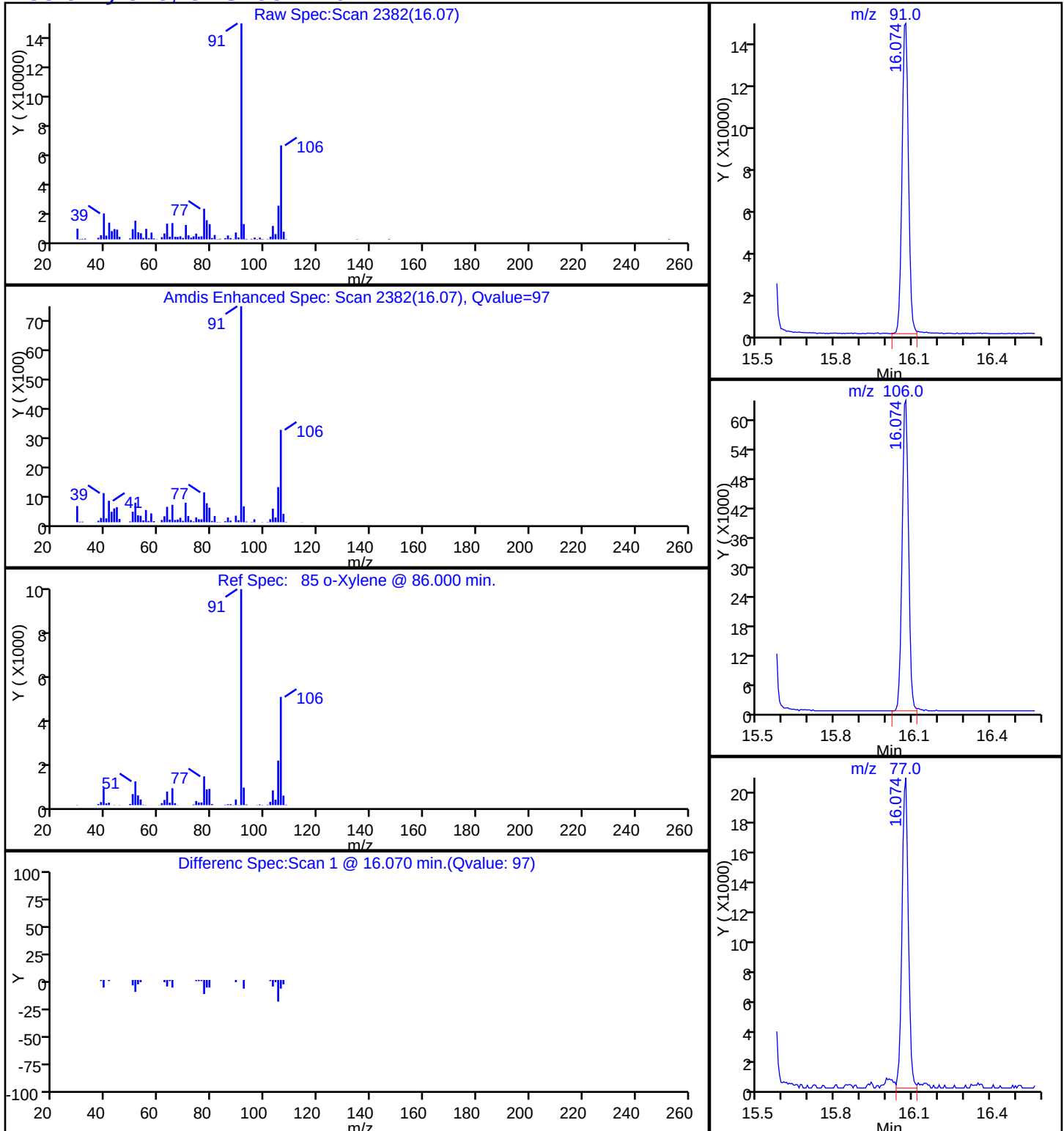
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D

Injection Date: 04-Apr-2017 16:41:30

Instrument ID: MG

Lims ID: 140-7685-A-3

Lab Sample ID: 140-7685-3

Client ID: H33-BA-2

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 11

Purge Vol: 500.000 mL

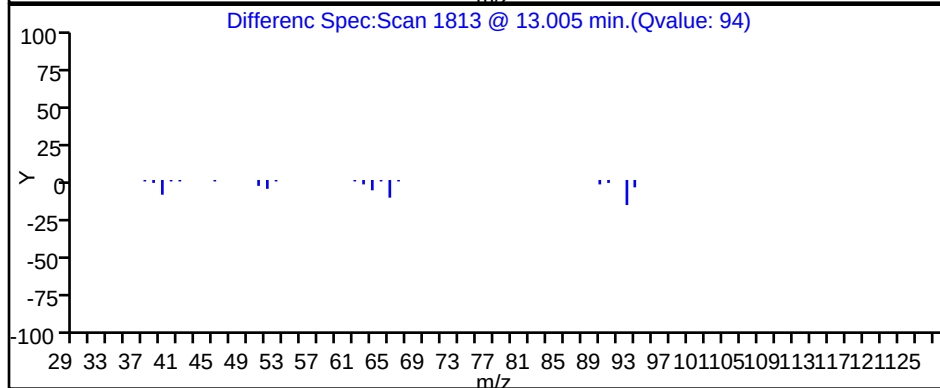
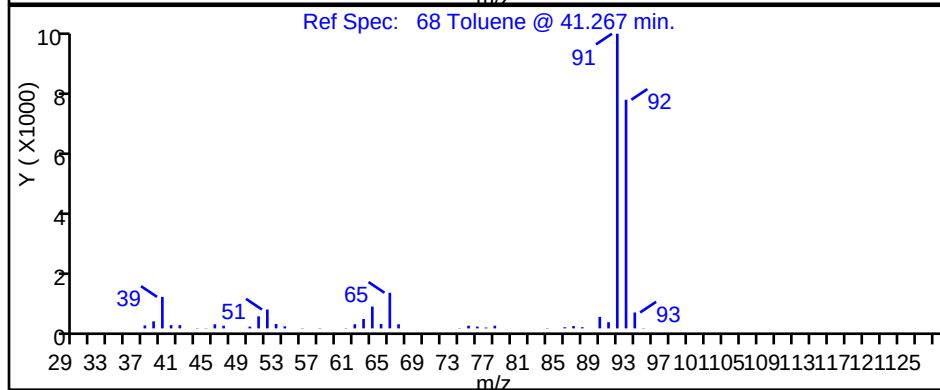
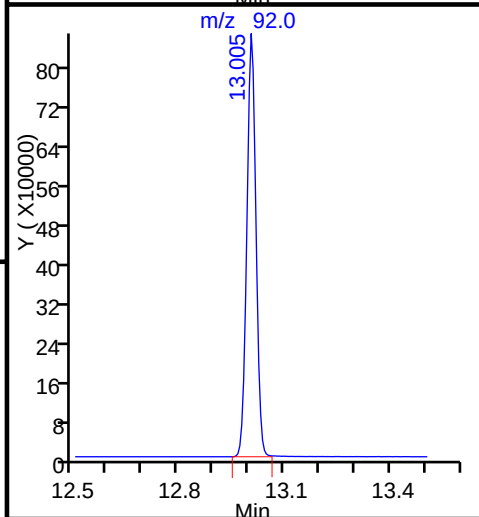
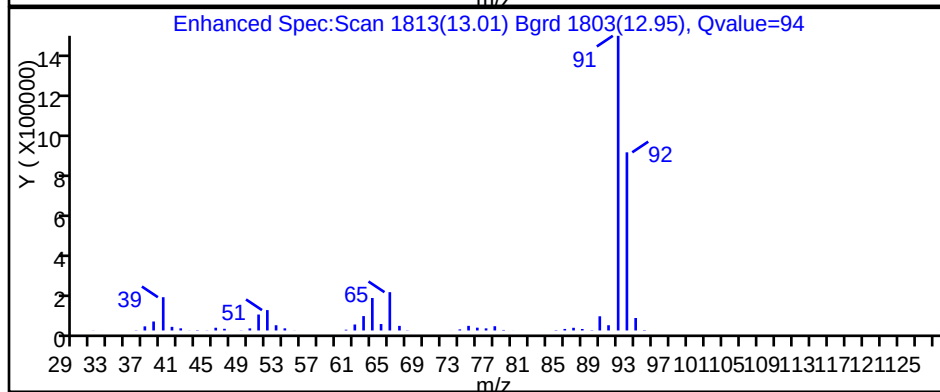
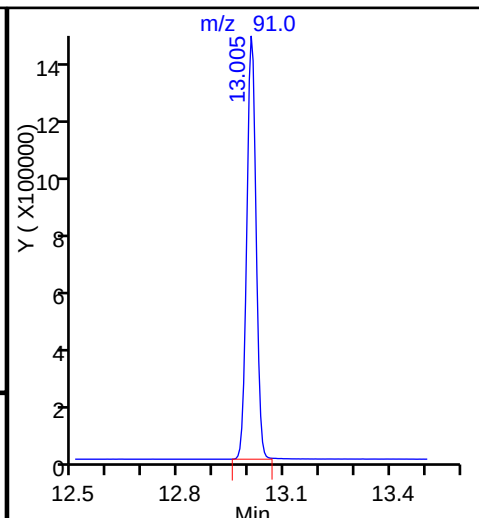
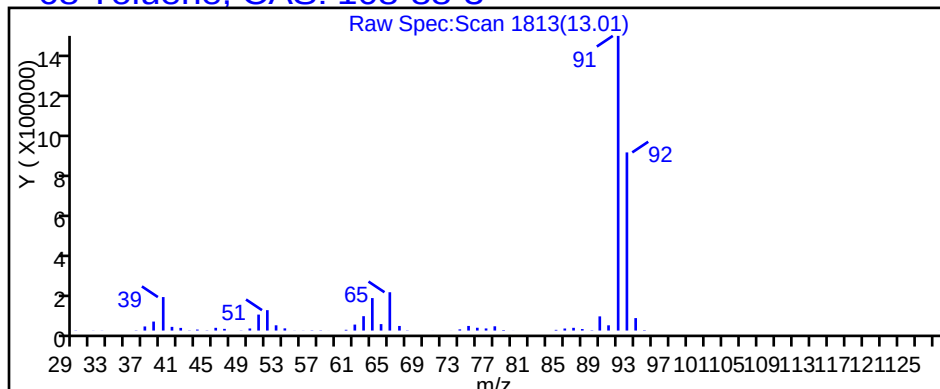
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D

Injection Date: 04-Apr-2017 16:41:30

Instrument ID: MG

Lims ID: 140-7685-A-3

Lab Sample ID: 140-7685-3

Client ID: H33-BA-2

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 11

Purge Vol: 500.000 mL

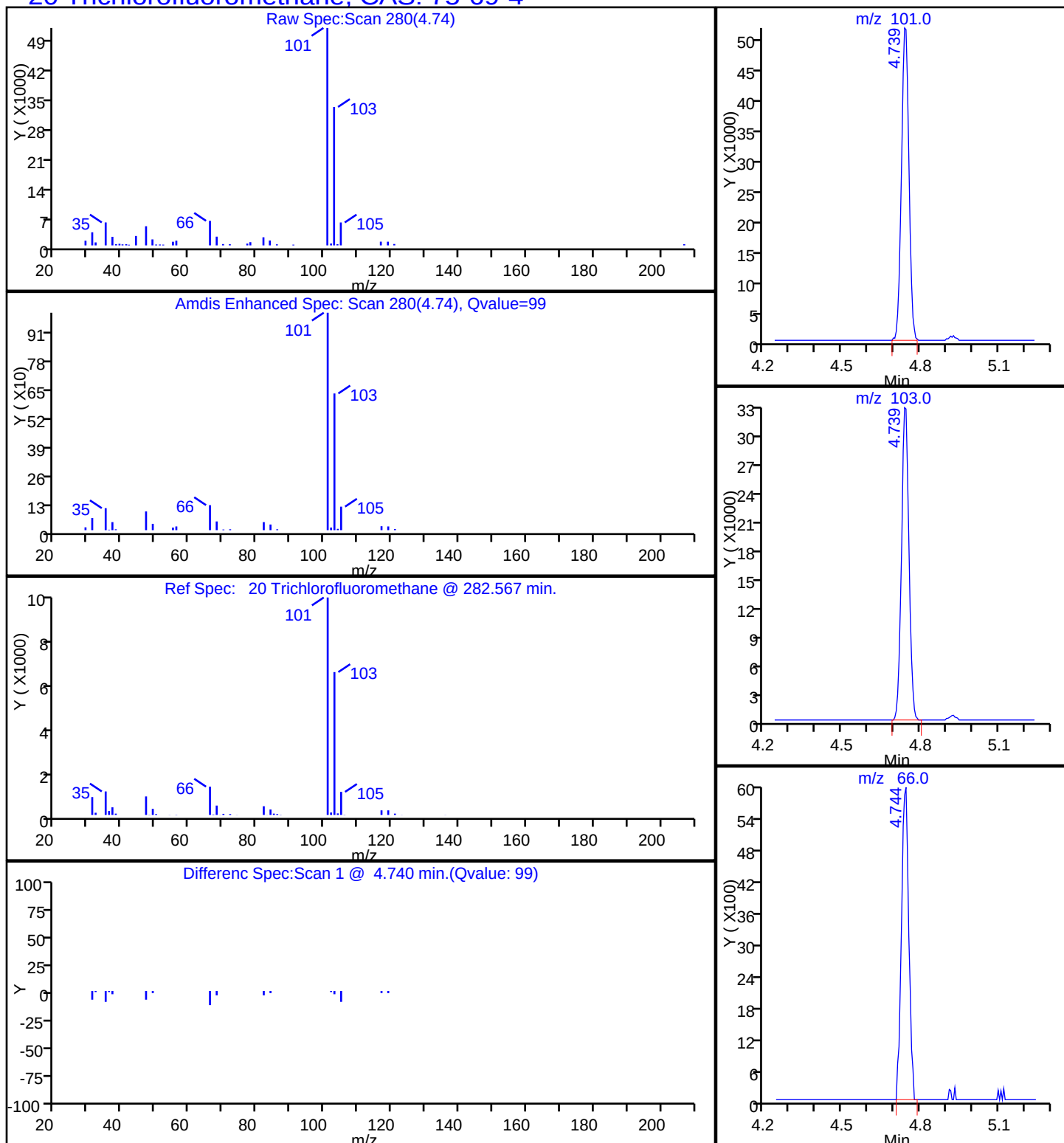
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P103.D

Injection Date: 04-Apr-2017 16:41:30

Instrument ID: MG

Lims ID: 140-7685-A-3

Lab Sample ID: 140-7685-3

Client ID: H33-BA-2

Operator ID: 7126

ALS Bottle#: 3 Worklist Smp#: 11

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

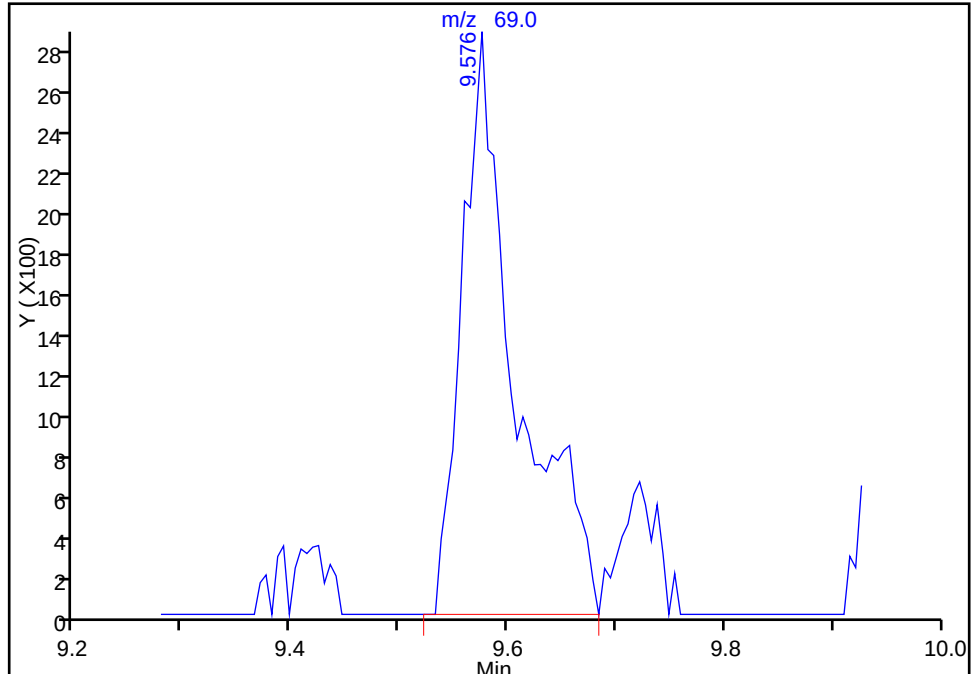
Detector: MS SCAN

50 Cyclohexane, CAS: 110-82-7

Signal: 1

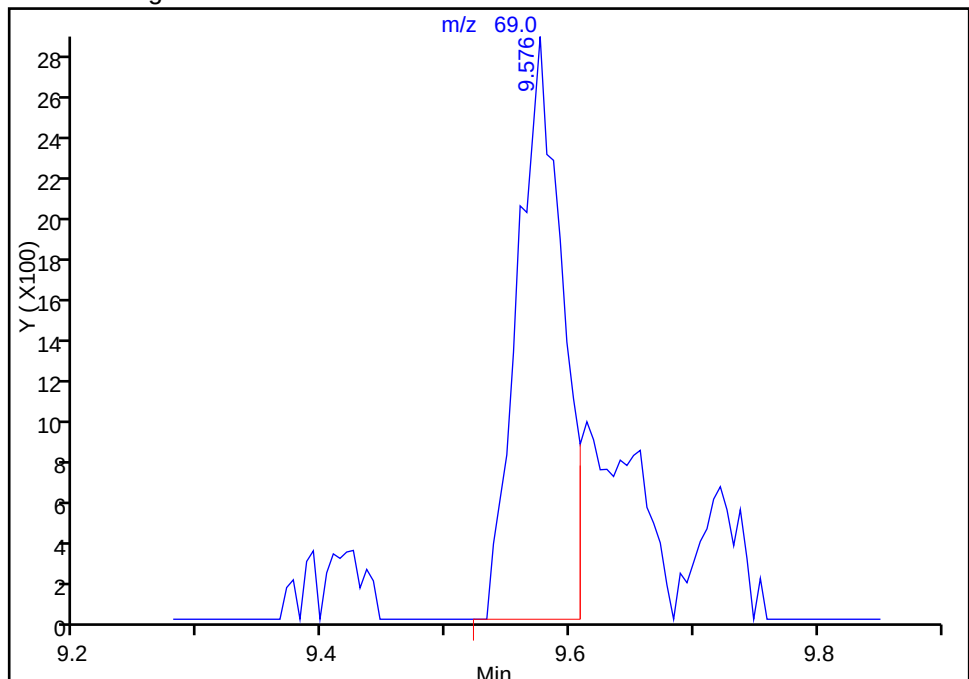
RT: 9.58
Area: 9954
Amount: 0.274538
Amount Units: ppb v/v

Processing Integration Results



RT: 9.58
Area: 7128
Amount: 0.196595
Amount Units: ppb v/v

Manual Integration Results



Reviewer: tajh, 05-Apr-2017 10:01:35

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H35-BA Lab Sample ID: 140-7685-4
 Matrix: Air Lab File ID: GD04P104R.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 08:42
 Sample wt/vol: 500 (mL) Date Analyzed: 04/05/2017 10:09
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 10155 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	0.60		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	0.72		0.20	
71-43-2	Benzene	78.11	0.13		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	ND		0.080	
74-87-3	Chloromethane	50.49	0.38		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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H35-BA Lab Sample ID: 140-7685-4
 Matrix: Air Lab File ID: GD04P104R.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 08:42
 Sample wt/vol: 500 (mL) Date Analyzed: 04/05/2017 10:09
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 10155 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	0.52		0.080	
64-17-5	Ethanol	46.07	3.6		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	0.42		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.089		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	0.44		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		0.040	

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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H35-BA Lab Sample ID: 140-7685-4
 Matrix: Air Lab File ID: GD04P104R.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 08:42
 Sample wt/vol: 500 (mL) Date Analyzed: 04/05/2017 10:09
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 10155 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	1.8		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	3.0		0.82	
71-43-2	Benzene	78.11	0.40		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	ND		0.39	
74-87-3	Chloromethane	50.49	0.79		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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H35-BA Lab Sample ID: 140-7685-4
 Matrix: Air Lab File ID: GD04P104R.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 08:42
 Sample wt/vol: 500 (mL) Date Analyzed: 04/05/2017 10:09
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 10155 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	6.7		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	1.4		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	ND		0.54	
108-88-3	Toluene	92.14	1.7		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	ND		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.3		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P104R.D
 Lims ID: 140-7685-A-4
 Client ID: H35-BA
 Sample Type: Client
 Inject. Date: 05-Apr-2017 10:09:30 ALS Bottle#: 4 Worklist Smp#: 27
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004508-022
 Misc. Info.: 140-7685-a-4
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 05-Apr-2017 11:16:20 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 11:16:20

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.996	7.980	0.016	70	308577	4.00	
* 2 1,4-Difluorobenzene	114	10.158	10.148	0.010	94	1531412	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.022	15.022	0.000	87	1476302	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.694	16.694	0.000	94	1150393	3.94	
8 Dichlorodifluoromethane	85	3.531	3.515	0.016	99	169244	0.5182	
9 Chloromethane	52	3.677	3.666	0.011	99	8434	0.3839	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.693	3.671	0.022	50	3032	0.0156	
17 Ethanol	31	4.399	4.356	0.043	97	110450	3.56	
20 Trichlorofluoromethane	101	4.761	4.744	0.017	99	78009	0.2398	
29 2-Methyl-2-propanol	59	5.570	5.456	0.114	41	3924	0.0313	
30 1,1,2-Trichloro-1,2,2-trif	101	5.543	5.521	0.022	91	11540	0.0608	
31 Methylene Chloride	84	5.672	5.650	0.022	83	30812	0.4152	
39 2-Butanone (MEK)	72	7.295	7.268	0.027	97	21178	0.6031	
40 Hexane	56	7.349	7.327	0.022	54	4738	0.0778	
44 Chloroform	83	8.023	8.007	0.016	88	8396	0.0388	
49 Benzene	78	9.576	9.565	0.011	97	32605	0.1253	
51 Carbon tetrachloride	117	9.614	9.598	0.016	98	18295	0.0673	
56 Isooctane	57	10.412	10.396	0.016	91	8779	0.0227	
62 1,4-Dioxane	88	11.167	11.129	0.038	92	3417	0.0970	
65 4-Methyl-2-pentanone (MIBK	43	12.132	12.116	0.016	95	107837	0.7216	
68 Toluene	91	13.011	13.006	0.005	93	129294	0.4396	
79 Ethylbenzene	91	15.378	15.378	0.000	99	15557	0.0379	
81 m-Xylene & p-Xylene	91	15.545	15.545	0.000	99	29572	0.0891	
85 o-Xylene	91	16.079	16.074	0.005	96	11967	0.0353	
96 1,2,4-Trimethylbenzene	105	17.940	17.940	0.000	98	29239	0.0702	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P104R.D

Injection Date: 05-Apr-2017 10:09:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7685-A-4

Lab Sample ID: 140-7685-4

Worklist Smp#: 27

Client ID: H35-BA

Purge Vol: 500.000 mL

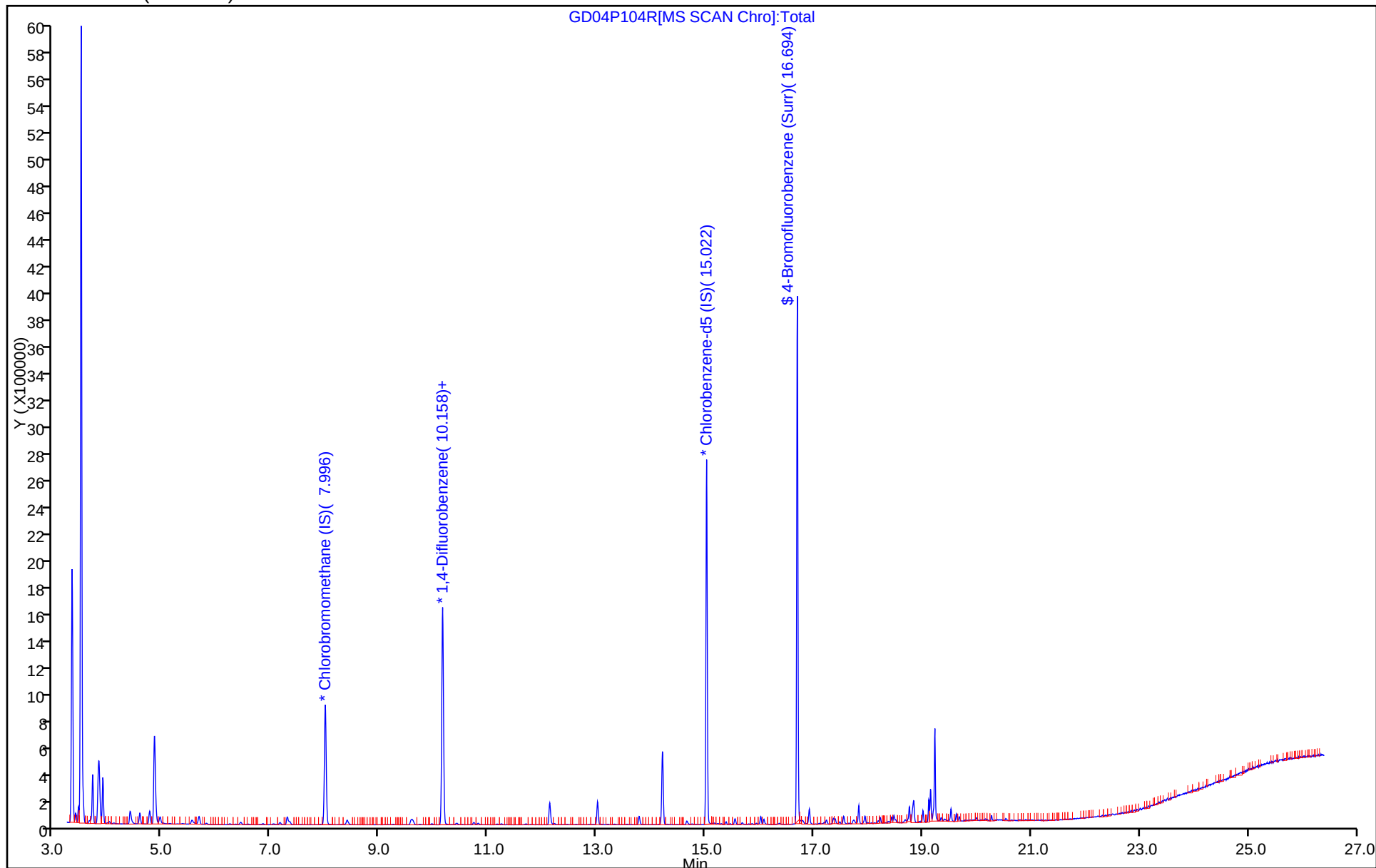
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P104R.D
Lims ID: 140-7685-A-4
Client ID: H35-BA
Sample Type: Client
Inject. Date: 05-Apr-2017 10:09:30 ALS Bottle#: 4 Worklist Smp#: 27
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004508-022
Misc. Info.: 140-7685-a-4
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 05-Apr-2017 11:16:20 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 11:16:20

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	3.94	98.58

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P104R.D

Injection Date: 05-Apr-2017 10:09:30

Instrument ID: MG

Lims ID: 140-7685-A-4

Lab Sample ID: 140-7685-4

Client ID: H35-BA

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 27

Purge Vol: 500.000 mL

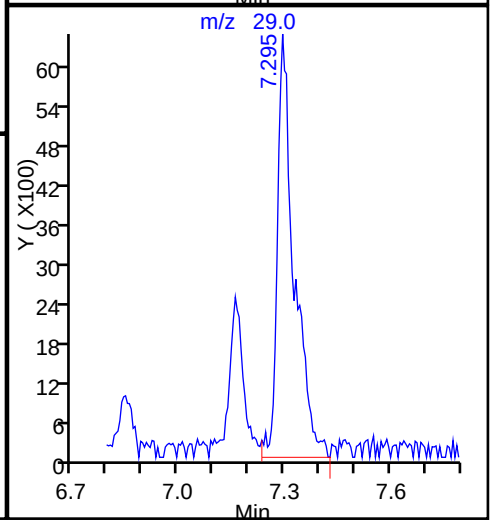
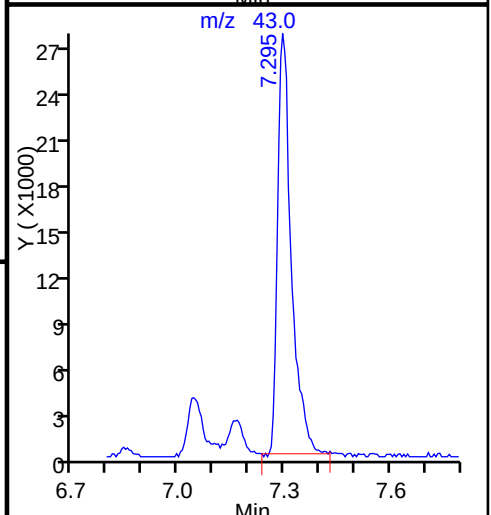
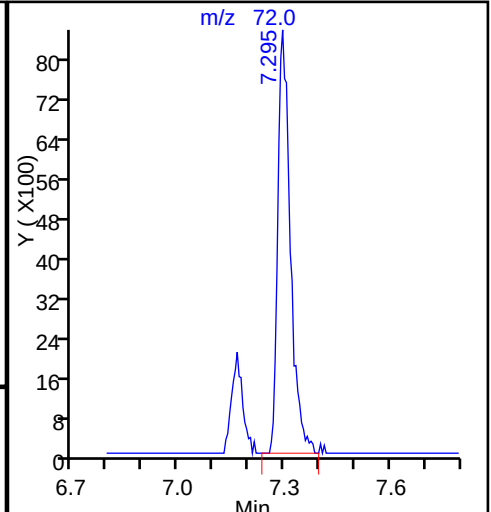
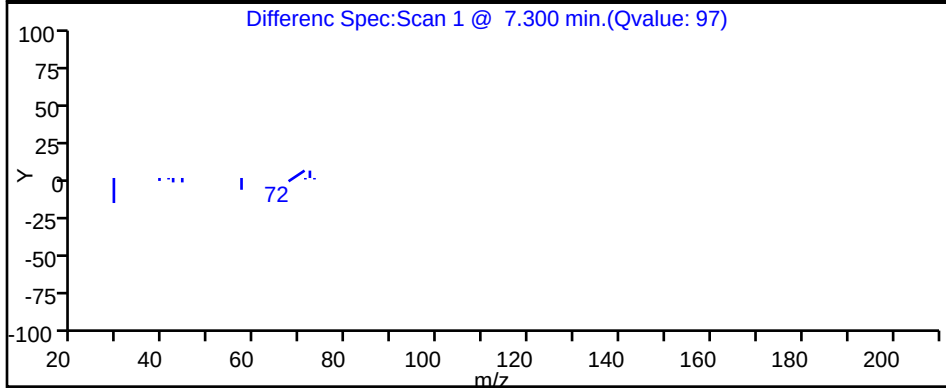
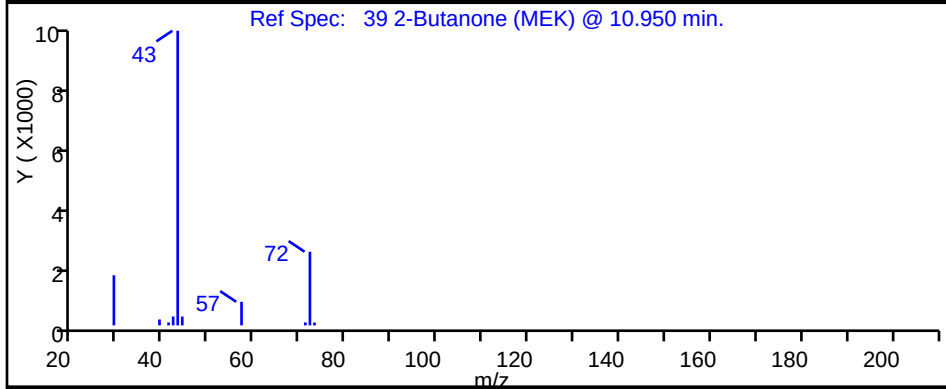
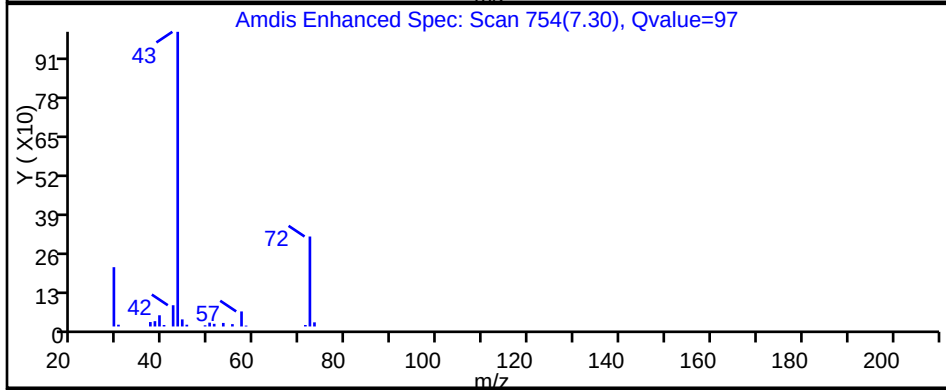
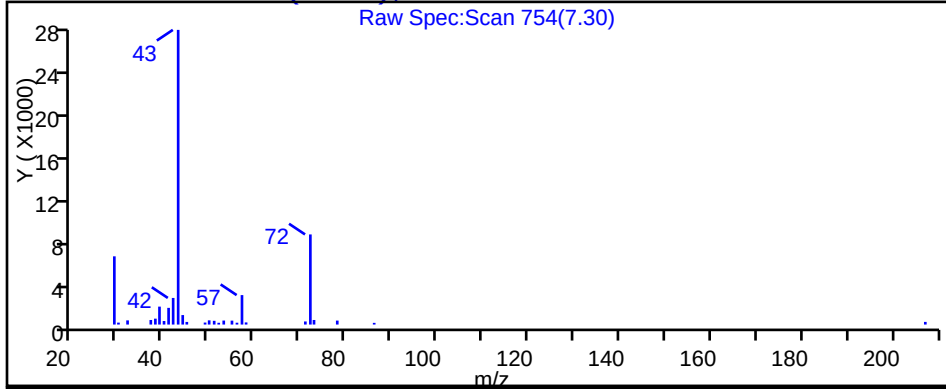
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P104R.D

Injection Date: 05-Apr-2017 10:09:30

Instrument ID: MG

Lims ID: 140-7685-A-4

Lab Sample ID: 140-7685-4

Client ID: H35-BA

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 27

Purge Vol: 500.000 mL

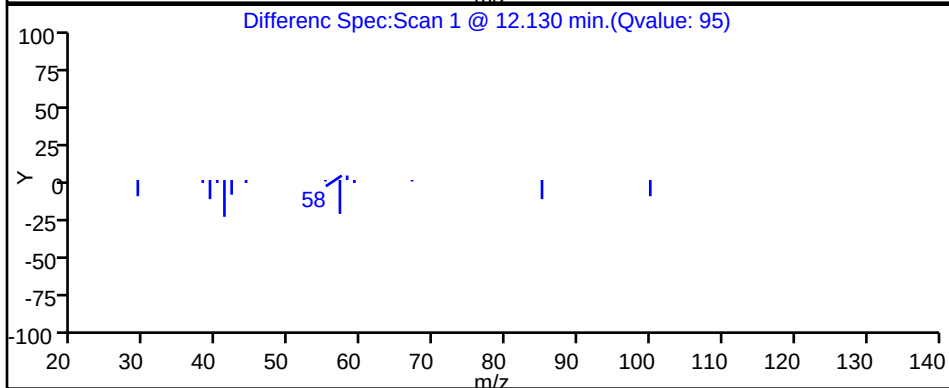
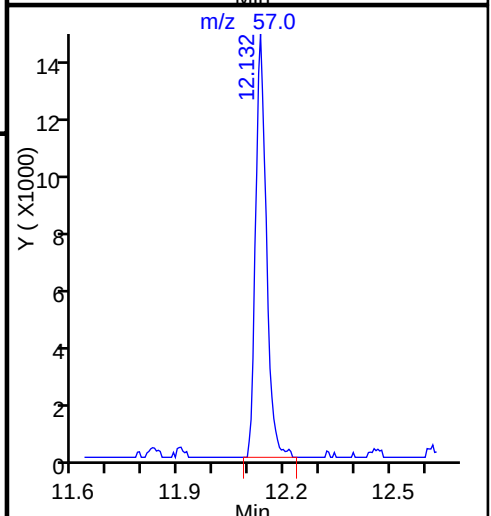
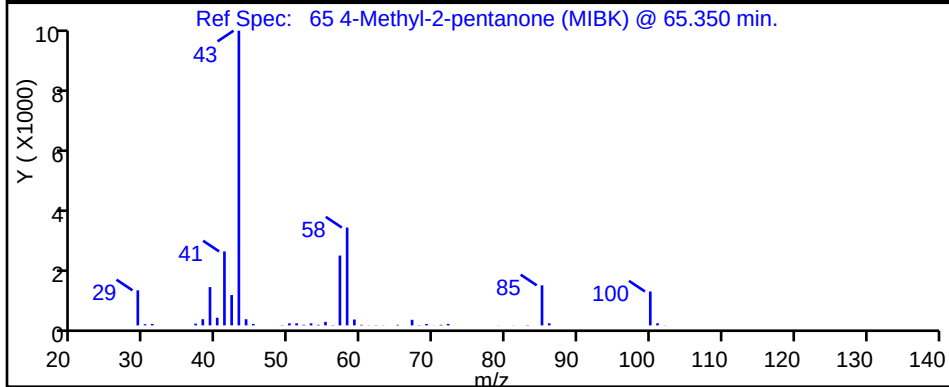
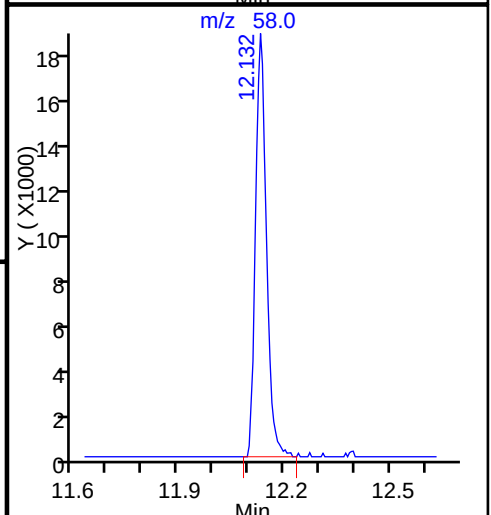
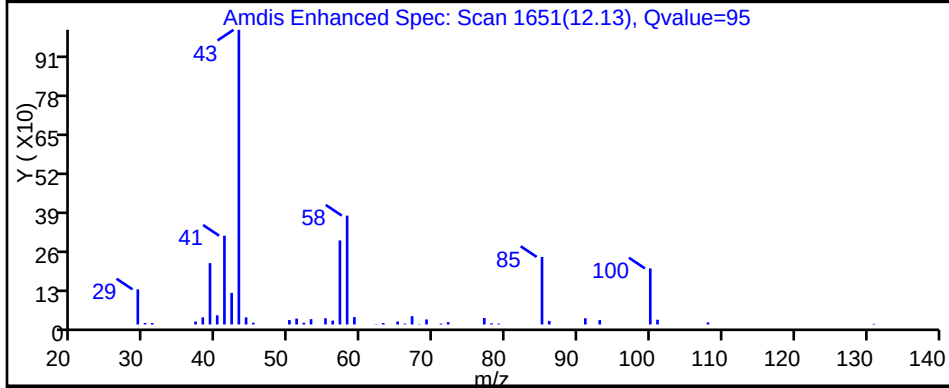
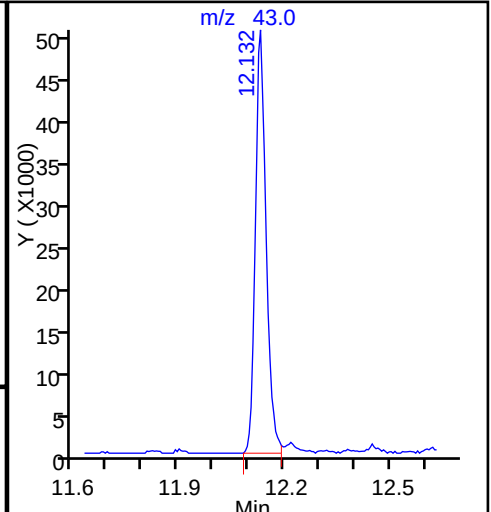
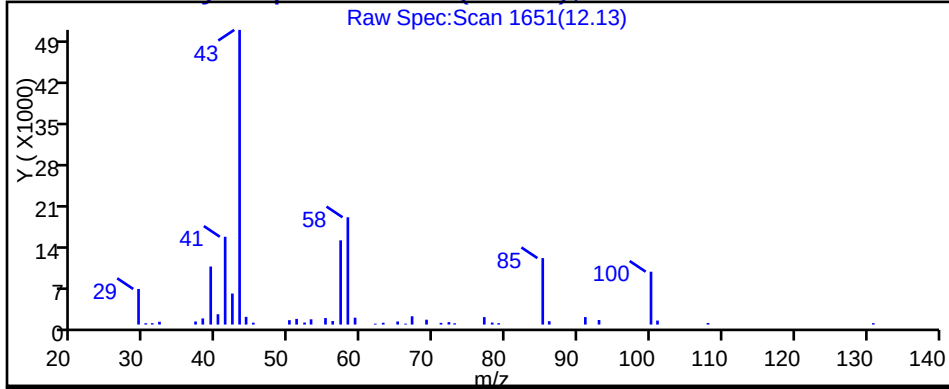
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P104R.D

Injection Date: 05-Apr-2017 10:09:30

Instrument ID: MG

Lims ID: 140-7685-A-4

Lab Sample ID: 140-7685-4

Client ID: H35-BA

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 27

Purge Vol: 500.000 mL

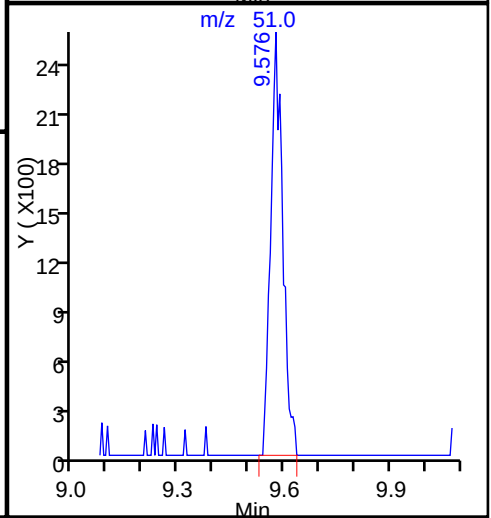
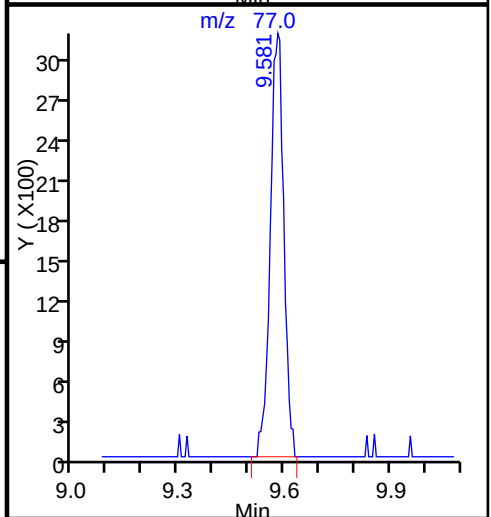
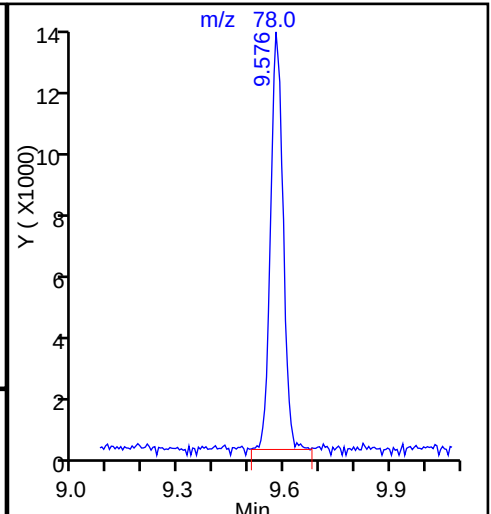
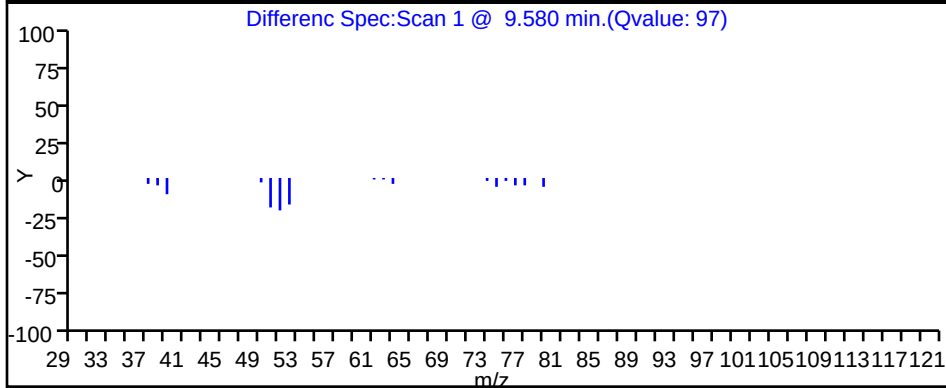
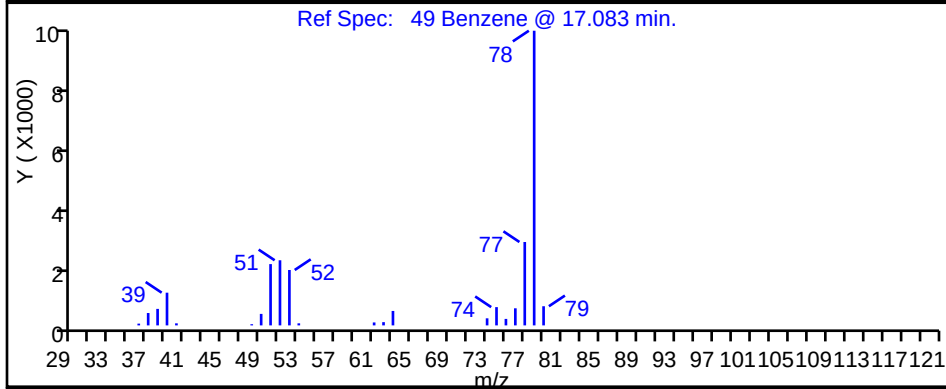
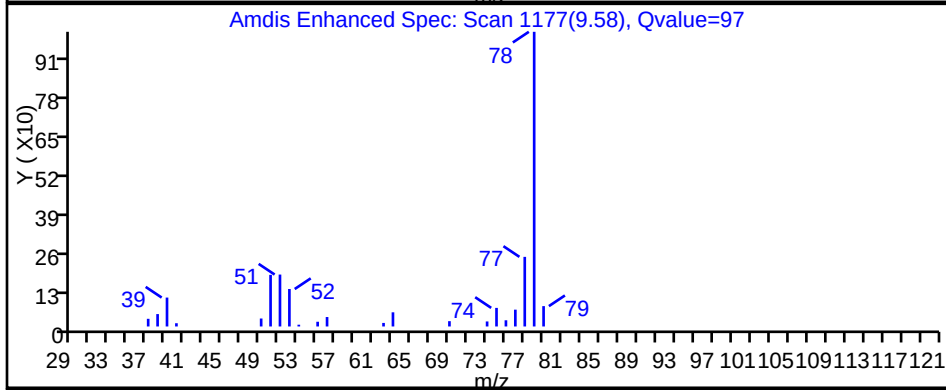
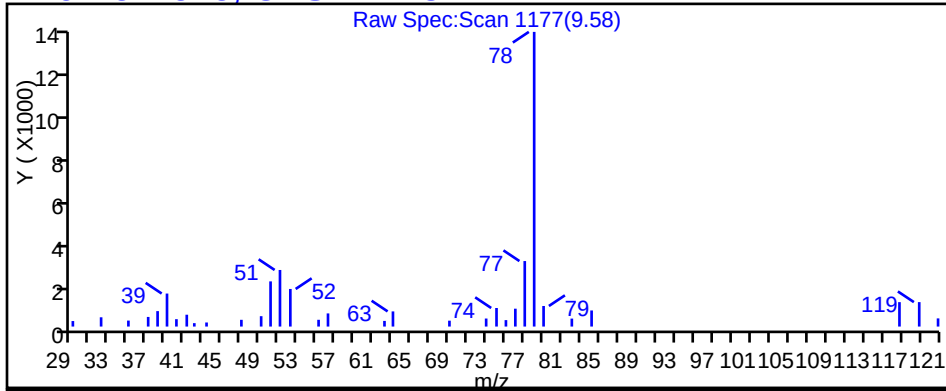
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P104R.D

Injection Date: 05-Apr-2017 10:09:30

Instrument ID: MG

Lims ID: 140-7685-A-4

Lab Sample ID: 140-7685-4

Client ID: H35-BA

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 27

Purge Vol: 500.000 mL

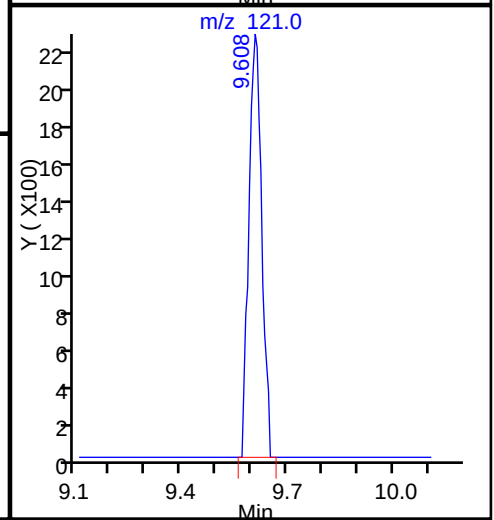
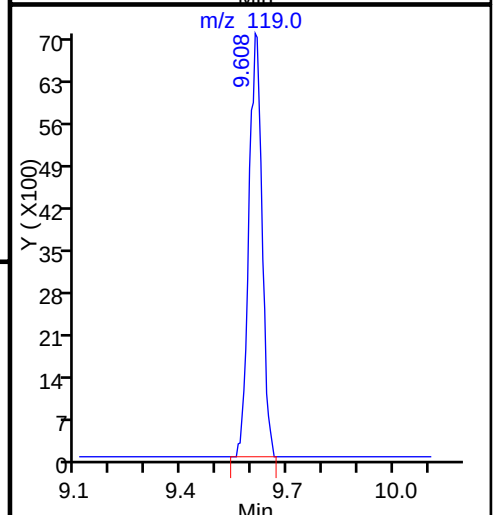
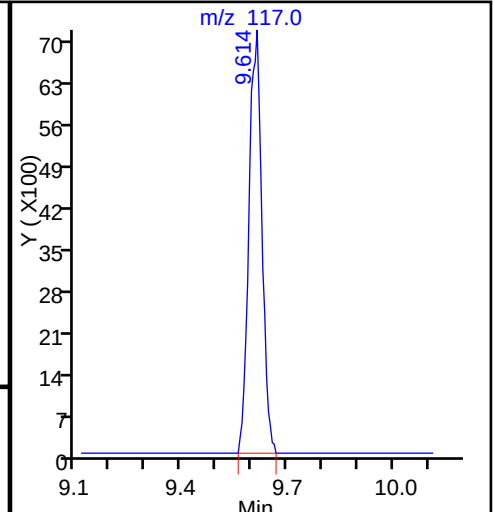
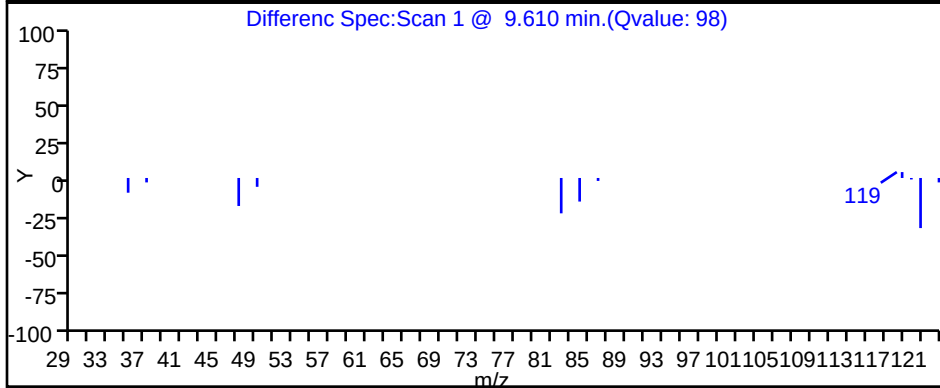
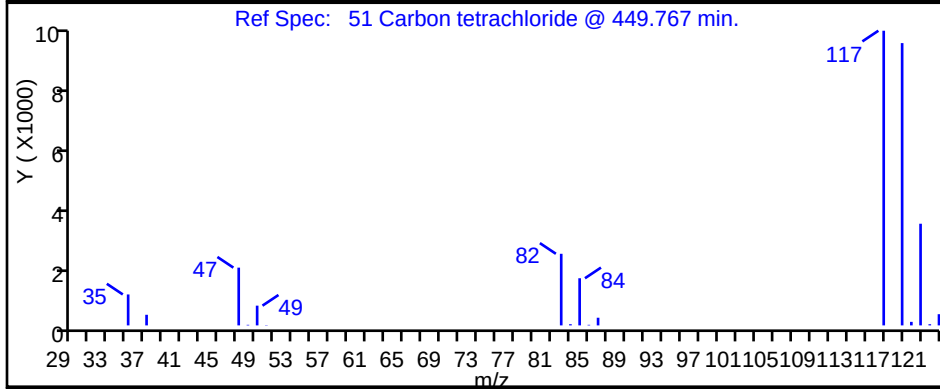
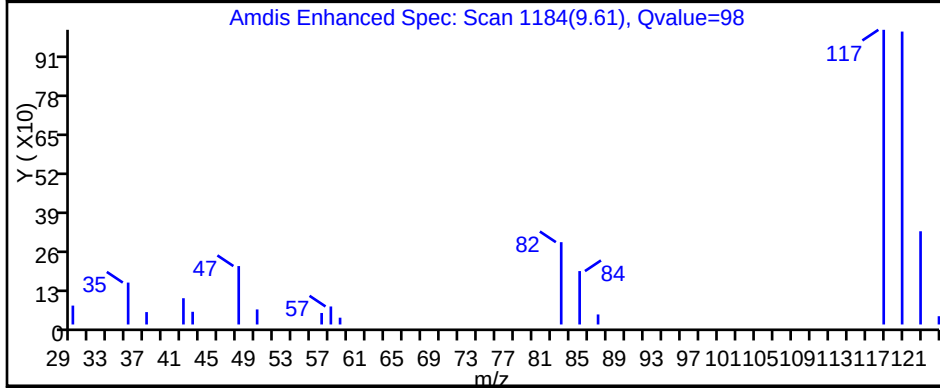
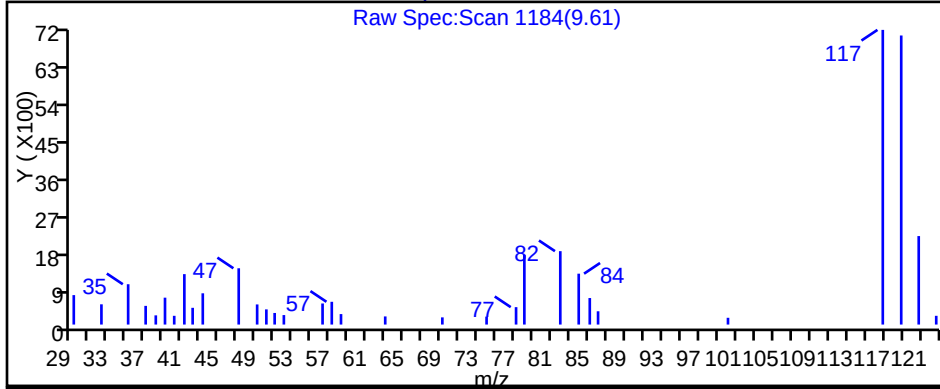
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P104R.D

Injection Date: 05-Apr-2017 10:09:30

Instrument ID: MG

Lims ID: 140-7685-A-4

Lab Sample ID: 140-7685-4

Client ID: H35-BA

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 27

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

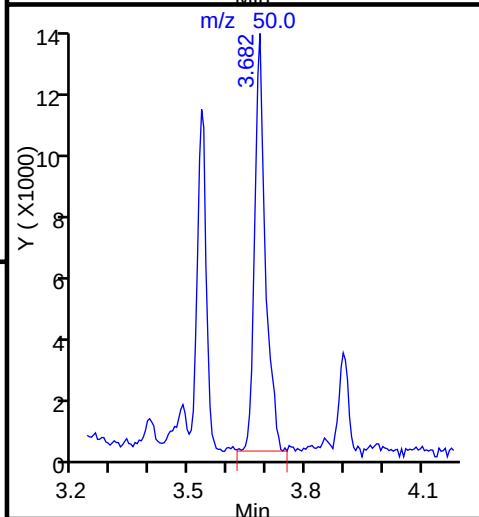
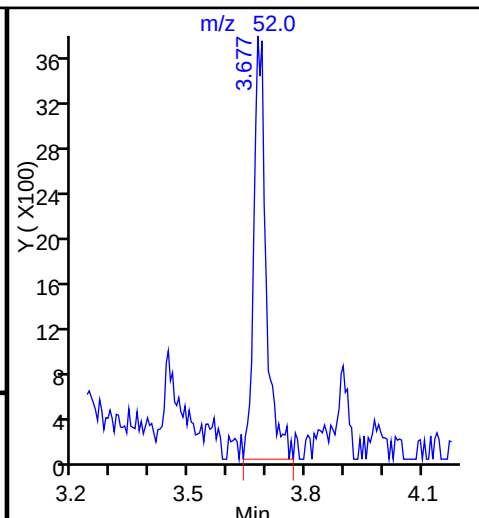
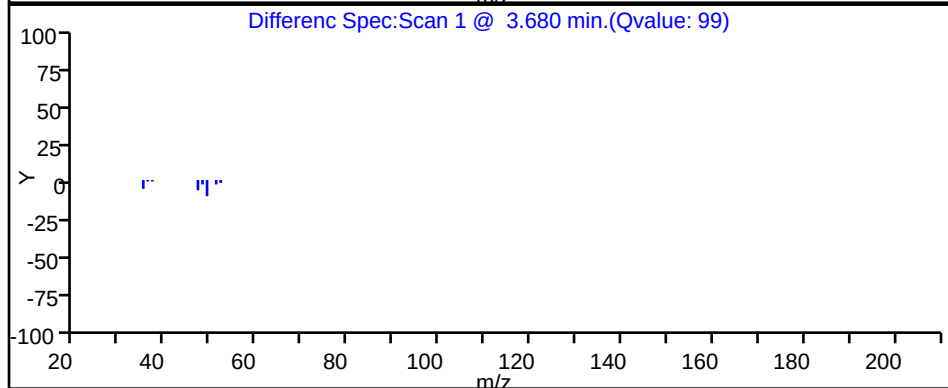
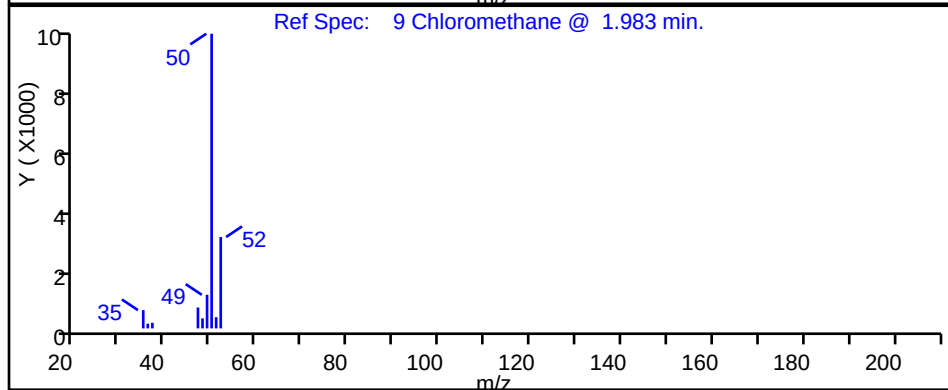
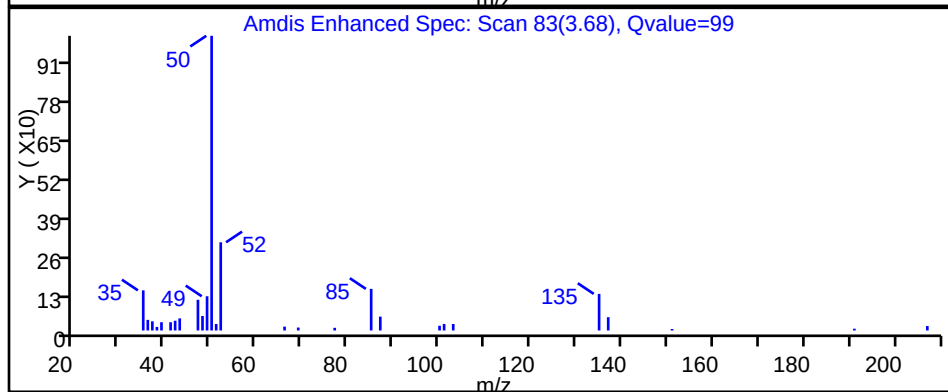
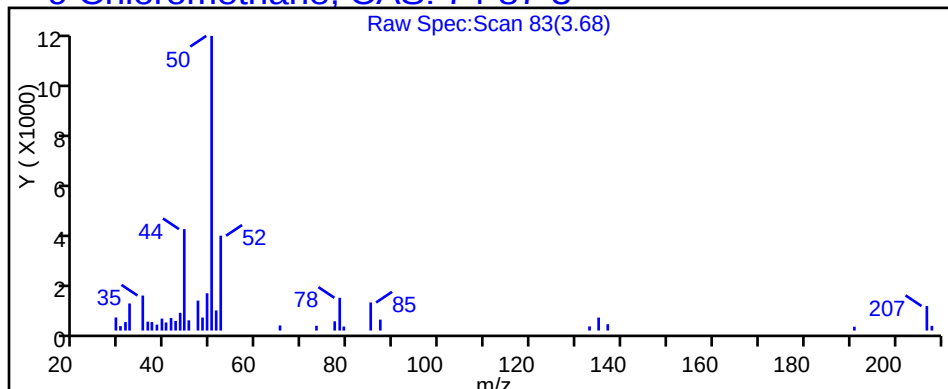
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P104R.D

Injection Date: 05-Apr-2017 10:09:30

Instrument ID: MG

Lims ID: 140-7685-A-4

Lab Sample ID: 140-7685-4

Client ID: H35-BA

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 27

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

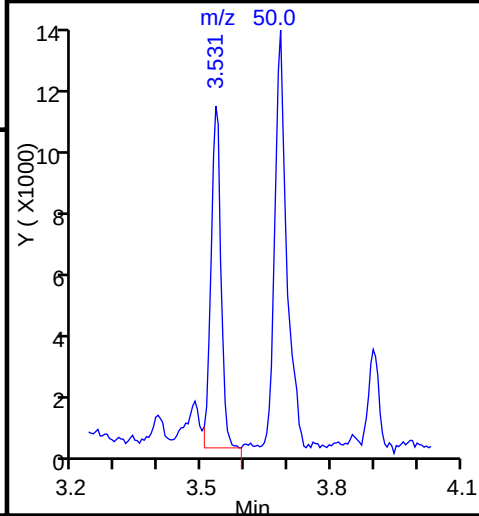
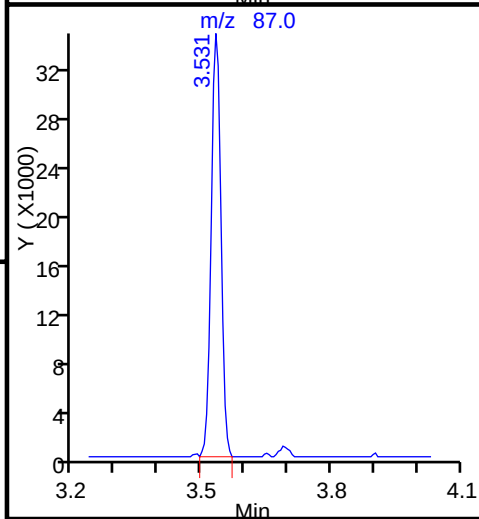
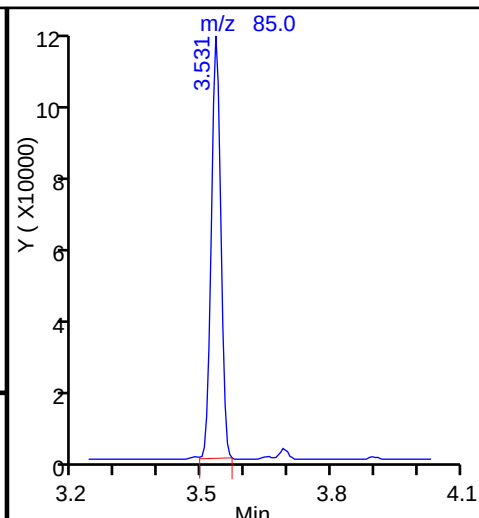
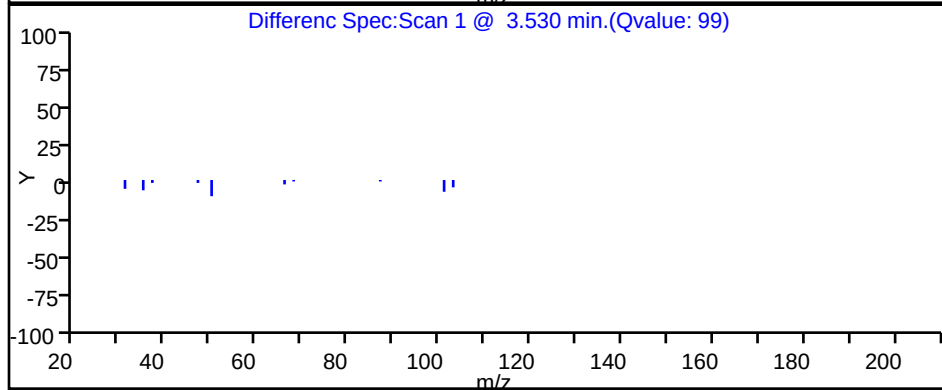
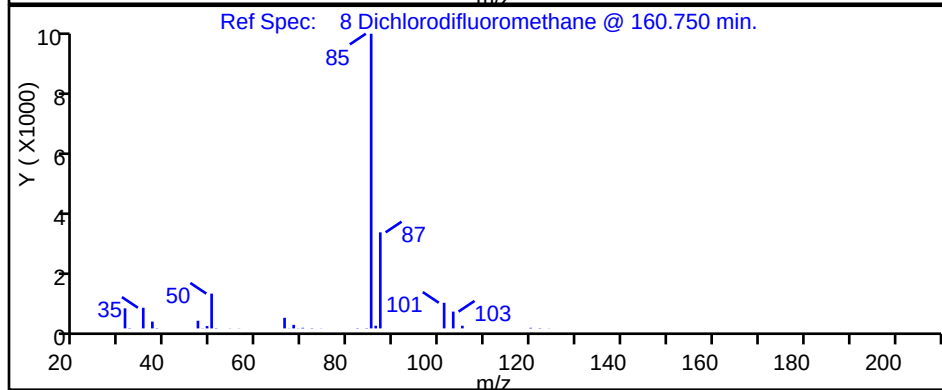
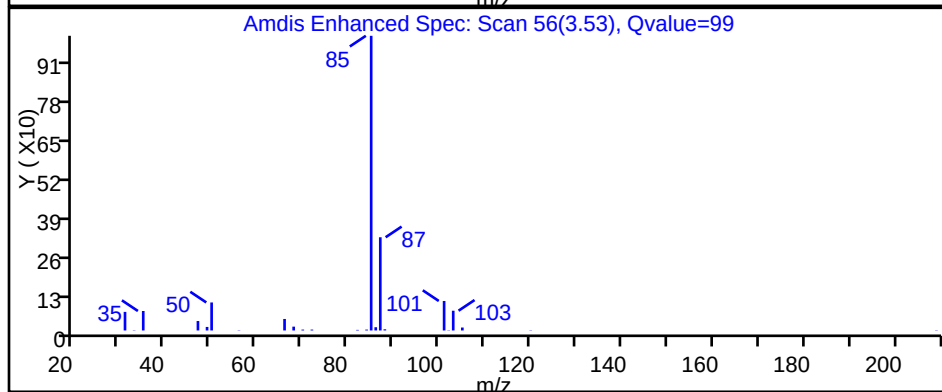
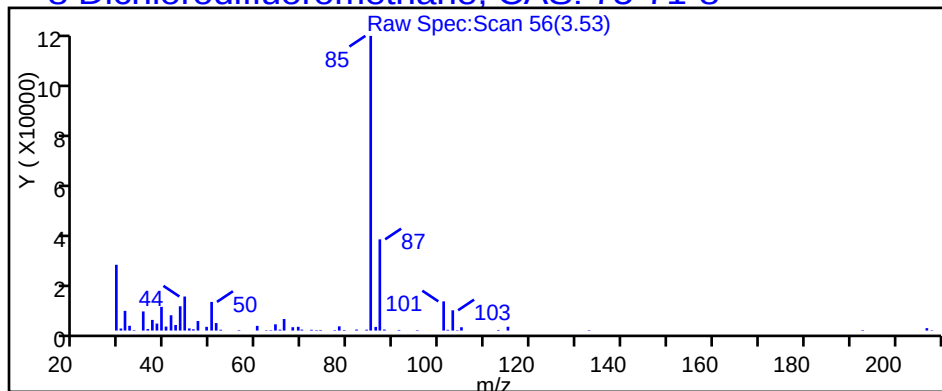
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P104R.D

Injection Date: 05-Apr-2017 10:09:30

Instrument ID: MG

Lims ID: 140-7685-A-4

Lab Sample ID: 140-7685-4

Client ID: H35-BA

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 27

Purge Vol: 500.000 mL

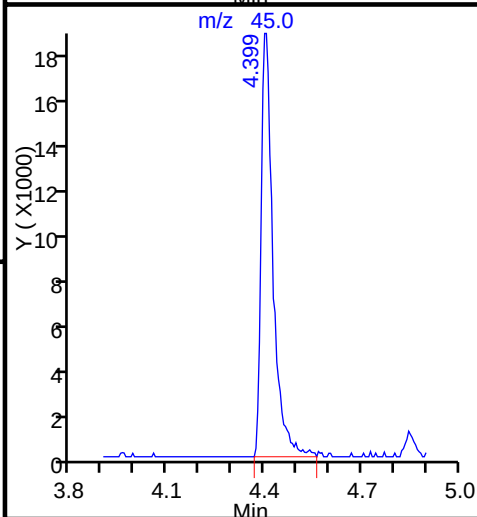
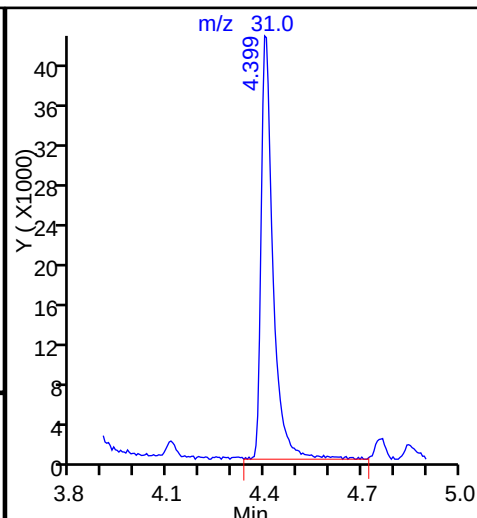
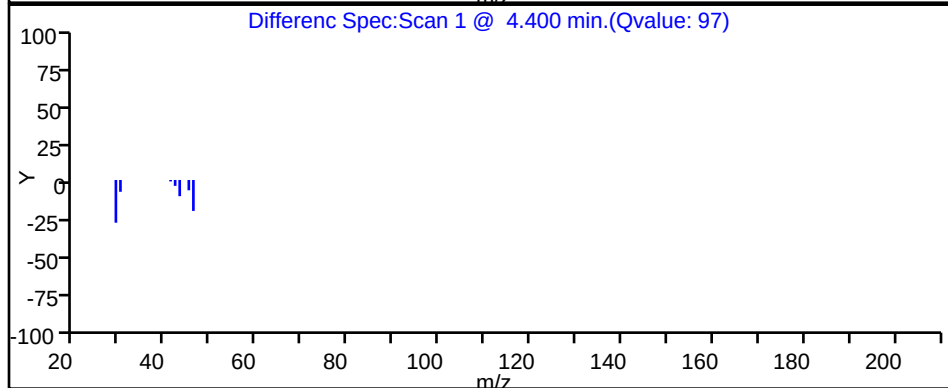
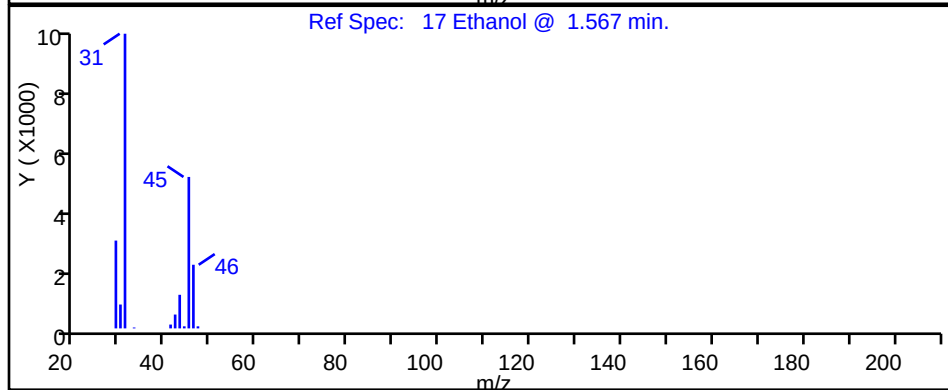
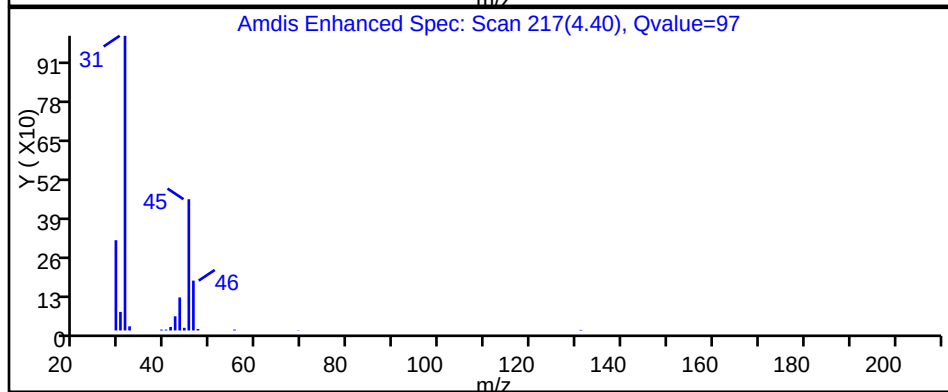
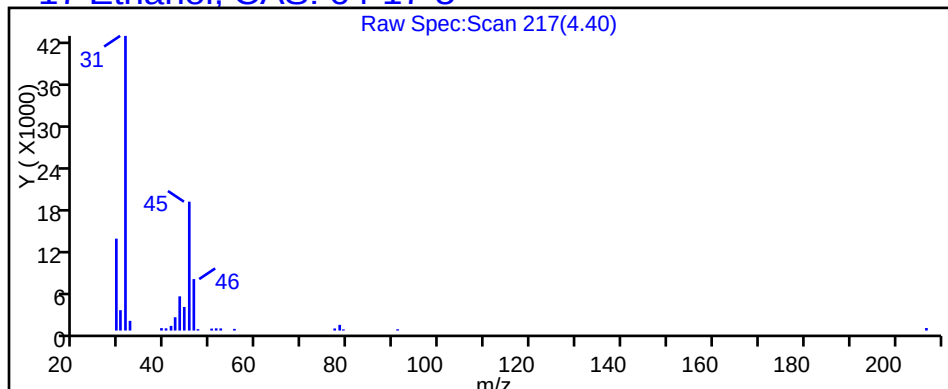
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P104R.D

Injection Date: 05-Apr-2017 10:09:30

Instrument ID: MG

Lims ID: 140-7685-A-4

Lab Sample ID: 140-7685-4

Client ID: H35-BA

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 27

Purge Vol: 500.000 mL

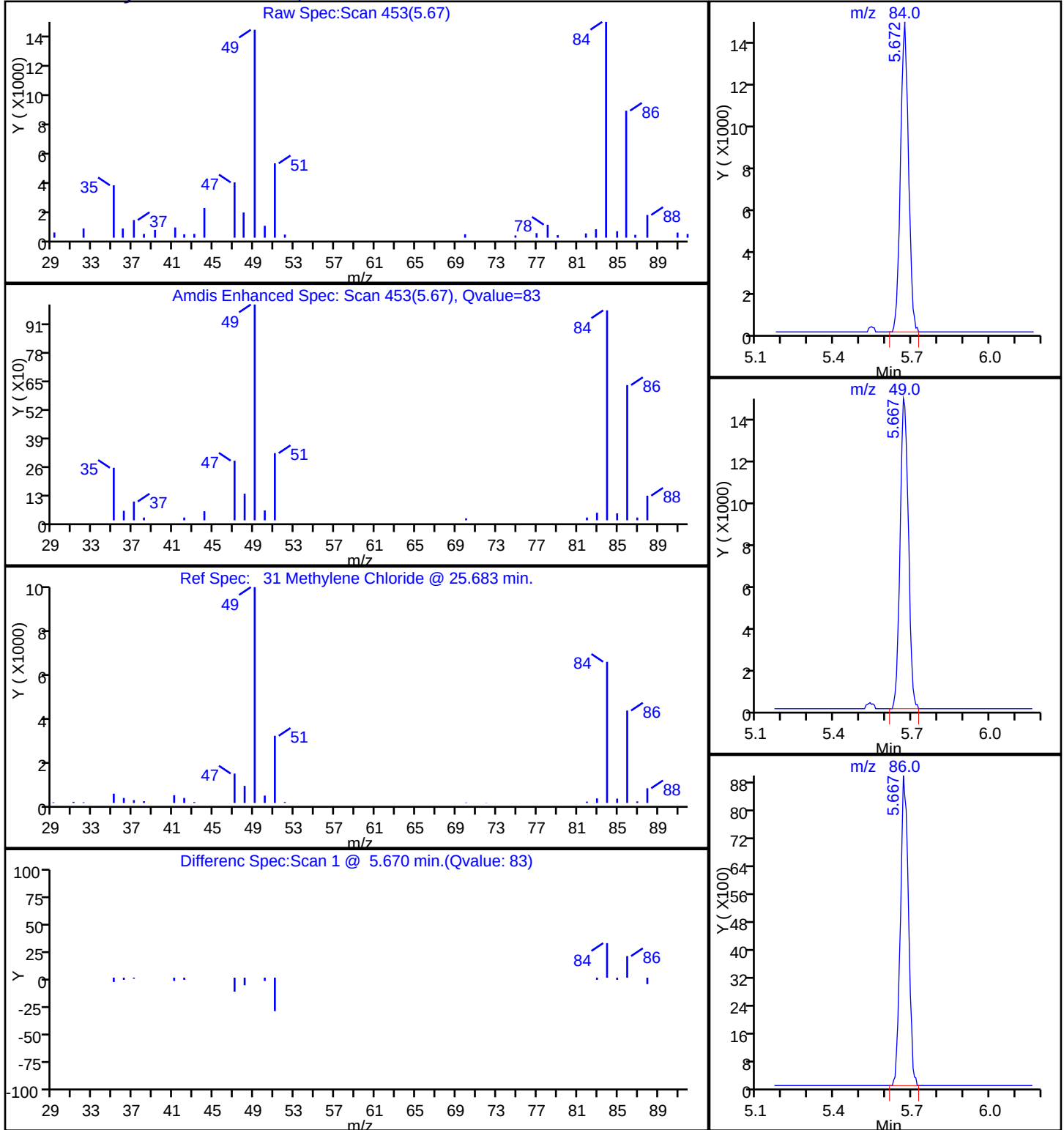
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P104R.D

Injection Date: 05-Apr-2017 10:09:30

Instrument ID: MG

Lims ID: 140-7685-A-4

Lab Sample ID: 140-7685-4

Client ID: H35-BA

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 27

Purge Vol: 500.000 mL

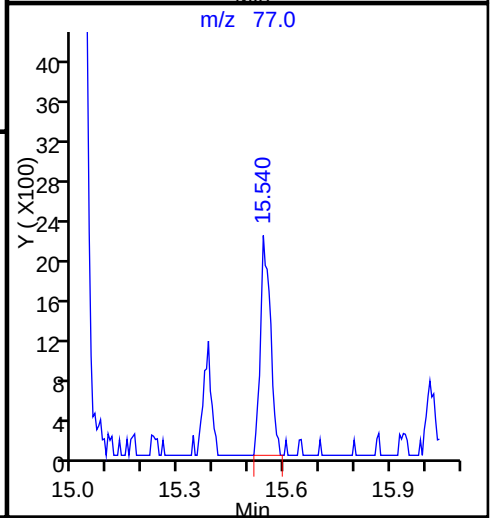
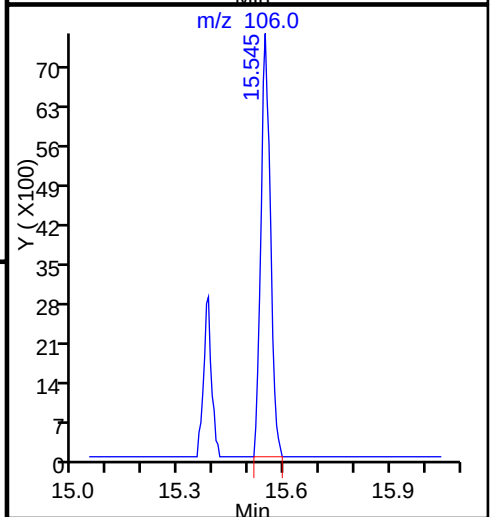
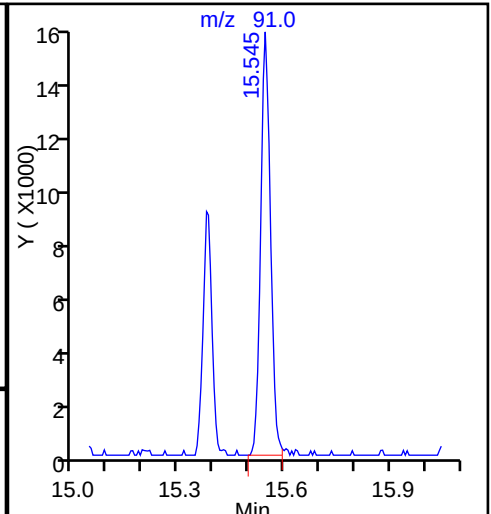
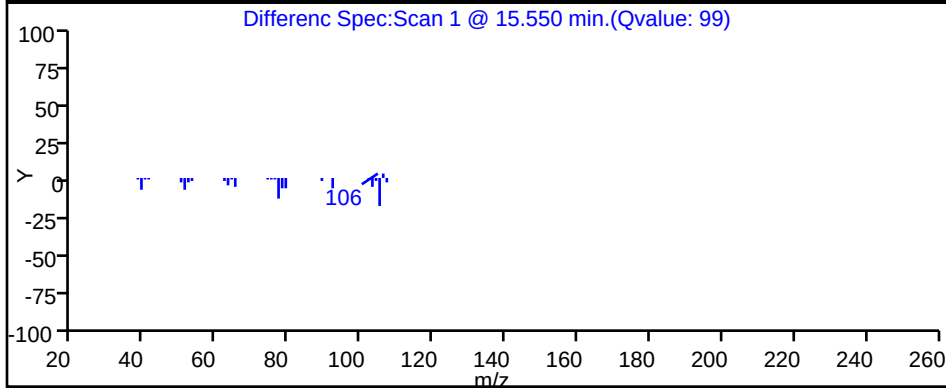
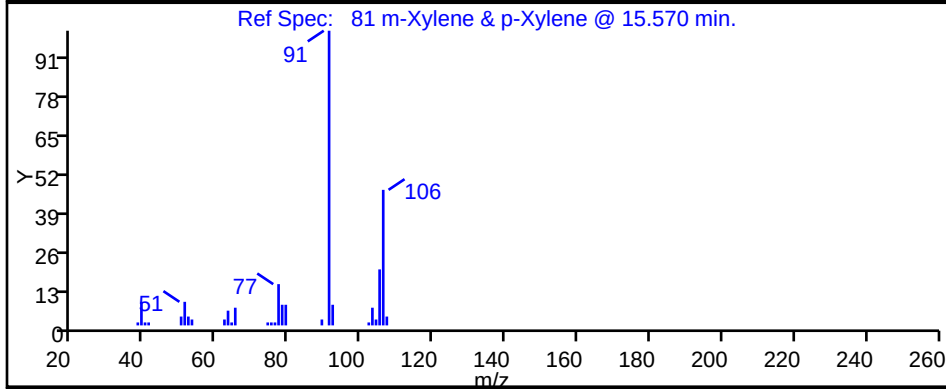
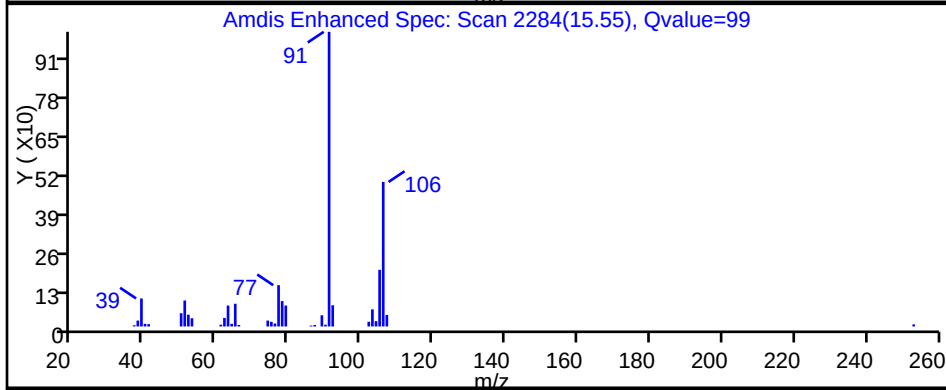
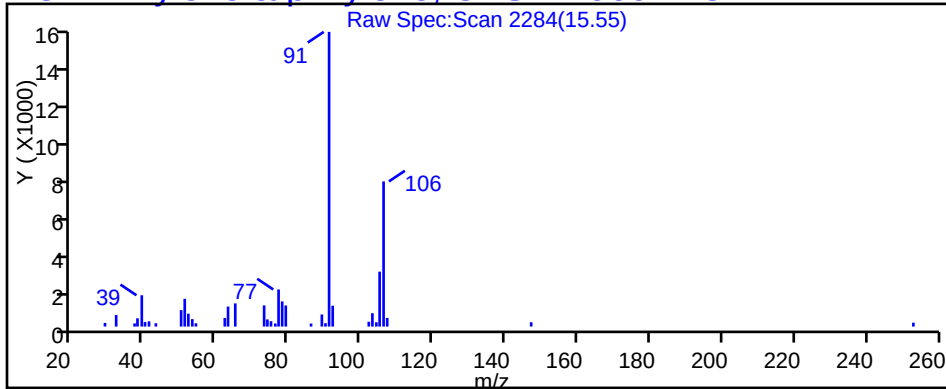
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P104R.D

Injection Date: 05-Apr-2017 10:09:30

Instrument ID: MG

Lims ID: 140-7685-A-4

Lab Sample ID: 140-7685-4

Client ID: H35-BA

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 27

Purge Vol: 500.000 mL

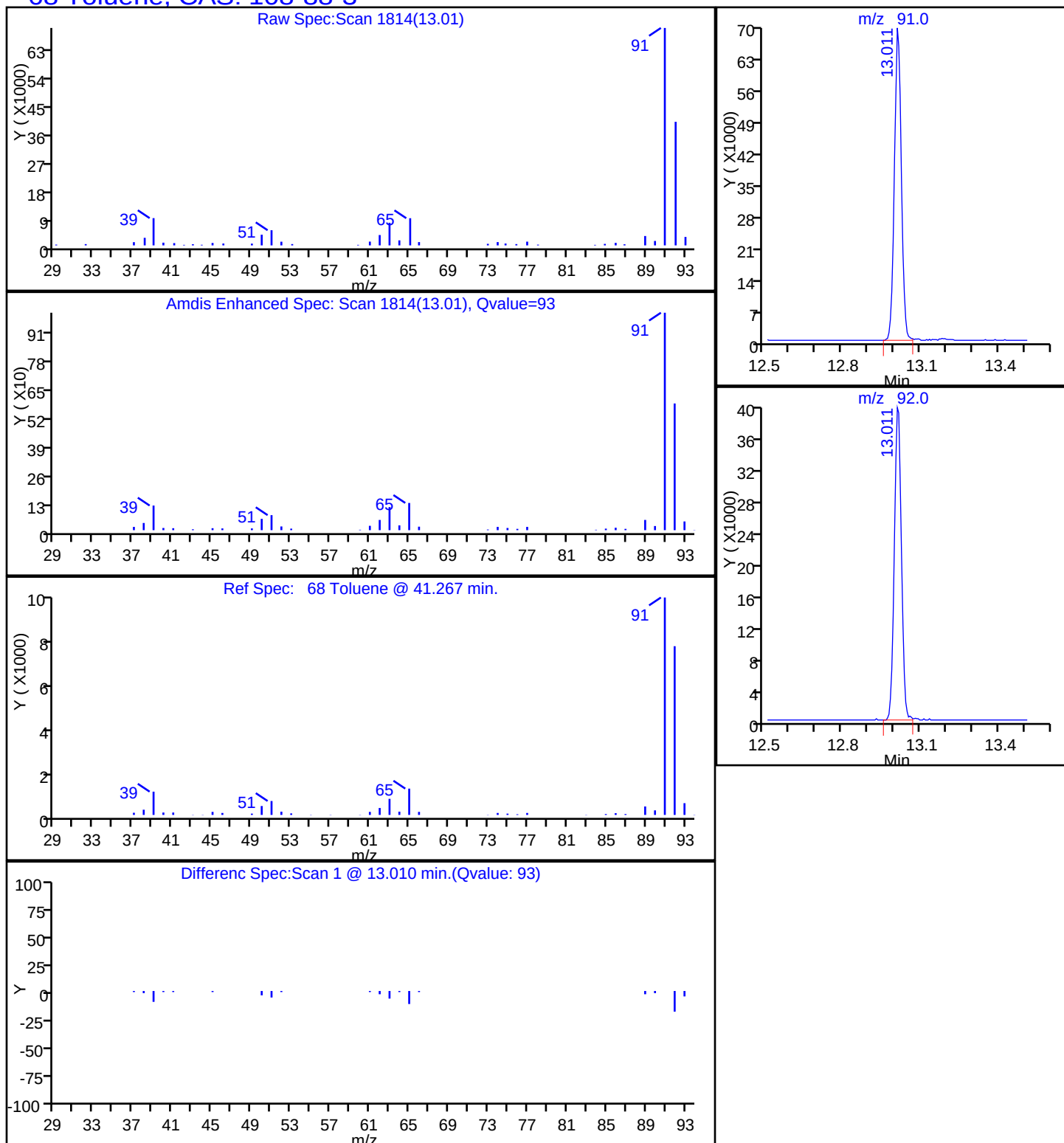
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P104R.D

Injection Date: 05-Apr-2017 10:09:30

Instrument ID: MG

Lims ID: 140-7685-A-4

Lab Sample ID: 140-7685-4

Client ID: H35-BA

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 27

Purge Vol: 500.000 mL

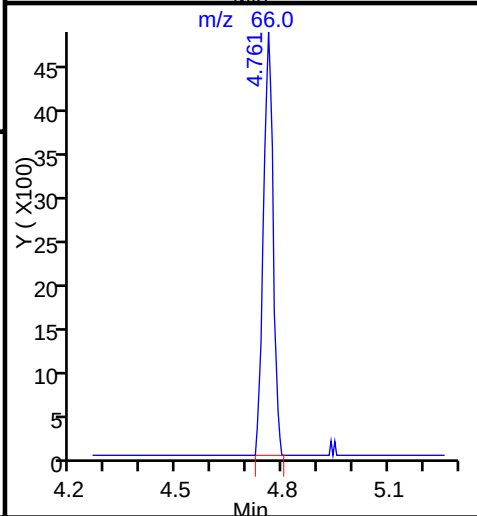
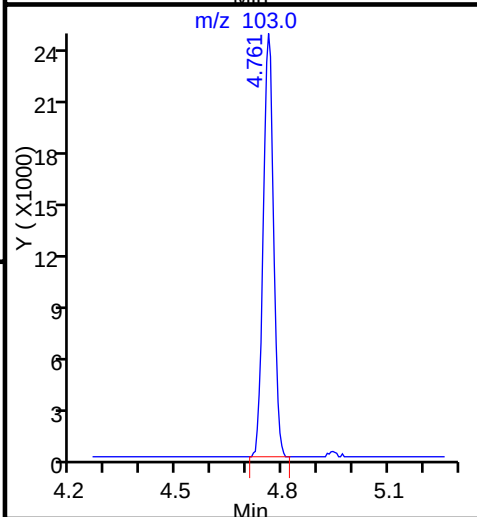
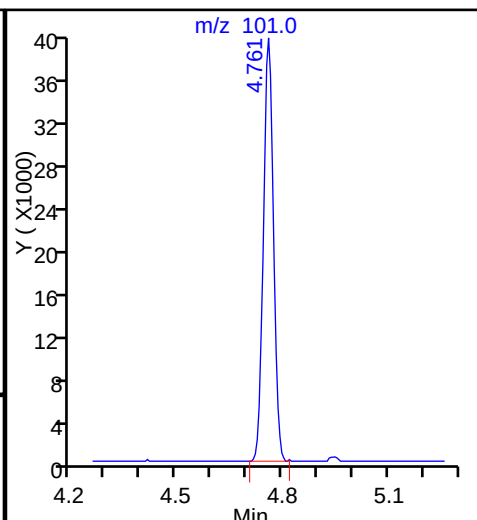
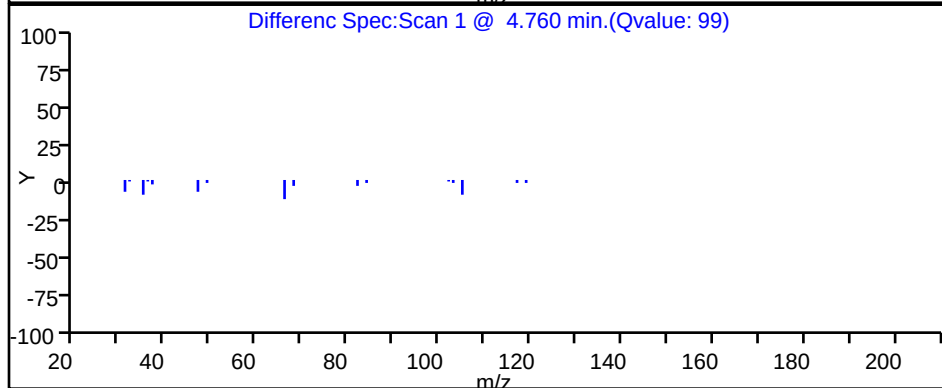
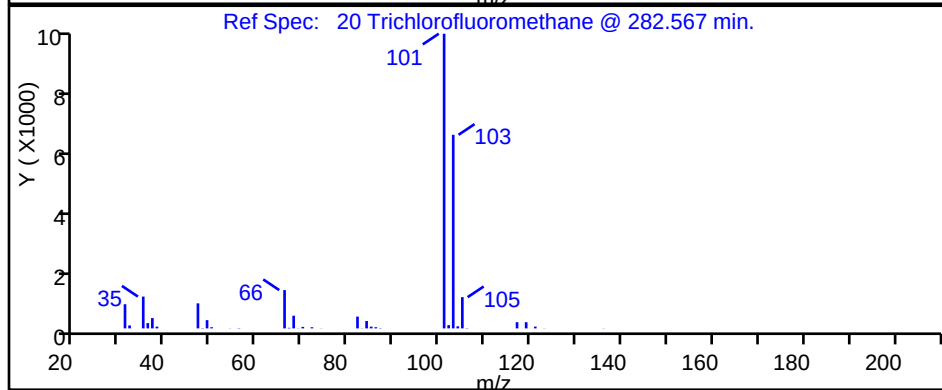
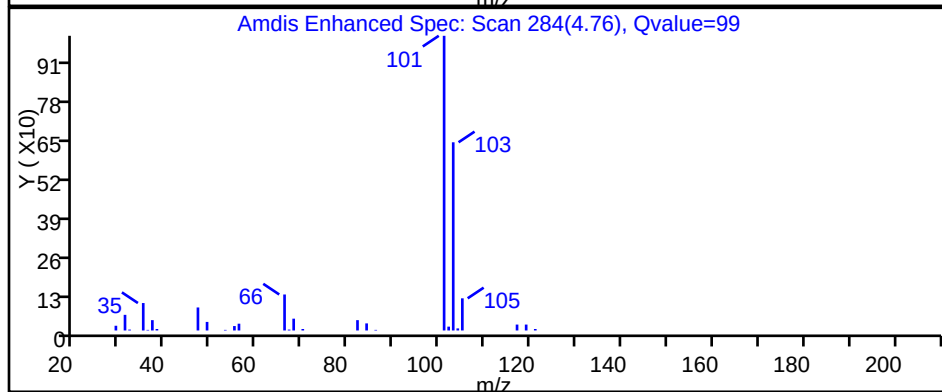
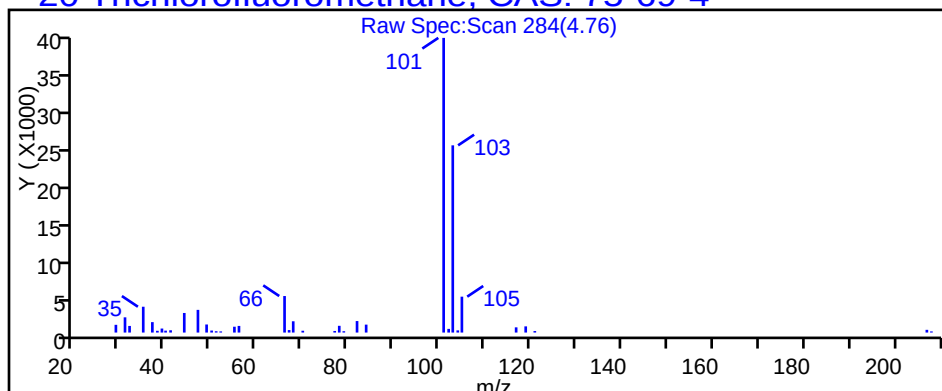
Dil. Factor: 1.0000

Method: MG_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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: FIELD DUP 1 Lab Sample ID: 140-7685-5
 Matrix: Air Lab File ID: GD04P105R.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 00:00
 Sample wt/vol: 500 (mL) Date Analyzed: 04/05/2017 10:54
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 10155 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	0.73		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	4.4		0.20	
71-43-2	Benzene	78.11	0.14		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	0.38		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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: FIELD DUP 1 Lab Sample ID: 140-7685-5
 Matrix: Air Lab File ID: GD04P105R.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 00:00
 Sample wt/vol: 500 (mL) Date Analyzed: 04/05/2017 10:54
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 10155 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	0.59		0.080	
64-17-5	Ethanol	46.07	4.8		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	0.89		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	0.50		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	ND		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.28		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: FIELD DUP 1 Lab Sample ID: 140-7685-5
 Matrix: Air Lab File ID: GD04P105R.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 00:00
 Sample wt/vol: 500 (mL) Date Analyzed: 04/05/2017 10:54
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 10155 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	2.1		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	18		0.82	
71-43-2	Benzene	78.11	0.45		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	0.77		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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: FIELD DUP 1 Lab Sample ID: 140-7685-5
 Matrix: Air Lab File ID: GD04P105R.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 00:00
 Sample wt/vol: 500 (mL) Date Analyzed: 04/05/2017 10:54
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 10155 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	2.9		0.40	
64-17-5	Ethanol	46.07	9.0		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	3.1		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	0.45		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	ND		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.6		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P105R.D
 Lims ID: 140-7685-A-5
 Client ID: FIELD DUP 1
 Sample Type: Client
 Inject. Date: 05-Apr-2017 10:54:30 ALS Bottle#: 5 Worklist Smp#: 28
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004508-028
 Misc. Info.: 140-7685-a-5
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 05-Apr-2017 11:36:07 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 11:36:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.974	7.980	-0.006	72	244561	4.00	
* 2 1,4-Difluorobenzene	114	10.142	10.148	-0.006	95	1237077	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.017	15.022	-0.005	88	1249837	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.688	16.694	-0.006	94	1014169	4.11	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	152093	0.5876	
9 Chloromethane	52	3.660	3.666	-0.006	98	6534	0.3752	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.671	0.000	84	2767	0.0180	
17 Ethanol	31	4.356	4.356	0.000	96	117344	4.77	
20 Trichlorofluoromethane	101	4.739	4.744	-0.005	99	72827	0.2825	
29 2-Methyl-2-propanol	59	5.456	5.456	0.000	95	11353	0.1143	
30 1,1,2-Trichloro-1,2,2-trif	101	5.515	5.521	-0.006	90	10245	0.0681	
31 Methylene Chloride	84	5.645	5.650	-0.005	87	52593	0.8943	
39 2-Butanone (MEK)	72	7.263	7.268	-0.005	98	20276	0.7286	
40 Hexane	56	7.322	7.327	-0.005	81	6638	0.1375	
44 Chloroform	83	8.001	8.007	-0.006	87	5042	0.0294	
49 Benzene	78	9.560	9.565	-0.005	97	29346	0.1396	
51 Carbon tetrachloride	117	9.592	9.598	-0.006	97	16647	0.0758	
56 Isooctane	57	10.396	10.396	0.000	80	8165	0.0262	
62 1,4-Dioxane	88	11.134	11.129	0.005	89	2980	0.1048	
65 4-Methyl-2-pentanone (MIBK	43	12.100	12.116	-0.016	96	528653	4.38	
68 Toluene	91	13.005	13.006	-0.001	93	125098	0.5024	
76 Tetrachloroethene	129	14.181	14.181	0.000	88	2029	0.0178	
79 Ethylbenzene	91	15.373	15.378	-0.005	99	14717	0.0423	
81 m-Xylene & p-Xylene	91	15.540	15.545	-0.005	98	29169	0.1038	
85 o-Xylene	91	16.068	16.074	-0.006	94	12410	0.0432	
96 1,2,4-Trimethylbenzene	105	17.939	17.940	-0.001	98	27496	0.0779	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P105R.D

Injection Date: 05-Apr-2017 10:54:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7685-A-5

Lab Sample ID: 140-7685-5

Worklist Smp#: 28

Client ID: FIELD DUP 1

Purge Vol: 500.000 mL

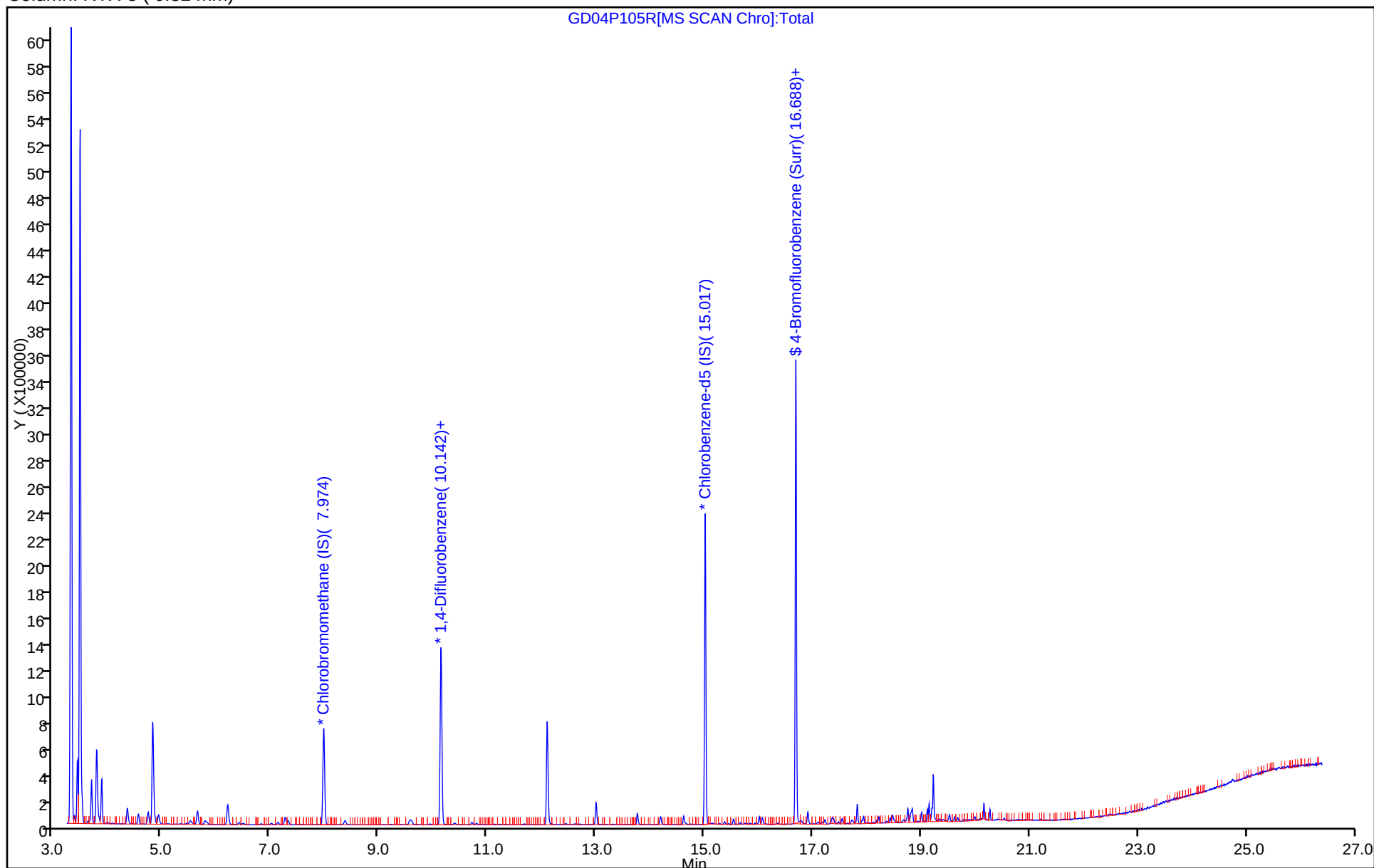
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P105R.D
Lims ID: 140-7685-A-5
Client ID: FIELD DUP 1
Sample Type: Client
Inject. Date: 05-Apr-2017 10:54:30 ALS Bottle#: 5 Worklist Smp#: 28
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004508-028
Misc. Info.: 140-7685-a-5
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 05-Apr-2017 11:36:07 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 11:36:07

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.11	102.65

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P105R.D

Injection Date: 05-Apr-2017 10:54:30

Instrument ID: MG

Lims ID: 140-7685-A-5

Lab Sample ID: 140-7685-5

Client ID: FIELD DUP 1

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 28

Purge Vol: 500.000 mL

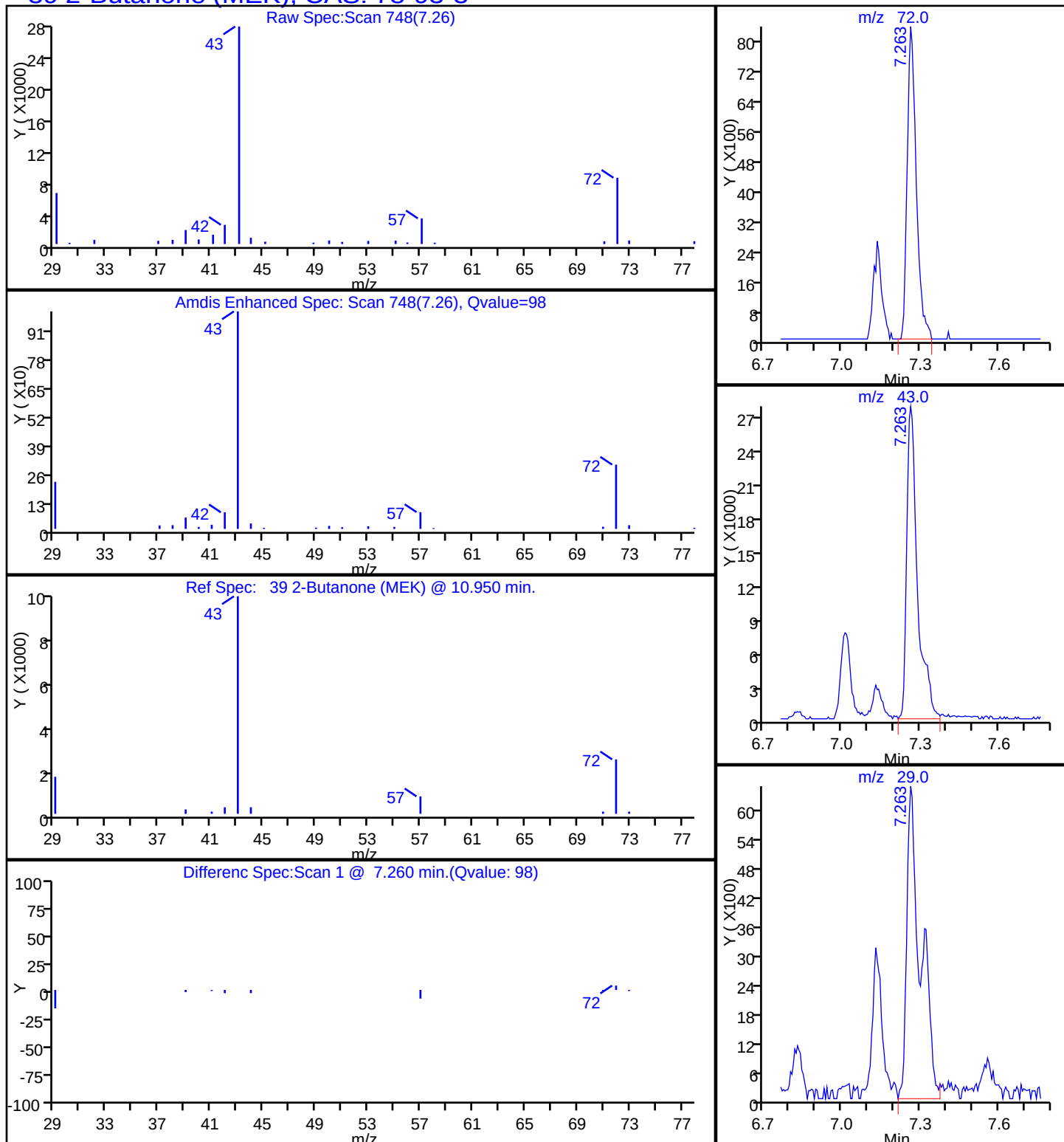
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P105R.D

Injection Date: 05-Apr-2017 10:54:30

Instrument ID: MG

Lims ID: 140-7685-A-5

Lab Sample ID: 140-7685-5

Client ID: FIELD DUP 1

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 28

Purge Vol: 500.000 mL

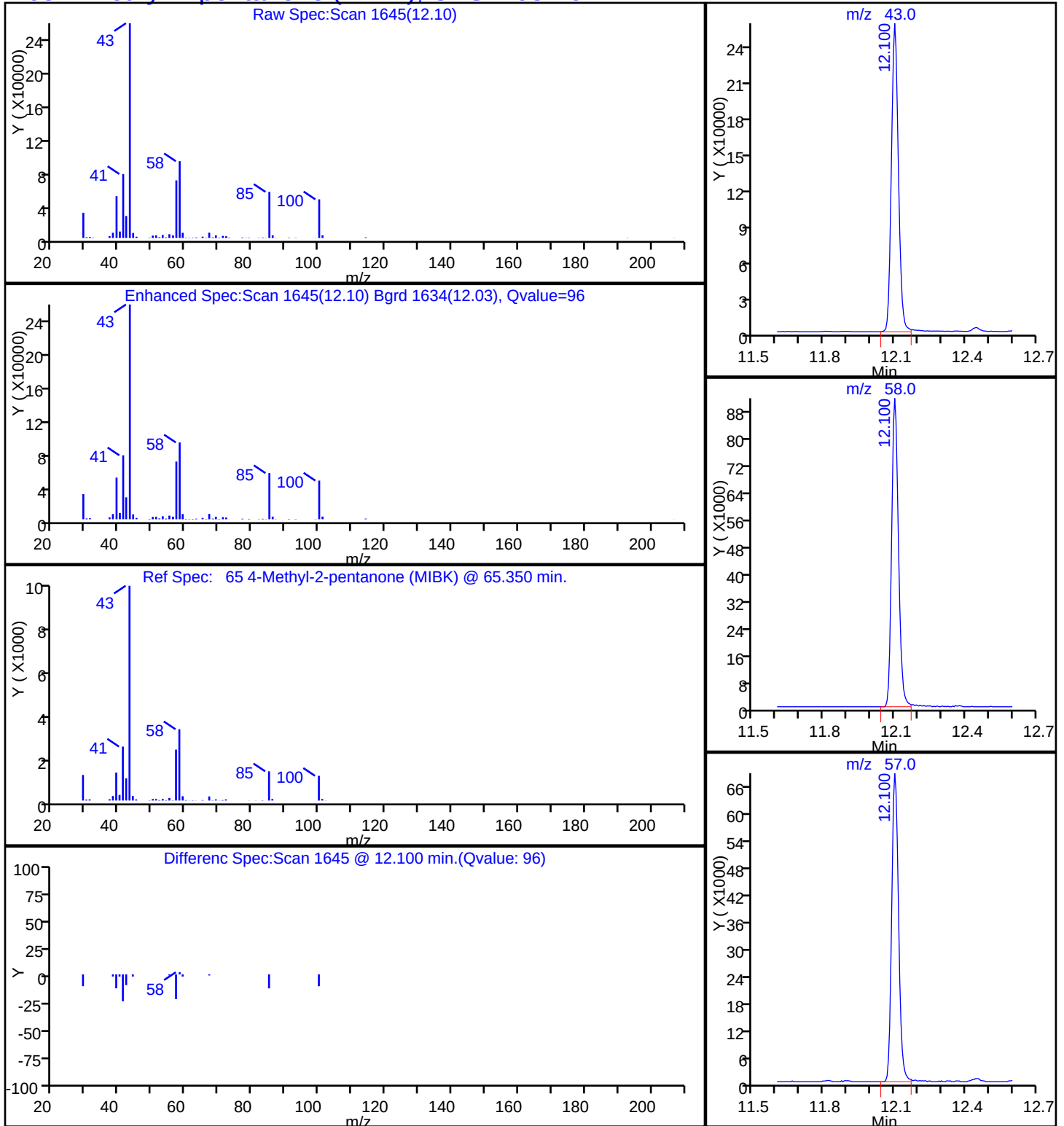
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

65 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P105R.D

Injection Date: 05-Apr-2017 10:54:30

Instrument ID: MG

Lims ID: 140-7685-A-5

Lab Sample ID: 140-7685-5

Client ID: FIELD DUP 1

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 28

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

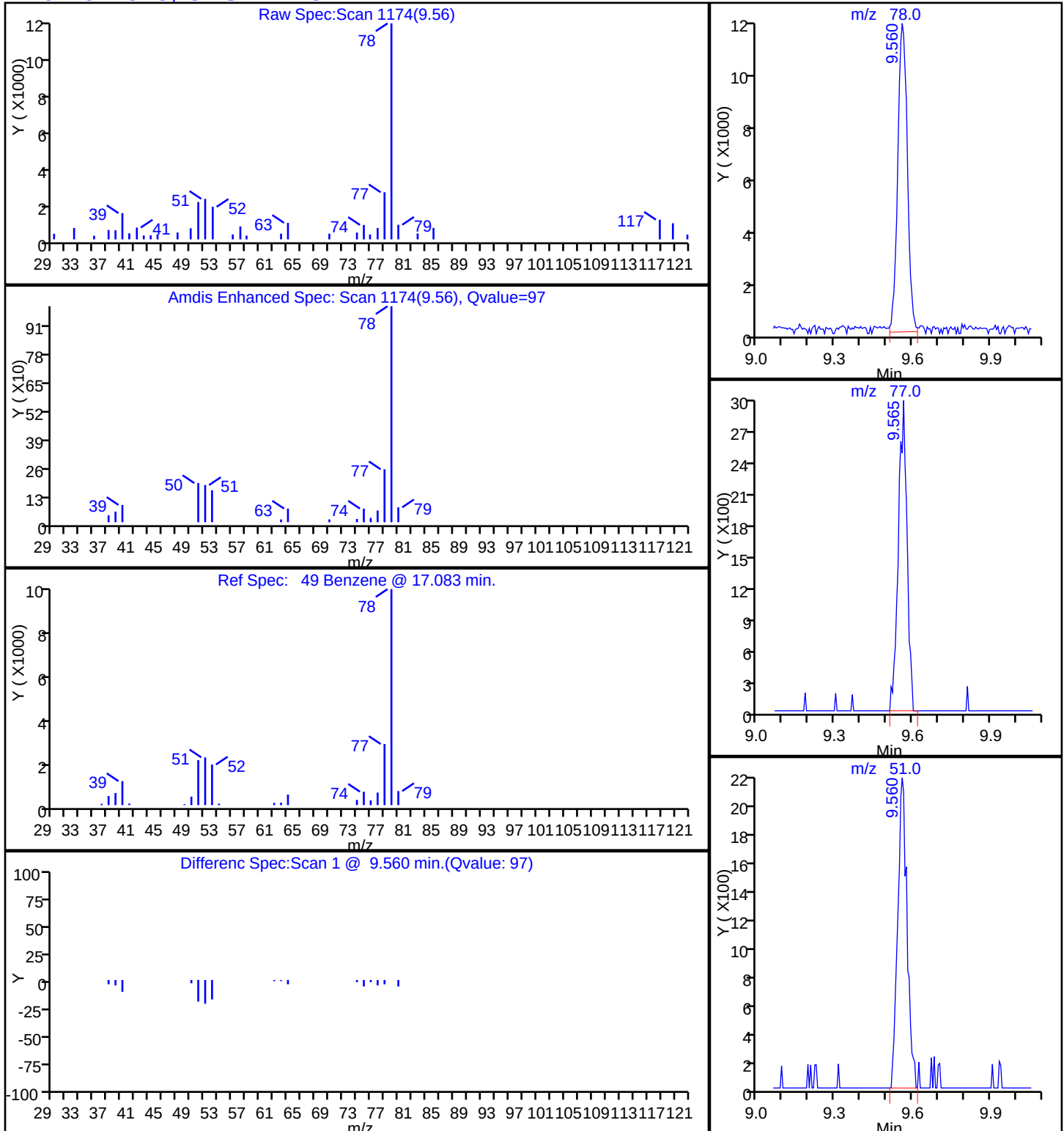
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P105R.D

Injection Date: 05-Apr-2017 10:54:30

Instrument ID: MG

Lims ID: 140-7685-A-5

Lab Sample ID: 140-7685-5

Client ID: FIELD DUP 1

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 28

Purge Vol: 500.000 mL

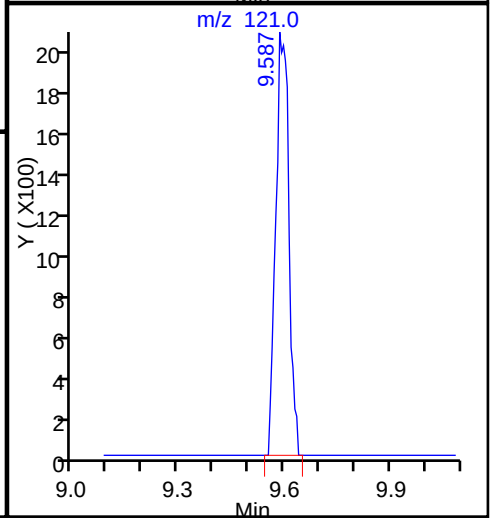
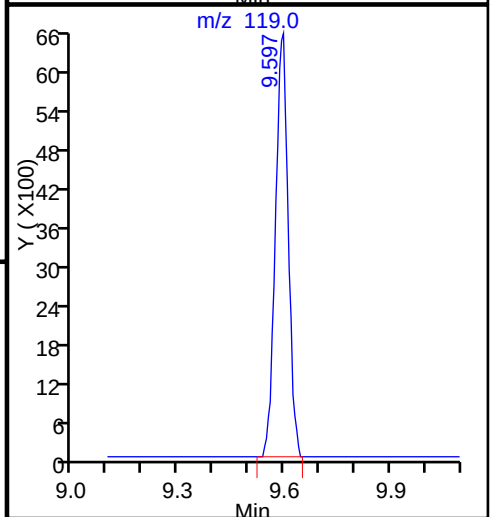
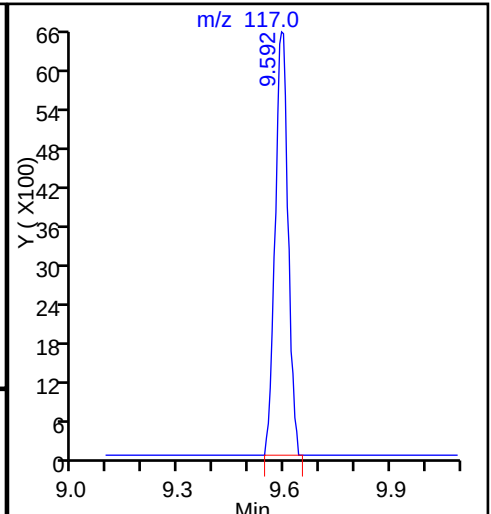
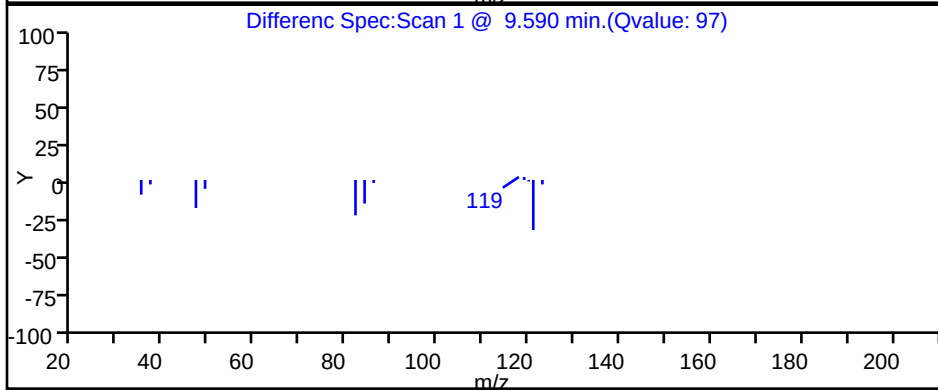
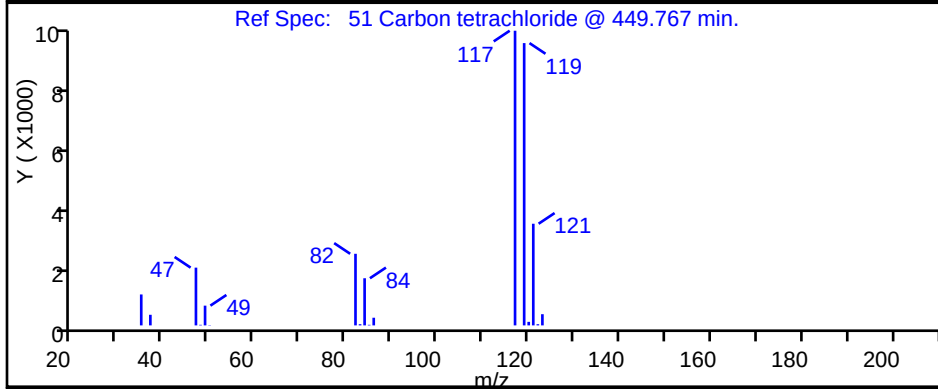
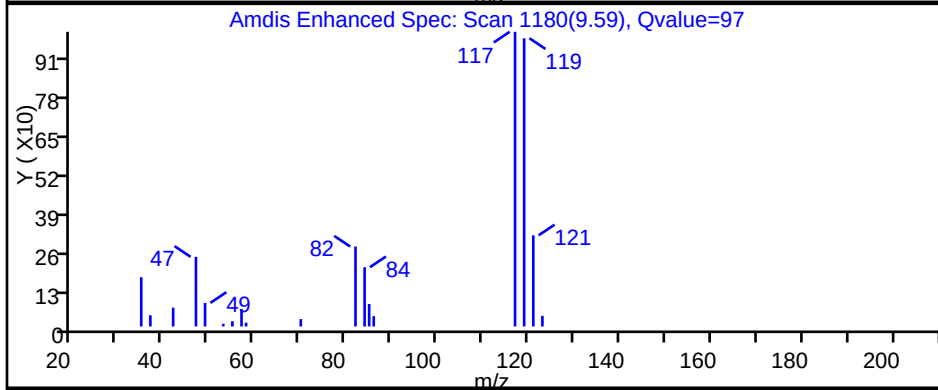
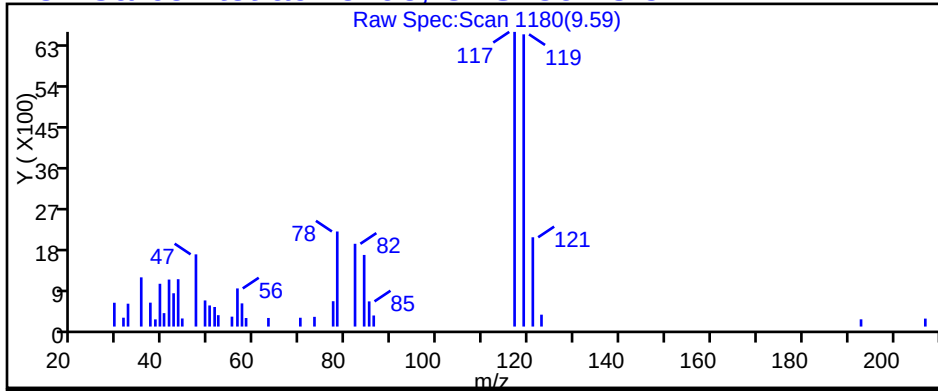
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P105R.D

Injection Date: 05-Apr-2017 10:54:30

Instrument ID: MG

Lims ID: 140-7685-A-5

Lab Sample ID: 140-7685-5

Client ID: FIELD DUP 1

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 28

Purge Vol: 500.000 mL

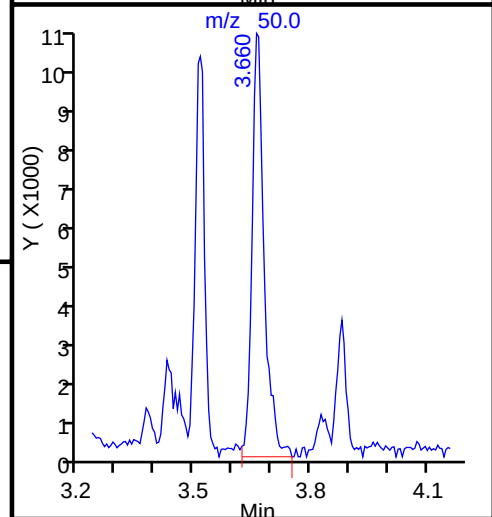
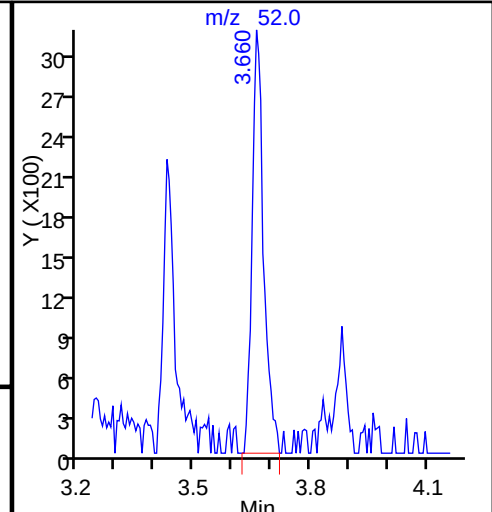
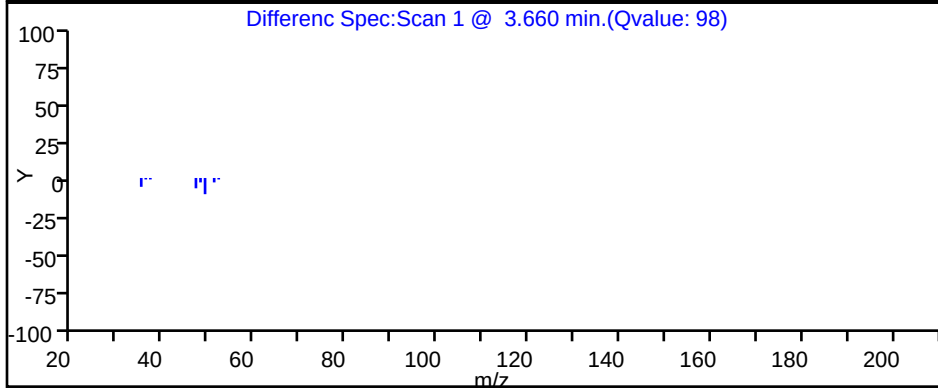
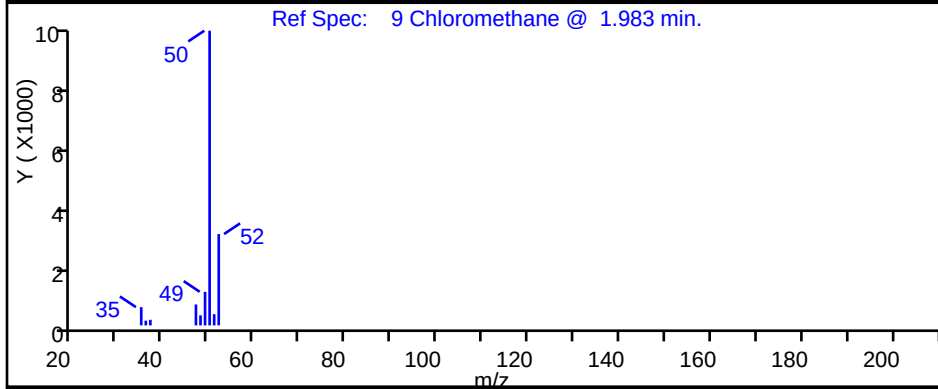
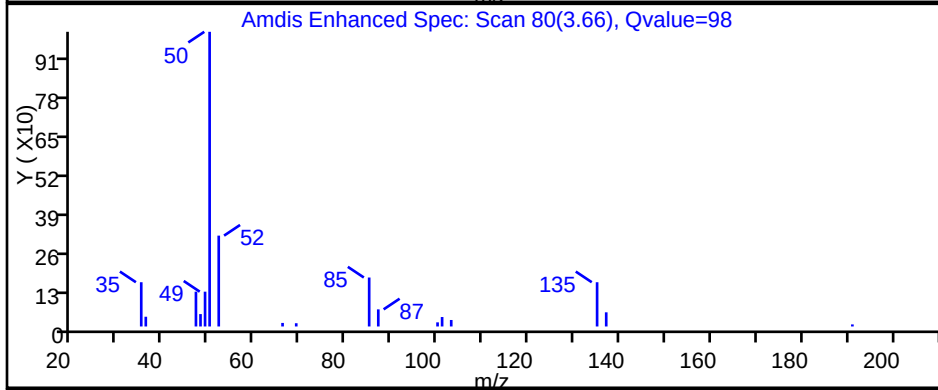
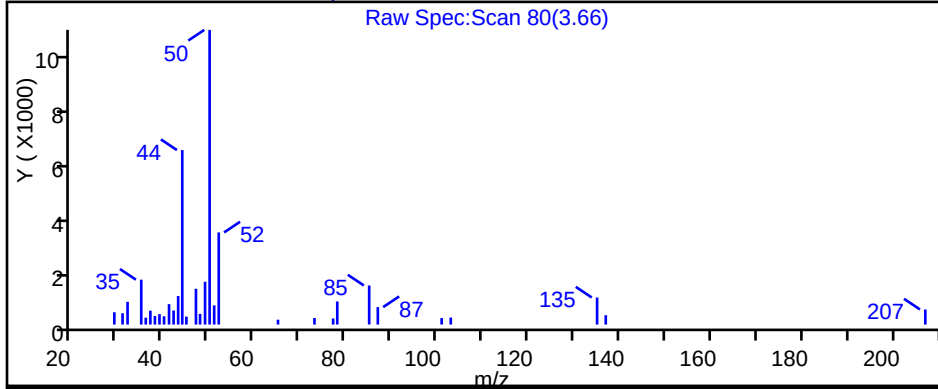
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P105R.D

Injection Date: 05-Apr-2017 10:54:30

Instrument ID: MG

Lims ID: 140-7685-A-5

Lab Sample ID: 140-7685-5

Client ID: FIELD DUP 1

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 28

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

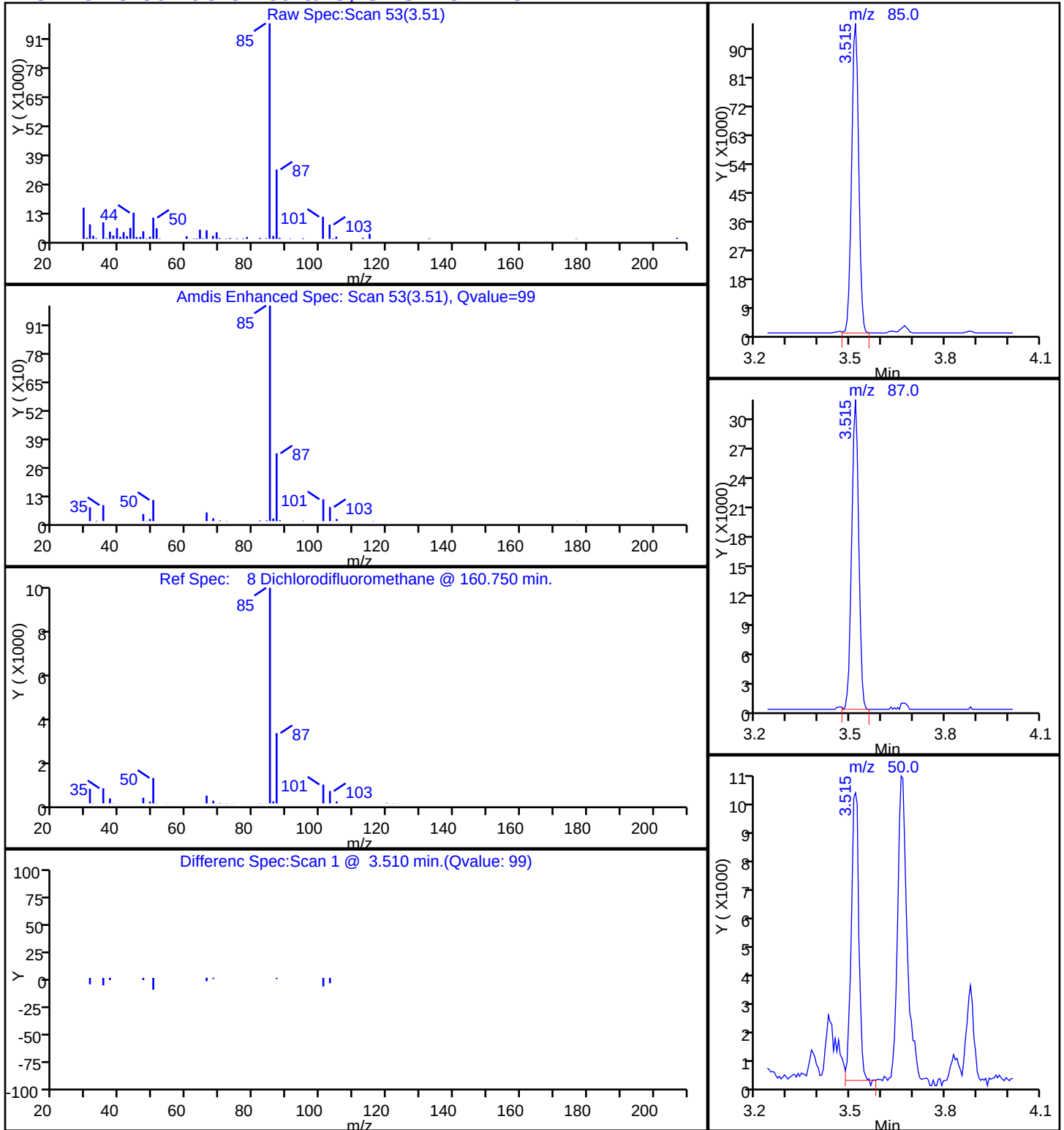
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P105R.D

Injection Date: 05-Apr-2017 10:54:30

Instrument ID: MG

Lims ID: 140-7685-A-5

Lab Sample ID: 140-7685-5

Client ID: FIELD DUP 1

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 28

Purge Vol: 500.000 mL

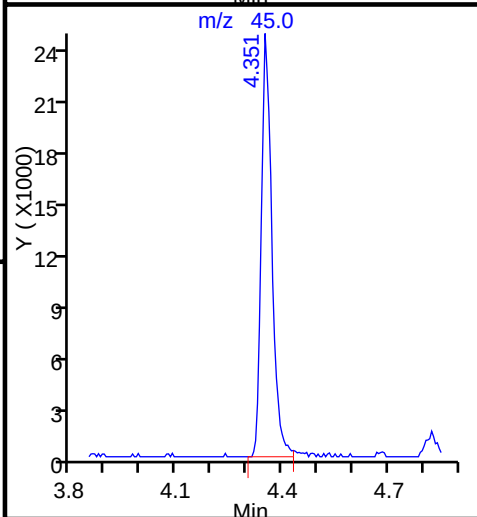
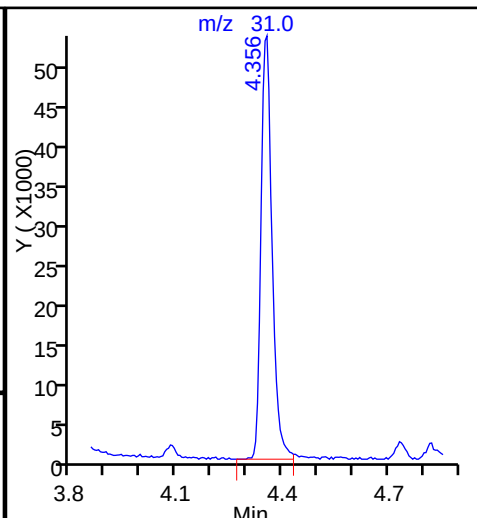
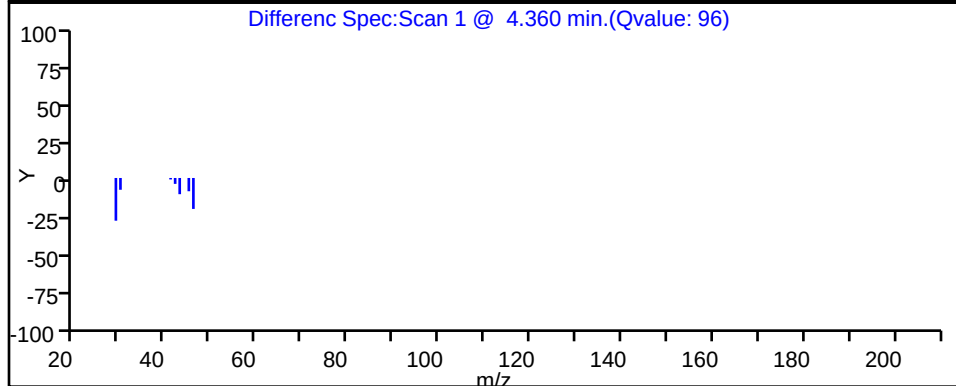
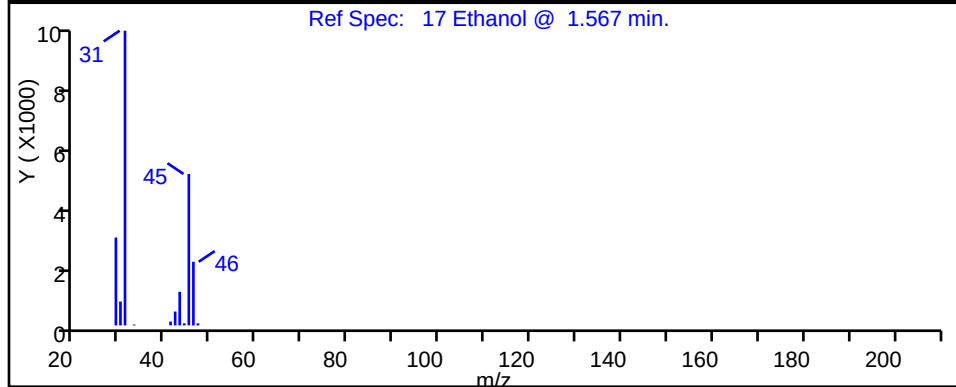
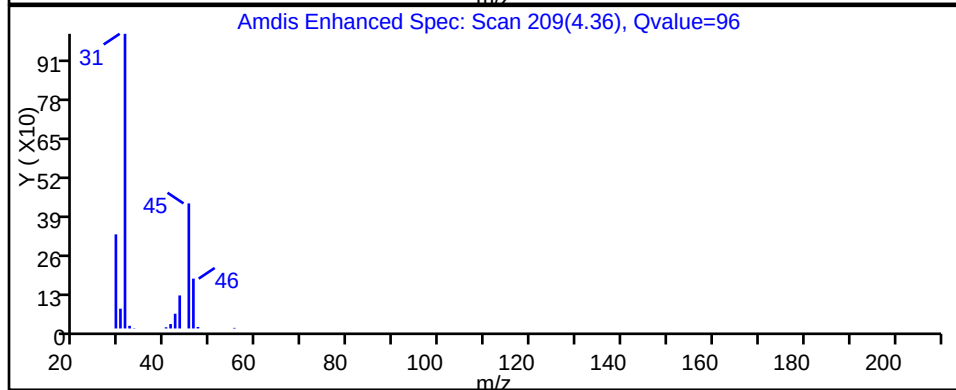
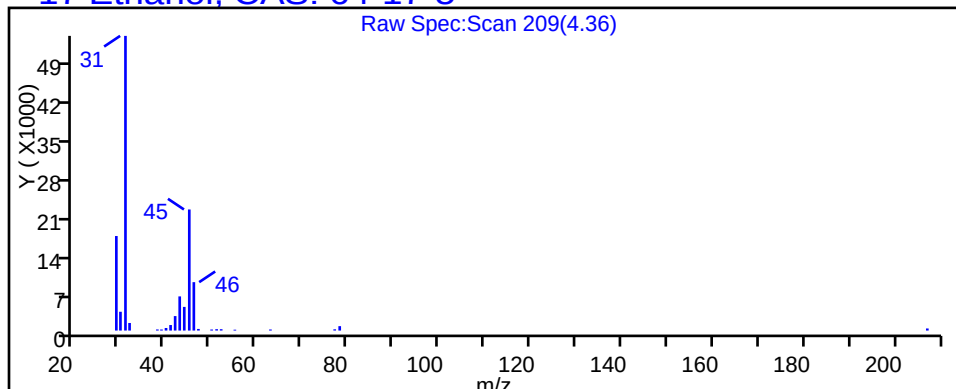
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P105R.D

Injection Date: 05-Apr-2017 10:54:30

Instrument ID: MG

Lims ID: 140-7685-A-5

Lab Sample ID: 140-7685-5

Client ID: FIELD DUP 1

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 28

Purge Vol: 500.000 mL

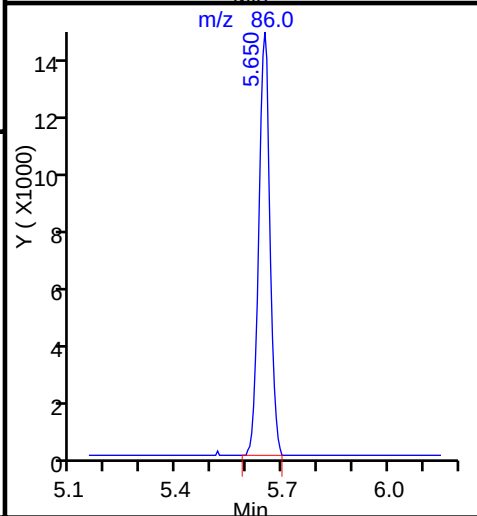
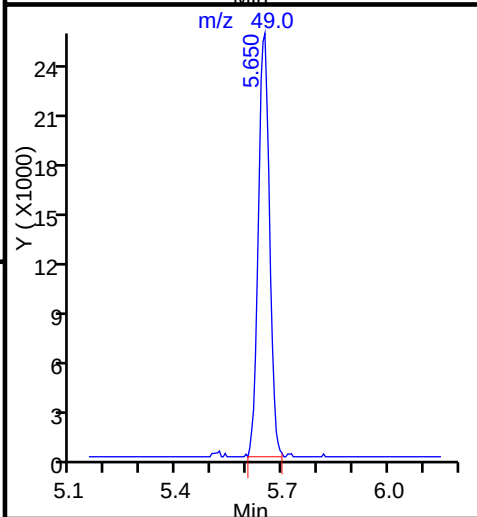
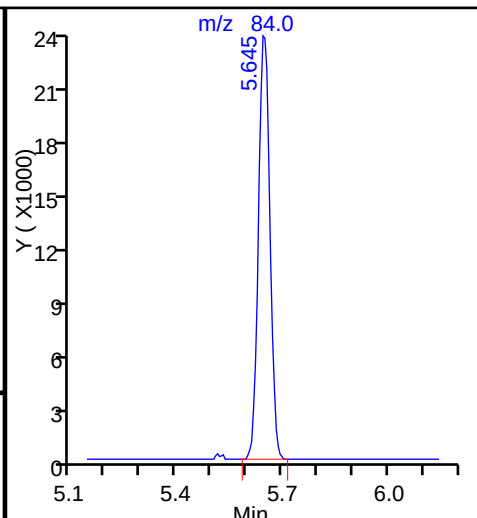
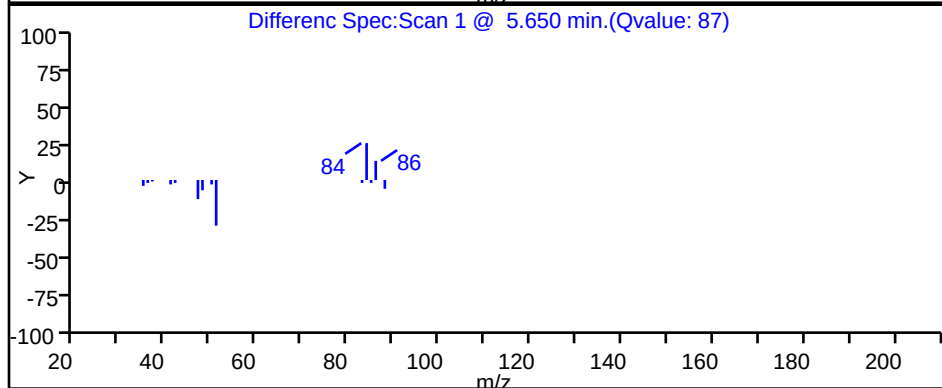
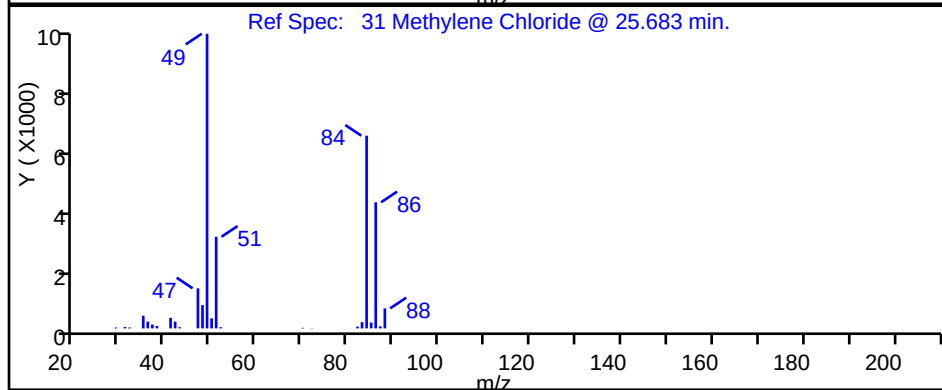
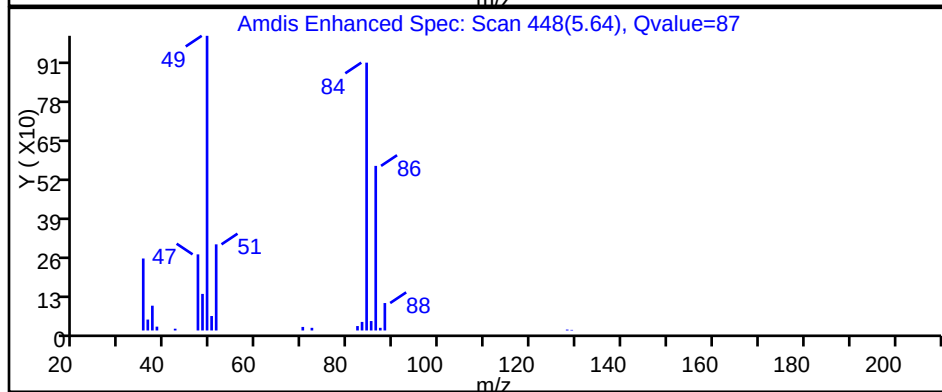
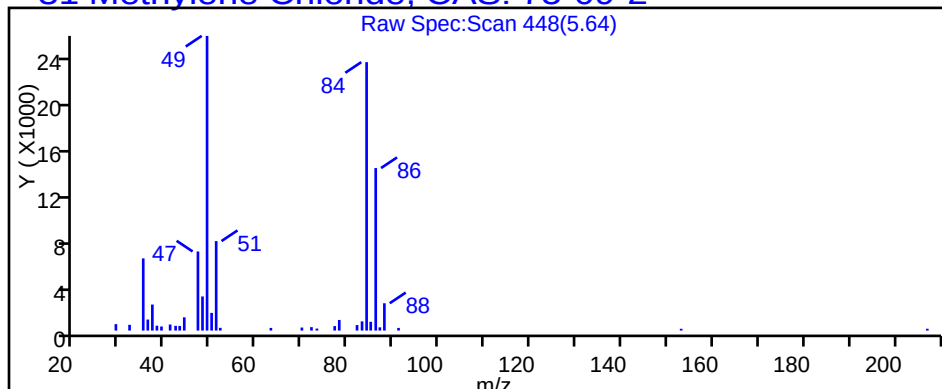
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P105R.D

Injection Date: 05-Apr-2017 10:54:30

Instrument ID: MG

Lims ID: 140-7685-A-5

Lab Sample ID: 140-7685-5

Client ID: FIELD DUP 1

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 28

Purge Vol: 500.000 mL

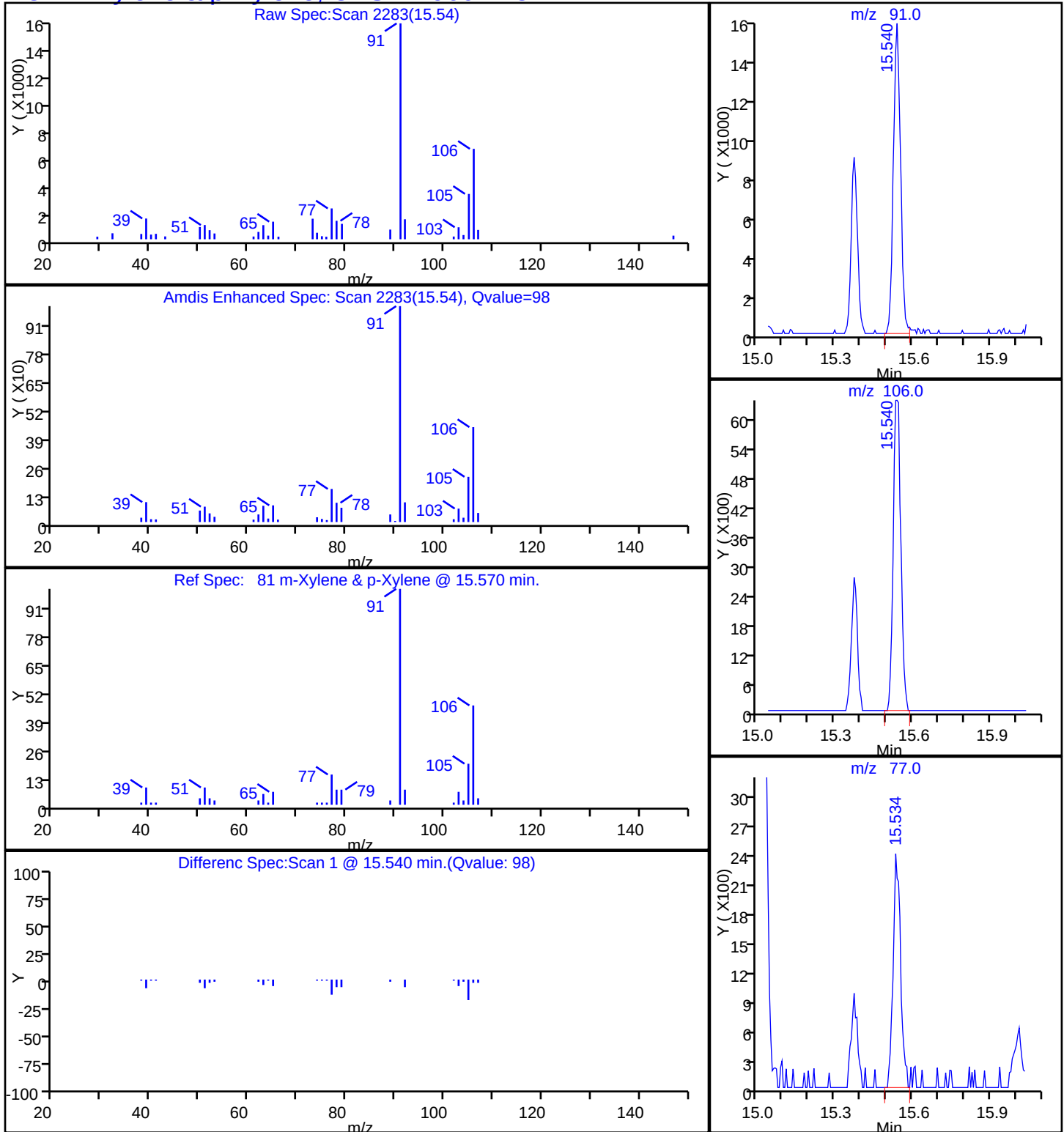
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P105R.D

Injection Date: 05-Apr-2017 10:54:30

Instrument ID: MG

Lims ID: 140-7685-A-5

Lab Sample ID: 140-7685-5

Client ID: FIELD DUP 1

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 28

Purge Vol: 500.000 mL

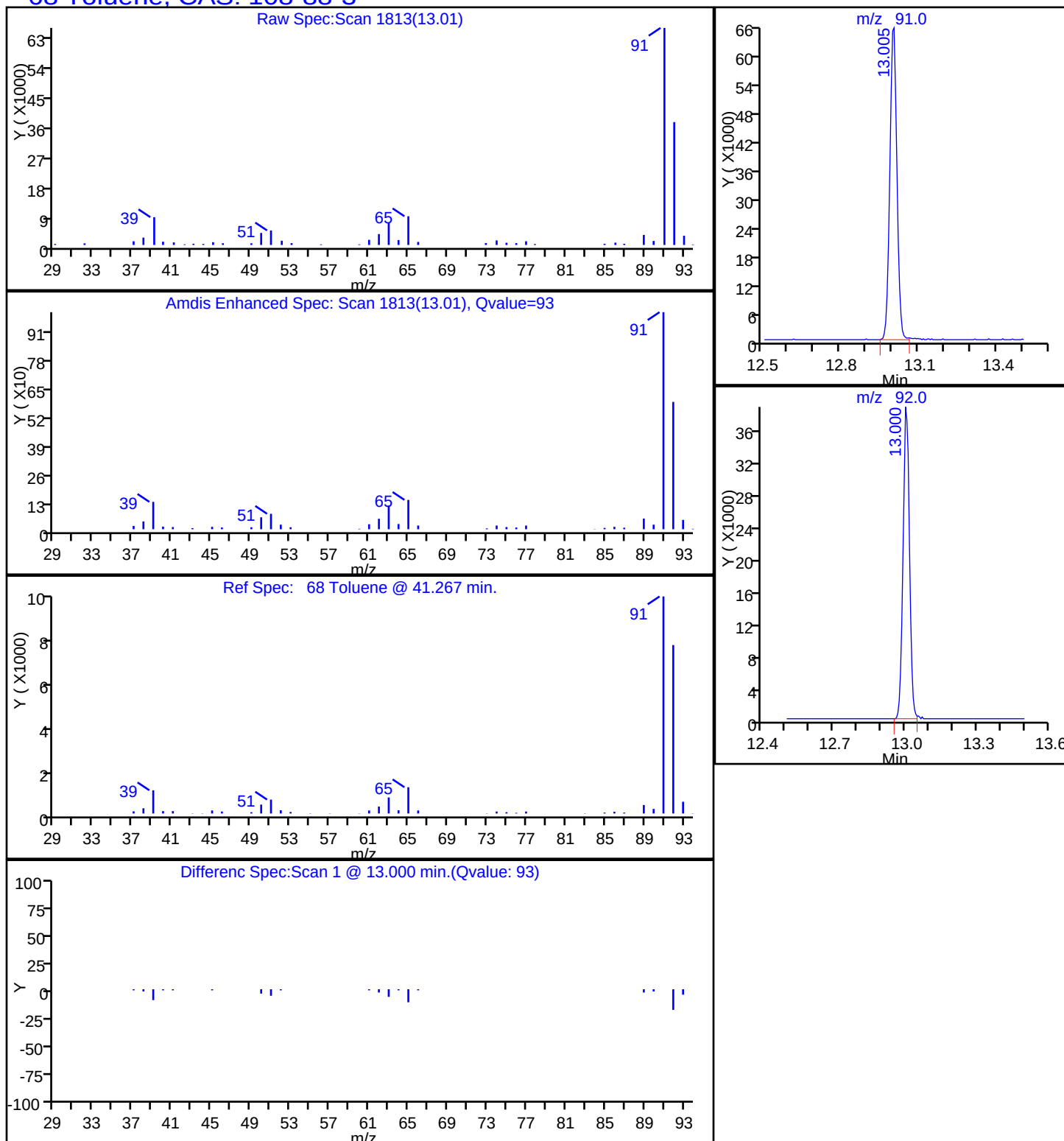
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P105R.D

Injection Date: 05-Apr-2017 10:54:30

Instrument ID: MG

Lims ID: 140-7685-A-5

Lab Sample ID: 140-7685-5

Client ID: FIELD DUP 1

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 28

Purge Vol: 500.000 mL

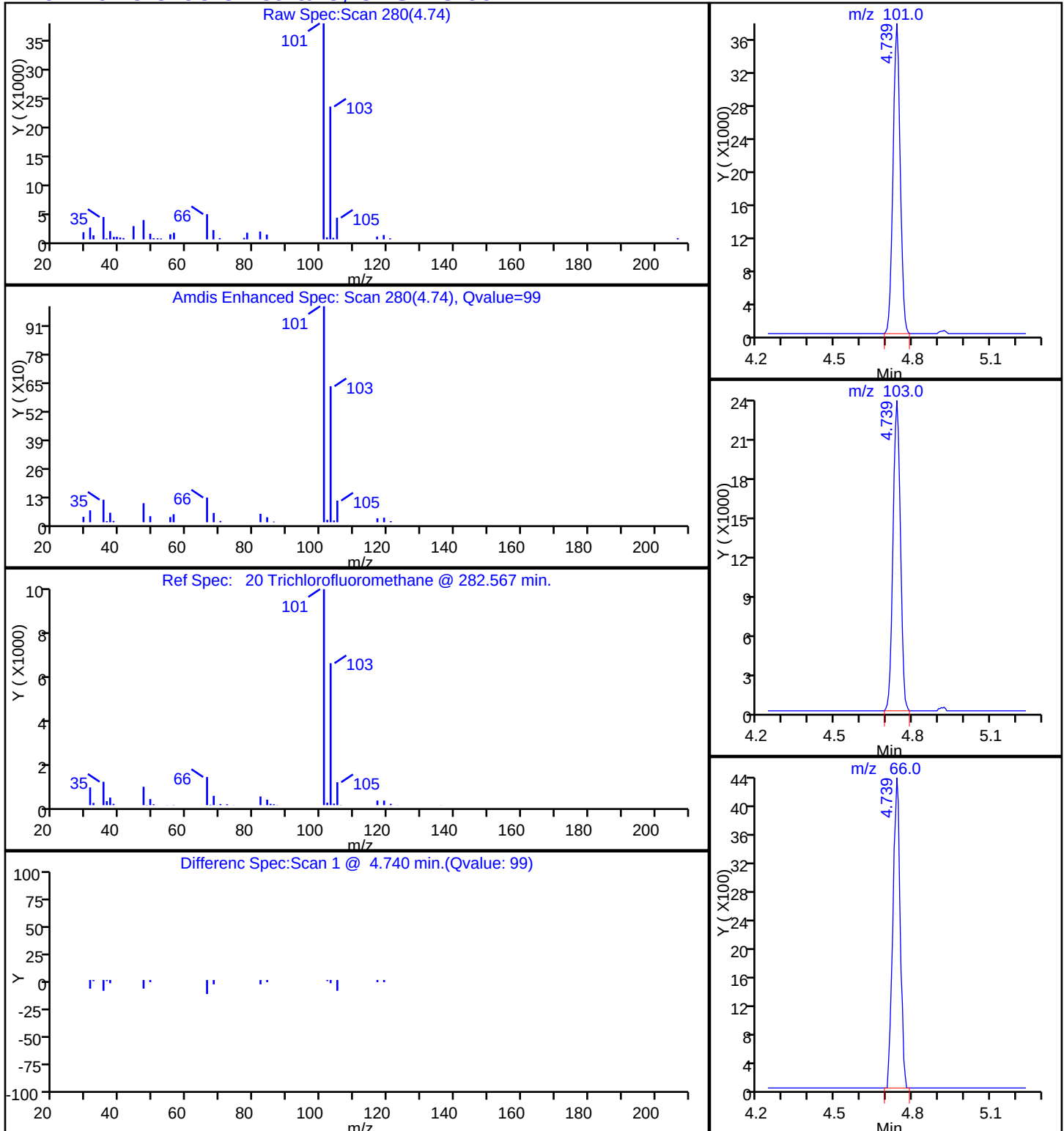
Dil. Factor: 1.0000

Method: MG_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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H16-OA Lab Sample ID: 140-7685-6
 Matrix: Air Lab File ID: GD04P106.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 09:01
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 19:01
 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.: 10155 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	0.19		0.080	
100-44-7	Benzyl chloride	126.58	ND		0.16	
75-27-4	Bromodichloromethane	163.83	ND		0.080	
75-25-2	Bromoform	252.75	ND		0.080	
74-83-9	Bromomethane	94.94	ND		0.080	
56-23-5	Carbon tetrachloride	153.81	0.071		0.040	
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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H16-OA Lab Sample ID: 140-7685-6
 Matrix: Air Lab File ID: GD04P106.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 09:01
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 19:01
 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.: 10155 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	2.5		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	ND		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	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	0.23		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	0.23		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H16-OA Lab Sample ID: 140-7685-6
 Matrix: Air Lab File ID: GD04P106.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 09:01
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 19:01
 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.: 10155 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	0.61		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	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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H16-OA Lab Sample ID: 140-7685-6
 Matrix: Air Lab File ID: GD04P106.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 09:01
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 19:01
 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.: 10155 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	4.8		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	0.59		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	0.87		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		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P106.D
 Lims ID: 140-7685-A-6
 Client ID: H16-OA
 Sample Type: Client
 Inject. Date: 04-Apr-2017 19:01:30 ALS Bottle#: 6 Worklist Smp#: 14
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004508-014
 Misc. Info.: 140-7685-a-6
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 05-Apr-2017 10:01:21 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 09:56:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.980	7.980	0.000	72	271299	4.00	
* 2 1,4-Difluorobenzene	114	10.142	10.148	-0.006	95	1372815	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.017	15.022	-0.005	88	1333616	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.688	16.694	-0.006	94	1078948	4.09	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	131954	0.4596	
9 Chloromethane	52	3.666	3.666	0.000	99	8345	0.4320	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.671	0.000	39	2699	0.0158	
17 Ethanol	31	4.356	4.356	0.000	96	69565	2.55	
20 Trichlorofluoromethane	101	4.744	4.744	0.000	99	65090	0.2276	
30 1,1,2-Trichloro-1,2,2-trif	101	5.521	5.521	0.000	91	10145	0.0608	
31 Methylene Chloride	84	5.645	5.650	-0.005	89	10561	0.1619	
39 2-Butanone (MEK)	72	7.284	7.268	0.016	97	3988	0.1292	
40 Hexane	56	7.327	7.327	0.000	76	4486	0.0837	
44 Chloroform	83	7.996	8.007	-0.011	77	4728	0.0248	
49 Benzene	78	9.565	9.565	0.000	97	44211	0.1896	
50 Cyclohexane	69	9.576	9.576	0.000	39	1019	0.0260	
51 Carbon tetrachloride	117	9.597	9.598	-0.001	96	17333	0.0711	
56 Isooctane	57	10.396	10.396	0.000	93	17046	0.0492	
65 4-Methyl-2-pentanone (MIBK	43	12.126	12.116	0.010	94	8560	0.0639	
68 Toluene	91	13.005	13.006	-0.001	93	61548	0.2317	
76 Tetrachloroethene	129	14.181	14.181	0.000	89	2404	0.0198	
79 Ethylbenzene	91	15.373	15.378	-0.005	99	15413	0.0415	
81 m-Xylene & p-Xylene	91	15.540	15.545	-0.005	99	40649	0.1356	
85 o-Xylene	91	16.074	16.074	0.000	96	17126	0.0559	
96 1,2,4-Trimethylbenzene	105	17.939	17.940	-0.001	97	19138	0.0508	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P106.D

Injection Date: 04-Apr-2017 19:01:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7685-A-6

Lab Sample ID: 140-7685-6

Worklist Smp#: 14

Client ID: H16-OA

Purge Vol: 500.000 mL

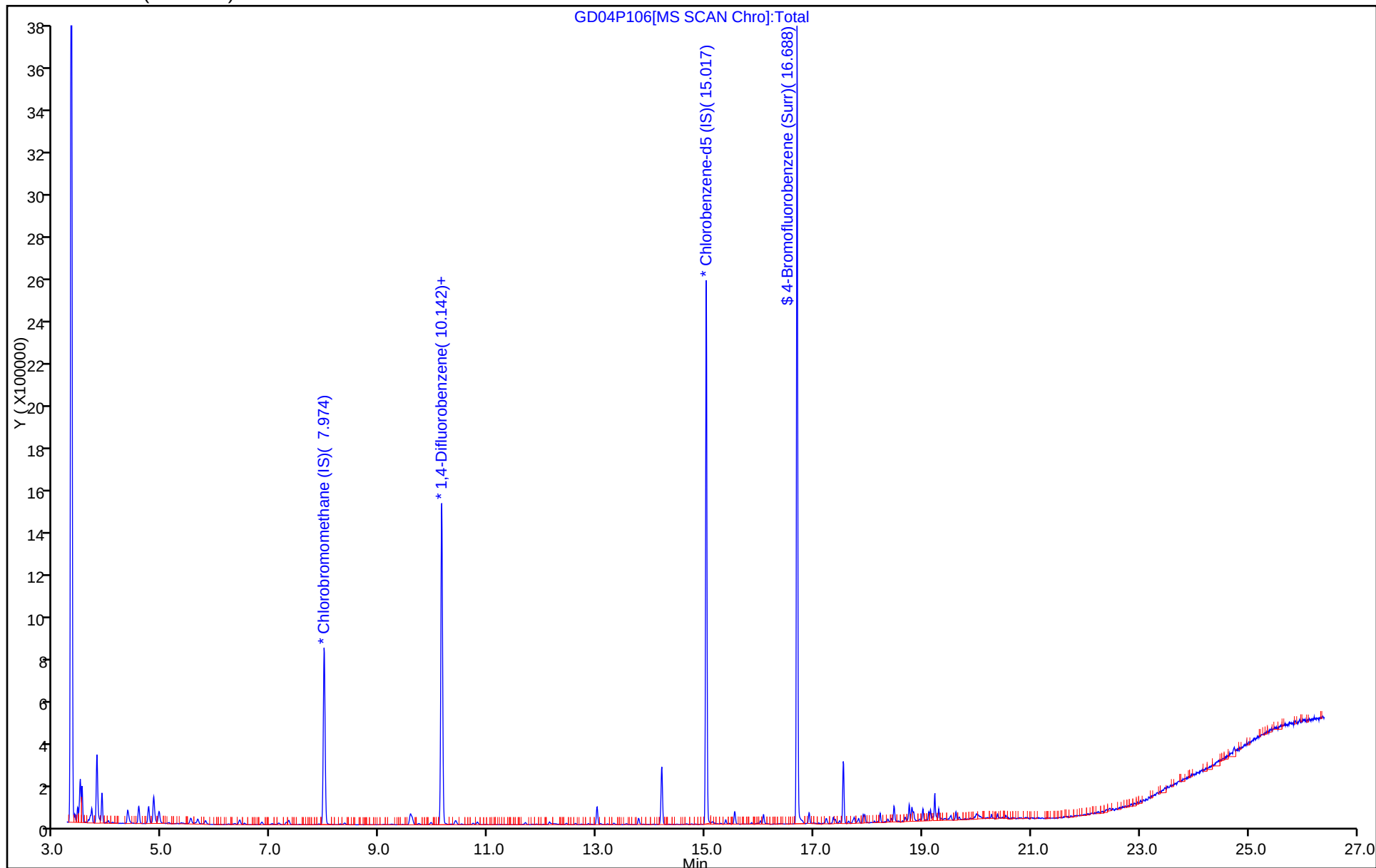
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P106.D
Lims ID: 140-7685-A-6
Client ID: H16-OA
Sample Type: Client
Inject. Date: 04-Apr-2017 19:01:30 ALS Bottle#: 6 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004508-014
Misc. Info.: 140-7685-a-6
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 05-Apr-2017 10:01:21 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 09:56:28

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.09	102.35

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P106.D

Injection Date: 04-Apr-2017 19:01:30

Instrument ID: MG

Lims ID: 140-7685-A-6

Lab Sample ID: 140-7685-6

Client ID: H16-OA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 14

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

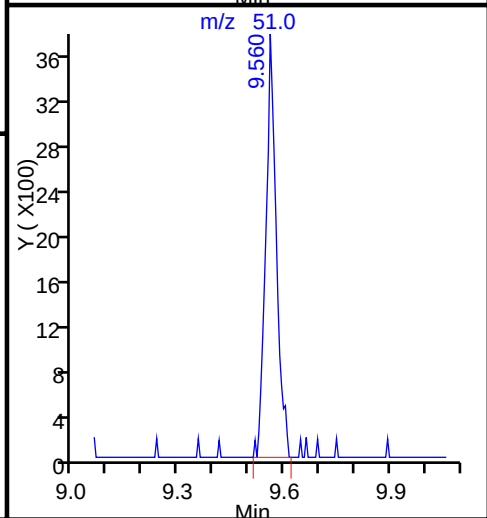
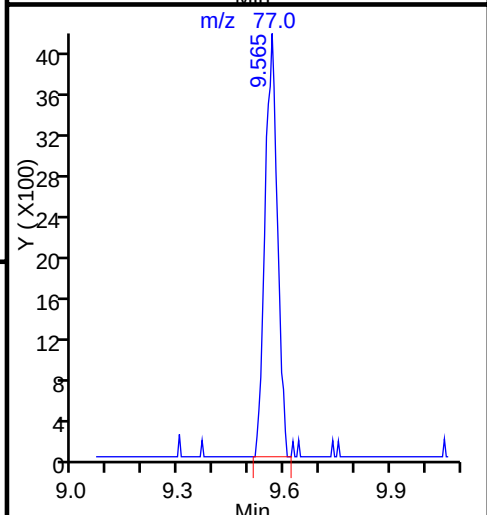
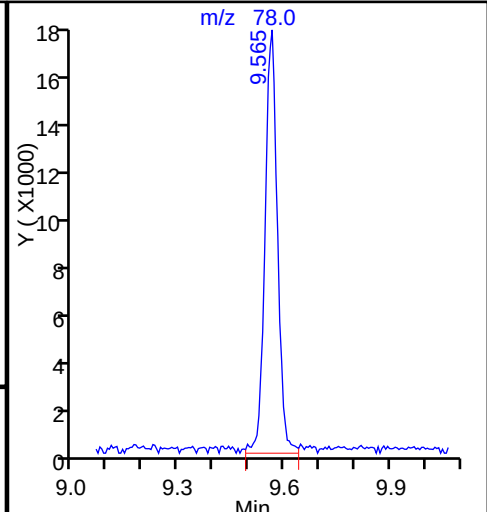
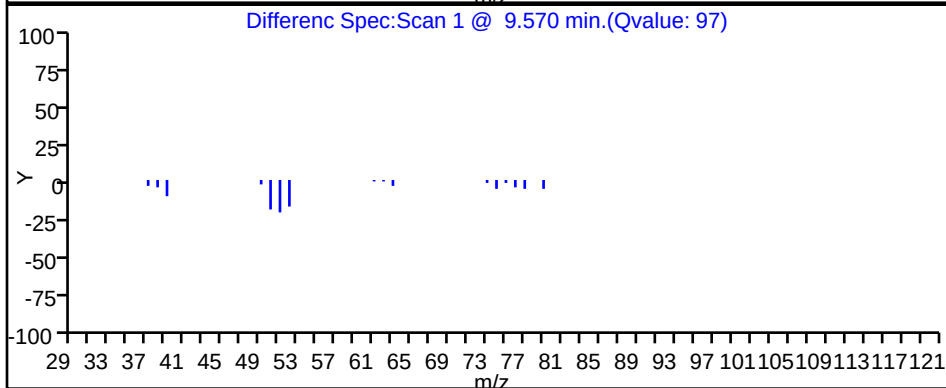
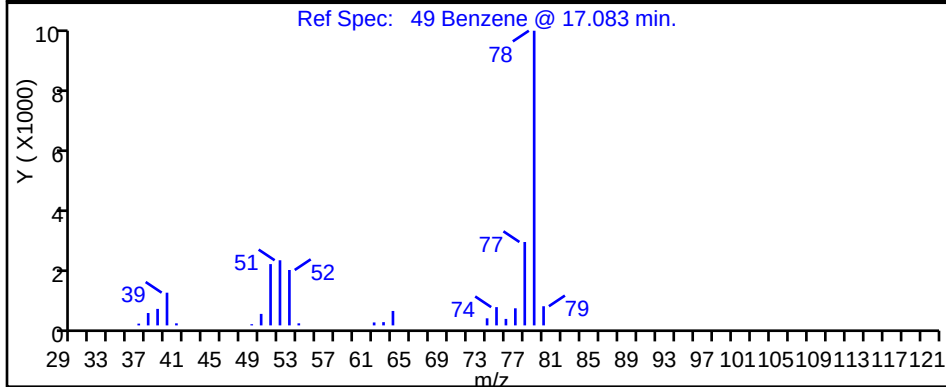
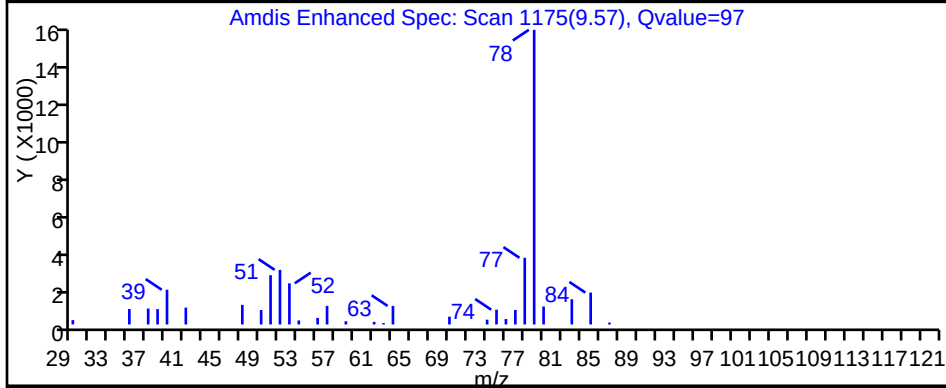
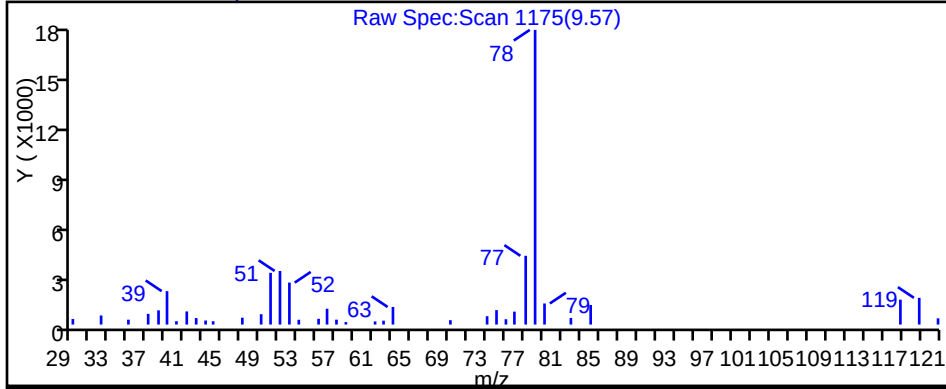
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P106.D

Injection Date: 04-Apr-2017 19:01:30

Instrument ID: MG

Lims ID: 140-7685-A-6

Lab Sample ID: 140-7685-6

Client ID: H16-OA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 14

Purge Vol: 500.000 mL

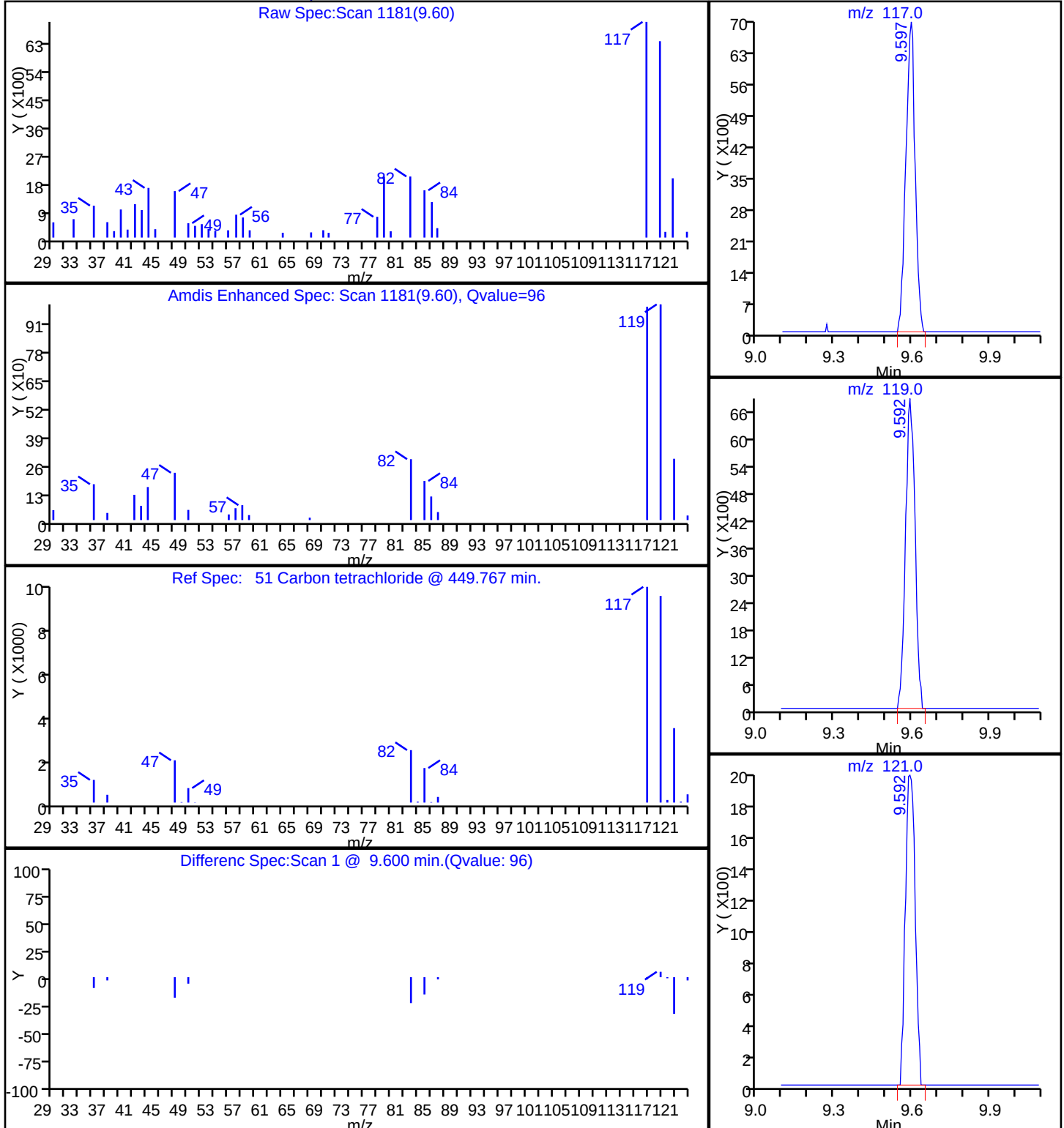
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P106.D

Injection Date: 04-Apr-2017 19:01:30

Instrument ID: MG

Lims ID: 140-7685-A-6

Lab Sample ID: 140-7685-6

Client ID: H16-OA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 14

Purge Vol: 500.000 mL

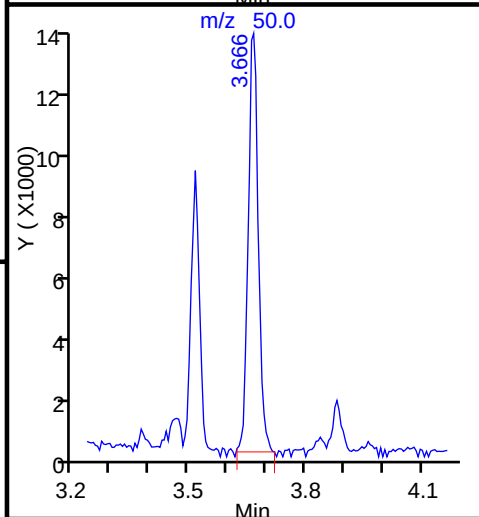
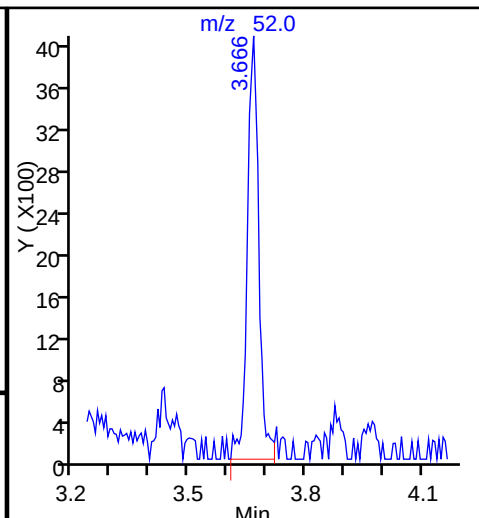
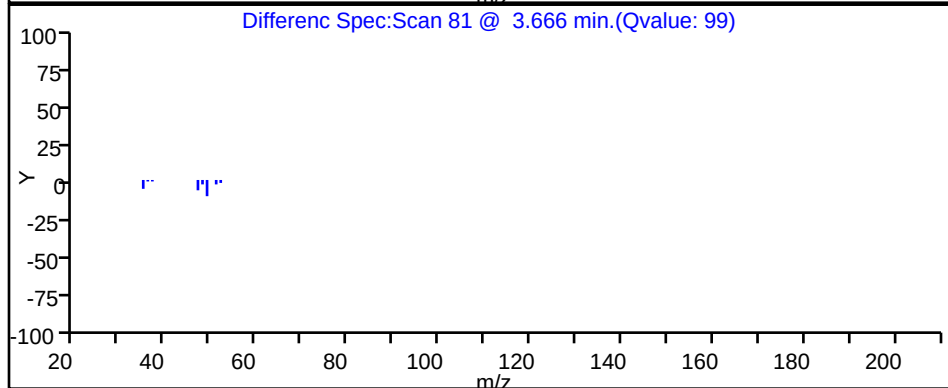
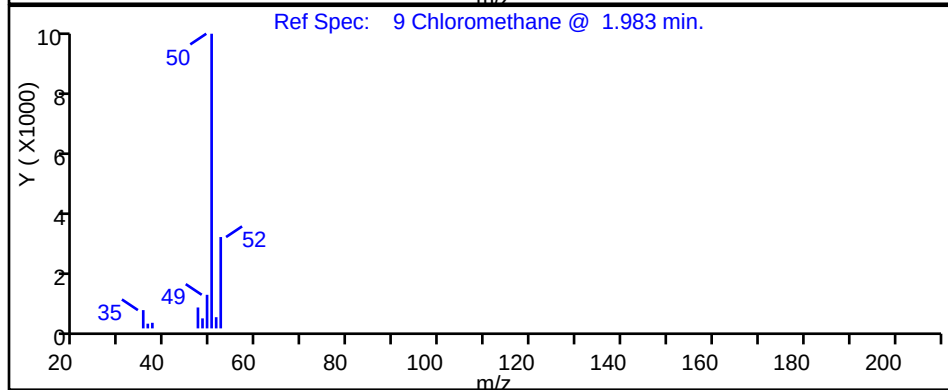
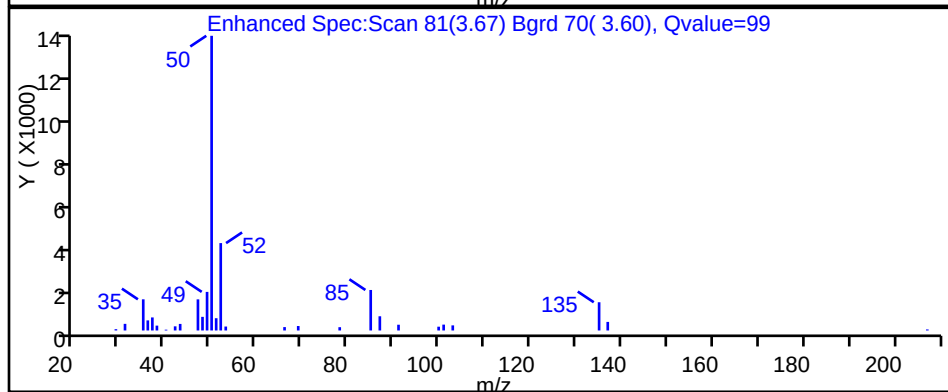
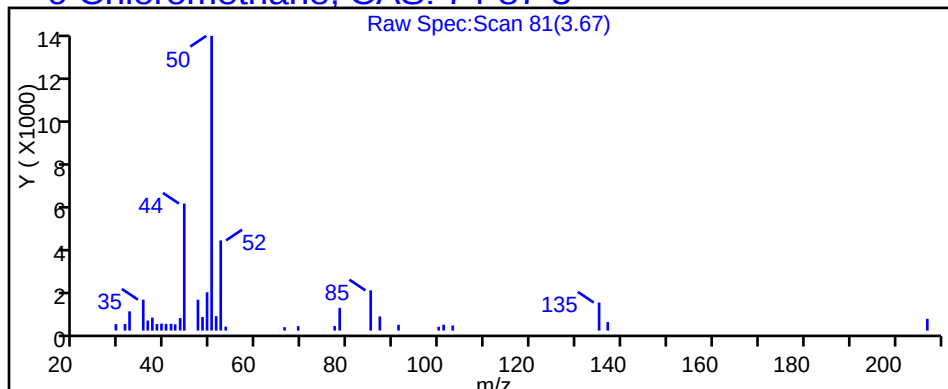
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P106.D

Injection Date: 04-Apr-2017 19:01:30

Instrument ID: MG

Lims ID: 140-7685-A-6

Lab Sample ID: 140-7685-6

Client ID: H16-OA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 14

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

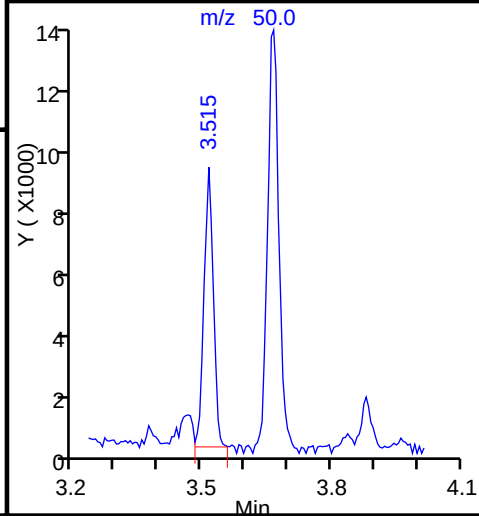
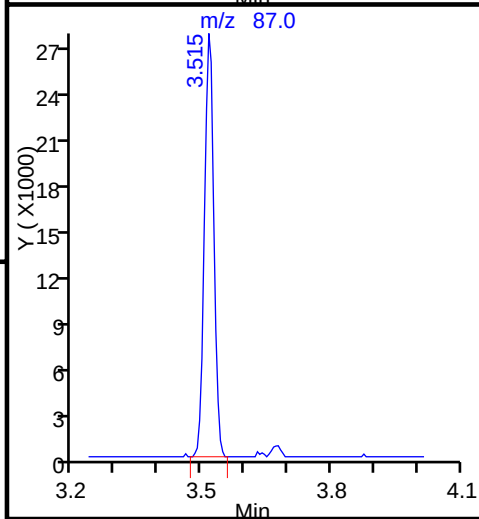
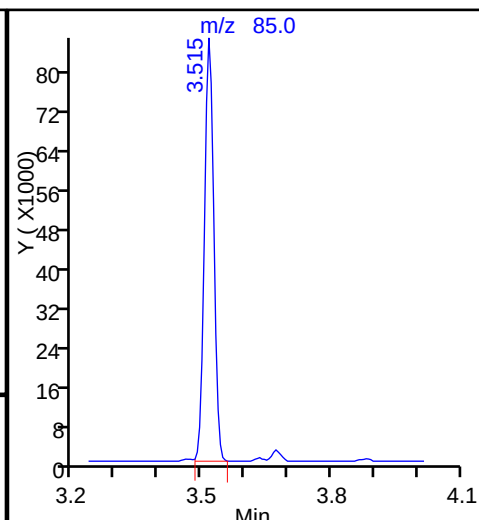
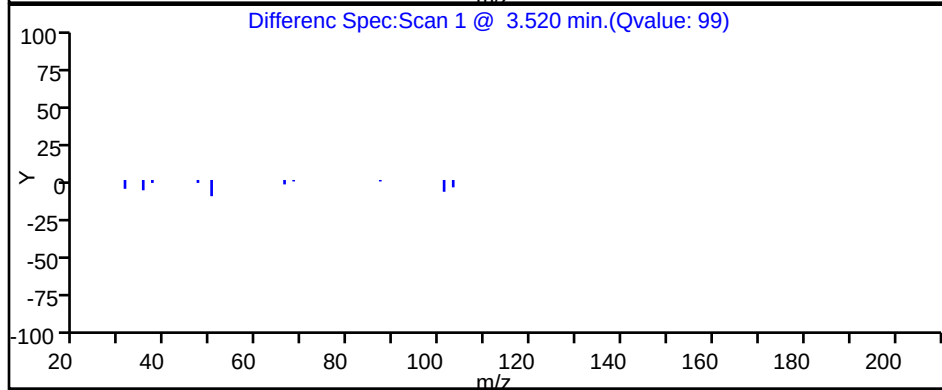
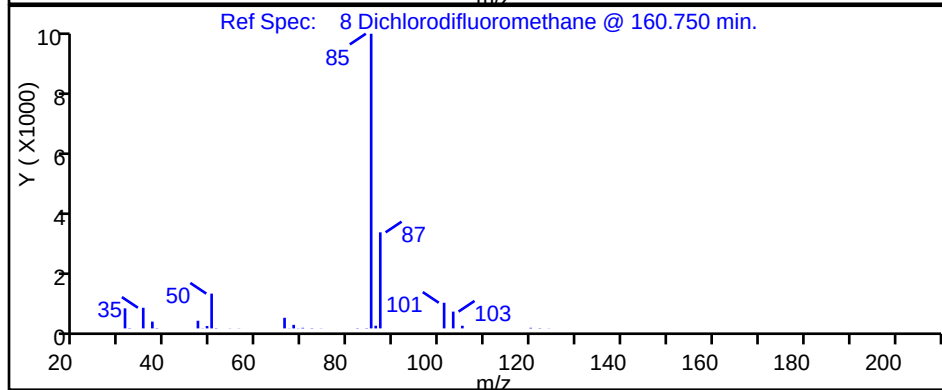
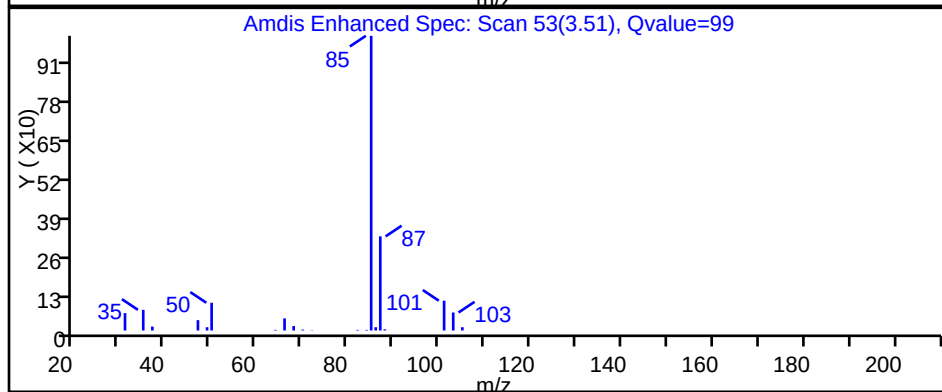
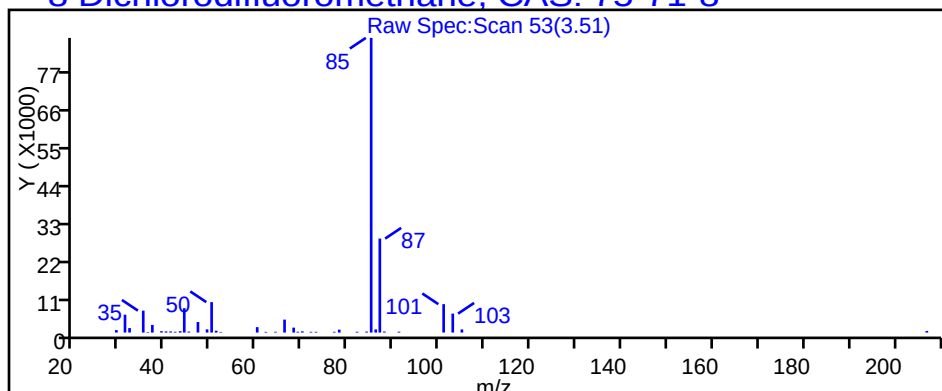
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P106.D

Injection Date: 04-Apr-2017 19:01:30

Instrument ID: MG

Lims ID: 140-7685-A-6

Lab Sample ID: 140-7685-6

Client ID: H16-OA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 14

Purge Vol: 500.000 mL

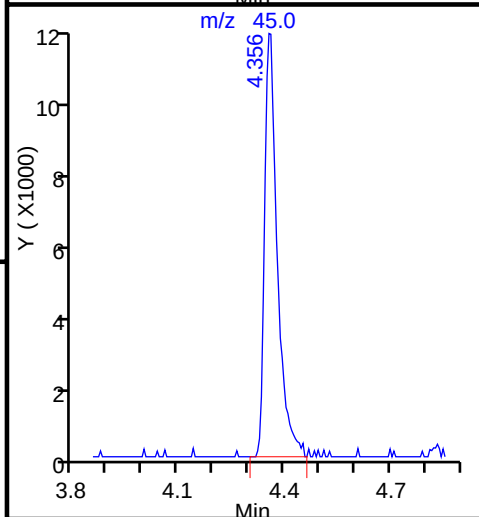
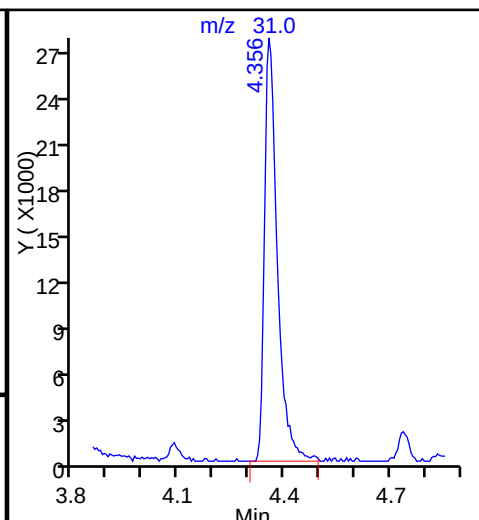
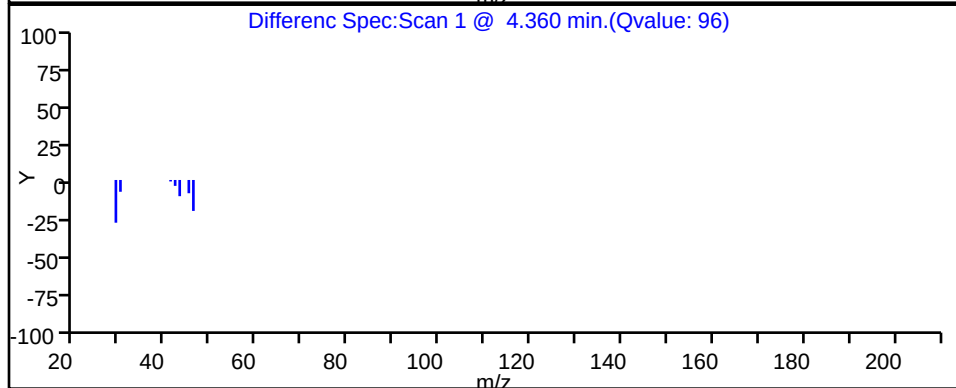
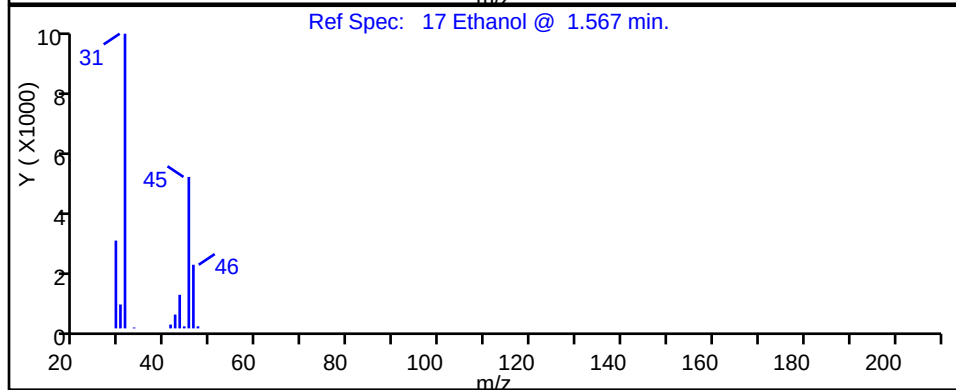
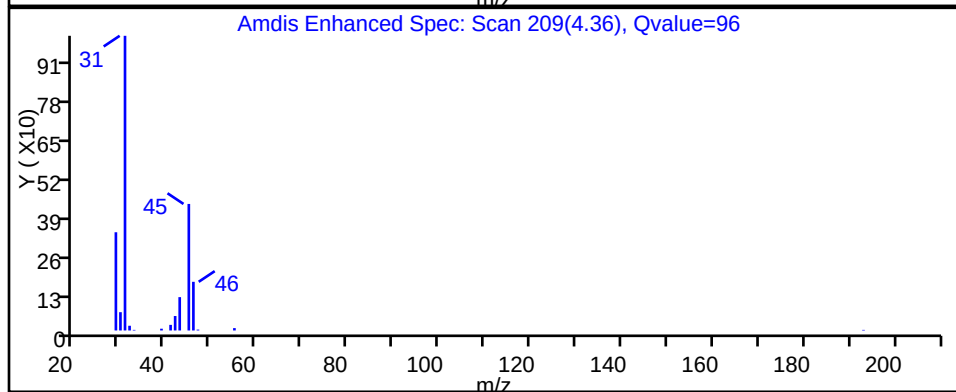
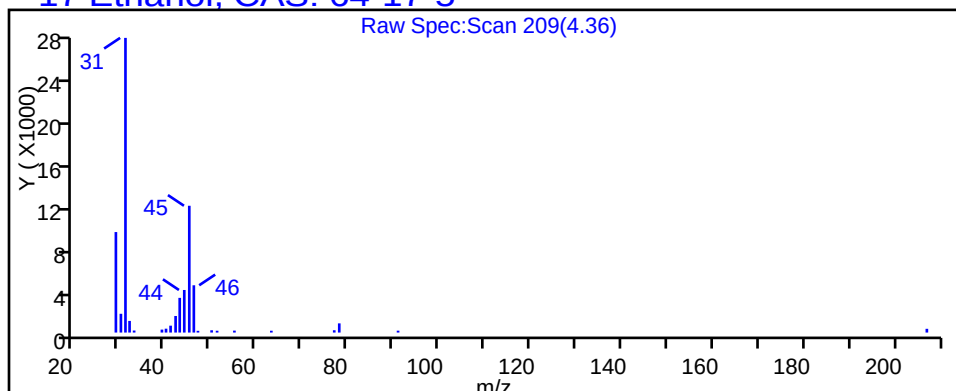
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P106.D

Injection Date: 04-Apr-2017 19:01:30

Instrument ID: MG

Lims ID: 140-7685-A-6

Lab Sample ID: 140-7685-6

Client ID: H16-OA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 14

Purge Vol: 500.000 mL

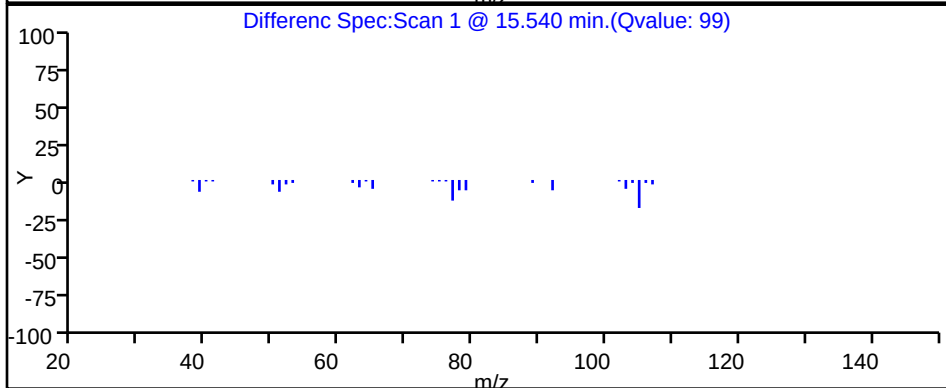
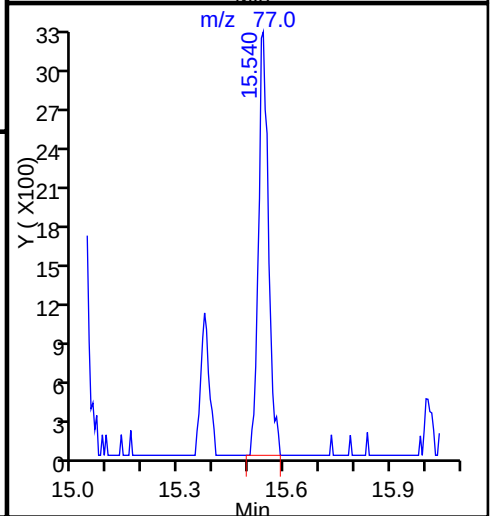
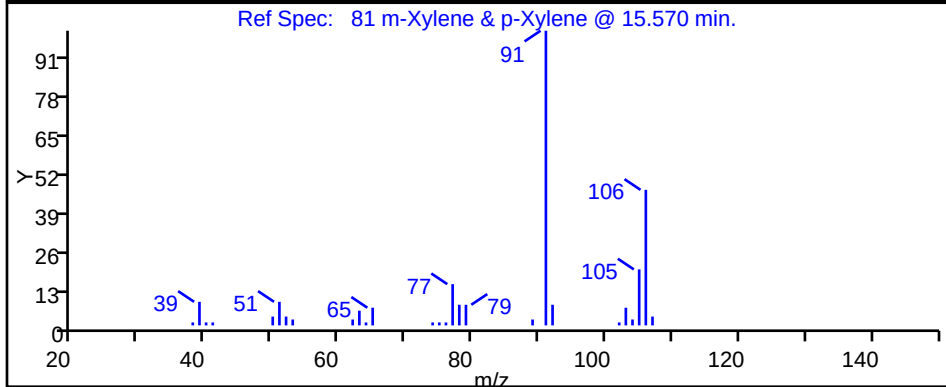
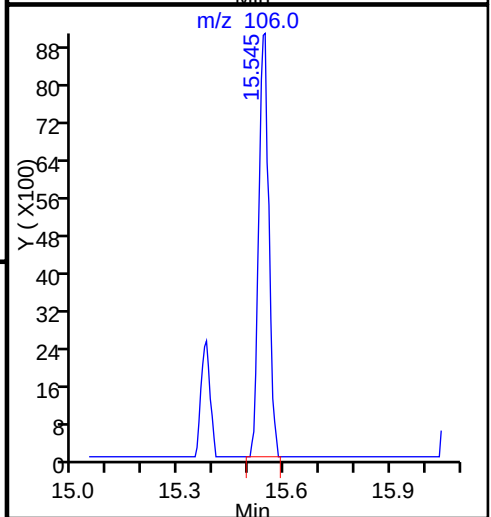
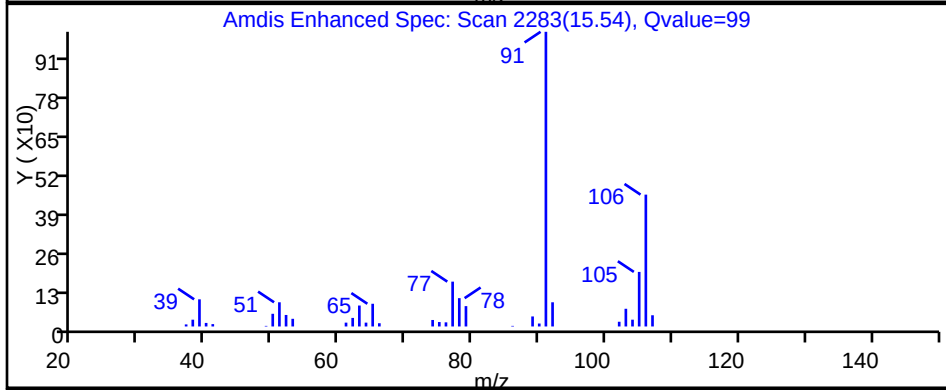
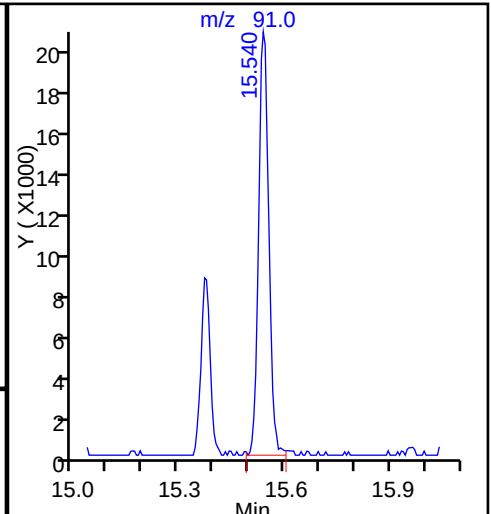
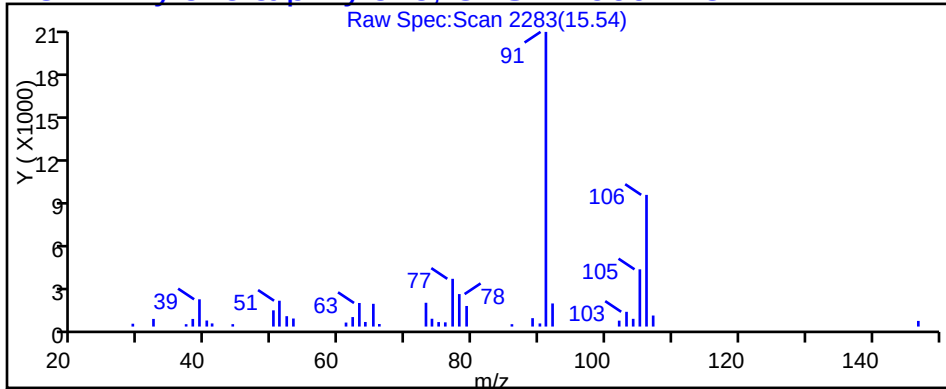
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P106.D

Injection Date: 04-Apr-2017 19:01:30

Instrument ID: MG

Lims ID: 140-7685-A-6

Lab Sample ID: 140-7685-6

Client ID: H16-OA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 14

Purge Vol: 500.000 mL

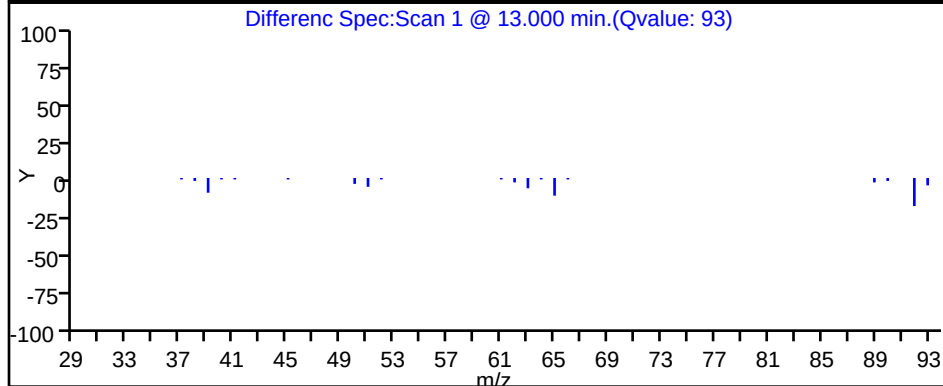
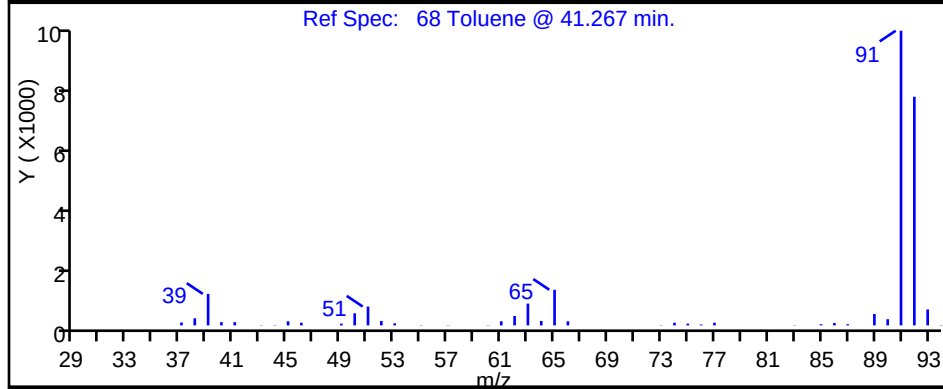
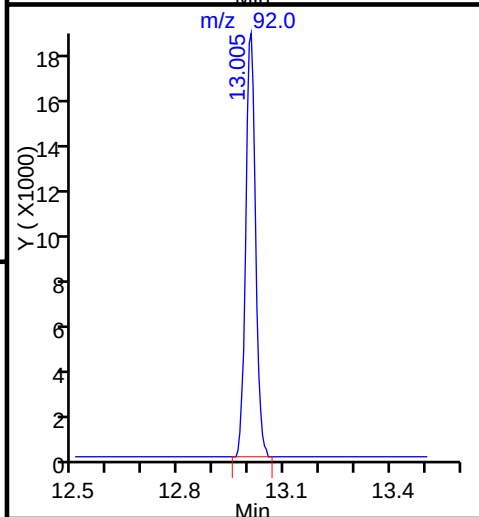
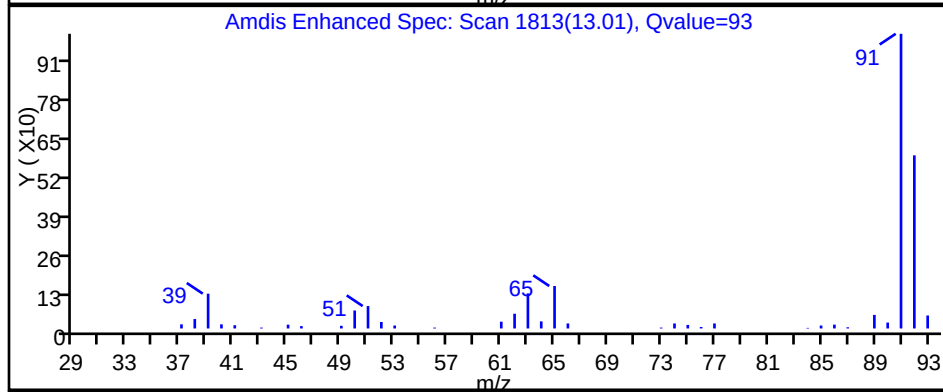
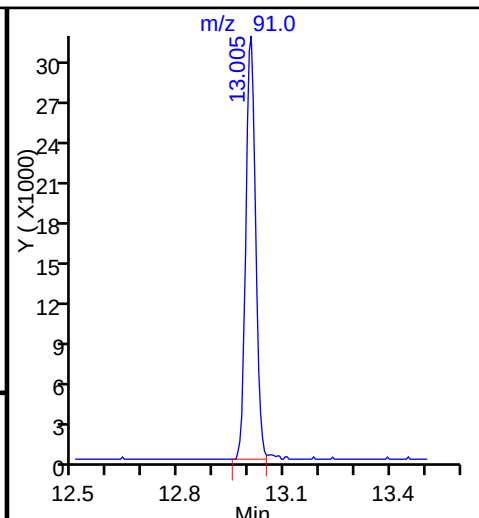
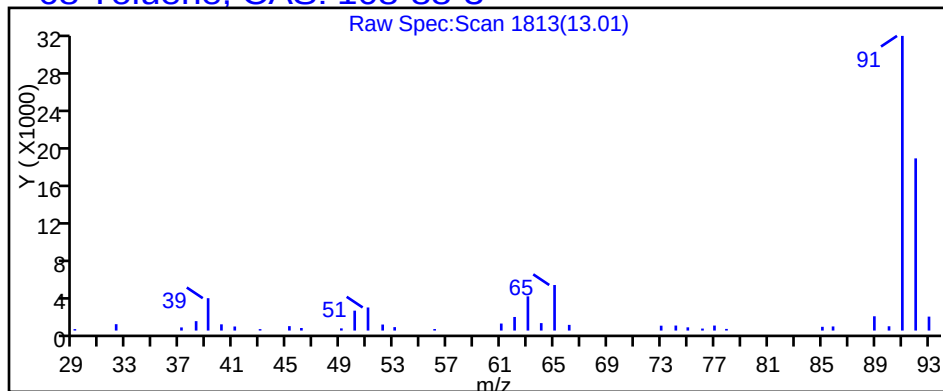
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P106.D

Injection Date: 04-Apr-2017 19:01:30

Instrument ID: MG

Lims ID: 140-7685-A-6

Lab Sample ID: 140-7685-6

Client ID: H16-OA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 14

Purge Vol: 500.000 mL

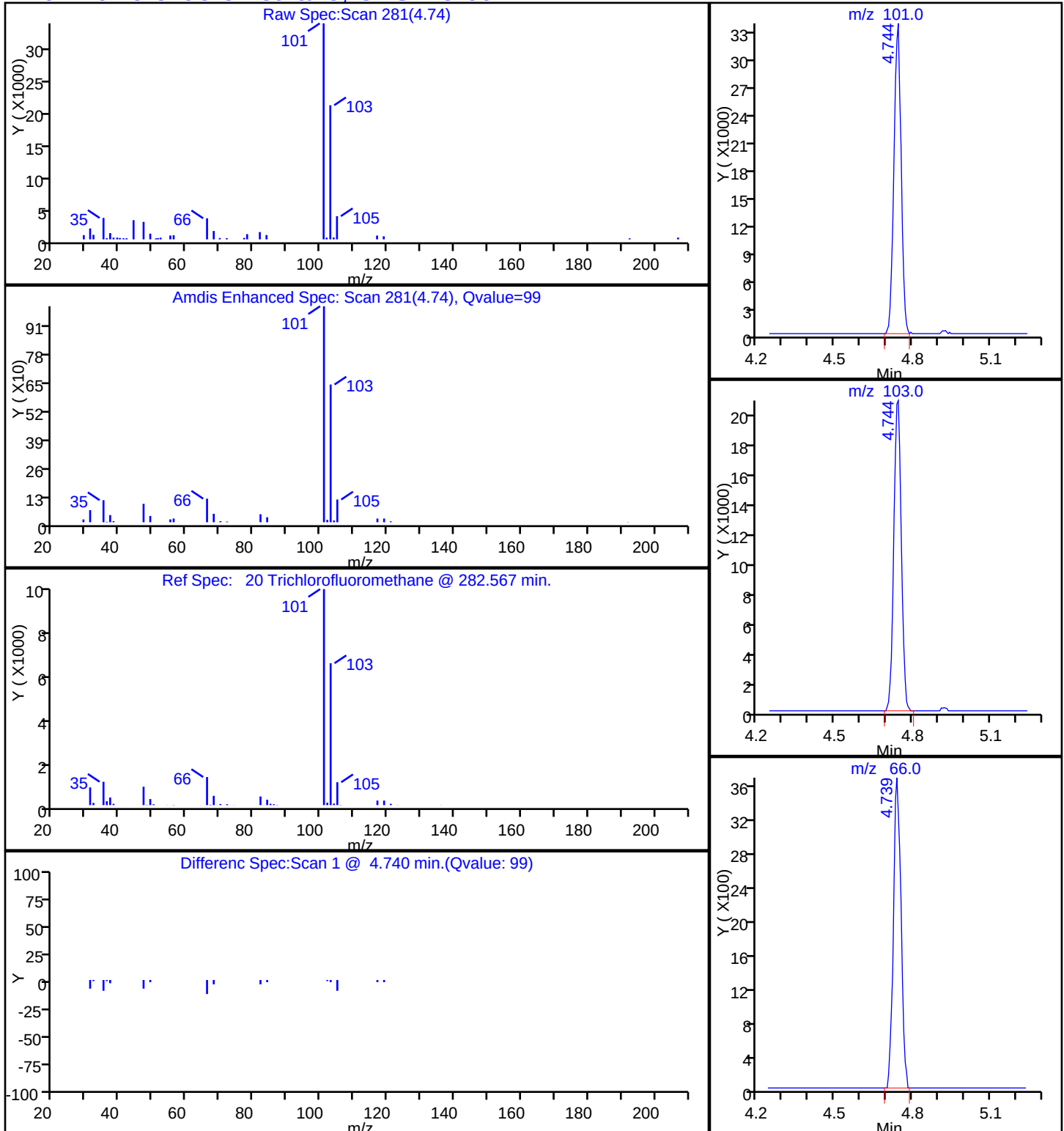
Dil. Factor: 1.0000

Method: MG_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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H16-BA Lab Sample ID: 140-7685-7
 Matrix: Air Lab File ID: GD04P107.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 09:00
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 19:49
 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.: 10155 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	0.12		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	0.71		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	0.29		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	0.077		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	0.40		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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H16-BA Lab Sample ID: 140-7685-7
 Matrix: Air Lab File ID: GD04P107.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 09:00
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 19:49
 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.: 10155 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	23		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	ND		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.15		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	0.19		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		0.040	

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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H16-BA Lab Sample ID: 140-7685-7
 Matrix: Air Lab File ID: GD04P107.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 09:00
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 19:49
 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.: 10155 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	0.57		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	2.1		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.2		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	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	0.83		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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H16-BA Lab Sample ID: 140-7685-7
 Matrix: Air Lab File ID: GD04P107.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 09:00
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 19:49
 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.: 10155 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	44		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	0.65		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	0.73		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		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P107.D
 Lims ID: 140-7685-A-7
 Client ID: H16-BA
 Sample Type: Client
 Inject. Date: 04-Apr-2017 19:49:30 ALS Bottle#: 7 Worklist Smp#: 15
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004508-015
 Misc. Info.: 140-7685-a-7
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 05-Apr-2017 10:01:21 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 09:57:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.974	7.980	-0.006	72	253185	4.00	
* 2 1,4-Difluorobenzene	114	10.142	10.148	-0.006	95	1266855	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.017	15.022	-0.005	88	1264157	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.688	16.694	-0.006	94	1031345	4.13	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	134017	0.5001	
9 Chloromethane	52	3.660	3.666	-0.006	99	7255	0.4024	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.671	0.000	40	2707	0.0170	
17 Ethanol	31	4.356	4.356	0.000	96	595024	23.4	
20 Trichlorofluoromethane	101	4.739	4.744	-0.005	99	62989	0.2360	
29 2-Methyl-2-propanol	59	5.472	5.456	0.016	85	2414	0.0235	
30 1,1,2-Trichloro-1,2,2-trif	101	5.510	5.521	-0.011	88	10197	0.0655	
31 Methylene Chloride	84	5.645	5.650	-0.005	85	10698	0.1757	
39 2-Butanone (MEK)	72	7.263	7.268	-0.005	95	20500	0.7115	
40 Hexane	56	7.322	7.327	-0.005	68	4008	0.0802	
44 Chloroform	83	7.996	8.007	-0.011	93	11027	0.0621	
49 Benzene	78	9.560	9.565	-0.005	97	34405	0.1599	
50 Cyclohexane	69	9.565	9.576	-0.011	40	870	0.0240	
51 Carbon tetrachloride	117	9.597	9.598	-0.001	97	17215	0.0765	
56 Isooctane	57	10.390	10.396	-0.006	84	10988	0.0344	
65 4-Methyl-2-pentanone (MIBK	43	12.116	12.116	0.000	95	36228	0.2930	
68 Toluene	91	13.005	13.006	-0.001	93	48934	0.1943	
79 Ethylbenzene	91	15.373	15.378	-0.005	99	16487	0.0469	
81 m-Xylene & p-Xylene	91	15.540	15.545	-0.005	99	42539	0.1497	
85 o-Xylene	91	16.068	16.074	-0.006	93	17339	0.0597	
92 1,3,5-Trimethylbenzene	120	17.476	17.481	-0.005	91	6733	0.0361	
96 1,2,4-Trimethylbenzene	105	17.934	17.940	-0.006	98	41592	0.1165	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P107.D

Injection Date: 04-Apr-2017 19:49:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7685-A-7

Lab Sample ID: 140-7685-7

Worklist Smp#: 15

Client ID: H16-BA

Purge Vol: 500.000 mL

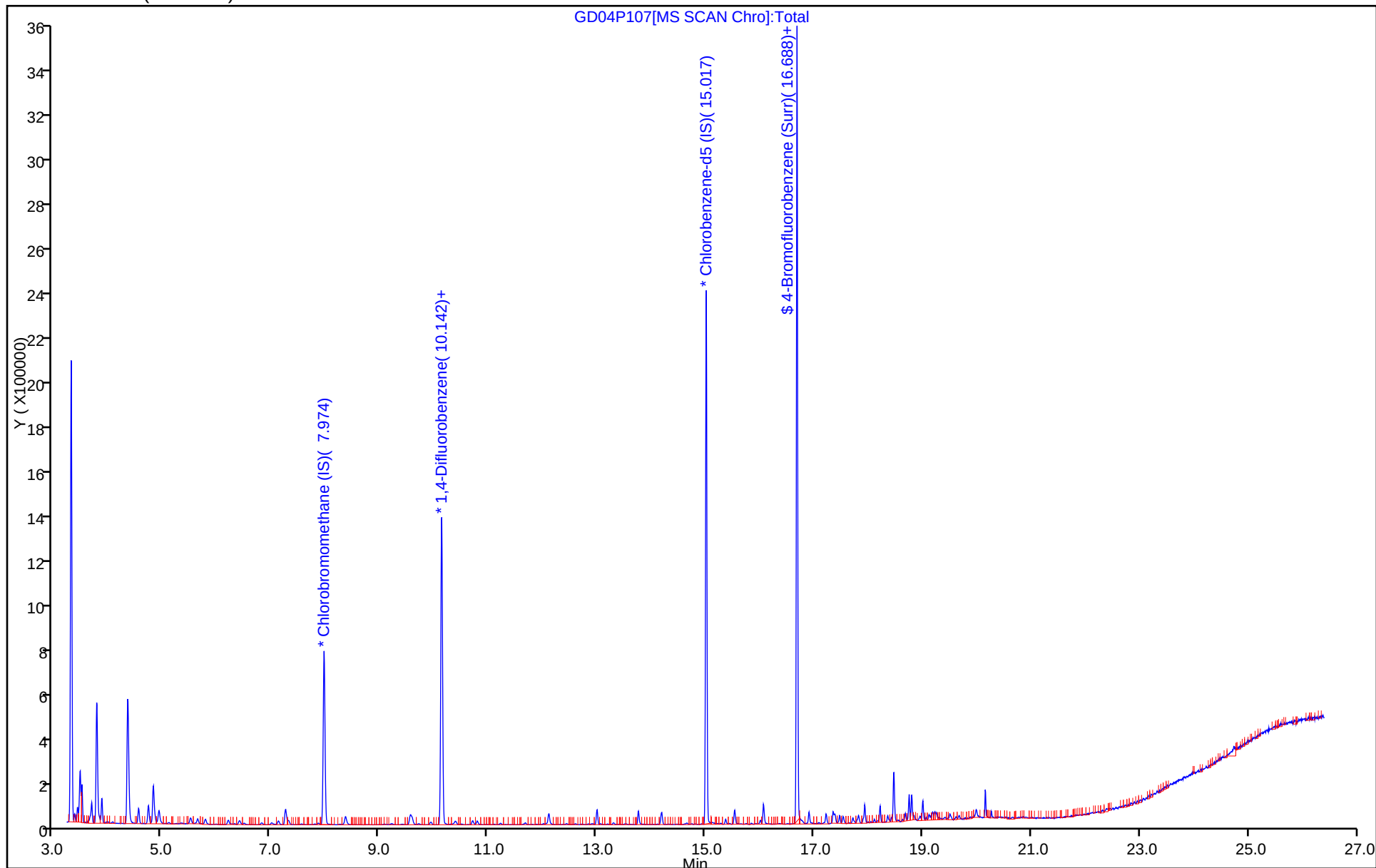
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P107.D
Lims ID: 140-7685-A-7
Client ID: H16-BA
Sample Type: Client
Inject. Date: 04-Apr-2017 19:49:30 ALS Bottle#: 7 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004508-015
Misc. Info.: 140-7685-a-7
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 05-Apr-2017 10:01:21 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 09:57:02

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.13	103.21

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P107.D

Injection Date: 04-Apr-2017 19:49:30

Instrument ID: MG

Lims ID: 140-7685-A-7

Lab Sample ID: 140-7685-7

Client ID: H16-BA

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 15

Purge Vol: 500.000 mL

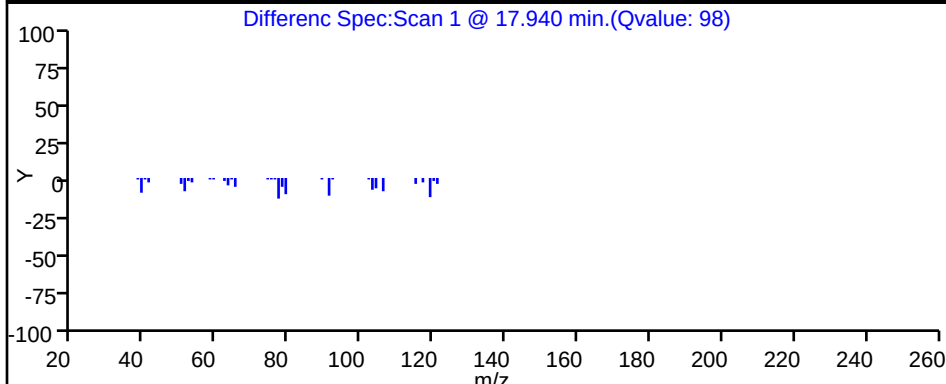
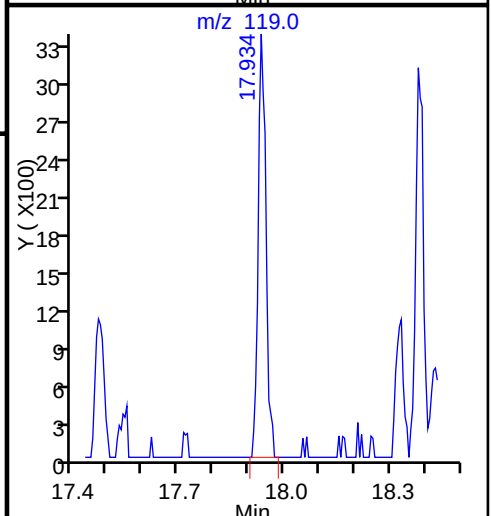
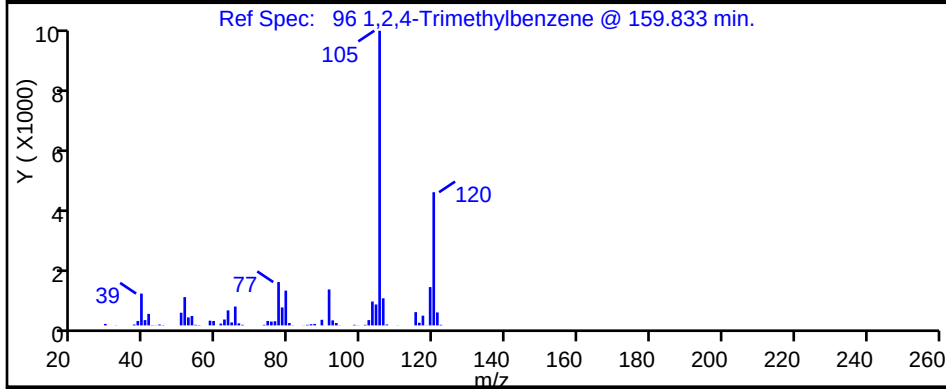
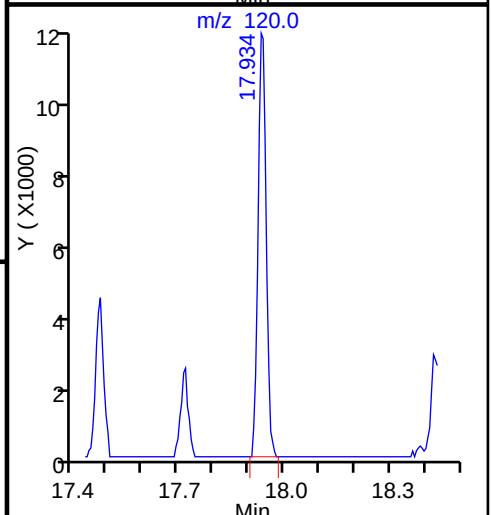
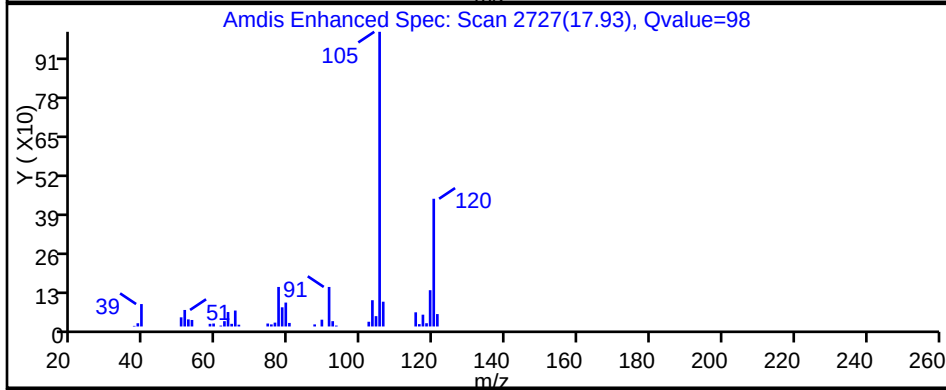
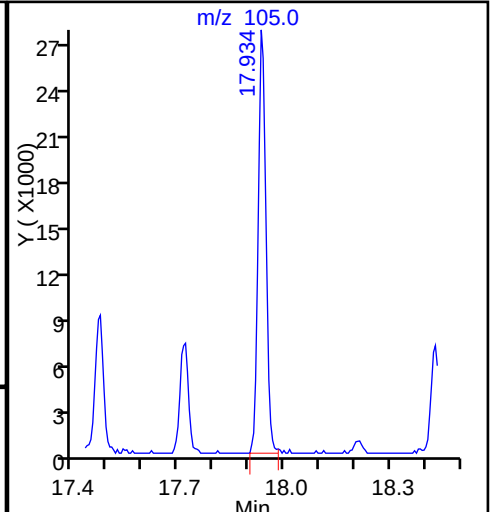
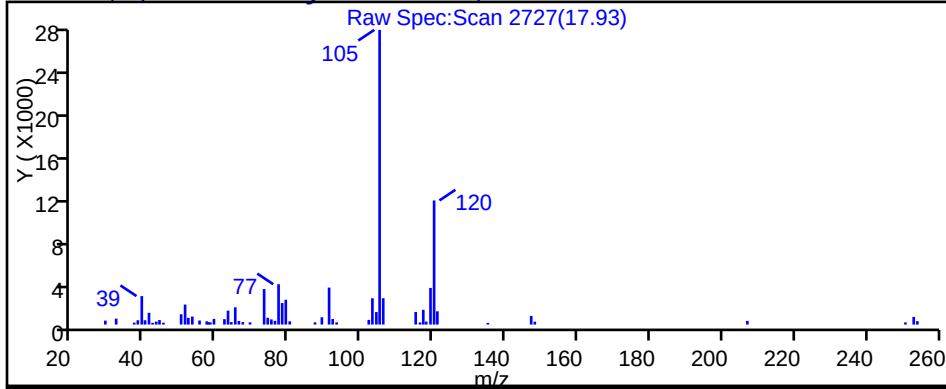
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

96 1,2,4-Trimethylbenzene, CAS: 95-63-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P107.D

Injection Date: 04-Apr-2017 19:49:30

Instrument ID: MG

Lims ID: 140-7685-A-7

Lab Sample ID: 140-7685-7

Client ID: H16-BA

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 15

Purge Vol: 500.000 mL

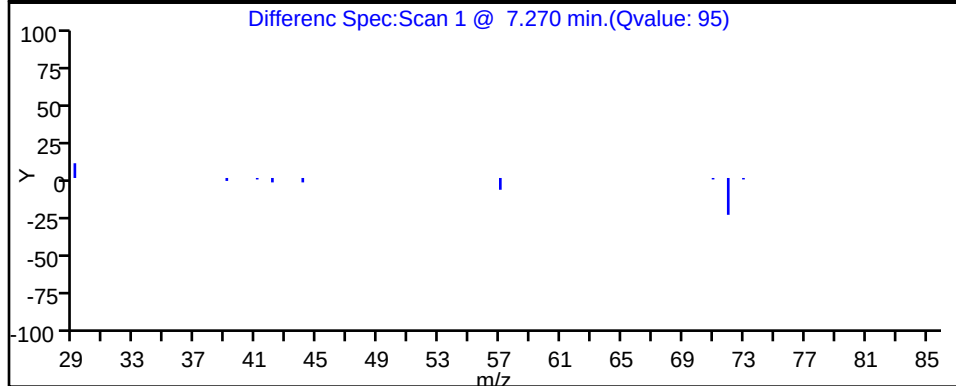
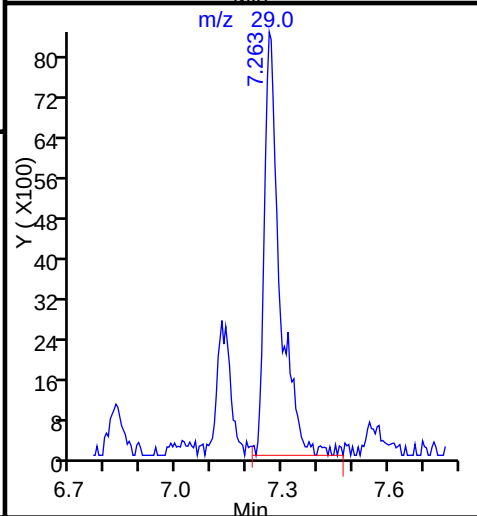
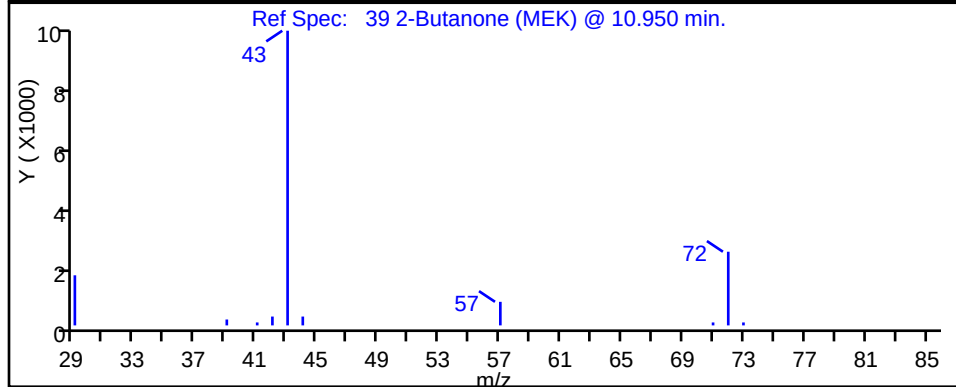
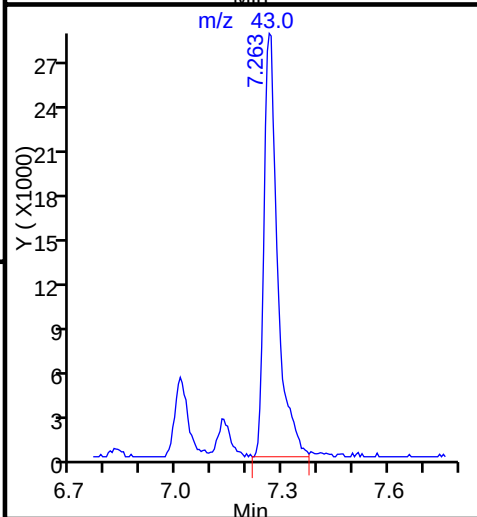
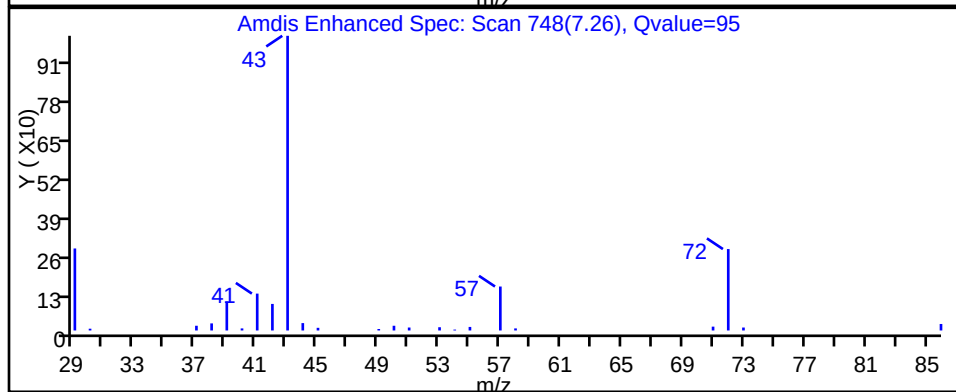
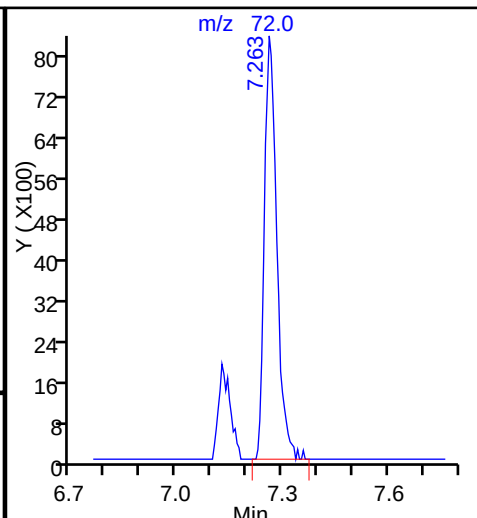
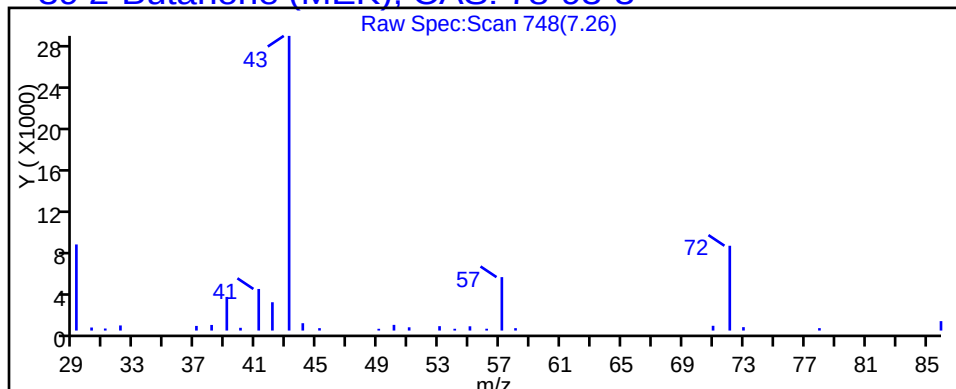
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P107.D

Injection Date: 04-Apr-2017 19:49:30

Instrument ID: MG

Lims ID: 140-7685-A-7

Lab Sample ID: 140-7685-7

Client ID: H16-BA

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 15

Purge Vol: 500.000 mL

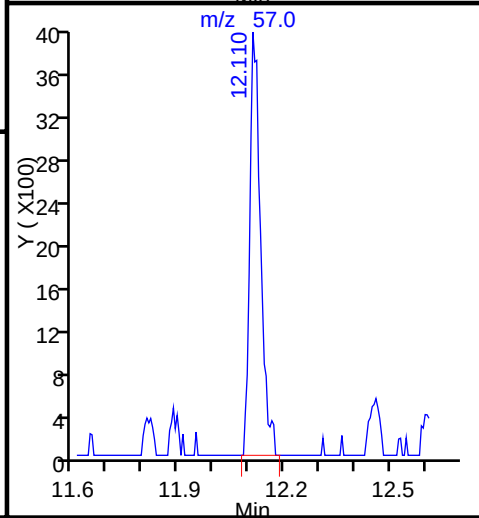
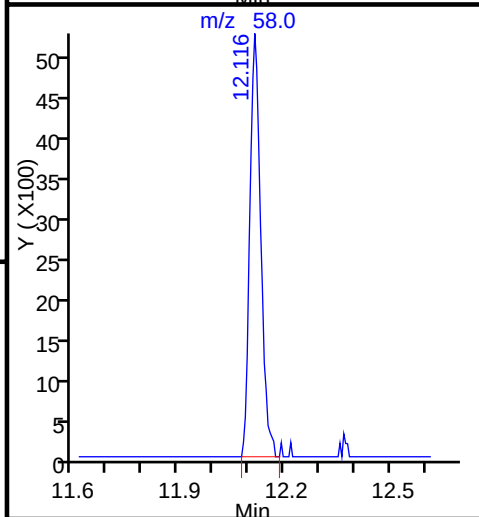
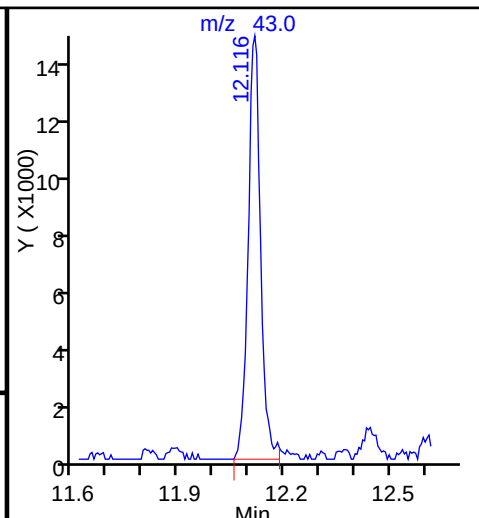
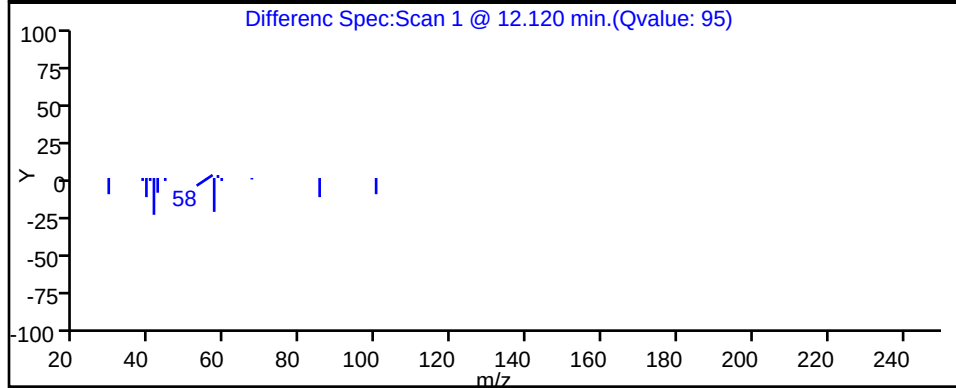
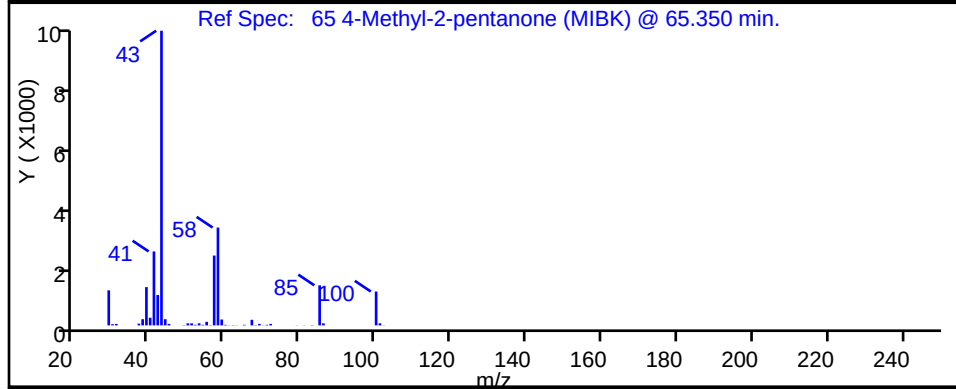
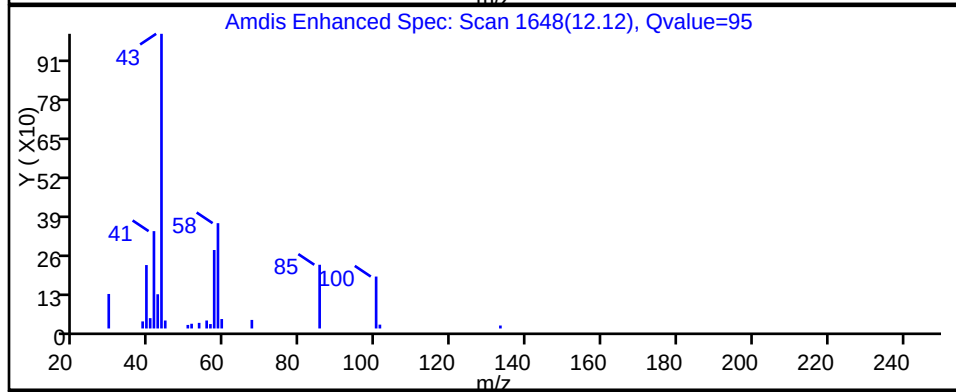
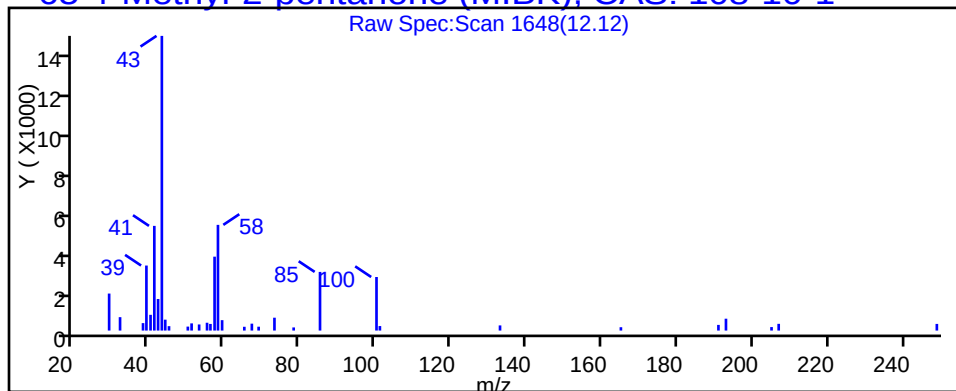
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P107.D

Injection Date: 04-Apr-2017 19:49:30

Instrument ID: MG

Lims ID: 140-7685-A-7

Lab Sample ID: 140-7685-7

Client ID: H16-BA

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 15

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

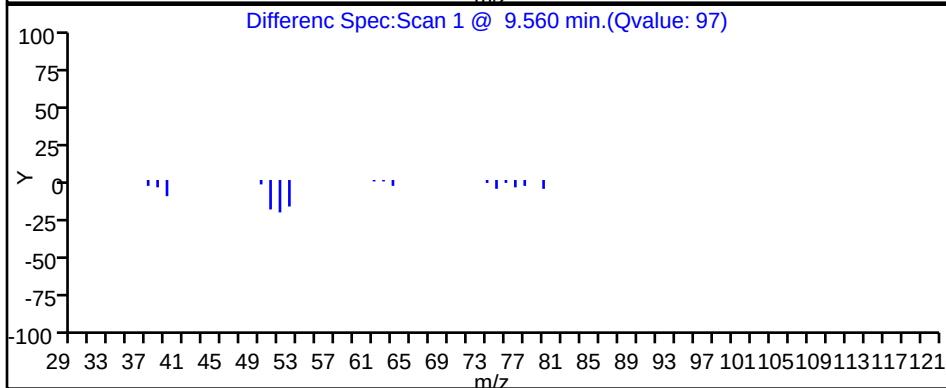
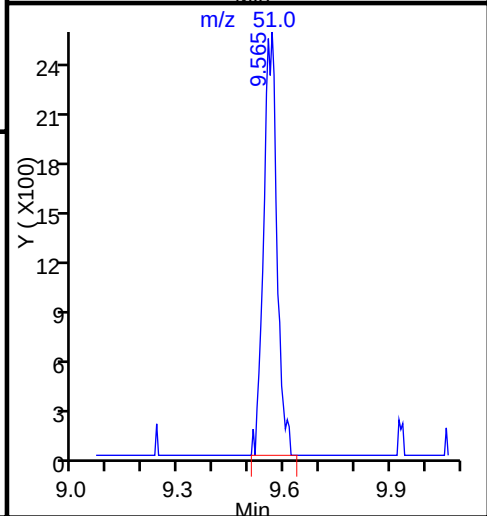
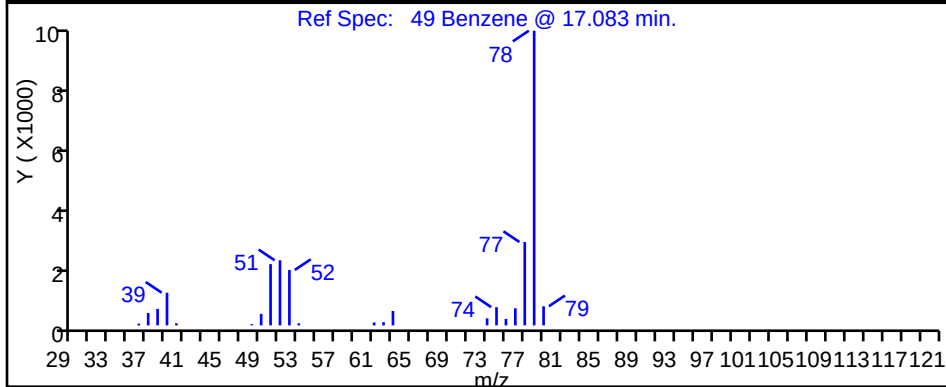
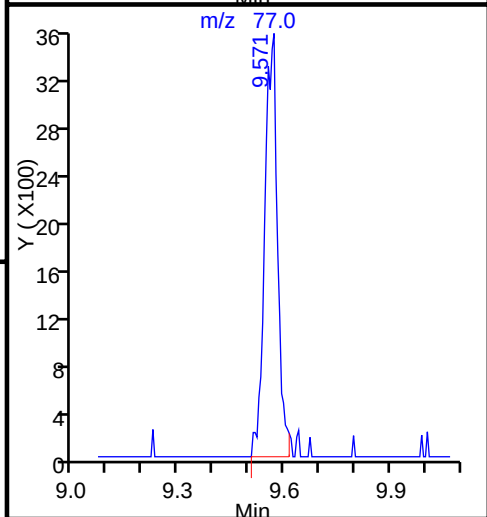
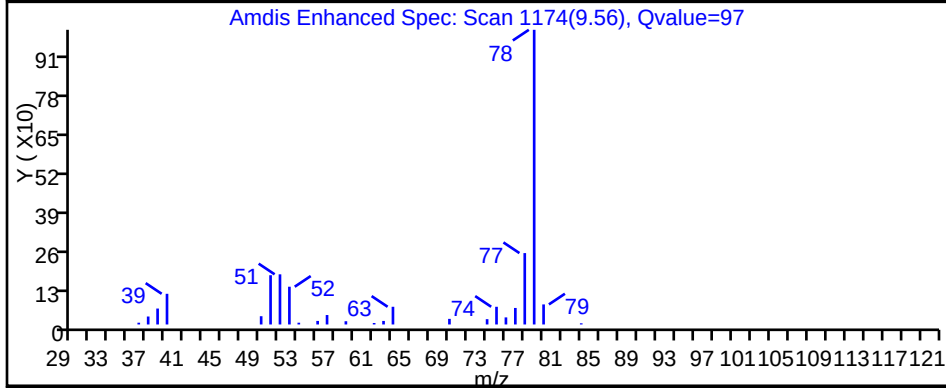
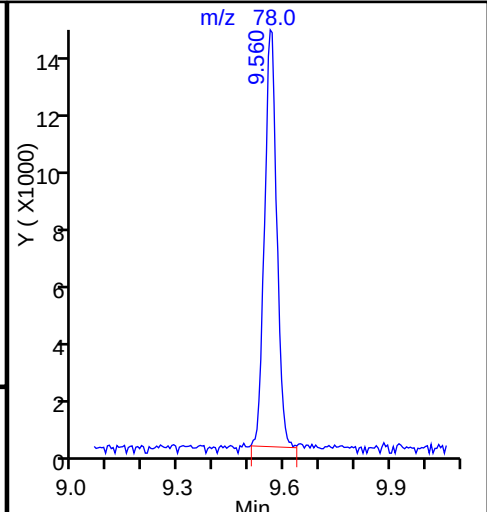
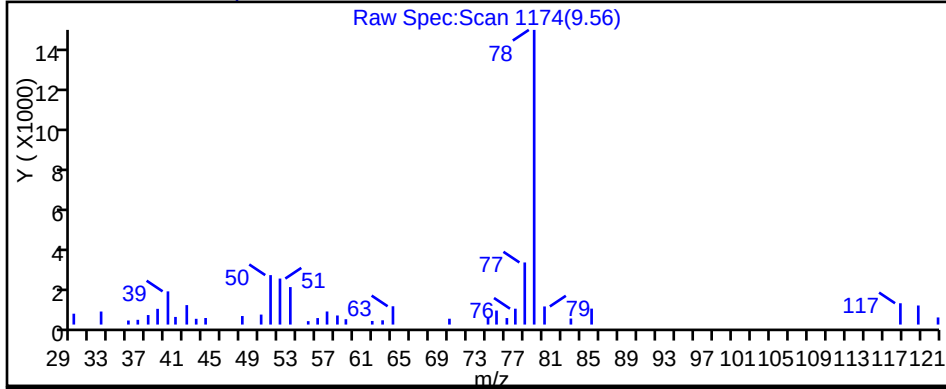
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P107.D

Injection Date: 04-Apr-2017 19:49:30

Instrument ID: MG

Lims ID: 140-7685-A-7

Lab Sample ID: 140-7685-7

Client ID: H16-BA

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 15

Purge Vol: 500.000 mL

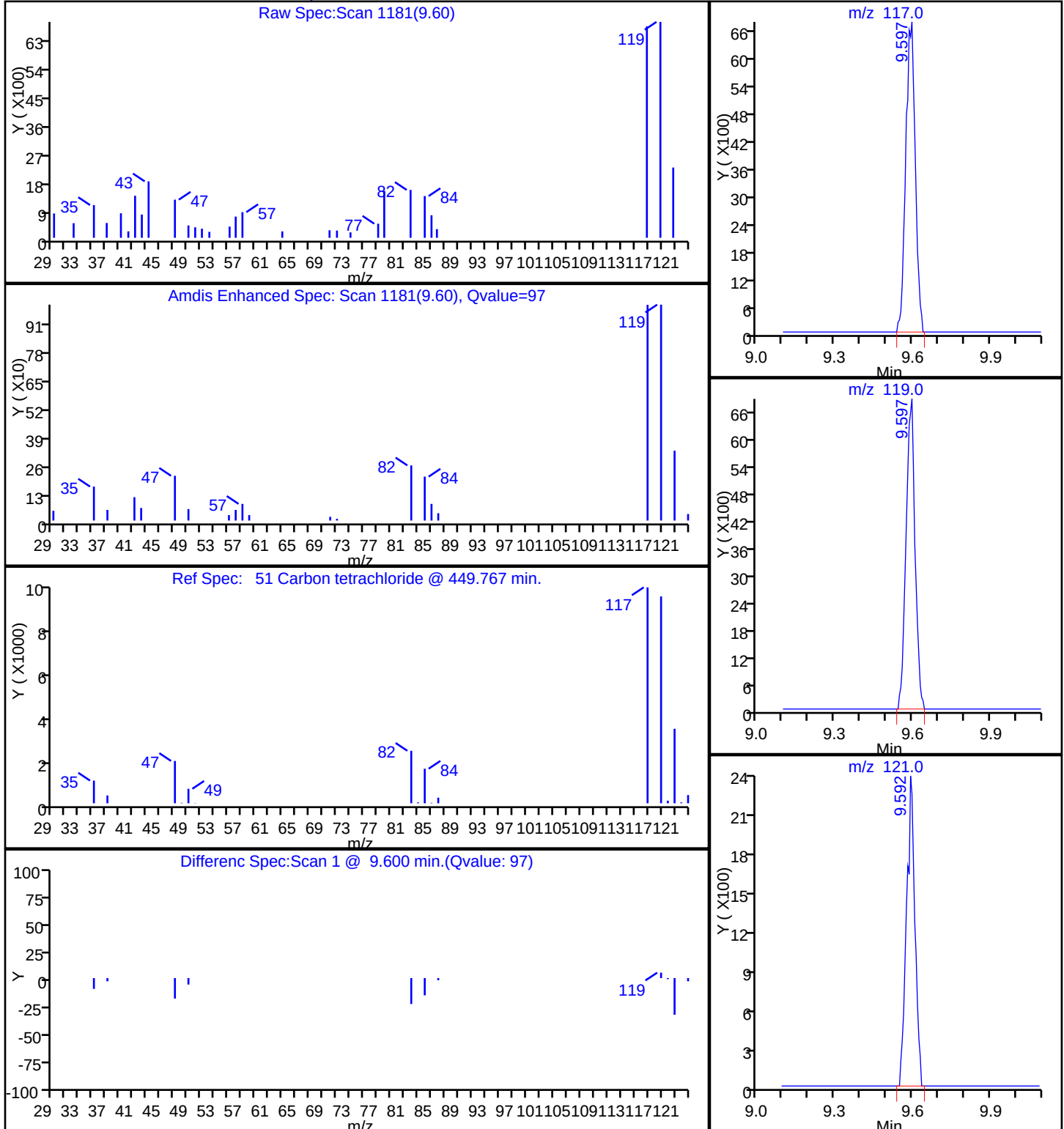
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P107.D

Injection Date: 04-Apr-2017 19:49:30

Instrument ID: MG

Lims ID: 140-7685-A-7

Lab Sample ID: 140-7685-7

Client ID: H16-BA

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 15

Purge Vol: 500.000 mL

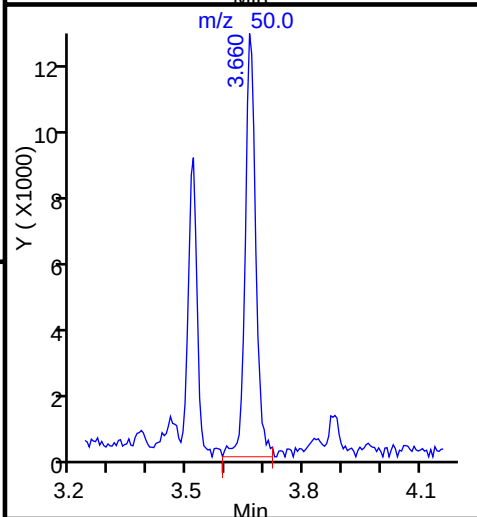
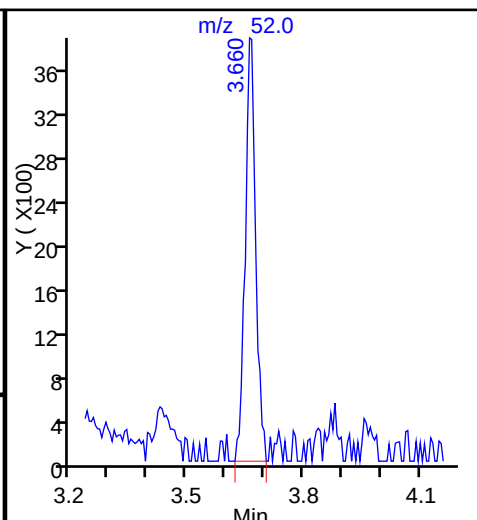
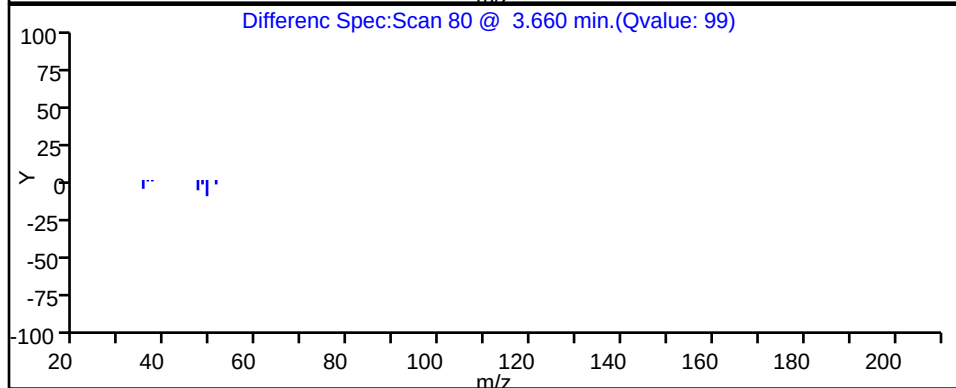
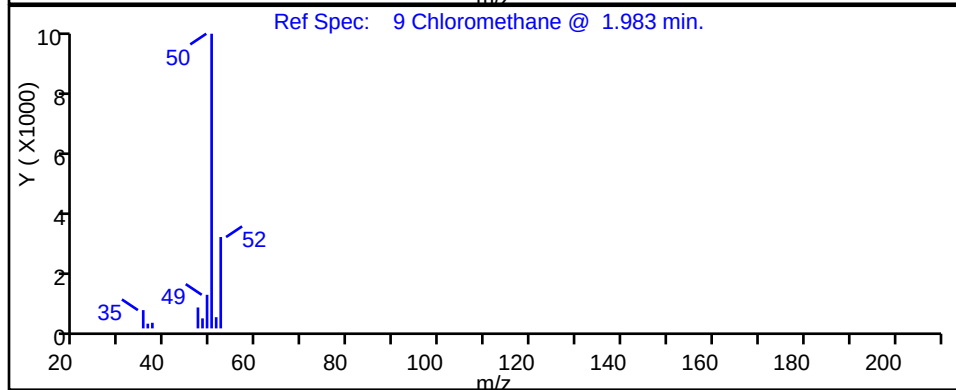
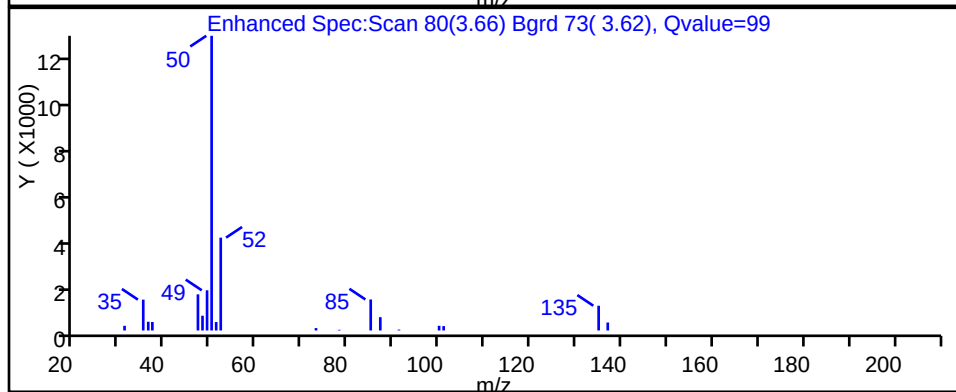
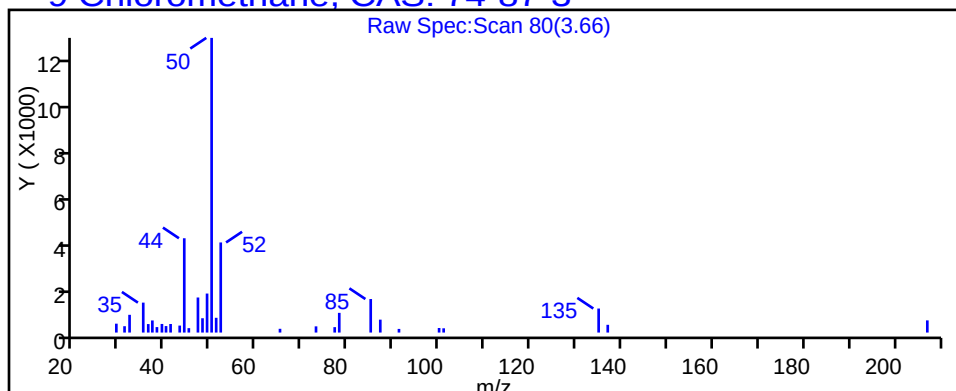
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P107.D

Injection Date: 04-Apr-2017 19:49:30

Instrument ID: MG

Lims ID: 140-7685-A-7

Lab Sample ID: 140-7685-7

Client ID: H16-BA

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 15

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

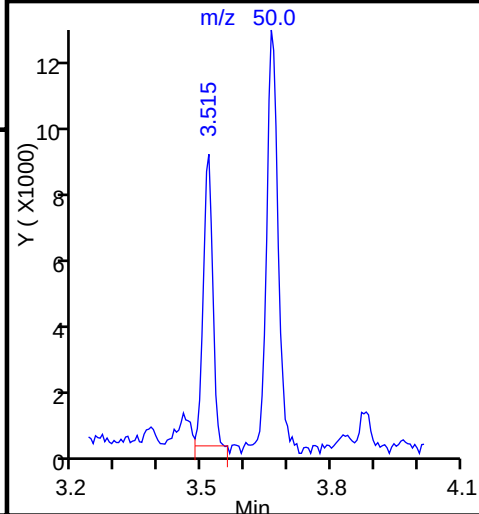
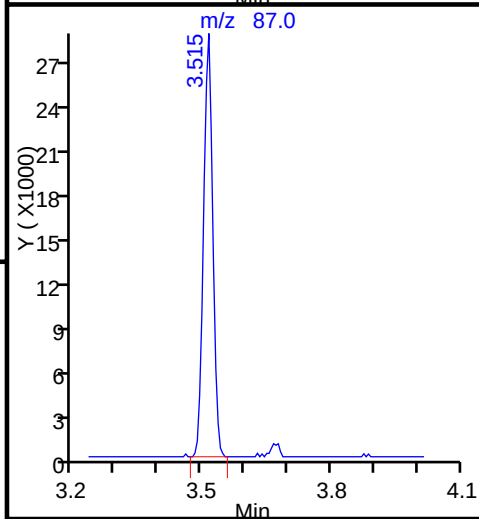
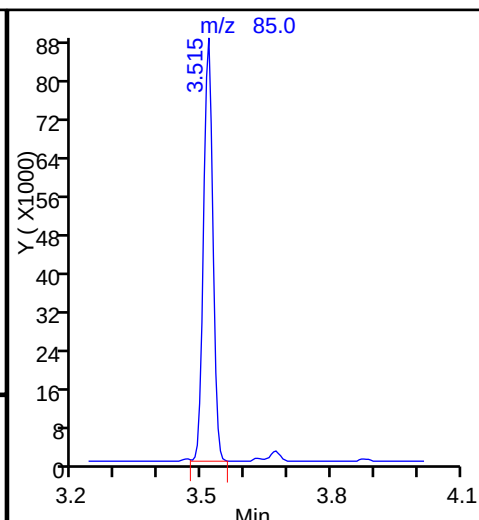
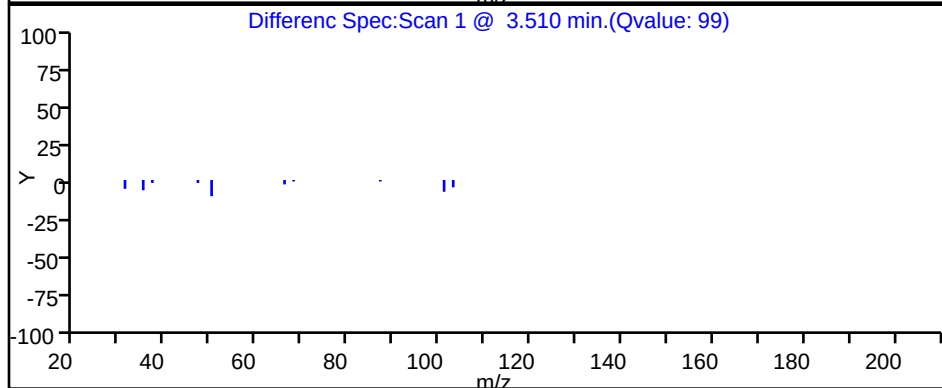
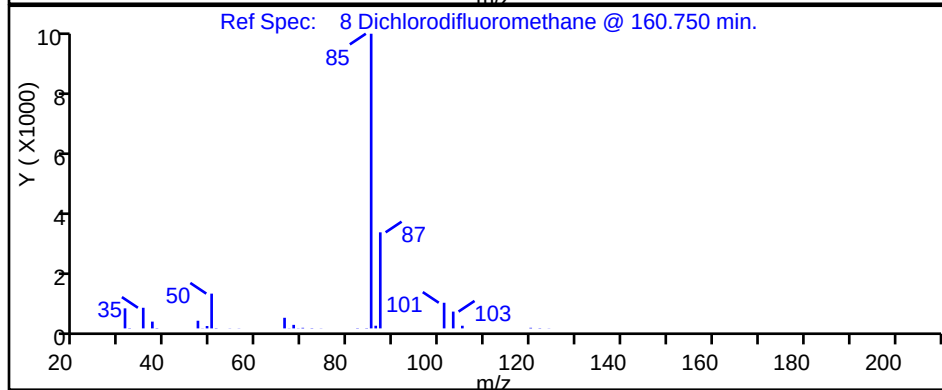
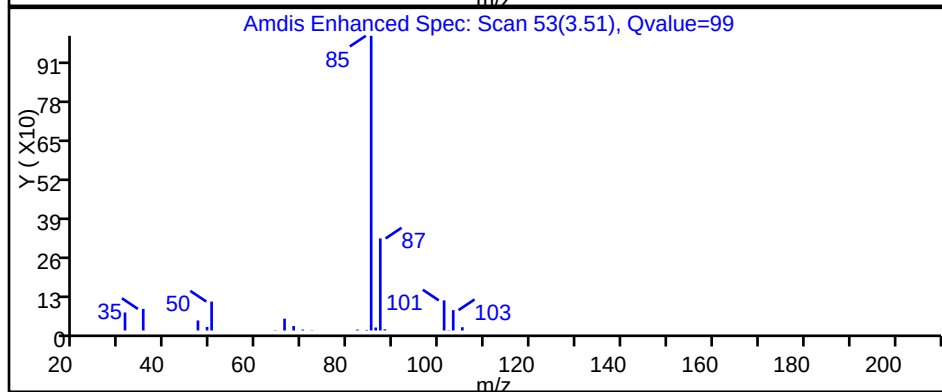
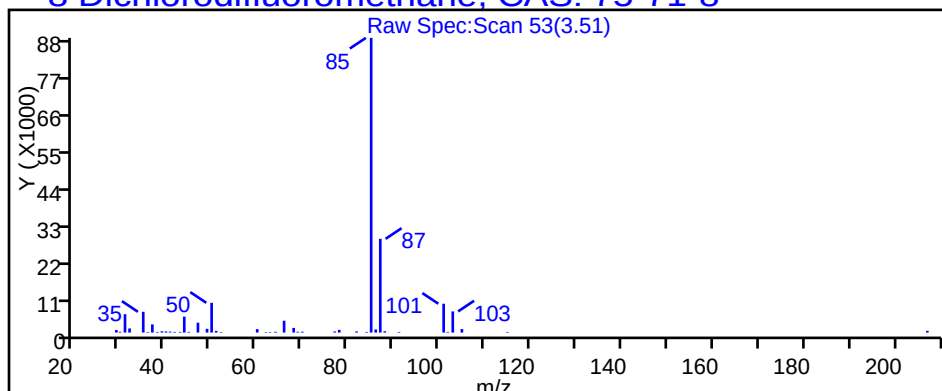
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P107.D

Injection Date: 04-Apr-2017 19:49:30

Instrument ID: MG

Lims ID: 140-7685-A-7

Lab Sample ID: 140-7685-7

Client ID: H16-BA

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 15

Purge Vol: 500.000 mL

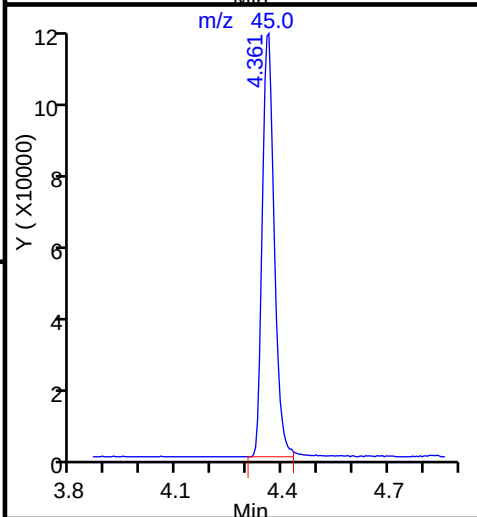
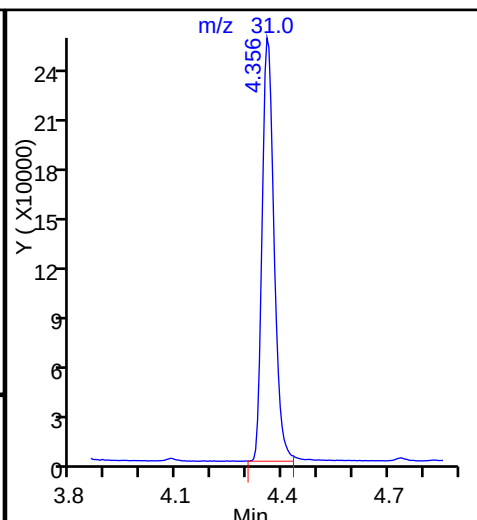
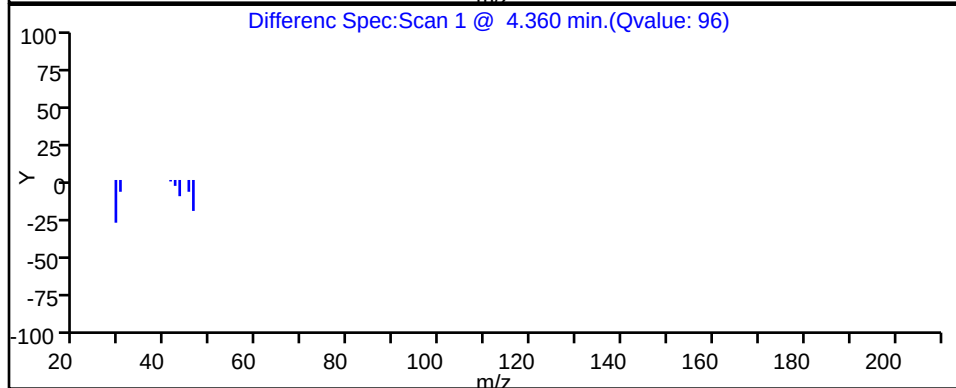
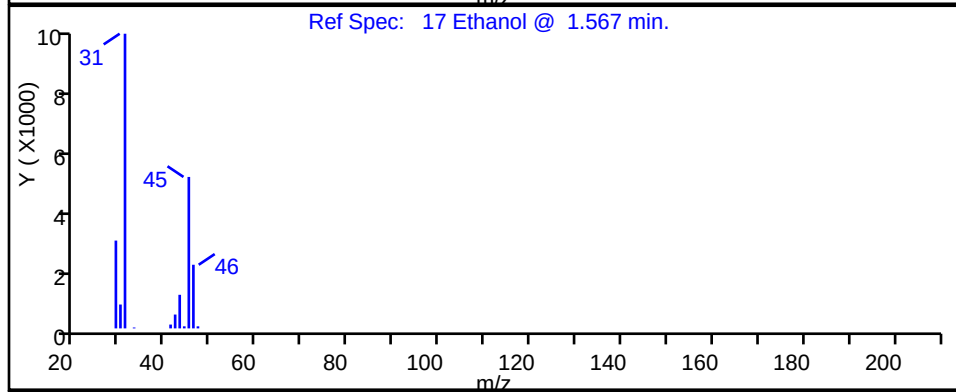
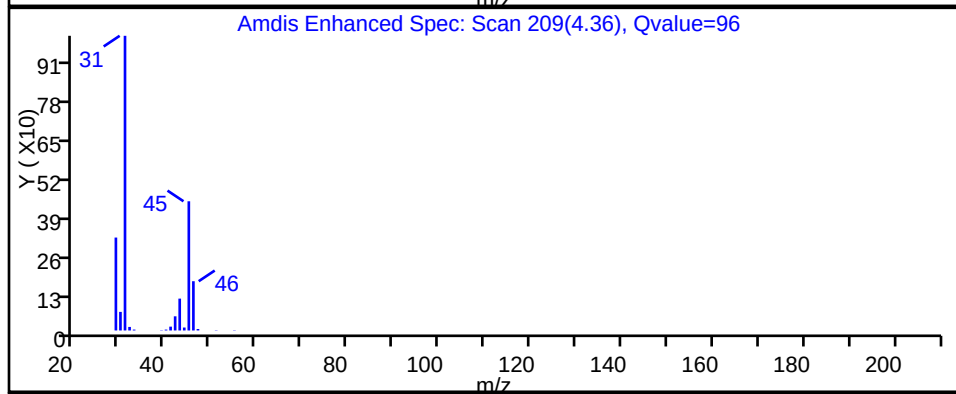
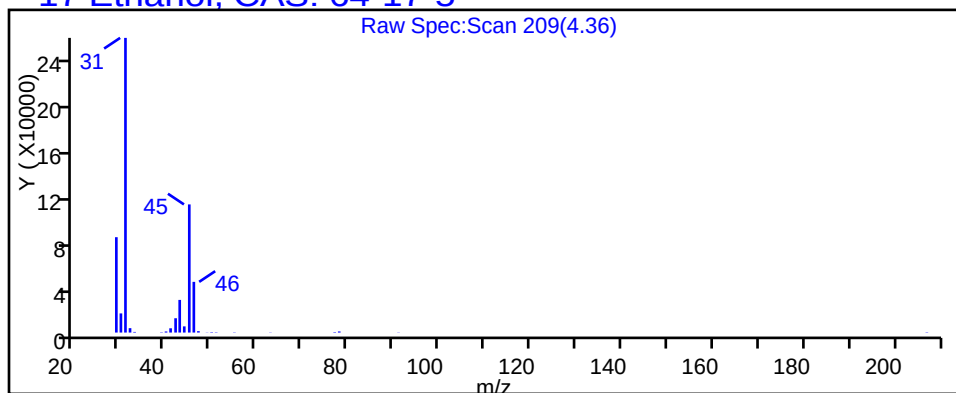
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P107.D

Injection Date: 04-Apr-2017 19:49:30

Instrument ID: MG

Lims ID: 140-7685-A-7

Lab Sample ID: 140-7685-7

Client ID: H16-BA

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 15

Purge Vol: 500.000 mL

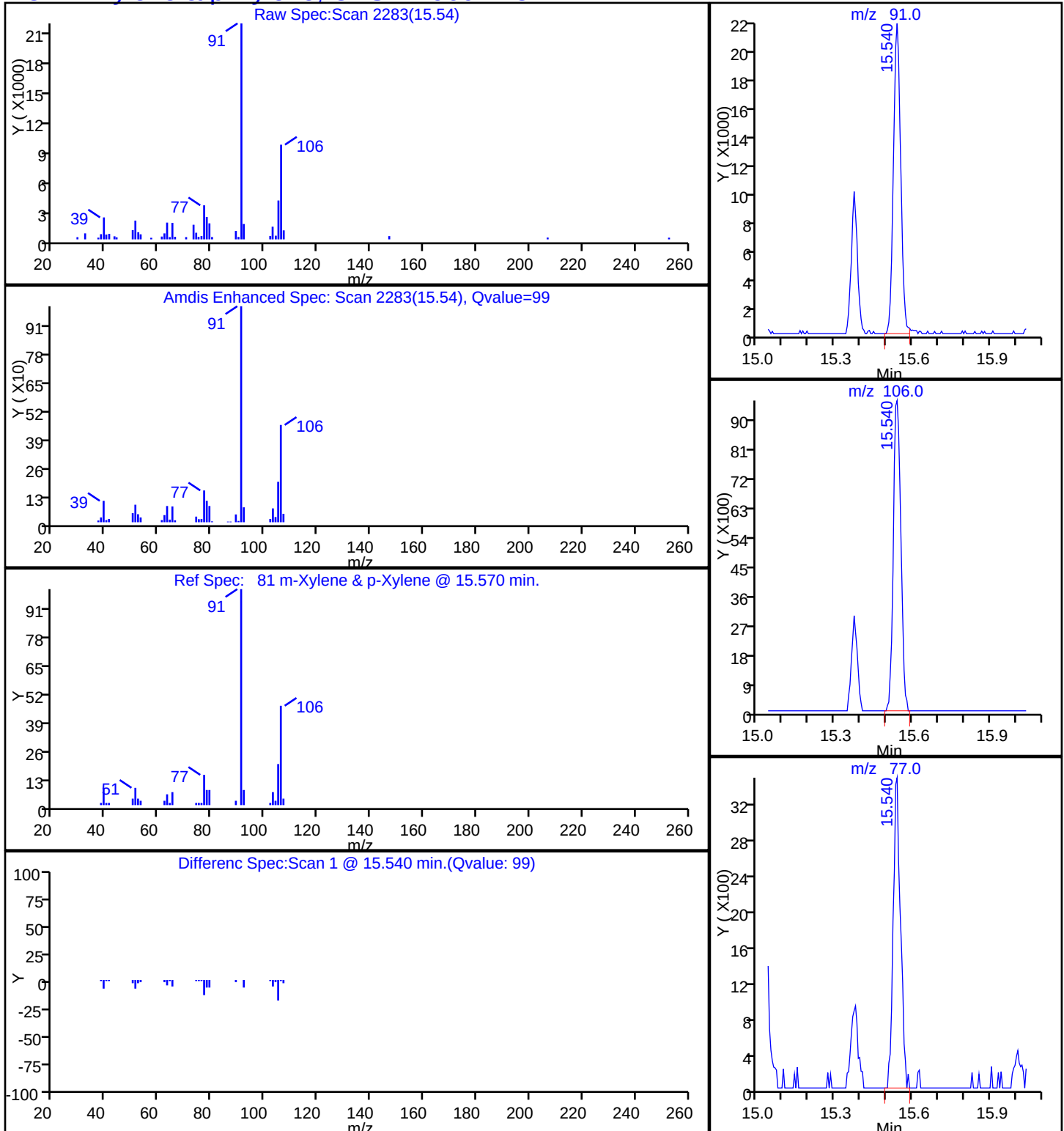
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P107.D

Injection Date: 04-Apr-2017 19:49:30

Instrument ID: MG

Lims ID: 140-7685-A-7

Lab Sample ID: 140-7685-7

Client ID: H16-BA

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 15

Purge Vol: 500.000 mL

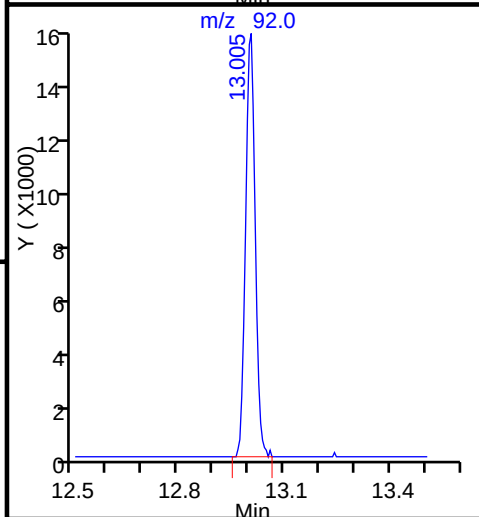
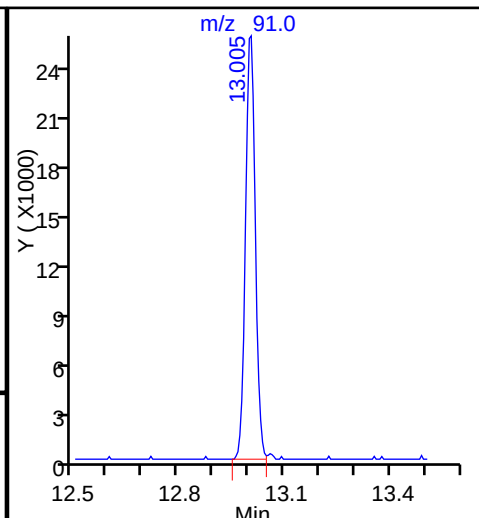
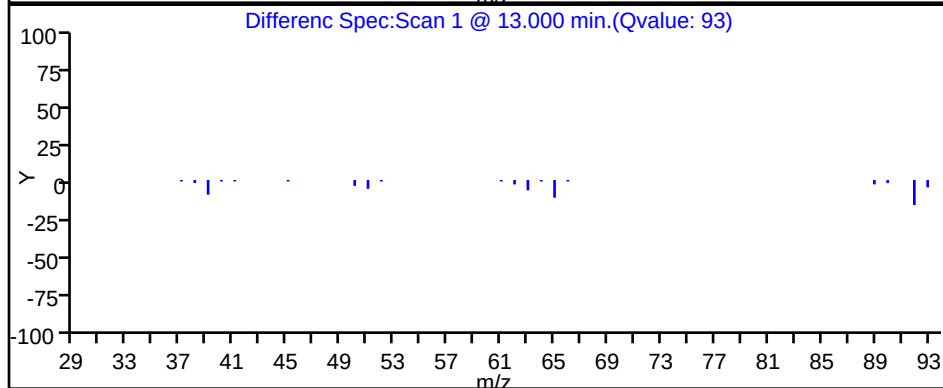
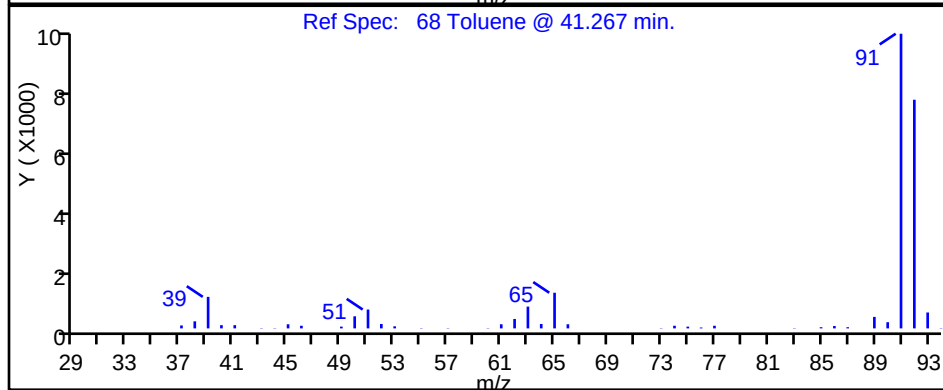
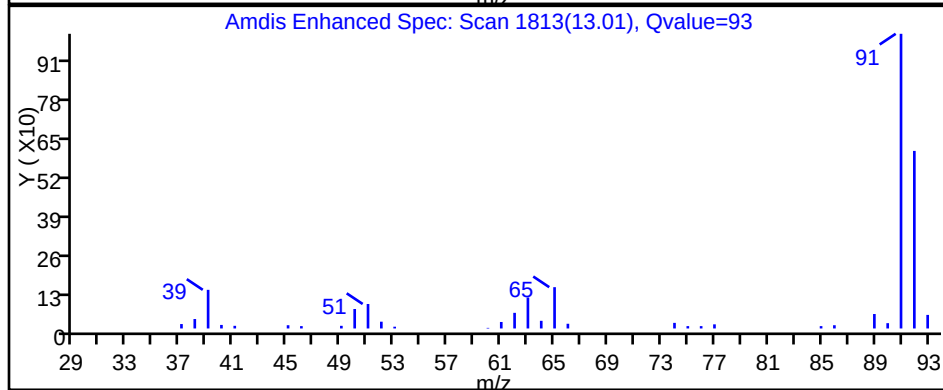
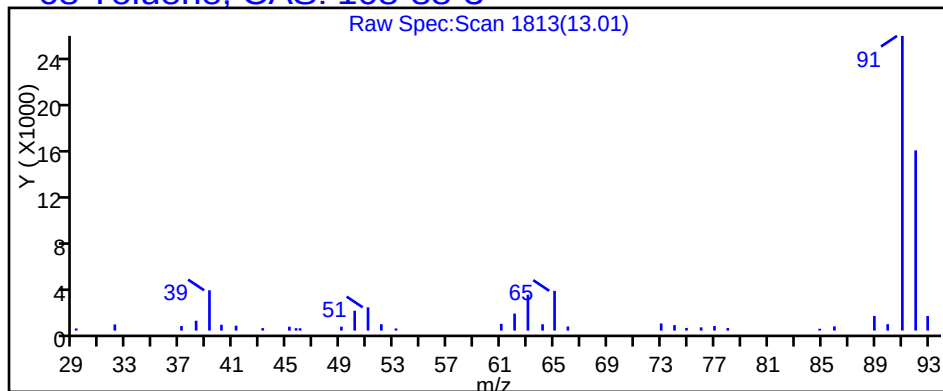
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P107.D

Injection Date: 04-Apr-2017 19:49:30

Instrument ID: MG

Lims ID: 140-7685-A-7

Lab Sample ID: 140-7685-7

Client ID: H16-BA

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 15

Purge Vol: 500.000 mL

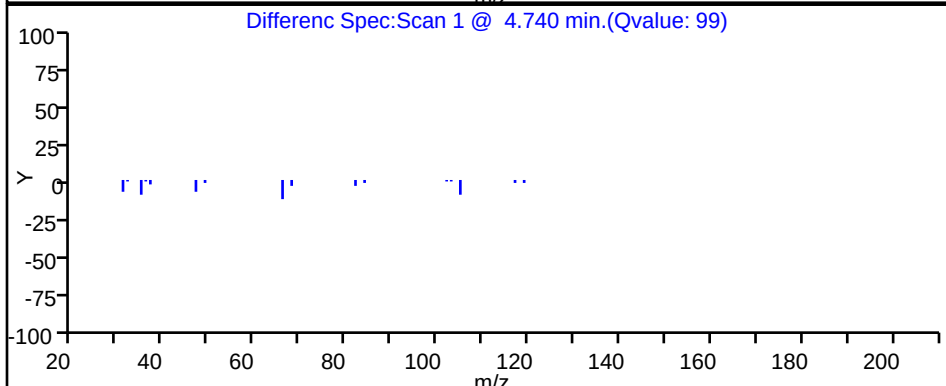
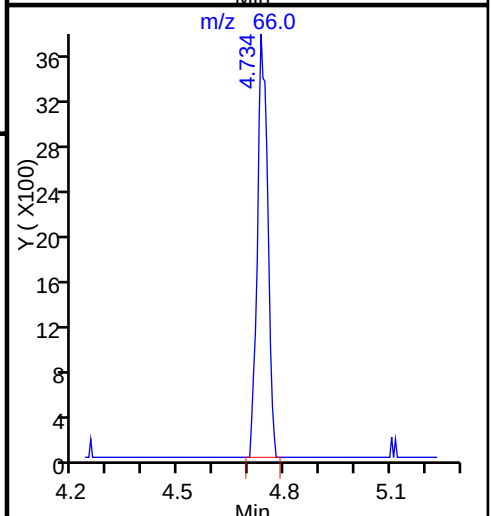
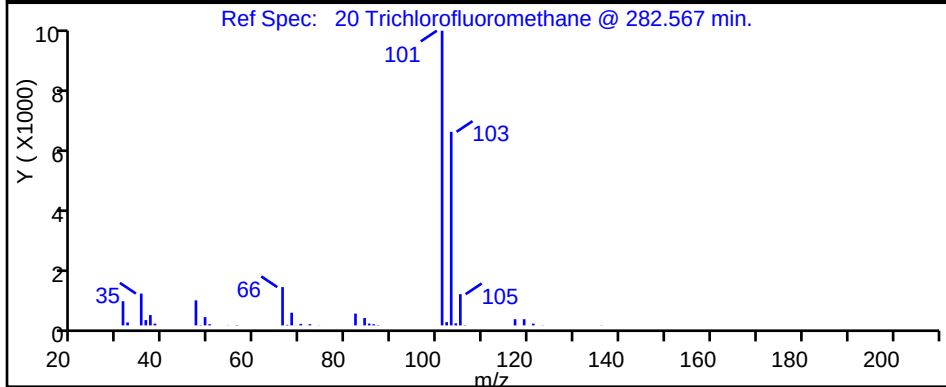
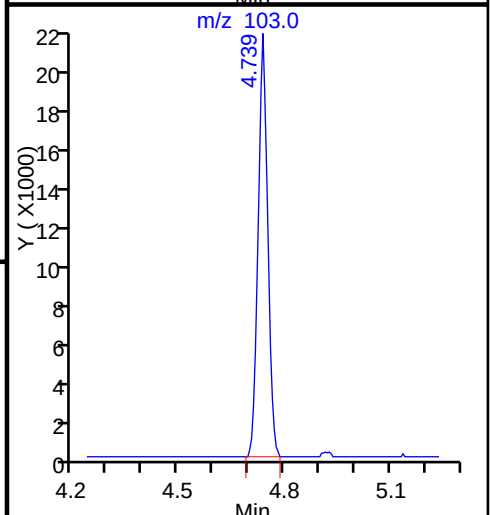
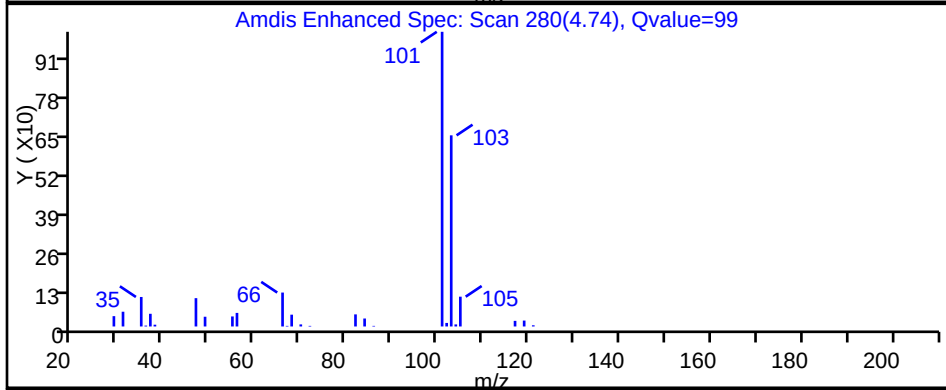
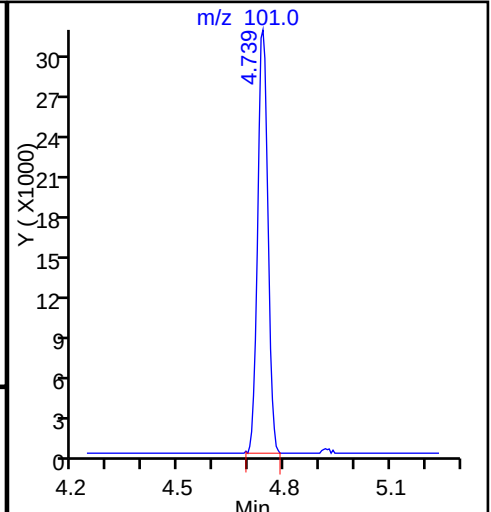
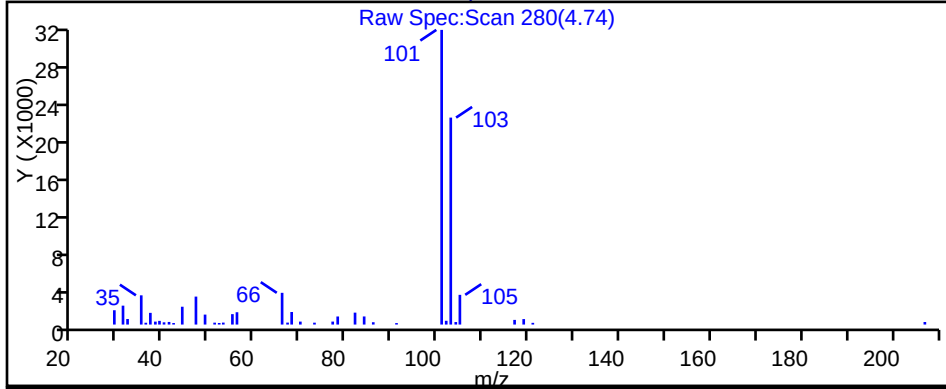
Dil. Factor: 1.0000

Method: MG_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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H15-BA Lab Sample ID: 140-7685-8
 Matrix: Air Lab File ID: GD04P108.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 08:59
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 20:38
 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.: 10155 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	0.33		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	0.10		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	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	0.072		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	0.43		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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H15-BA Lab Sample ID: 140-7685-8
 Matrix: Air Lab File ID: GD04P108.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 08:59
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 20:38
 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.: 10155 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	25		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	0.20		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.15		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	0.24		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H15-BA Lab Sample ID: 140-7685-8
 Matrix: Air Lab File ID: GD04P108.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 08:59
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 20:38
 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.: 10155 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	1.6		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	0.50		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	3.5		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	0.45		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	ND		0.39	
74-87-3	Chloromethane	50.49	0.88		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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H15-BA Lab Sample ID: 140-7685-8
 Matrix: Air Lab File ID: GD04P108.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 08:59
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 20:38
 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.: 10155 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	47		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	0.71		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	0.65		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	1.4		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P108.D
 Lims ID: 140-7685-A-8
 Client ID: H15-BA
 Sample Type: Client
 Inject. Date: 04-Apr-2017 20:38:30 ALS Bottle#: 8 Worklist Smp#: 16
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004508-016
 Misc. Info.: 140-7685-a-8
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 05-Apr-2017 10:01:21 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 09:57:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.974	7.980	-0.006	72	253127	4.00	
* 2 1,4-Difluorobenzene	114	10.142	10.148	-0.006	95	1249099	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.017	15.022	-0.005	89	1231665	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.689	16.694	-0.005	93	1003779	4.12	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	130076	0.4855	
9 Chloromethane	52	3.661	3.666	-0.005	98	7685	0.4264	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.677	3.671	0.006	48	2668	0.0167	
17 Ethanol	31	4.356	4.356	0.000	97	635114	24.9	
20 Trichlorofluoromethane	101	4.739	4.744	-0.005	99	64820	0.2429	
29 2-Methyl-2-propanol	59	5.472	5.456	0.016	90	3507	0.0341	
30 1,1,2-Trichloro-1,2,2-trif	101	5.521	5.521	0.000	92	9701	0.0623	
31 Methylene Chloride	84	5.645	5.650	-0.005	87	12412	0.2039	
39 2-Butanone (MEK)	72	7.257	7.268	-0.011	98	34382	1.19	
40 Hexane	56	7.322	7.327	-0.005	68	5608	0.1122	
44 Chloroform	83	8.001	8.007	-0.006	45	4953	0.0279	
49 Benzene	78	9.560	9.565	-0.005	97	38042	0.1793	
50 Cyclohexane	69	9.571	9.576	-0.005	39	1039	0.0291	
51 Carbon tetrachloride	117	9.592	9.598	-0.006	97	15863	0.0715	
56 Isooctane	57	10.390	10.396	-0.006	76	12003	0.0381	
65 4-Methyl-2-pentanone (MIBK	43	12.127	12.116	0.011	94	11686	0.0959	
68 Toluene	91	13.000	13.006	-0.006	92	72948	0.2973	
76 Tetrachloroethene	129	14.181	14.181	0.000	87	2780	0.0248	
79 Ethylbenzene	91	15.373	15.378	-0.005	98	16730	0.0488	
81 m-Xylene & p-Xylene	91	15.540	15.545	-0.005	99	41640	0.1504	
85 o-Xylene	91	16.074	16.074	0.000	93	19906	0.0703	
92 1,3,5-Trimethylbenzene	120	17.476	17.481	-0.005	91	18454	0.1017	
96 1,2,4-Trimethylbenzene	105	17.934	17.940	-0.006	98	113223	0.3256	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P108.D

Injection Date: 04-Apr-2017 20:38:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7685-A-8

Lab Sample ID: 140-7685-8

Worklist Smp#: 16

Client ID: H15-BA

Purge Vol: 500.000 mL

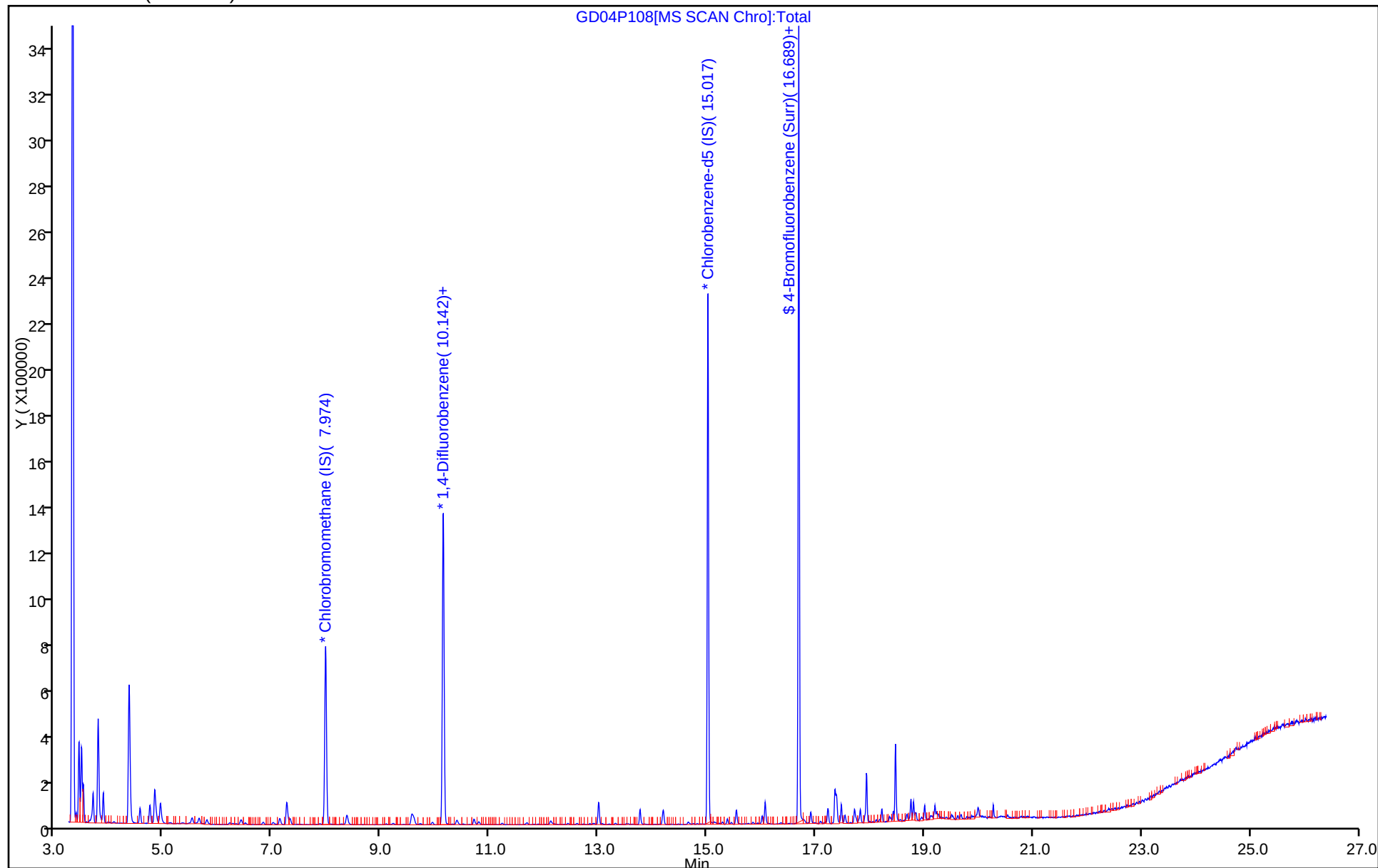
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P108.D
Lims ID: 140-7685-A-8
Client ID: H15-BA
Sample Type: Client
Inject. Date: 04-Apr-2017 20:38:30 ALS Bottle#: 8 Worklist Smp#: 16
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004508-016
Misc. Info.: 140-7685-a-8
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 05-Apr-2017 10:01:21 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 09:57:37

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.12	103.10

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P108.D

Injection Date: 04-Apr-2017 20:38:30

Instrument ID: MG

Lims ID: 140-7685-A-8

Lab Sample ID: 140-7685-8

Client ID: H15-BA

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 16

Purge Vol: 500.000 mL

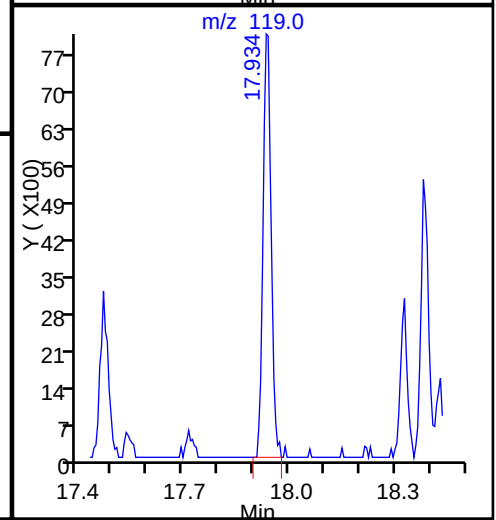
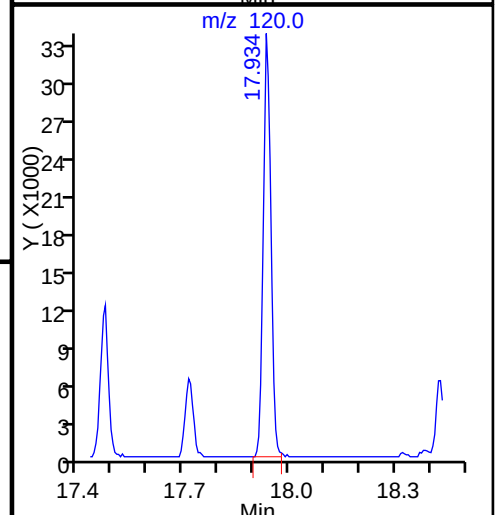
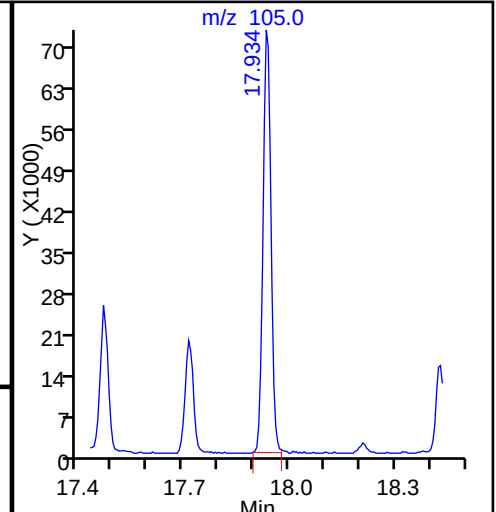
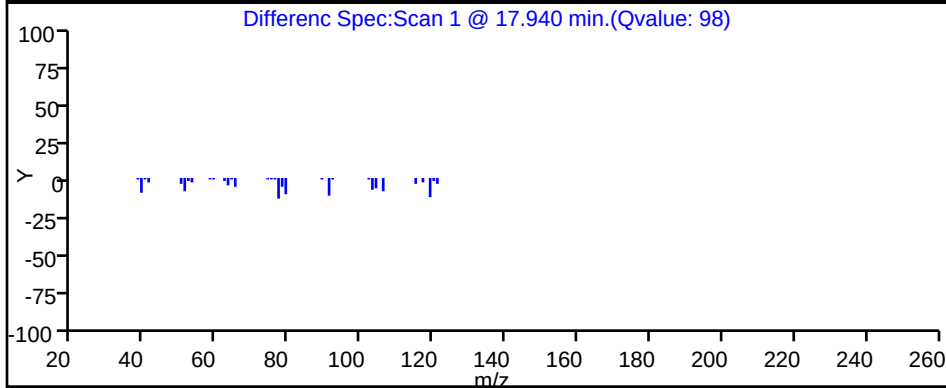
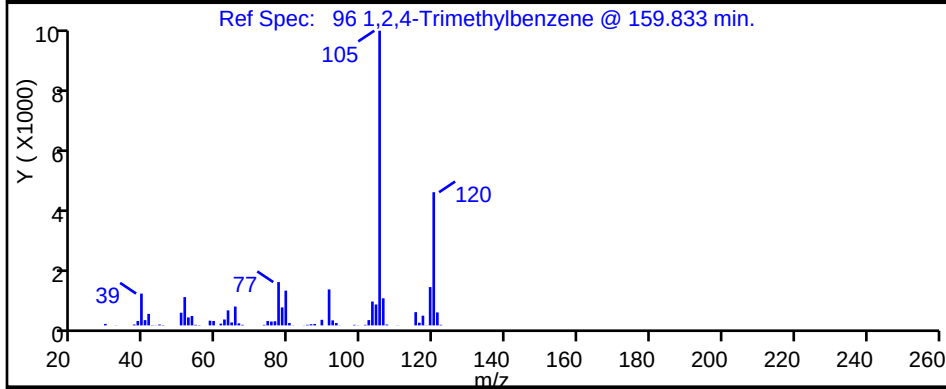
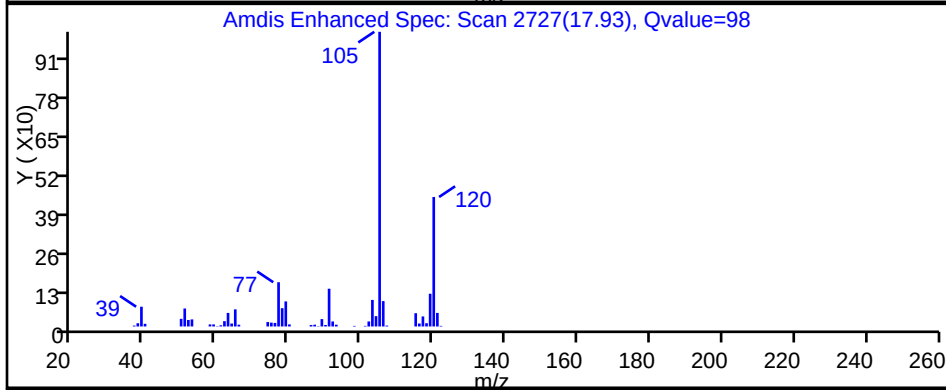
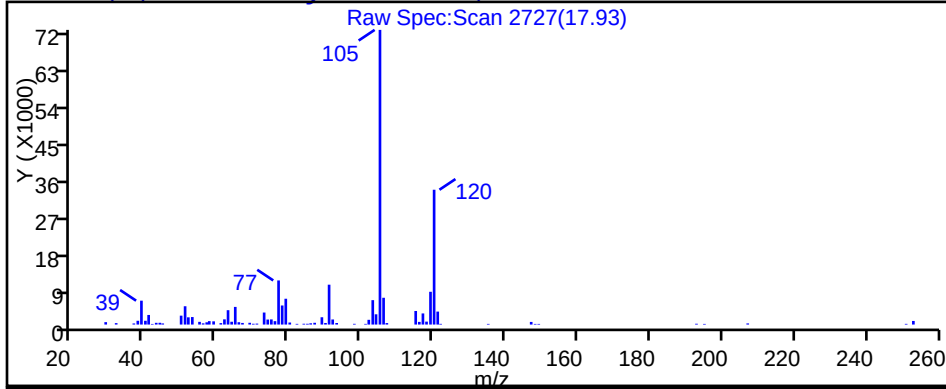
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

96 1,2,4-Trimethylbenzene, CAS: 95-63-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P108.D

Injection Date: 04-Apr-2017 20:38:30

Instrument ID: MG

Lims ID: 140-7685-A-8

Lab Sample ID: 140-7685-8

Client ID: H15-BA

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 16

Purge Vol: 500.000 mL

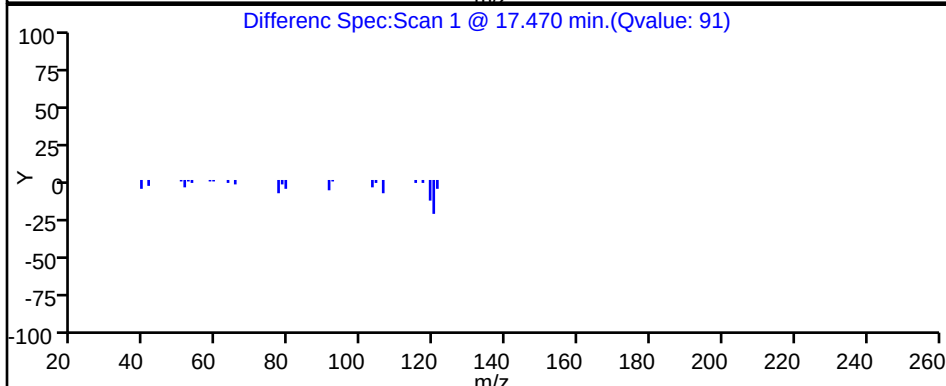
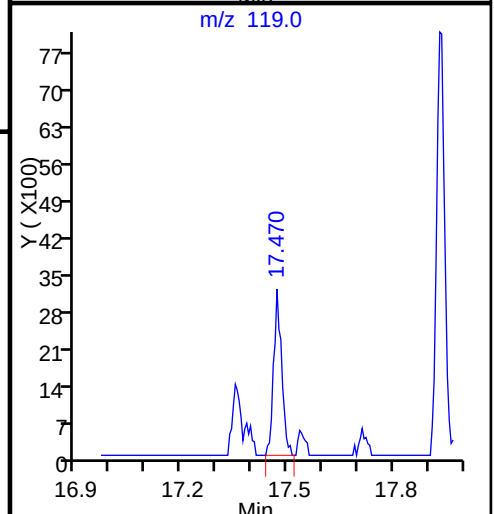
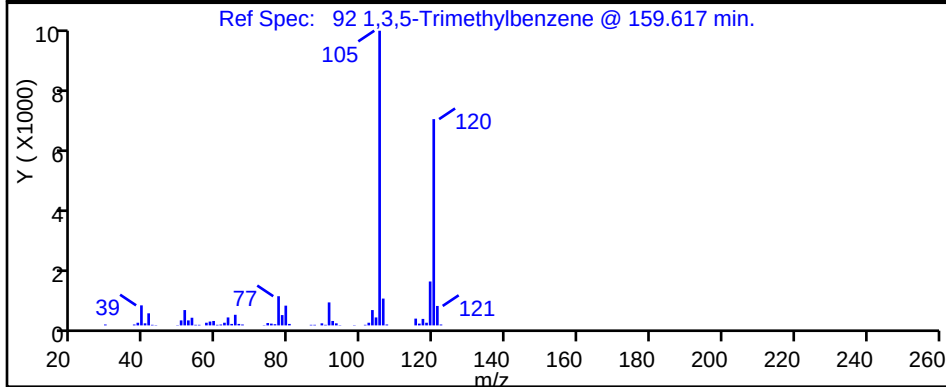
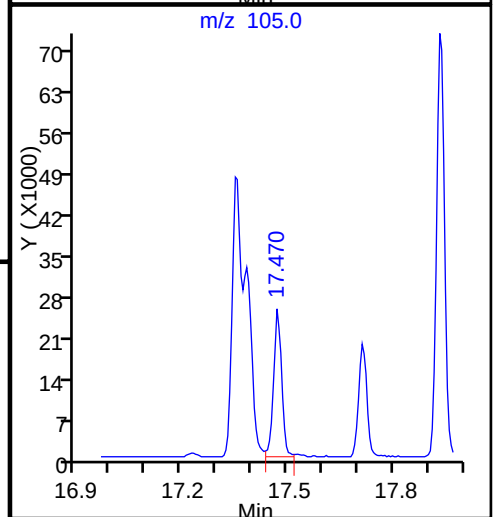
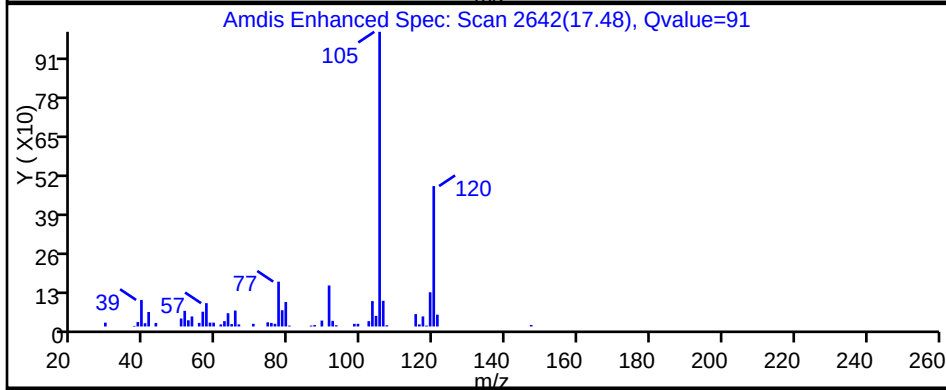
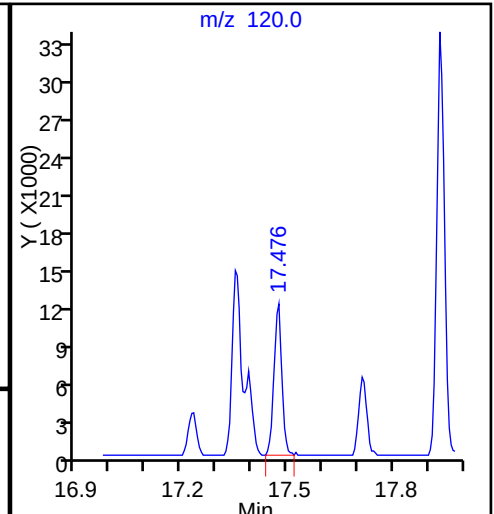
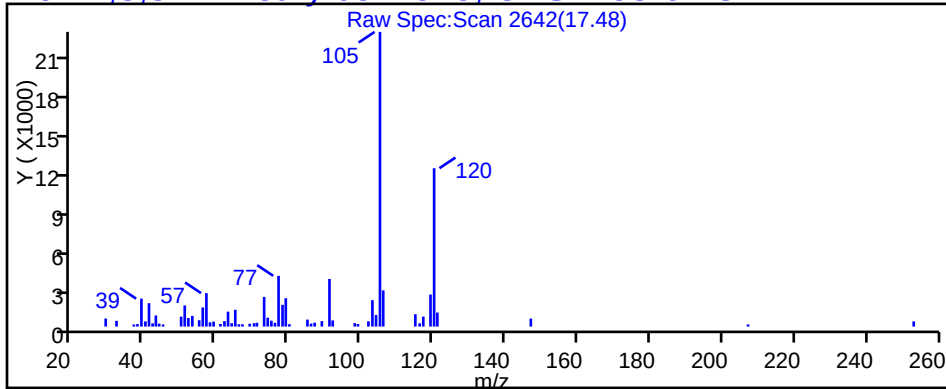
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

92 1,3,5-Trimethylbenzene, CAS: 108-67-8

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P108.D

Injection Date: 04-Apr-2017 20:38:30

Instrument ID: MG

Lims ID: 140-7685-A-8

Lab Sample ID: 140-7685-8

Client ID: H15-BA

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 16

Purge Vol: 500.000 mL

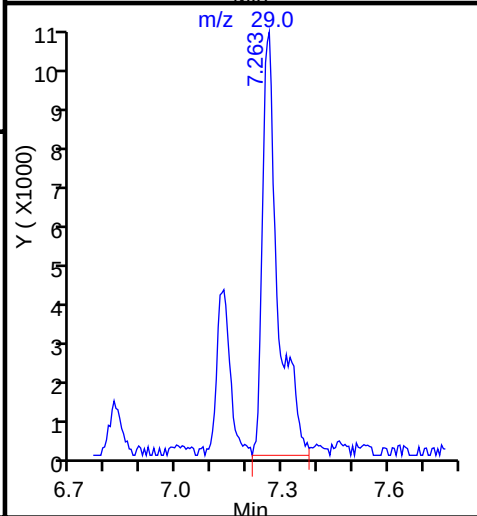
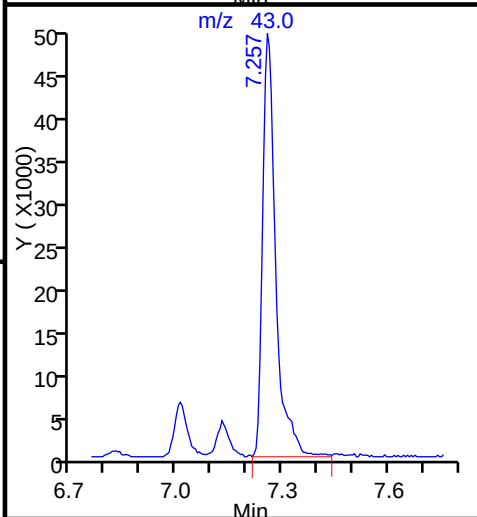
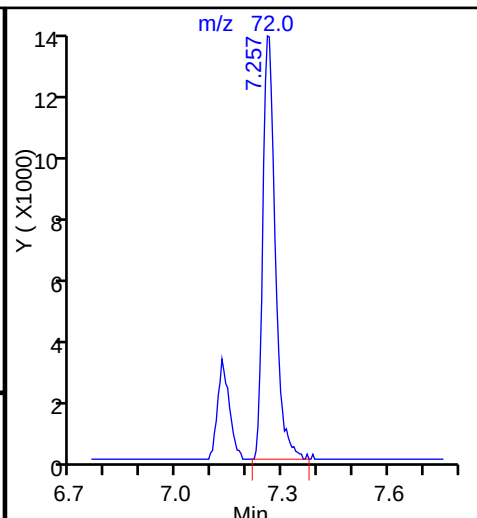
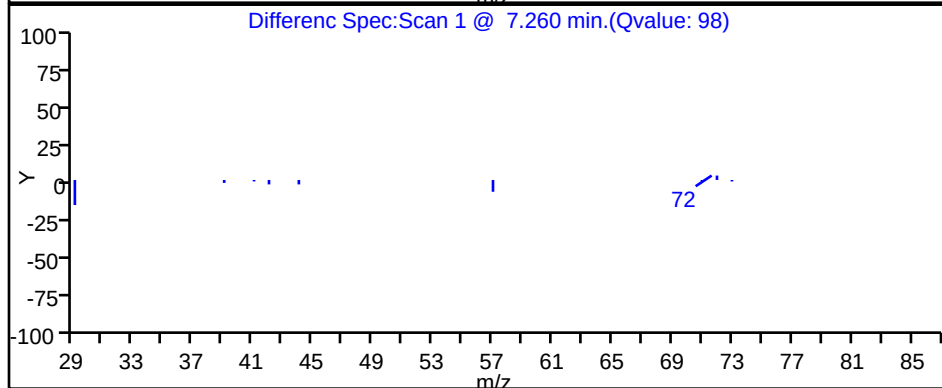
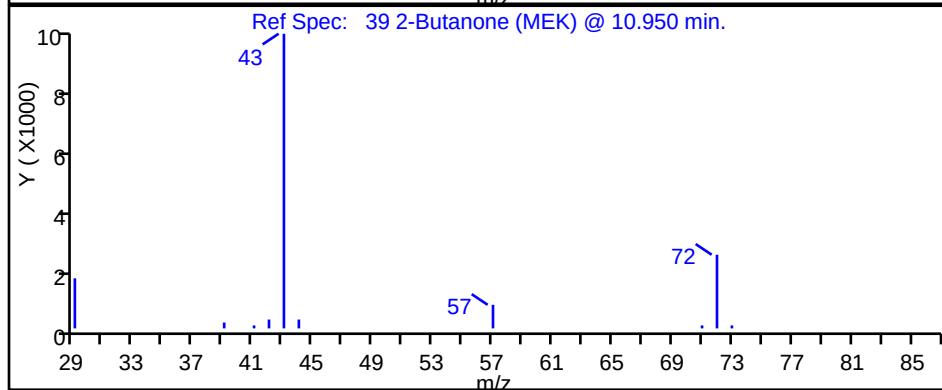
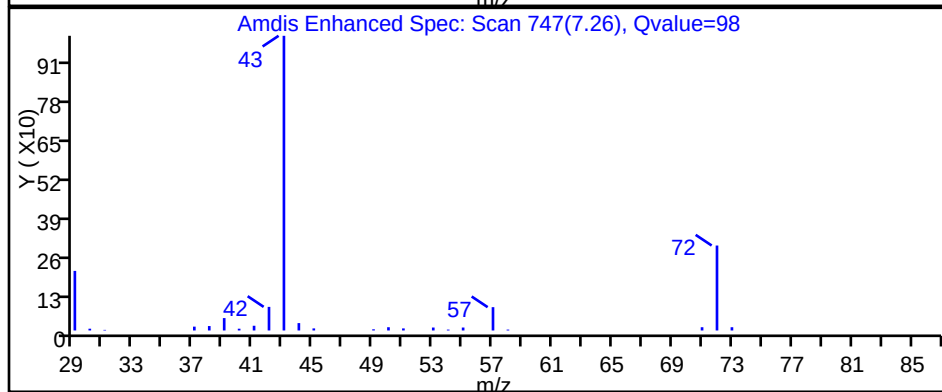
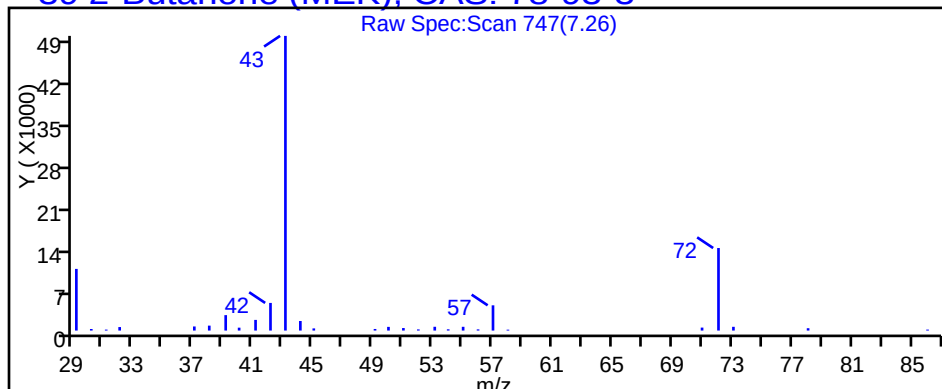
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P108.D

Injection Date: 04-Apr-2017 20:38:30

Instrument ID: MG

Lims ID: 140-7685-A-8

Lab Sample ID: 140-7685-8

Client ID: H15-BA

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 16

Purge Vol: 500.000 mL

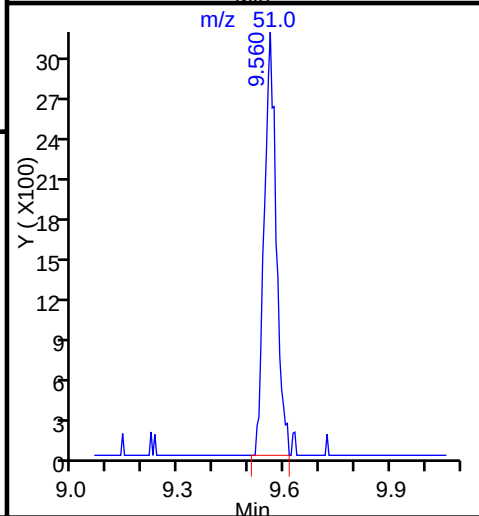
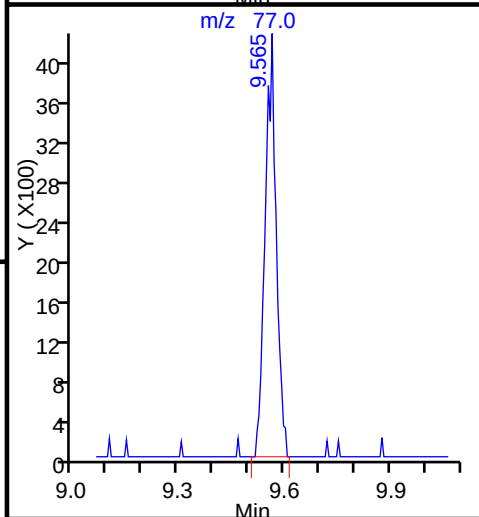
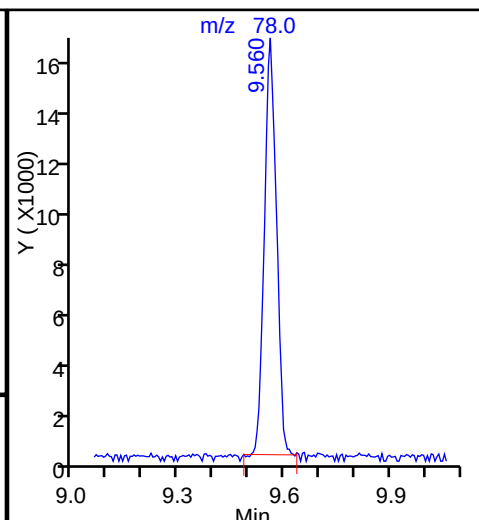
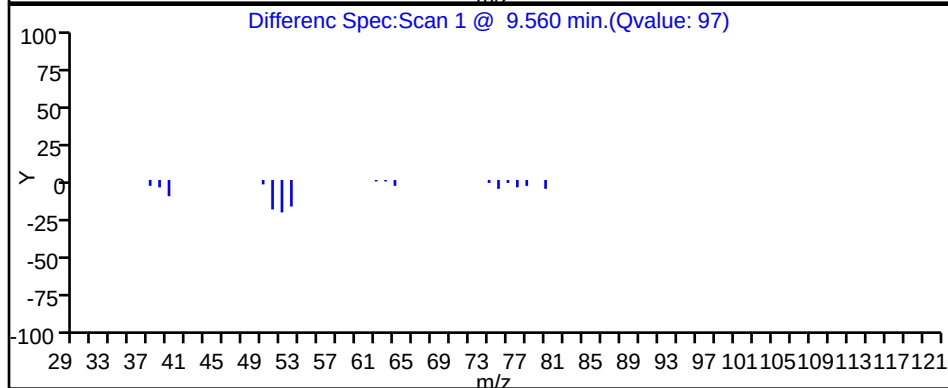
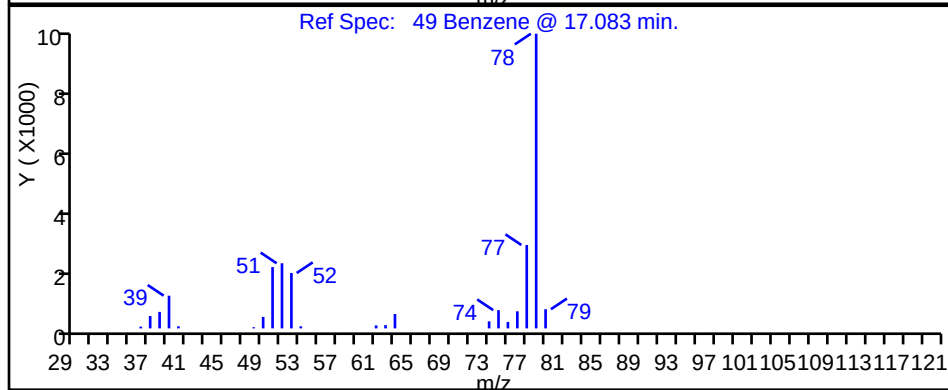
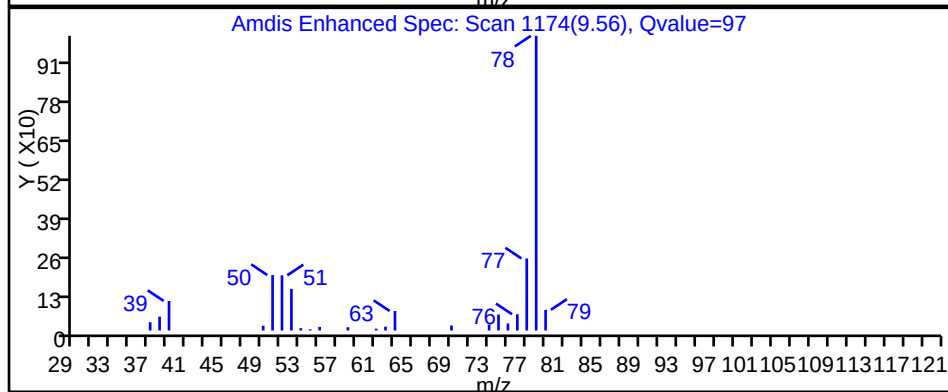
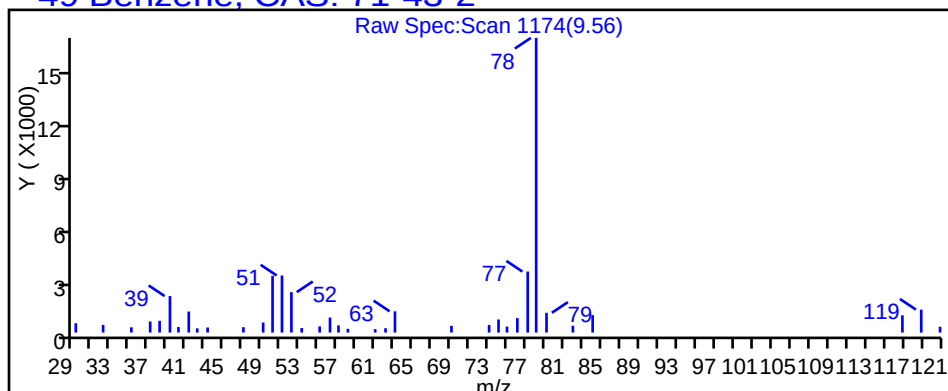
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P108.D

Injection Date: 04-Apr-2017 20:38:30

Instrument ID: MG

Lims ID: 140-7685-A-8

Lab Sample ID: 140-7685-8

Client ID: H15-BA

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 16

Purge Vol: 500.000 mL

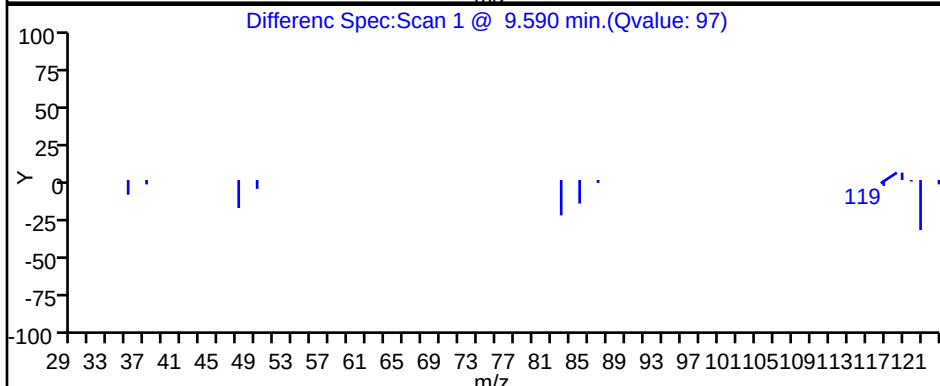
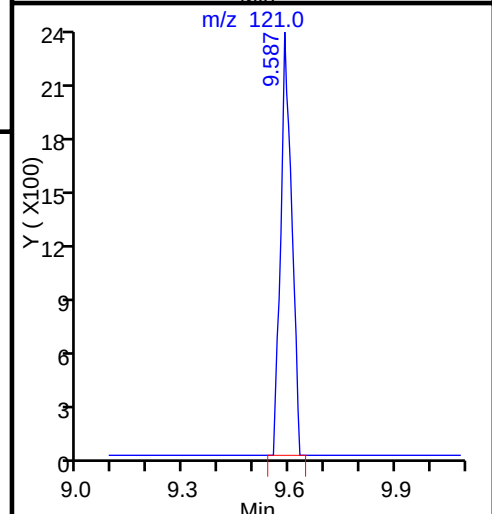
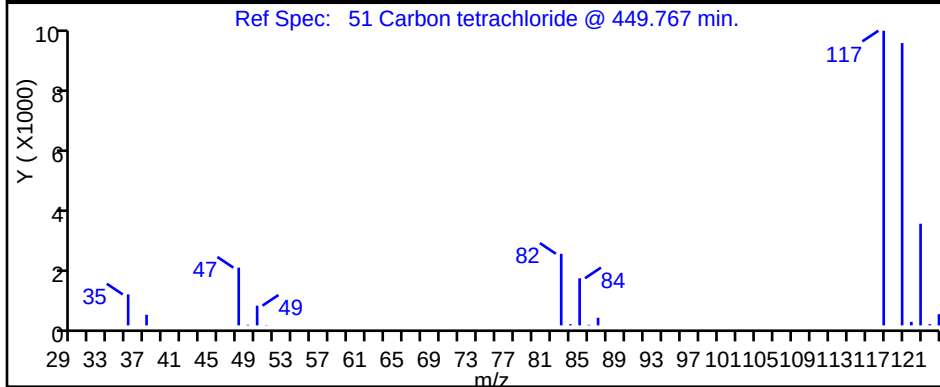
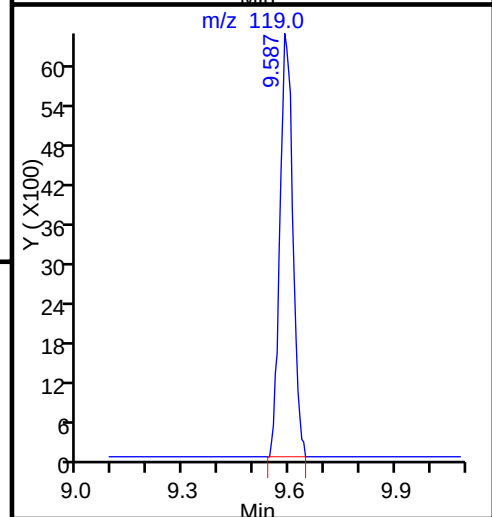
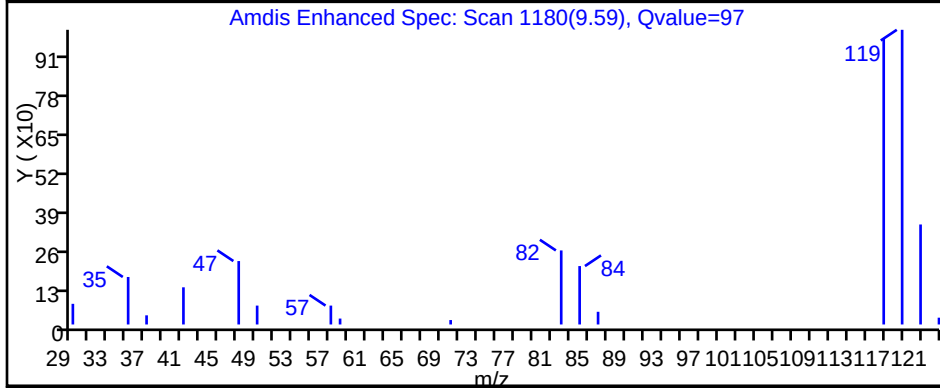
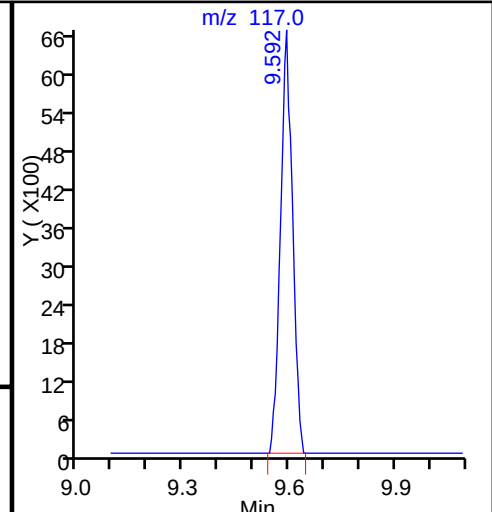
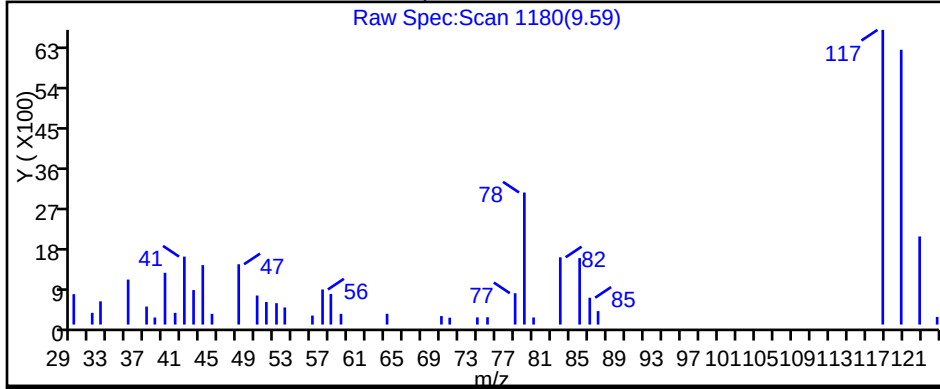
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P108.D

Injection Date: 04-Apr-2017 20:38:30

Instrument ID: MG

Lims ID: 140-7685-A-8

Lab Sample ID: 140-7685-8

Client ID: H15-BA

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 16

Purge Vol: 500.000 mL

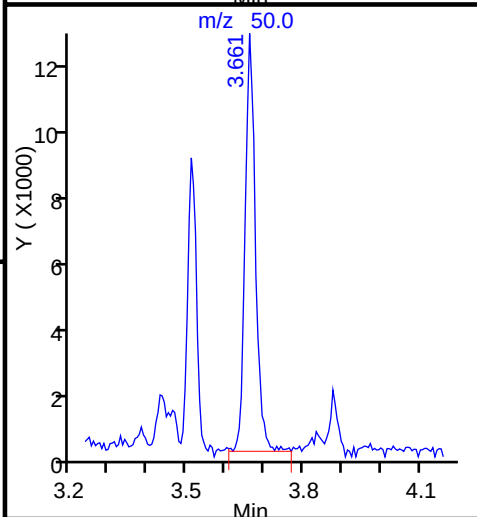
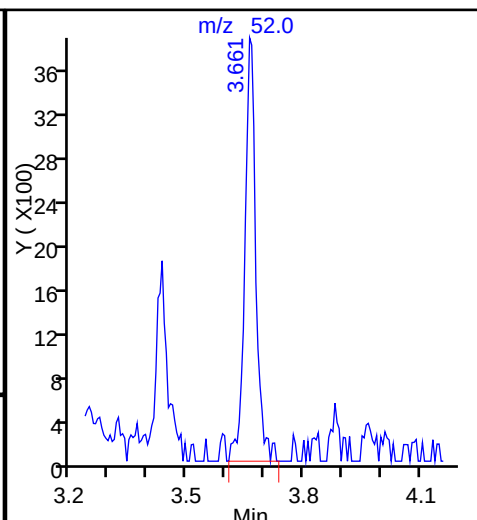
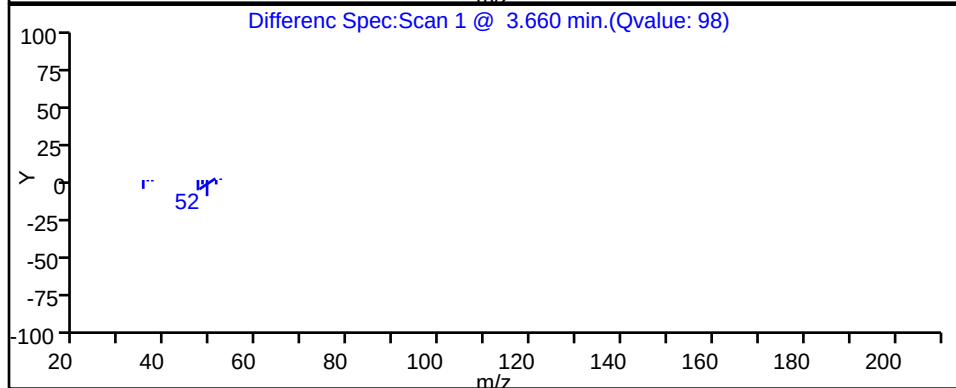
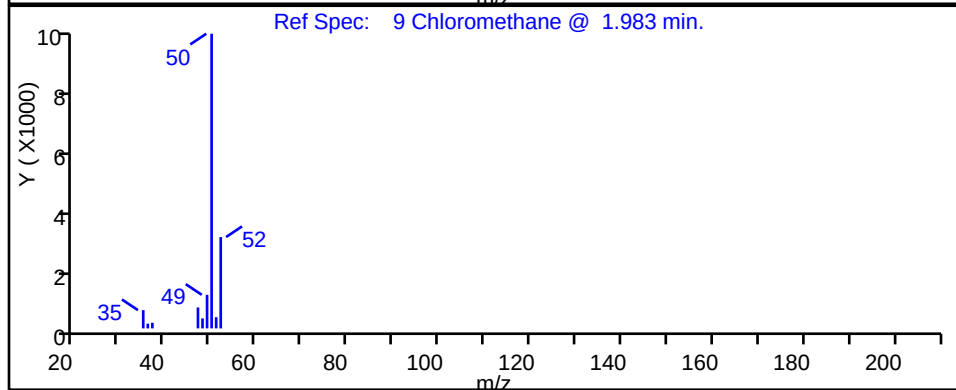
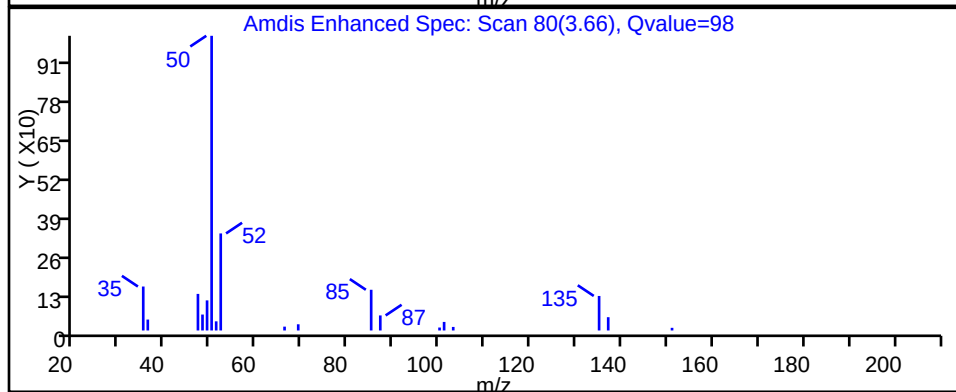
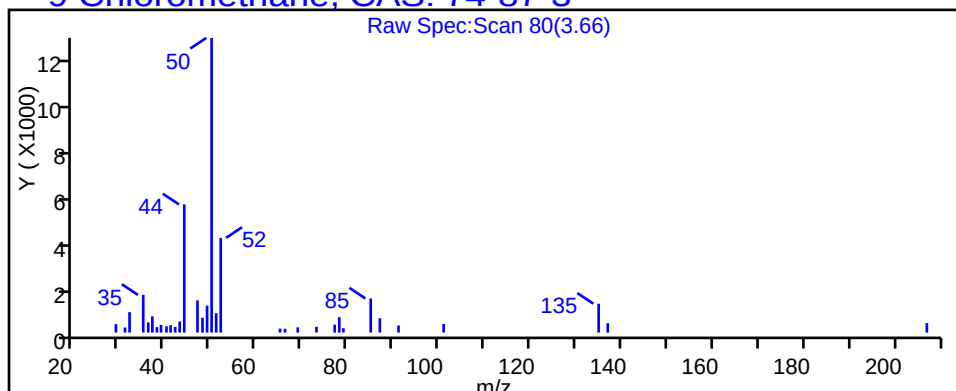
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P108.D

Injection Date: 04-Apr-2017 20:38:30

Instrument ID: MG

Lims ID: 140-7685-A-8

Lab Sample ID: 140-7685-8

Client ID: H15-BA

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 16

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

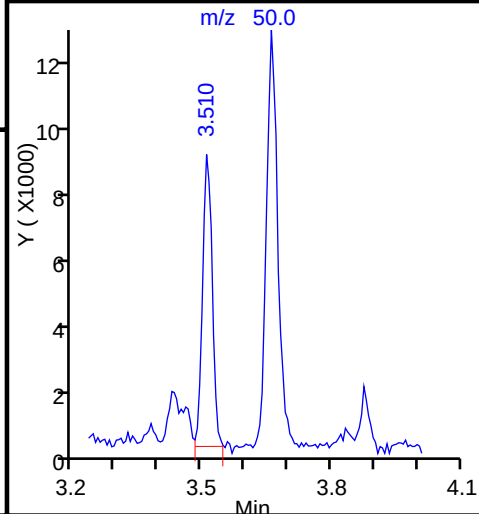
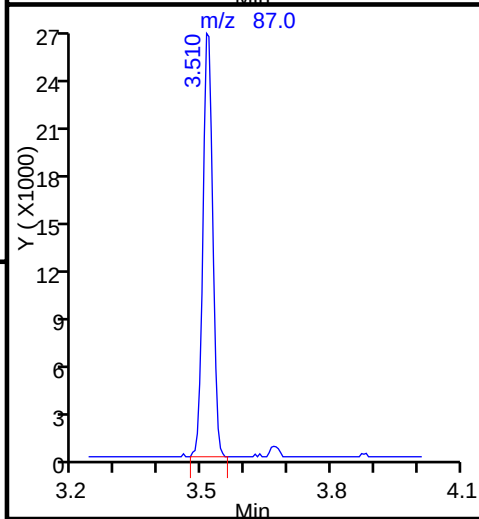
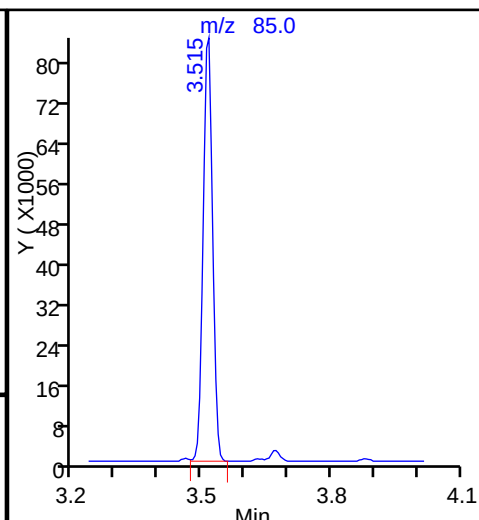
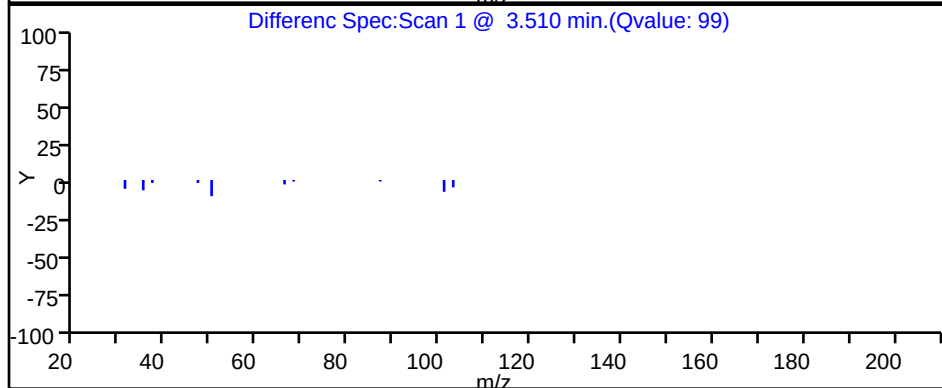
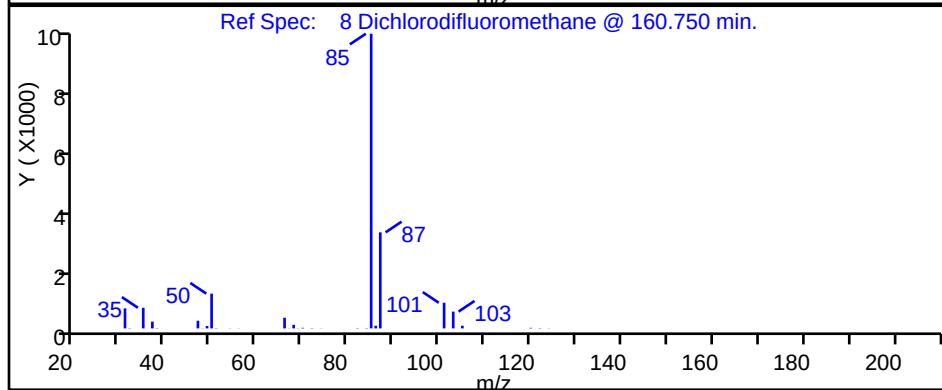
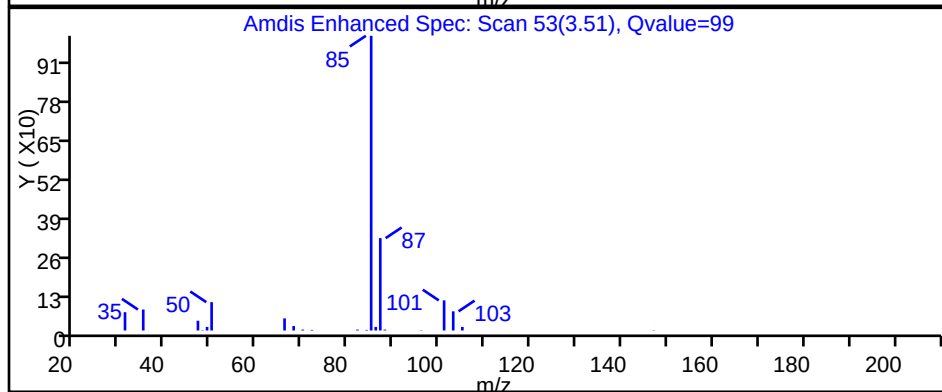
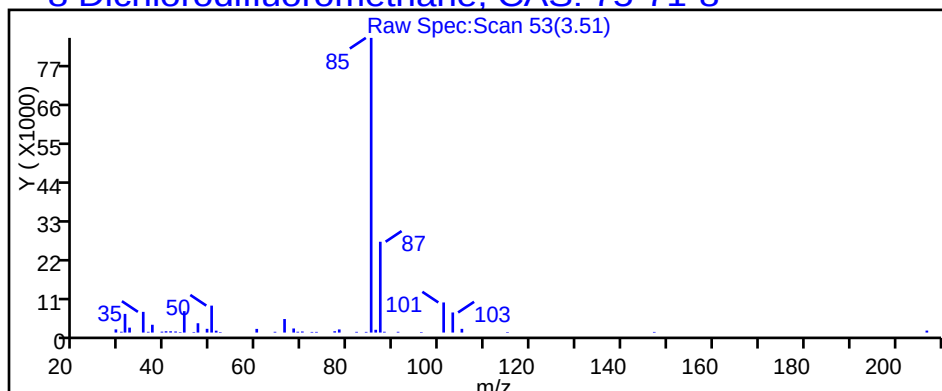
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P108.D

Injection Date: 04-Apr-2017 20:38:30

Instrument ID: MG

Lims ID: 140-7685-A-8

Lab Sample ID: 140-7685-8

Client ID: H15-BA

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 16

Purge Vol: 500.000 mL

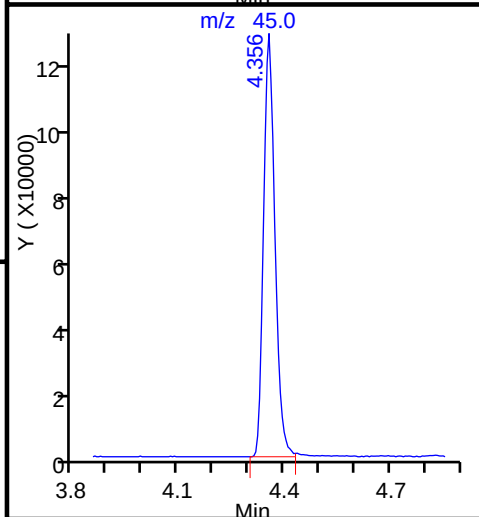
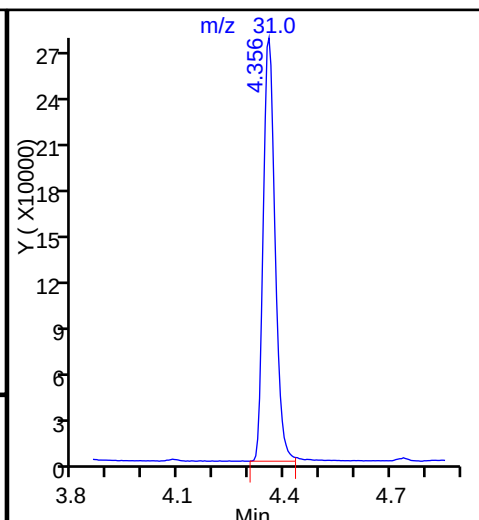
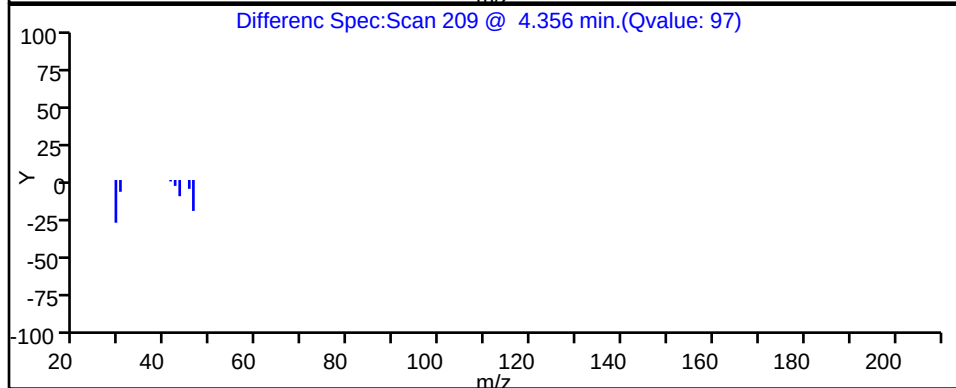
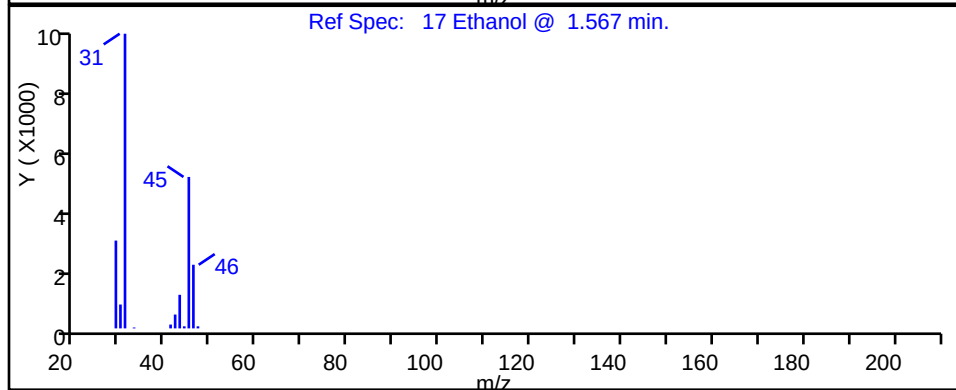
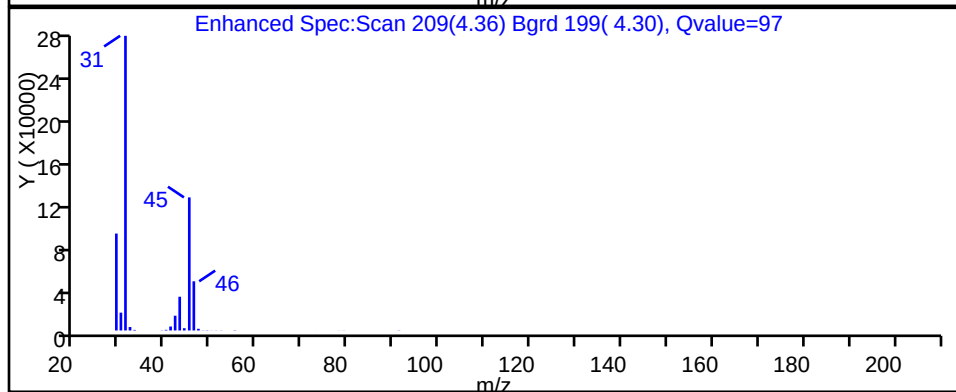
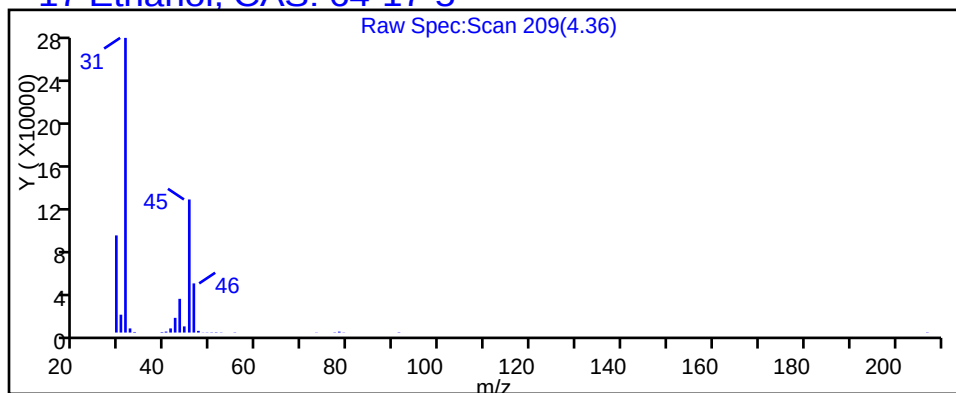
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P108.D

Injection Date: 04-Apr-2017 20:38:30

Instrument ID: MG

Lims ID: 140-7685-A-8

Lab Sample ID: 140-7685-8

Client ID: H15-BA

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 16

Purge Vol: 500.000 mL

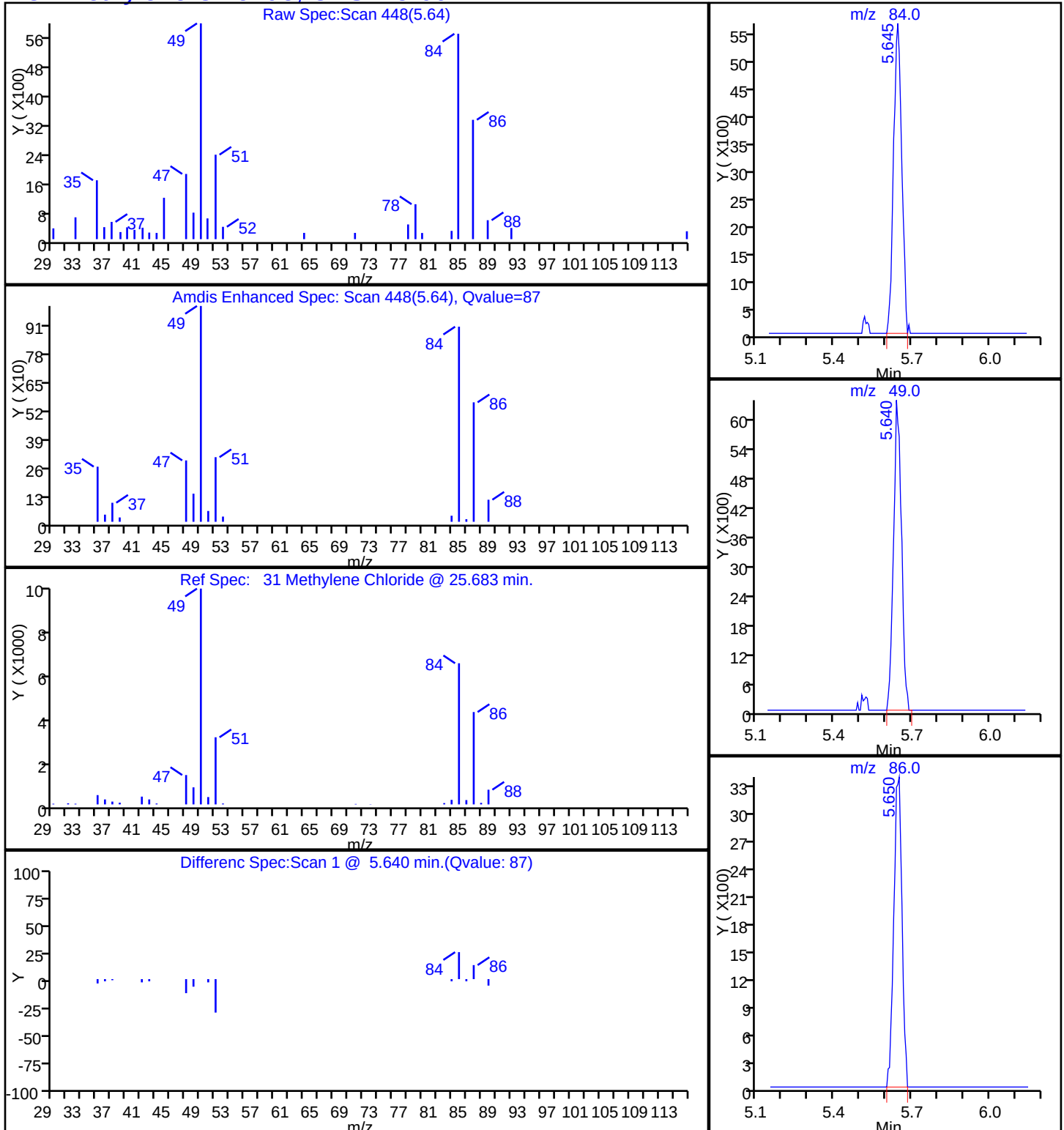
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P108.D

Injection Date: 04-Apr-2017 20:38:30

Instrument ID: MG

Lims ID: 140-7685-A-8

Lab Sample ID: 140-7685-8

Client ID: H15-BA

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 16

Purge Vol: 500.000 mL

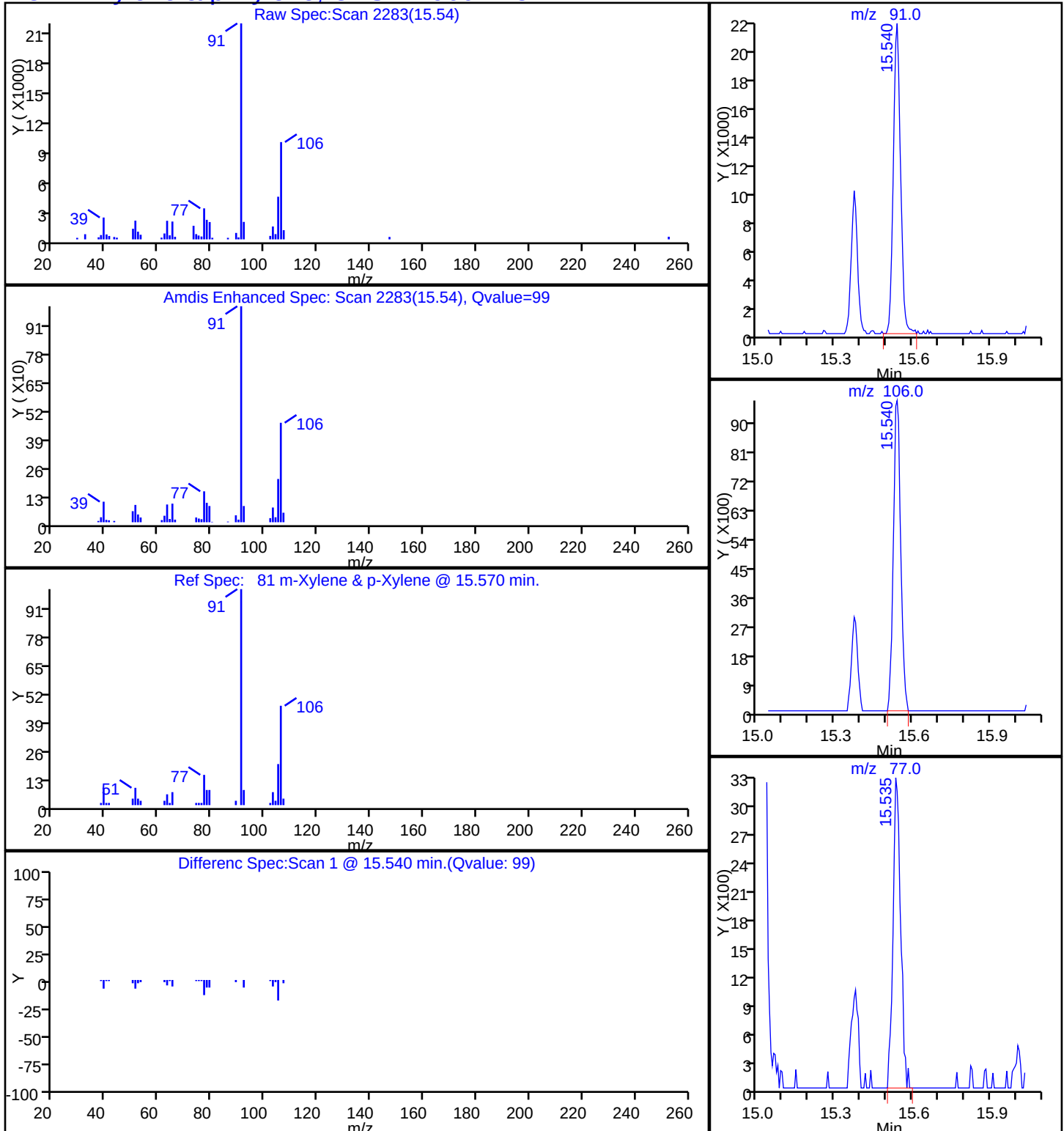
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P108.D

Injection Date: 04-Apr-2017 20:38:30

Instrument ID: MG

Lims ID: 140-7685-A-8

Lab Sample ID: 140-7685-8

Client ID: H15-BA

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 16

Purge Vol: 500.000 mL

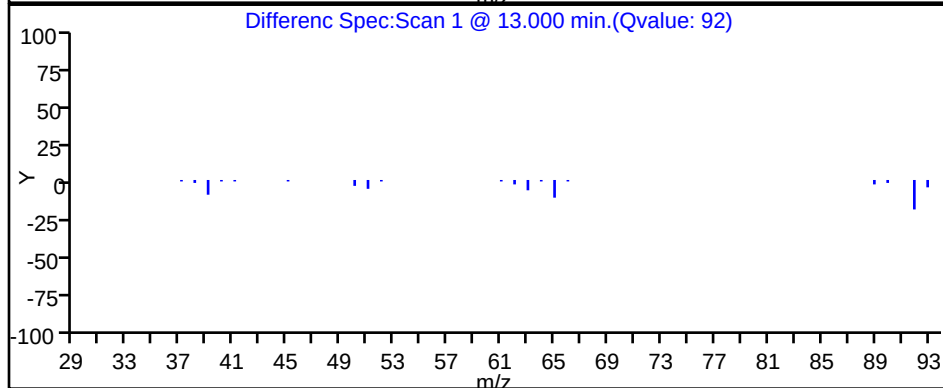
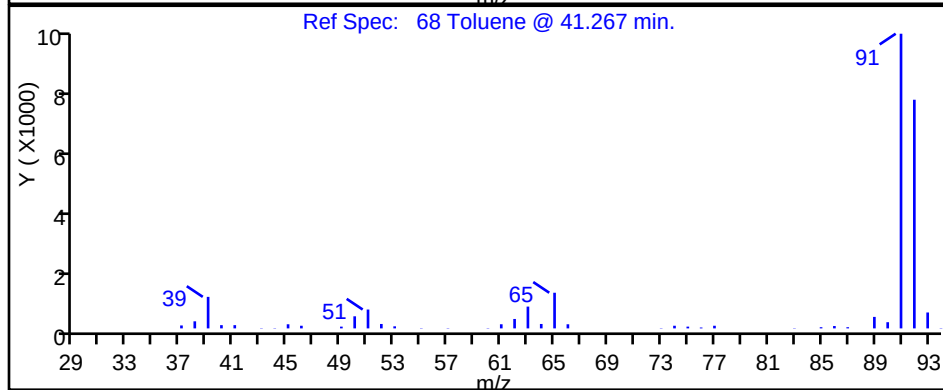
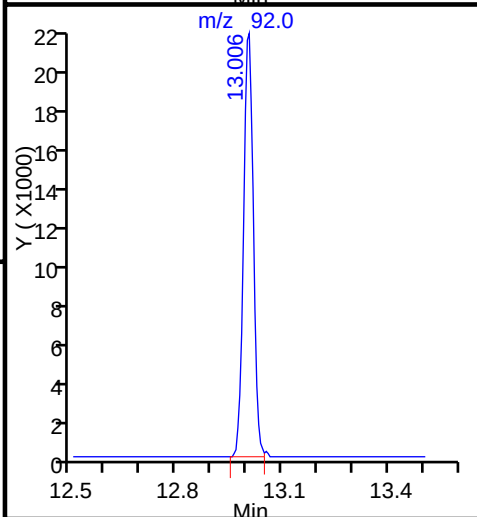
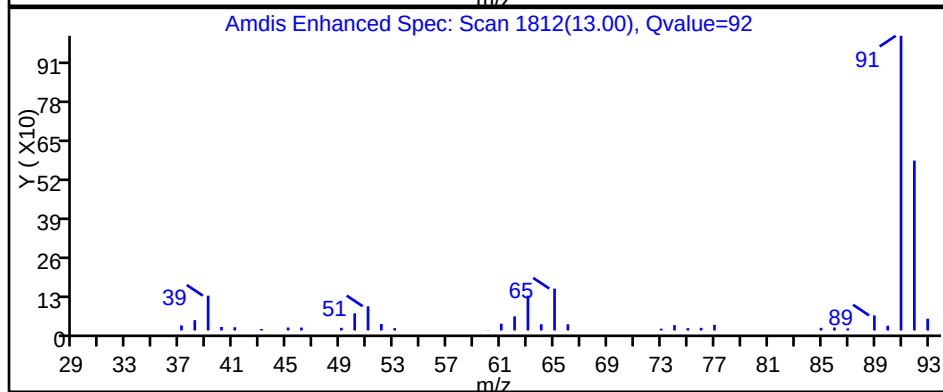
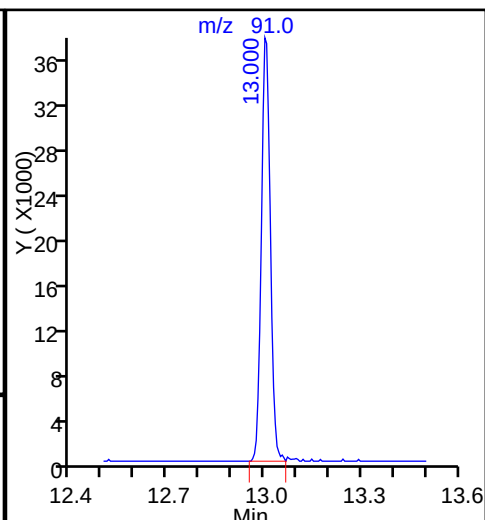
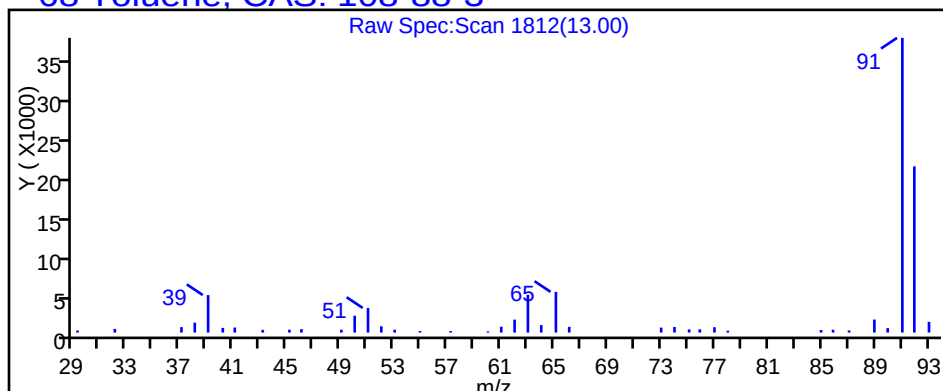
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P108.D

Injection Date: 04-Apr-2017 20:38:30

Instrument ID: MG

Lims ID: 140-7685-A-8

Lab Sample ID: 140-7685-8

Client ID: H15-BA

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 16

Purge Vol: 500.000 mL

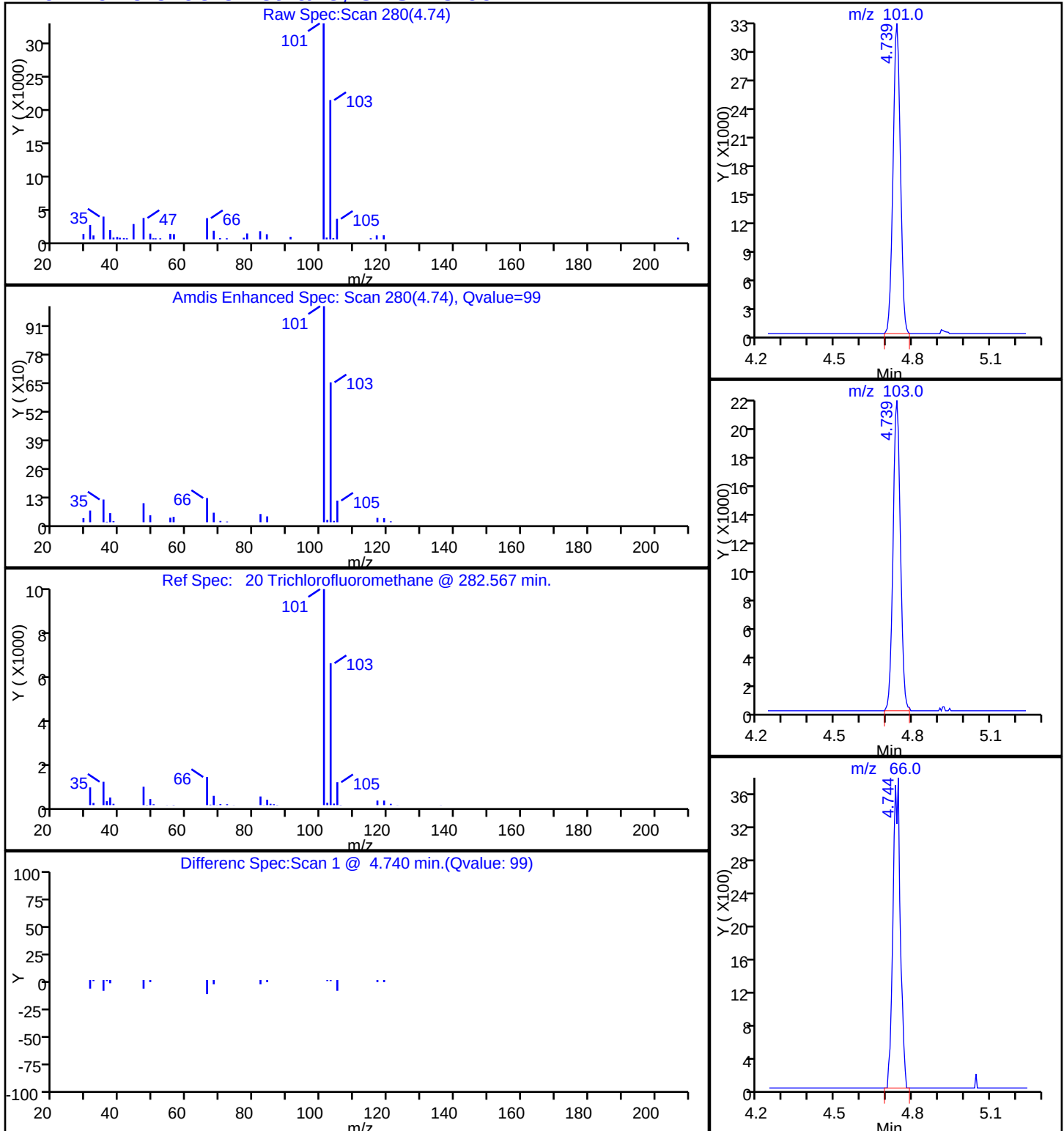
Dil. Factor: 1.0000

Method: MG_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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H36-SS Lab Sample ID: 140-7685-9
 Matrix: Air Lab File ID: GD04P109.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 10:01
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 21:26
 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.: 10155 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	5.6		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	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	0.097		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	0.21		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	0.38		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	0.23		0.20	
71-43-2	Benzene	78.11	0.19		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	1.8		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	1.4		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	0.26		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H36-SS Lab Sample ID: 140-7685-9
 Matrix: Air Lab File ID: GD04P109.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 10:01
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 21:26
 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.: 10155 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	0.54		0.080	
64-17-5	Ethanol	46.07	2.1		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	0.53		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	0.39		0.080	
95-47-6	o-Xylene	106.17	0.14		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	0.11		0.080	
108-88-3	Toluene	92.14	1.7		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	11		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.37		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	108		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H36-SS Lab Sample ID: 140-7685-9
 Matrix: Air Lab File ID: GD04P109.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 10:01
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 21:26
 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.: 10155 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	31		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	0.62		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	0.48		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	1.3		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	0.95		0.82	
71-43-2	Benzene	78.11	0.61		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	11		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	6.7		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	0.90		0.69	

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H36-SS Lab Sample ID: 140-7685-9
 Matrix: Air Lab File ID: GD04P109.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 10:01
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 21:26
 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.: 10155 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	2.7		0.40	
64-17-5	Ethanol	46.07	3.9		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	1.9		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	1.7		0.35	
95-47-6	o-Xylene	106.17	0.61		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	0.72		0.54	
108-88-3	Toluene	92.14	6.6		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	60		0.21	
75-69-4	Trichlorofluoromethane	137.37	2.1		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	108		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D
 Lims ID: 140-7685-A-9
 Client ID: H36-SS
 Sample Type: Client
 Inject. Date: 04-Apr-2017 21:26:30 ALS Bottle#: 9 Worklist Smp#: 17
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004508-017
 Misc. Info.: 140-7685-a-9
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 05-Apr-2017 10:01:21 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 09:58:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.985	7.980	0.005	72	247611	4.00	
* 2 1,4-Difluorobenzene	114	10.148	10.148	0.000	95	1225333	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.017	15.022	-0.005	88	1271762	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.689	16.694	-0.005	94	1087557	4.33	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	142020	0.5419	
9 Chloromethane	52	3.666	3.666	0.000	90	1332	0.0756	M
10 1,2-Dichloro-1,1,2,2-tetra	135	3.677	3.671	0.006	84	2216	0.0142	
17 Ethanol	31	4.367	4.356	0.011	96	51544	2.07	
20 Trichlorofluoromethane	101	4.750	4.744	0.006	100	97543	0.3737	
30 1,1,2-Trichloro-1,2,2-trif	101	5.526	5.521	0.005	94	10370	0.0681	
31 Methylene Chloride	84	5.656	5.650	0.006	87	10048	0.1687	
34 trans-1,2-Dichloroethene	96	6.389	6.384	0.005	95	1659	0.0257	
39 2-Butanone (MEK)	72	7.284	7.268	0.016	96	10587	0.3757	
40 Hexane	56	7.327	7.327	0.000	86	26109	0.5340	
44 Chloroform	83	8.007	8.007	0.000	96	239208	1.38	
47 1,1,1-Trichloroethane	97	8.983	8.983	0.000	94	1127958	5.61	
49 Benzene	78	9.571	9.565	0.006	96	39537	0.1899	
50 Cyclohexane	69	9.587	9.576	0.011	57	9183	0.2621	
51 Carbon tetrachloride	117	9.598	9.598	0.000	98	380784	1.75	
56 Isooctane	57	10.401	10.396	0.005	47	4941	0.0160	
59 Trichloroethene	130	10.881	10.881	0.000	96	1259203	11.2	
65 4-Methyl-2-pentanone (MIBK	43	12.127	12.116	0.011	96	27649	0.2312	
68 Toluene	91	13.006	13.006	0.000	93	442713	1.75	
76 Tetrachloroethene	129	14.181	14.181	0.000	91	12222	0.1055	
79 Ethylbenzene	91	15.373	15.378	-0.005	98	22741	0.0643	
81 m-Xylene & p-Xylene	91	15.540	15.545	-0.005	99	111665	0.3907	
85 o-Xylene	91	16.074	16.074	0.000	96	41054	0.1405	
92 1,3,5-Trimethylbenzene	120	17.481	17.481	0.000	90	18232	0.0973	
96 1,2,4-Trimethylbenzene	105	17.945	17.940	0.005	98	45269	0.1261	
100 1,4-Dichlorobenzene	146	18.301	18.301	0.000	93	55866	0.2111	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Worklist Smp#: 17

Client ID: H36-SS

Purge Vol: 500.000 mL

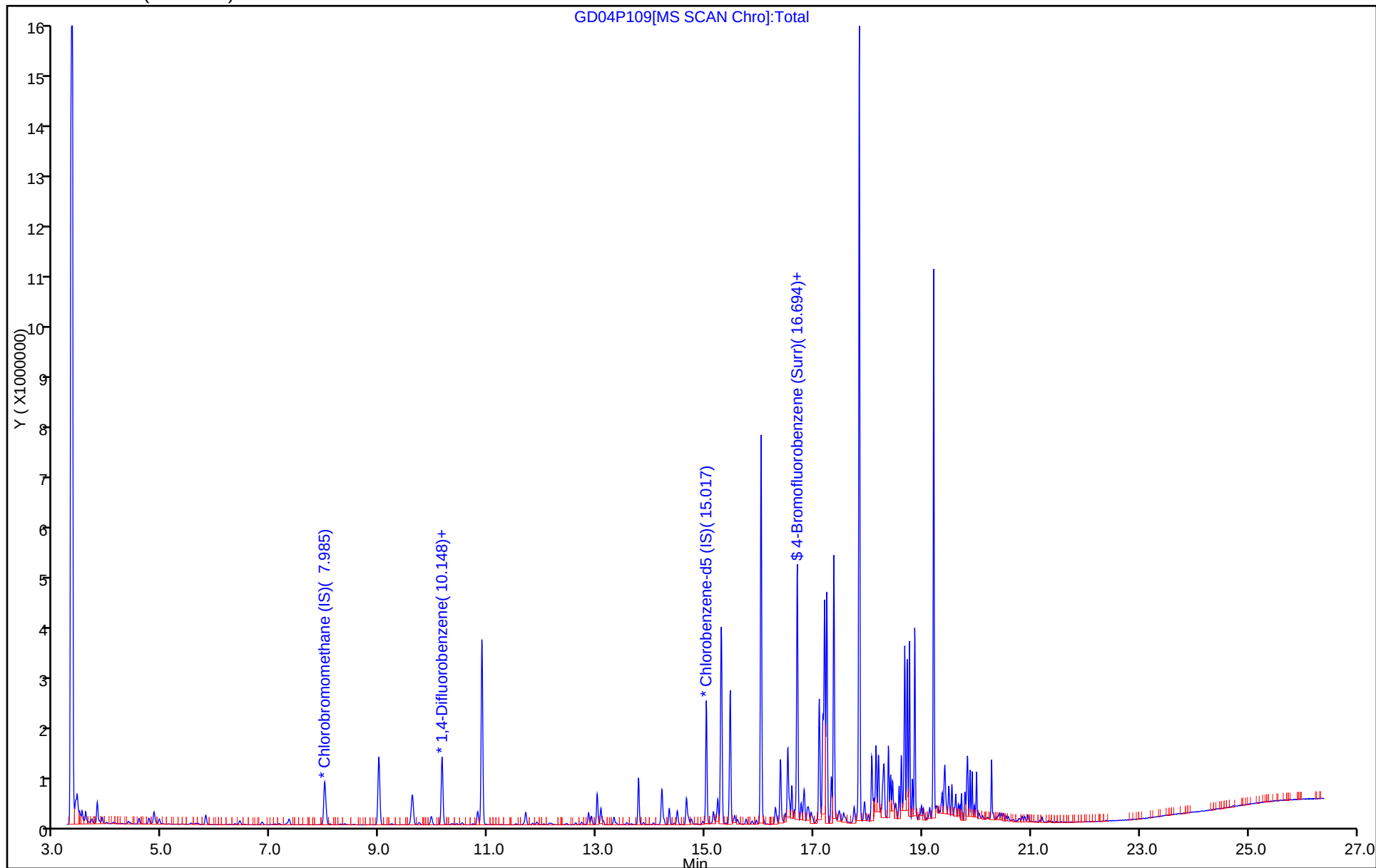
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D
Lims ID: 140-7685-A-9
Client ID: H36-SS
Sample Type: Client
Inject. Date: 04-Apr-2017 21:26:30 ALS Bottle#: 9 Worklist Smp#: 17
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004508-017
Misc. Info.: 140-7685-a-9
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 05-Apr-2017 10:01:21 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 09:58:48

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.33	108.18

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Client ID: H36-SS

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 17

Purge Vol: 500.000 mL

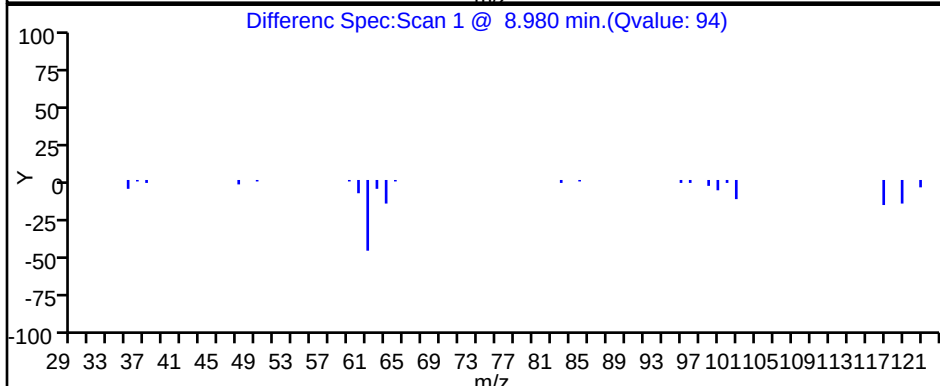
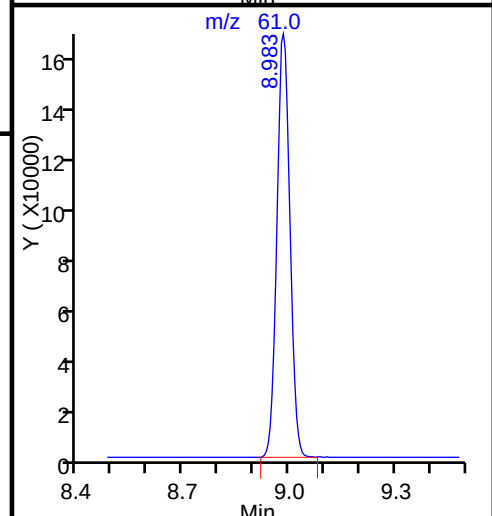
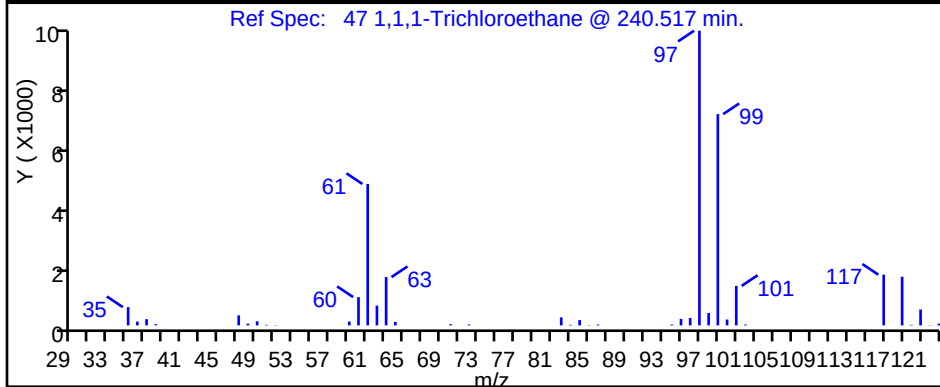
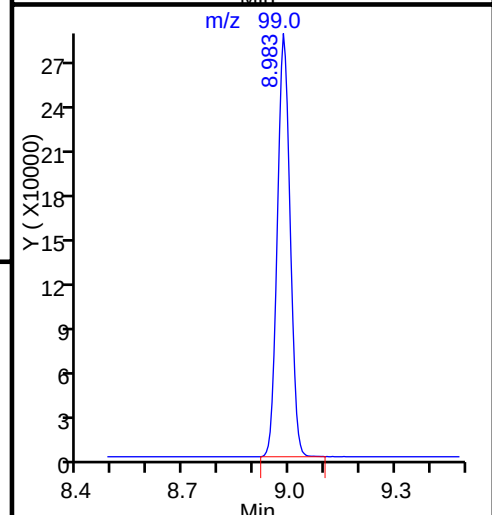
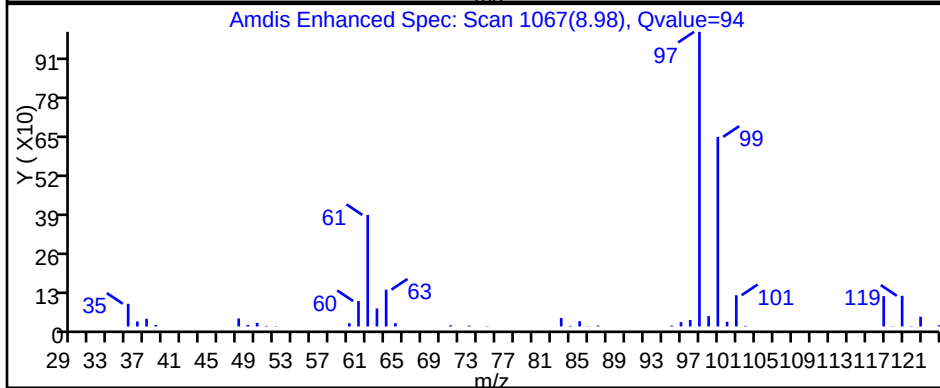
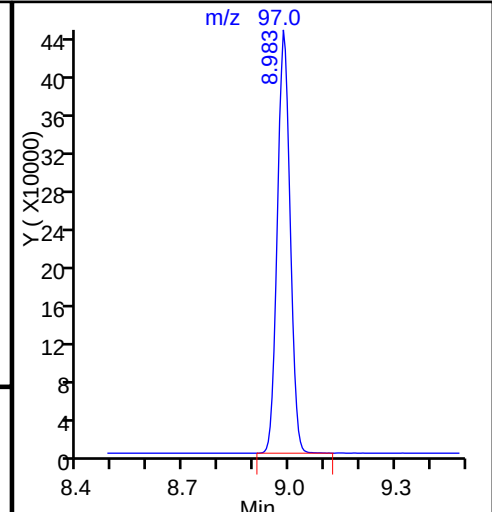
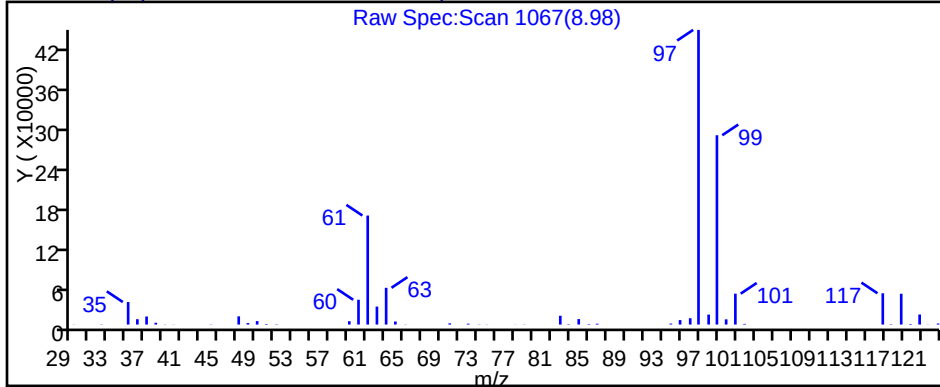
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

47 1,1,1-Trichloroethane, CAS: 71-55-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Client ID: H36-SS

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 17

Purge Vol: 500.000 mL

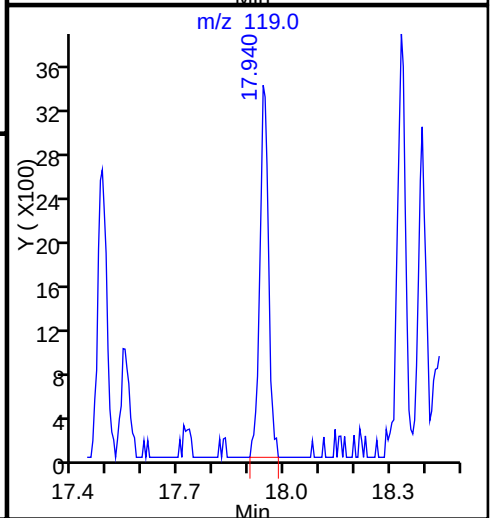
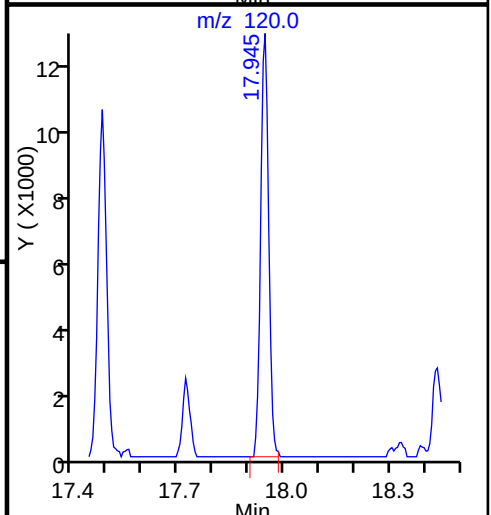
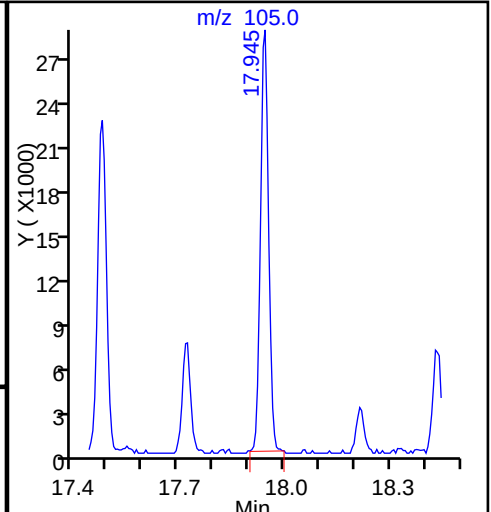
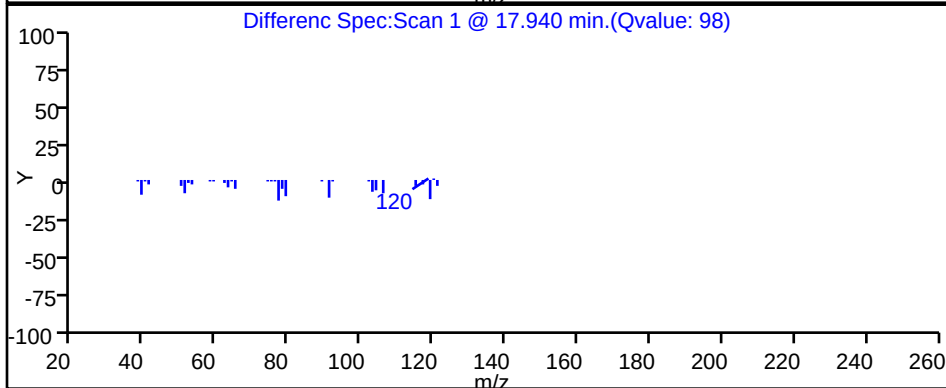
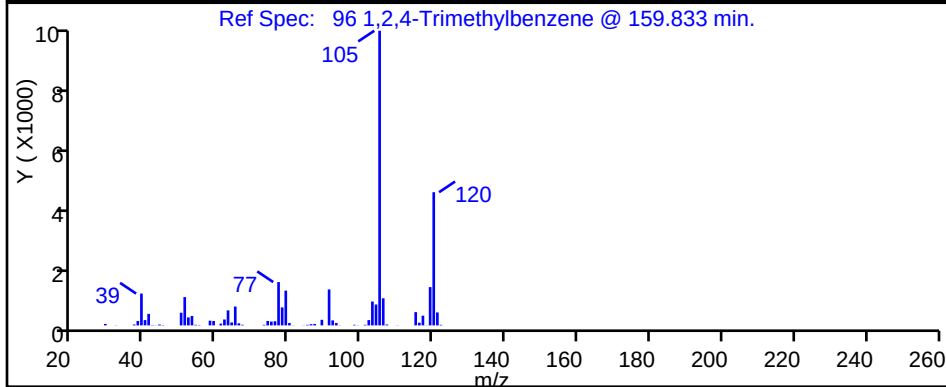
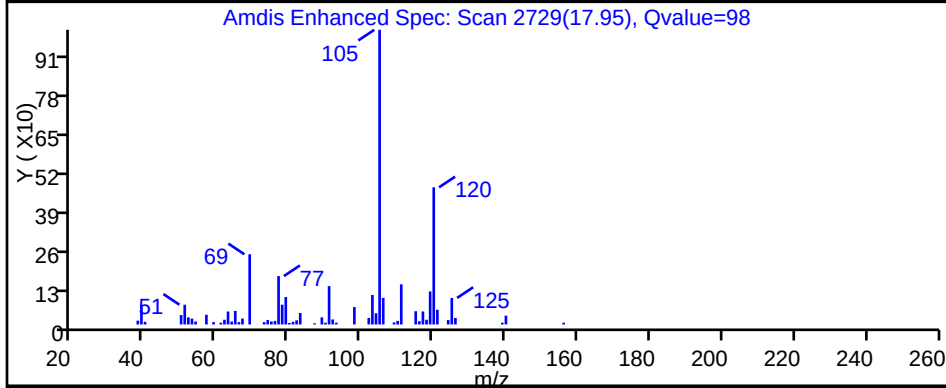
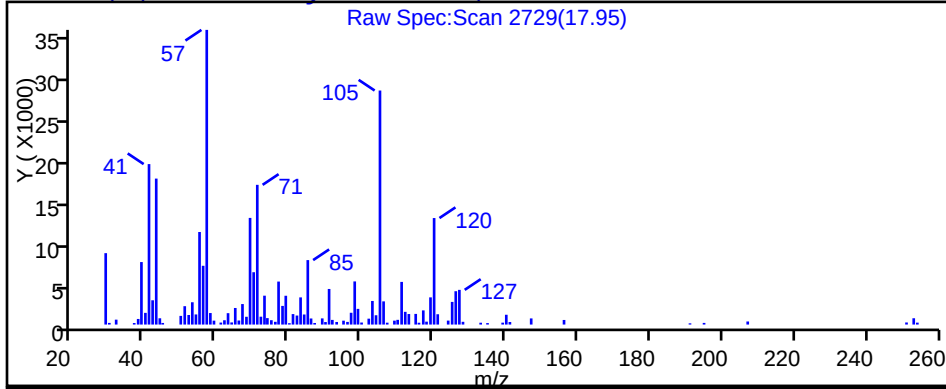
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

96 1,2,4-Trimethylbenzene, CAS: 95-63-6

TestAmerica Knoxville

Data File: \\ChromNA\\Knoxville\\ChromData\\MG\\20170402-4508.b\\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Client ID: H36-SS

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 17

Purge Vol: 500.000 mL

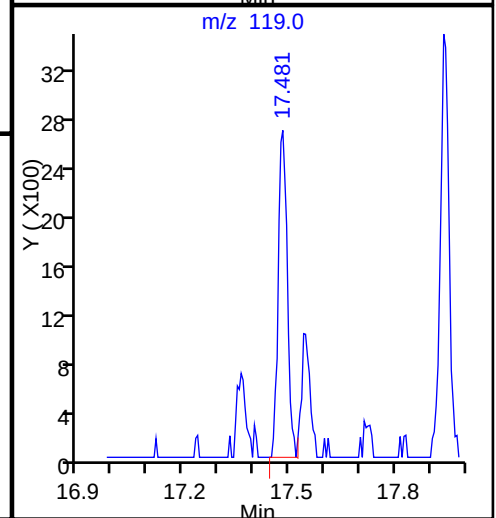
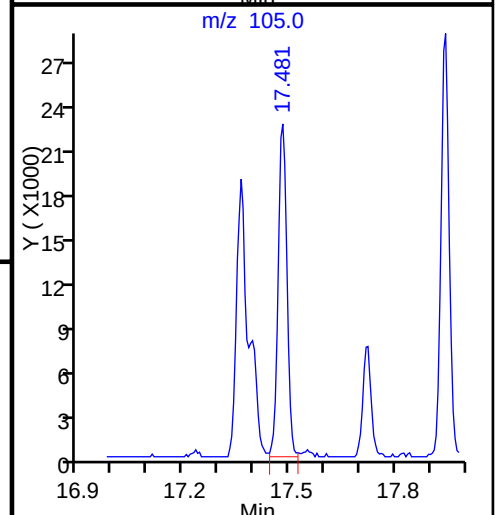
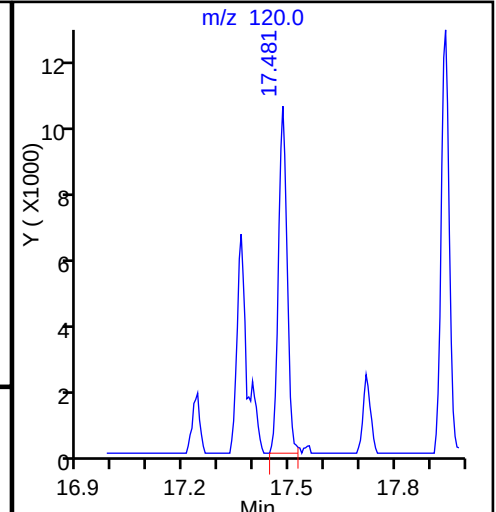
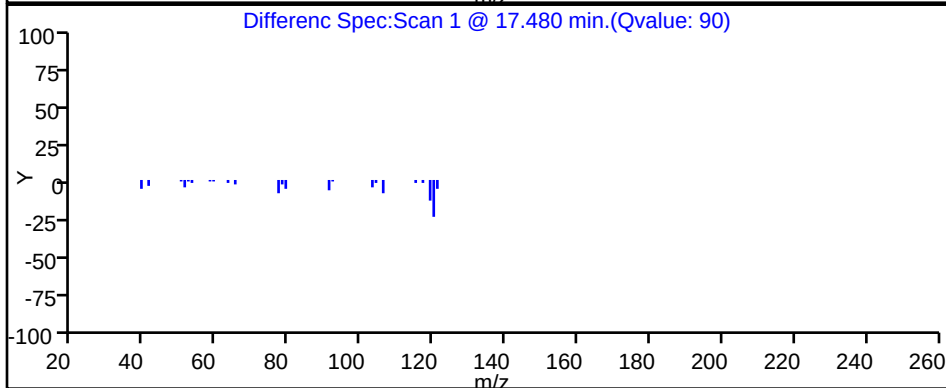
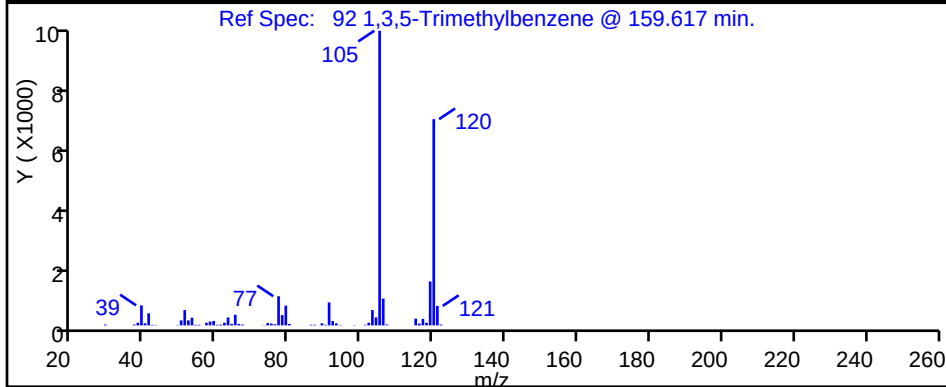
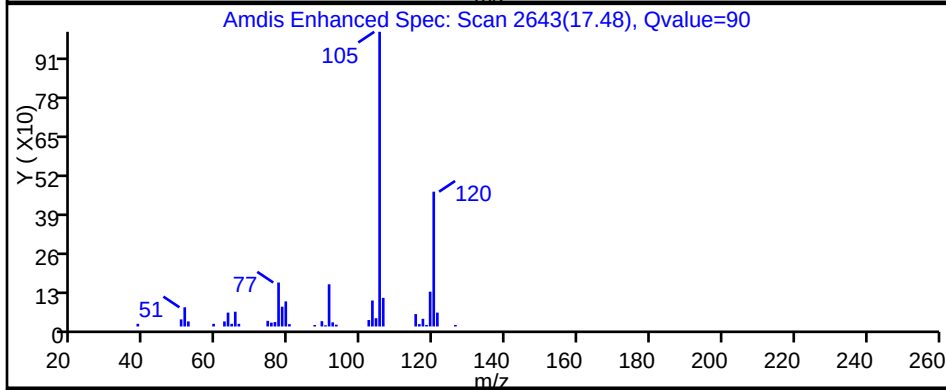
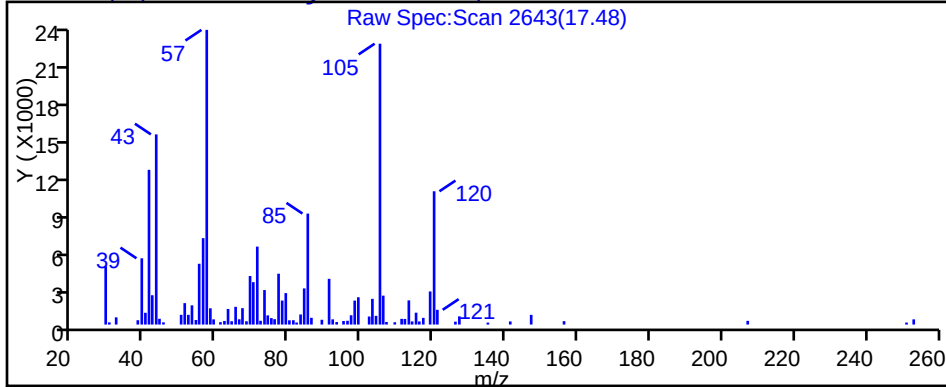
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

92 1,3,5-Trimethylbenzene, CAS: 108-67-8

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Client ID: H36-SS

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 17

Purge Vol: 500.000 mL

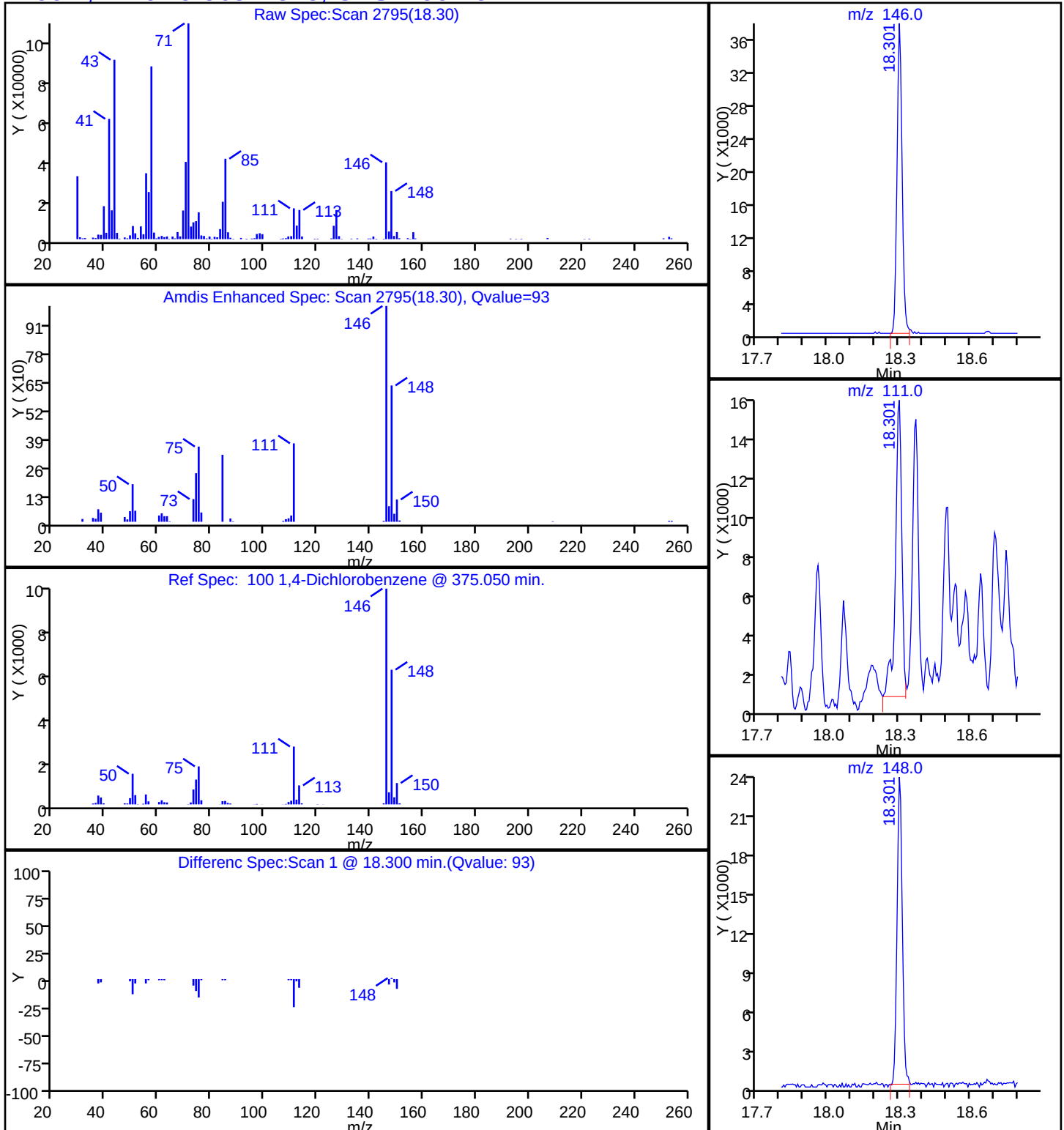
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

100 1,4-Dichlorobenzene, CAS: 106-46-7

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Client ID: H36-SS

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 17

Purge Vol: 500.000 mL

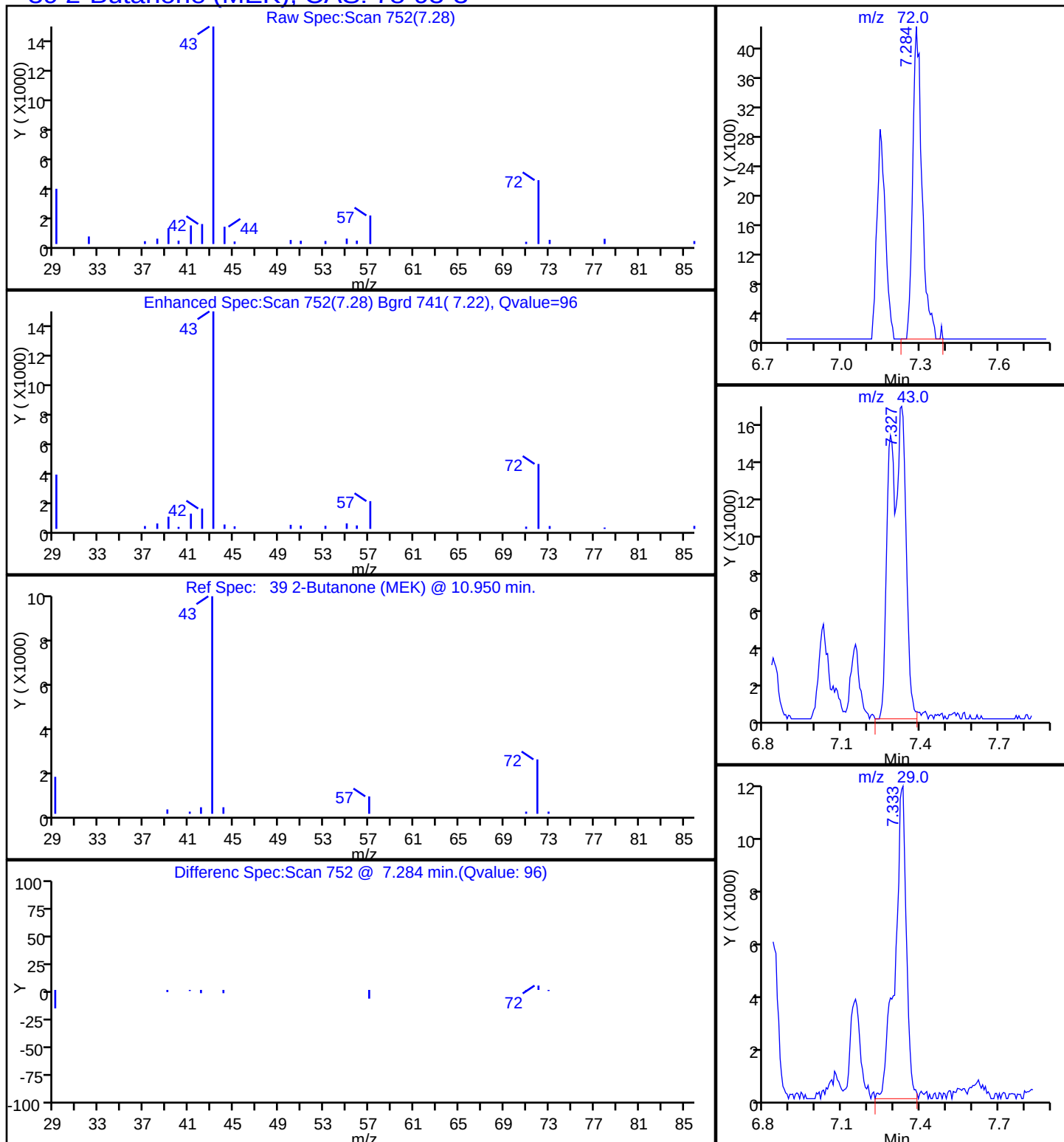
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Client ID: H36-SS

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 17

Purge Vol: 500.000 mL

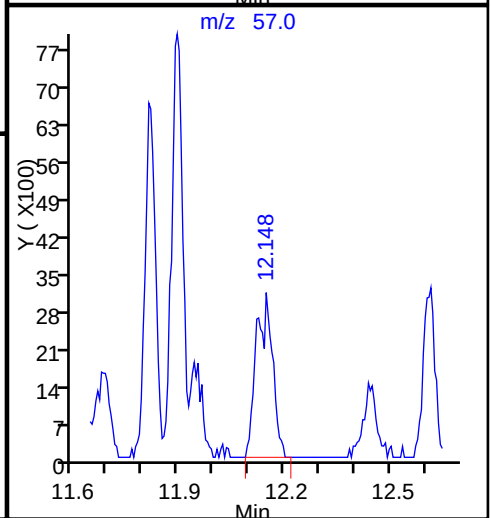
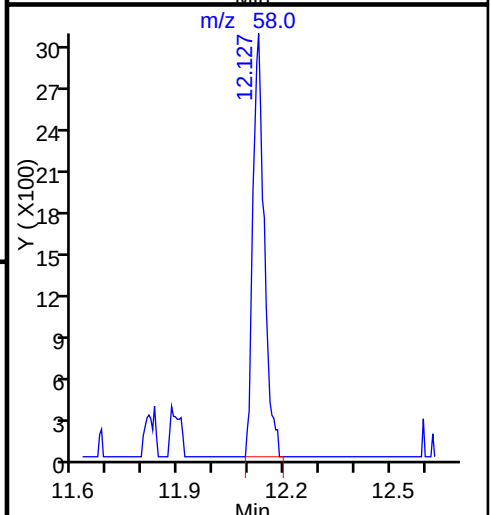
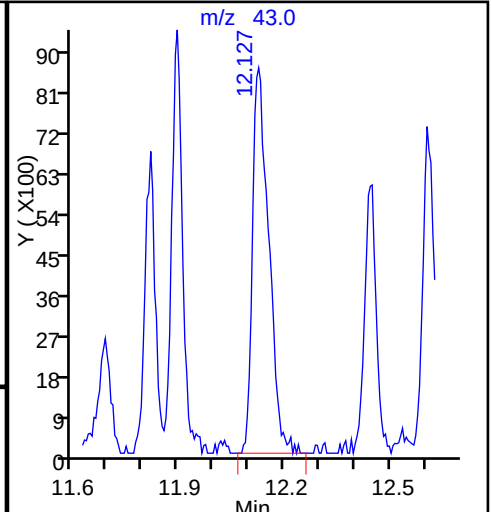
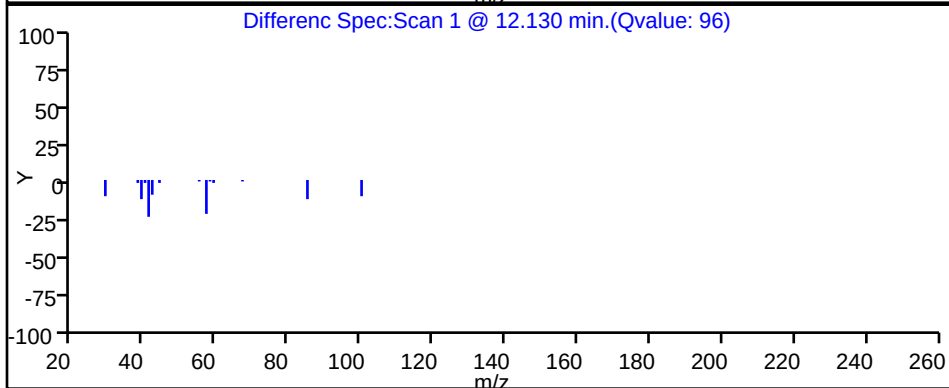
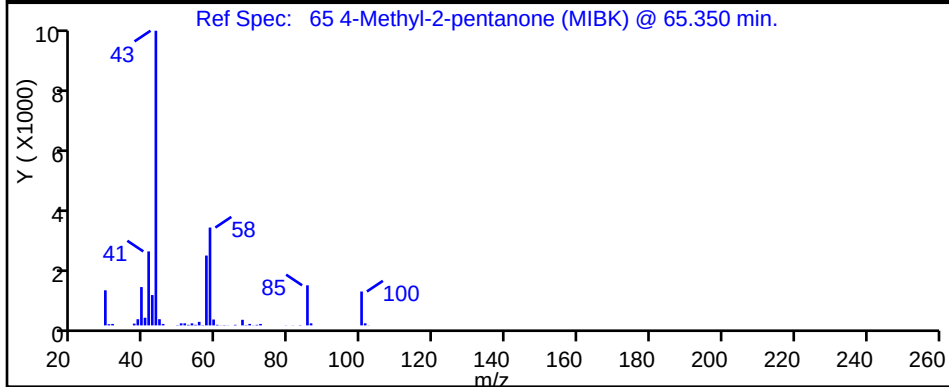
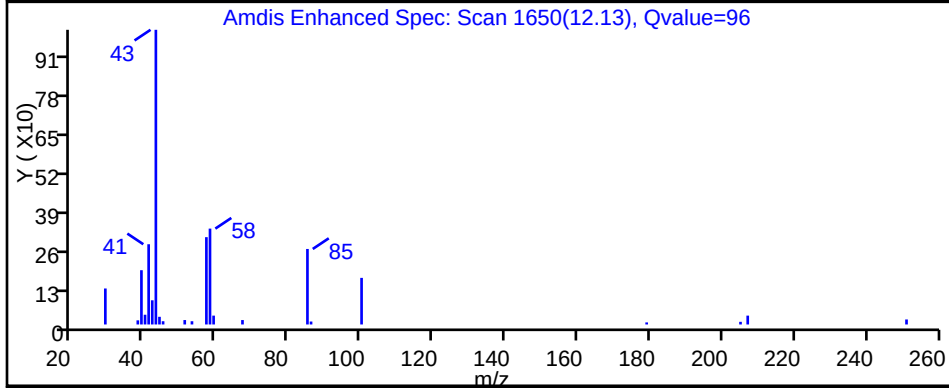
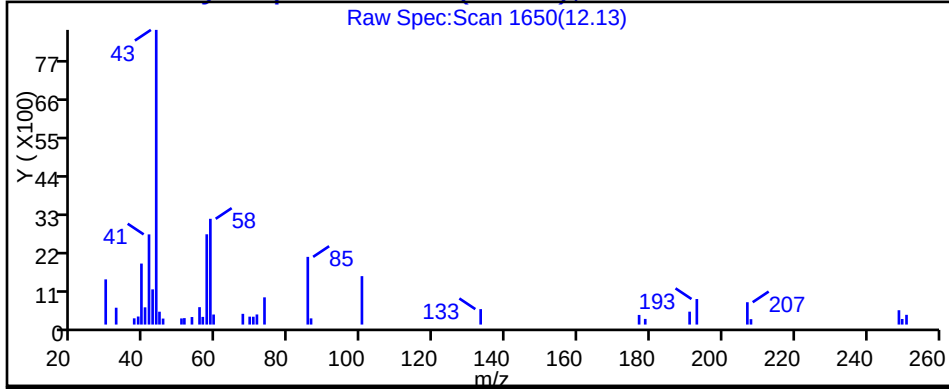
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

65 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Client ID: H36-SS

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 17

Purge Vol: 500.000 mL

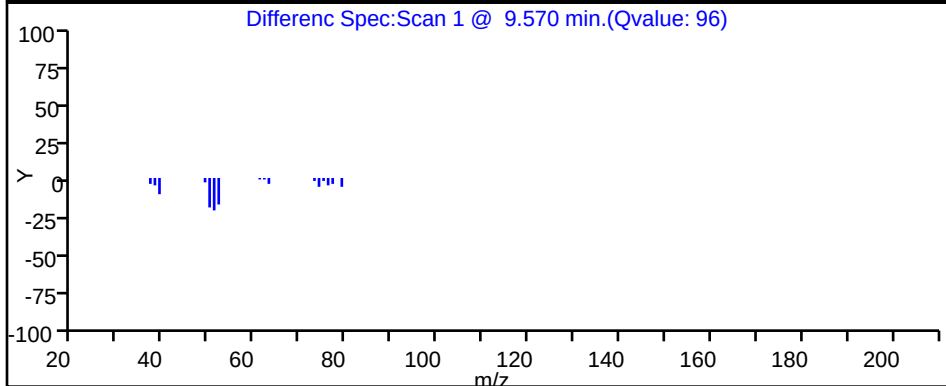
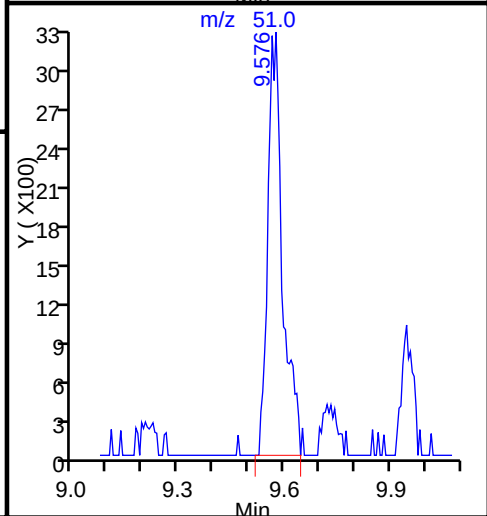
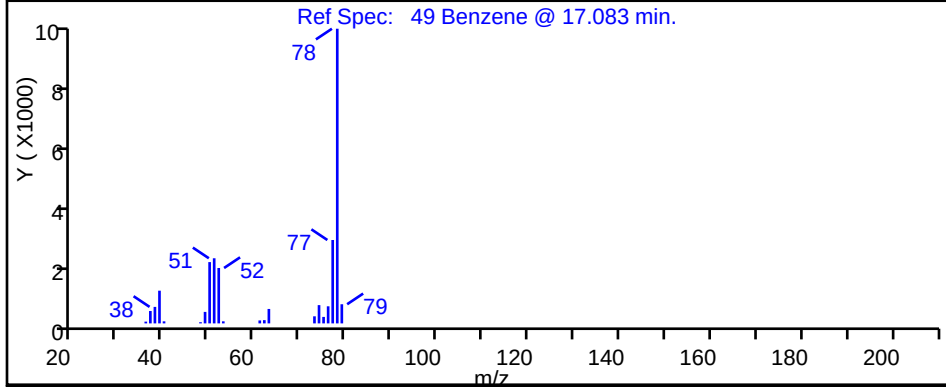
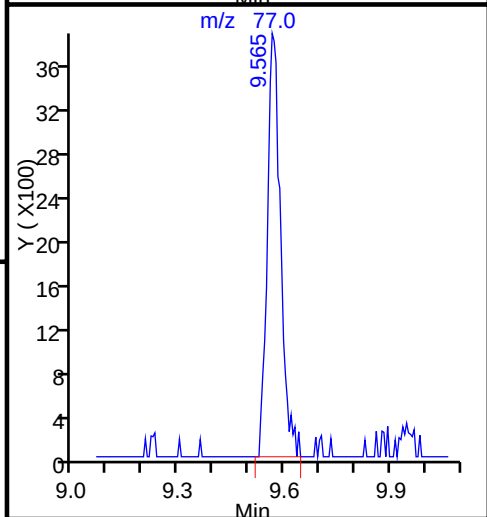
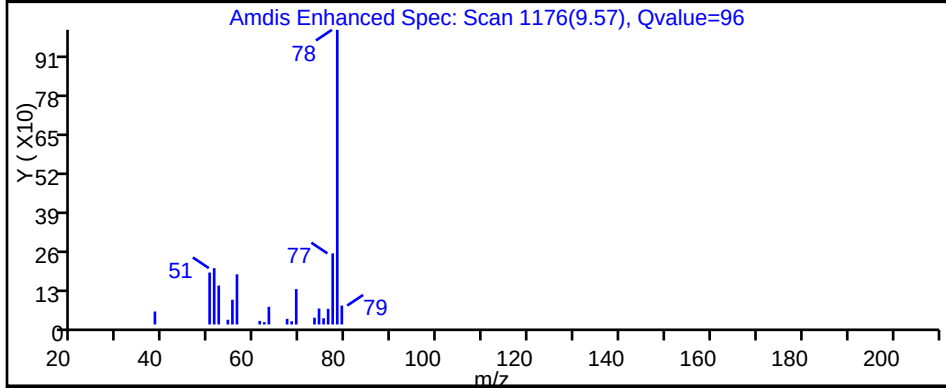
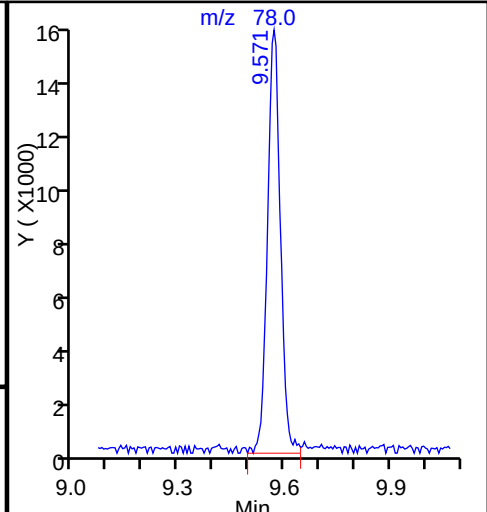
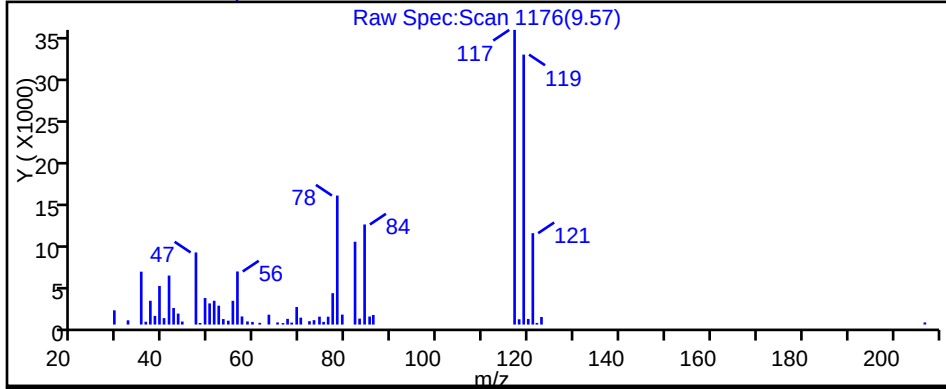
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Client ID: H36-SS

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 17

Purge Vol: 500.000 mL

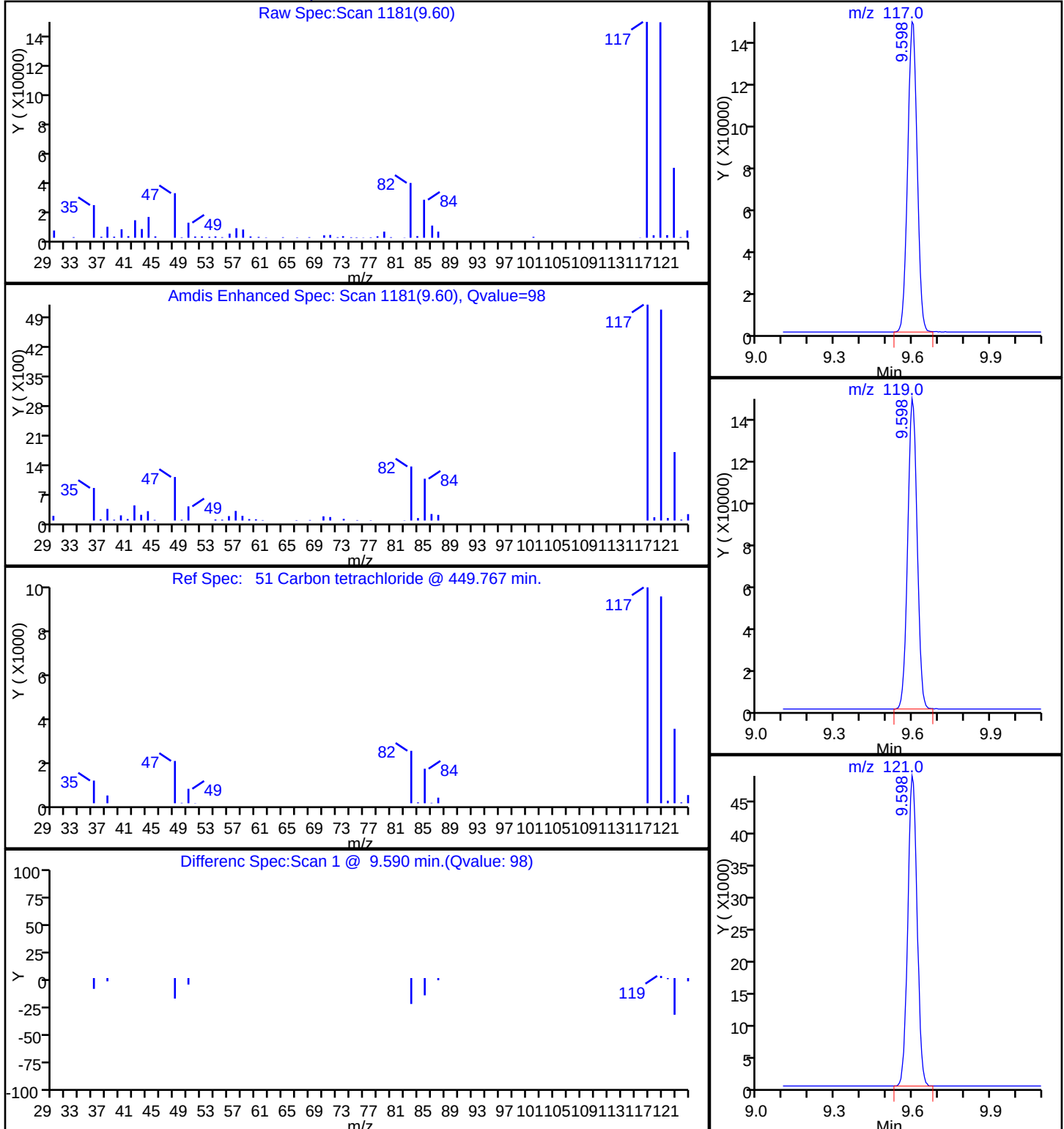
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Client ID: H36-SS

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 17

Purge Vol: 500.000 mL

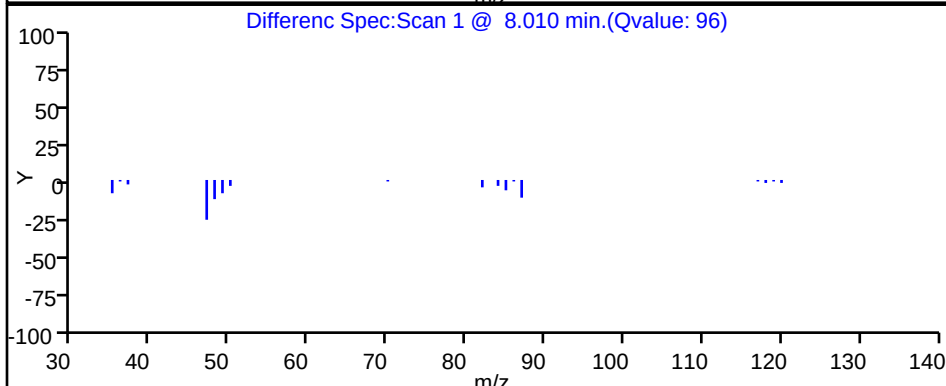
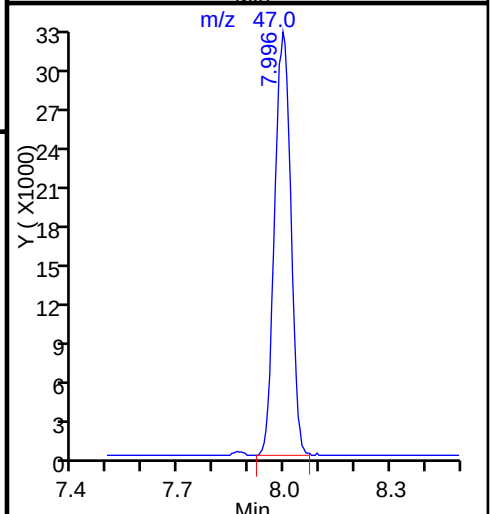
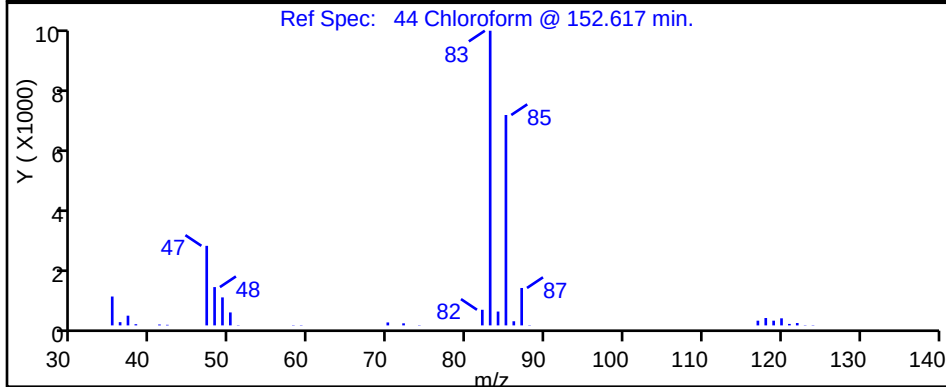
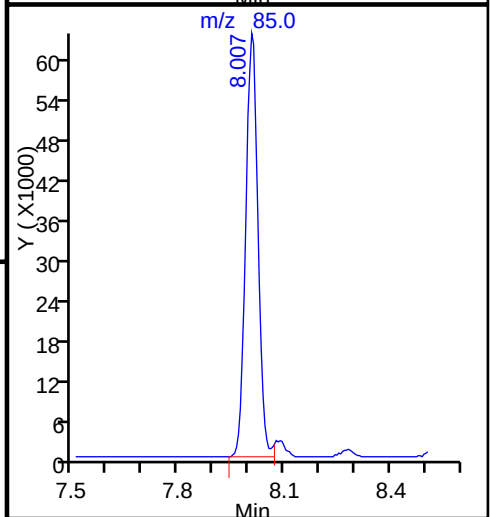
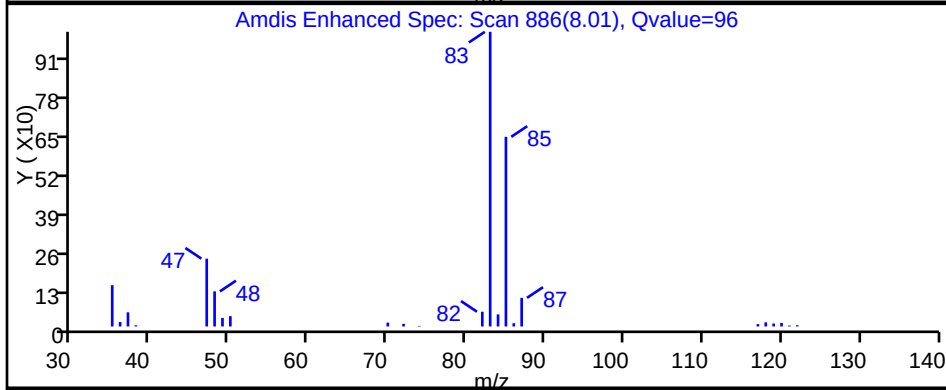
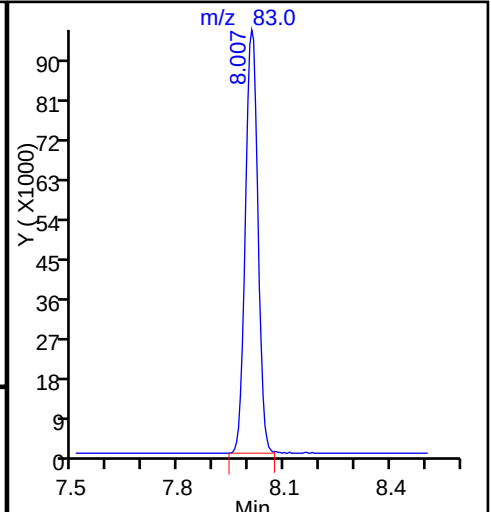
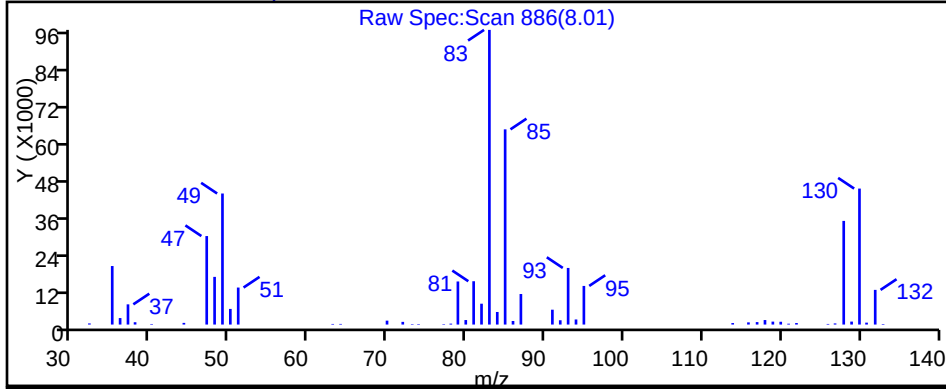
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

44 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Client ID: H36-SS

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 17

Purge Vol: 500.000 mL

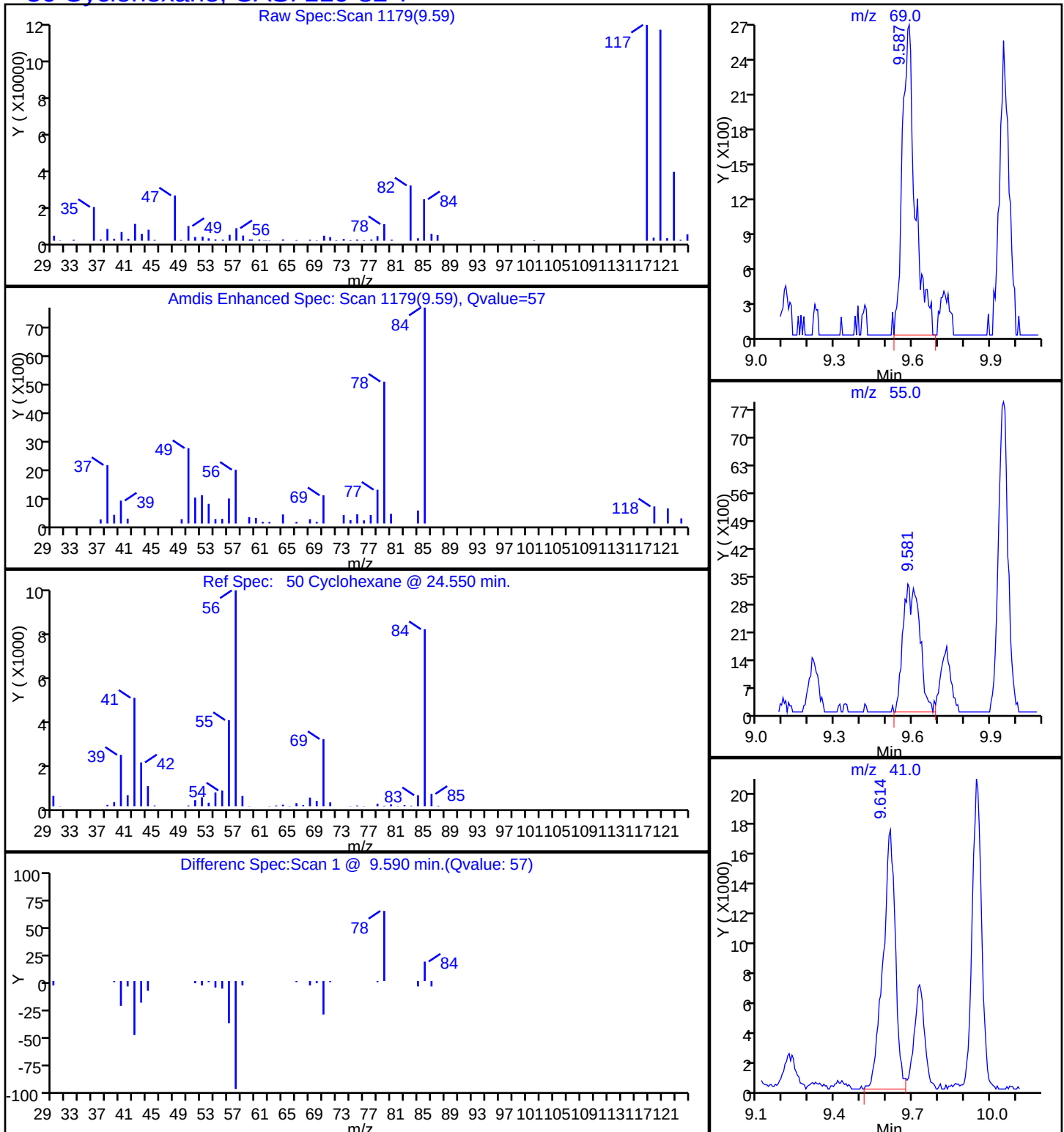
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Cyclohexane, CAS: 110-82-7

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Client ID: H36-SS

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

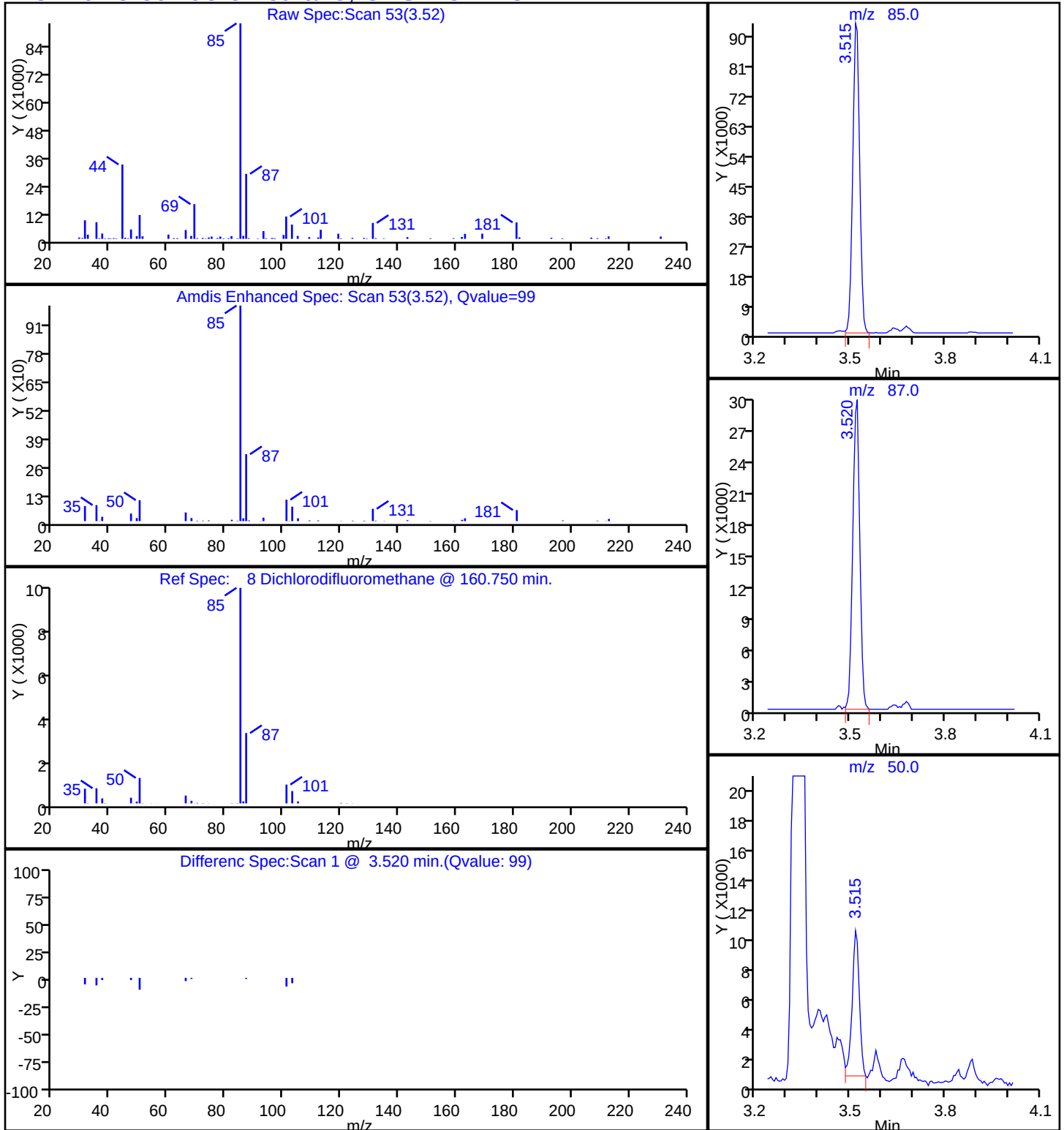
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Client ID: H36-SS

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 17

Purge Vol: 500.000 mL

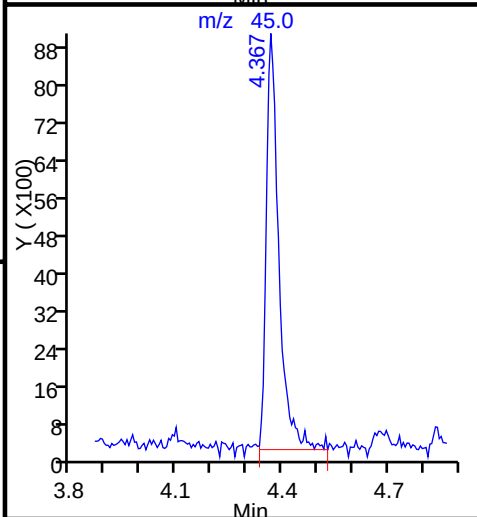
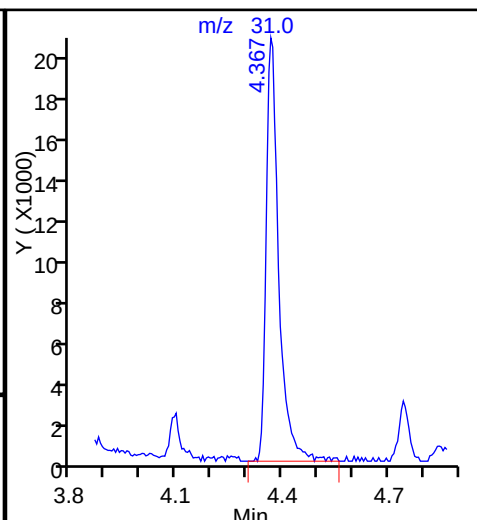
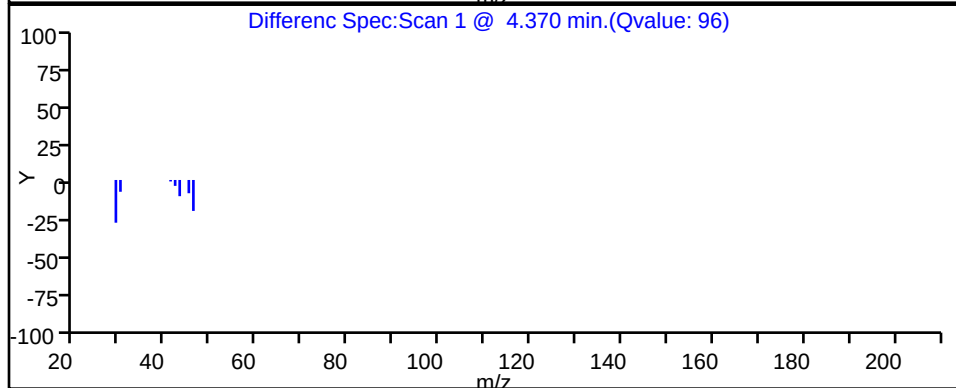
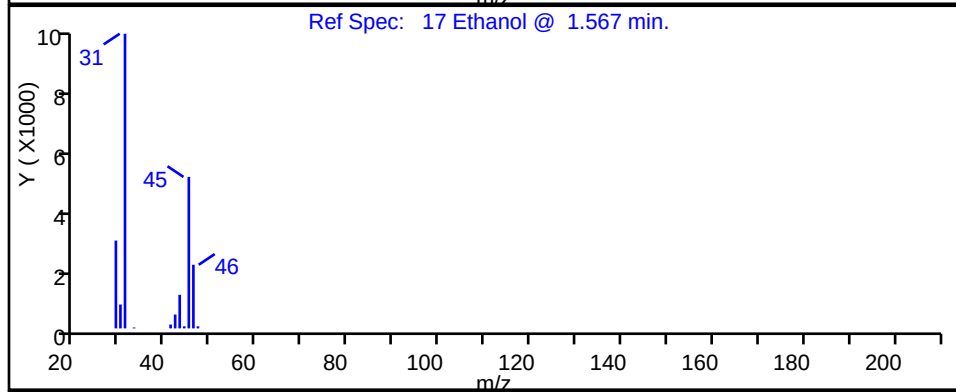
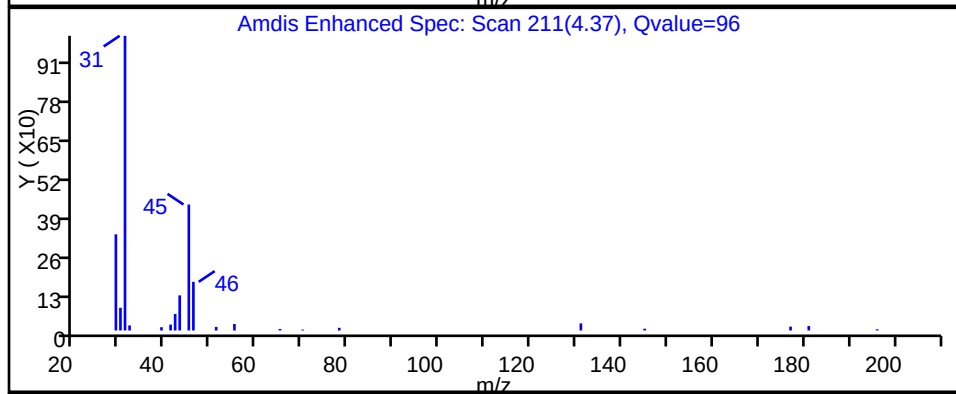
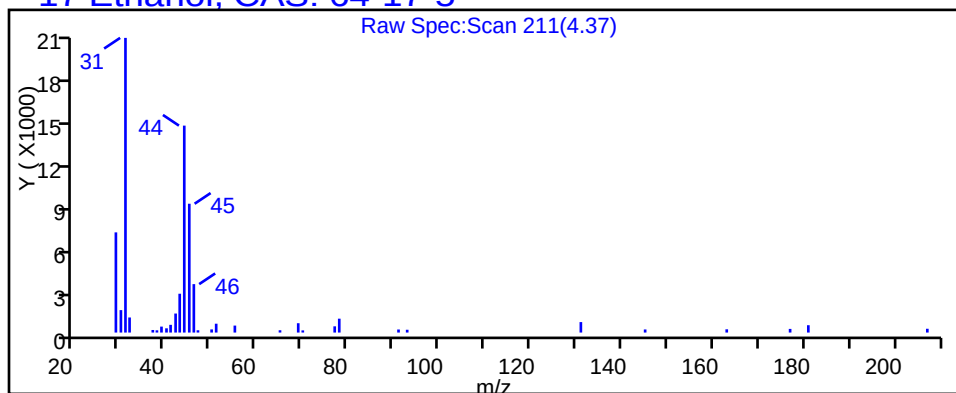
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Client ID: H36-SS

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 17

Purge Vol: 500.000 mL

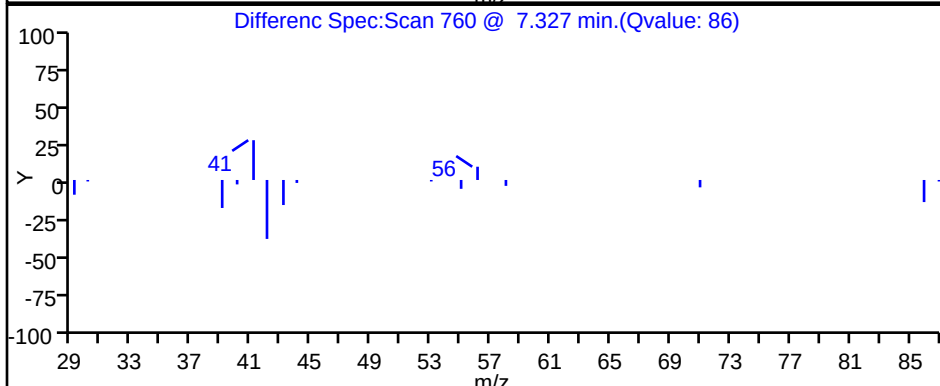
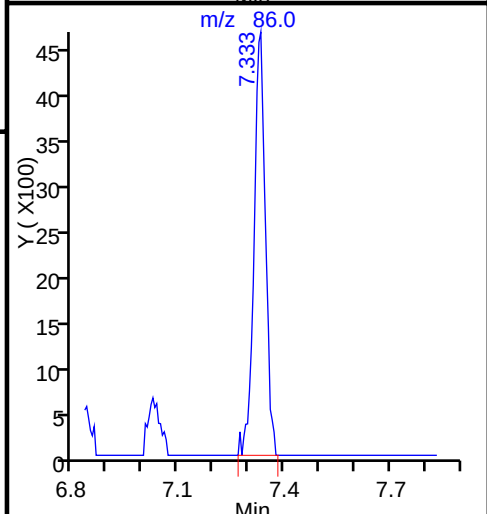
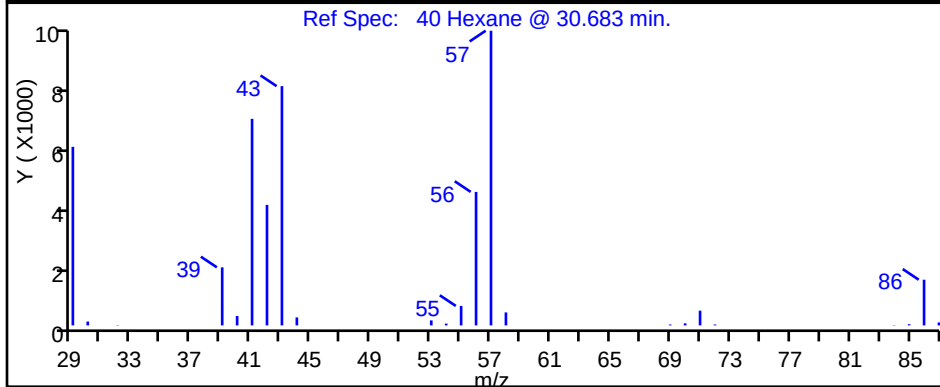
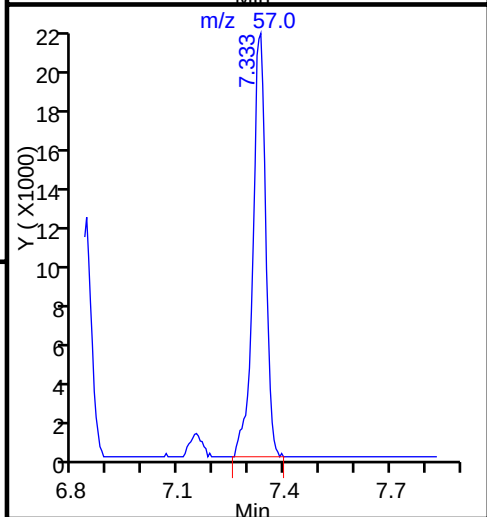
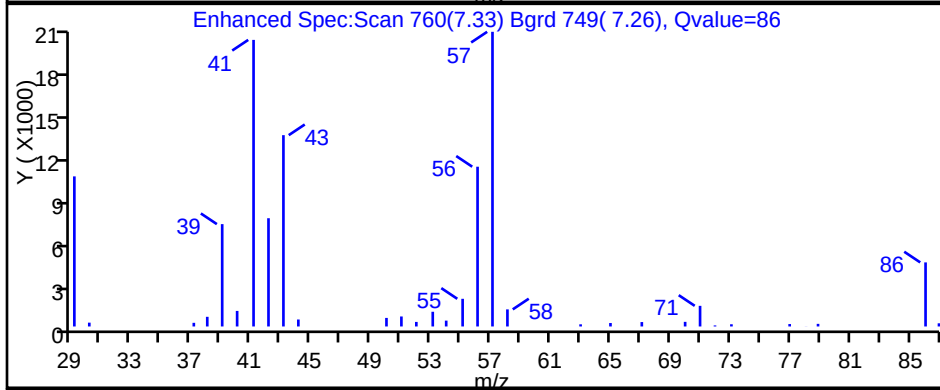
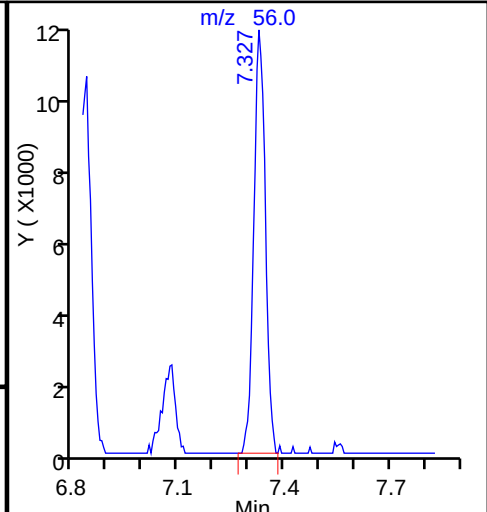
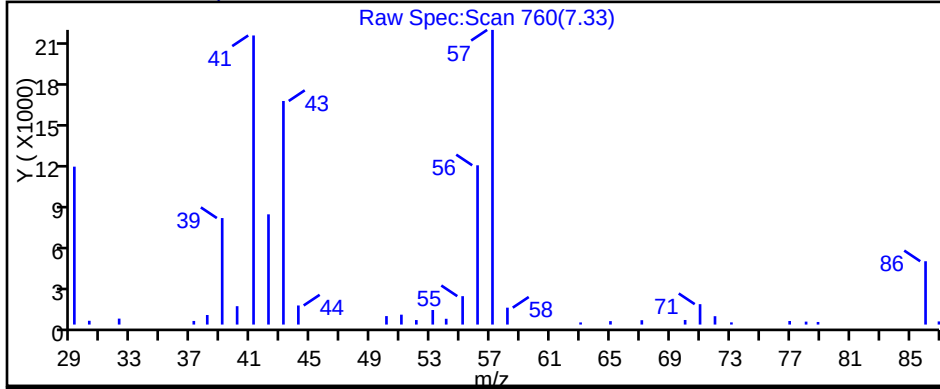
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Client ID: H36-SS

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 17

Purge Vol: 500.000 mL

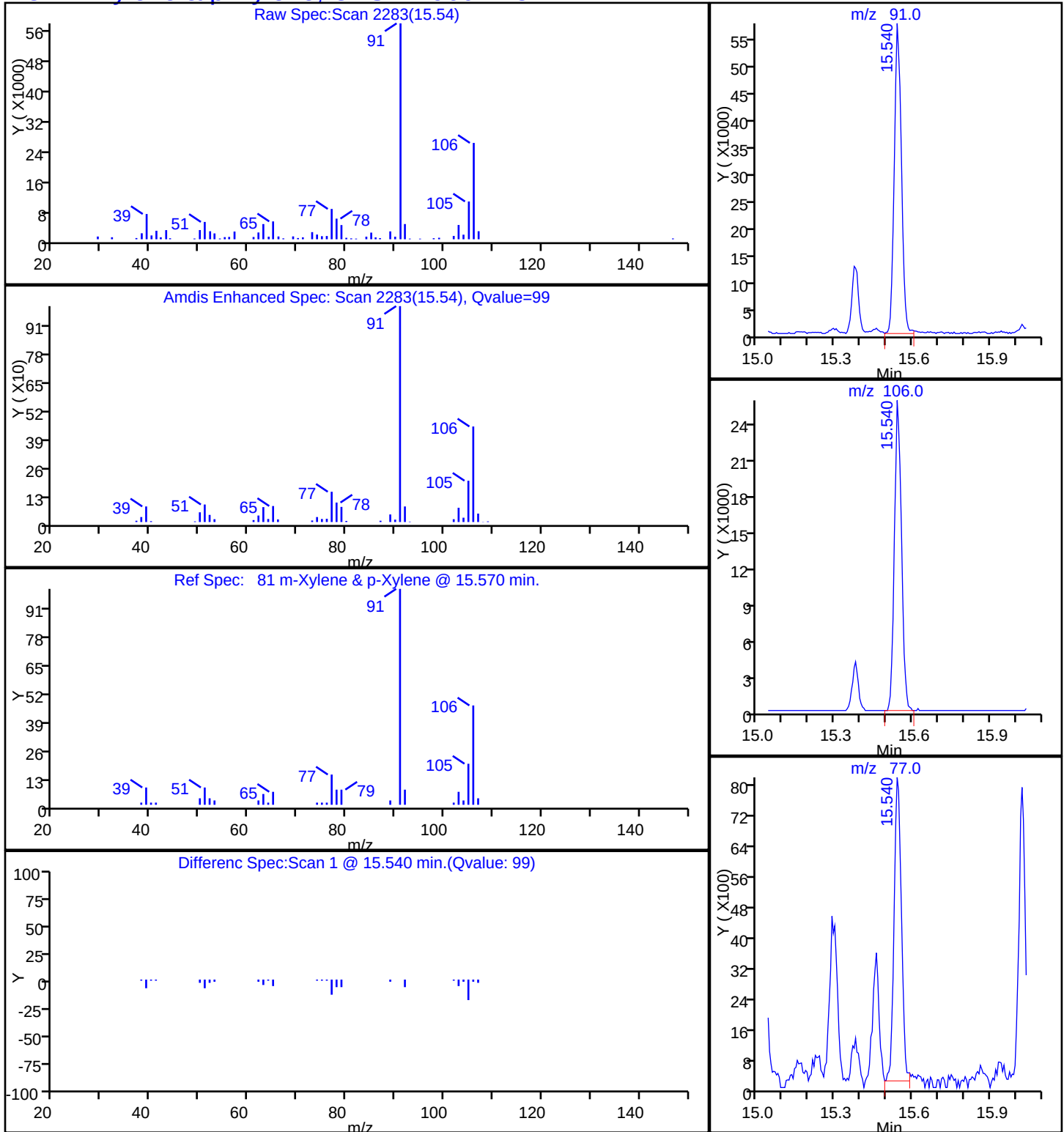
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Client ID: H36-SS

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 17

Purge Vol: 500.000 mL

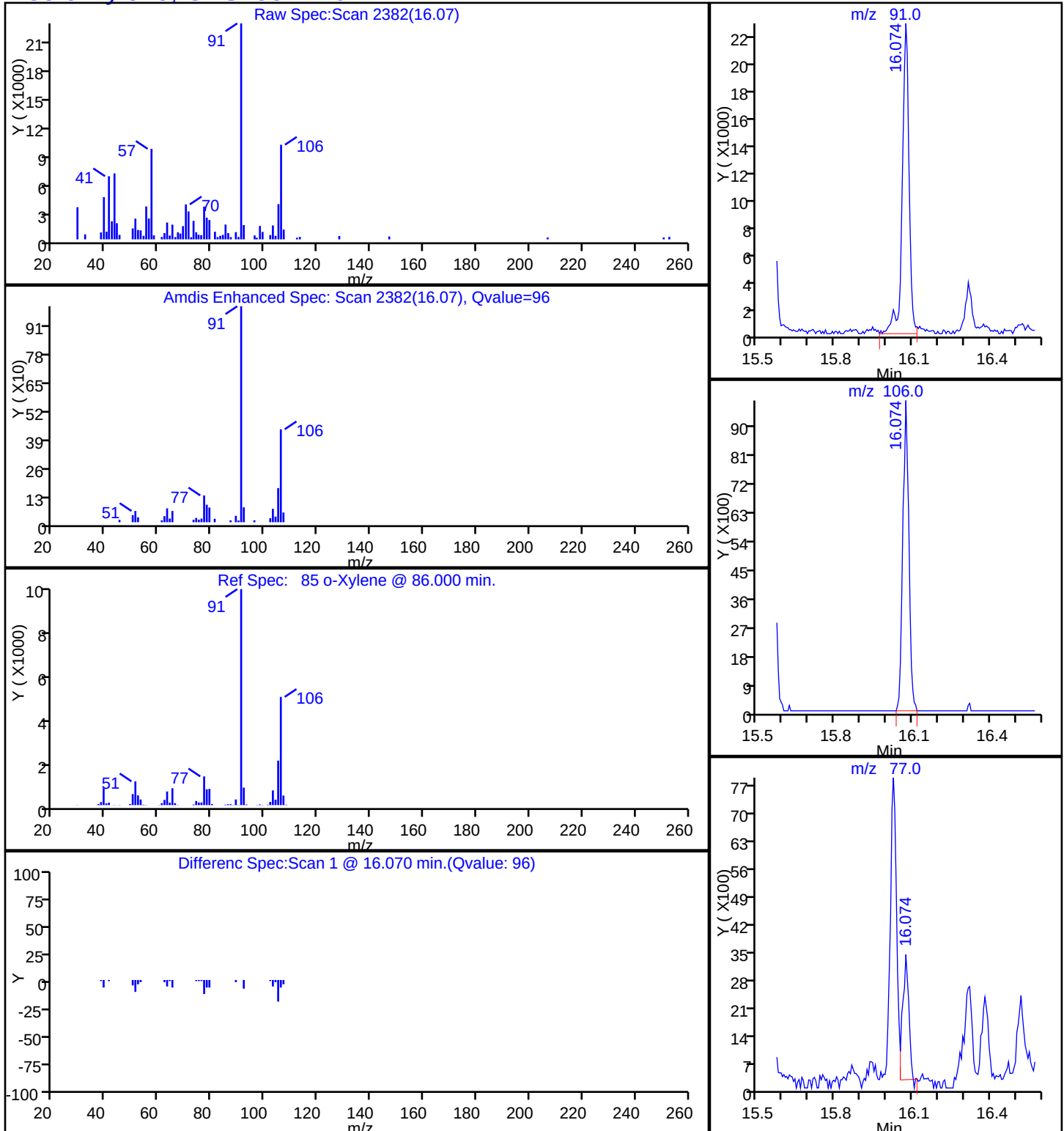
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Client ID: H36-SS

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 17

Purge Vol: 500.000 mL

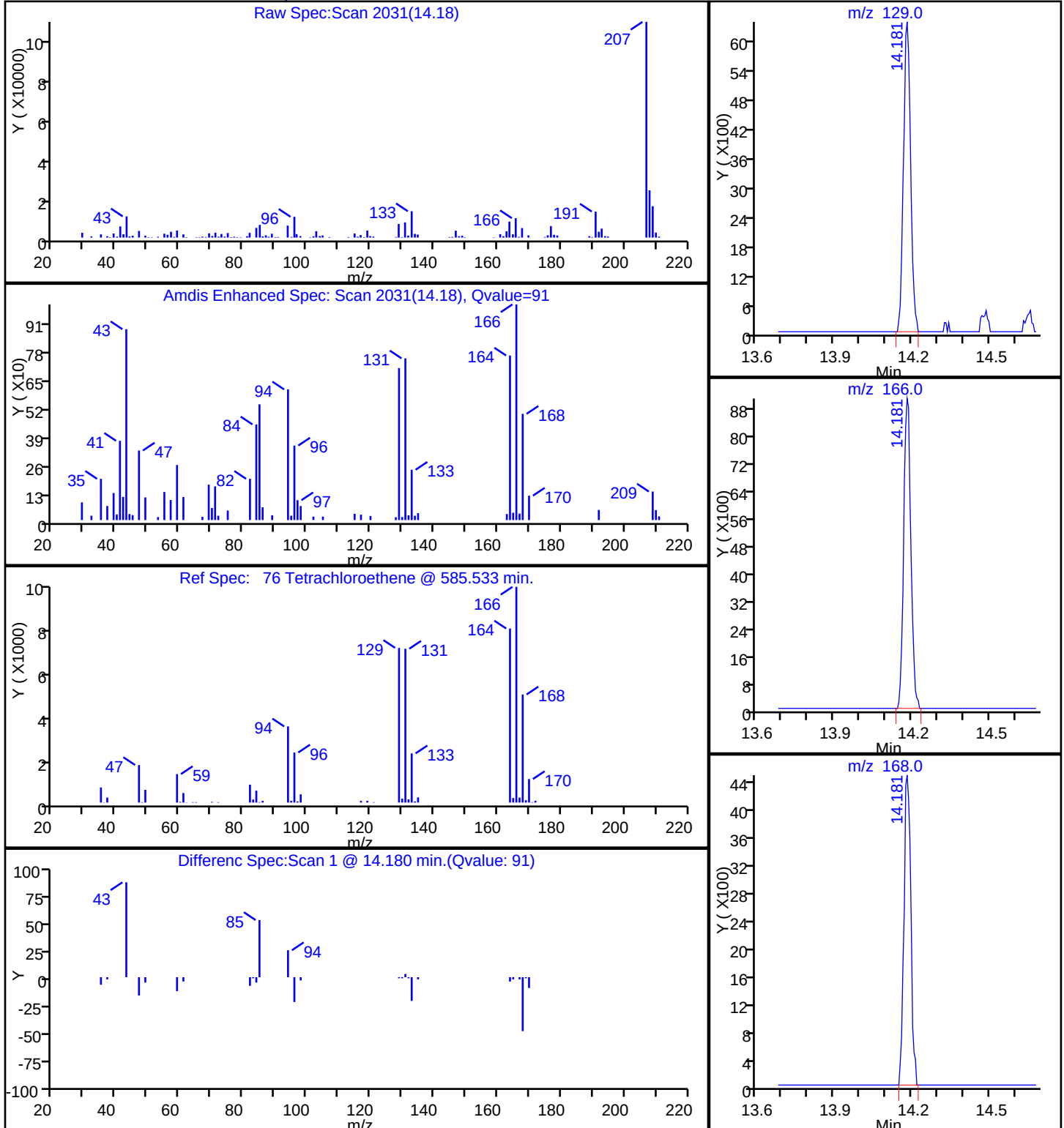
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

76 Tetrachloroethene, CAS: 127-18-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Client ID: H36-SS

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 17

Purge Vol: 500.000 mL

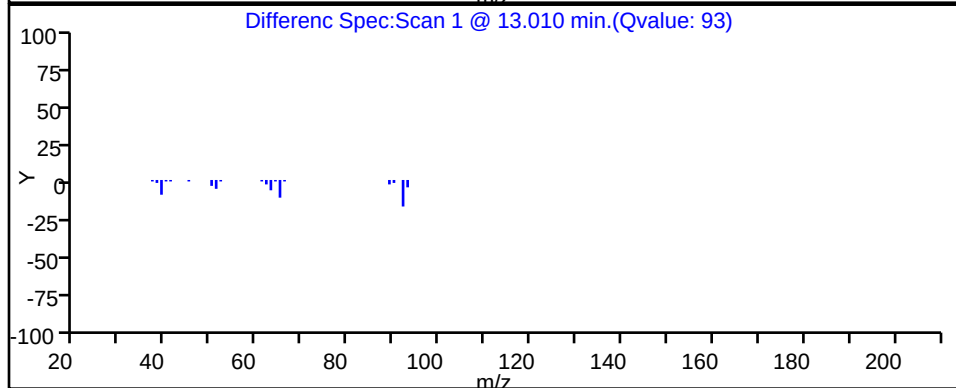
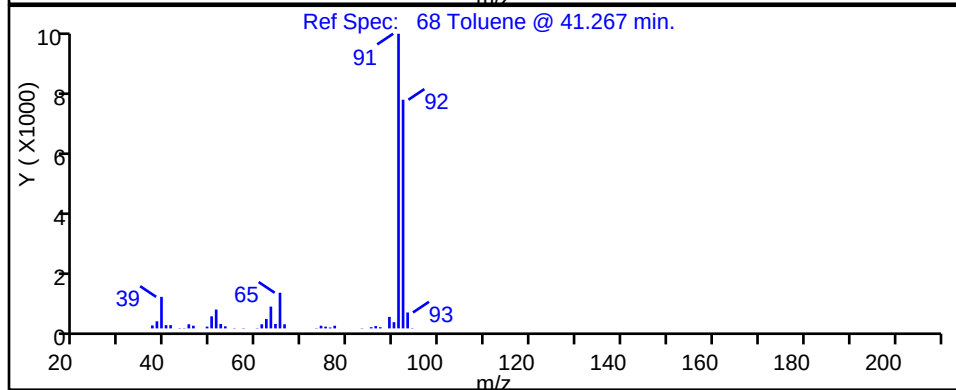
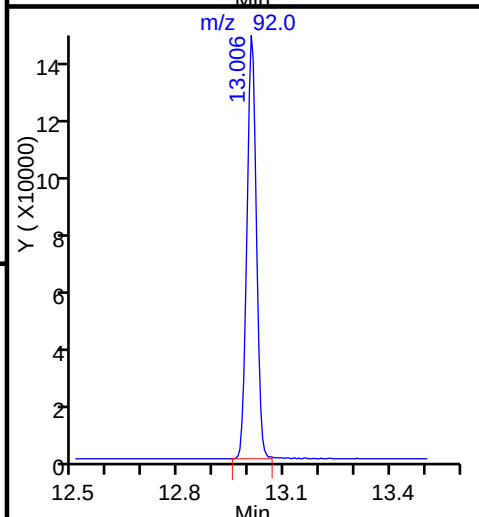
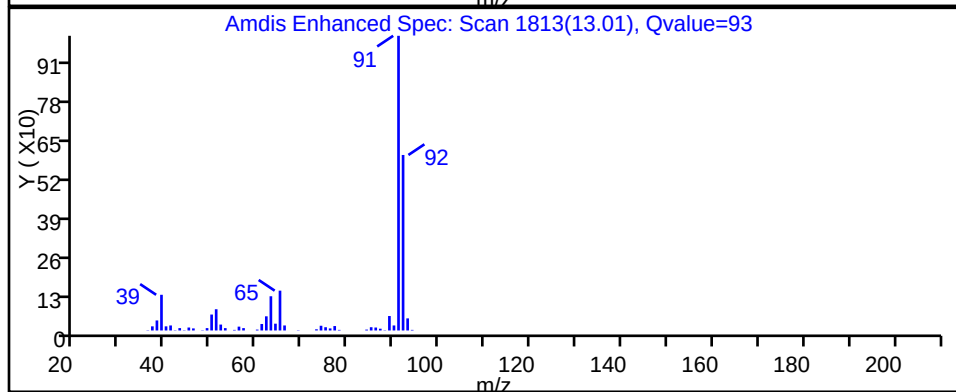
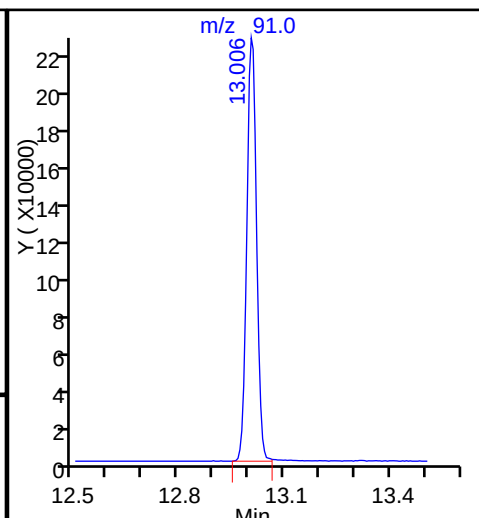
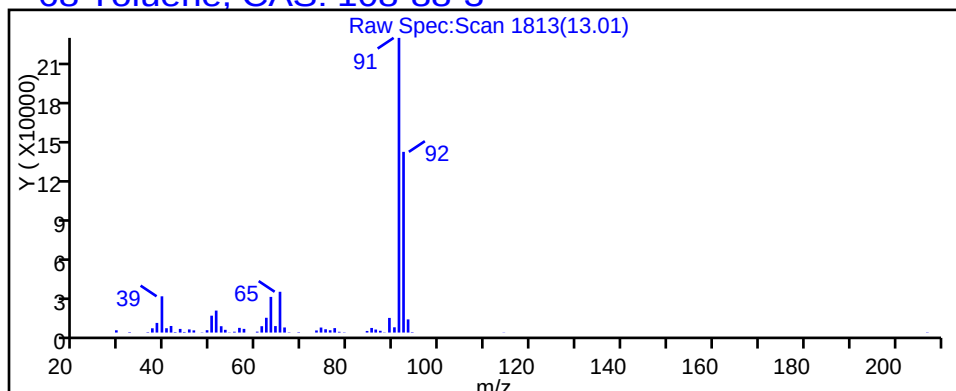
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Client ID: H36-SS

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 17

Purge Vol: 500.000 mL

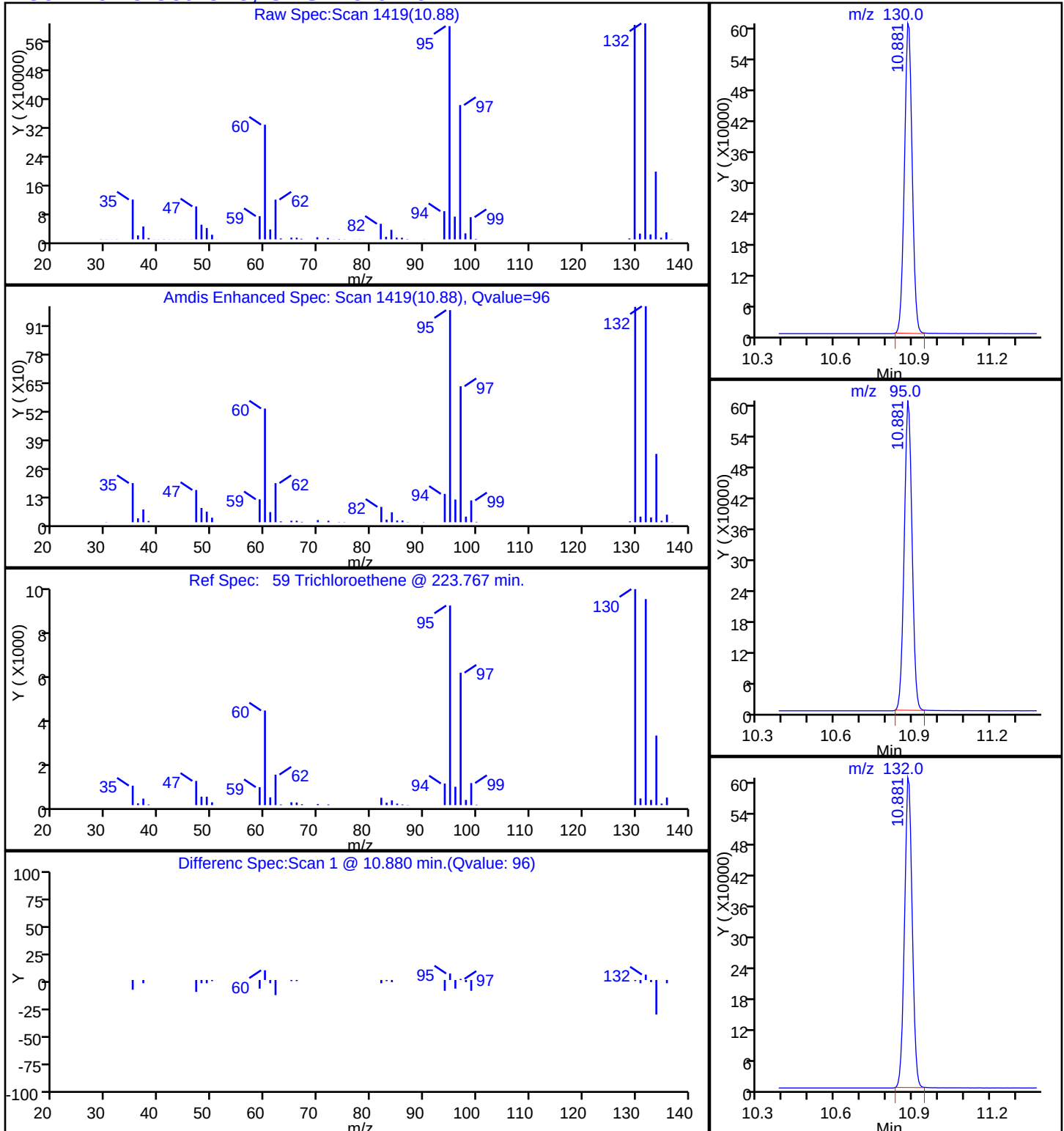
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

59 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Client ID: H36-SS

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 17

Purge Vol: 500.000 mL

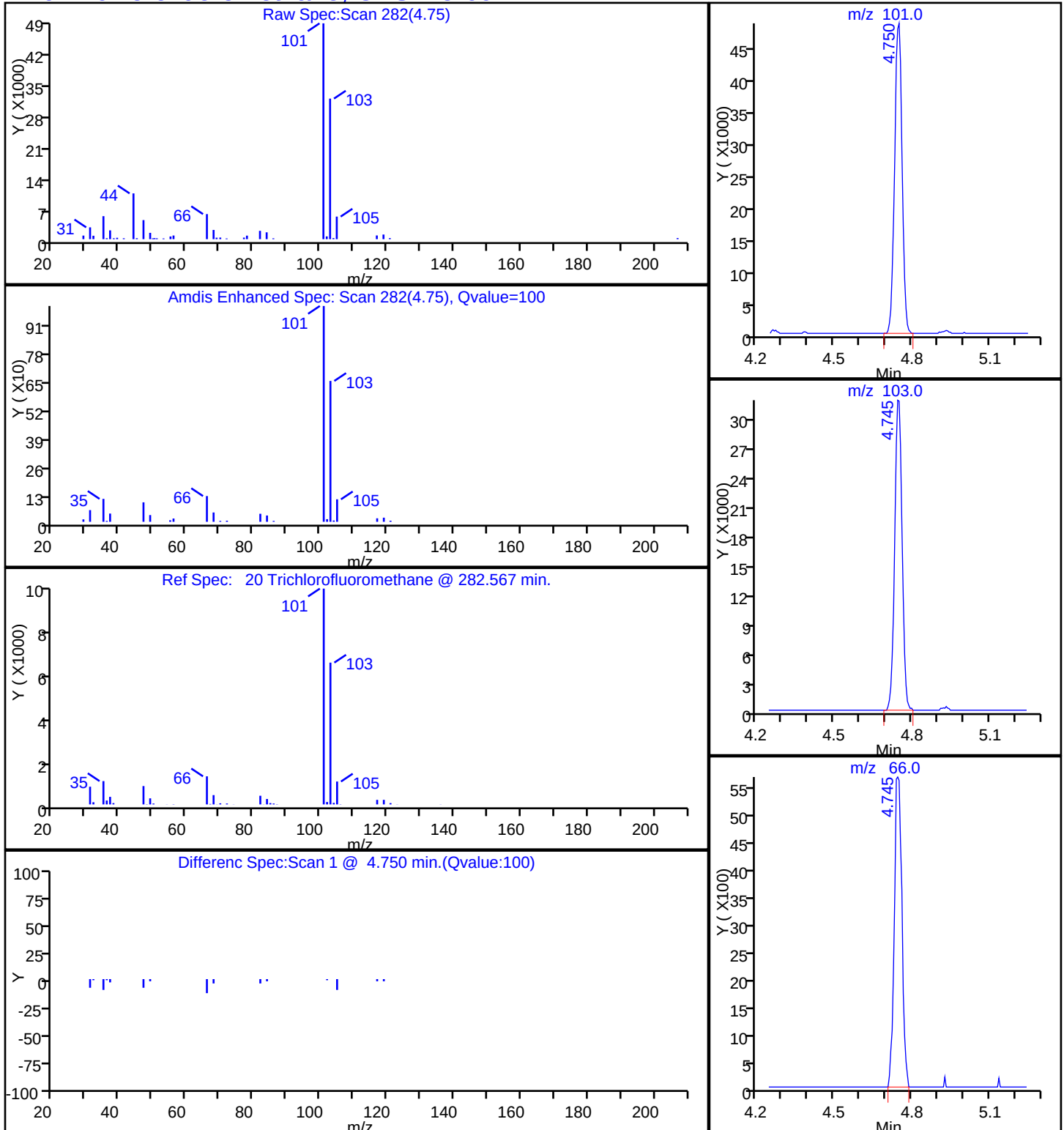
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P109.D

Injection Date: 04-Apr-2017 21:26:30

Instrument ID: MG

Lims ID: 140-7685-A-9

Lab Sample ID: 140-7685-9

Client ID: H36-SS

Operator ID: 7126

ALS Bottle#: 9 Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

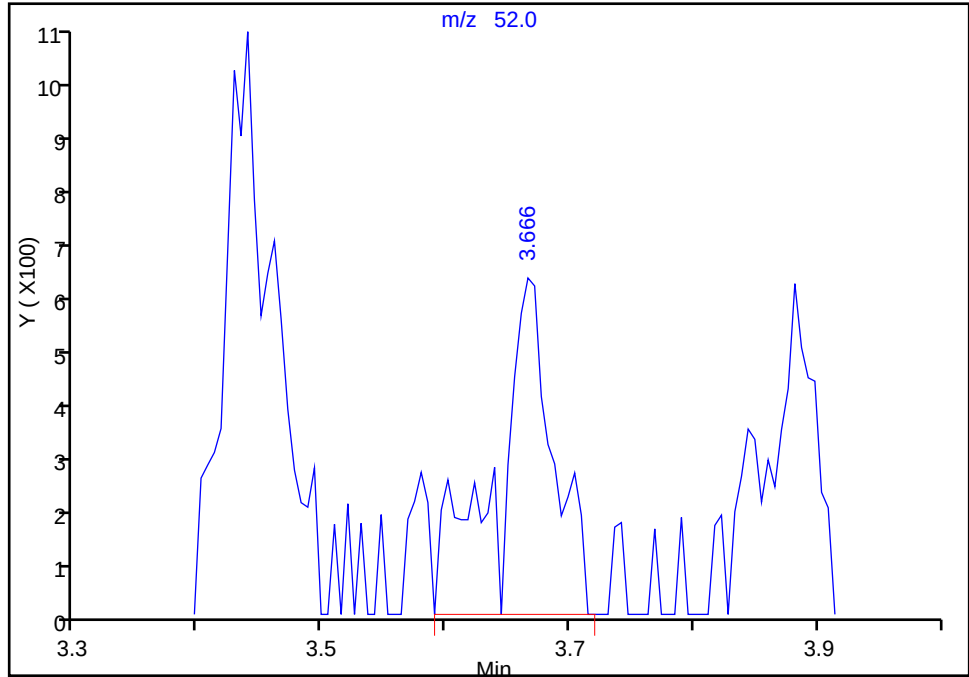
Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

Signal: 1

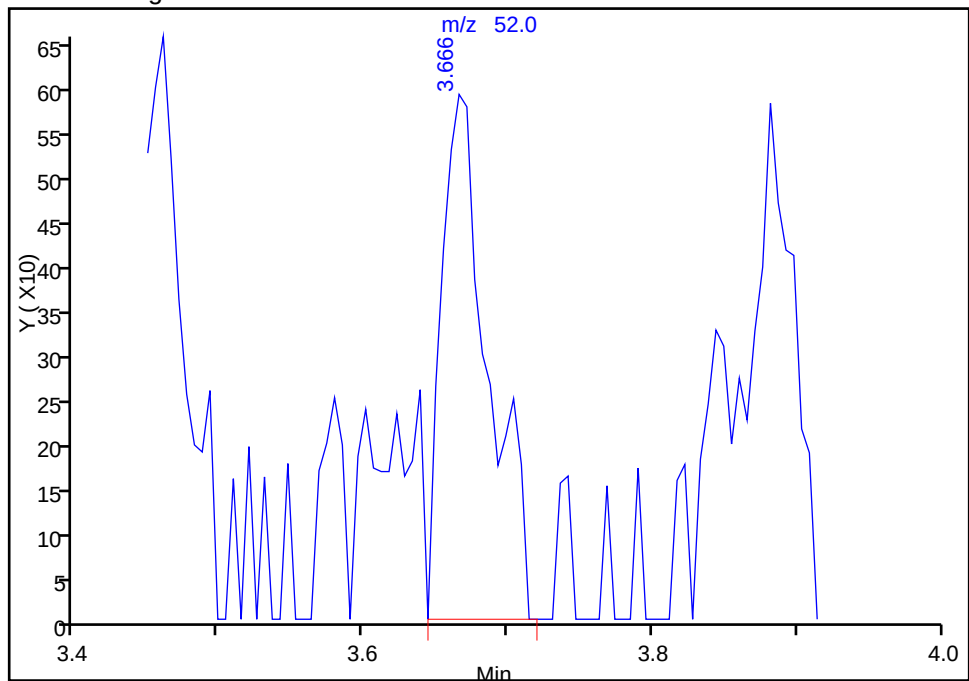
RT: 3.67
Area: 1898
Amount: 0.107655
Amount Units: ppb v/v

Processing Integration Results



RT: 3.67
Area: 1332
Amount: 0.075552
Amount Units: ppb v/v

Manual Integration Results



Reviewer: tajh, 05-Apr-2017 10:01:47

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H36-BA Lab Sample ID: 140-7685-10
 Matrix: Air Lab File ID: GD04P110.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 10:02
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 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.: 10155 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	0.57		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	0.078		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	ND		0.080	
74-87-3	Chloromethane	50.49	0.32		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	0.49		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H36-BA Lab Sample ID: 140-7685-10
 Matrix: Air Lab File ID: GD04P110.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 10:02
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 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.: 10155 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	0.48		0.080	
64-17-5	Ethanol	46.07	5.6		2.0	
100-41-4	Ethylbenzene	106.17	0.10		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	0.13		0.080	
100-42-5	Styrene	104.15	ND		0.080	
75-65-0	t-Butyl alcohol	74.12	ND		0.32	
127-18-4	Tetrachloroethene	165.83	ND		0.080	
108-88-3	Toluene	92.14	4.1		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	0.54		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

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.: 140-7685-1

SDG No.: _____

Client Sample ID: H36-BA Lab Sample ID: 140-7685-10

Matrix: Air Lab File ID: GD04P110.D

Analysis Method: TO 15 LL Date Collected: 03/28/2017 10:02

Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 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.: 10155 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	0.52		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	0.56		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	0.65		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	1.7		0.69	

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H36-BA Lab Sample ID: 140-7685-10
 Matrix: Air Lab File ID: GD04P110.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 10:02
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 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.: 10155 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	11		3.8	
100-41-4	Ethylbenzene	106.17	0.45		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	0.80		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	1.5		0.35	
95-47-6	o-Xylene	106.17	0.55		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	16		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	3.1		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P110.D
 Lims ID: 140-7685-A-10
 Client ID: H36-BA
 Sample Type: Client
 Inject. Date: 04-Apr-2017 22:16:30 ALS Bottle#: 10 Worklist Smp#: 18
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004508-018
 Misc. Info.: 140-7685-a-10
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 05-Apr-2017 10:01:21 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 09:59:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.974	7.980	-0.006	71	263773	4.00	
* 2 1,4-Difluorobenzene	114	10.142	10.148	-0.006	94	1297065	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.017	15.022	-0.005	88	1308926	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.688	16.694	-0.006	94	1062849	4.11	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	135286	0.4846	
9 Chloromethane	52	3.666	3.666	0.000	99	5924	0.3154	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.671	0.000	39	2755	0.0166	
17 Ethanol	31	4.351	4.356	-0.005	96	148615	5.60	
20 Trichlorofluoromethane	101	4.739	4.744	-0.005	100	151250	0.5440	
30 1,1,2-Trichloro-1,2,2-trif	101	5.515	5.521	-0.006	87	10631	0.0656	
31 Methylene Chloride	84	5.639	5.650	-0.011	86	14561	0.2296	
39 2-Butanone (MEK)	72	7.263	7.268	-0.005	98	17215	0.5735	
40 Hexane	56	7.322	7.327	-0.005	81	7949	0.1526	
44 Chloroform	83	7.996	8.007	-0.011	88	8349	0.0451	
47 1,1,1-Trichloroethane	97	8.983	8.983	0.000	93	13706	0.0640	
48 1,2-Dichloroethane	62	9.074	9.074	0.000	94	3454	0.0264	
49 Benzene	78	9.565	9.565	0.000	97	38334	0.1740	
50 Cyclohexane	69	9.571	9.576	-0.005	86	18352	0.4948	
51 Carbon tetrachloride	117	9.592	9.598	-0.006	72	18059	0.0784	
56 Isooctane	57	10.396	10.396	0.000	93	23615	0.0722	
59 Trichloroethene	130	10.875	10.881	-0.006	86	1862	0.0156	
65 4-Methyl-2-pentanone (MIBK	43	12.121	12.116	0.005	96	13016	0.1028	
68 Toluene	91	13.005	13.006	-0.001	93	1077772	4.13	
76 Tetrachloroethene	129	14.176	14.181	-0.005	75	1973	0.0165	
79 Ethylbenzene	91	15.373	15.378	-0.005	99	37787	0.1037	
81 m-Xylene & p-Xylene	91	15.540	15.545	-0.005	99	105007	0.3569	
85 o-Xylene	91	16.068	16.074	-0.006	97	37791	0.1256	
92 1,3,5-Trimethylbenzene	120	17.470	17.481	-0.011	91	7000	0.0363	
96 1,2,4-Trimethylbenzene	105	17.939	17.940	-0.001	98	39134	0.1059	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P110.D

Injection Date: 04-Apr-2017 22:16:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7685-A-10

Lab Sample ID: 140-7685-10

Worklist Smp#: 18

Client ID: H36-BA

Purge Vol: 500.000 mL

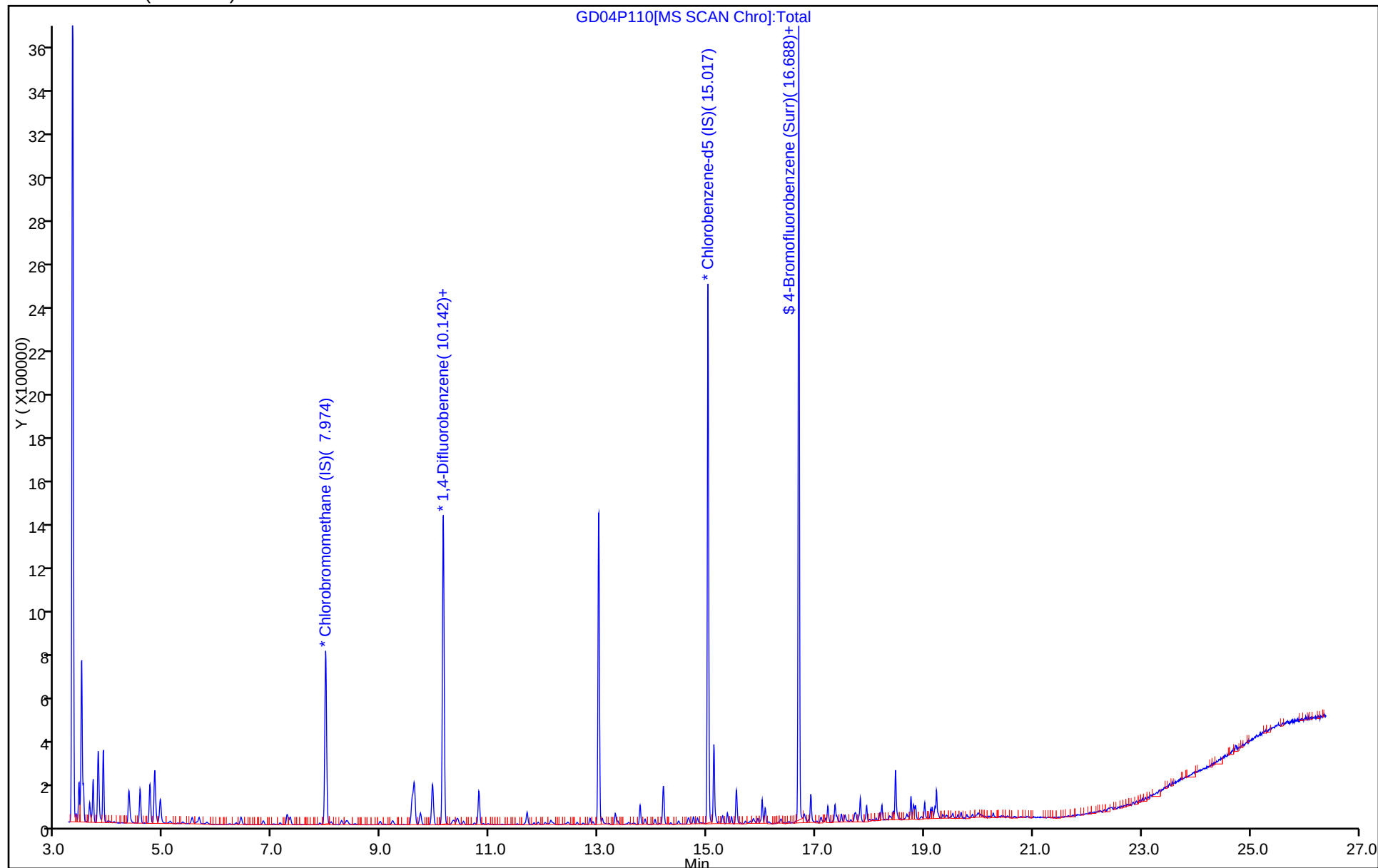
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P110.D
Lims ID: 140-7685-A-10
Client ID: H36-BA
Sample Type: Client
Inject. Date: 04-Apr-2017 22:16:30 ALS Bottle#: 10 Worklist Smp#: 18
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004508-018
Misc. Info.: 140-7685-a-10
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 05-Apr-2017 10:01:21 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 09:59:25

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.11	102.72

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P110.D

Injection Date: 04-Apr-2017 22:16:30

Instrument ID: MG

Lims ID: 140-7685-A-10

Lab Sample ID: 140-7685-10

Client ID: H36-BA

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 18

Purge Vol: 500.000 mL

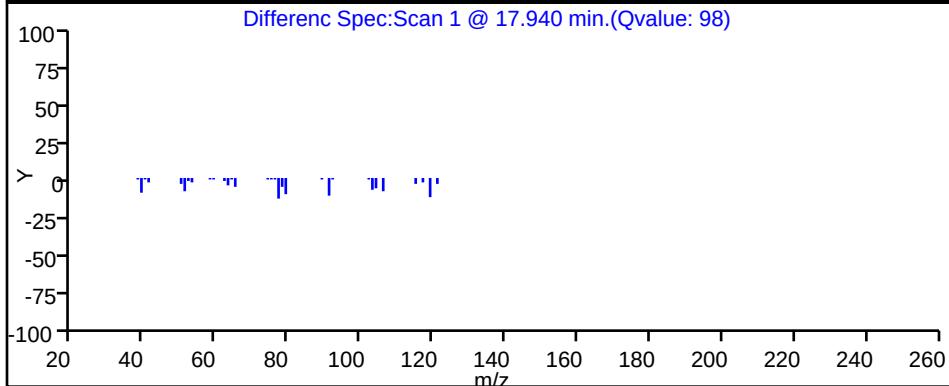
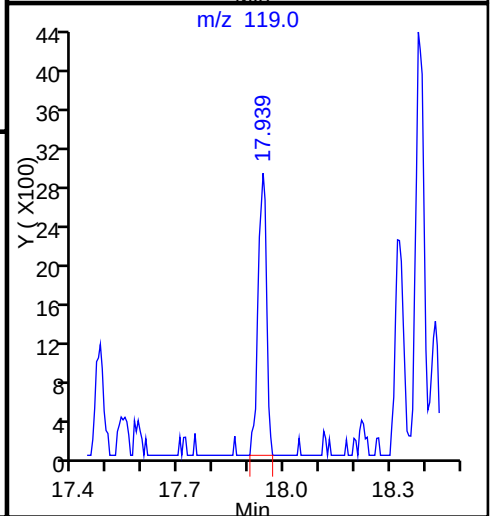
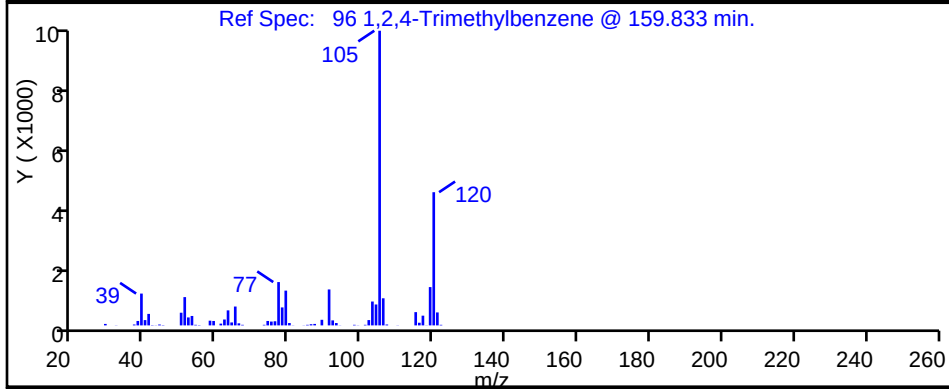
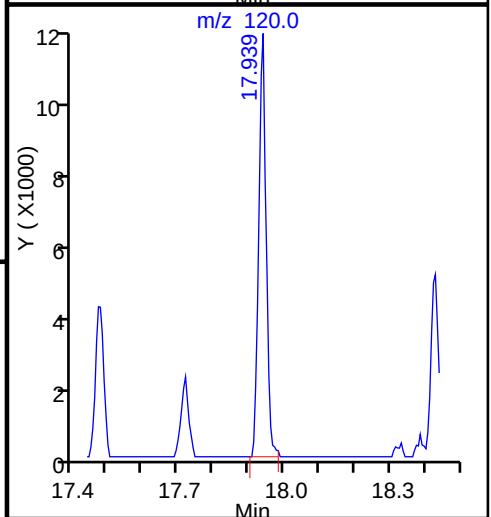
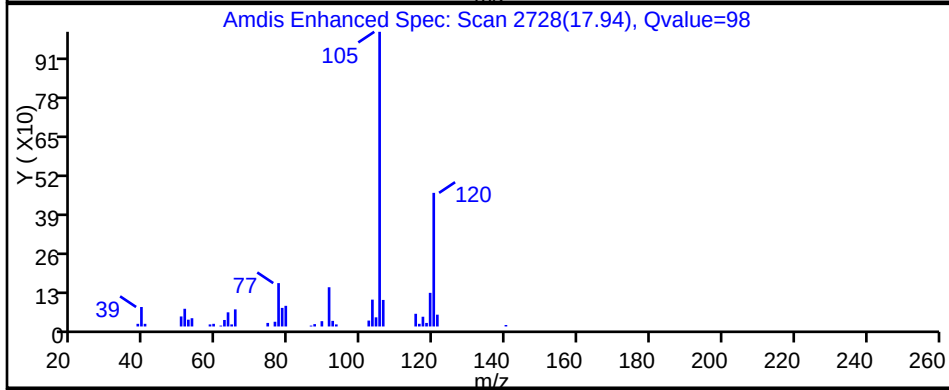
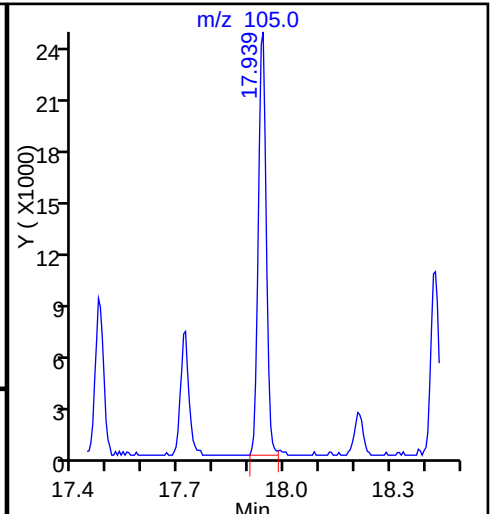
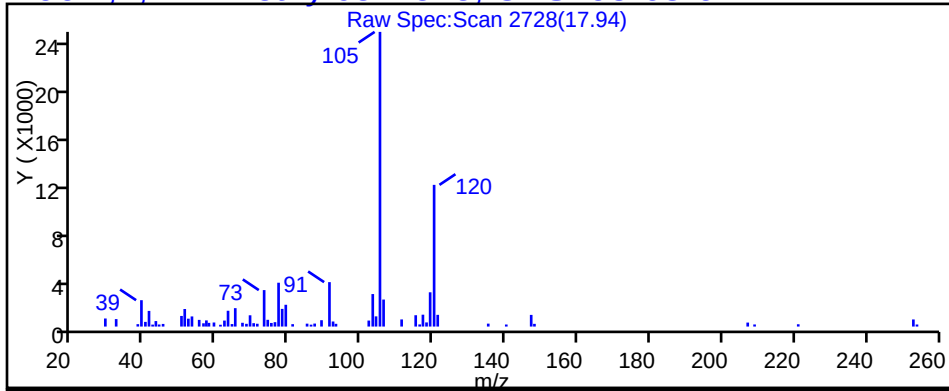
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

96 1,2,4-Trimethylbenzene, CAS: 95-63-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P110.D

Injection Date: 04-Apr-2017 22:16:30

Instrument ID: MG

Lims ID: 140-7685-A-10

Lab Sample ID: 140-7685-10

Client ID: H36-BA

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 18

Purge Vol: 500.000 mL

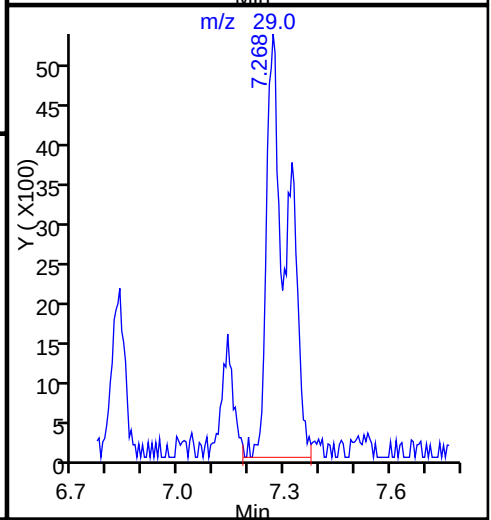
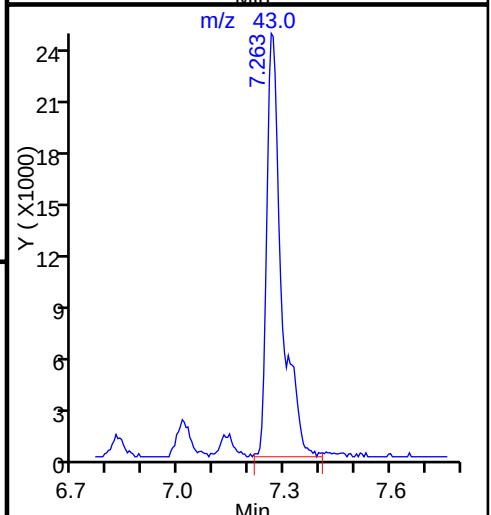
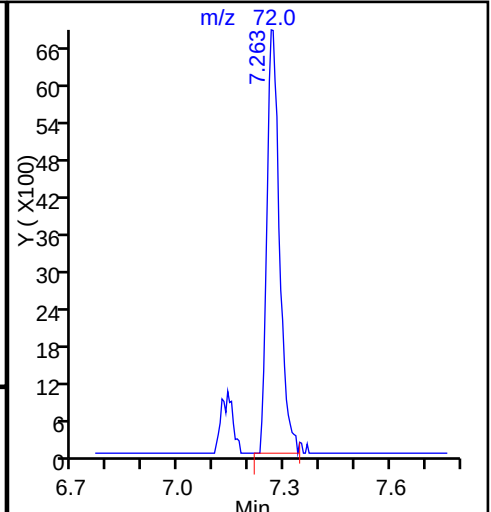
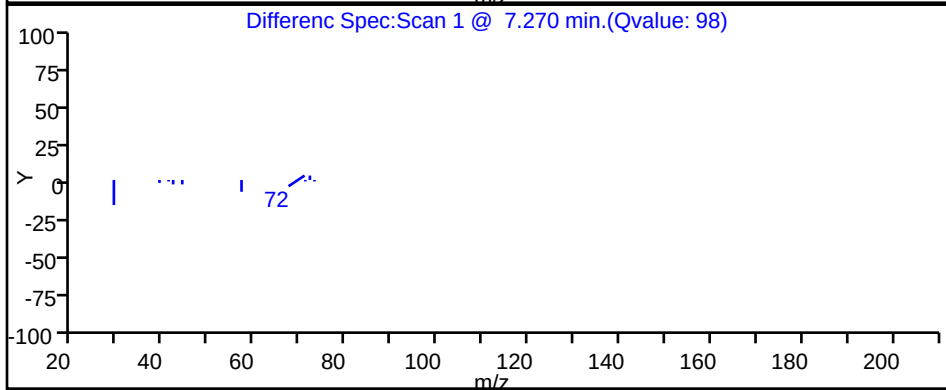
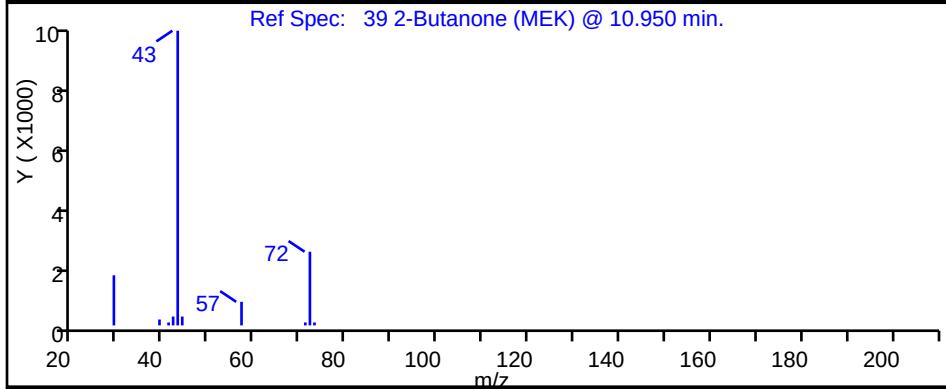
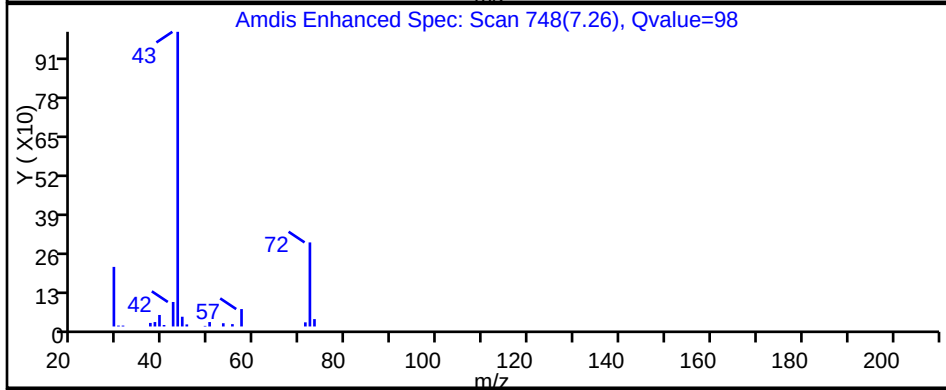
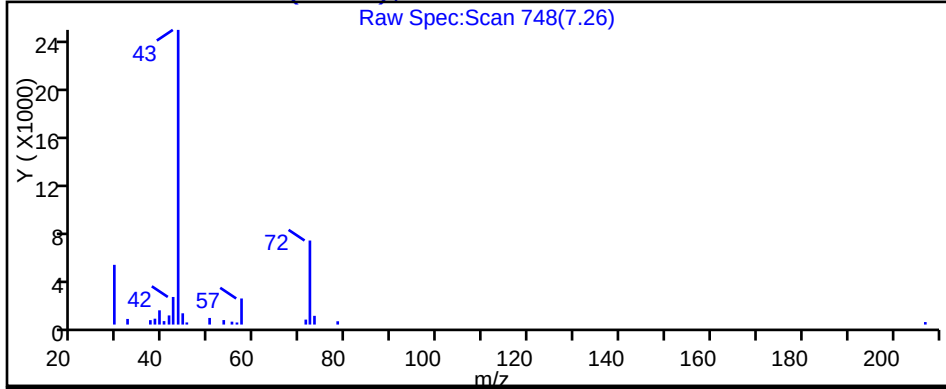
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P110.D

Injection Date: 04-Apr-2017 22:16:30

Instrument ID: MG

Lims ID: 140-7685-A-10

Lab Sample ID: 140-7685-10

Client ID: H36-BA

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 18

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

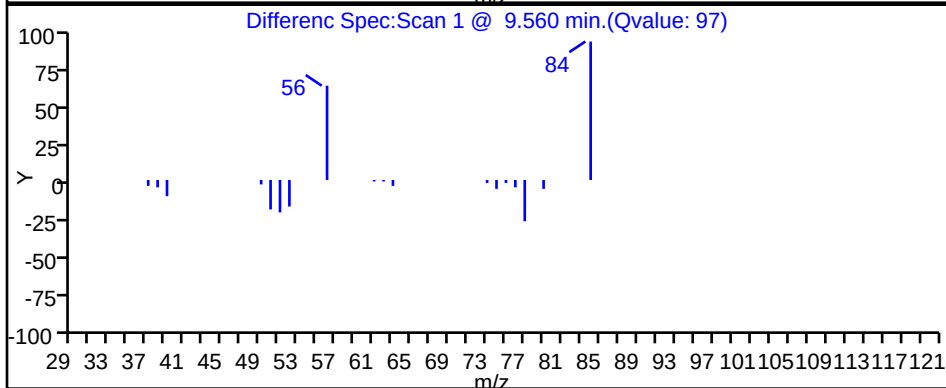
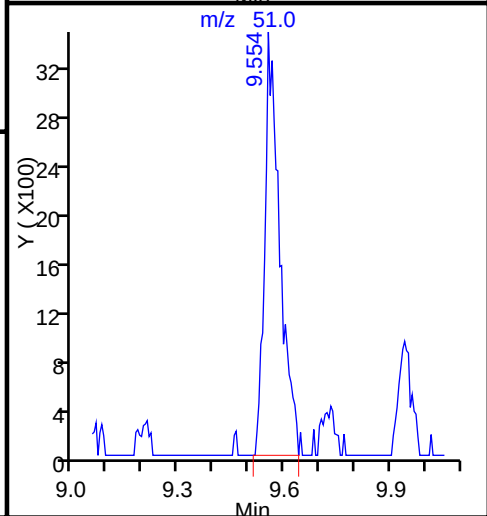
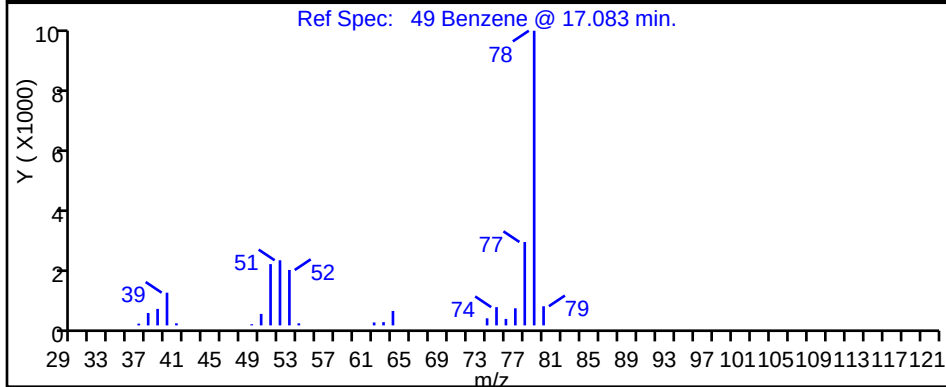
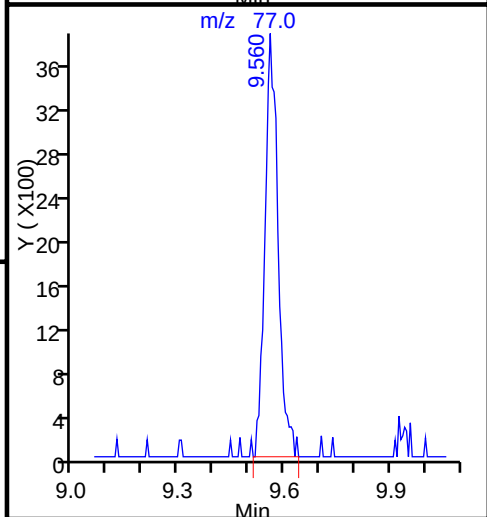
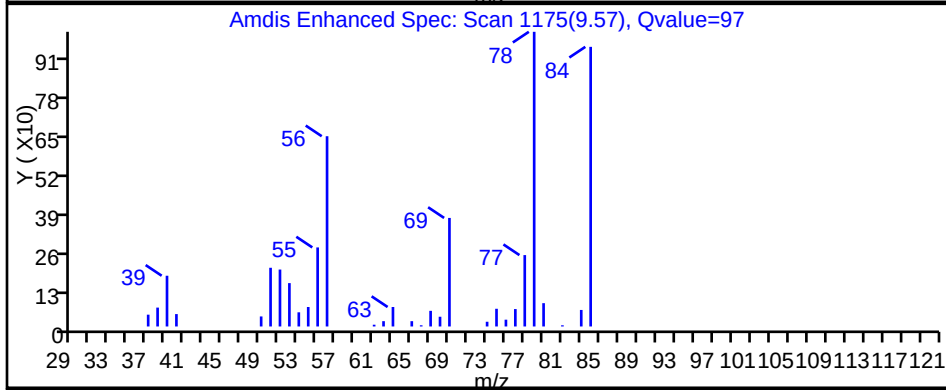
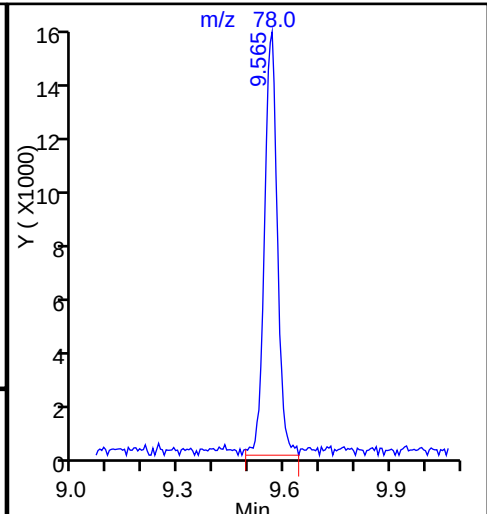
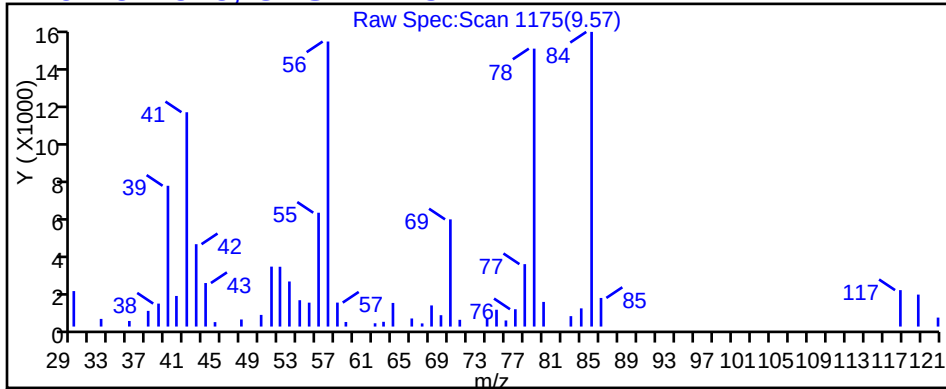
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P110.D

Injection Date: 04-Apr-2017 22:16:30

Instrument ID: MG

Lims ID: 140-7685-A-10

Lab Sample ID: 140-7685-10

Client ID: H36-BA

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 18

Purge Vol: 500.000 mL

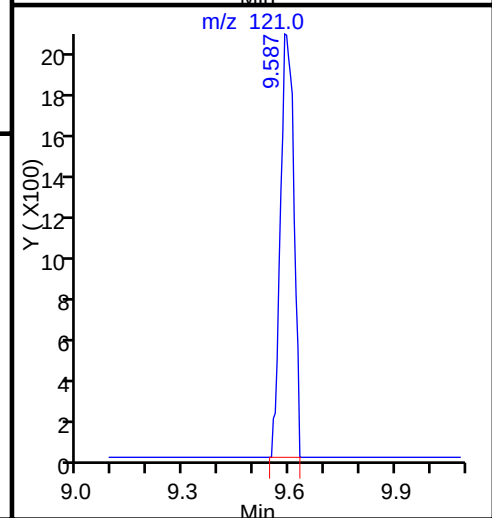
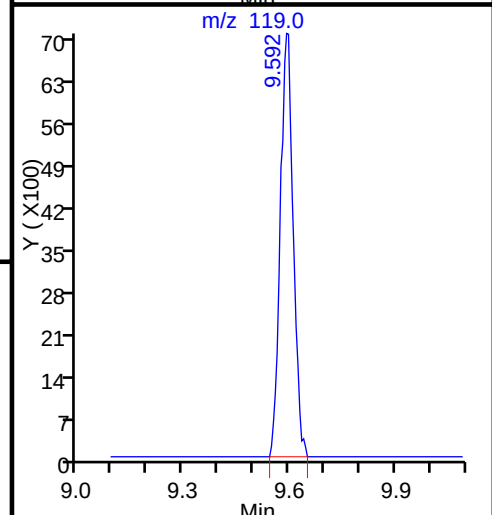
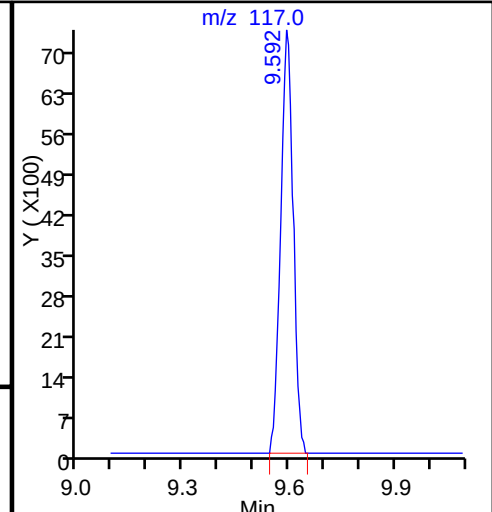
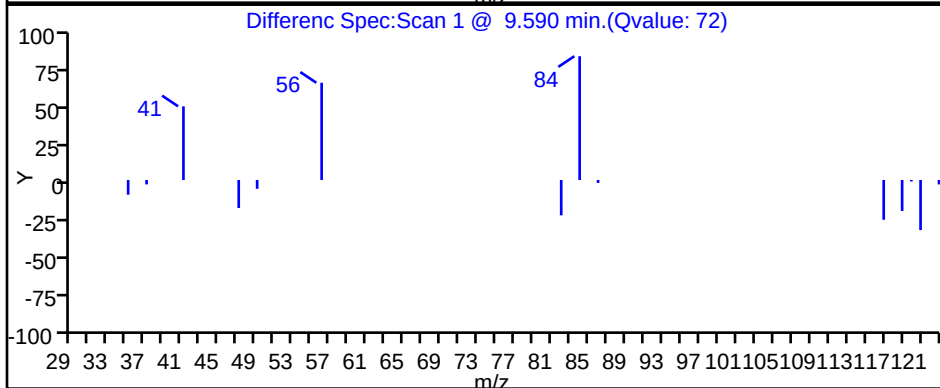
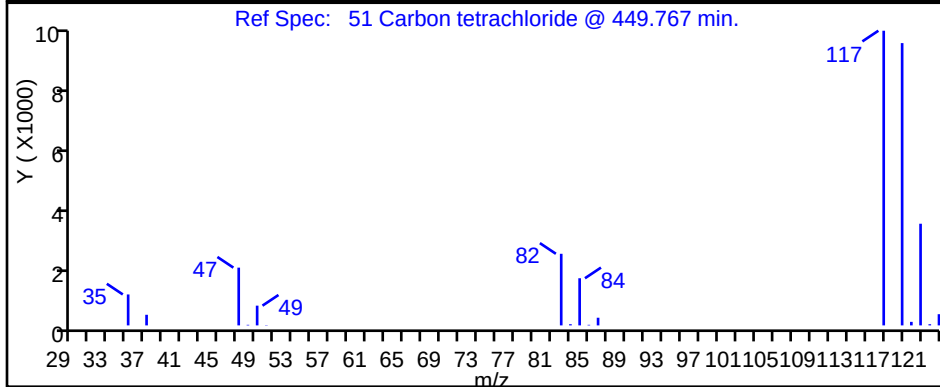
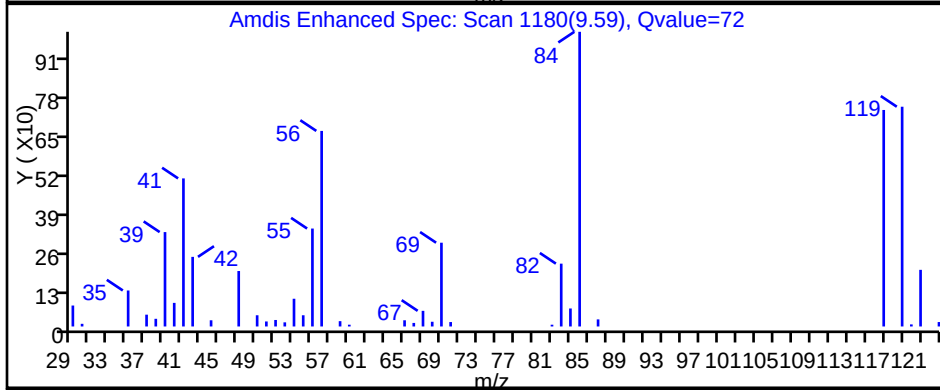
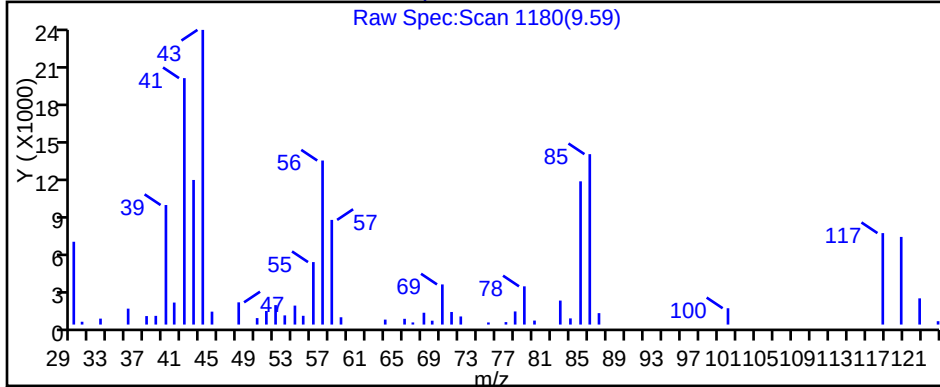
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P110.D

Injection Date: 04-Apr-2017 22:16:30

Instrument ID: MG

Lims ID: 140-7685-A-10

Lab Sample ID: 140-7685-10

Client ID: H36-BA

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 18

Purge Vol: 500.000 mL

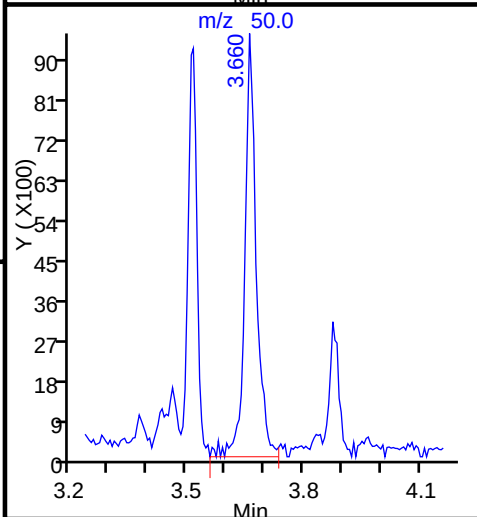
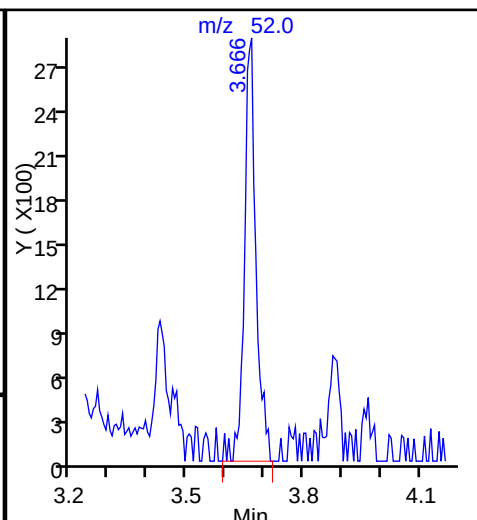
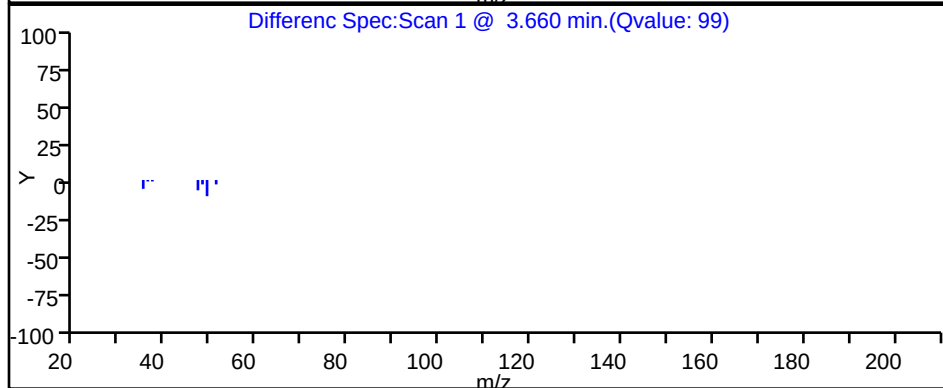
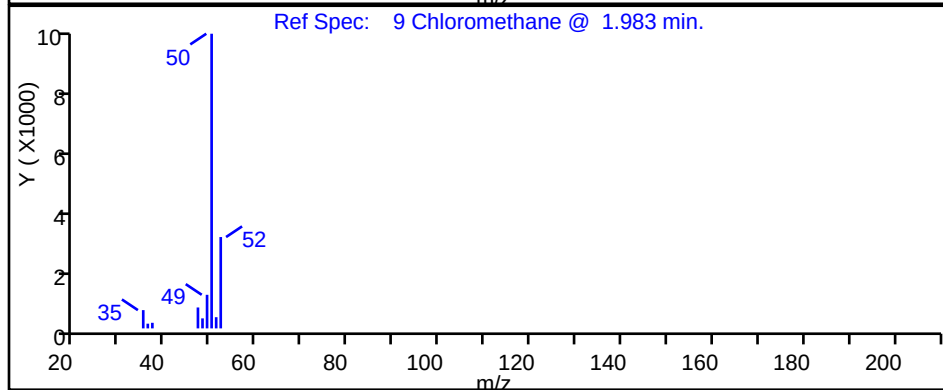
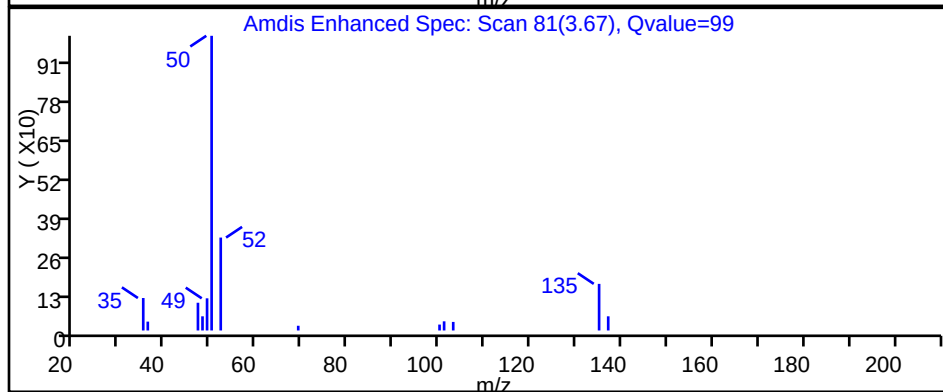
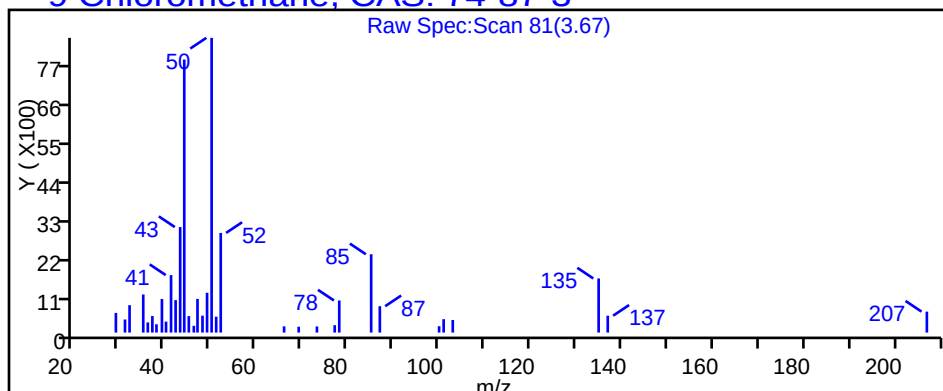
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P110.D

Injection Date: 04-Apr-2017 22:16:30

Instrument ID: MG

Lims ID: 140-7685-A-10

Lab Sample ID: 140-7685-10

Client ID: H36-BA

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 18

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

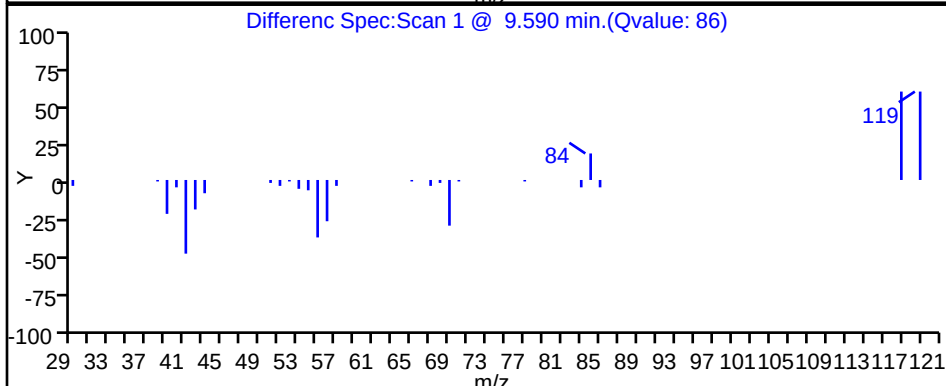
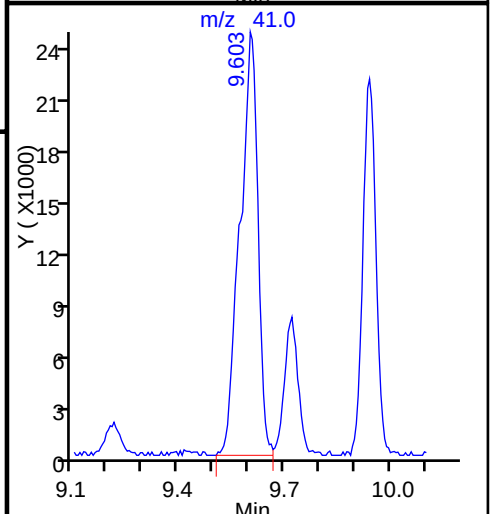
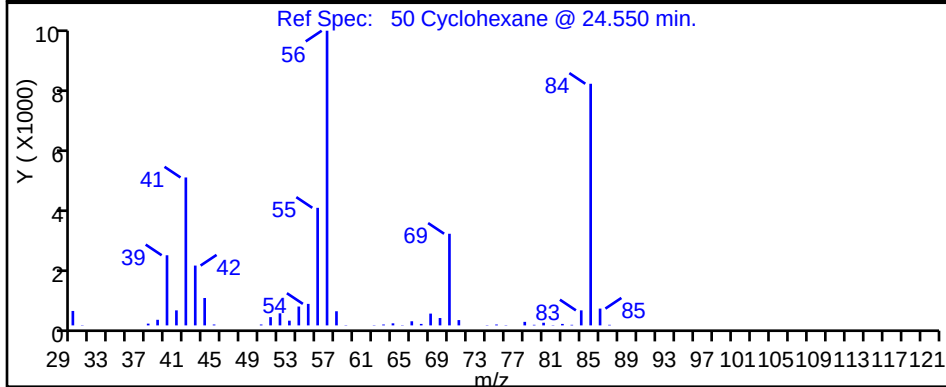
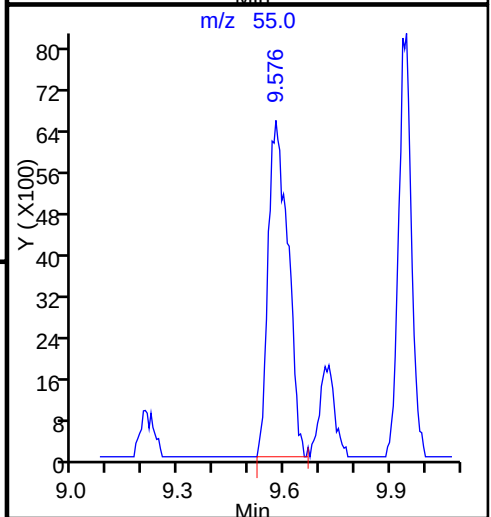
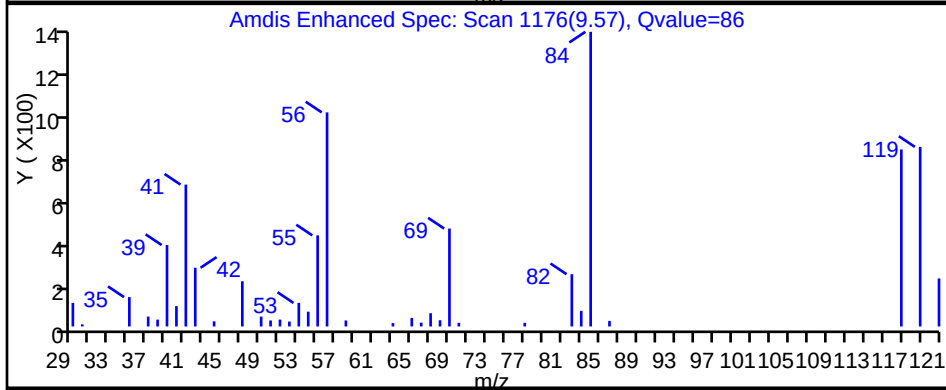
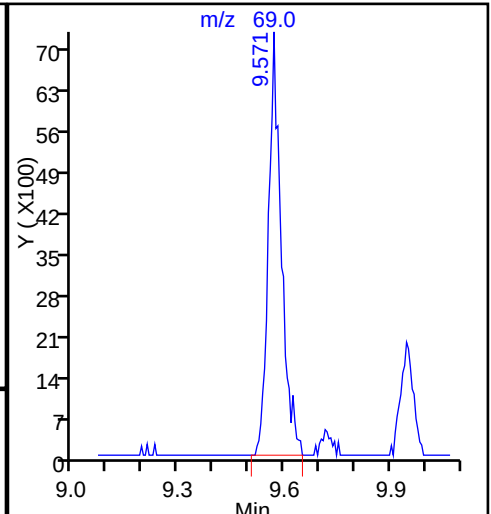
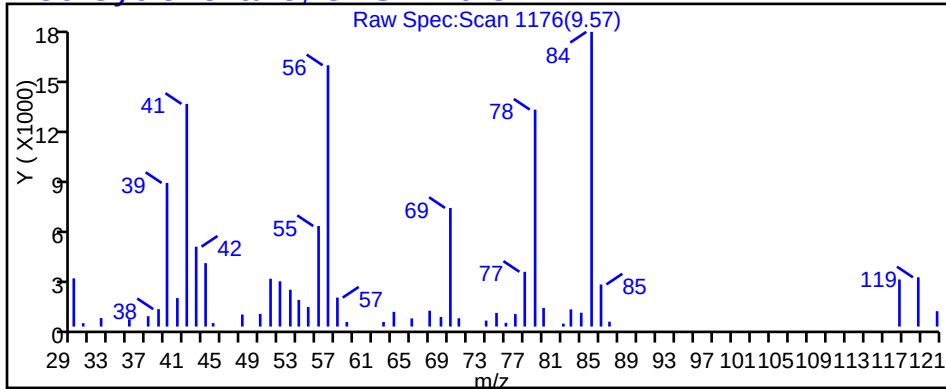
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Cyclohexane, CAS: 110-82-7



TestAmerica Knoxville

Data File: \\ChromNA\\Knoxville\\ChromData\\MG\\20170402-4508.b\\GD04P110.D

Injection Date: 04-Apr-2017 22:16:30

Instrument ID: MG

Lims ID: 140-7685-A-10

Lab Sample ID: 140-7685-10

Client ID: H36-BA

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 18

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

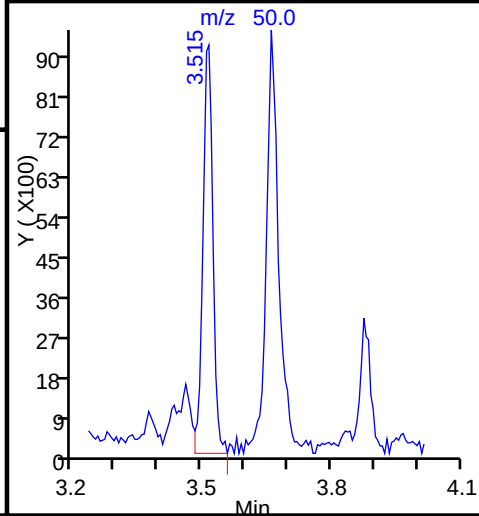
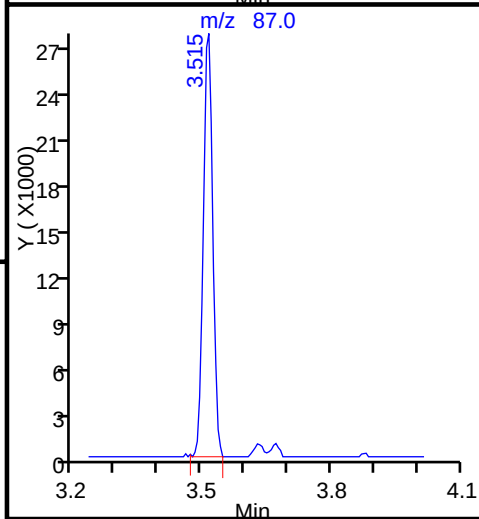
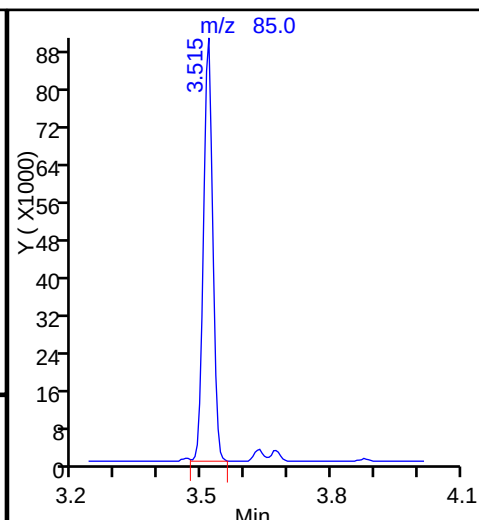
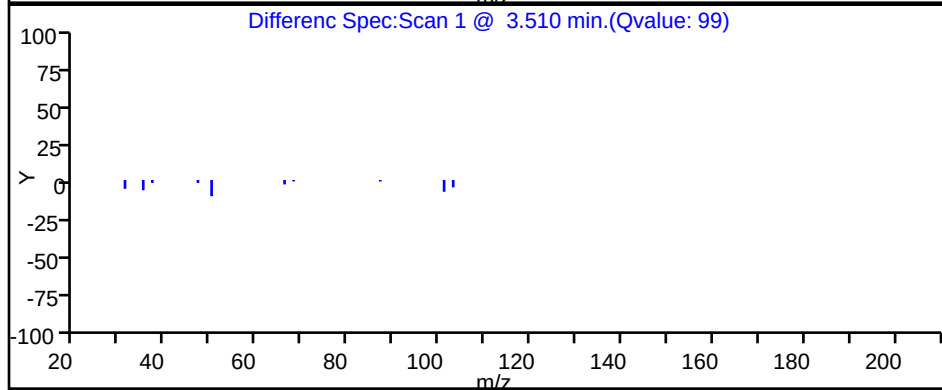
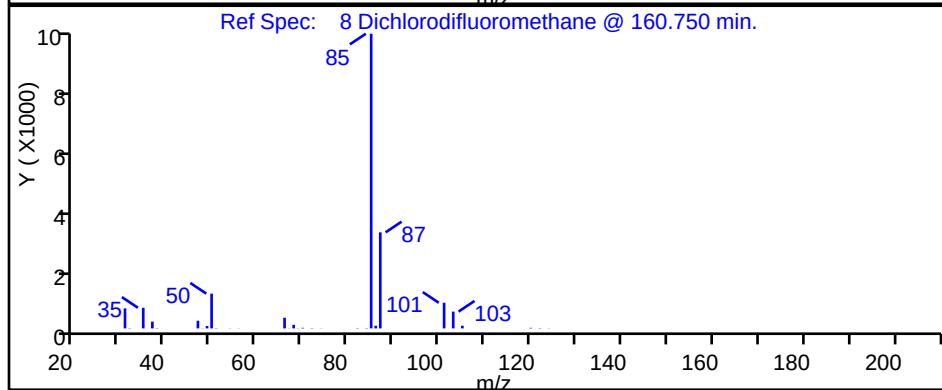
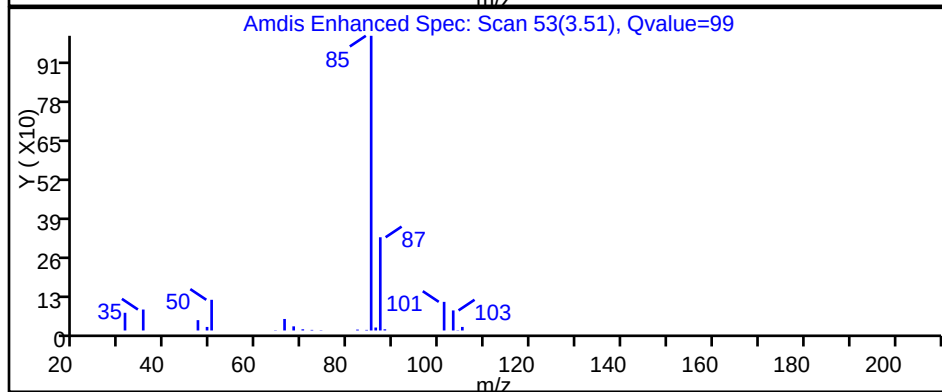
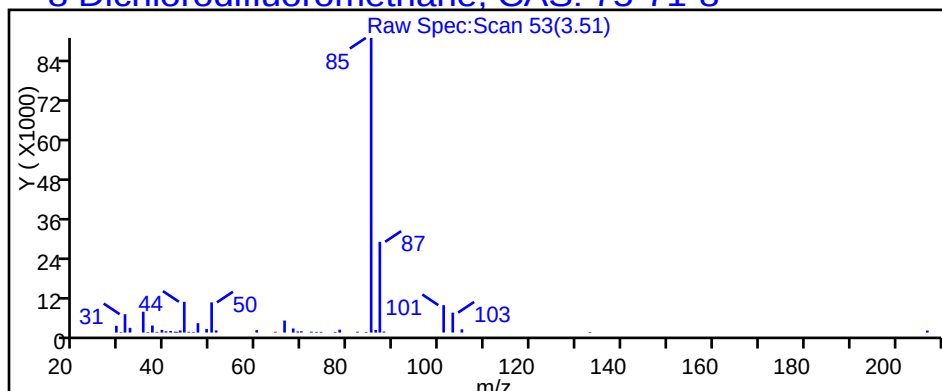
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P110.D

Injection Date: 04-Apr-2017 22:16:30

Instrument ID: MG

Lims ID: 140-7685-A-10

Lab Sample ID: 140-7685-10

Client ID: H36-BA

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 18

Purge Vol: 500.000 mL

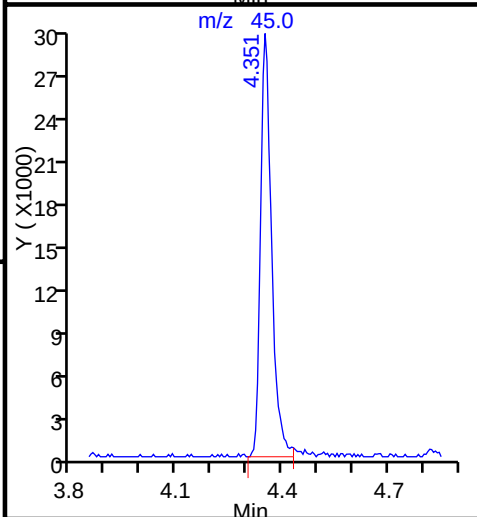
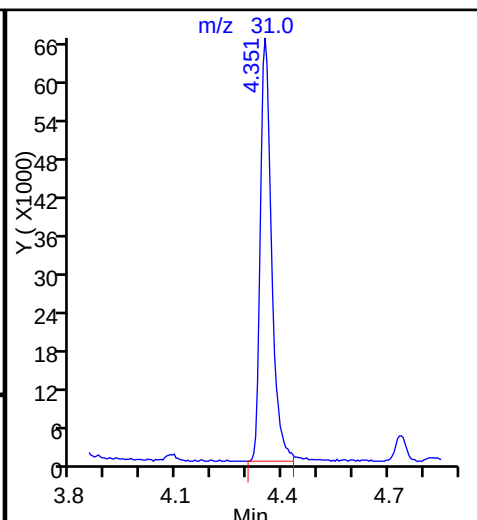
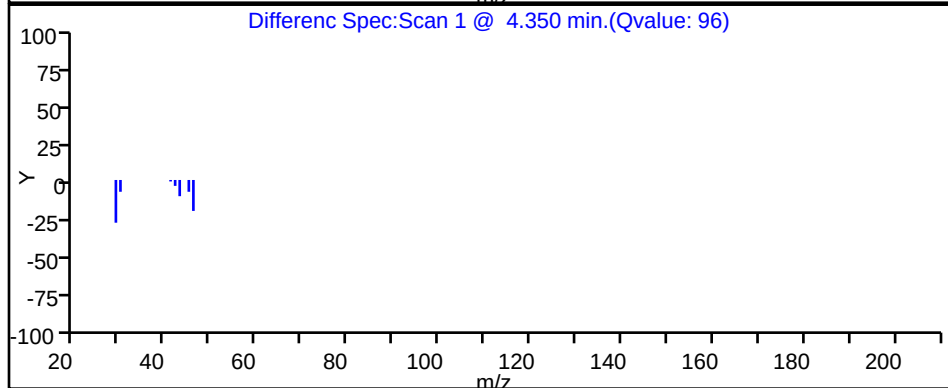
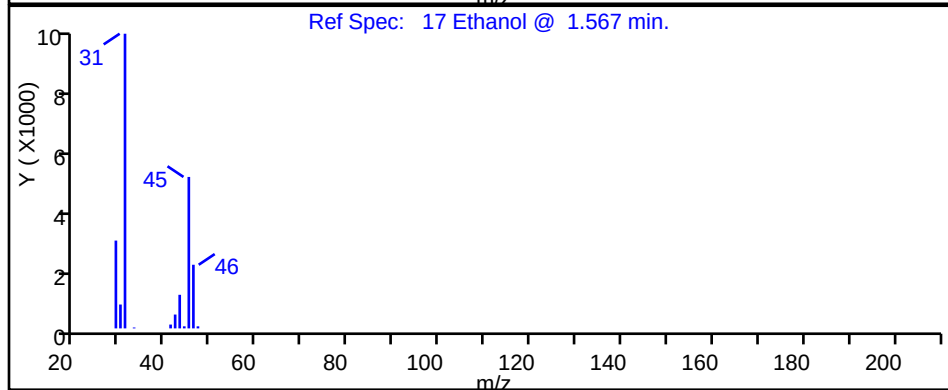
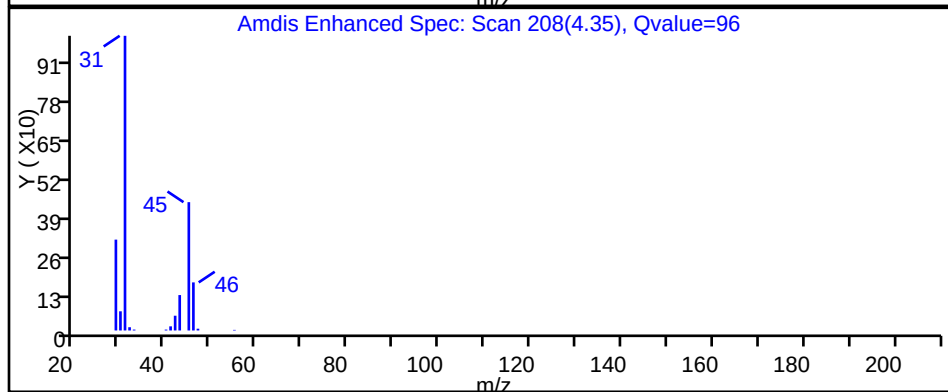
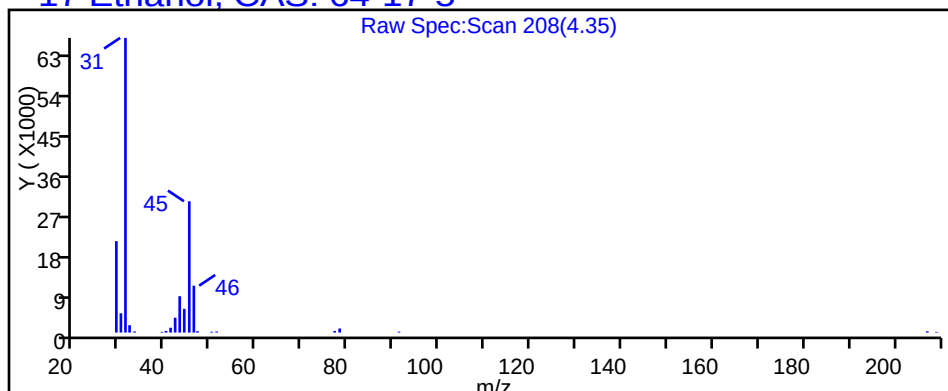
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P110.D

Injection Date: 04-Apr-2017 22:16:30

Instrument ID: MG

Lims ID: 140-7685-A-10

Lab Sample ID: 140-7685-10

Client ID: H36-BA

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 18

Purge Vol: 500.000 mL

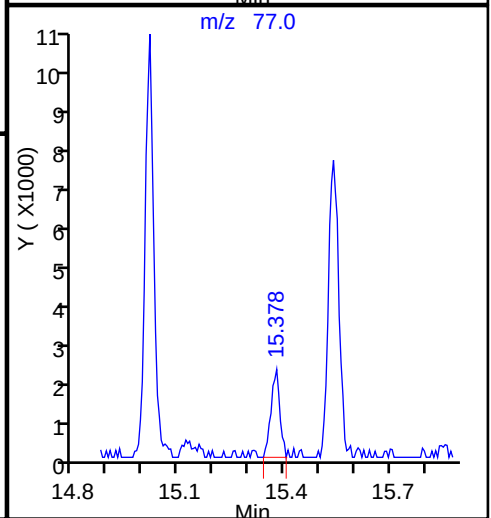
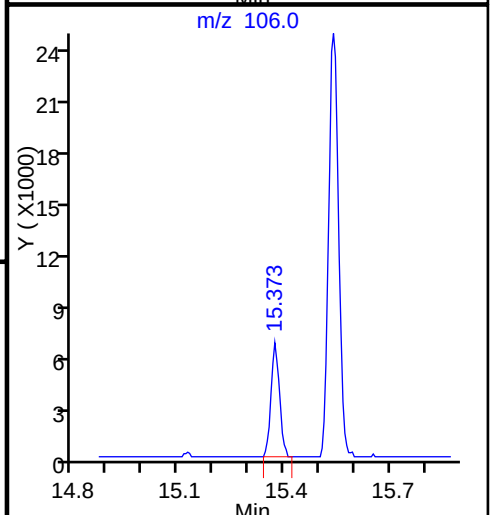
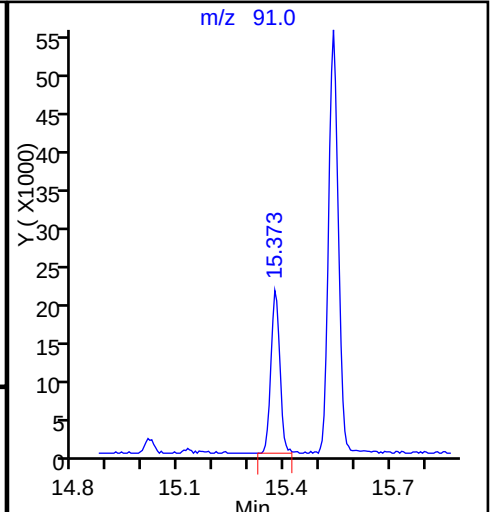
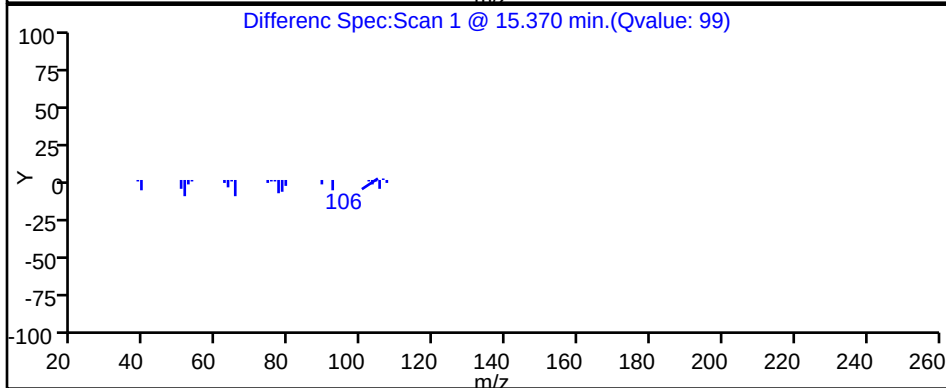
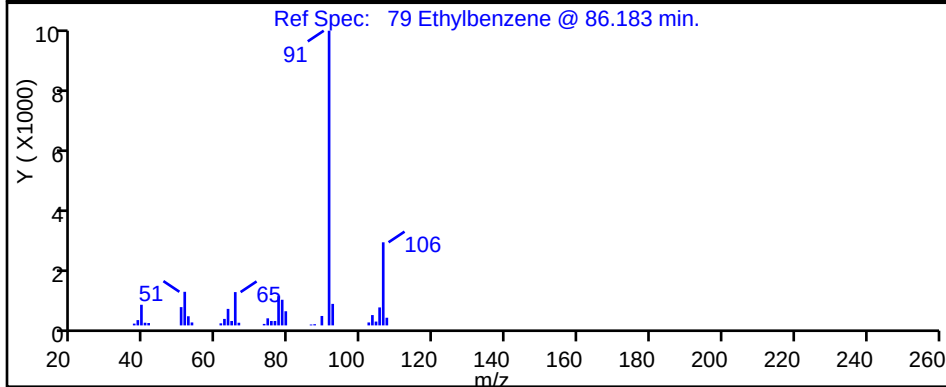
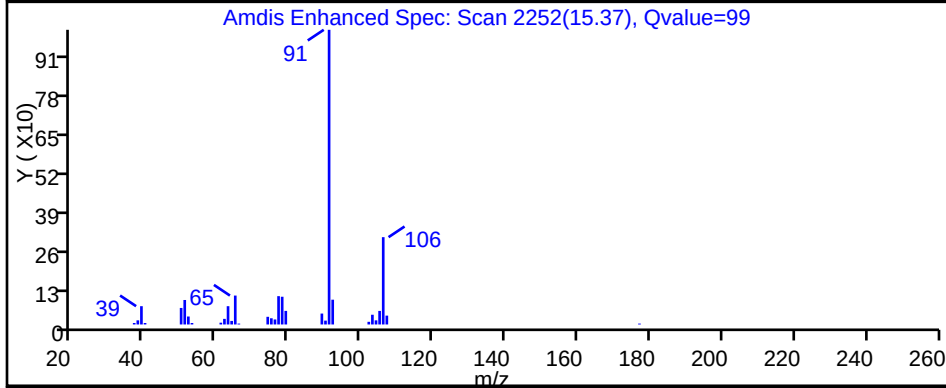
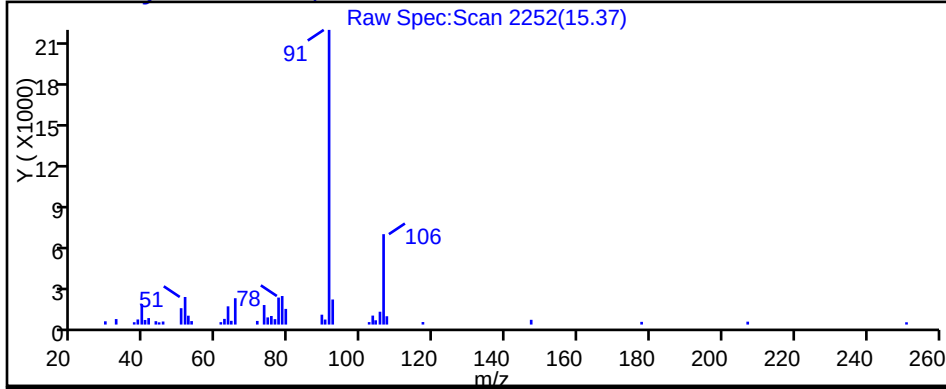
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

79 Ethylbenzene, CAS: 100-41-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P110.D

Injection Date: 04-Apr-2017 22:16:30

Instrument ID: MG

Lims ID: 140-7685-A-10

Lab Sample ID: 140-7685-10

Client ID: H36-BA

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 18

Purge Vol: 500.000 mL

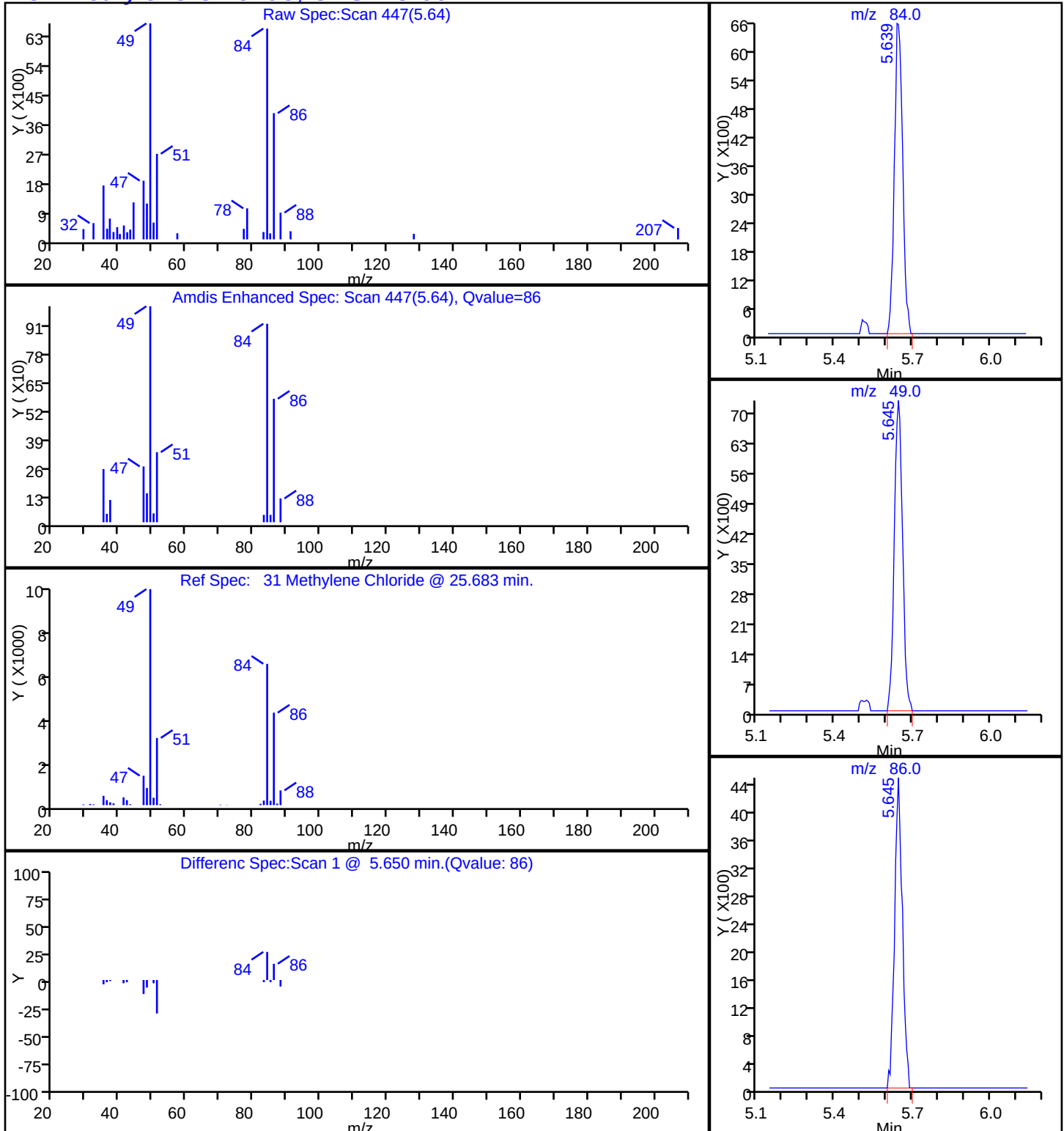
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P110.D

Injection Date: 04-Apr-2017 22:16:30

Instrument ID: MG

Lims ID: 140-7685-A-10

Lab Sample ID: 140-7685-10

Client ID: H36-BA

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 18

Purge Vol: 500.000 mL

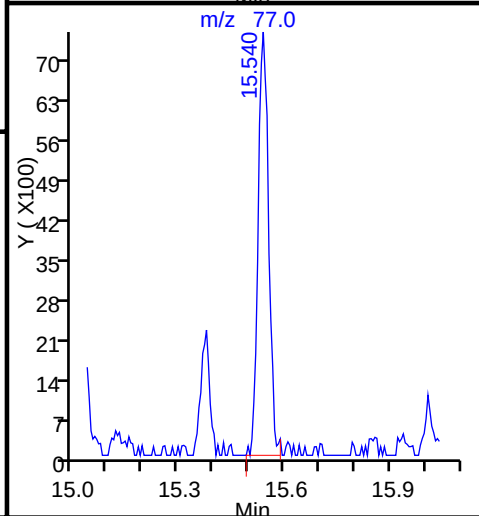
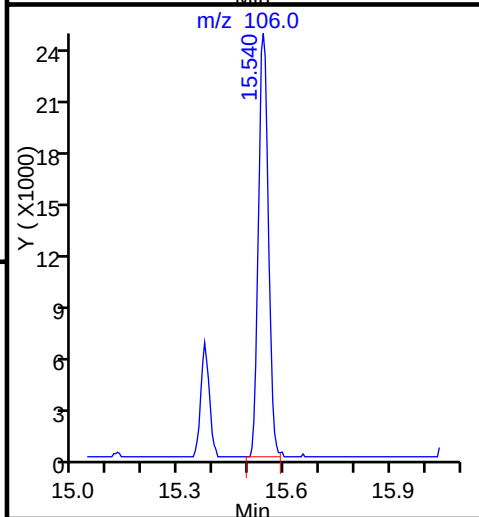
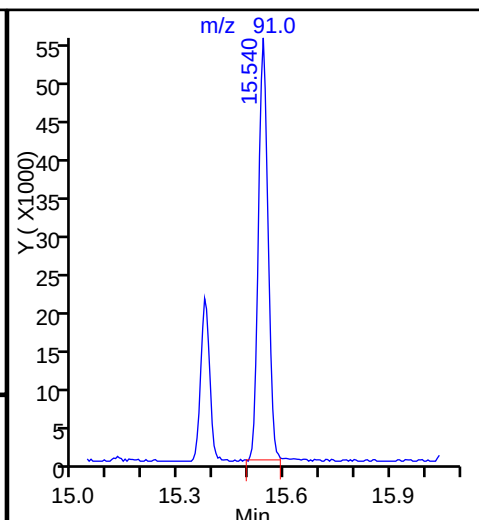
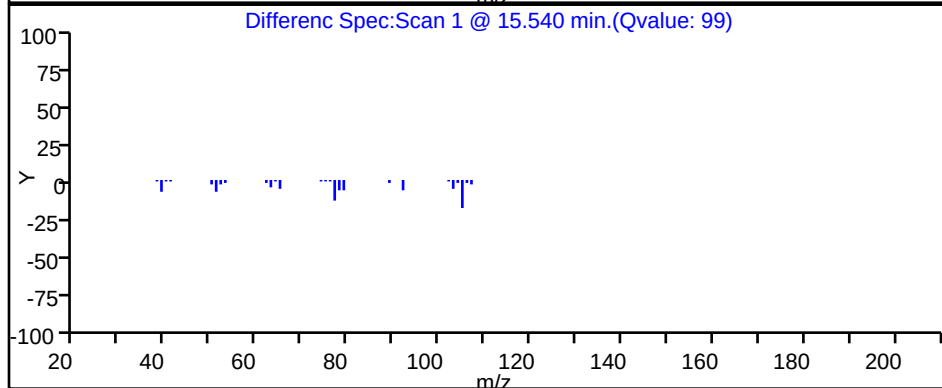
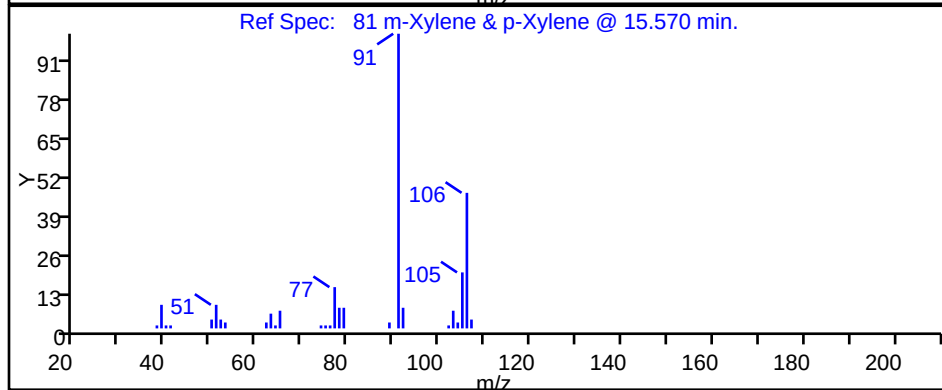
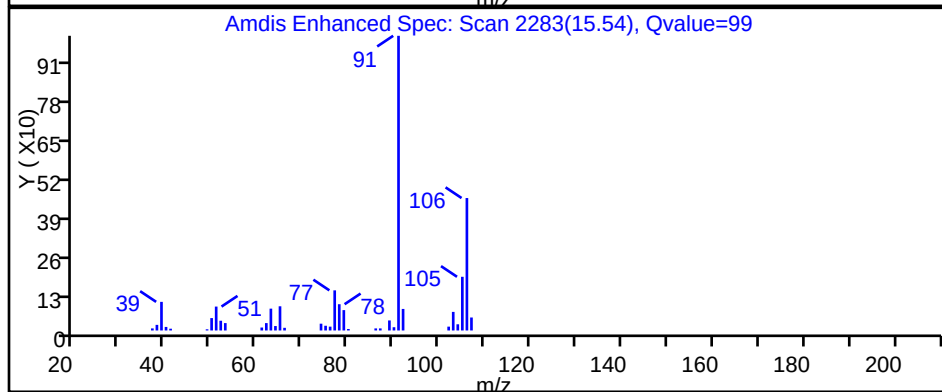
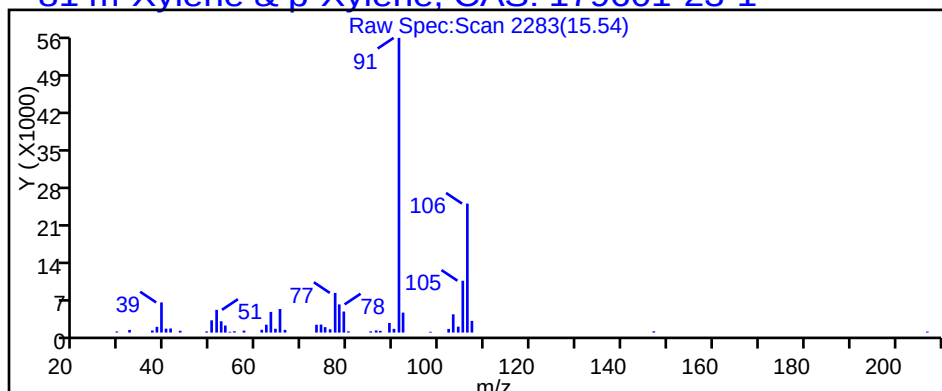
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P110.D

Injection Date: 04-Apr-2017 22:16:30

Instrument ID: MG

Lims ID: 140-7685-A-10

Lab Sample ID: 140-7685-10

Client ID: H36-BA

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 18

Purge Vol: 500.000 mL

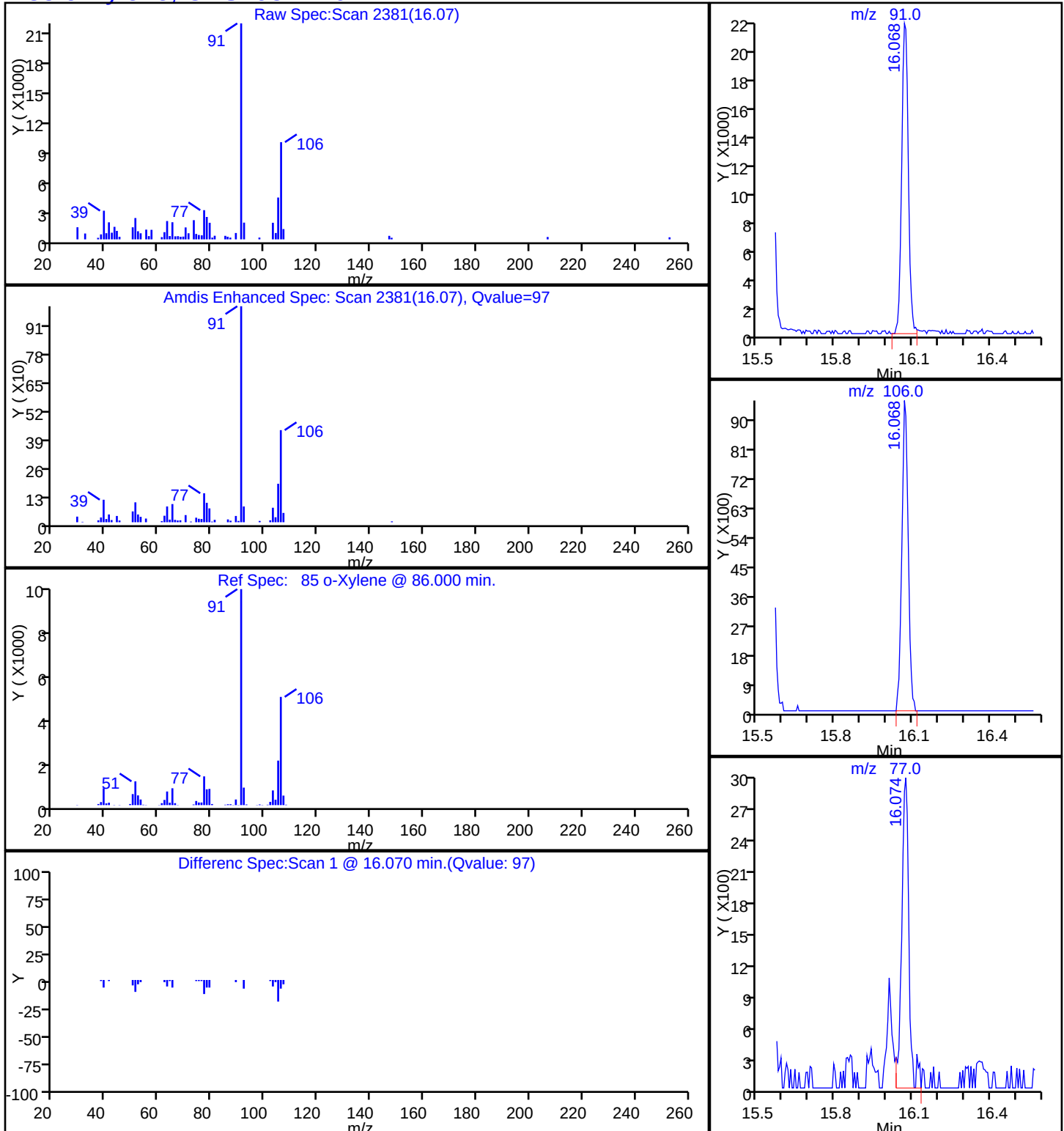
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P110.D

Injection Date: 04-Apr-2017 22:16:30

Instrument ID: MG

Lims ID: 140-7685-A-10

Lab Sample ID: 140-7685-10

Client ID: H36-BA

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 18

Purge Vol: 500.000 mL

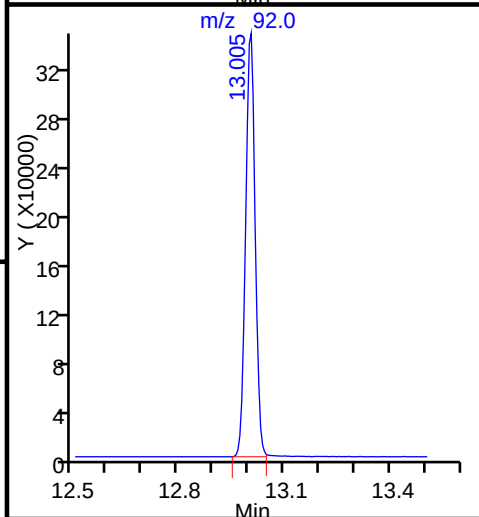
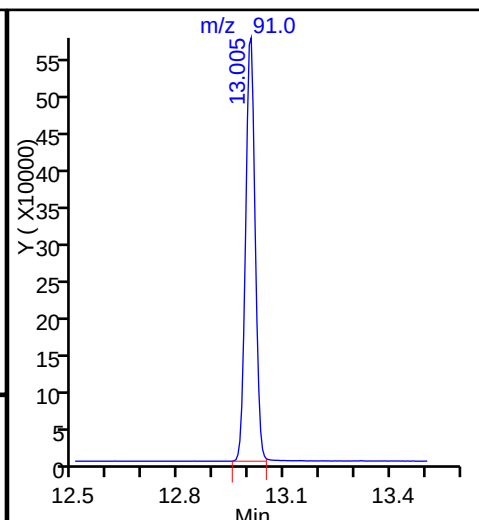
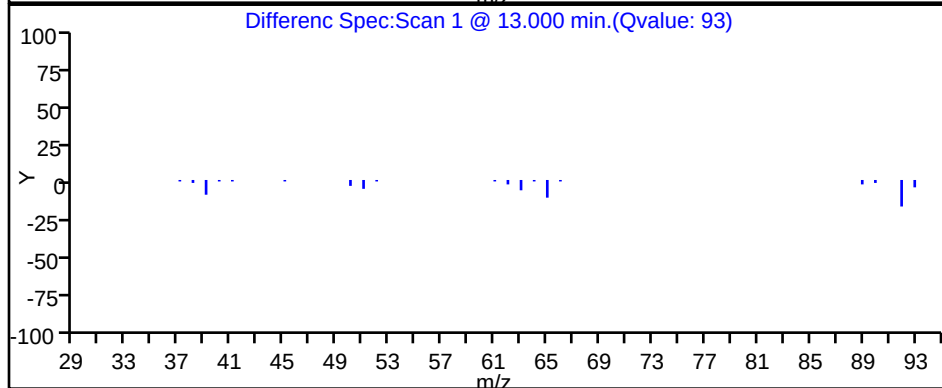
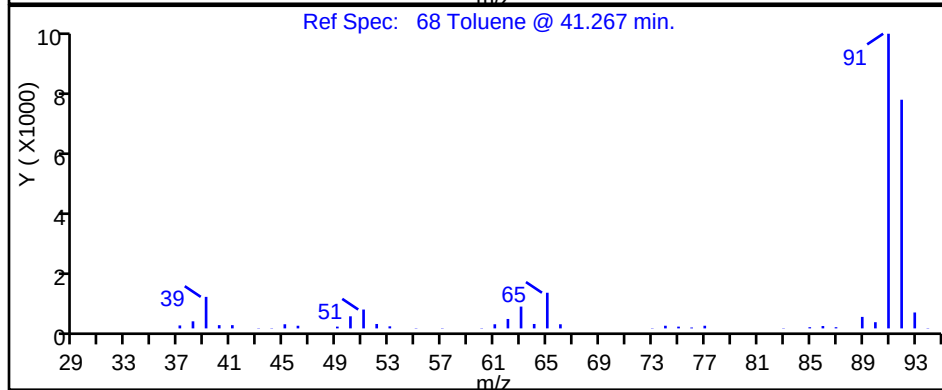
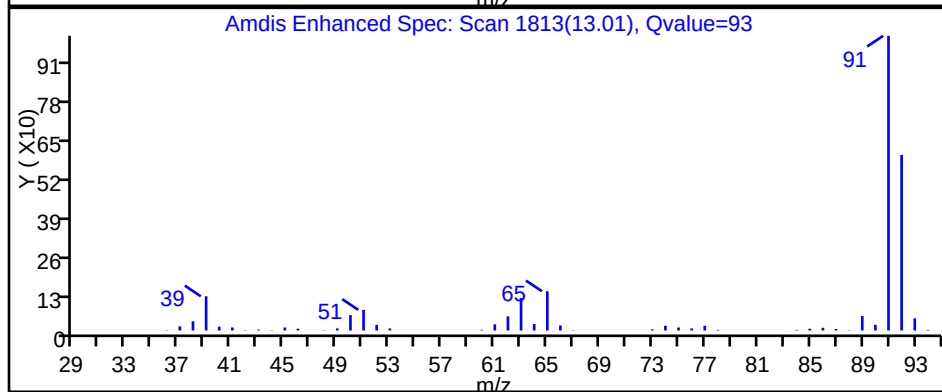
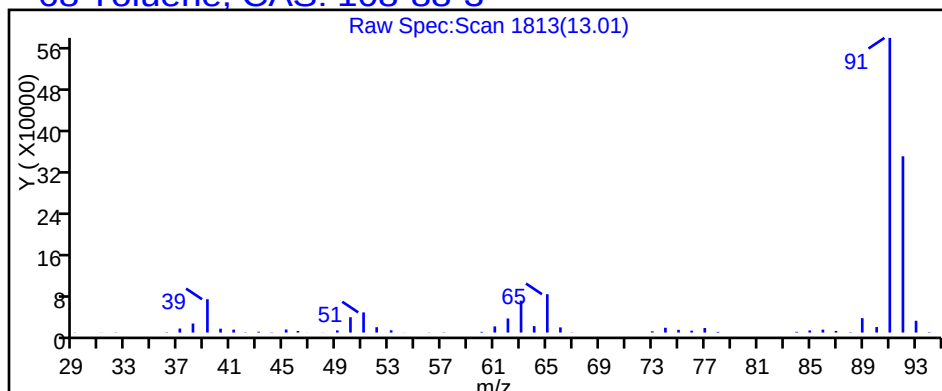
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P110.D

Injection Date: 04-Apr-2017 22:16:30

Instrument ID: MG

Lims ID: 140-7685-A-10

Lab Sample ID: 140-7685-10

Client ID: H36-BA

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 18

Purge Vol: 500.000 mL

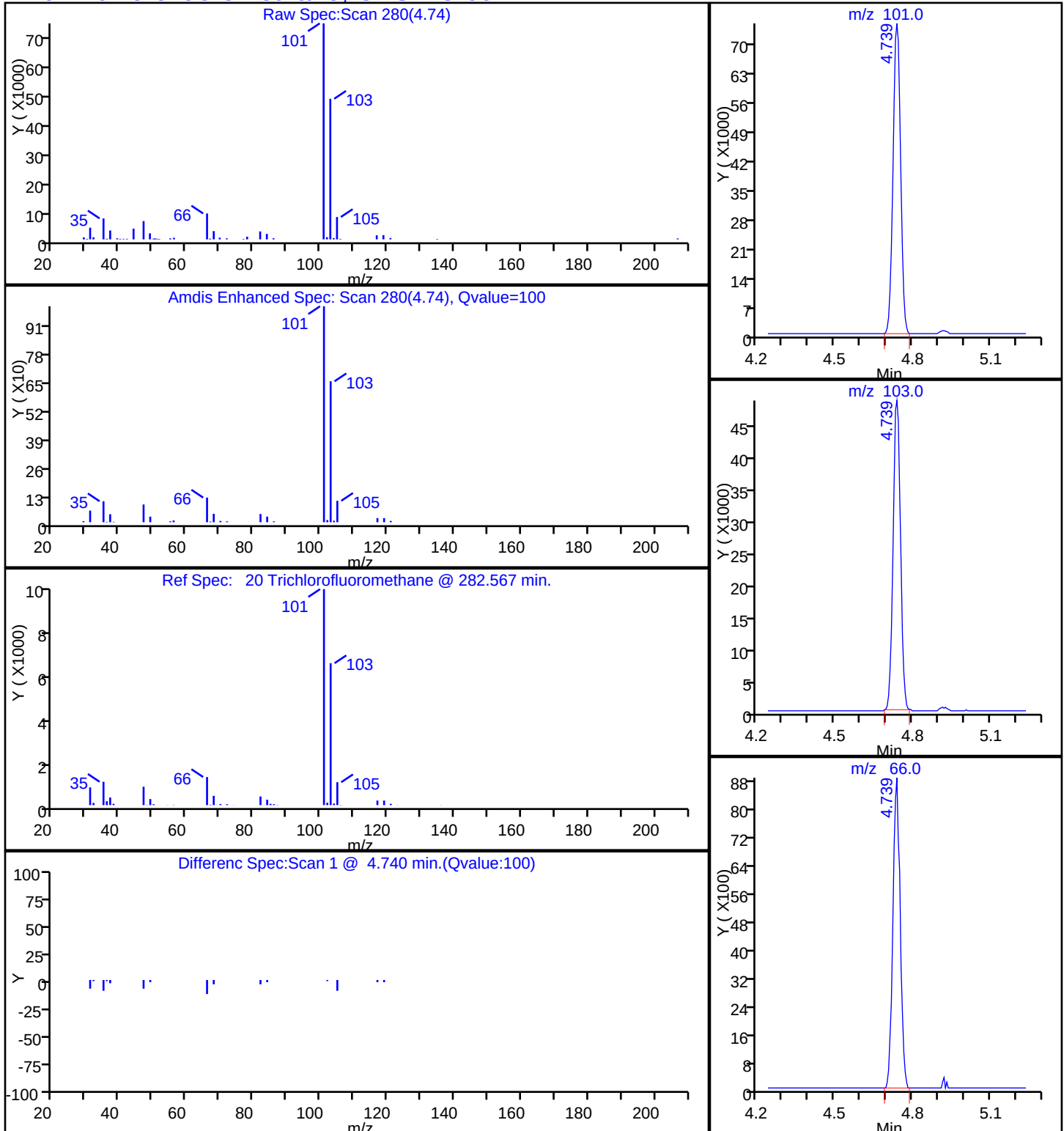
Dil. Factor: 1.0000

Method: MG_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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H19-BA Lab Sample ID: 140-7685-11
 Matrix: Air Lab File ID: GD04P111.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 13:01
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 23:08
 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.: 10155 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	0.13		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	0.073		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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H19-BA Lab Sample ID: 140-7685-11
 Matrix: Air Lab File ID: GD04P111.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 13:01
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 23:08
 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.: 10155 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	0.66		0.080	
64-17-5	Ethanol	46.07	16		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	3.5		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.18		0.080	
95-47-6	o-Xylene	106.17	ND		0.080	
100-42-5	Styrene	104.15	0.11		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	0.31		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	1.3		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H19-BA Lab Sample ID: 140-7685-11
 Matrix: Air Lab File ID: GD04P111.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 13:01
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 23:08
 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.: 10155 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	0.40		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	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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H19-BA Lab Sample ID: 140-7685-11
 Matrix: Air Lab File ID: GD04P111.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 13:01
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 23:08
 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.: 10155 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	3.2		0.40	
64-17-5	Ethanol	46.07	31		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	12		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	0.78		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	0.48		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	1.2		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.21	
75-69-4	Trichlorofluoromethane	137.37	7.5		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P111.D
 Lims ID: 140-7685-A-11
 Client ID: H19-BA
 Sample Type: Client
 Inject. Date: 04-Apr-2017 23:08:30 ALS Bottle#: 11 Worklist Smp#: 19
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004508-019
 Misc. Info.: 140-7685-a-11
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 05-Apr-2017 10:01:21 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 09:59:58

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.980	7.980	0.000	72	266425	4.00	
* 2 1,4-Difluorobenzene	114	10.142	10.148	-0.006	95	1321188	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.017	15.022	-0.005	88	1311228	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.689	16.694	-0.006	94	1060332	4.09	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	184923	0.6558	
9 Chloromethane	52	3.666	3.666	0.000	98	7333	0.3866	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.671	0.000	41	2708	0.0161	
16 Chloroethane	64	4.254	4.259	-0.005	24	566	0.0150	
17 Ethanol	31	4.362	4.356	0.006	97	441372	16.5	
20 Trichlorofluoromethane	101	4.739	4.744	-0.005	99	373727	1.33	
29 2-Methyl-2-propanol	59	5.483	5.456	0.027	90	2778	0.0257	
30 1,1,2-Trichloro-1,2,2-trif	101	5.521	5.521	0.000	92	10429	0.0637	
31 Methylene Chloride	84	5.650	5.650	0.000	86	222490	3.47	
39 2-Butanone (MEK)	72	7.268	7.268	0.000	97	17664	0.5826	
40 Hexane	56	7.322	7.327	-0.005	75	3564	0.0677	
44 Chloroform	83	8.007	8.007	0.000	92	10553	0.0565	
49 Benzene	78	9.565	9.565	0.000	97	28396	0.1265	
51 Carbon tetrachloride	117	9.592	9.598	-0.006	97	17059	0.0727	
56 Isooctane	57	10.401	10.396	0.005	50	6755	0.0203	
59 Trichloroethene	130	10.876	10.881	-0.005	91	3271	0.0269	
65 4-Methyl-2-pentanone (MIBK	43	12.121	12.116	0.005	95	8055	0.0625	
68 Toluene	91	13.000	13.006	-0.006	93	80185	0.3070	
79 Ethylbenzene	91	15.378	15.378	0.000	99	16282	0.0446	
81 m-Xylene & p-Xylene	91	15.540	15.545	-0.005	99	52838	0.1793	
83 Styrene	104	16.009	16.014	-0.005	97	21817	0.1122	
85 o-Xylene	91	16.074	16.074	0.000	95	22230	0.0738	
96 1,2,4-Trimethylbenzene	105	17.940	17.940	0.000	97	12374	0.0334	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P111.D

Injection Date: 04-Apr-2017 23:08:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7685-A-11

Lab Sample ID: 140-7685-11

Worklist Smp#: 19

Client ID: H19-BA

Purge Vol: 500.000 mL

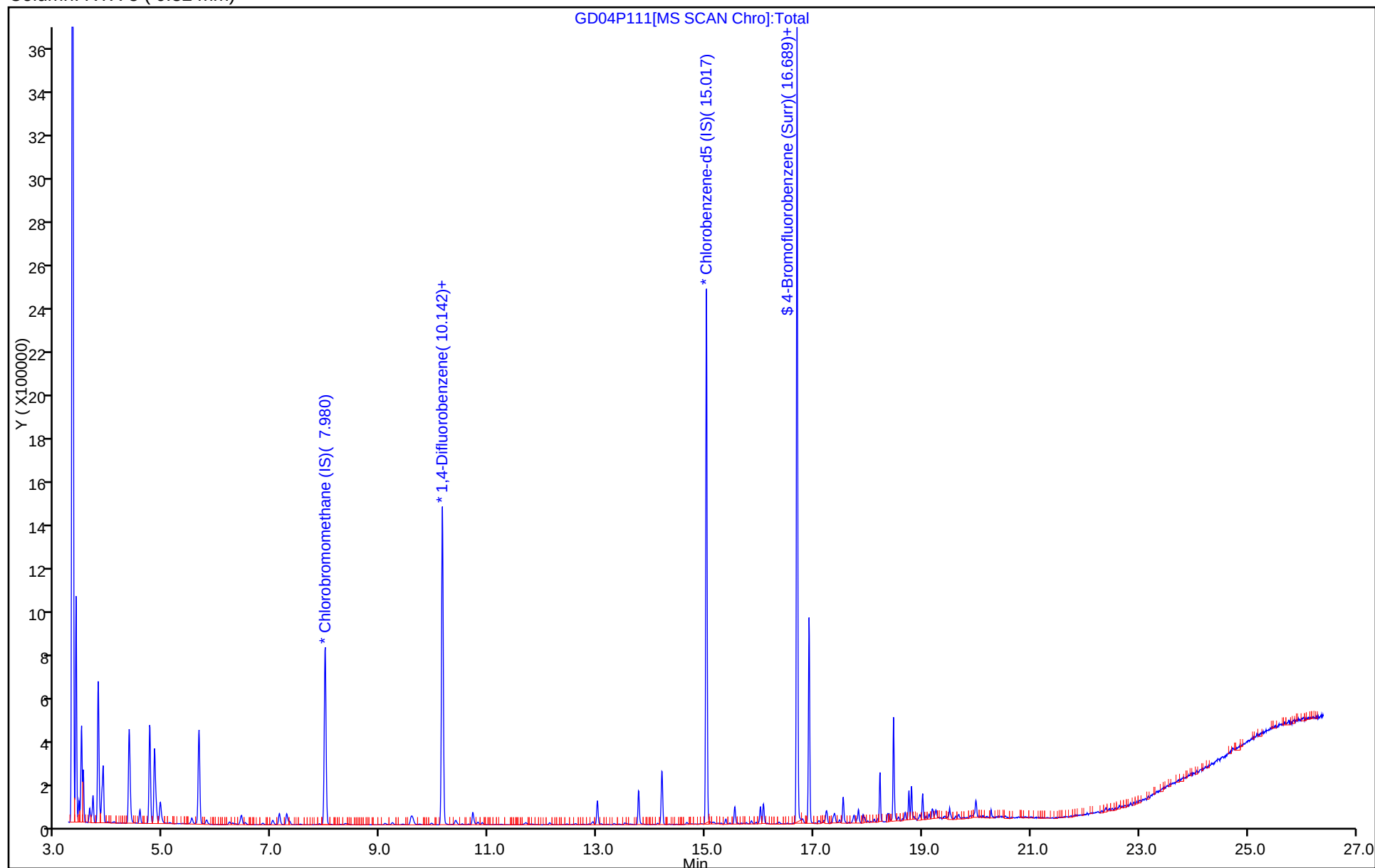
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P111.D
Lims ID: 140-7685-A-11
Client ID: H19-BA
Sample Type: Client
Inject. Date: 04-Apr-2017 23:08:30 ALS Bottle#: 11 Worklist Smp#: 19
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004508-019
Misc. Info.: 140-7685-a-11
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 05-Apr-2017 10:01:21 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 09:59:58

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.09	102.30

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P111.D

Injection Date: 04-Apr-2017 23:08:30

Instrument ID: MG

Lims ID: 140-7685-A-11

Lab Sample ID: 140-7685-11

Client ID: H19-BA

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 19

Purge Vol: 500.000 mL

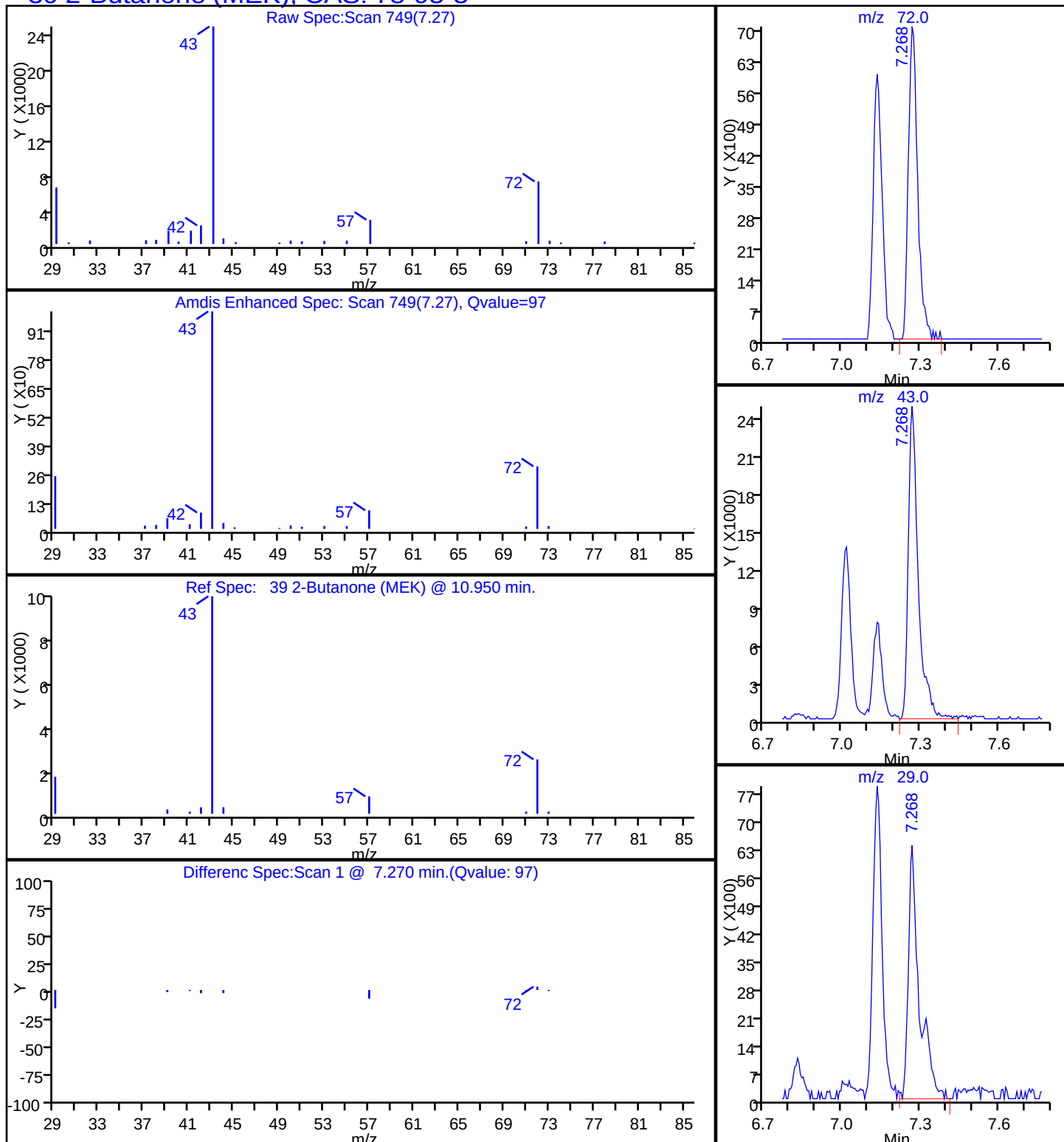
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P111.D

Injection Date: 04-Apr-2017 23:08:30

Instrument ID: MG

Lims ID: 140-7685-A-11

Lab Sample ID: 140-7685-11

Client ID: H19-BA

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 19

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

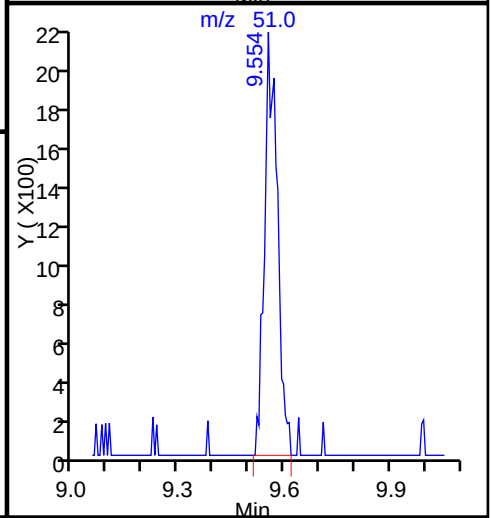
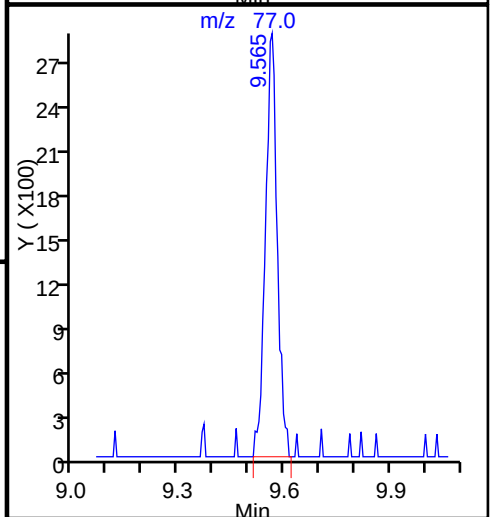
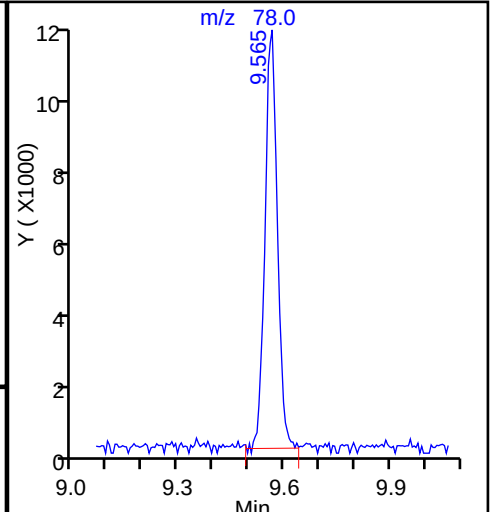
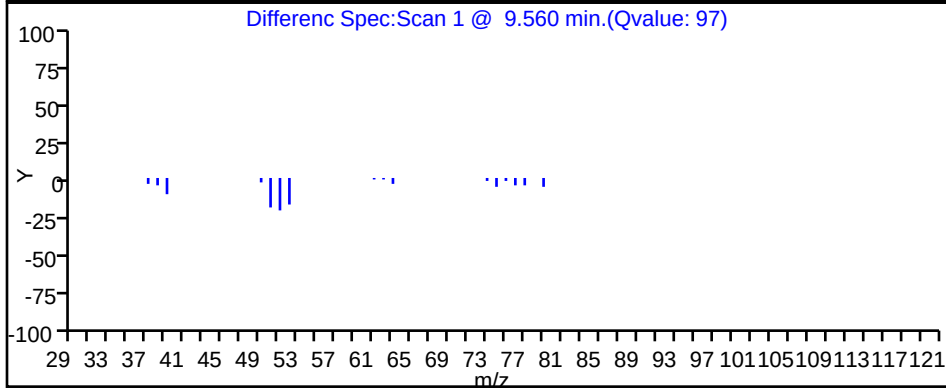
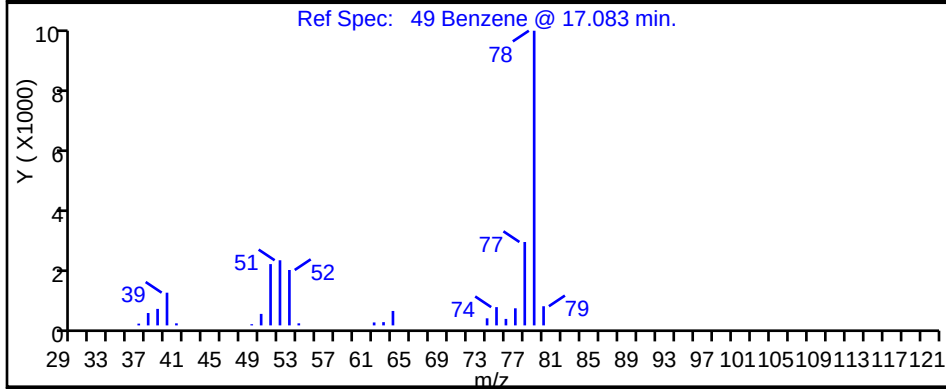
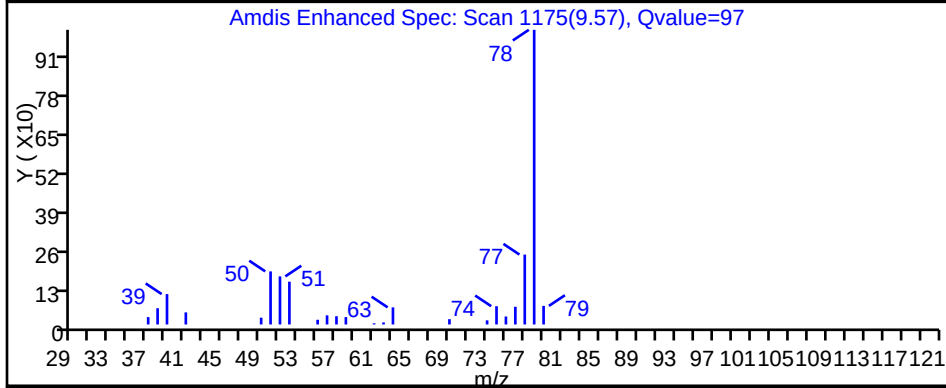
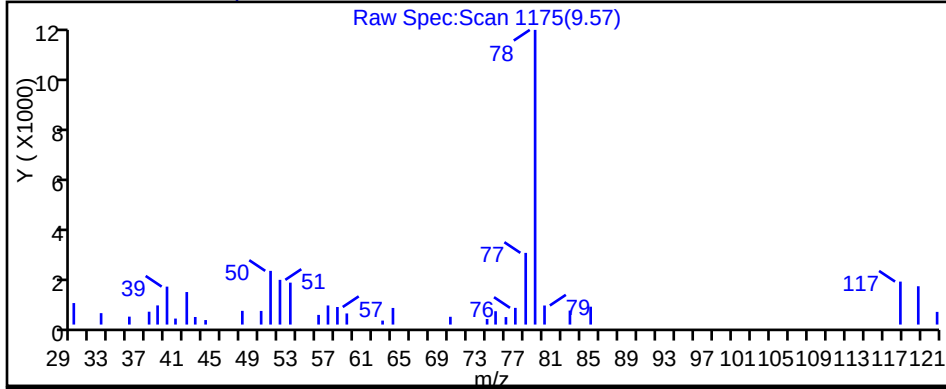
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P111.D

Injection Date: 04-Apr-2017 23:08:30

Instrument ID: MG

Lims ID: 140-7685-A-11

Lab Sample ID: 140-7685-11

Client ID: H19-BA

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 19

Purge Vol: 500.000 mL

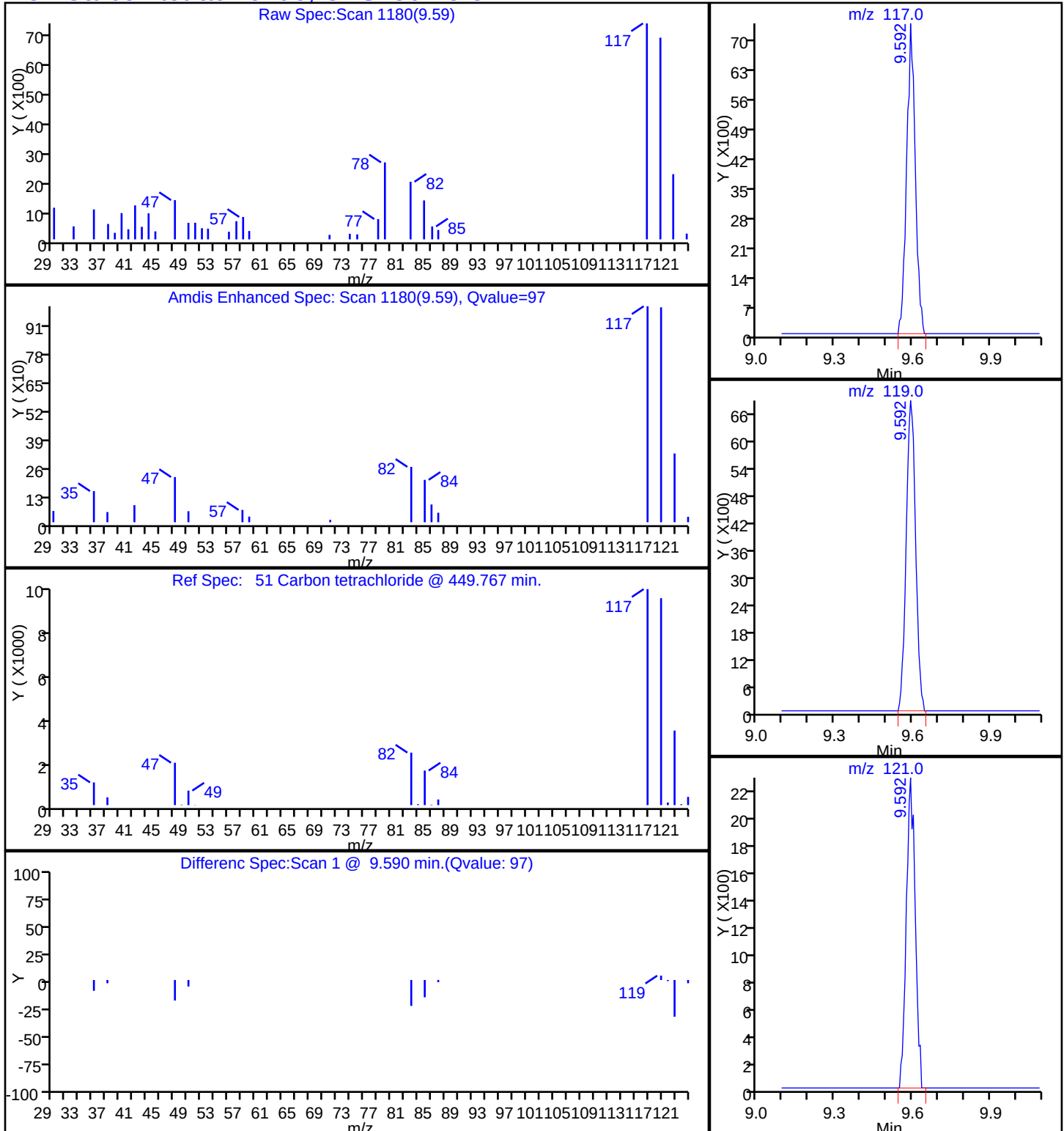
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P111.D

Injection Date: 04-Apr-2017 23:08:30

Instrument ID: MG

Lims ID: 140-7685-A-11

Lab Sample ID: 140-7685-11

Client ID: H19-BA

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 19

Purge Vol: 500.000 mL

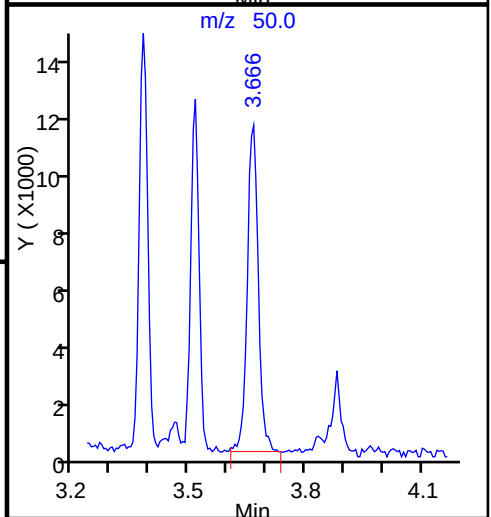
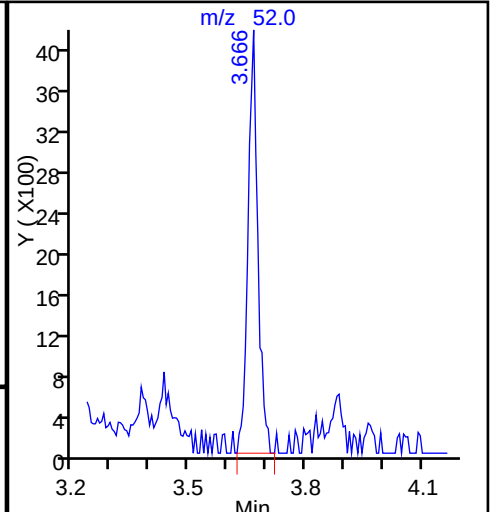
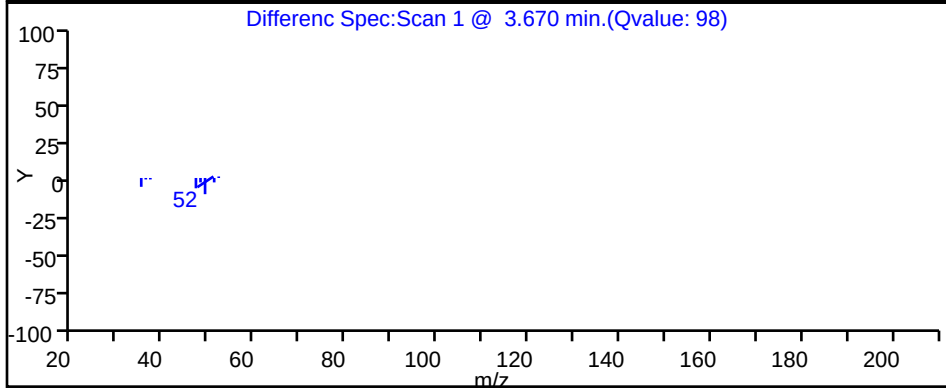
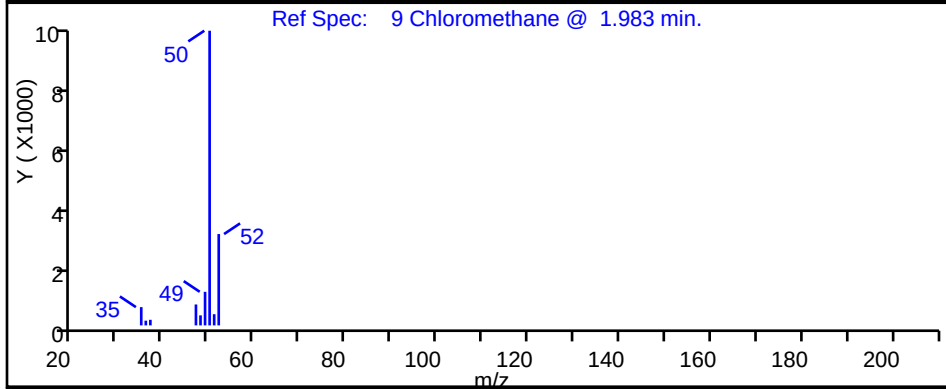
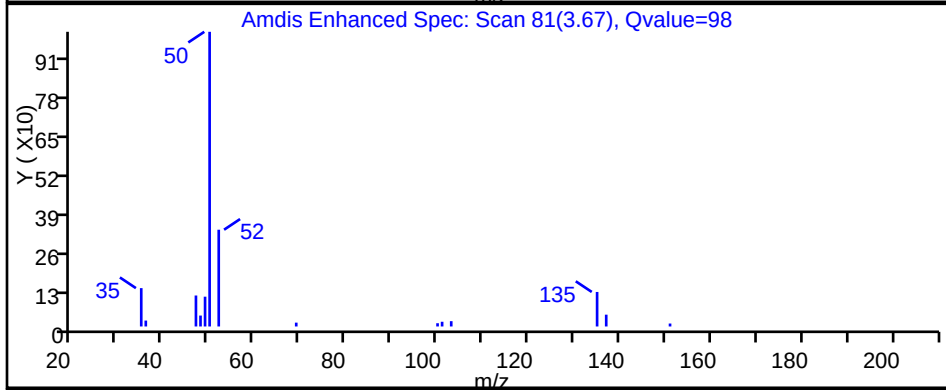
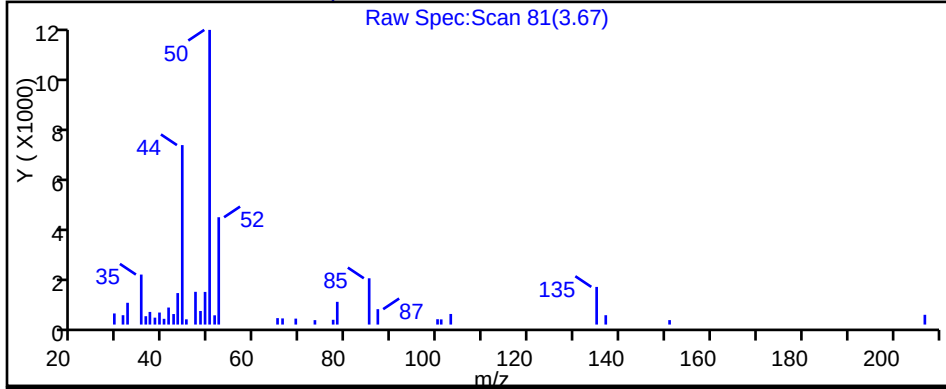
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P111.D

Injection Date: 04-Apr-2017 23:08:30

Instrument ID: MG

Lims ID: 140-7685-A-11

Lab Sample ID: 140-7685-11

Client ID: H19-BA

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 19

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

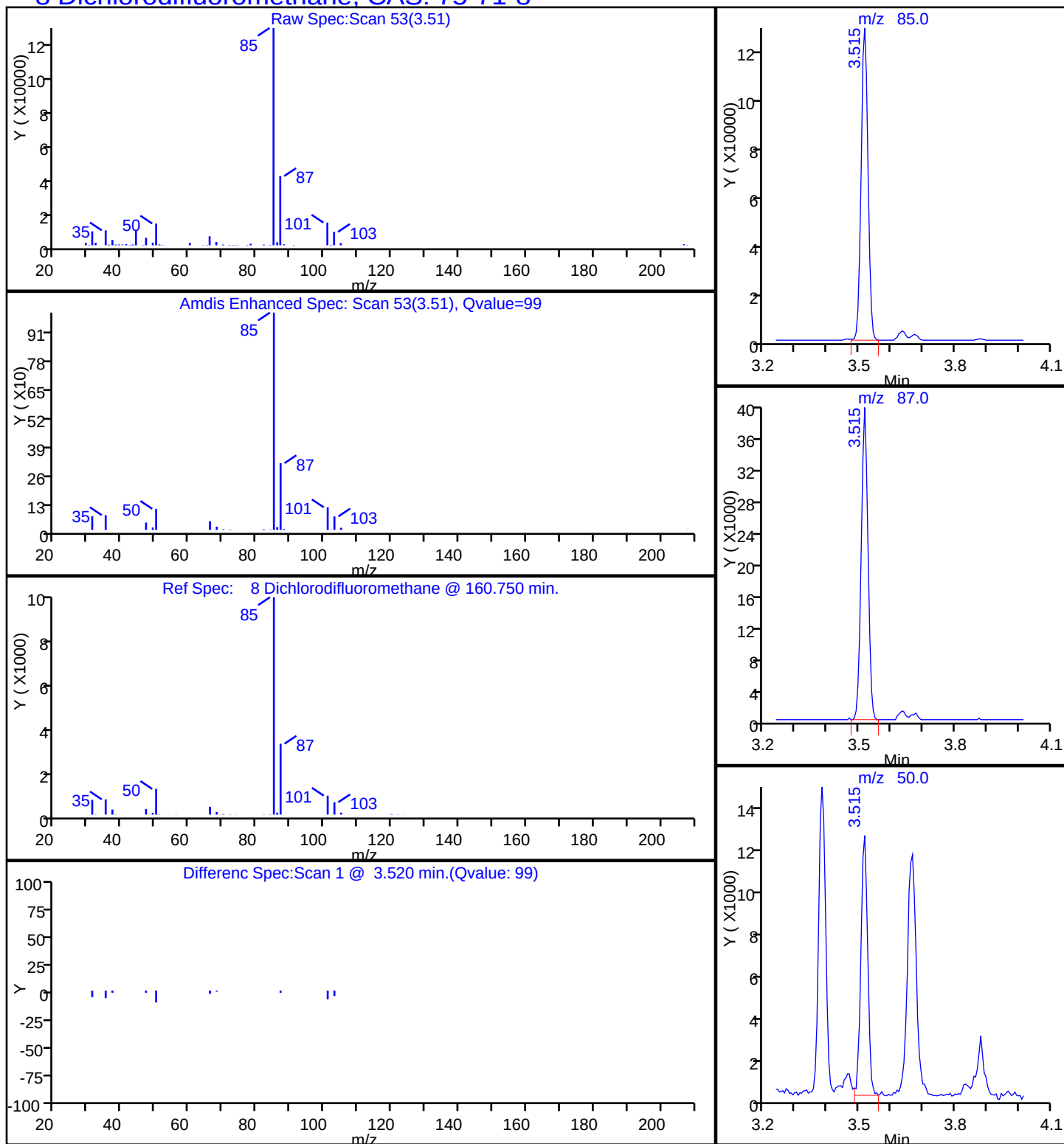
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P111.D

Injection Date: 04-Apr-2017 23:08:30

Instrument ID: MG

Lims ID: 140-7685-A-11

Lab Sample ID: 140-7685-11

Client ID: H19-BA

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 19

Purge Vol: 500.000 mL

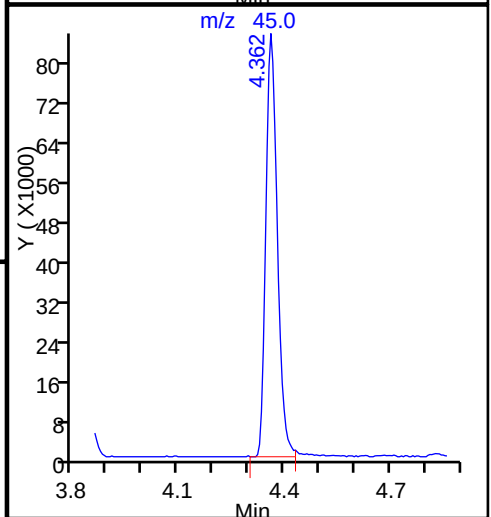
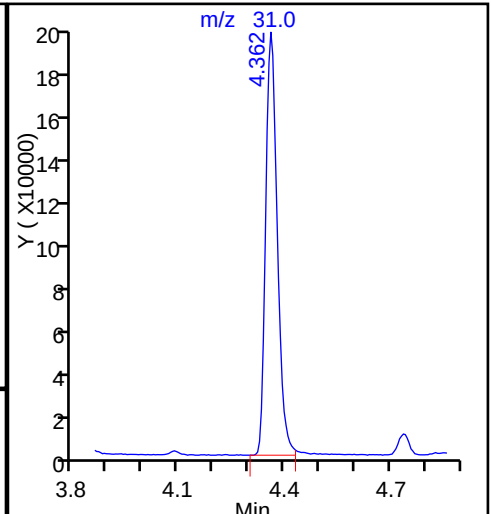
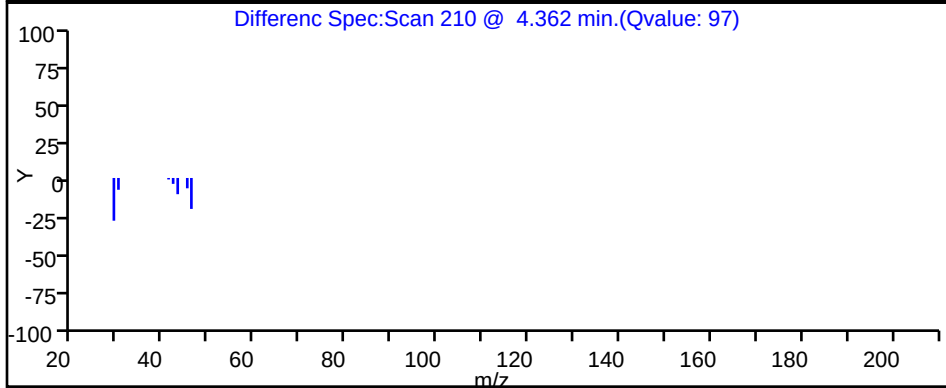
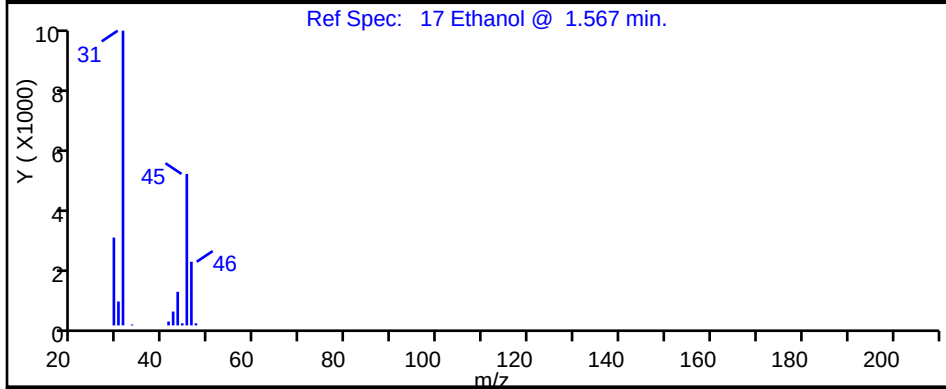
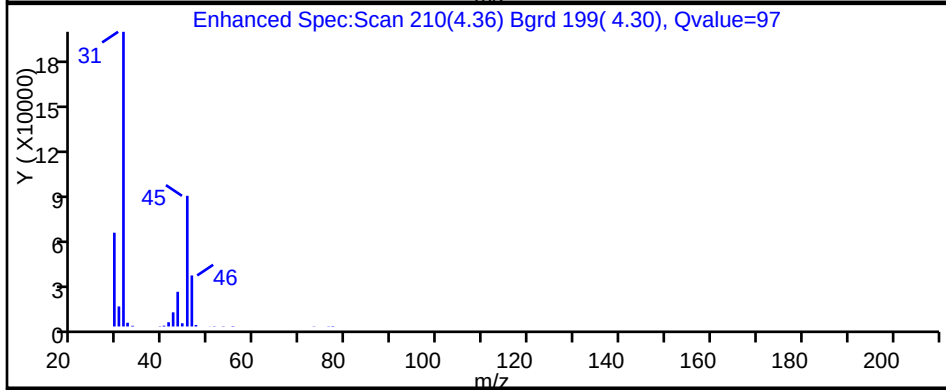
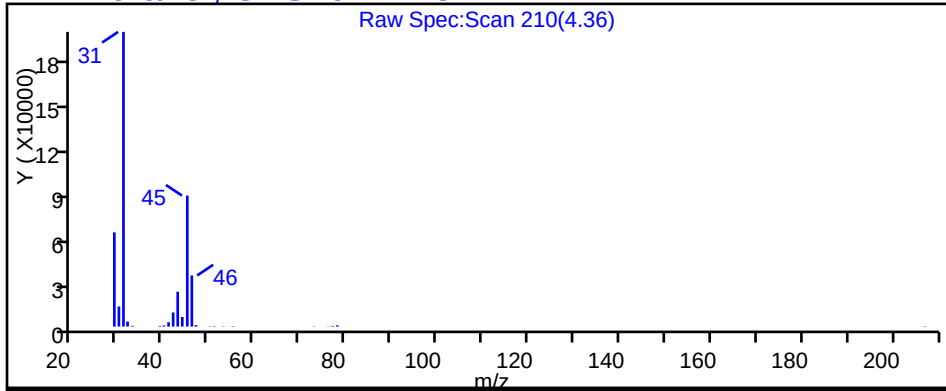
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P111.D

Injection Date: 04-Apr-2017 23:08:30

Instrument ID: MG

Lims ID: 140-7685-A-11

Lab Sample ID: 140-7685-11

Client ID: H19-BA

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 19

Purge Vol: 500.000 mL

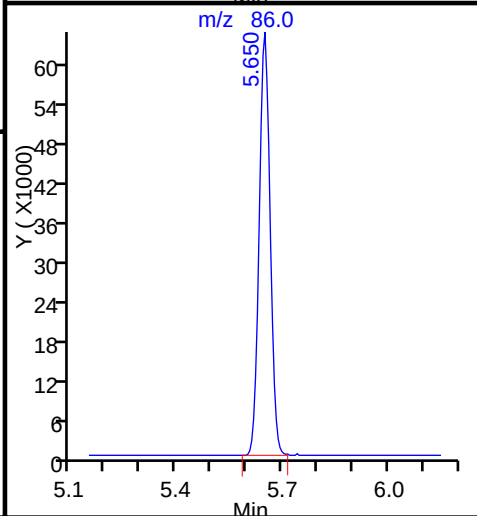
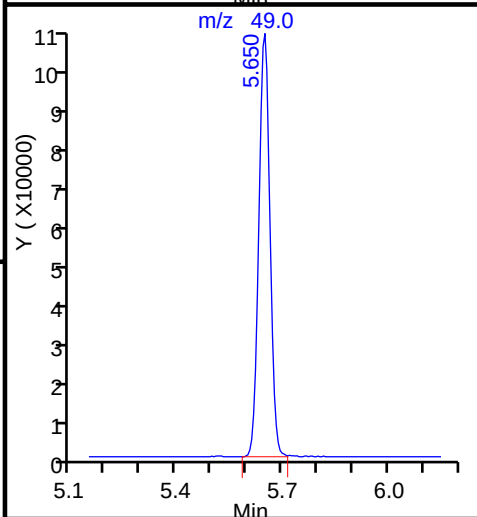
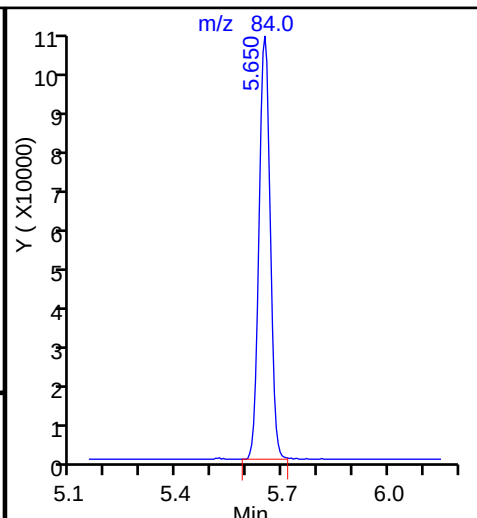
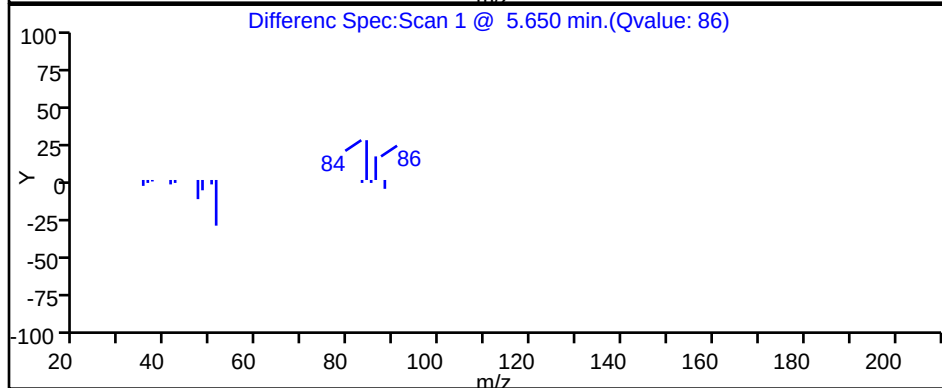
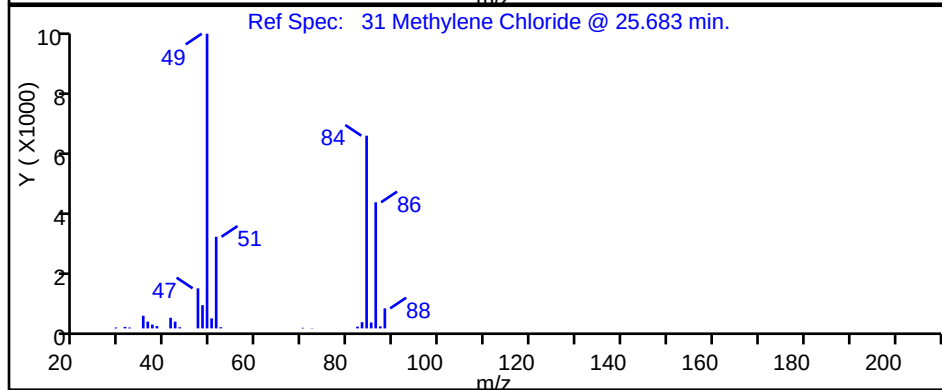
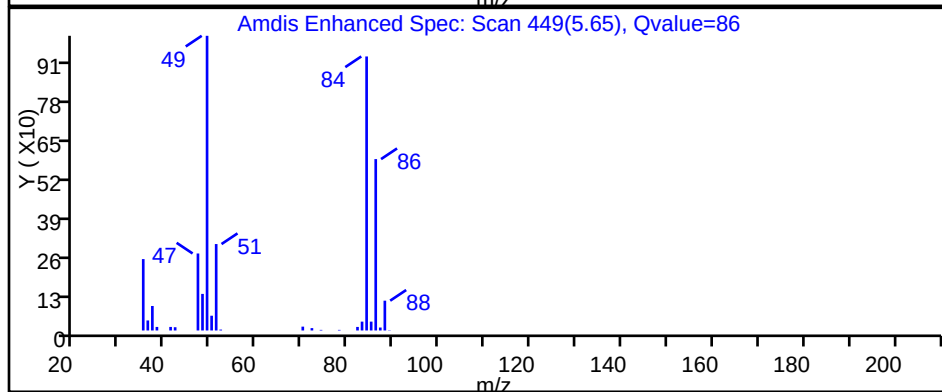
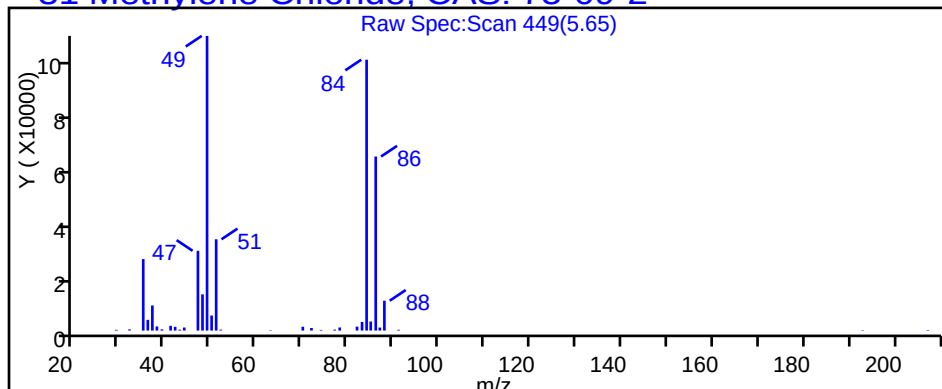
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P111.D

Injection Date: 04-Apr-2017 23:08:30

Instrument ID: MG

Lims ID: 140-7685-A-11

Lab Sample ID: 140-7685-11

Client ID: H19-BA

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 19

Purge Vol: 500.000 mL

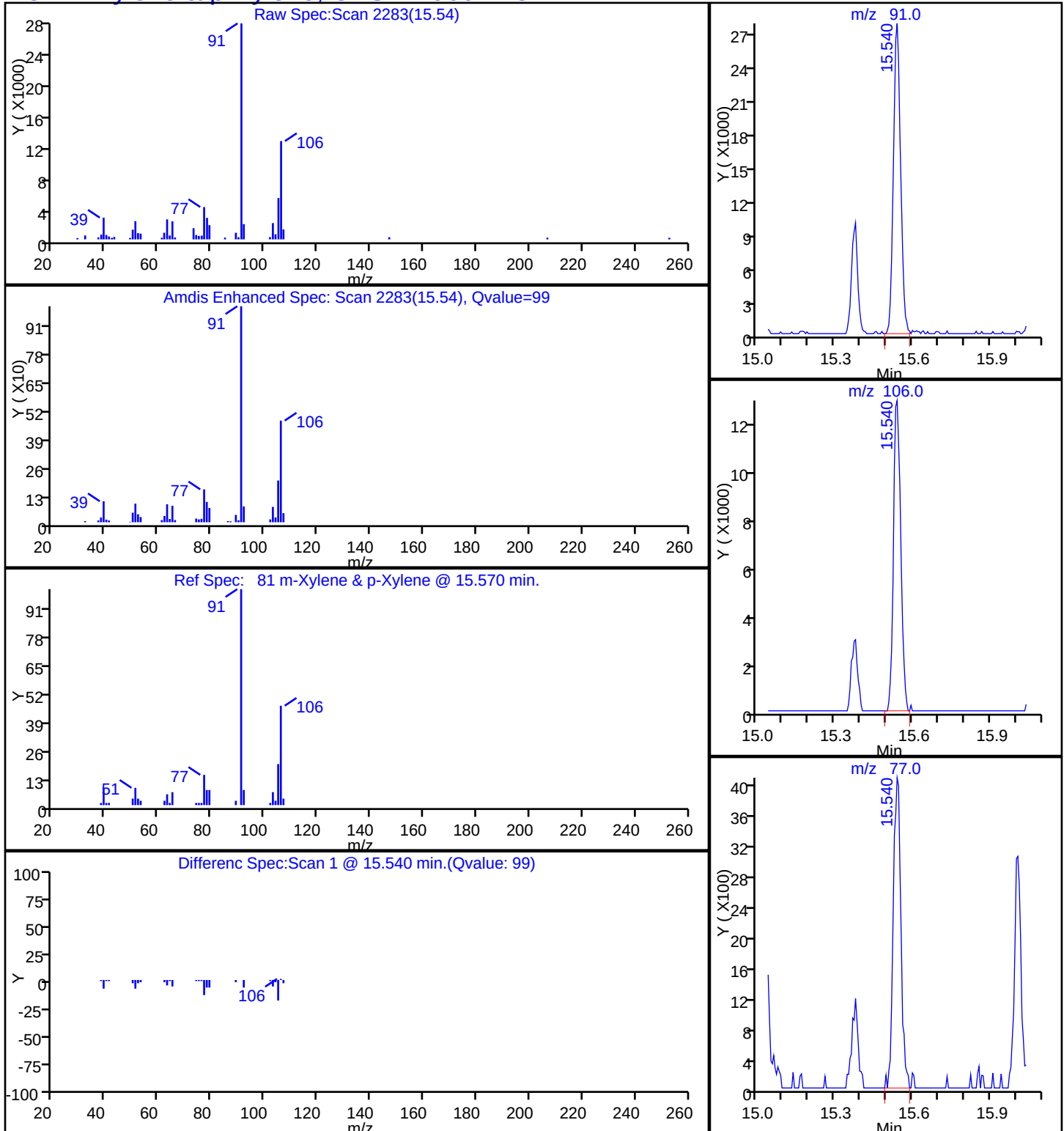
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P111.D

Injection Date: 04-Apr-2017 23:08:30

Instrument ID: MG

Lims ID: 140-7685-A-11

Lab Sample ID: 140-7685-11

Client ID: H19-BA

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 19

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

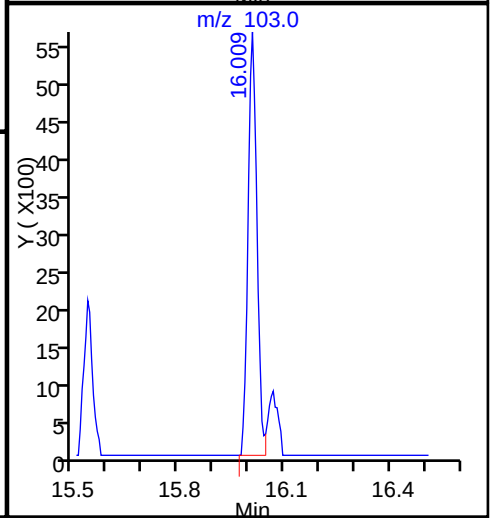
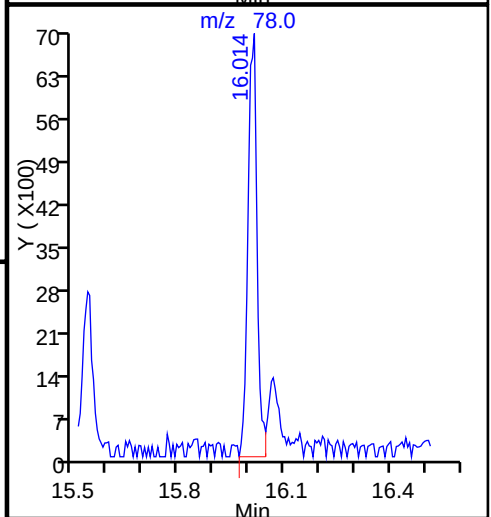
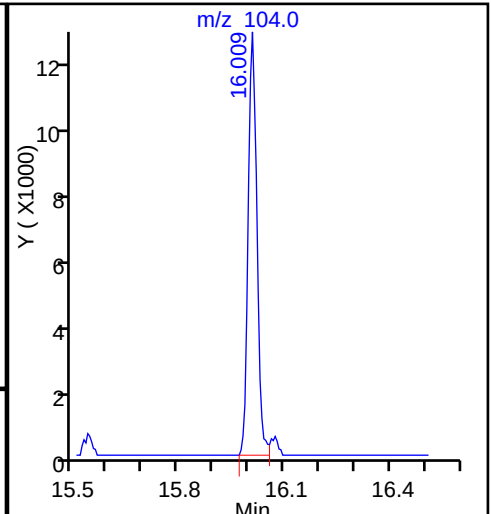
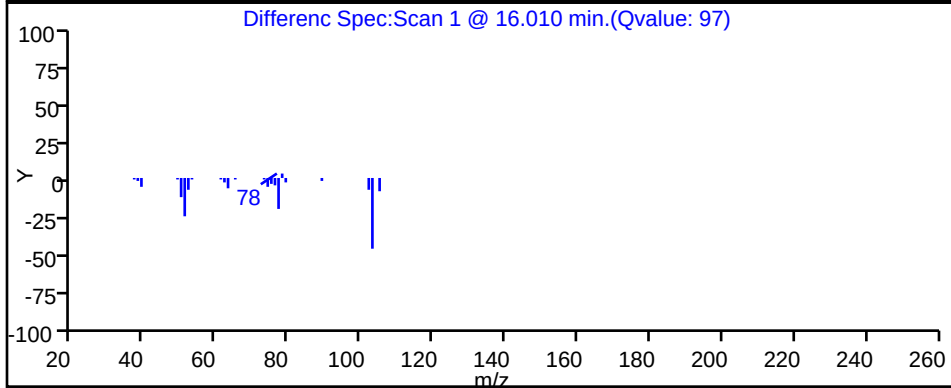
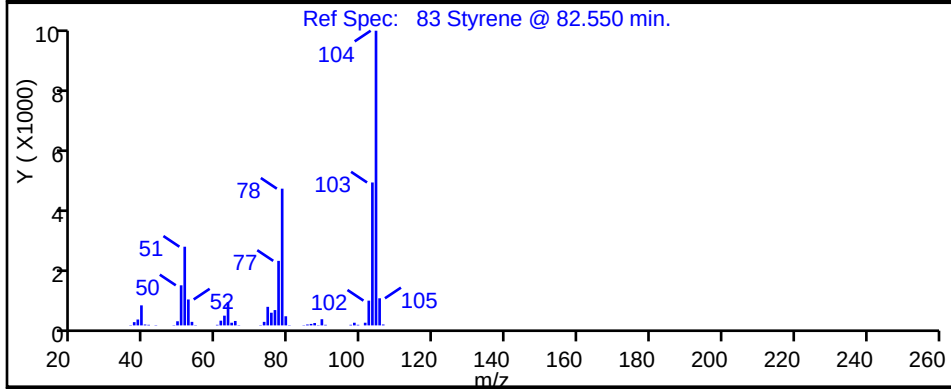
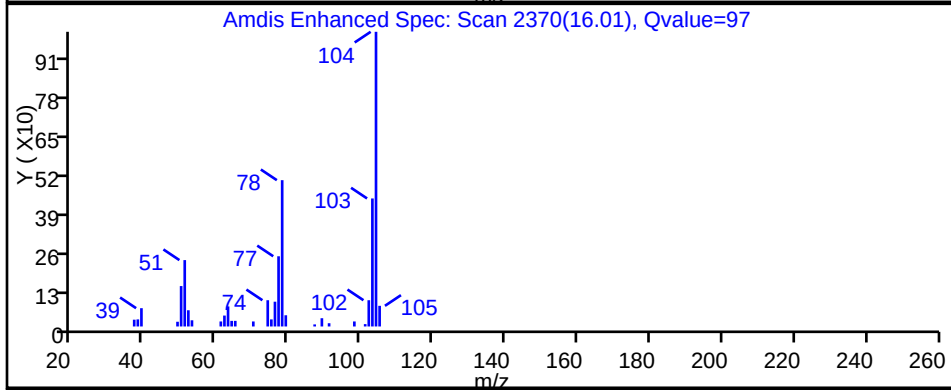
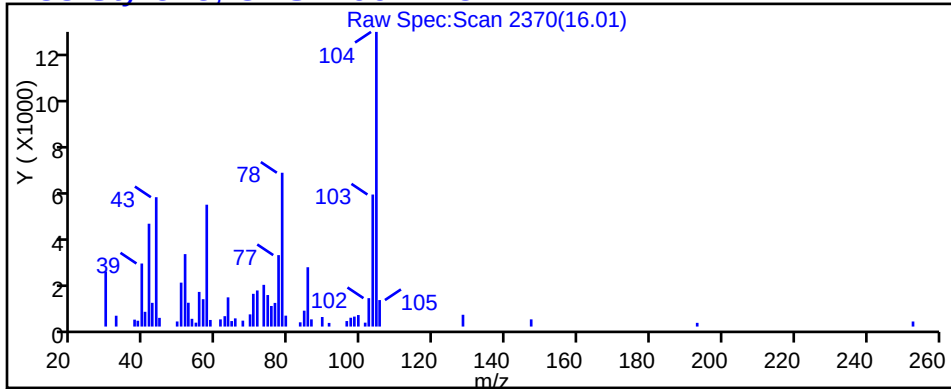
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

83 Styrene, CAS: 100-42-5



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P111.D

Injection Date: 04-Apr-2017 23:08:30

Instrument ID: MG

Lims ID: 140-7685-A-11

Lab Sample ID: 140-7685-11

Client ID: H19-BA

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 19

Purge Vol: 500.000 mL

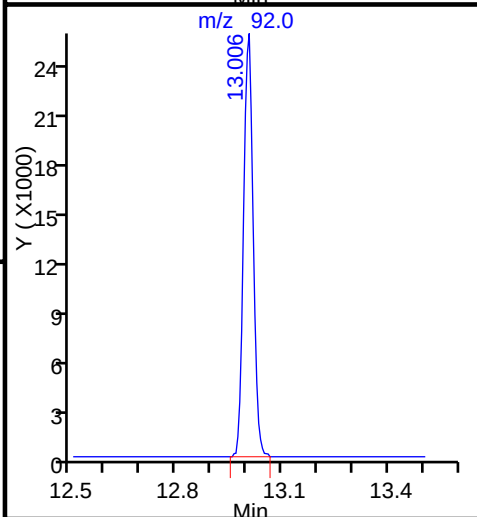
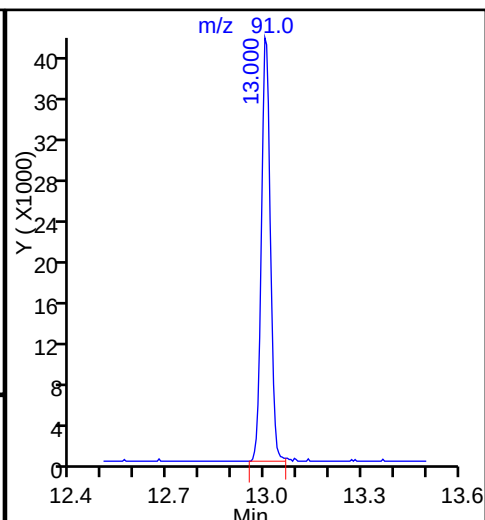
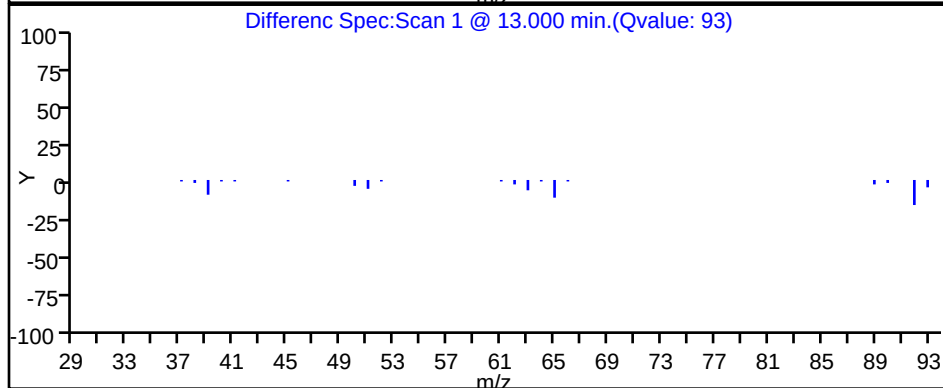
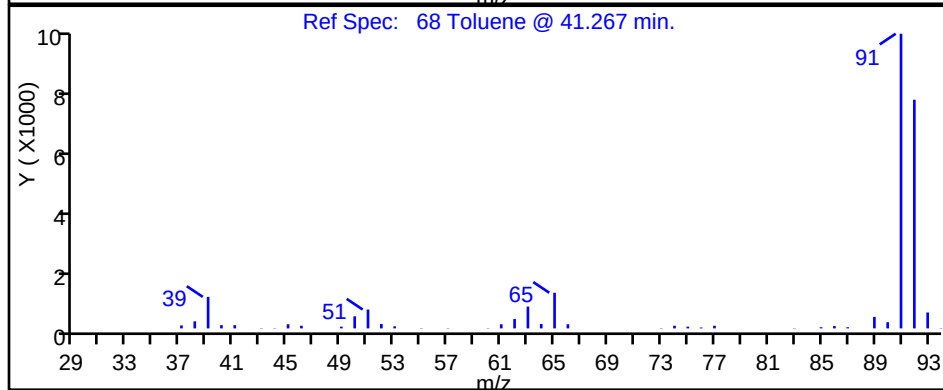
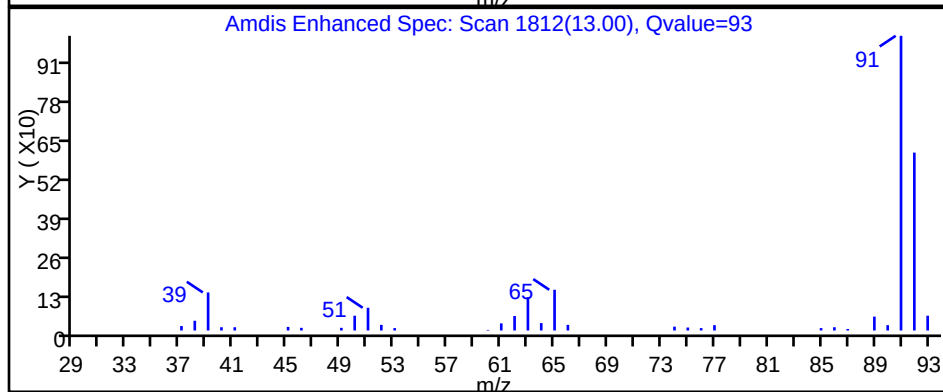
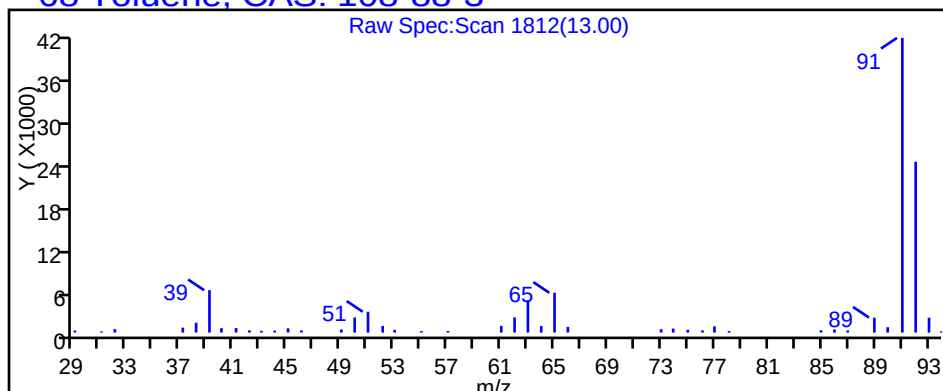
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P111.D

Injection Date: 04-Apr-2017 23:08:30

Instrument ID: MG

Lims ID: 140-7685-A-11

Lab Sample ID: 140-7685-11

Client ID: H19-BA

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 19

Purge Vol: 500.000 mL

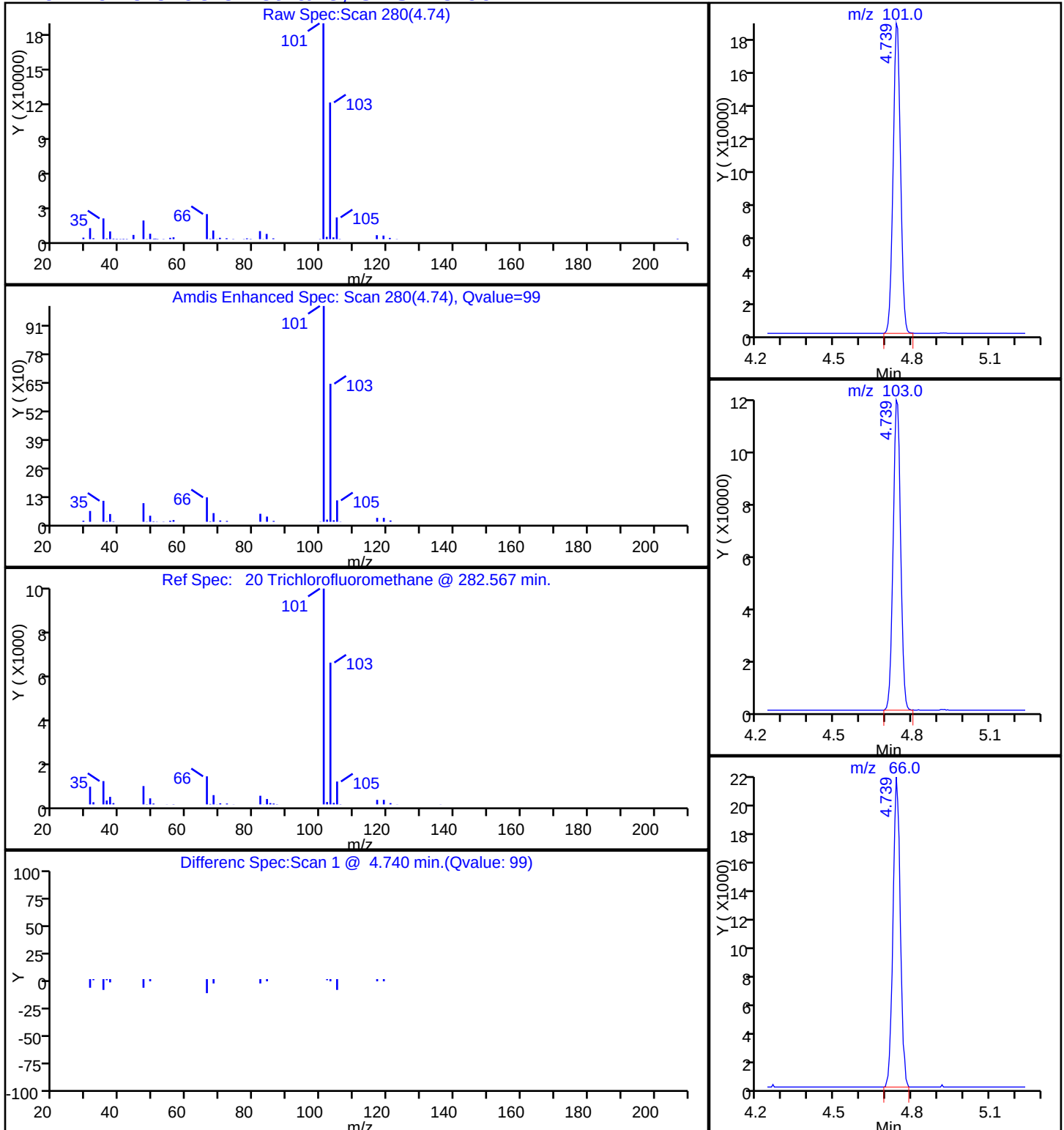
Dil. Factor: 1.0000

Method: MG_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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H19-FF Lab Sample ID: 140-7685-12
 Matrix: Air Lab File ID: GD04P112.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 13:02
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 23:57
 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.: 10155 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	0.16		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	0.79		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	0.076		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	0.082		0.080	
74-87-3	Chloromethane	50.49	0.46		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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H19-FF Lab Sample ID: 140-7685-12
 Matrix: Air Lab File ID: GD04P112.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 13:02
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 23:57
 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.: 10155 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	0.63		0.080	
64-17-5	<i>Ethanol</i>	<i>46.07</i>	<i>170</i>	<i>E</i>	<i>2.0</i>	
100-41-4	Ethylbenzene	106.17	0.22		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	1.9		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	1.3		0.080	
95-47-6	o-Xylene	106.17	0.61		0.080	
100-42-5	Styrene	104.15	2.4		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	ND		0.040	
75-69-4	Trichlorofluoromethane	137.37	5.8		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H19-FF Lab Sample ID: 140-7685-12
 Matrix: Air Lab File ID: GD04P112.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 13:02
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 23:57
 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.: 10155 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	0.78		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	2.3		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.53		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	0.40		0.39	
74-87-3	Chloromethane	50.49	0.95		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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H19-FF Lab Sample ID: 140-7685-12
 Matrix: Air Lab File ID: GD04P112.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 13:02
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 23:57
 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.: 10155 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	3.1		0.40	
64-17-5	<i>Ethanol</i>	<i>46.07</i>	<i>320</i>	<i>E</i>	<i>3.8</i>	
100-41-4	Ethylbenzene	106.17	0.94		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	6.5		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	5.8		0.35	
95-47-6	o-Xylene	106.17	2.7		0.35	
100-42-5	Styrene	104.15	10		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	4.5		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	33		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P112.D
 Lims ID: 140-7685-A-12
 Client ID: H19-FF
 Sample Type: Client
 Inject. Date: 04-Apr-2017 23:57:30 ALS Bottle#: 12 Worklist Smp#: 20
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004508-020
 Misc. Info.: 140-7685-a-12
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 05-Apr-2017 10:01:21 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 09:36:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.991	7.980	0.011	72	271022	4.00	
* 2 1,4-Difluorobenzene	114	10.153	10.148	0.005	95	1352154	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.022	15.022	0.000	88	1352469	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.694	16.694	0.000	94	1095605	4.10	
8 Dichlorodifluoromethane	85	3.526	3.515	0.011	99	179788	0.6268	
9 Chloromethane	52	3.677	3.666	0.011	99	8903	0.4614	
17 Ethanol	31	4.475	4.356	0.119	97	4660205	170.9	E
20 Trichlorofluoromethane	101	4.755	4.744	0.011	99	1664804	5.83	
29 2-Methyl-2-propanol	59	5.575	5.456	0.119	40	4545	0.0413	
30 1,1,2-Trichloro-1,2,2-trif	101	5.532	5.521	0.011	96	10776	0.0647	
31 Methylene Chloride	84	5.667	5.650	0.017	87	121035	1.86	
39 2-Butanone (MEK)	72	7.284	7.268	0.016	98	24498	0.7943	
40 Hexane	56	7.333	7.327	0.006	70	4774	0.0892	
44 Chloroform	83	8.012	8.007	0.005	92	15617	0.0821	
48 1,2-Dichloroethane	62	9.080	9.074	0.006	94	2892	0.0212	
49 Benzene	78	9.571	9.565	0.006	96	37783	0.1645	
50 Cyclohexane	69	9.576	9.576	0.000	50	2127	0.0550	
51 Carbon tetrachloride	117	9.603	9.598	0.005	96	18148	0.0756	
56 Isooctane	57	10.401	10.396	0.005	51	9176	0.0269	
62 1,4-Dioxane	88	11.156	11.129	0.027	88	4220	0.1357	
65 4-Methyl-2-pentanone (MIBK	43	12.143	12.116	0.027	95	20316	0.1540	
68 Toluene	91	13.011	13.006	0.005	93	323467	1.20	
76 Tetrachloroethene	129	14.187	14.181	0.006	91	3757	0.0305	
79 Ethylbenzene	91	15.378	15.378	0.000	99	81552	0.2167	
81 m-Xylene & p-Xylene	91	15.545	15.545	0.000	100	407432	1.34	
83 Styrene	104	16.015	16.014	0.001	97	481245	2.40	
85 o-Xylene	91	16.079	16.074	0.005	97	189742	0.6105	
92 1,3,5-Trimethylbenzene	120	17.481	17.481	0.000	90	8372	0.0420	
96 1,2,4-Trimethylbenzene	105	17.945	17.940	0.005	98	60568	0.1586	

[QC Flag Legend](#)

Processing Flags

E - Exceeded Maximum Amount

[Reagents:](#)

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P112.D

Injection Date: 04-Apr-2017 23:57:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7685-A-12

Lab Sample ID: 140-7685-12

Worklist Smp#: 20

Client ID: H19-FF

Purge Vol: 500.000 mL

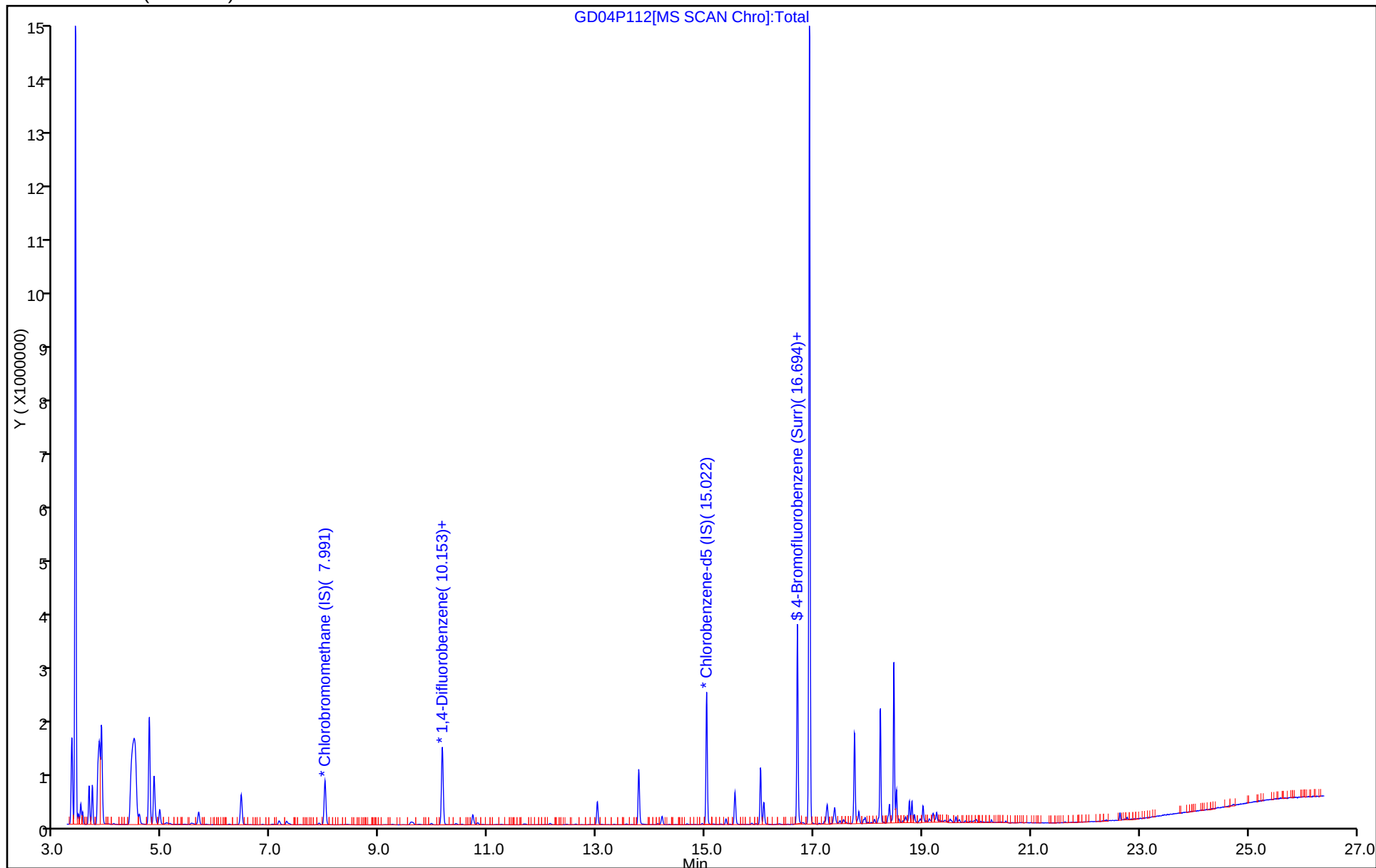
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P112.D
Lims ID: 140-7685-A-12
Client ID: H19-FF
Sample Type: Client
Inject. Date: 04-Apr-2017 23:57:30 ALS Bottle#: 12 Worklist Smp#: 20
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004508-020
Misc. Info.: 140-7685-a-12
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 05-Apr-2017 10:01:21 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 09:36:19

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.10	102.48

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P112.D

Injection Date: 04-Apr-2017 23:57:30

Instrument ID: MG

Lims ID: 140-7685-A-12

Lab Sample ID: 140-7685-12

Client ID: H19-FF

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 20

Purge Vol: 500.000 mL

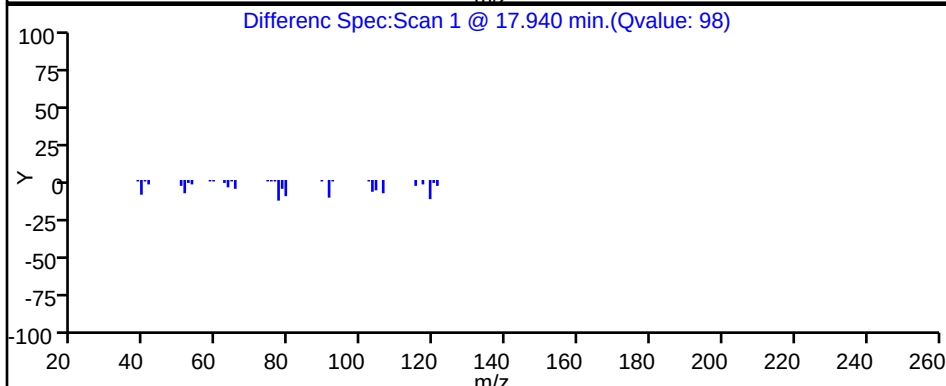
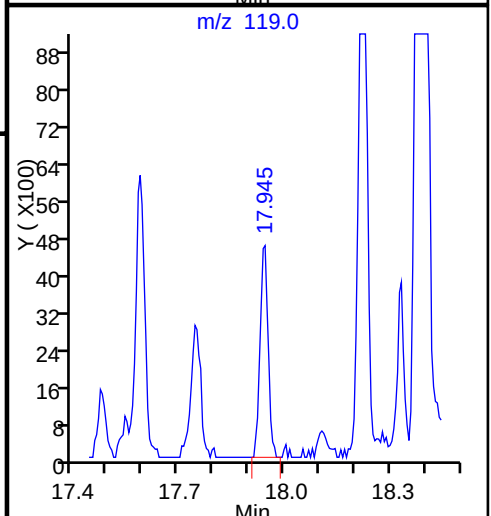
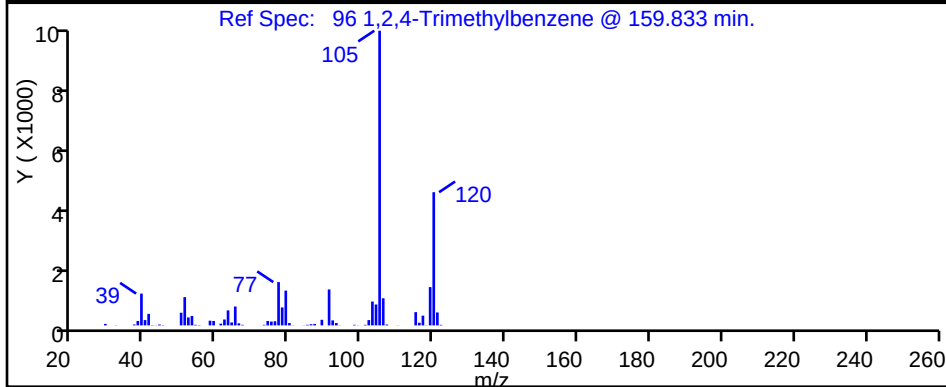
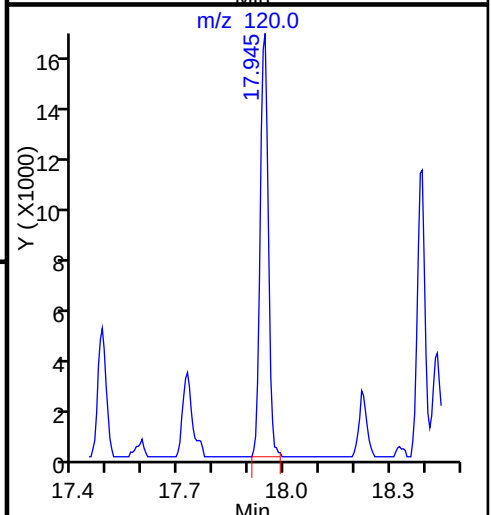
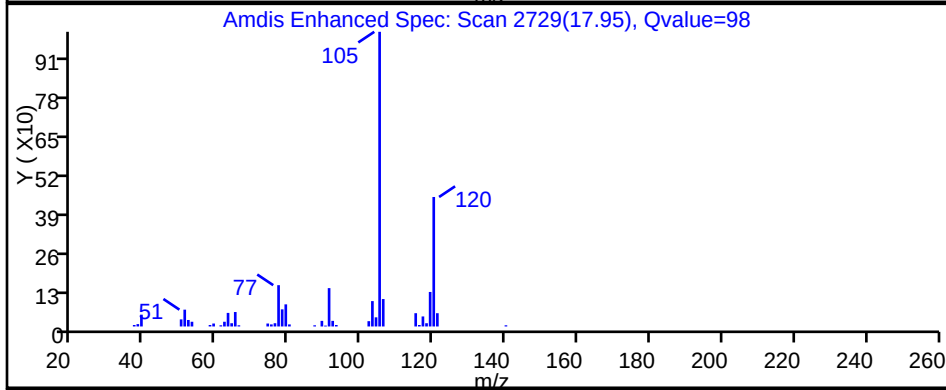
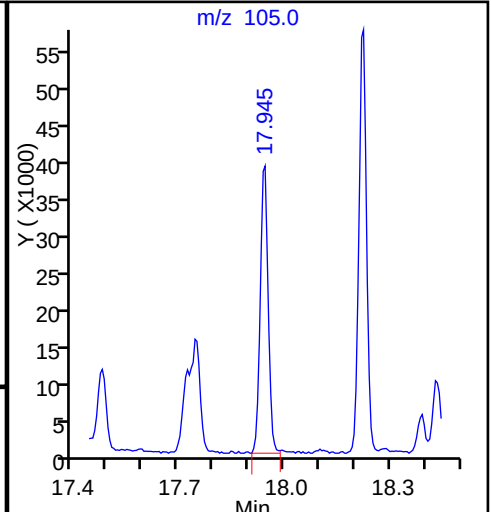
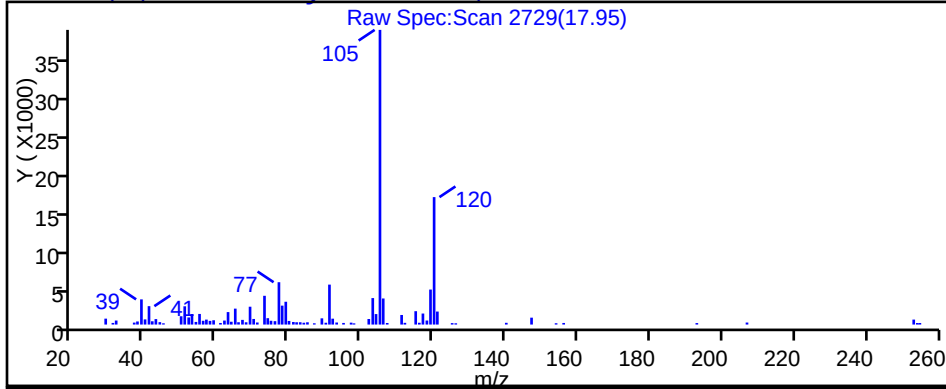
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

96 1,2,4-Trimethylbenzene, CAS: 95-63-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P112.D

Injection Date: 04-Apr-2017 23:57:30

Instrument ID: MG

Lims ID: 140-7685-A-12

Lab Sample ID: 140-7685-12

Client ID: H19-FF

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 20

Purge Vol: 500.000 mL

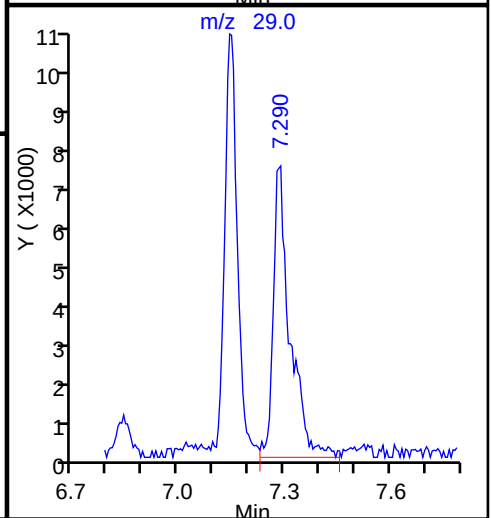
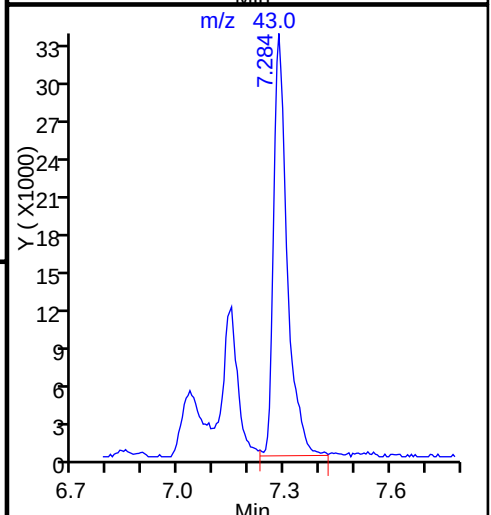
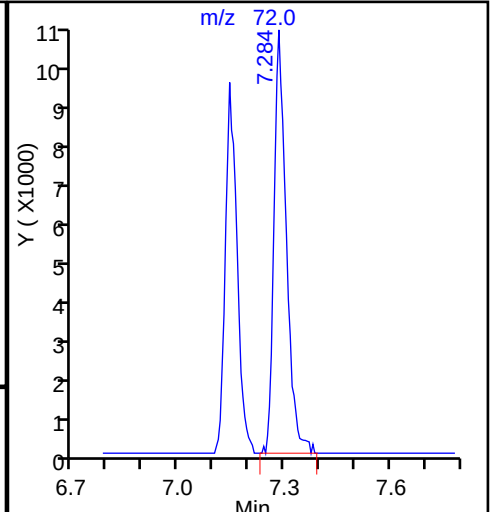
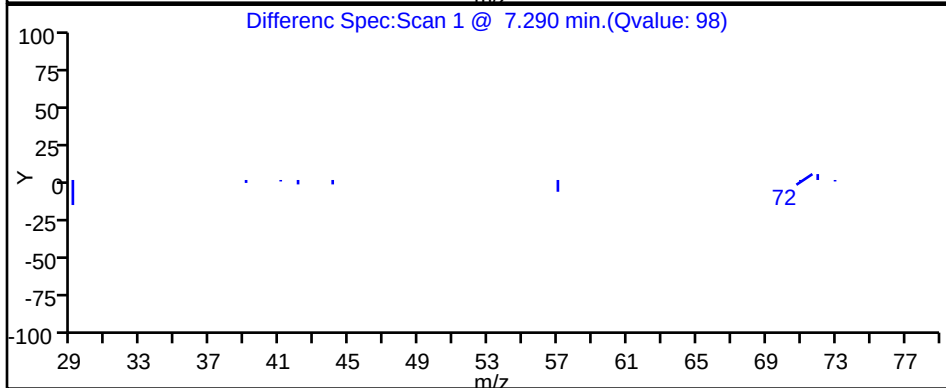
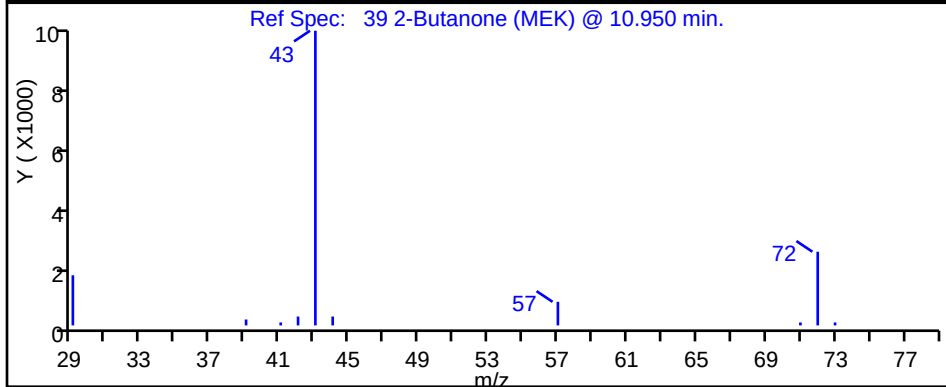
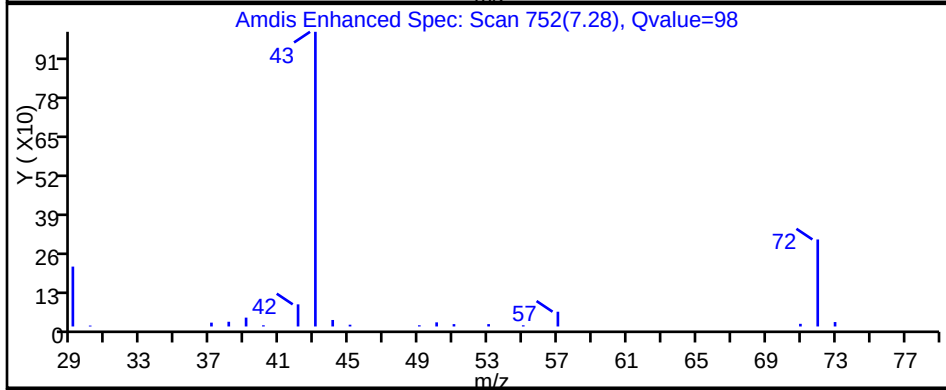
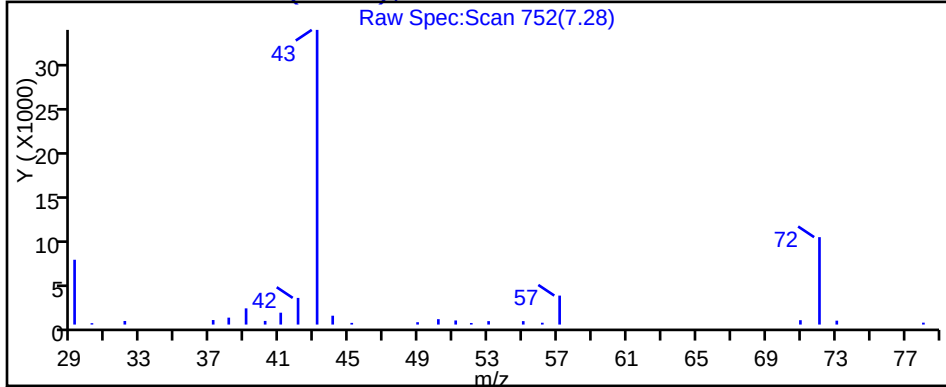
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P112.D

Injection Date: 04-Apr-2017 23:57:30

Instrument ID: MG

Lims ID: 140-7685-A-12

Lab Sample ID: 140-7685-12

Client ID: H19-FF

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 20

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

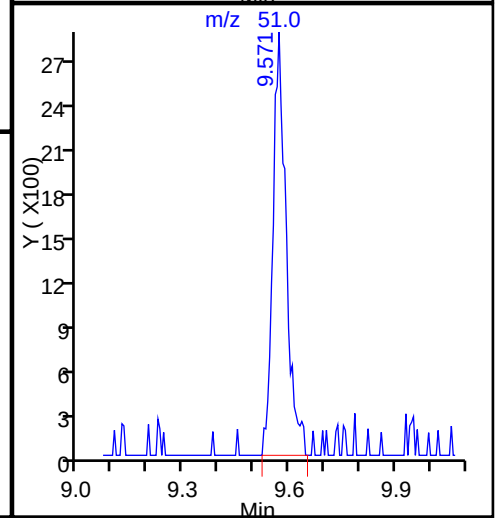
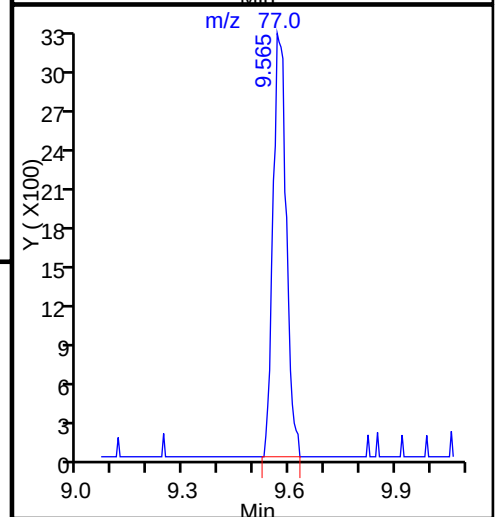
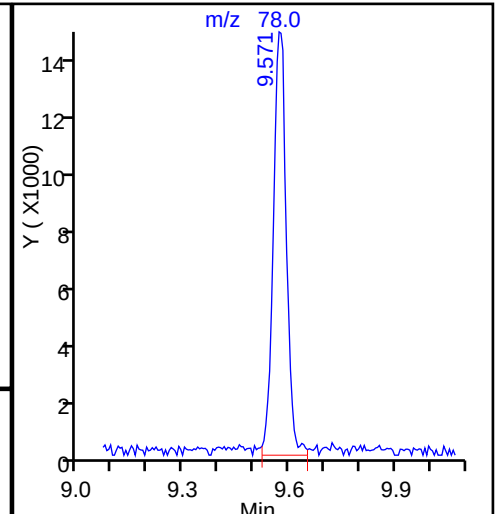
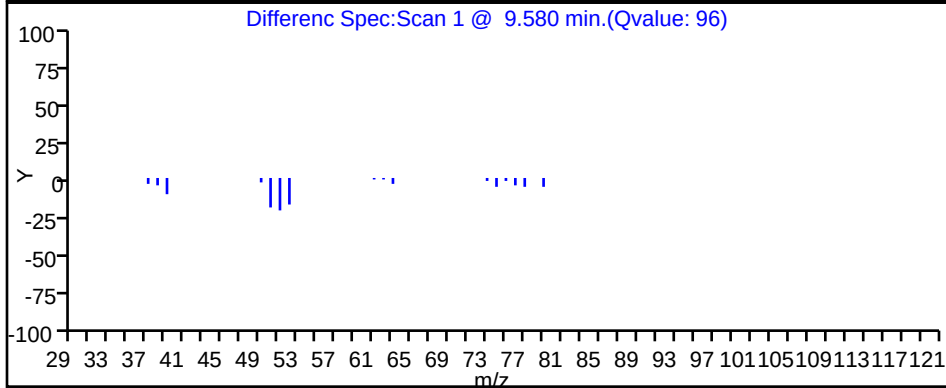
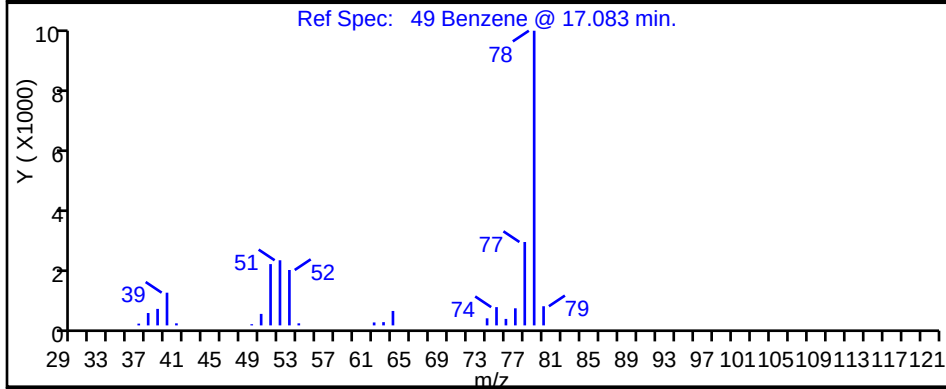
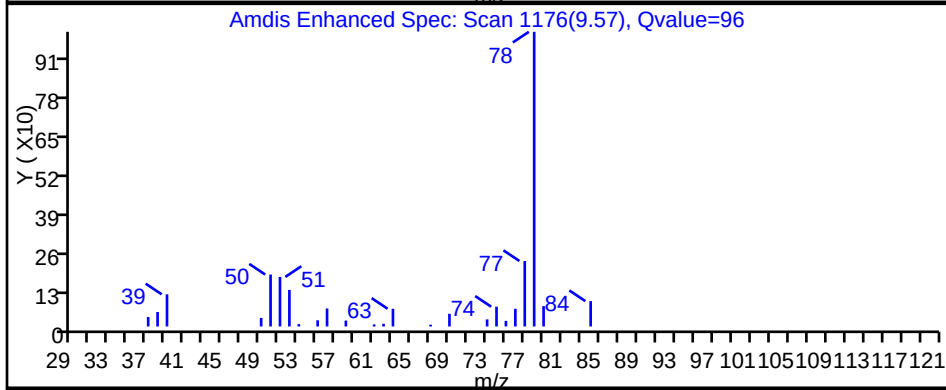
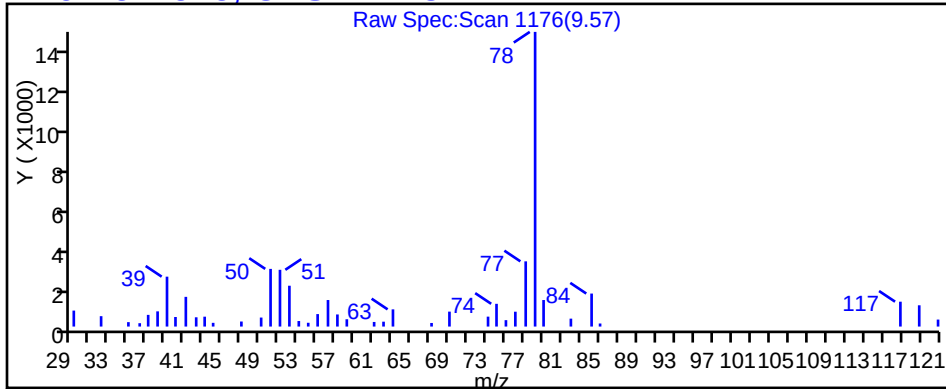
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P112.D

Injection Date: 04-Apr-2017 23:57:30

Instrument ID: MG

Lims ID: 140-7685-A-12

Lab Sample ID: 140-7685-12

Client ID: H19-FF

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 20

Purge Vol: 500.000 mL

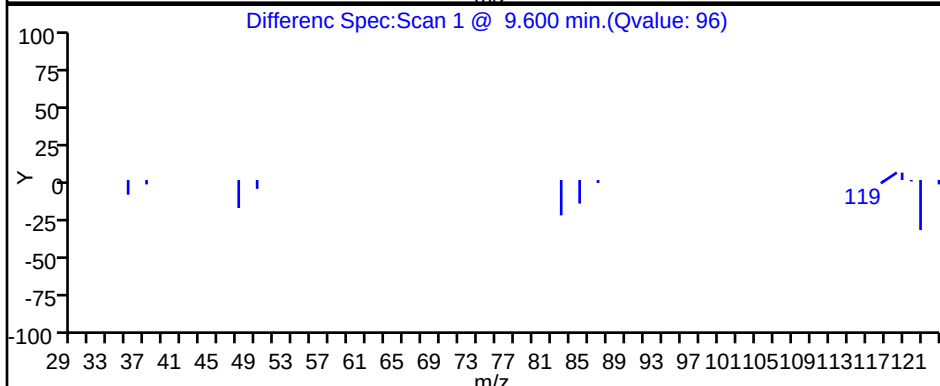
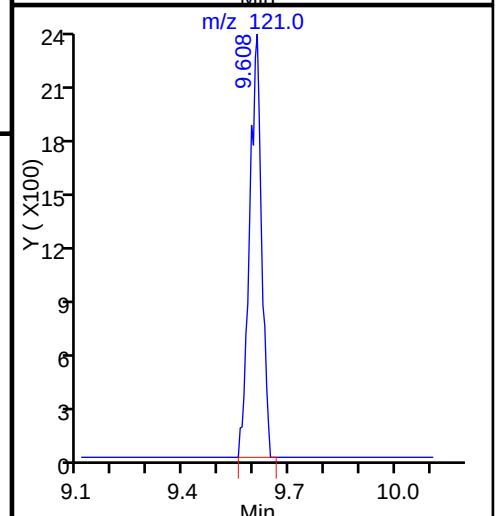
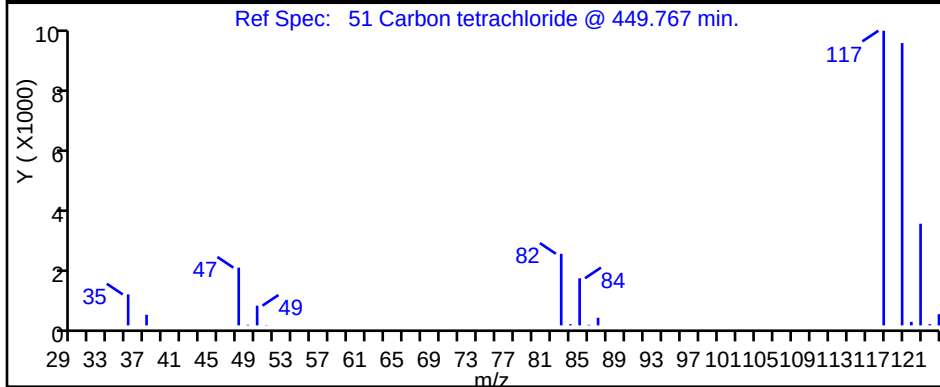
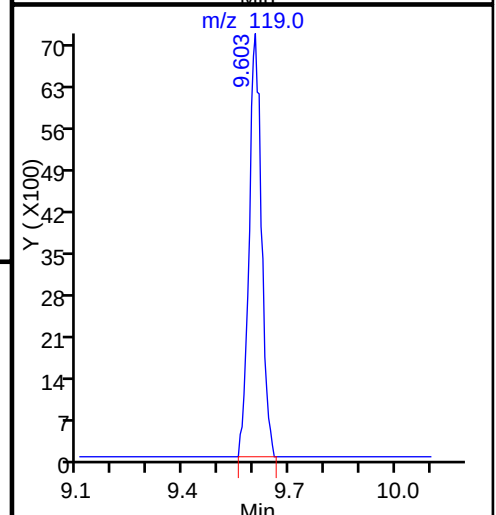
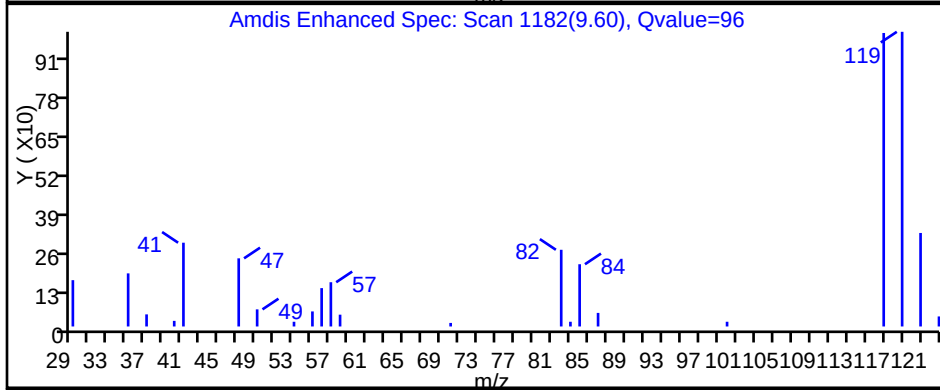
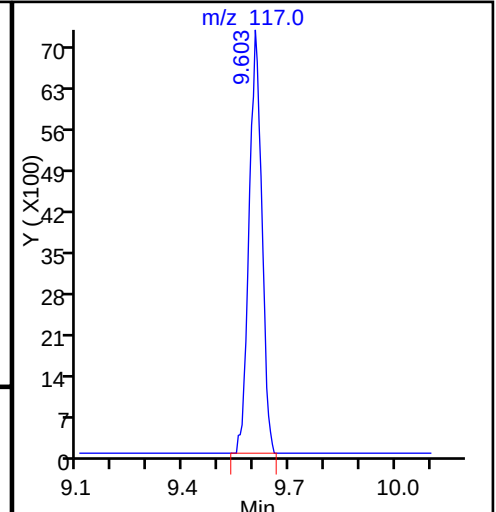
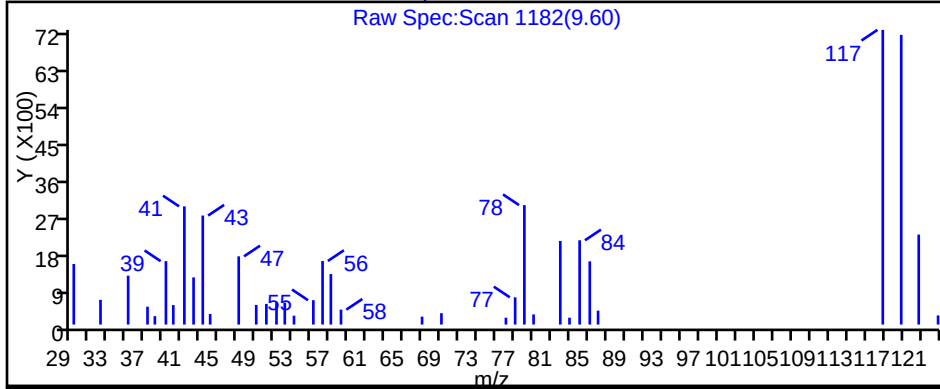
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P112.D

Injection Date: 04-Apr-2017 23:57:30

Instrument ID: MG

Lims ID: 140-7685-A-12

Lab Sample ID: 140-7685-12

Client ID: H19-FF

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 20

Purge Vol: 500.000 mL

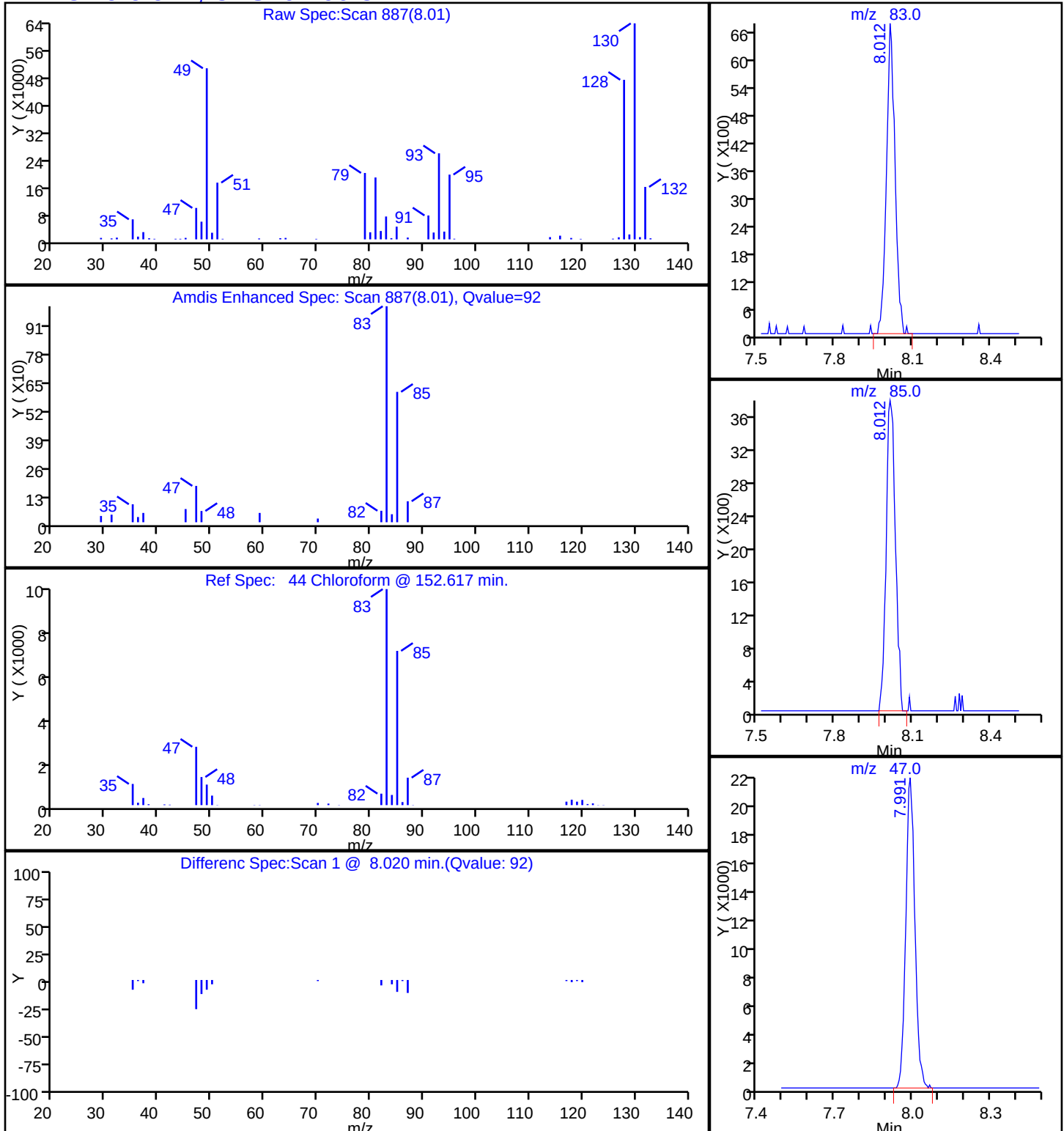
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

44 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P112.D

Injection Date: 04-Apr-2017 23:57:30

Instrument ID: MG

Lims ID: 140-7685-A-12

Lab Sample ID: 140-7685-12

Client ID: H19-FF

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 20

Purge Vol: 500.000 mL

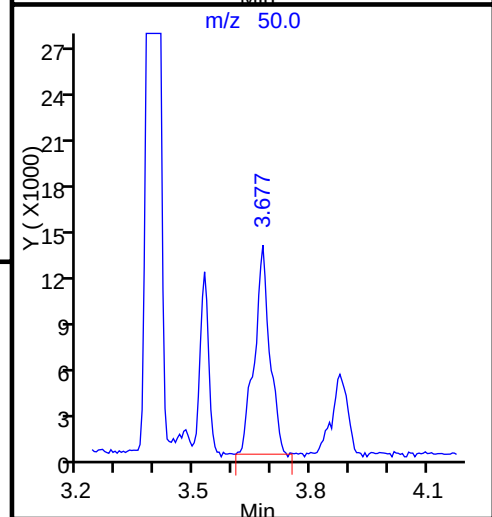
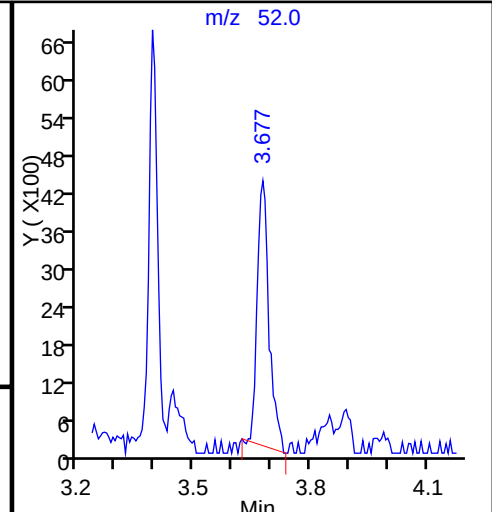
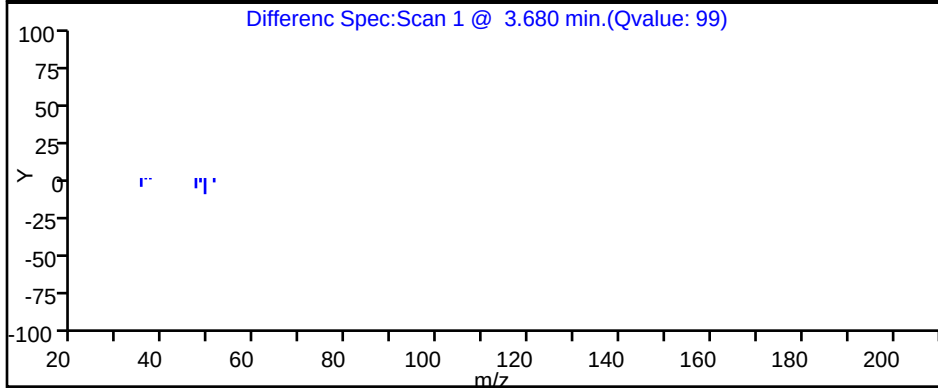
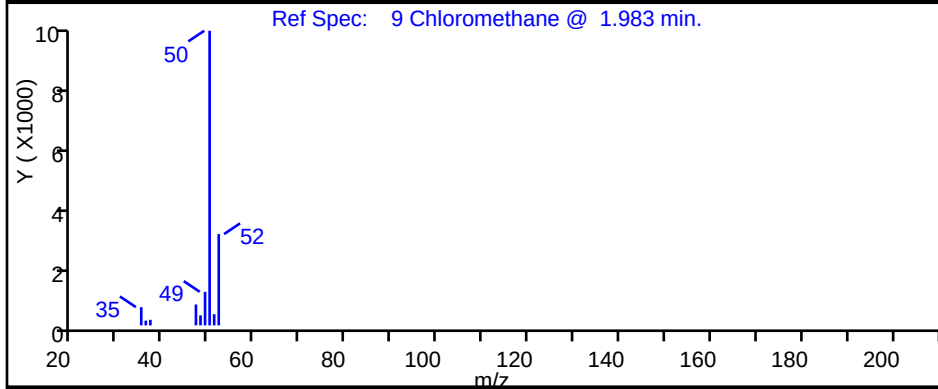
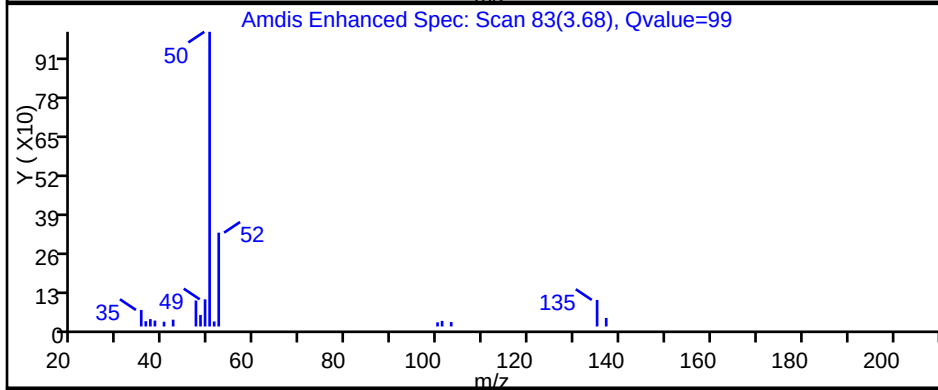
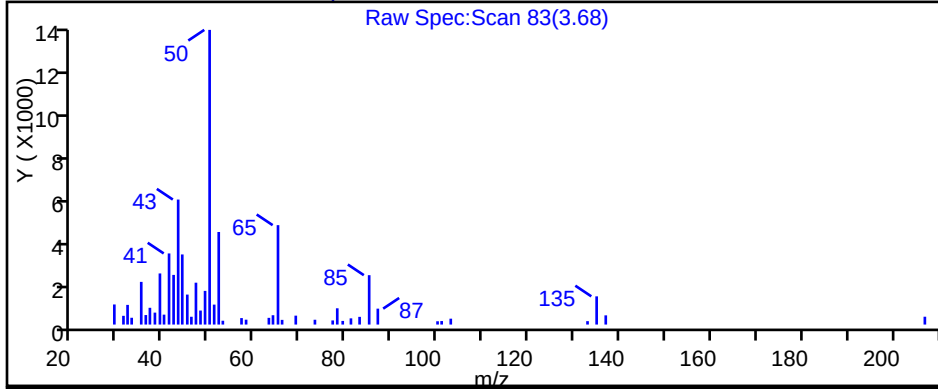
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\\Knoxville\\ChromData\\MG\\20170402-4508.b\\GD04P112.D

Injection Date: 04-Apr-2017 23:57:30

Instrument ID: MG

Lims ID: 140-7685-A-12

Lab Sample ID: 140-7685-12

Client ID: H19-FF

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 20

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

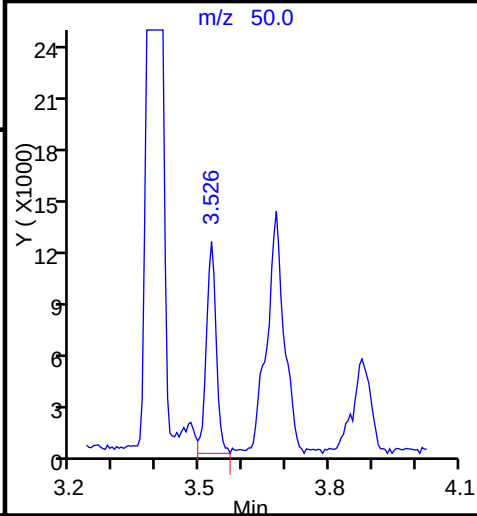
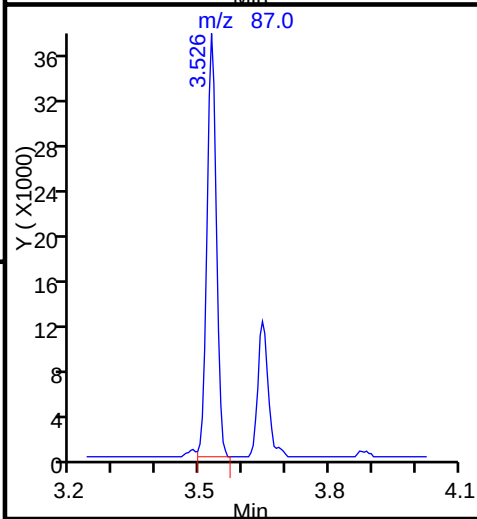
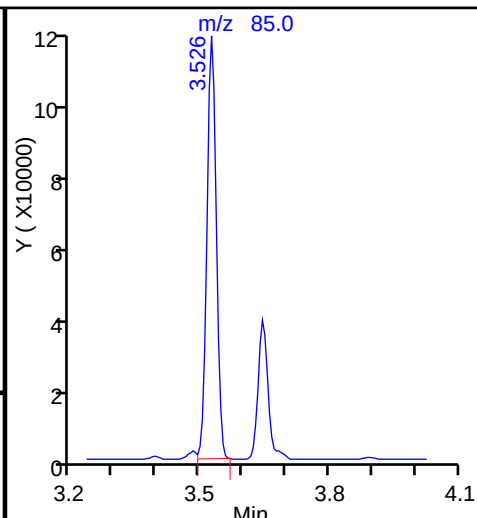
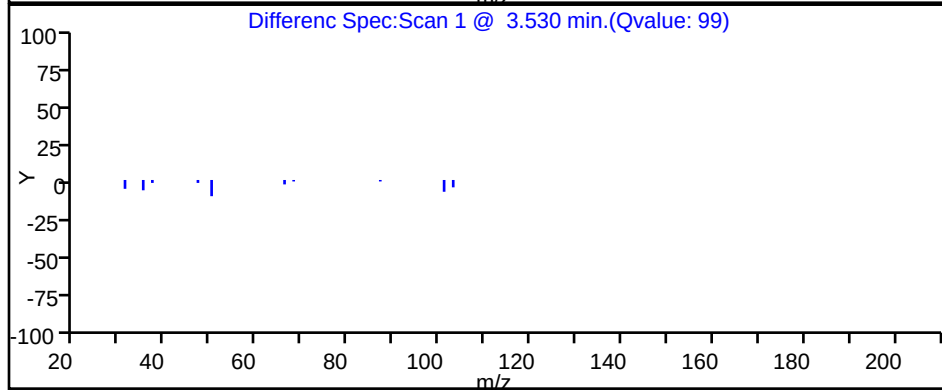
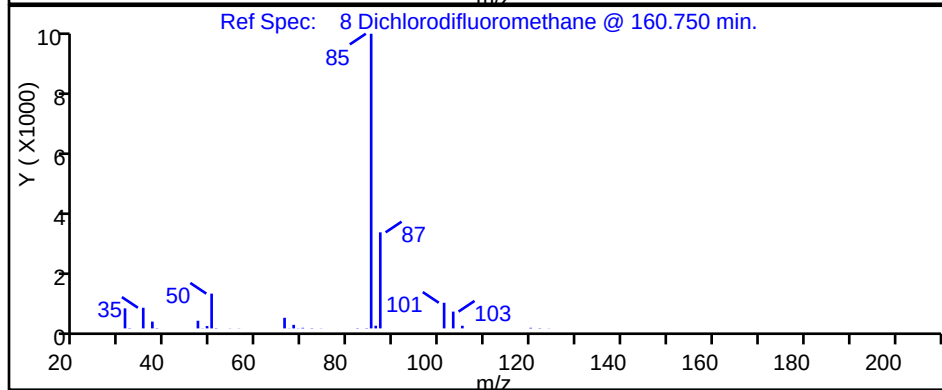
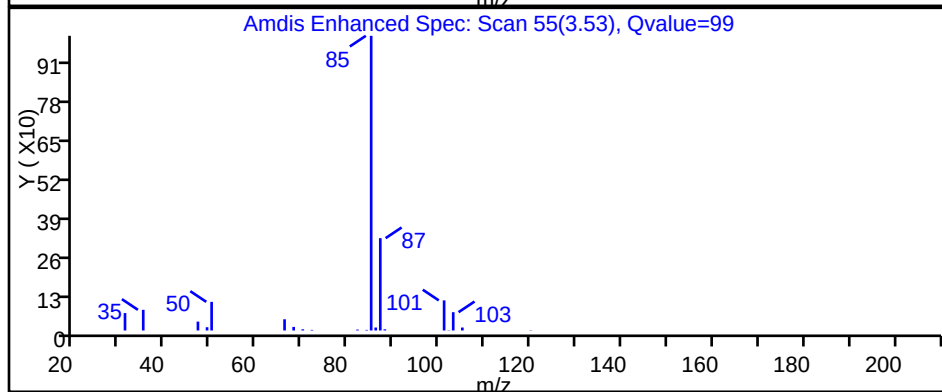
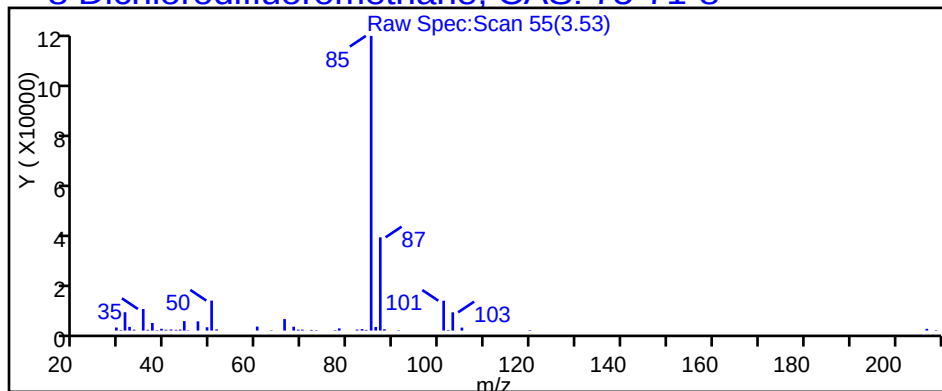
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P112.D

Injection Date: 04-Apr-2017 23:57:30

Instrument ID: MG

Lims ID: 140-7685-A-12

Lab Sample ID: 140-7685-12

Client ID: H19-FF

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 20

Purge Vol: 500.000 mL

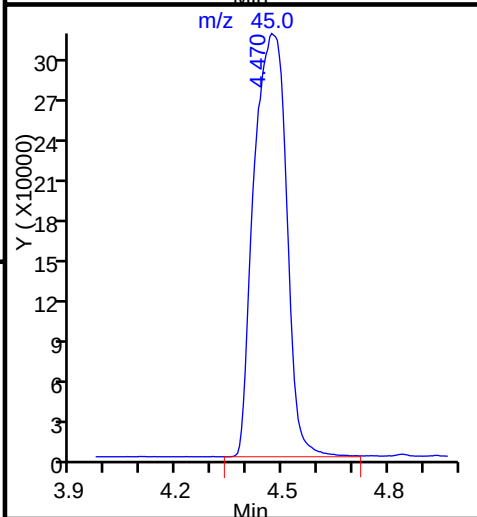
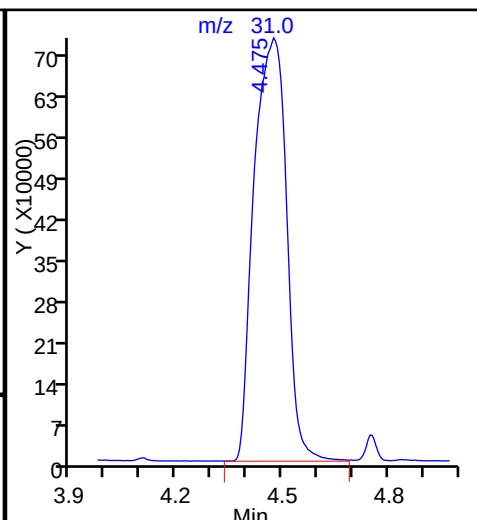
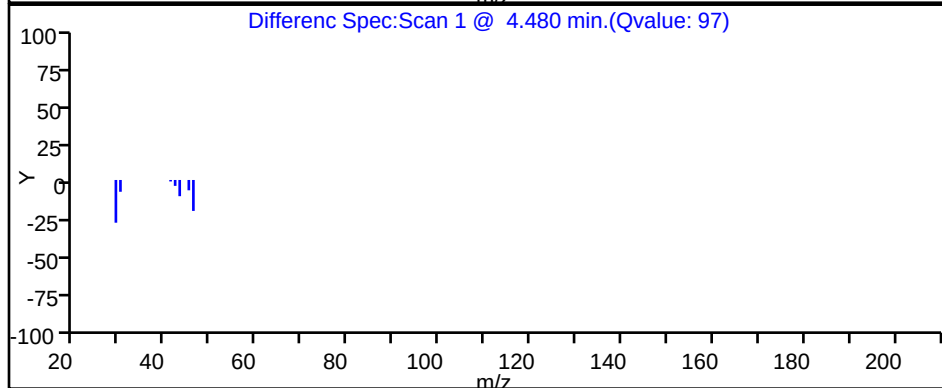
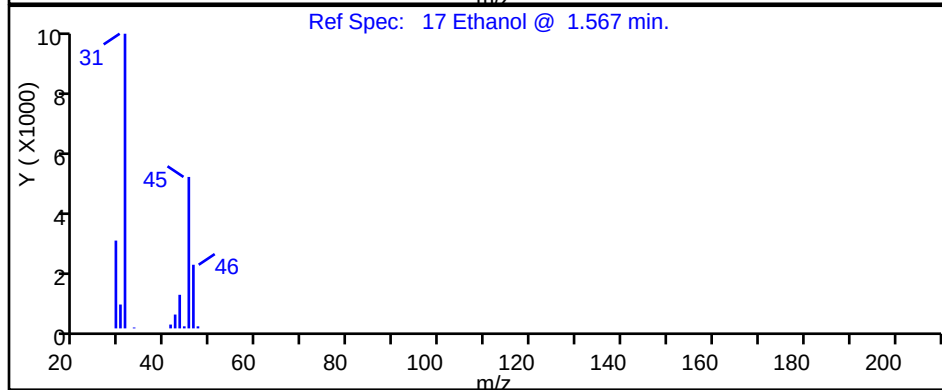
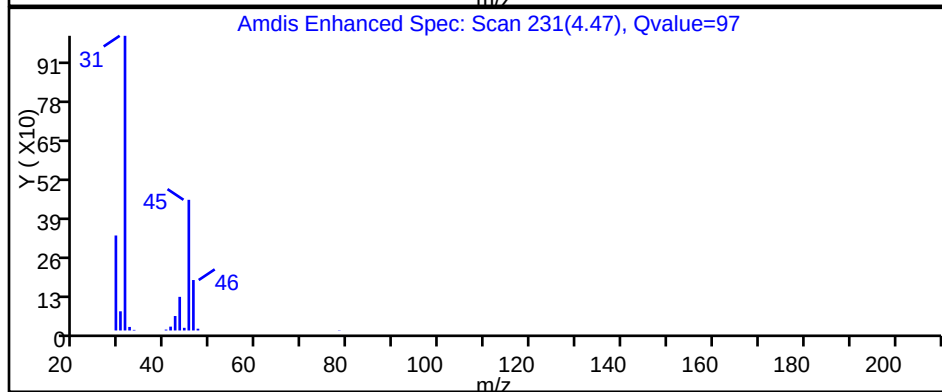
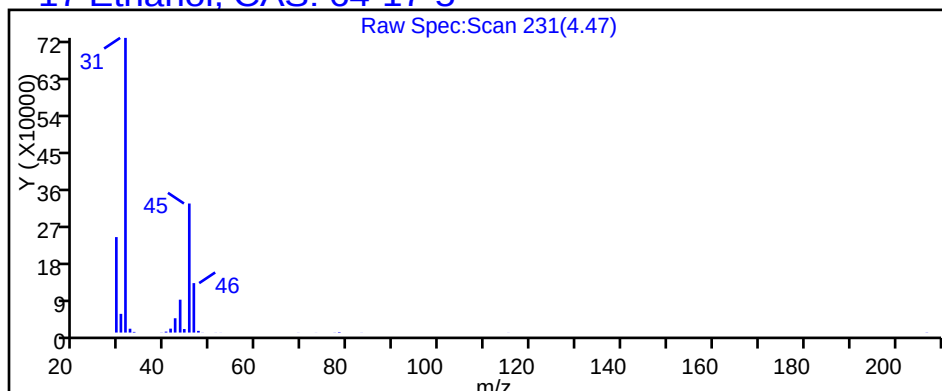
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P112.D

Injection Date: 04-Apr-2017 23:57:30

Instrument ID: MG

Lims ID: 140-7685-A-12

Lab Sample ID: 140-7685-12

Client ID: H19-FF

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 20

Purge Vol: 500.000 mL

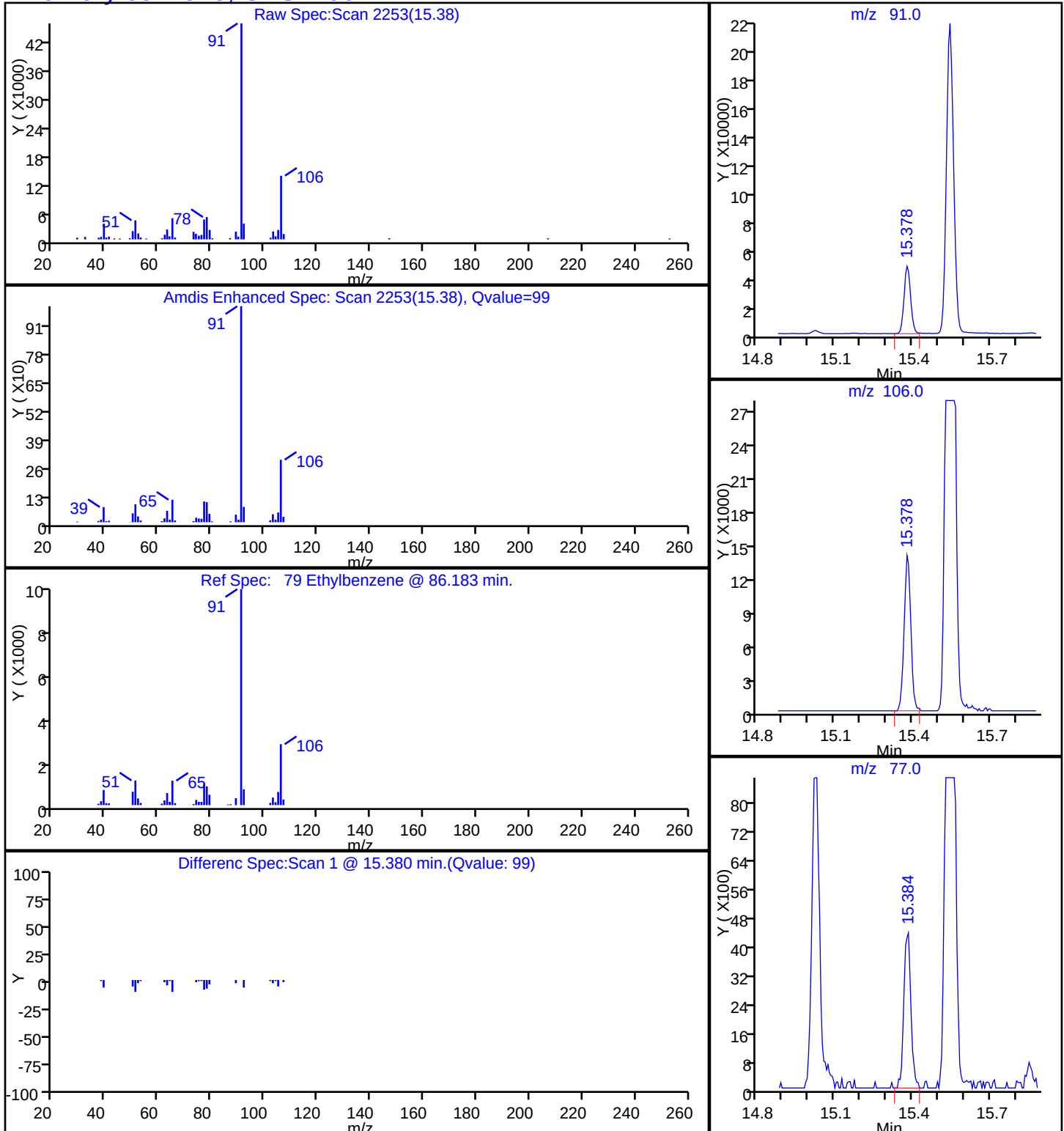
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

79 Ethylbenzene, CAS: 100-41-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P112.D

Injection Date: 04-Apr-2017 23:57:30

Instrument ID: MG

Lims ID: 140-7685-A-12

Lab Sample ID: 140-7685-12

Client ID: H19-FF

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 20

Purge Vol: 500.000 mL

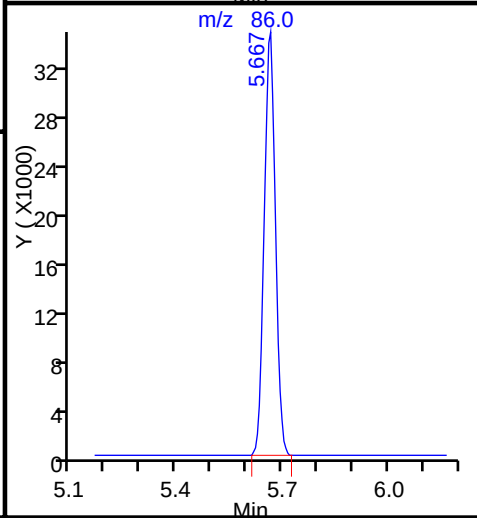
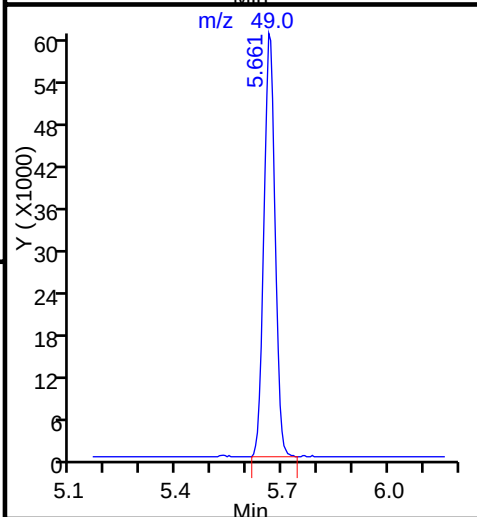
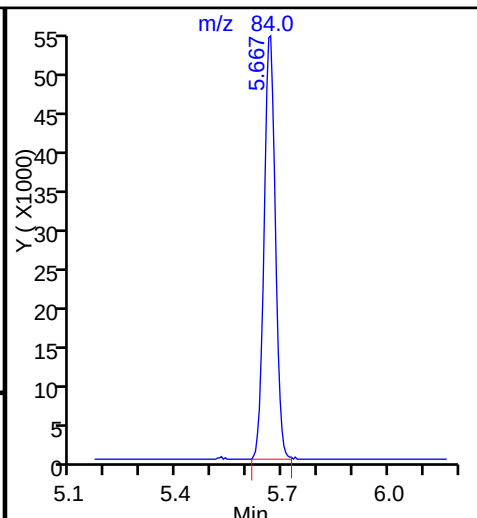
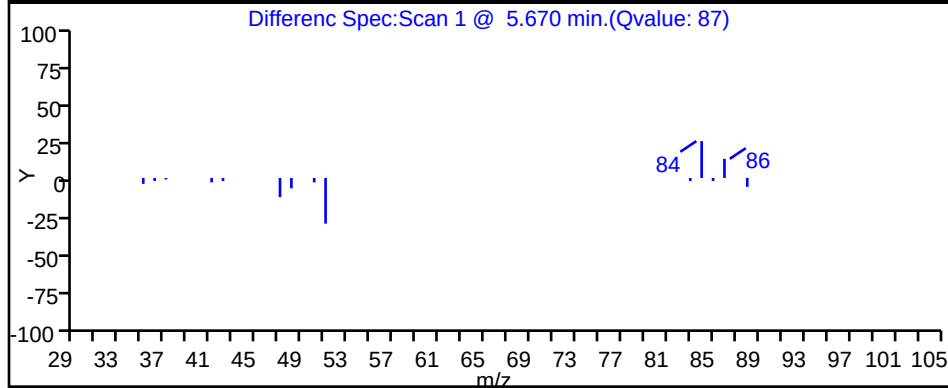
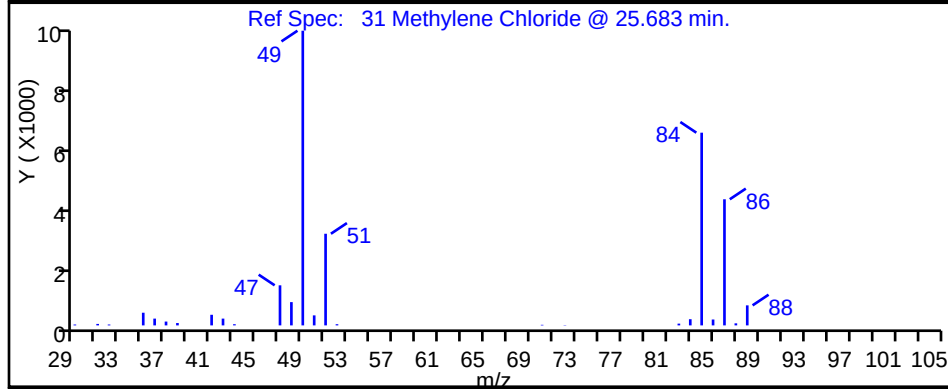
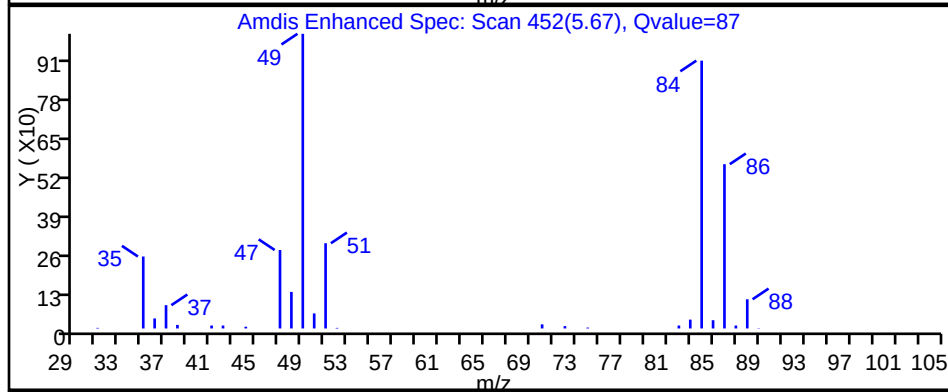
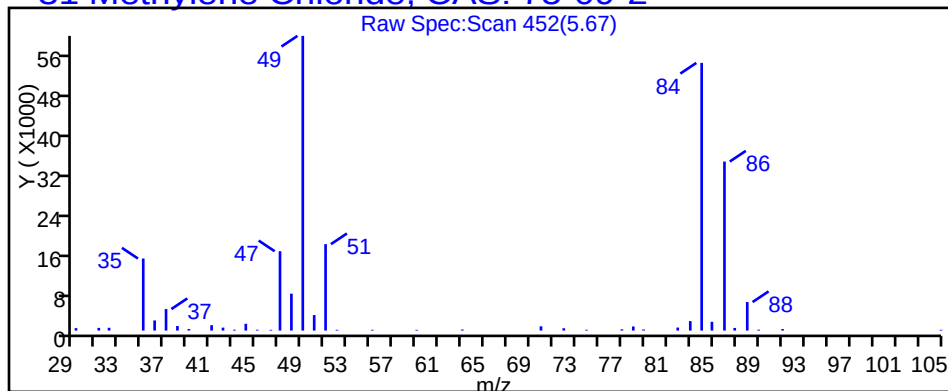
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P112.D

Injection Date: 04-Apr-2017 23:57:30

Instrument ID: MG

Lims ID: 140-7685-A-12

Lab Sample ID: 140-7685-12

Client ID: H19-FF

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 20

Purge Vol: 500.000 mL

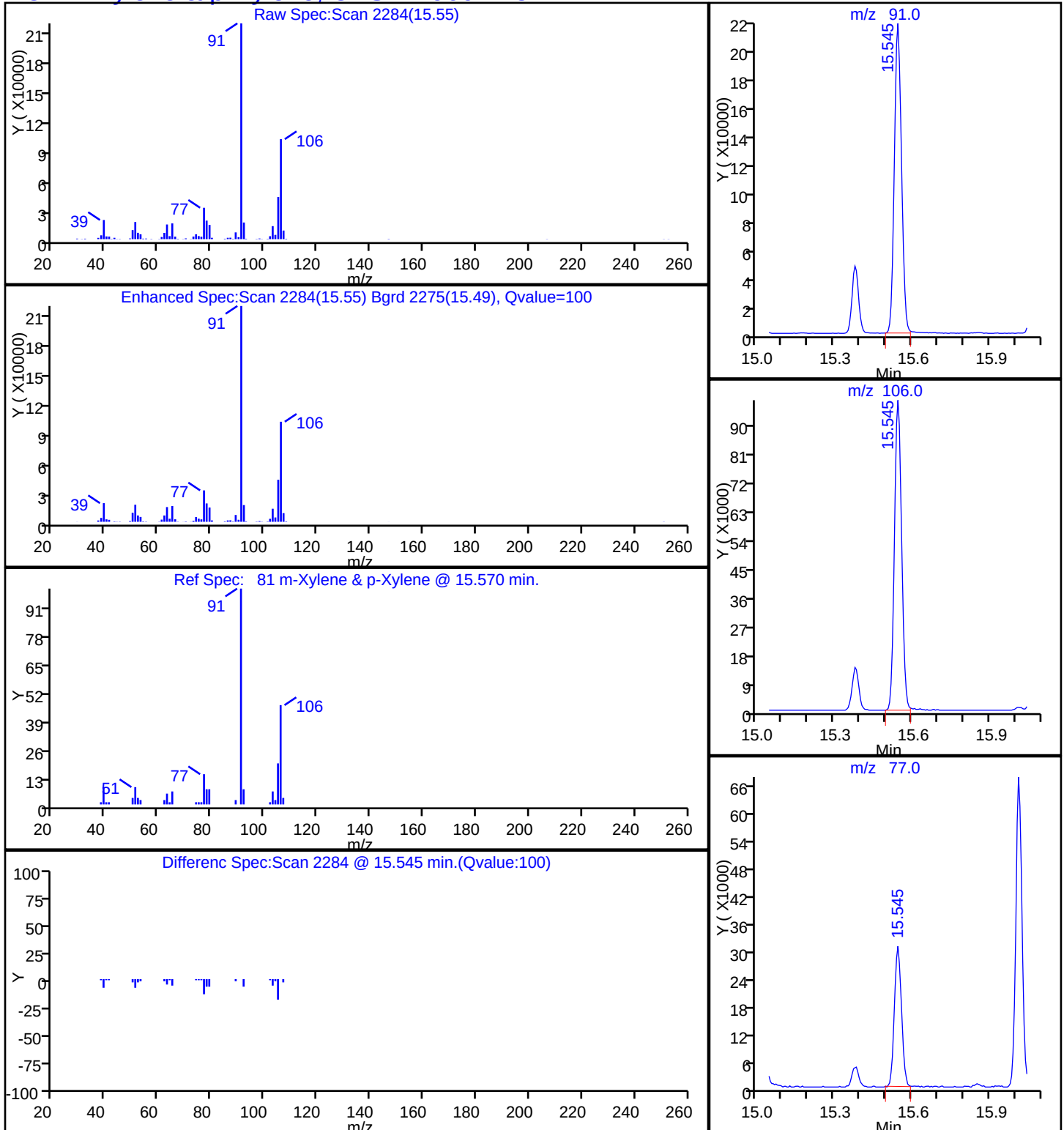
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P112.D

Injection Date: 04-Apr-2017 23:57:30

Instrument ID: MG

Lims ID: 140-7685-A-12

Lab Sample ID: 140-7685-12

Client ID: H19-FF

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 20

Purge Vol: 500.000 mL

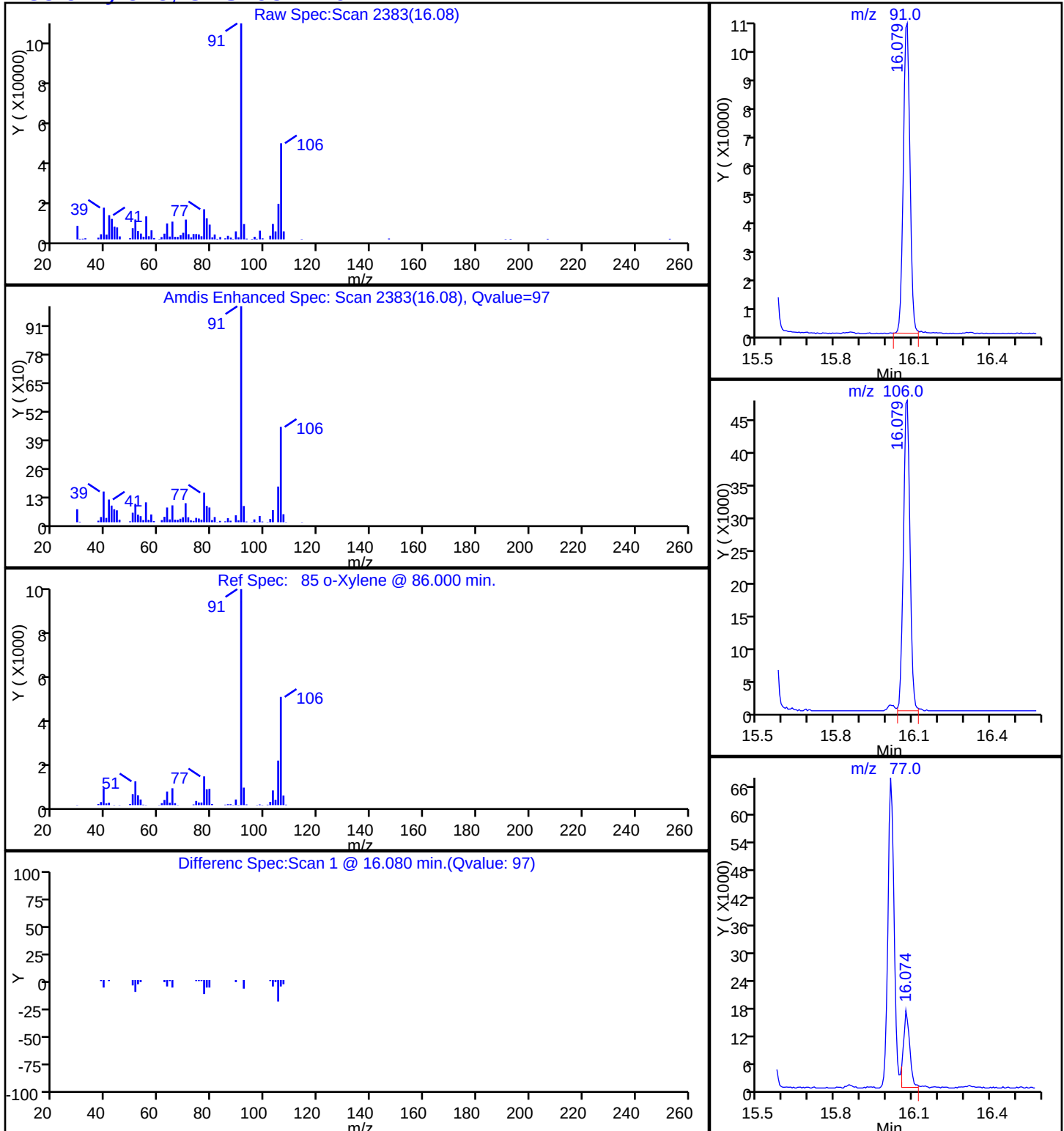
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P112.D

Injection Date: 04-Apr-2017 23:57:30

Instrument ID: MG

Lims ID: 140-7685-A-12

Lab Sample ID: 140-7685-12

Client ID: H19-FF

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 20

Purge Vol: 500.000 mL

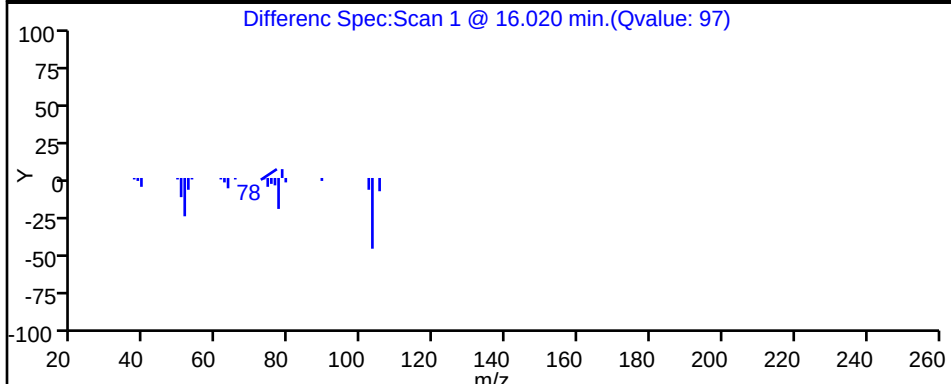
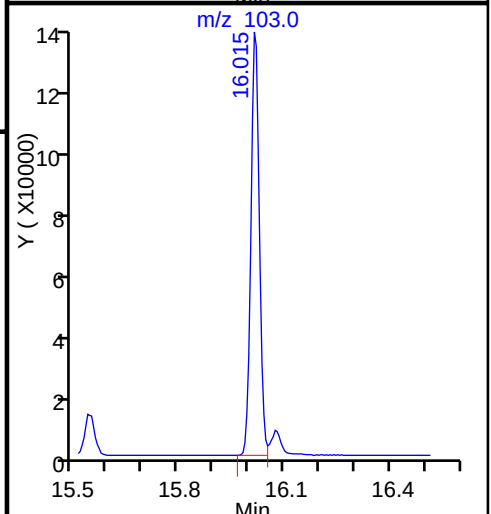
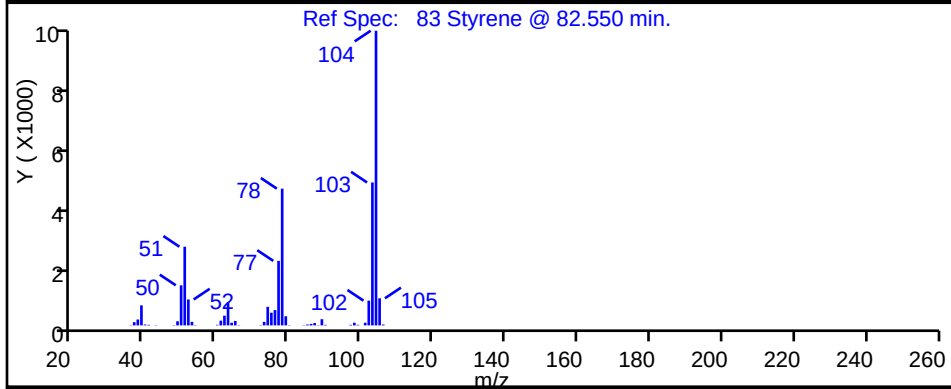
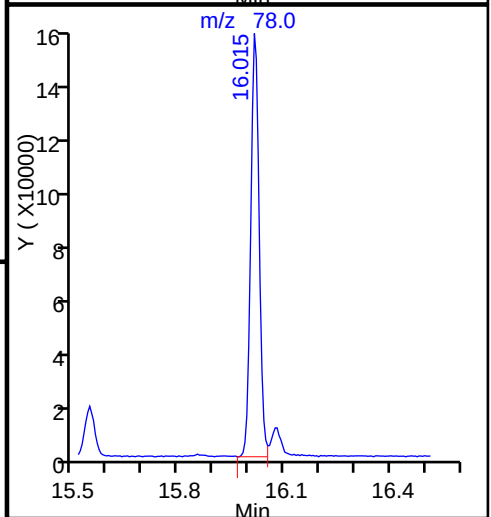
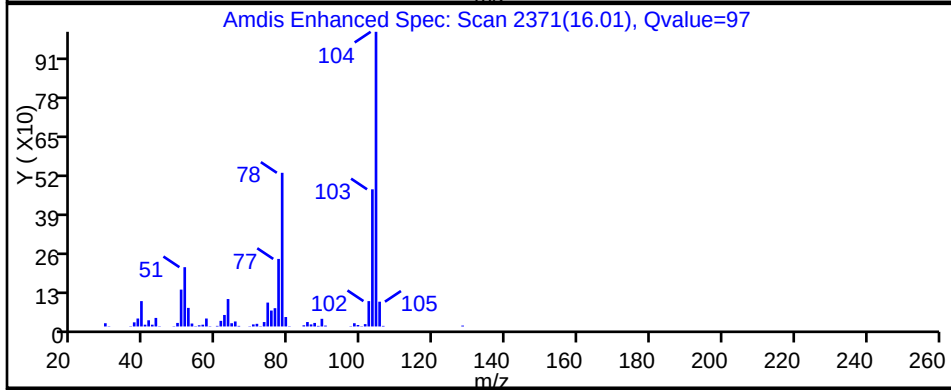
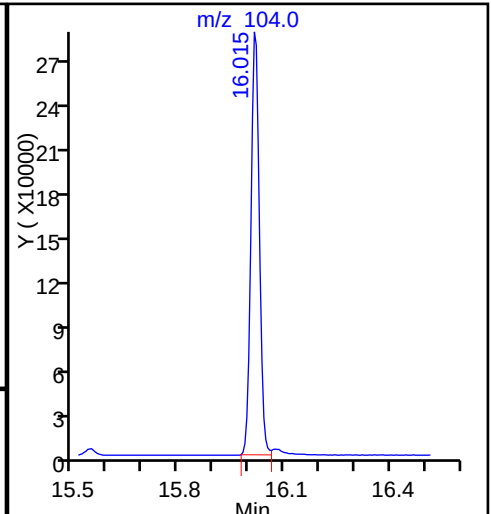
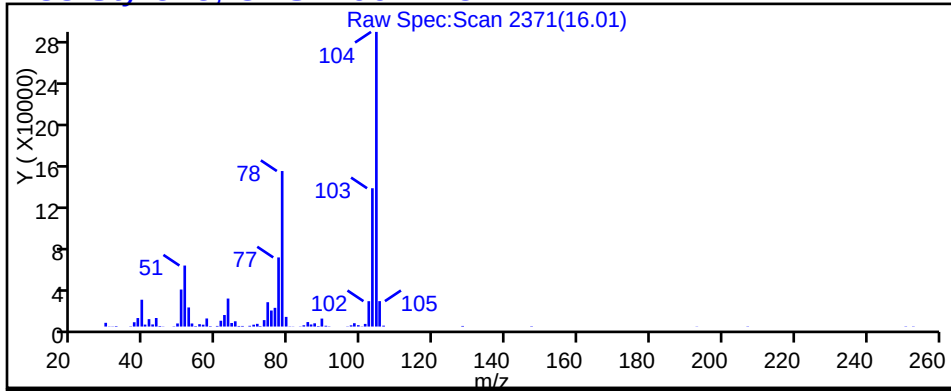
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

83 Styrene, CAS: 100-42-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P112.D

Injection Date: 04-Apr-2017 23:57:30

Instrument ID: MG

Lims ID: 140-7685-A-12

Lab Sample ID: 140-7685-12

Client ID: H19-FF

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 20

Purge Vol: 500.000 mL

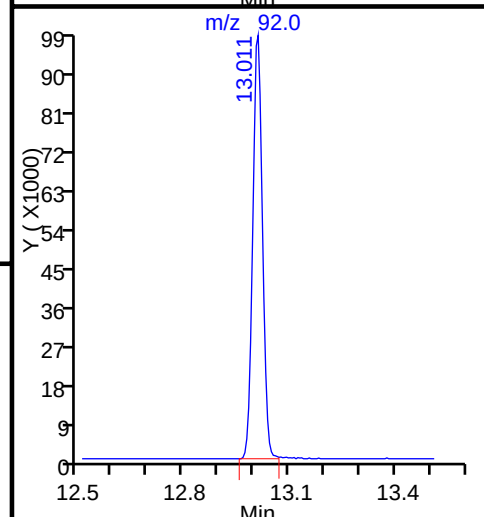
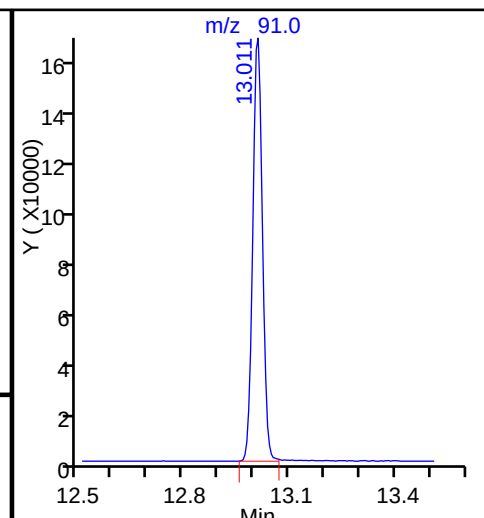
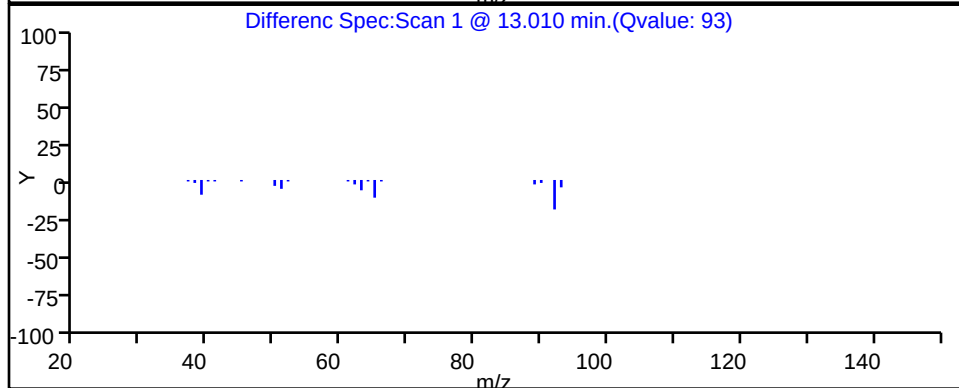
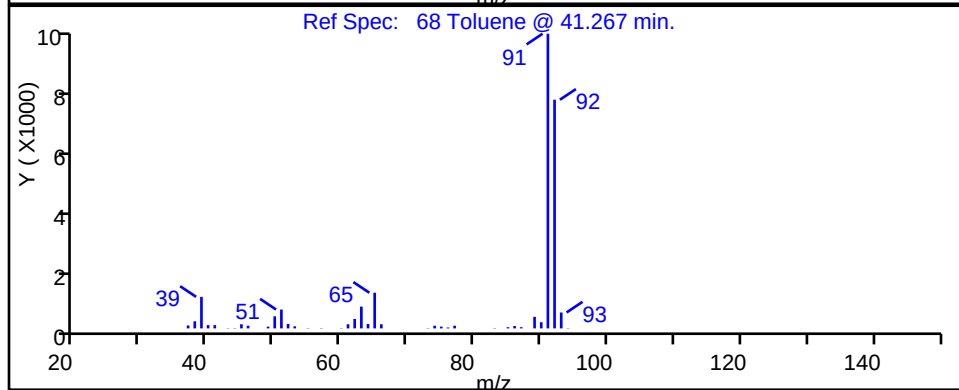
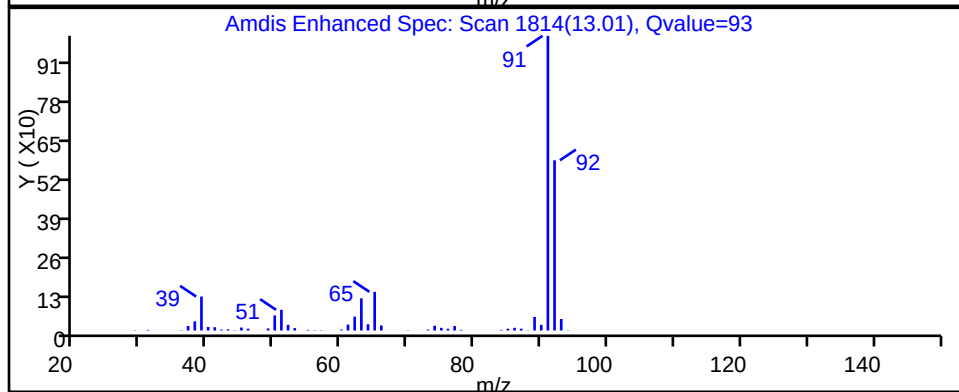
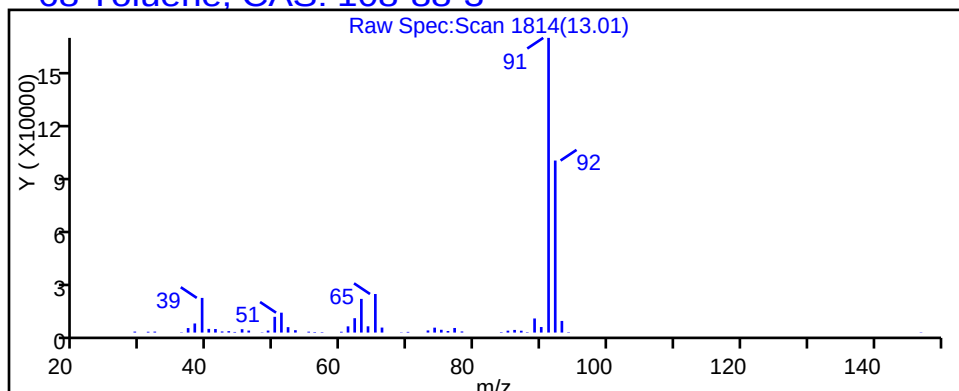
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GD04P112.D

Injection Date: 04-Apr-2017 23:57:30

Instrument ID: MG

Lims ID: 140-7685-A-12

Lab Sample ID: 140-7685-12

Client ID: H19-FF

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 20

Purge Vol: 500.000 mL

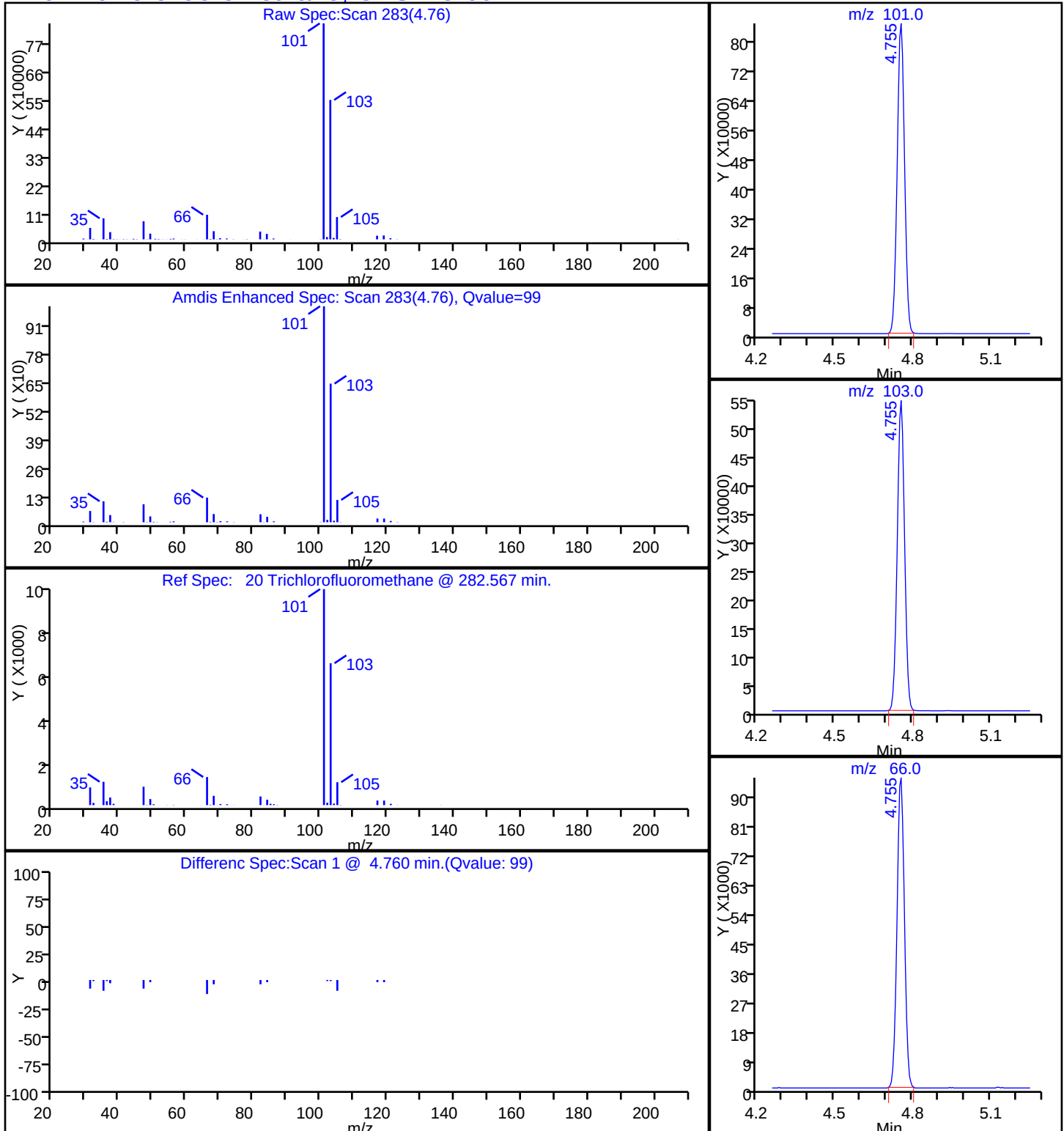
Dil. Factor: 1.0000

Method: MG_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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H19-FF DL Lab Sample ID: 140-7685-12 DL
 Matrix: Air Lab File ID: JD04P106DL.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 13:02
 Sample wt/vol: 100 (mL) Date Analyzed: 04/05/2017 10:50
 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.: 10158 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
64-17-5	Ethanol	46.07	280	D	10	

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

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: H19-FF DL Lab Sample ID: 140-7685-12 DL
 Matrix: Air Lab File ID: JD04P106DL.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 13:02
 Sample wt/vol: 100 (mL) Date Analyzed: 04/05/2017 10:50
 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.: 10158 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
64-17-5	Ethanol	46.07	530	D	19	

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

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\JD04P106DL.D
 Lims ID: 140-7685-A-12
 Client ID: H19-FF
 Sample Type: Client
 Inject. Date: 05-Apr-2017 10:50:30 ALS Bottle#: 6 Worklist Smp#: 19
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004511-019
 Misc. Info.: 140-7685-a-12
 Operator ID: 7126 Instrument ID: MJ
 Method: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 05-Apr-2017 09:20:19 Calib Date: 24-Mar-2017 17:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 11:34:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.537	8.538	-0.001	97	182564	4.00	
* 2 1,4-Difluorobenzene	114	10.737	10.739	-0.002	96	807231	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.520	15.521	-0.001	90	726564	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.166	17.167	-0.001	92	496951	3.92	
8 Dichlorodifluoromethane	85	3.615	3.622	-0.007	100	23102	0.1476	
9 Chloromethane	52	3.798	3.794	0.004	96	2461	0.1434	
17 Ethanol	31	4.562	4.558	0.004	97	601801	55.9	
20 Trichlorofluoromethane	101	5.014	5.015	-0.001	100	195848	1.36	
28 2-Methyl-2-propanol	59	5.810	5.790	0.020	94	4266	0.0630	
30 1,1,2-Trichloro-1,2,2-trif	101	5.869	5.870	-0.001	89	1406	0.0121	
31 Methylene Chloride	84	6.036	6.037	-0.001	97	92902	1.65	
39 2-Butanone (MEK)	72	7.806	7.796	0.010	93	3481	0.2591	
40 Hexane	56	7.806	7.812	-0.006	81	13532	0.2824	
44 Chloroform	83	8.553	8.555	-0.002	27	1965	0.0163	
51 Benzene	78	10.173	10.179	-0.006	88	5950	0.0376	
68 Toluene	91	13.535	13.536	-0.001	93	57854	0.3766	
79 Ethylbenzene	91	15.859	15.860	-0.001	96	8374	0.0483	
81 m-Xylene & p-Xylene	91	16.020	16.021	-0.001	98	39951	0.3184	
84 Styrene	104	16.488	16.489	-0.001	99	41399	0.4415	
85 o-Xylene	91	16.547	16.548	-0.001	96	20117	0.1572	
96 1,2,4-Trimethylbenzene	105	18.360	18.361	-0.001	94	5490	0.0478	
99 Benzyl chloride	91	18.780	18.711	0.069	55	4128	0.0457	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\JD04P106DL.D

Injection Date: 05-Apr-2017 10:50:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: 140-7685-A-12

Lab Sample ID: 140-7685-12

Worklist Smp#: 19

Client ID: H19-FF

Purge Vol: 500.000 mL

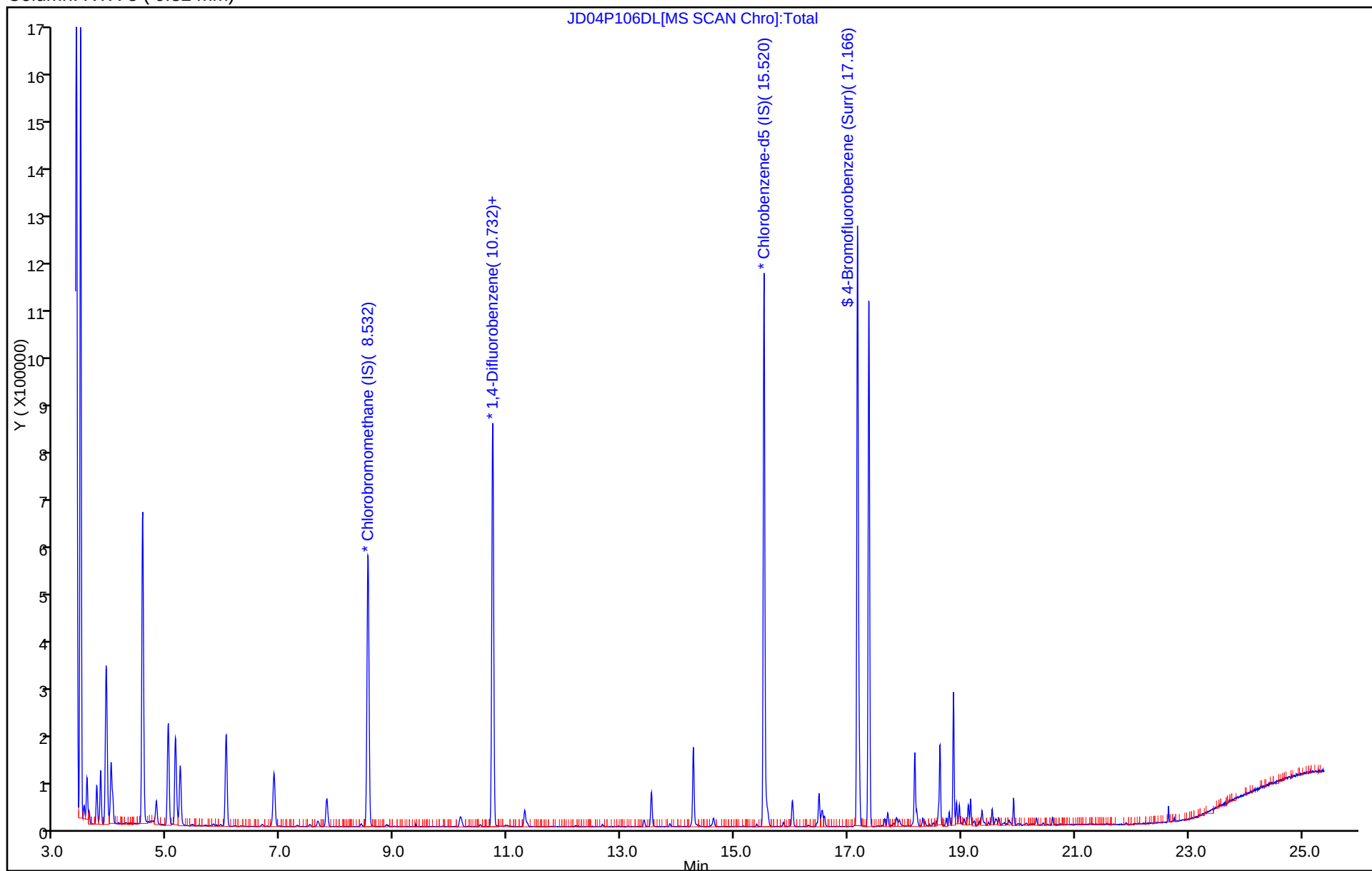
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\JD04P106DL.D
Lims ID: 140-7685-A-12
Client ID: H19-FF
Sample Type: Client
Inject. Date: 05-Apr-2017 10:50:30 ALS Bottle#: 6 Worklist Smp#: 19
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004511-019
Misc. Info.: 140-7685-a-12
Operator ID: 7126 Instrument ID: MJ
Method: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\MJ_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 05-Apr-2017 09:20:19 Calib Date: 24-Mar-2017 17:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 11:34:27

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	3.92	97.96

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\JD04P106DL.D

Injection Date: 05-Apr-2017 10:50:30

Instrument ID: MJ

Lims ID: 140-7685-A-12

Lab Sample ID: 140-7685-12

Client ID: H19-FF

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 19

Purge Vol: 500.000 mL

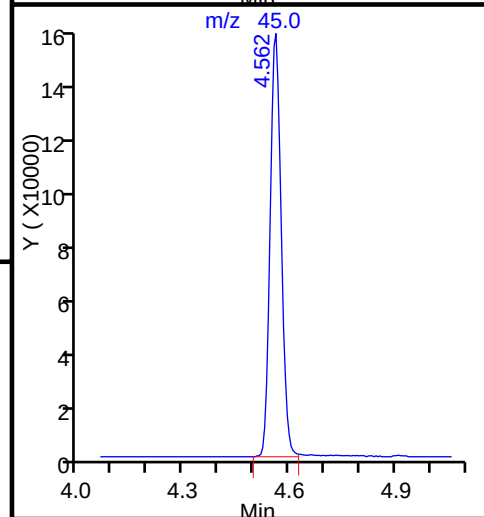
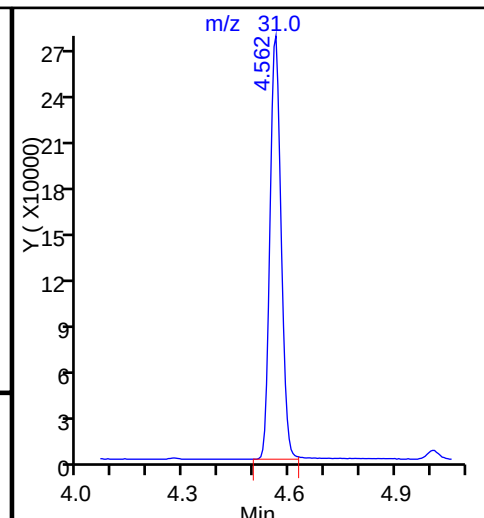
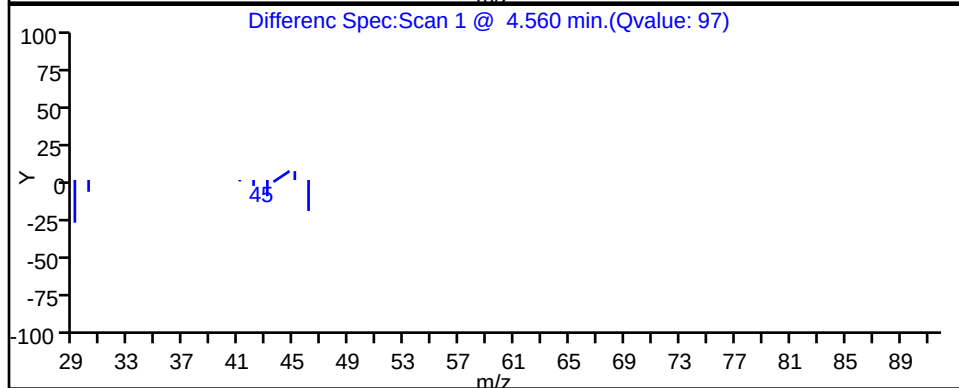
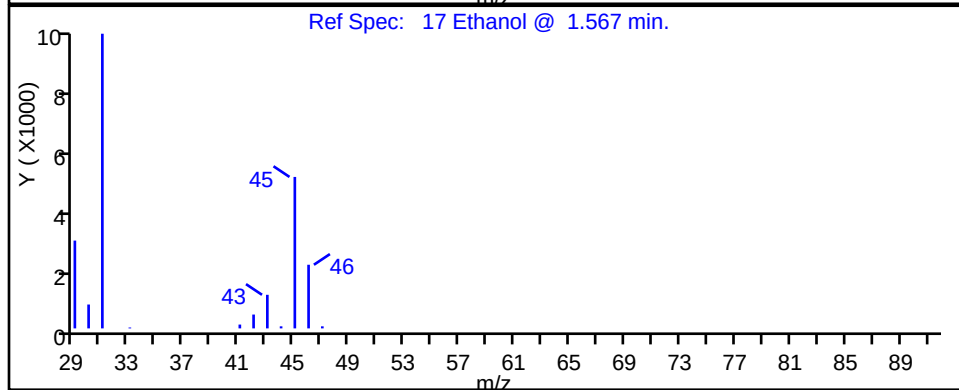
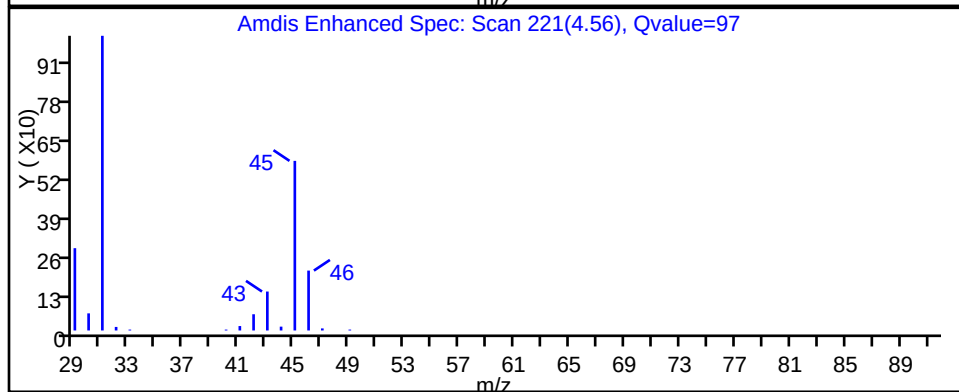
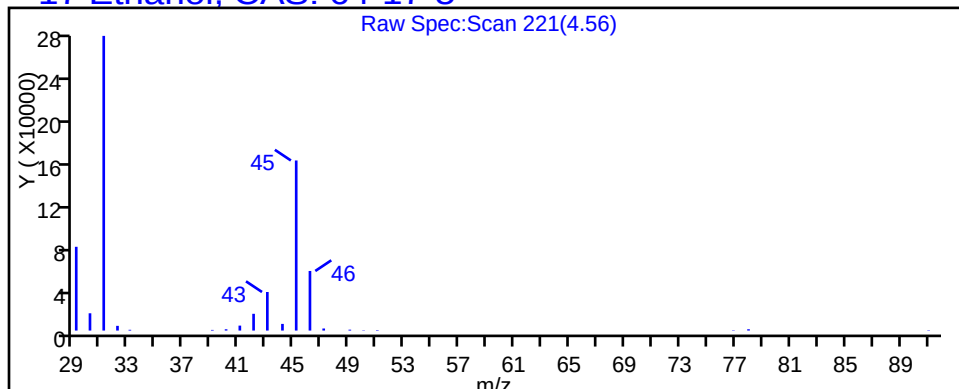
Dil. Factor: 1.0000

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

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9482

SDG No.: _____

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

Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-9482/3	GC15IC01.D
Level 2	IC 140-9482/4	GC15IC02.D
Level 3	IC 140-9482/5	GC15IC03.D
Level 4	IC 140-9482/6	GC15IC04.D
Level 5	IC 140-9482/7	GC15IC05.D
Level 6	ICIS 140-9482/8	GC15IC06.D
Level 7	IC 140-9482/9	GC15IC07.D
Level 8	IC 140-9482/10	GC15IC08.D
Level 9	IC 140-9482/11	GC15IC09.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	+++++ 0.4492	0.5243 0.4243	0.4768 0.3958	0.4692 0.3664	0.4517	Ave		0.4447				11.1		30.0			
Propene	1.2559 1.0478	1.2382 0.9657	1.1468 0.8917	1.1084 0.7546	1.1130	Ave		1.0580				15.4		30.0			
Dichlorodifluoromethane	4.8320 4.2127	4.6343 3.9990	4.3917 3.8216	4.2891 3.5675	4.3531	Ave		4.2334				9.3		30.0			
Chloromethane	+++++ 0.2919	+++++ 0.2699	0.3511 0.2437	0.3157 0.2157	0.3055	Ave		0.2848				16.0		30.0			
1,2-Dichlorotetrafluoroethane	2.6647 2.4528	2.7171 2.4377	2.5660 2.4240	2.4867 2.4540	2.4764	Ave		2.5199				4.2		30.0			
Acetaldehyde	+++++ 0.3520	+++++ 0.3138	+++++ 0.2823	0.4204 0.2466	0.3916	Ave		0.3344				19.8		30.0			
Vinyl chloride	1.3581 1.1850	1.3052 1.0914	1.2835 1.0073	1.2092 0.8963	1.1952	Ave		1.1701				12.7		30.0			
1,3-Butadiene	0.8307 0.8039	0.8697 0.7476	0.8308 0.6849	0.8235 0.6065	0.8156	Ave		0.7793				10.8		30.0			
Butane	2.0474 1.6504	1.8888 1.5358	1.8200 1.3619	1.7380 1.1943	1.6862	Ave		1.6581				15.9		30.0			
Bromomethane	1.2729 1.1473	1.2685 1.1211	1.1982 1.0600	1.1615 1.0020	1.1747	Ave		1.1562				7.7		30.0			
Chloroethane	0.6202 0.5523	0.6462 0.5375	0.5992 0.5102	0.5796 0.4698	0.5813	Ave		0.5663				9.7		30.0			
Ethanol	0.4667 0.3882	0.4764 0.3730	0.4356 0.3514	0.4071 0.3093	0.4143	Ave		0.4025				13.4		30.0			
Vinyl bromide	1.1369 1.0936	1.2219 1.0624	1.1482 1.0193	1.1018 0.9772	1.1008	Ave		1.0958				6.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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	1.2979 1.1019	1.3019 1.0531	1.1814 0.9805	1.1311 0.9018	1.1319	Ave		1.1202				11.8		30.0			
Acrolein	++++ 0.1689	++++ 0.1838	0.1515 0.1664	0.1415 0.1869	0.1478	Ave		0.1638				10.8		30.0			
Trichlorofluoromethane	4.8982 4.1780	4.5033 4.0365	4.2099 3.8886	4.2004 3.7805	4.2513	Ave		4.2163				7.9		30.0			
Acetonitrile	++++ 0.3455	++++ 0.3253	++++ 0.3091	0.3670 0.2962	0.3713	Ave		0.3357				9.2		30.0			
Acetone	++++ 0.3988	++++ 0.3747	++++ 0.3572	0.4582 0.3327	0.4350	Ave		0.3928				12.1		30.0			
Pentane	++++ 0.2081	0.2306 0.1963	0.2111 0.1889	0.2019 0.1831	0.2097	Ave		0.2037				7.3		30.0			
Isopropyl alcohol	++++ 1.3318	++++ 1.2860	1.4634 1.2076	1.5818 1.2506	1.3883	Ave		1.3585				9.6		30.0			
Ethyl ether	0.9382 0.9126	1.0226 0.8738	0.9338 0.8382	0.9342 0.8824	0.9813	Ave		0.9241				6.1		30.0			
1,1-Dichloroethene	1.1997 1.0521	1.1238 1.0202	1.0793 0.9944	1.0590 1.0026	1.0636	Ave		1.0661				6.0		30.0			
Acrylonitrile	++++ 0.4755	0.5548 0.4637	0.5320 0.4448	0.4820 0.4378	0.4985	Ave		0.4861				8.4		30.0			
t-Butyl alcohol	1.7335 1.5954	1.6954 1.6067	1.7782 1.5471	1.6014 1.4137	1.6439	Ave		1.6239				6.6		30.0			
1,1,2-Trichlorotrifluoroethane	2.7462 2.4294	2.5716 2.3469	2.4578 2.3134	2.4601 2.3195	2.4878	Ave		2.4592				5.6		30.0			
Methylene Chloride	++++ 0.8898	++++ 0.8426	1.3997 0.8059	1.0494 0.7857	0.9603	Ave		0.9619				22.2		30.0			
3-Chloropropene	1.3230 1.0002	1.1895 0.9454	1.0528 0.8875	1.0053 0.8637	1.0378	Ave		1.0339				14.0		30.0			
Carbon disulfide	3.1830 2.6914	2.9030 2.5798	2.7447 2.4737	2.6742 2.4755	2.7200	Ave		2.7161				8.1		30.0			
trans-1,2-Dichloroethene	1.1520 1.0243	1.0869 1.0160	1.0319 1.0020	1.0004 1.0168	1.0512	Ave		1.0424				4.7		30.0			
2-Methylpentane	2.4442 2.0107	2.2935 1.8810	2.1617 1.7802	2.0757 1.6497	2.1100	Ave		2.0452				12.2		30.0			
Methyl tert-butyl ether	3.2716 3.0742	3.3148 2.9891	3.1854 2.8934	3.0695 2.8251	3.2425	Ave		3.0962				5.5		30.0			
1,1-Dichloroethane	2.4649 1.9932	2.1933 1.9091	2.0960 1.8234	2.0124 1.7705	2.0509	Ave		2.0349				10.2		30.0			
Vinyl acetate	2.3537 2.3986	2.4371 2.3555	2.3018 2.2353	2.3117 2.1757	2.4624	Ave		2.3369				4.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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	++++ 0.4477	0.5290 0.4398	0.4791 0.4291	0.4391 0.4150	0.4626	Ave		0.4552				7.8		30.0			
Hexane	0.9272 0.7802	0.8897 0.7413	0.8149 0.6991	0.8020 0.6548	0.7995	Ave		0.7899				10.8		30.0			
C6 Range	++++ 1.5533	++++ 1.4918	++++ 1.4753	1.5507 ++++	1.5868	Ave		1.5316				3.0		30.0			
Isopropyl ether	2.9696 2.9568	3.0846 2.8425	3.0439 2.6777	2.9405 2.5359	3.1080	Ave		2.9066				6.6		30.0			
cis-1,2-Dichloroethene	1.1807 1.1054	1.2051 1.0733	1.1183 1.0545	1.0720 1.0570	1.0986	Ave		1.1072				4.8		30.0			
Ethyl acetate	1.9826 1.9470	2.0492 1.8805	1.9970 1.8074	1.9306 1.7180	2.0347	Ave		1.9274				5.7		30.0			
Chloroform	3.1680 2.7810	3.0658 2.6656	2.7927 2.5757	2.7886 2.5332	2.8816	Ave		2.8058				7.5		30.0			
Tert-butyl ethyl ether	3.1533 2.9551	3.0716 2.8268	2.9525 2.7461	2.8883 2.6238	3.0788	Ave		2.9218				5.8		30.0			
Tetrahydrofuran	1.1323 0.9962	1.1580 0.9617	1.0365 0.9258	1.0347 0.8837	1.0616	Ave		1.0212				8.8		30.0			
1,1,1-Trichloroethane	3.6366 3.1948	3.4605 3.1195	3.2415 3.0594	3.1658 3.0511	3.2818	Ave		3.2457				5.9		30.0			
1,2-Dichloroethane	0.4453 0.4146	0.4341 0.3909	0.4133 0.3759	0.3926 0.3665	0.4014	Ave		0.4038				6.4		30.0			
Benzene	0.8565 0.6763	0.7234 0.6426	0.6692 0.6290	0.6431 0.6244	0.6512	Ave		0.6795				10.7		30.0			
Cyclohexane	0.1266 0.1179	0.1269 0.1115	0.1114 0.1058	0.1140 0.1025	0.1128	Ave		0.1144				7.3		30.0			
1-Butanol	++++ 0.0749	++++ 0.0748	0.0782 0.0711	0.0719 0.0702	0.0681	Ave		0.0727				4.7		30.0			
Carbon tetrachloride	0.7406 0.7383	0.6978 0.7281	0.6474 0.7266	0.6648 0.7560	0.6919	Ave		0.7102				5.2		30.0			
2,3-Dimethylpentane	0.1613 0.1609	0.1727 0.1546	0.1548 0.1480	0.1546 0.1433	0.1578	Ave		0.1564				5.4		30.0			
Thiophene	0.3984 0.3926	0.3997 0.3758	0.3824 0.3643	0.3701 0.3561	0.3777	Ave		0.3797				4.0		30.0			
Tert-amyl methyl ether	++++ 0.6573	0.6040 0.6339	0.5913 0.6224	0.6275 0.6000	0.6476	Ave		0.6230				3.7		30.0			
2,2,4-Trimethylpentane	1.1319 1.0337	1.0910 0.9745	1.0171 0.9296	1.0057 0.8832	1.0118	Ave		1.0087				7.5		30.0			
Heptane	0.2793 0.2604	0.2754 0.2466	0.2504 0.2381	0.2394 0.2297	0.2480	Ave		0.2519				6.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9482

SDG No.: _____

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

Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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	0.2369 0.2379	0.2592 0.2239	0.2423 0.2138	0.2307 0.2044	0.2282	Ave		0.2308				7.0		30.0			
Trichloroethene	0.3913 0.3732	0.3778 0.3641	0.3535 0.3793	0.3420 0.3811	0.3505	Ave		0.3681				4.5		30.0			
Dibromomethane	0.3543 0.3167	0.3067 0.3050	0.2852 0.3044	0.2873 0.3024	0.2986	Ave		0.3067				6.6		30.0			
Bromodichloromethane	0.6086 0.6261	0.5498 0.6149	0.5387 0.6089	0.5577 0.6031	0.5917	Ave		0.5888				5.4		30.0			
1,4-Dioxane	0.0864 0.0991	0.0977 0.0939	0.0920 0.0920	0.0895 0.0845	0.0928	Ave		0.0920				5.2		30.0			
Methyl methacrylate	0.2506 0.2719	0.2669 0.2669	0.2455 0.2567	0.2369 0.2462	0.2534	Ave		0.2550				4.6		30.0			
Methylcyclohexane	0.5429 0.5509	0.5520 0.5254	0.5273 0.5144	0.5134 0.5090	0.5296	Ave		0.5294				3.0		30.0			
4-Methyl-2-pentanone (MIBK)	0.3776 0.4117	0.3958 0.4017	0.3967 0.3926	0.3789 0.3610	0.3969	Ave		0.3903				3.9		30.0			
cis-1,3-Dichloropropene	0.4475 0.4489	0.4392 0.4328	0.4056 0.4255	0.4041 0.4132	0.4296	Ave		0.4274				3.9		30.0			
trans-1,3-Dichloropropene	0.4385 0.4472	0.4225 0.4317	0.4283 0.4230	0.4164 0.4211	0.4273	Ave		0.4284				2.2		30.0			
Toluene Range	++++ 2.0153	++++ 1.9295	++++ 1.8763	1.8534 1.8846	1.9262	Ave		1.9142				3.0		30.0			
Toluene	0.8395 0.8093	0.8491 0.7770	0.7936 0.7642	0.7738 0.7773	0.7881	Ave		0.7969				3.8		30.0			
1,1,2-Trichloroethane	0.2473 0.2468	0.2582 0.2332	0.2411 0.2289	0.2313 0.2284	0.2347	Ave		0.2389				4.3		30.0			
2-Methylthiophene	0.6786 0.6945	0.6915 0.6634	0.6567 0.6465	0.6589 0.6593	0.6702	Ave		0.6689				2.4		30.0			
3-Methylthiophene	0.6861 0.6844	0.6815 0.6575	0.6391 0.6481	0.6408 0.6536	0.6684	Ave		0.6622				2.8		30.0			
2-Hexanone	0.1705 0.2083	0.1899 0.2042	0.1871 0.1978	0.1825 0.1879	0.1884	Ave		0.1907				6.0		30.0			
Octane	0.3046 0.2983	0.2938 0.2856	0.2875 0.2800	0.2759 0.2759	0.2901	Ave		0.2880				3.4		30.0			
Dibromochloromethane	0.5147 0.6391	0.4976 0.6658	0.5002 0.6985	0.5208 0.7314	0.5960	Ave		0.5960				15.3		30.0			
1,2-Dibromoethane	0.4514 0.4987	0.4414 0.4873	0.4271 0.4908	0.4418 0.4998	0.4725	Ave		0.4679				6.0		30.0			
Tetrachloroethene	0.3686 0.3715	0.3773 0.3614	0.3461 0.3710	0.3339 0.3954	0.3554	Ave		0.3645				4.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9482

SDG No.: _____

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

Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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								
Chlorobenzene	0.6950 0.6883	0.6894 0.6657	0.6599 0.6734	0.6471 0.6950	0.6559	Ave		0.6744				2.7		30.0			
2,3-Dimethylheptane	0.7899 0.6914	0.7827 0.6350	0.7170 0.5879	0.6997 0.5398	0.6966	Ave		0.6822				12.1		30.0			
Ethylbenzene	1.1434 1.1417	1.1377 1.1050	1.1069 1.0902	1.0700 1.1099	1.1134	Ave		1.1131				2.2		30.0			
2-Ethylthiophene	0.8499 0.9248	0.8830 0.8941	0.8364 0.8781	0.8529 0.8854	0.8866	Ave		0.8768				3.1		30.0			
m-Xylene & p-Xylene	0.9244 0.9307	0.9041 0.8929	0.8801 0.8889	0.8676 0.9026	0.8999	Ave		0.8990				2.2		30.0			
Bromoform	0.4414 0.6021	0.4305 0.7122	0.4383 0.7997	0.4732 +++++	0.5776	Ave		0.5594				24.9		30.0			
Styrene	0.4659 0.6631	0.4995 0.6610	0.5075 0.6798	0.5351 0.7078	0.6183	Ave		0.5931				15.4		30.0			
Nonane	0.5320 0.5077	0.5212 0.4643	0.5212 0.4376	0.4918 0.4085	0.5133	Ave		0.4886				8.7		30.0			
o-Xylene	0.9666 0.9452	0.9743 0.9037	0.9096 0.8874	0.8846 0.8870	0.9138	Ave		0.9191				3.8		30.0			
1,1,2,2-Tetrachloroethane	0.5455 0.6248	0.5869 0.6002	0.5295 0.5769	0.5547 0.5835	0.6125	Ave		0.5794				5.4		30.0			
1,2,3-Trichloropropane	0.2174 0.2205	0.2166 0.2110	0.2058 0.2107	0.2000 0.2121	0.2139	Ave		0.2120				2.9		30.0			
Isopropylbenzene	1.4295 1.3572	1.3734 1.3141	1.3130 1.3091	1.2638 1.3243	1.3304	Ave		1.3350				3.5		30.0			
Propylbenzene	0.3206 0.3696	0.3283 0.3614	0.3301 0.3700	0.3300 0.3908	0.3507	Ave		0.3502				6.9		30.0			
2-Chlorotoluene	+++++ 0.3340	0.3335 0.3298	0.3098 0.3343	0.3015 0.3477	0.3231	Ave		0.3267				4.5		30.0			
4-Ethyltoluene	1.1970 1.3224	1.2319 1.2896	1.1897 1.3003	1.1796 1.3269	1.2762	Ave		1.2571				4.6		30.0			
1,3,5-Trimethylbenzene	0.5469 0.6243	0.5674 0.6109	0.5327 0.6231	0.5477 0.6499	0.6024	Ave		0.5895				7.1		30.0			
Alpha Methyl Styrene	+++++ 0.5207	0.3639 0.5401	0.3656 0.5610	0.3863 0.5861	0.4774	Ave		0.4751				19.2		30.0			
Decane	0.5864 0.6383	0.6469 0.5959	0.6103 0.5500	0.6147 0.5048	0.6447	Ave		0.5991				7.9		30.0			
tert-Butylbenzene	1.1155 1.3026	1.2200 1.2873	1.1544 1.3340	1.1382 1.3748	1.2508	Ave		1.2420				7.4		30.0			
1,2,4-Trimethylbenzene	1.0567 1.1887	1.0858 1.1674	1.0572 1.1857	1.0569 1.2179	1.1475	Ave		1.1293				5.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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								
sec-Butylbenzene	1.4575 1.6940	1.5550 1.6784	1.4797 1.7510	1.4842 +++++	1.6224	Ave		1.5903				7.0		30.0			
1,3-Dichlorobenzene	0.7839 0.8746	0.7680 0.9113	0.7371 1.0012	0.7327 1.0431	0.8146	Ave		0.8518				13.3		30.0			
Benzyl chloride	0.9913 1.1502	0.9509 1.1420	0.9751 1.1585	0.9861 1.1519	1.0824	Ave		1.0654				8.3		30.0			
1,4-Dichlorobenzene	0.7832 0.8555	0.7728 0.8624	0.7394 0.9397	0.7367 0.9958	0.8073	Ave		0.8325				10.7		30.0			
4-Isopropyltoluene	1.2787 1.5072	1.3728 1.4704	1.3354 1.5104	1.3072 +++++	1.4520	Ave		1.4043				6.6		30.0			
1,2,3-Trimethylbenzene	0.7980 0.8970	0.8575 0.8524	0.8145 0.8449	0.7986 0.8469	0.8775	Ave		0.8430				4.0		30.0			
Butylcyclohexane	0.8269 0.8735	0.8430 0.8279	0.8368 0.8147	0.8222 0.7686	0.8741	Ave		0.8320				3.8		30.0			
1,2-Dichlorobenzene	0.7339 0.8390	0.7467 0.8639	0.7024 0.9401	0.7046 0.9877	0.7869	Ave		0.8117				12.7		30.0			
Indane	0.8988 1.0874	0.9453 1.0871	0.9346 1.1500	0.9155 1.2030	1.0376	Ave		1.0288				10.7		30.0			
Indene	+++++ 0.8020	0.6602 0.8044	0.6375 0.8255	0.6603 0.8617	0.7619	Ave		0.7517				11.5		30.0			
Butylbenzene	1.3043 1.3941	1.2970 1.3165	1.2882 1.3191	1.2631 1.2590	1.3725	Ave		1.3127				3.5		30.0			
Undecane	0.7087 0.7450	0.7870 0.6698	0.7061 0.6436	0.7148 0.5617	0.7894	Ave		0.7029				10.2		30.0			
1,2-Dimethyl-4-Ethylbenzene	+++++ 1.1145	0.9799 1.0683	0.9582 1.1101	0.9631 1.0986	1.0937	Ave		1.0483				6.6		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.3626	0.2848 0.3888	0.2556 0.4208	0.2832 0.4321	0.3569	Ave		0.3481				19.1		30.0			
1,2,4,5-Tetramethylbenzene	1.1280 1.3892	1.1793 1.3109	1.1313 1.4313	1.1592 +++++	1.3455	Ave		1.2593				9.8		30.0			
1,2,3,5-Tetramethylbenzene	0.7014 0.8228	0.7621 0.7627	0.6772 0.8072	0.6958 0.7761	0.8138	Ave		0.7577				7.2		30.0			
1,2,3,4-Tetramethylbenzene	0.9370 1.1438	0.9768 1.0541	0.9292 1.1581	0.9384 1.0472	1.1276	Ave		1.0347				9.0		30.0			
Dodecane	0.6092 0.6657	0.7288 0.5555	0.6338 0.6382	0.6127 0.3833	0.7850	Ave		0.6236				18.1		30.0			
1,2,4-Trichlorobenzene	0.6272 0.8005	0.6639 0.7430	0.5713 0.9298	0.5791 0.7414	0.7733	Ave		0.7144				16.2		30.0			
Naphthalene	1.3527 1.6696	1.4676 1.5877	1.2582 1.7071	1.2708 +++++	1.6598	Ave		1.4967				12.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9482

SDG No.: _____

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

Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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													
Benzo(b)thiophene	0.7926 0.9824	0.8643 0.9431	0.7434 0.9932	0.7548 0.7832	0.9779	Ave		0.8706				12.0		30.0			
Hexachlorobutadiene	0.6444 0.7667	0.6789 0.7046	0.6040 0.8911	0.6006 0.6659	0.7840	Ave		0.7045				13.4		30.0			
1,2,3-Trichlorobenzene	0.6779 0.7664	0.7017 0.6913	0.5616 0.8404	0.5574 0.5093	0.7607	Ave		0.6741				16.4		30.0			
2-Methylnaphthalene	++++ 0.3374	0.2697 0.3653	0.2434 0.4468	0.2127 ++++	0.3001	Ave		0.3108				25.7		50.0			
1-Methylnaphthalene	++++ 0.3303	0.2976 0.3653	0.2352 0.4362	0.2020 ++++	0.2997	Ave		0.3095				25.3		50.0			
4-Bromofluorobenzene (Surr)	0.7862 0.7838	0.7836 0.7899	0.7710 0.8014	0.7914 0.8000	0.8071	Ave		0.7905				1.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9482

SDG No.: _____

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

Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-9482/3	GC15IC01.D
Level 2	IC 140-9482/4	GC15IC02.D
Level 3	IC 140-9482/5	GC15IC03.D
Level 4	IC 140-9482/6	GC15IC04.D
Level 5	IC 140-9482/7	GC15IC05.D
Level 6	ICIS 140-9482/8	GC15IC06.D
Level 7	IC 140-9482/9	GC15IC07.D
Level 8	IC 140-9482/10	GC15IC08.D
Level 9	IC 140-9482/11	GC15IC09.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	+++++ 79923	3314 161083	6330 317499	16118 648102	38106	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Propene	CBM	Ave	3760 186431	7827 366636	15226 715294	38073 1334692	93889	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Dichlorodifluoromethane	CBM	Ave	14467 749517	29295 1518249	58308 3065573	147329 6309639	367220	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Chloromethane	CBM	Ave	+++++ 51943	+++++ 102473	4662 195522	10845 381523	25770	+++++ 2.00	+++++ 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dichlorotetrafluoroethane	CBM	Ave	7978 436402	17176 925480	34069 1944481	85416 4340354	208904	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Acetaldehyde	CBM	Ave	+++++ 313096	+++++ 595674	+++++ 1132144	72210 2180620	165163	+++++ 9.99	+++++ 20.0	+++++ 40.0	2.00 80.0	5.01
Vinyl chloride	CBM	Ave	4066 210834	8251 414360	17041 808059	41537 1585259	100829	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,3-Butadiene	CBM	Ave	2487 143038	5498 283835	11030 549398	28287 1072769	68804	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Butane	CBM	Ave	6130 293638	11940 583059	24164 1092508	59701 2112304	142250	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Bromomethane	CBM	Ave	3811 204127	8019 425627	15909 850291	39896 1772157	99093	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Chloroethane	CBM	Ave	1857 98257	4085 204064	7956 409306	19908 830849	49038	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Ethanol	CBM	Ave	6987 345378	15059 707984	28920 1409489	69923 2735400	174754	0.196 9.99	0.392 20.0	0.794 40.0	2.00 80.0	5.01
Vinyl bromide	CBM	Ave	3404 194576	7724 403357	15245 817628	37848 1728343	92859	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Methylbutane	CBM	Ave	3886 196053	8230 399830	15685 786537	38853 1595022	95489	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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
Acrolein	CBM	Ave	+++++ 30056	+++++ 69764	2011 133516	4862 330540	12471	+++++ 2.00	+++++ 4.00	0.159 8.00	0.400 16.0	1.00
Trichlorofluoromethane	CBM	Ave	14665 743344	28467 1532462	55895 3119354	144284 6686372	358635	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Acetonitrile	CBM	Ave	+++++ 61466	+++++ 123503	+++++ 247919	12605 523809	31325	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0	1.00
Acetone	CBM	Ave	+++++ 208378	+++++ 417742	+++++ 841477	46214 1728119	107750	+++++ 5.87	+++++ 11.7	+++++ 23.5	1.17 47.0	2.94
Pentane	CBM	Ave	+++++ 37027	1458 74522	2803 151563	6934 323924	17688	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Isopropyl alcohol	CBM	Ave	+++++ 695832	+++++ 1433726	57055 2844607	159557 6495368	343901	+++++ 5.87	+++++ 11.7	0.466 23.5	1.17 47.0	2.94
Ethyl ether	CBM	Ave	2809 162376	6464 331731	12398 672373	32090 1560739	82779	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1-Dichloroethene	CBM	Ave	3592 187192	7104 387339	14330 797692	36376 1773303	89728	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Acrylonitrile	CBM	Ave	+++++ 84597	3507 176062	7063 356803	16558 774315	42053	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
t-Butyl alcohol	CBM	Ave	5190 283850	10717 610004	23609 1241041	55009 2500383	138675	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1,2-Trichlorotrifluoroethane	CBM	Ave	8222 432242	16256 891000	32632 1855781	84505 4102363	209870	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Methylene Chloride	CBM	Ave	+++++ 158311	+++++ 319885	18584 646443	36046 1389569	81013	+++++ 2.00	+++++ 4.00	0.159 8.00	0.400 16.0	1.00
3-Chloropropene	CBM	Ave	3961 177955	7519 358922	13978 711970	34533 1527575	87550	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Carbon disulfide	CBM	Ave	9530 478845	18351 979418	36441 1984338	91859 4378380	229458	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
trans-1,2-Dichloroethene	CBM	Ave	3449 182249	6871 385716	13700 803766	34363 1798426	88680	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Methylpentane	CBM	Ave	7318 357751	14498 714141	28701 1428051	71301 2917758	177996	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Methyl tert-butyl ether	CBM	Ave	9795 546952	20954 1134810	42292 2321003	105435 4996692	273536	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1-Dichloroethane	CBM	Ave	7380 354630	13865 724800	27828 1462691	69127 3131504	173008	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Vinyl acetate	CBM	Ave	7047 426758	15406 894260	30561 1793080	79405 3848118	207726	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Butanone	CBM	Ave	+++++ 79660	3344 166968	6361 344230	15082 734059	39027	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Hexane	CBM	Ave	2776 138819	5624 281421	10820 560820	27547 1158063	67446	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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	DFBZ	Ave	+++++ 1313930	+++++ 2723811	+++++ 5679805	265311 +++++	680124	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++	1.00
Isopropyl ether	CBM	Ave	8891 526080	19499 1079183	40414 2148000	101005 4485105	262185	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
cis-1,2-Dichloroethene	CBM	Ave	3535 196676	7618 407485	14847 845905	36823 1869513	92674	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Ethyl acetate	CBM	Ave	5936 346406	12954 713928	26514 1449886	66315 3038641	171642	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Chloroform	CBM	Ave	9485 494799	19380 1012011	37079 2066202	95787 4480470	243090	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Tert-butyl ethyl ether	CBM	Ave	9441 525778	19417 1073194	39200 2202848	99212 4640558	259723	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Tetrahydrofuran	CBM	Ave	3390 177245	7320 365105	13762 742637	35542 1562956	89552	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1,1-Trichloroethane	CBM	Ave	10888 568413	21875 1184348	43037 2454172	108746 5396460	276845	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dichloroethane	DFBZ	Ave	6535 350677	13373 713806	27277 1447194	67175 3085614	172041	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Benzene	DFBZ	Ave	12569 572098	22286 1173319	44171 2421461	110029 5257486	279122	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Cyclohexane	DFBZ	Ave	1858 99763	3909 203651	7351 407285	19497 863041	48328	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1-Butanol	DFBZ	Ave	+++++ 63344	+++++ 136613	5160 273762	12296 591245	29171	+++++ 2.00	+++++ 4.00	0.159 8.00	0.400 16.0	1.00
Carbon tetrachloride	DFBZ	Ave	10868 624502	21497 1329349	42733 2797102	113747 6365119	296576	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2,3-Dimethylpentane	DFBZ	Ave	2367 136123	5321 282206	10219 569652	26444 1206293	67650	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Thiophene	DFBZ	Ave	5847 332092	12315 686171	25238 1402526	63320 2998594	161878	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Tert-amyl methyl ether	DFBZ	Ave	+++++ 556050	18607 1157370	39025 2396229	107357 5052003	277565	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2,2,4-Trimethylpentane	DFBZ	Ave	16611 874389	33610 1779183	67131 3578687	172066 7435991	433667	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Heptane	DFBZ	Ave	4099 220272	8485 450272	16529 916791	40968 1934212	106290	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dichloropropane	DFBZ	Ave	3477 201269	7985 408812	15995 823056	39466 1721134	97796	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Trichloroethene	DFBZ	Ave	5743 315722	11638 664844	23332 1460218	58508 3208650	150217	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Dibromomethane	DFBZ	Ave	5200 267885	9448 556851	18824 1171750	49152 2546424	127996	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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	DFBZ	Ave	8931 529608	16938 1122661	35557 2343991	95415 5078012	253630	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,4-Dioxane	DFBZ	Ave	1268 83850	3011 171415	6069 354151	15307 711143	39782	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Methyl methacrylate	DFBZ	Ave	3677 229984	8221 487379	16201 988227	40539 2072888	108599	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Methylcyclohexane	DFBZ	Ave	7968 465979	17005 959276	34804 1980430	87846 4285973	227011	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	5542 348265	12195 733481	26186 1511574	64835 3039224	170118	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
cis-1,3-Dichloropropene	DFBZ	Ave	6567 379694	13530 790238	26770 1637962	69133 3479031	184126	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
trans-1,3-Dichloropropene	CBZd 5	Ave	6192 373664	12488 789307	26814 1645268	68241 3558024	178625	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Toluene Range	DFBZ	Ave	++++ 1704710	++++ 3522873	++++ 7223375	317115 15867496	825588	++++ 2.00	++++ 4.00	++++ 8.00	0.400 16.0	1.00
Toluene	CBZd 5	Ave	11856 676247	25094 1420544	49691 2972164	126815 6568341	329471	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1,2-Trichloroethane	CBZd 5	Ave	3493 206257	7631 426290	15096 890354	37911 1930179	98117	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Methylthiophene	CBZd 5	Ave	9584 580302	20438 1212899	41117 2514496	107989 5571008	280205	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
3-Methylthiophene	CBZd 5	Ave	9689 571930	20142 1202168	40017 2520669	105015 5522937	279432	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Hexanone	CBZd 5	Ave	2408 174060	5612 373275	11715 769096	29914 1588026	78752	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Octane	CBZd 5	Ave	4302 249240	8683 522104	18002 1089002	45217 2331636	121262	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Dibromochloromethane	CBZd 5	Ave	7269 534023	14707 1217195	31316 2716554	85348 6180157	249183	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dibromoethane	CBZd 5	Ave	6375 416730	13045 890944	26740 1908708	72403 4223710	197523	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Tetrachloroethene	CBZd 5	Ave	5206 310406	11152 660677	21668 1442699	54718 3341461	148601	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Chlorobenzene	CBZd 5	Ave	9815 575122	20374 1217110	41319 2618941	106057 5872788	274196	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2,3-Dimethylheptane	CBZd 5	Ave	11155 577752	23134 1160951	44892 2286470	114675 4561552	291234	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Ethylbenzene	CBZd 5	Ave	16148 954045	33624 2020166	69301 4239909	175356 9378439	465478	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Ethylthiophene	CBZd 5	Ave	12002 772778	26097 1634721	52367 3415104	139782 7482070	370649	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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
m-Xylene & p-Xylene	CBZd 5	Ave	26110 1555433	53439 3265060	110203 6914176	284366 15254685	752459	0.0784 4.00	0.157 8.00	0.317 16.0	0.800 32.0	2.00
Bromoform	CBZd 5	Ave	6234 503085	12722 1302027	27441 3110131	77559 +++++	241462	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 +++++	1.00
Styrene	CBZd 5	Ave	6579 554081	14764 1208558	31773 2643863	87701 5980940	258497	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Nonane	CBZd 5	Ave	7513 424281	15404 848900	32630 1702072	80602 3451826	214597	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
o-Xylene	CBZd 5	Ave	13651 789853	28796 1652204	56948 3451230	144970 7495466	382052	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	7704 522069	17347 1097235	33152 2243454	90906 4930342	256086	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,3-Trichloropropane	CBZd 5	Ave	3070 184265	6401 385852	12888 819612	32782 1792574	89439	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Isopropylbenzene	CBZd 5	Ave	20188 1134088	40591 2402575	82210 5091349	207127 11190142	556209	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Propylbenzene	CBZd 5	Ave	4528 308856	9702 660707	20666 1438960	54076 3302547	146598	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Chlorotoluene	CBZd 5	Ave	+++++ 279105	9858 602879	19395 1300045	49412 2937732	135063	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
4-Ethyltoluene	CBZd 5	Ave	16904 1105029	36409 2357742	74487 5056909	193325 11212261	533550	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,3,5-Trimethylbenzene	CBZd 5	Ave	7724 521704	16770 1116920	33353 2423508	89762 5491943	251859	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 435119	10756 987378	22891 2181723	63304 4952983	199600	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Decane	CBZd 5	Ave	8281 533364	19120 1089510	38214 2139210	100736 4265576	269524	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
tert-Butylbenzene	CBZd 5	Ave	15754 1088441	36058 2353545	72279 5188127	186533 11616984	522916	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,4-Trimethylbenzene	CBZd 5	Ave	14923 993298	32090 2134348	66195 4611406	173218 10291549	479730	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
sec-Butylbenzene	CBZd 5	Ave	20583 1415485	45958 3068495	92643 6810067	243244 +++++	678287	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 +++++	1.00
1,3-Dichlorobenzene	CBZd 5	Ave	11070 730798	22698 1666142	46148 3893907	120087 8814211	340580	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Benzyl chloride	CBZd 5	Ave	14000 961111	28105 2087808	61054 4505667	161617 9733935	452529	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,4-Dichlorobenzene	CBZd 5	Ave	11061 714901	22839 1576716	46292 3654606	120739 8414582	337505	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
4-Isopropyltoluene	CBZd 5	Ave	18058 1259395	40574 2688329	83608 5874319	214236 +++++	607035	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 +++++	1.00

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9482

SDG No.: _____

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

Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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
1,2,3-Trimethylbenzene	CBZd 5	Ave	11269 749546	25342 1558491	50998 3285785	130876 7156186	366844	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Butylcyclohexane	CBZd 5	Ave	11678 729918	24915 1513686	52392 3168620	134750 6495136	365451	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dichlorobenzene	CBZd 5	Ave	10364 701112	22069 1579523	43975 3656010	115468 8346220	328983	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Indane	CBZd 5	Ave	12693 908631	27938 1987507	58519 4472405	150042 10165330	433789	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Indene	CBZd 5	Ave	++++ 670154	19511 1470712	39915 3210332	108215 7281318	318543	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Butylbenzene	CBZd 5	Ave	18420 1164905	38334 2406878	80658 5130283	207014 10638853	573821	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Undecane	CBZd 5	Ave	10009 622503	23261 1224656	44209 2502915	117141 4746027	330016	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dimethyl-4-Ethylbenzene	CBZd 5	Ave	++++ 931315	28961 1953205	59995 4317337	157840 9283464	457261	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dibromo-3-Chloropropane	CBZd 5	Ave	++++ 302962	8417 710910	16001 1636568	46413 3651422	149226	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,4,5-Tetramethylbenzene	CBZd 5	Ave	15930 1160795	34855 2396674	70829 5566375	189973 ++++	562520	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 ++++	1.00
1,2,3,5-Tetramethylbenzene	CBZd 5	Ave	9905 687501	22523 1394400	42400 3139429	114039 6557823	340236	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,3,4-Tetramethylbenzene	CBZd 5	Ave	13233 955751	28869 1927205	58175 4503997	153792 8848915	471400	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Dodecane	CBZd 5	Ave	8604 556303	21541 1015546	39684 2482191	100417 3238859	328197	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,4-Trichlorobenzene	CBZd 5	Ave	8857 668939	19622 1358330	35767 3616219	94904 6264846	323309	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Naphthalene	CBZd 5	Ave	19103 1395111	43374 2902807	78779 6639288	208260 ++++	693914	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 ++++	1.00
Benzo(b)thiophene	CBZd 5	Ave	11193 820908	25544 1724284	46547 3862788	123697 6618484	408835	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Hexachlorobutadiene	CBZd 5	Ave	9101 640650	20064 1288187	37819 3465632	98425 5626941	327761	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,3-Trichlorobenzene	CBZd 5	Ave	9574 640410	20740 1263910	35163 3268537	91350 4303288	318023	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Methylnaphthalene	CBZd 5	Ave	++++ 852913	24114 2020346	46113 5256646	105461 ++++	379553	++++ 6.04	0.237 12.1	0.480 24.2	1.21 ++++	3.03
1-Methylnaphthalene	CBZd 5	Ave	++++ 834902	26609 2020334	44542 5132440	100155 ++++	379039	++++ 6.04	0.237 12.1	0.480 24.2	1.21 ++++	3.03
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	1132701 1311298	1181326 1443792	1216766 1558022	1296737 1689695	1347272	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00	4.00

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

Lab Name: <u>TestAmerica Knoxville</u>	Job No.: <u>140-7685-1</u>	Analy Batch No.: <u>9482</u>
SDG No.: _____		
Instrument ID: <u>MG</u>	GC Column: <u>RTX-5</u> ID: <u>0.32 (mm)</u>	Heated Purge: (Y/N) <u>N</u>
Calibration Start Date: <u>03/15/2017 14:36</u>	Calibration End Date: <u>03/15/2017 20:21</u>	Calibration ID: <u>962</u>

Curve Type Legend:

Ave = Average ISTD

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC01.D
 Lims ID: IC L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 15-Mar-2017 14:36:30 ALS Bottle#: 1 Worklist Smp#: 3
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-003
 Misc. Info.: 083683
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 11-Apr-2017 10:07:11 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK028

First Level Reviewer: tajh

Date: 15-Mar-2017 15:37:22

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	7.985	7.993	-0.008	81	305443	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.153	10.161	-0.008	95	1497178	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.028	15.034	-0.006	88	1440748	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.699	16.705	-0.006	92	1132701	4.00	3.98	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	96	1904	0.0392	0.0561	
7 Propene	41	3.466	3.466	0.000	81	3760	0.0392	0.0465	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	14467	0.0392	0.0448	
9 Chloromethane	52	3.655	3.659	-0.004	55	1551	0.0392	0.0713	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.666	3.669	-0.003	89	7978	0.0392	0.0415	
11 Acetaldehyde	44	3.785	3.786	-0.001	84	13227	0.1960	0.5179	
12 Vinyl chloride	62	3.801	3.803	-0.002	98	4066	0.0392	0.0455	
13 Butadiene	54	3.876	3.876	0.000	70	2487	0.0392	0.0418	
14 Butane	43	3.876	3.879	-0.003	85	6130	0.0392	0.0484	
15 Bromomethane	94	4.135	4.141	-0.006	96	3811	0.0392	0.0432	
16 Chloroethane	64	4.259	4.258	0.001	91	1857	0.0392	0.0429	
17 Ethanol	31	4.356	4.357	-0.001	96	6987	0.1960	0.2273	
18 Vinyl bromide	106	4.507	4.511	-0.004	97	3404	0.0392	0.0407	
19 2-Methylbutane	43	4.556	4.560	-0.004	89	3886	0.0392	0.0454	
21 Acrolein	56	4.750	4.742	0.008	27	513	0.0392	0.0410	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	100	14665	0.0392	0.0455	
22 Acetonitrile	40	4.793	4.793	0.000	89	1363	0.0392	0.0532	
23 Acetone	58	4.841	4.835	0.006	99	5677	0.1151	0.1893	
25 Pentane	72	4.933	4.937	-0.004	80	741	0.0392	0.0476	
24 Isopropyl alcohol	45	4.933	4.939	-0.006	77	12981	0.1151	0.1251	
26 Ethyl ether	31	5.084	5.075	0.009	86	2809	0.0392	0.0398	
27 1,1-Dichloroethene	96	5.348	5.354	-0.006	96	3592	0.0392	0.0441	
28 Acrylonitrile	53	5.429	5.435	-0.006	96	1959	0.0392	0.0528	
29 2-Methyl-2-propanol	59	5.467	5.467	0.000	94	5190	0.0392	0.0419	
30 1,1,2-Trichloro-1,2,2-trif	101	5.516	5.521	-0.005	92	8222	0.0392	0.0438	
31 Methylene Chloride	84	5.650	5.656	-0.006	86	9041	0.0392	0.1231	

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	5.667	5.673	-0.006	89	3961	0.0392	0.0502	
33 Carbon disulfide	76	5.791	5.797	-0.006	99	9530	0.0392	0.0459	
34 trans-1,2-Dichloroethene	96	6.395	6.393	0.001	95	3449	0.0392	0.0433	
35 2-Methylpentane	43	6.421	6.426	-0.005	91	7318	0.0392	0.0469	
36 Methyl tert-butyl ether	73	6.524	6.513	0.011	95	9795	0.0392	0.0414	
37 1,1-Dichloroethane	63	6.756	6.771	-0.015	98	7380	0.0392	0.0475	
38 Vinyl acetate	43	6.880	6.881	-0.001	99	7047	0.0392	0.0395	
39 2-Butanone (MEK)	72	7.295	7.283	0.012	99	1469	0.0392	0.0423	
40 Hexane	56	7.333	7.336	-0.003	90	2776	0.0392	0.0460	
41 Isopropyl ether	45	7.489	7.483	0.006	91	8891	0.0392	0.0401	
42 cis-1,2-Dichloroethene	96	7.683	7.691	-0.008	95	3535	0.0392	0.0418	
43 Ethyl acetate	43	7.888	7.880	0.008	97	5936	0.0392	0.0403	
44 Chloroform	83	8.012	8.019	-0.007	89	9485	0.0392	0.0443	
45 Tert-butyl ethyl ether	59	8.131	8.122	0.009	96	9441	0.0392	0.0423	
46 Tetrahydrofuran	42	8.406	8.387	0.019	83	3390	0.0392	0.0435	
47 1,1,1-Trichloroethane	97	8.988	8.997	-0.009	95	10888	0.0392	0.0439	
48 1,2-Dichloroethane	62	9.080	9.087	-0.007	98	6535	0.0392	0.0432	
49 Benzene	78	9.576	9.582	-0.006	95	12569	0.0392	0.0494	
50 Cyclohexane	69	9.587	9.590	-0.003	82	1858	0.0392	0.0434	
51 Carbon tetrachloride	117	9.603	9.611	-0.008	96	10868	0.0392	0.0409	
53 2,3-Dimethylpentane	71	9.732	9.740	-0.008	88	2367	0.0392	0.0404	
54 Thiophene	84	9.851	9.855	-0.004	95	5847	0.0392	0.0411	
55 Tert-amyl methyl ether	73	10.104	10.100	0.004	40	7626	0.0392	0.0327	
56 Isooctane	57	10.412	10.414	-0.002	95	16611	0.0392	0.0440	
57 n-Heptane	71	10.816	10.816	0.000	83	4099	0.0392	0.0435	
58 1,2-Dichloropropane	63	10.838	10.846	-0.008	57	3477	0.0392	0.0402	
59 Trichloroethene	130	10.886	10.897	-0.011	93	5743	0.0392	0.0417	
60 Dibromomethane	93	10.951	10.961	-0.010	92	5200	0.0392	0.0453	
61 Dichlorobromomethane	83	11.118	11.126	-0.008	97	8931	0.0392	0.0405	
62 1,4-Dioxane	88	11.172	11.152	0.020	69	1268	0.0392	0.0368	
63 Methyl methacrylate	41	11.258	11.260	-0.002	86	3677	0.0392	0.0385	
64 Methylcyclohexane	83	11.706	11.704	0.002	93	7968	0.0392	0.0402	
65 4-Methyl-2-pentanone (MIBK)	43	12.143	12.133	0.010	94	5542	0.0392	0.0379	
66 cis-1,3-Dichloropropene	75	12.170	12.174	-0.004	96	6567	0.0392	0.0411	
67 trans-1,3-Dichloropropene	75	12.887	12.897	-0.010	96	6192	0.0392	0.0401	
68 Toluene	91	13.016	13.021	-0.005	93	11856	0.0392	0.0413	
69 1,1,2-Trichloroethane	83	13.086	13.091	-0.005	95	3493	0.0392	0.0406	
70 2-Methylthiophene	97	13.167	13.173	-0.006	98	9584	0.0392	0.0398	
71 3-Methylthiophene	97	13.378	13.381	-0.003	98	9689	0.0392	0.0406	
72 2-Hexanone	58	13.529	13.519	0.010	95	2408	0.0392	0.0351	
73 n-Octane	85	13.777	13.780	-0.003	86	4302	0.0392	0.0415	
74 Chlorodibromomethane	129	13.798	13.803	-0.005	95	7269	0.0392	0.0339	
75 Ethylene Dibromide	107	14.079	14.092	-0.013	98	6375	0.0392	0.0378	
76 Tetrachloroethene	129	14.192	14.195	-0.003	90	5206	0.0392	0.0397	
77 Chlorobenzene	112	15.082	15.082	0.000	92	9815	0.0392	0.0404	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	90	11155	0.0392	0.0454	
79 Ethylbenzene	91	15.389	15.393	-0.004	98	16148	0.0392	0.0403	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	12002	0.0392	0.0380	
81 m-Xylene & p-Xylene	91	15.551	15.559	-0.008	99	26110	0.0784	0.0806	
82 Bromoform	173	15.971	15.979	-0.008	93	6234	0.0392	0.0309	
83 Styrene	104	16.025	16.027	-0.002	81	6579	0.0392	0.0308	
84 n-Nonane	57	16.025	16.029	-0.004	88	7513	0.0392	0.0427	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 o-Xylene	91	16.085	16.088	-0.003	97	13651	0.0392	0.0412	
86 1,1,2,2-Tetrachloroethane	83	16.408	16.411	-0.003	95	7704	0.0392	0.0369	
87 1,2,3-Trichloropropane	110	16.554	16.565	-0.011	93	3070	0.0392	0.0402	
88 Isopropylbenzene	105	16.683	16.692	-0.009	91	20188	0.0392	0.0420	
89 N-Propylbenzene	120	17.239	17.246	-0.007	98	4528	0.0392	0.0359	
91 4-Ethyltoluene	105	17.406	17.409	-0.003	97	16904	0.0392	0.0373	
92 1,3,5-Trimethylbenzene	120	17.487	17.490	-0.003	91	7724	0.0392	0.0364	
93 Alpha Methyl Styrene	118	17.729	17.734	-0.005	87	4705	0.0392	0.0275	
94 n-Decane	57	17.832	17.837	-0.005	94	8281	0.0392	0.0384	
95 tert-Butylbenzene	119	17.934	17.939	-0.005	91	15754	0.0392	0.0352	
96 1,2,4-Trimethylbenzene	105	17.945	17.953	-0.008	96	14923	0.0392	0.0367	
97 1,3-Dichlorobenzene	146	18.220	18.223	-0.003	94	11070	0.0392	0.0361	
98 sec-Butylbenzene	105	18.220	18.225	-0.005	96	20583	0.0392	0.0359	
99 Benzyl chloride	91	18.295	18.303	-0.008	96	14000	0.0392	0.0365	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	93	11061	0.0392	0.0369	
101 4-Isopropyltoluene	119	18.398	18.402	-0.004	96	18058	0.0392	0.0357	
102 1,2,3-Trimethylbenzene	105	18.441	18.445	-0.004	97	11269	0.0392	0.0371	
103 Butylcyclohexane	83	18.517	18.520	-0.003	93	11678	0.0392	0.0390	
104 1,2-Dichlorobenzene	146	18.684	18.689	-0.005	90	10364	0.0392	0.0354	
105 2,3-Dihydroindene	117	18.689	18.693	-0.004	92	12693	0.0392	0.0343	
106 Indene	116	18.824	18.827	-0.003	92	8277	0.0392	0.0306	
107 n-Butylbenzene	91	18.851	18.854	-0.003	97	18420	0.0392	0.0390	
108 Undecane	57	19.207	19.209	-0.002	94	10009	0.0392	0.0395	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.234	19.239	-0.005	96	13104	0.0392	0.0347	
110 1,2-Dibromo-3-Chloropropan	157	19.304	19.308	-0.004	85	3309	0.0392	0.0264	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.635	-0.002	95	15930	0.0392	0.0351	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	94	9905	0.0392	0.0363	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	95	13233	0.0392	0.0355	
114 Dodecane	57	20.280	20.280	0.000	92	8604	0.0392	0.0383	
115 1,2,4-Trichlorobenzene	180	20.415	20.418	-0.003	92	8857	0.0392	0.0344	
116 Naphthalene	128	20.544	20.546	-0.002	98	19103	0.0392	0.0354	
117 Benzo(b)thiophene	134	20.647	20.645	0.002	98	11193	0.0392	0.0357	
118 Hexachlorobutadiene	225	20.771	20.776	-0.005	91	9101	0.0392	0.0359	
119 1,2,3-Trichlorobenzene	180	20.824	20.825	-0.001	94	9574	0.0392	0.0394	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	96	12576	0.1186	0.1124	
121 1-Methylnaphthalene	142	21.801	21.801	-0.001	97	14522	0.1186	0.1303	
A 122 C6 Range	1	7.343	(7.303-7.383)		0	36327	0.0392	0.0634	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	30770	0.0392	0.0429	
S 126 Xylenes, Total	100				0		0.1176	0.1219	
S 127 1,2-Dichloroethene, Total	1				0		0.0784	0.0851	

Reagents:

40L12DNP_00010

Amount Added: 100.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC01.D

Injection Date: 15-Mar-2017 14:36:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L1

Worklist Smp#: 3

Client ID:

Purge Vol: 500.000 mL

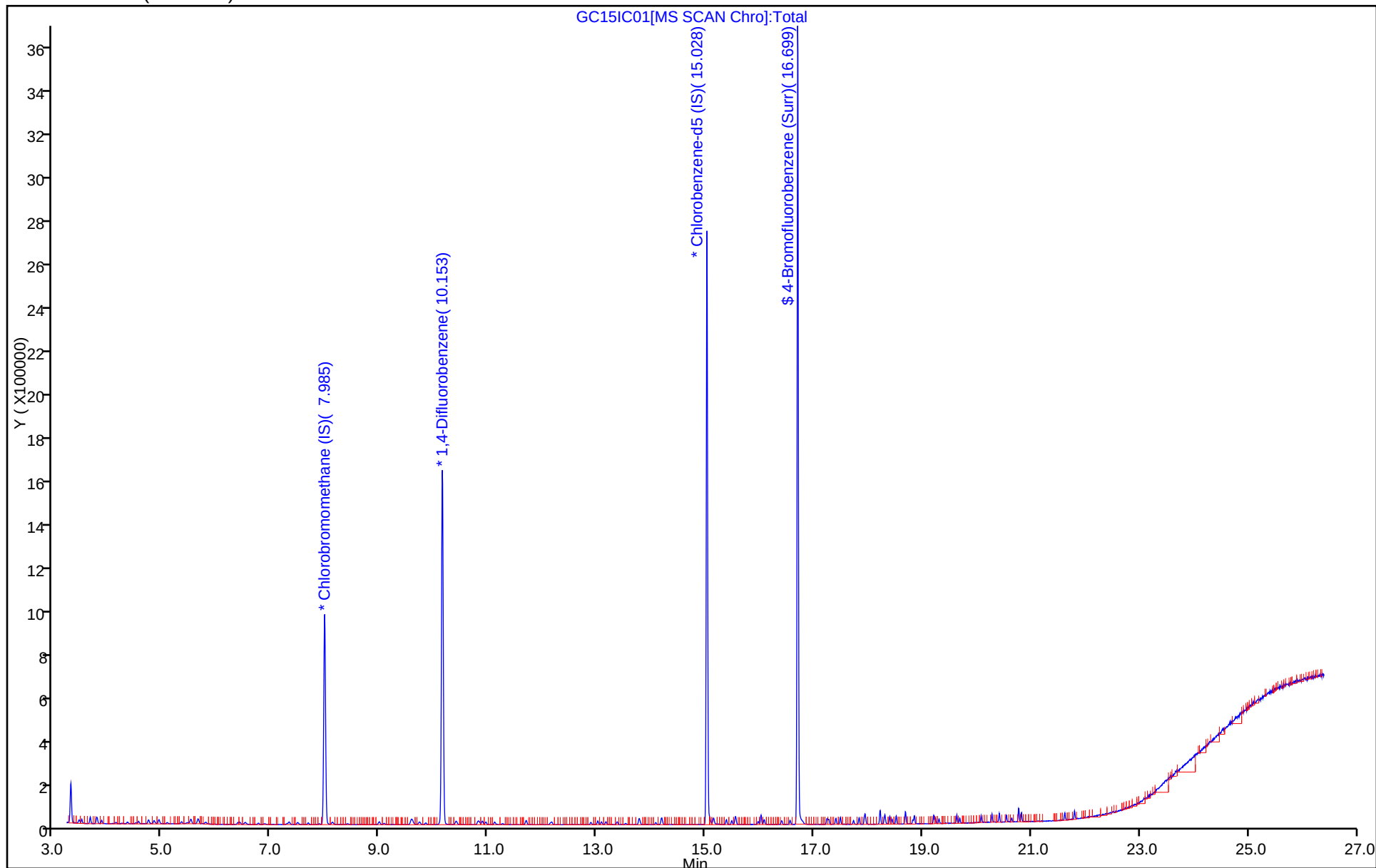
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC01.D

Injection Date: 15-Mar-2017 14:36:30

Instrument ID: MG

Lims ID: IC L1

Client ID:

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 3

Purge Vol: 500.000 mL

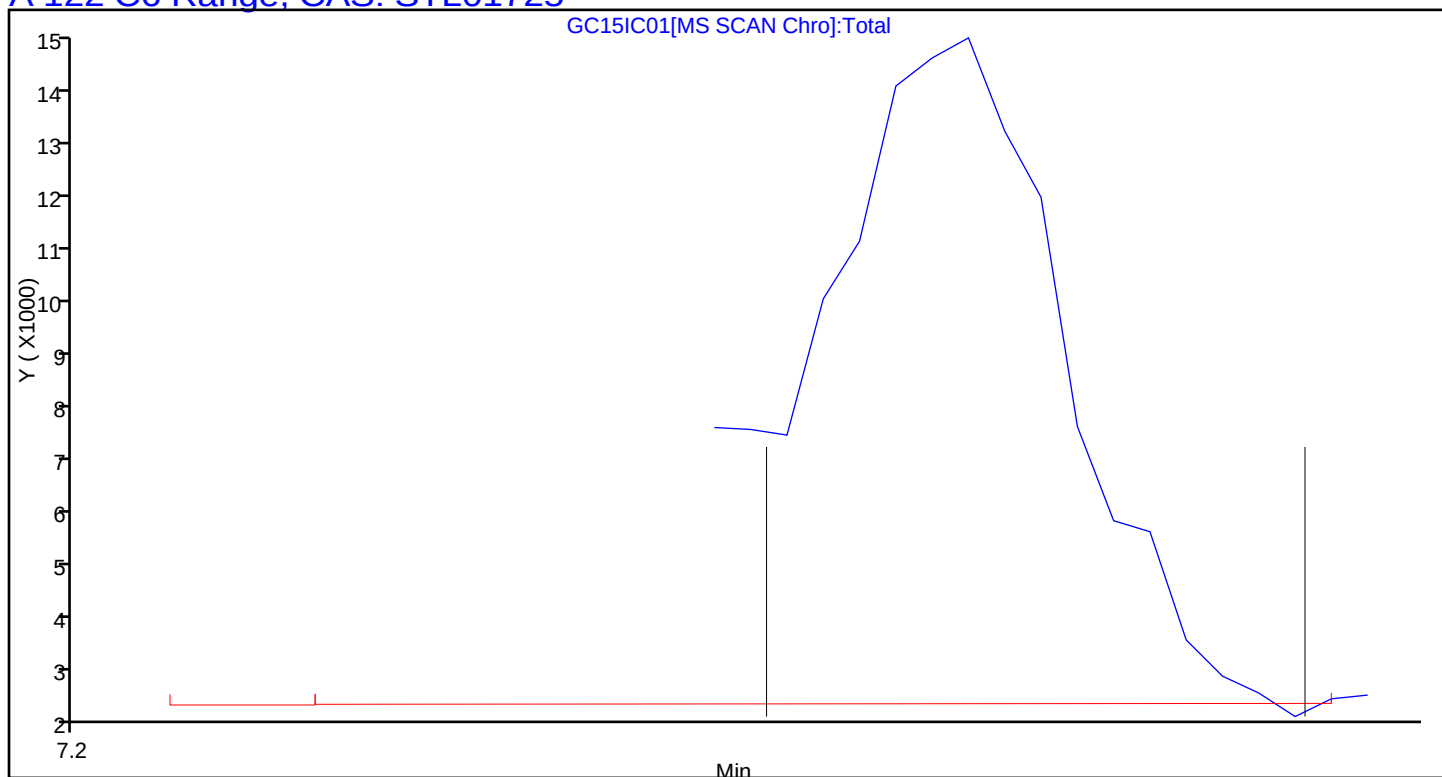
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC01.D

Injection Date: 15-Mar-2017 14:36:30

Instrument ID: MG

Lims ID: IC L1

Client ID:

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 3

Purge Vol: 500.000 mL

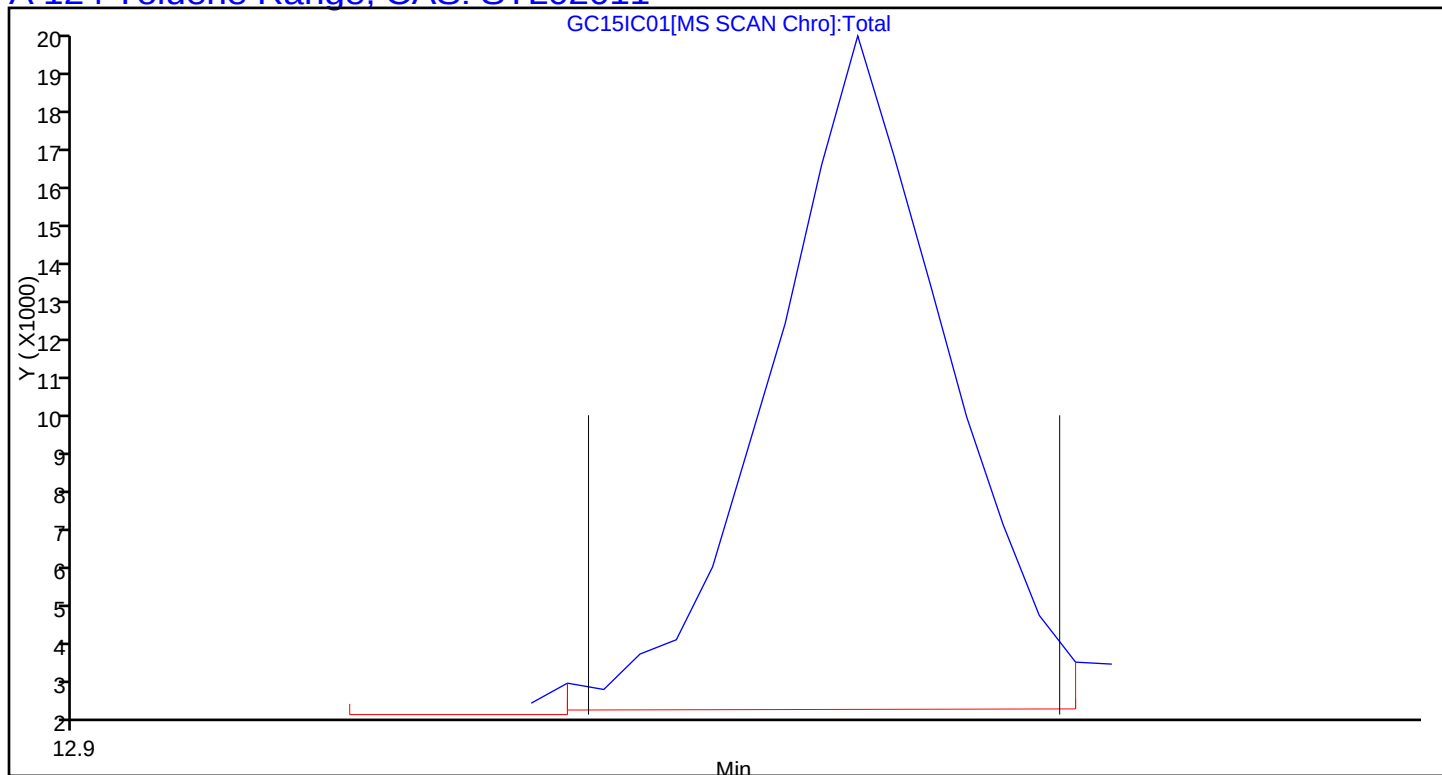
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

A 124 Toluene Range, CAS: STL02011

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC02.D
 Lims ID: IC L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 15-Mar-2017 15:20:30 ALS Bottle#: 1 Worklist Smp#: 4
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-004
 Misc. Info.: 083683
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:08:32 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: barlozhetskayaa

Date: 15-Mar-2017 16:12:16

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	7.985	7.993	-0.008	82	322451	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.153	10.161	-0.008	95	1571472	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.028	15.034	-0.006	88	1507586	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.699	16.705	-0.006	93	1181326	4.00	3.97	
6 Chlorodifluoromethane	67	3.461	3.457	0.004	97	3314	0.0784	0.0924	
7 Propene	41	3.461	3.466	-0.005	96	7827	0.0784	0.0918	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	29295	0.0784	0.0858	
9 Chloromethane	52	3.655	3.659	-0.004	60	2797	0.0784	0.1218	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.666	3.669	-0.003	92	17176	0.0784	0.0846	
11 Acetaldehyde	44	3.785	3.786	-0.001	86	22772	0.3921	0.8447	
12 Vinyl chloride	62	3.795	3.803	-0.008	99	8251	0.0784	0.0875	
13 Butadiene	54	3.876	3.876	0.000	68	5498	0.0784	0.0875	
14 Butane	43	3.876	3.879	-0.003	85	11940	0.0784	0.0893	
15 Bromomethane	94	4.140	4.141	-0.001	95	8019	0.0784	0.0860	
16 Chloroethane	64	4.254	4.258	-0.004	91	4085	0.0784	0.0895	
17 Ethanol	31	4.345	4.357	-0.012	97	15059	0.3921	0.4642	
18 Vinyl bromide	106	4.507	4.511	-0.004	96	7724	0.0784	0.0874	
19 2-Methylbutane	43	4.561	4.560	0.001	94	8230	0.0784	0.0911	
21 Acrolein	56	4.744	4.742	0.002	28	965	0.0784	0.0731	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	99	28467	0.0784	0.0838	
22 Acetonitrile	40	4.788	4.793	-0.005	89	2730	0.0784	0.0973	
23 Acetone	58	4.836	4.835	0.001	99	12083	0.2303	0.3816	
25 Pentane	72	4.933	4.937	-0.004	87	1458	0.0784	0.0888	
24 Isopropyl alcohol	45	4.917	4.939	-0.022	92	27125	0.2303	0.2477	
26 Ethyl ether	31	5.079	5.075	0.004	90	6464	0.0784	0.0868	
27 1,1-Dichloroethene	96	5.348	5.354	-0.006	96	7104	0.0784	0.0827	
28 Acrylonitrile	53	5.429	5.435	-0.006	93	3507	0.0784	0.0895	
29 2-Methyl-2-propanol	59	5.456	5.467	-0.011	95	10717	0.0784	0.0819	
30 1,1,2-Trichloro-1,2,2-trif	101	5.515	5.521	-0.006	91	16256	0.0784	0.0820	
31 Methylene Chloride	84	5.650	5.656	-0.006	89	12473	0.0784	0.1609	

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	5.666	5.673	-0.007	91	7519	0.0784	0.0902	
33 Carbon disulfide	76	5.790	5.797	-0.007	99	18351	0.0784	0.0838	
34 trans-1,2-Dichloroethene	96	6.384	6.393	-0.009	95	6871	0.0784	0.0818	
35 2-Methylpentane	43	6.427	6.426	0.001	92	14498	0.0784	0.0879	
36 Methyl tert-butyl ether	73	6.518	6.513	0.005	95	20954	0.0784	0.0840	
37 1,1-Dichloroethane	63	6.761	6.771	-0.010	99	13865	0.0784	0.0845	
38 Vinyl acetate	43	6.880	6.881	-0.001	100	15406	0.0784	0.0818	
39 2-Butanone (MEK)	72	7.279	7.283	-0.004	97	3344	0.0784	0.0911	
40 Hexane	56	7.327	7.336	-0.009	80	5624	0.0784	0.0883	
41 Isopropyl ether	45	7.484	7.483	0.001	92	19499	0.0784	0.0832	
42 cis-1,2-Dichloroethene	96	7.678	7.691	-0.013	96	7618	0.0784	0.0854	
43 Ethyl acetate	43	7.877	7.880	-0.003	98	12954	0.0784	0.0834	
44 Chloroform	83	8.007	8.019	-0.012	92	19380	0.0784	0.0857	
45 Tert-butyl ethyl ether	59	8.120	8.122	-0.002	95	19417	0.0784	0.0824	
46 Tetrahydrofuran	42	8.395	8.387	0.008	87	7320	0.0784	0.0889	
47 1,1,1-Trichloroethane	97	8.994	8.997	-0.003	95	21875	0.0784	0.0836	
48 1,2-Dichloroethane	62	9.074	9.087	-0.013	99	13373	0.0784	0.0843	
49 Benzene	78	9.571	9.582	-0.011	96	22286	0.0784	0.0835	
50 Cyclohexane	69	9.592	9.590	0.002	78	3909	0.0784	0.0870	
52 n-Butanol	31	9.619	9.606	0.013	47	2238	0.0784	0.0783	
51 Carbon tetrachloride	117	9.603	9.611	-0.008	97	21497	0.0784	0.0771	
53 2,3-Dimethylpentane	71	9.738	9.740	-0.002	89	5321	0.0784	0.0866	
54 Thiophene	84	9.846	9.855	-0.009	94	12315	0.0784	0.0826	
55 Tert-amyl methyl ether	73	10.104	10.100	0.004	96	18607	0.0784	0.0760	
56 Isooctane	57	10.412	10.414	-0.002	96	33610	0.0784	0.0848	
57 n-Heptane	71	10.805	10.816	-0.011	90	8485	0.0784	0.0857	
58 1,2-Dichloropropane	63	10.838	10.846	-0.008	87	7985	0.0784	0.0881	
59 Trichloroethene	130	10.892	10.897	-0.005	94	11638	0.0784	0.0805	
60 Dibromomethane	93	10.951	10.961	-0.010	94	9448	0.0784	0.0784	
61 Dichlorobromomethane	83	11.113	11.126	-0.013	98	16938	0.0784	0.0732	
62 1,4-Dioxane	88	11.156	11.152	0.004	73	3011	0.0784	0.0833	
63 Methyl methacrylate	41	11.258	11.260	-0.002	93	8221	0.0784	0.0821	
64 Methylcyclohexane	83	11.701	11.704	-0.003	95	17005	0.0784	0.0818	
65 4-Methyl-2-pentanone (MIBK)	43	12.132	12.133	-0.001	96	12195	0.0784	0.0795	
66 cis-1,3-Dichloropropene	75	12.164	12.174	-0.010	97	13530	0.0784	0.0806	
67 trans-1,3-Dichloropropene	75	12.892	12.897	-0.005	97	12488	0.0784	0.0773	
68 Toluene	91	13.016	13.021	-0.005	93	25094	0.0784	0.0836	
69 1,1,2-Trichloroethane	83	13.081	13.091	-0.010	96	7631	0.0784	0.0848	
70 2-Methylthiophene	97	13.167	13.173	-0.006	97	20438	0.0784	0.0811	
71 3-Methylthiophene	97	13.372	13.381	-0.009	99	20142	0.0784	0.0807	
72 2-Hexanone	58	13.523	13.519	0.004	94	5612	0.0784	0.0781	
73 n-Octane	85	13.777	13.780	-0.003	89	8683	0.0784	0.0800	
74 Chlorodibromomethane	129	13.793	13.803	-0.010	96	14707	0.0784	0.0655	
75 Ethylene Dibromide	107	14.084	14.092	-0.008	98	13045	0.0784	0.0740	
76 Tetrachloroethene	129	14.192	14.195	-0.003	92	11152	0.0784	0.0812	
77 Chlorobenzene	112	15.076	15.082	-0.006	91	20374	0.0784	0.0802	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	92	23134	0.0784	0.0900	
79 Ethylbenzene	91	15.389	15.393	-0.004	99	33624	0.0784	0.0801	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	26097	0.0784	0.0790	
81 m-Xylene & p-Xylene	91	15.556	15.559	-0.003	99	53439	0.1568	0.1577	
82 Bromoform	173	15.977	15.979	-0.002	92	12722	0.0784	0.0566	
83 Styrene	104	16.020	16.027	-0.007	96	14764	0.0784	0.0660	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.025	16.029	-0.004	87	15404	0.0784	0.0836	
85 o-Xylene	91	16.079	16.088	-0.009	97	28796	0.0784	0.0831	
86 1,1,2,2-Tetrachloroethane	83	16.403	16.411	-0.008	96	17347	0.0784	0.0794	
87 1,2,3-Trichloropropane	110	16.559	16.565	-0.006	96	6401	0.0784	0.0801	
88 Isopropylbenzene	105	16.688	16.692	-0.004	95	40591	0.0784	0.0807	
89 N-Propylbenzene	120	17.238	17.246	-0.008	99	9702	0.0784	0.0735	
90 2-Chlorotoluene	126	17.271	17.278	-0.007	94	9858	0.0784	0.0801	
91 4-Ethyltoluene	105	17.400	17.409	-0.009	98	36409	0.0784	0.0768	
92 1,3,5-Trimethylbenzene	120	17.481	17.490	-0.009	91	16770	0.0784	0.0755	
93 Alpha Methyl Styrene	118	17.729	17.734	-0.005	85	10756	0.0784	0.0621	
94 n-Decane	57	17.832	17.837	-0.005	94	19120	0.0784	0.0847	
95 tert-Butylbenzene	119	17.934	17.939	-0.005	91	36058	0.0784	0.0770	
96 1,2,4-Trimethylbenzene	105	17.950	17.953	-0.003	96	32090	0.0784	0.0754	
98 sec-Butylbenzene	105	18.220	18.223	-0.003	97	45958	0.0784	0.0767	
97 1,3-Dichlorobenzene	146	18.220	18.223	-0.003	95	22698	0.0784	0.0707	
99 Benzyl chloride	91	18.295	18.303	-0.008	97	28105	0.0784	0.0700	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	92	22839	0.0784	0.0728	
101 4-Isopropyltoluene	119	18.398	18.400	-0.002	96	40574	0.0784	0.0767	
102 1,2,3-Trimethylbenzene	105	18.441	18.445	-0.004	98	25342	0.0784	0.0798	
103 Butylcyclohexane	83	18.516	18.520	-0.004	92	24915	0.0784	0.0795	
104 1,2-Dichlorobenzene	146	18.684	18.689	-0.005	90	22069	0.0784	0.0721	
105 2,3-Dihydroindene	117	18.689	18.693	-0.004	92	27938	0.0784	0.0721	
106 Indene	116	18.824	18.827	-0.003	90	19511	0.0784	0.0689	
107 n-Butylbenzene	91	18.851	18.854	-0.003	98	38334	0.0784	0.0775	
108 Undecane	57	19.207	19.209	-0.002	95	23261	0.0784	0.0878	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.234	19.239	-0.005	96	28961	0.0784	0.0733	
110 1,2-Dibromo-3-Chloropropan	157	19.304	19.308	-0.004	88	8417	0.0784	0.0642	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.634	-0.001	96	34855	0.0784	0.0734	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	93	22523	0.0784	0.0789	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	96	28869	0.0784	0.0740	
114 Dodecane	57	20.280	20.280	0.000	93	21541	0.0784	0.0917	
115 1,2,4-Trichlorobenzene	180	20.420	20.418	0.002	93	19622	0.0784	0.0729	
116 Naphthalene	128	20.544	20.545	-0.001	98	43374	0.0784	0.0769	
117 Benzo(b)thiophene	134	20.641	20.645	-0.004	99	25544	0.0784	0.0779	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	91	20064	0.0784	0.0756	
119 1,2,3-Trichlorobenzene	180	20.824	20.825	-0.001	94	20740	0.0784	0.0816	
120 2-Methylnaphthalene	142	21.622	21.623	-0.001	98	24114	0.2372	0.2059	
121 1-Methylnaphthalene	142	21.800	21.801	-0.001	98	26609	0.2372	0.2281	
A 122 C6 Range	1	7.337	(7.297-7.377)		0	78271	0.0784	0.1259	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	63520	0.0784	0.0846	
S 126 Xylenes, Total	100				0		0.2353	0.2408	
S 127 1,2-Dichloroethene, Total	1				0		0.1568	0.1671	

Reagents:

40L12DNP_00010

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC02.D

Injection Date: 15-Mar-2017 15:20:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L2

Worklist Smp#: 4

Client ID:

Purge Vol: 500.000 mL

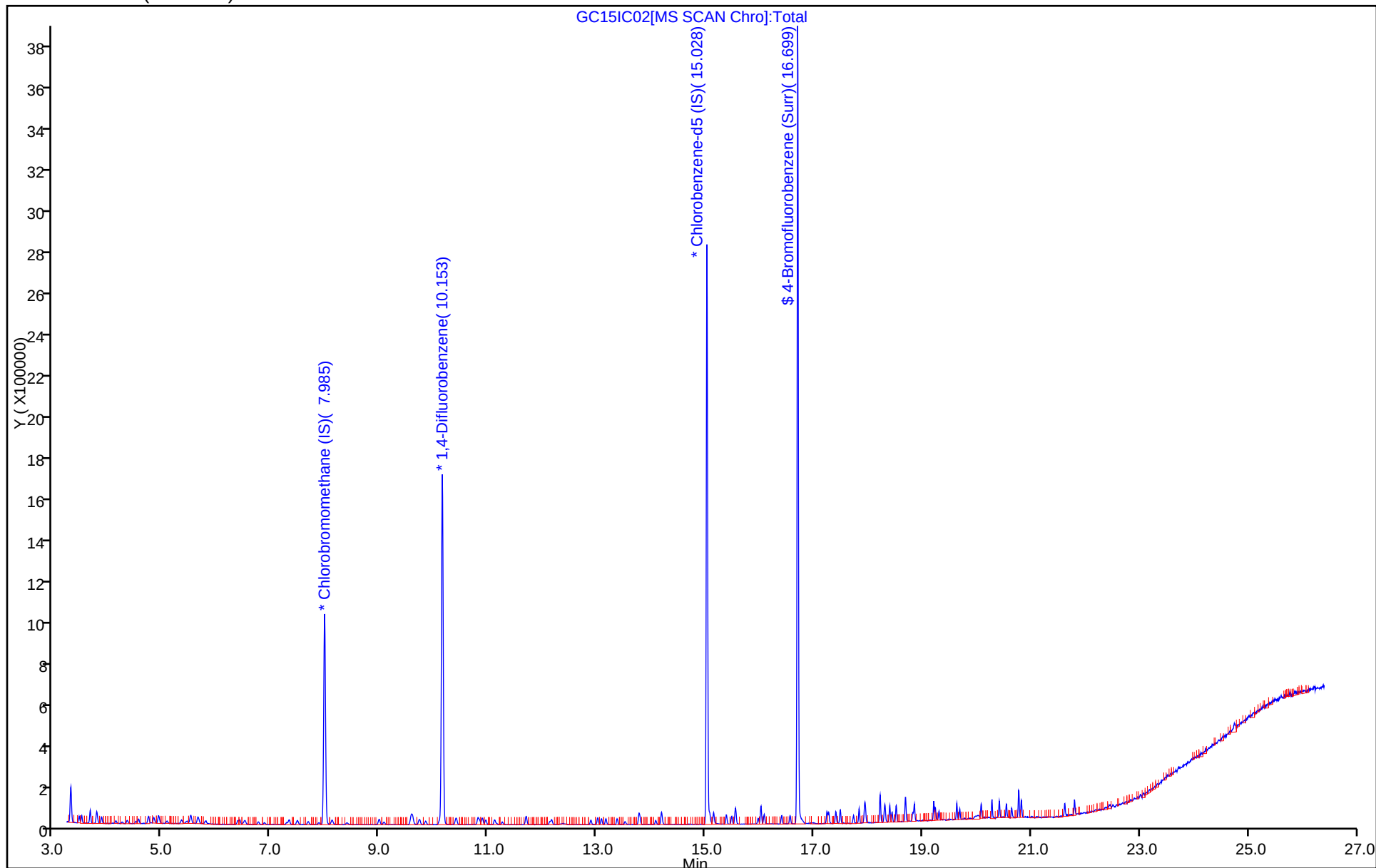
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC02.D

Injection Date: 15-Mar-2017 15:20:30

Instrument ID: MG

Lims ID: IC L2

Client ID:

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 4

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

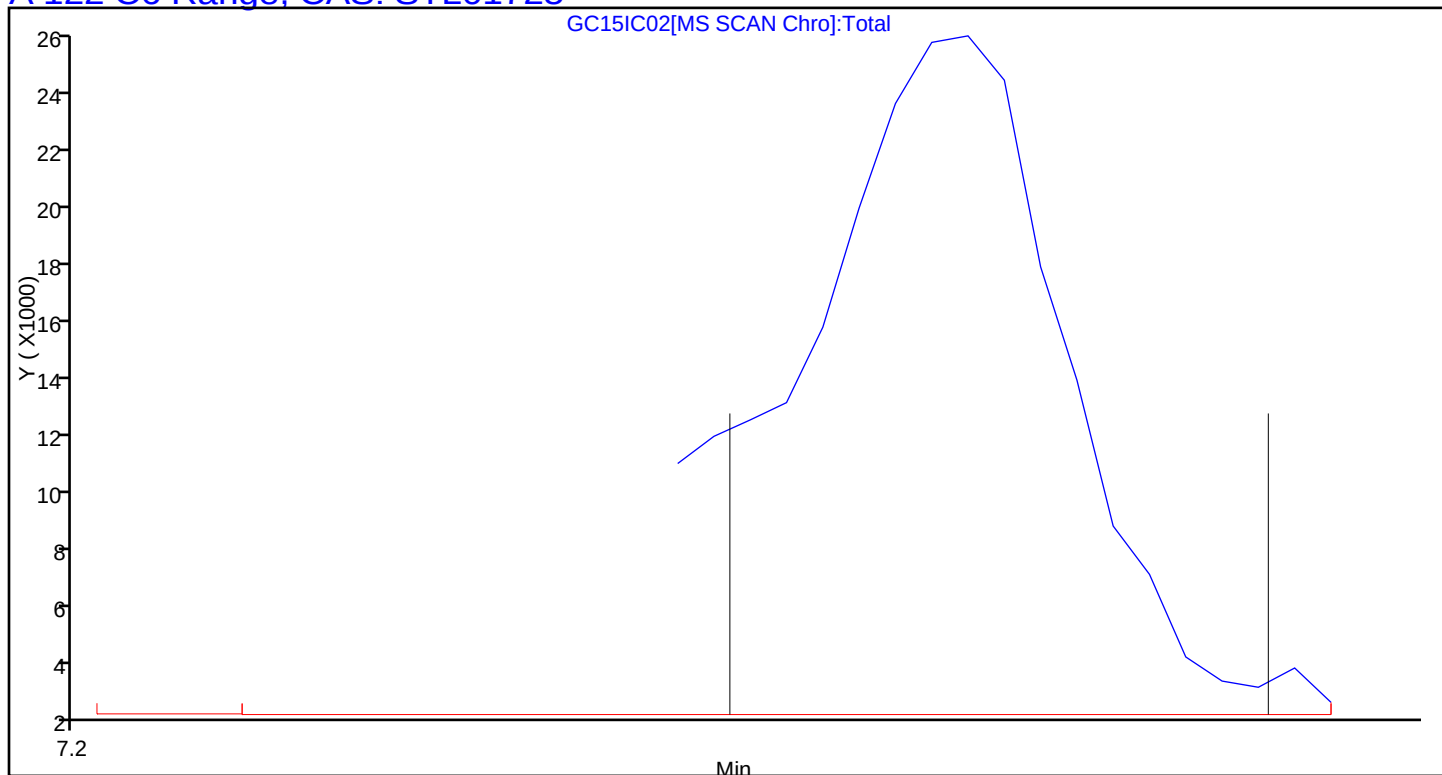
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC02.D

Injection Date: 15-Mar-2017 15:20:30

Instrument ID: MG

Lims ID: IC L2

Client ID:

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 4

Purge Vol: 500.000 mL

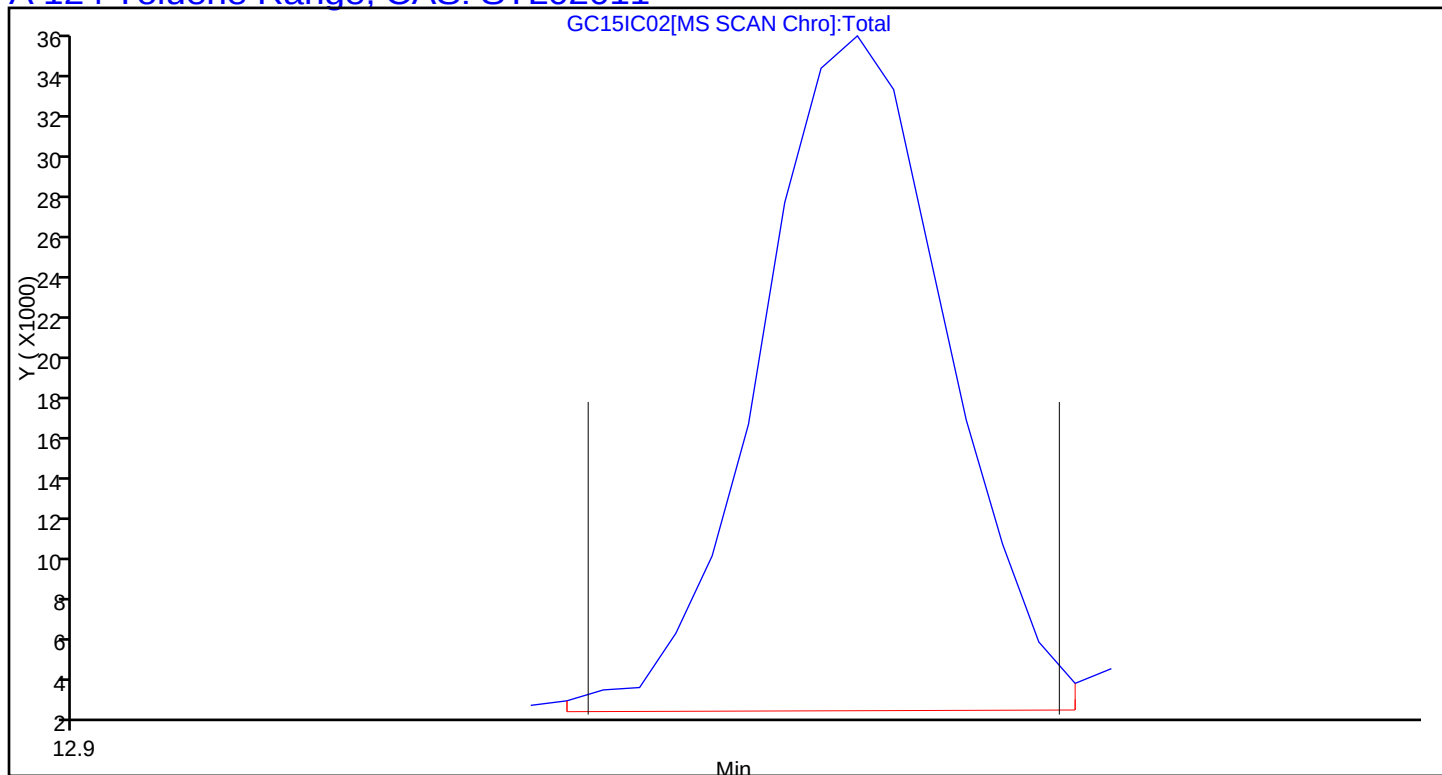
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC03.D
 Lims ID: IC L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 15-Mar-2017 16:02:30 ALS Bottle#: 2 Worklist Smp#: 5
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-005
 Misc. Info.: 083682
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:10:00 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: barlozhetskayaa

Date: 15-Mar-2017 17:05:43

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	7.985	7.993	-0.008	83	334641	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.153	10.161	-0.008	95	1663587	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.028	15.034	-0.006	88	1578082	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.699	16.705	-0.006	93	1216766	4.00	3.90	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	97	6330	0.1587	0.1701	
7 Propene	41	3.466	3.466	0.000	97	15226	0.1587	0.1720	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	58308	0.1587	0.1646	
9 Chloromethane	52	3.661	3.659	0.002	52	4662	0.1587	0.1957	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.669	0.002	91	34069	0.1587	0.1616	
11 Acetaldehyde	44	3.785	3.786	-0.001	86	38119	0.7935	1.36	
12 Vinyl chloride	62	3.801	3.803	-0.002	100	17041	0.1587	0.1741	
13 Butadiene	54	3.876	3.876	0.000	67	11030	0.1587	0.1692	
14 Butane	43	3.876	3.879	-0.003	85	24164	0.1587	0.1742	
15 Bromomethane	94	4.140	4.141	-0.001	97	15909	0.1587	0.1645	
16 Chloroethane	64	4.254	4.258	-0.004	89	7956	0.1587	0.1679	
17 Ethanol	31	4.345	4.357	-0.012	99	28920	0.7935	0.8589	
18 Vinyl bromide	106	4.507	4.511	-0.004	97	15245	0.1587	0.1663	
19 2-Methylbutane	43	4.561	4.560	0.001	89	15685	0.1587	0.1674	
21 Acrolein	56	4.739	4.742	-0.003	28	2011	0.1587	0.1467	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	100	55895	0.1587	0.1585	
22 Acetonitrile	40	4.788	4.793	-0.005	97	5595	0.1587	0.1992	
23 Acetone	58	4.836	4.835	0.001	100	21667	0.4660	0.6594	
25 Pentane	72	4.939	4.937	0.002	94	2803	0.1587	0.1645	
24 Isopropyl alcohol	45	4.917	4.939	-0.022	95	57055	0.4660	0.5020	
26 Ethyl ether	31	5.079	5.075	0.004	92	12398	0.1587	0.1604	
27 1,1-Dichloroethene	96	5.348	5.354	-0.006	97	14330	0.1587	0.1607	
28 Acrylonitrile	53	5.435	5.435	0.000	94	7063	0.1587	0.1737	
29 2-Methyl-2-propanol	59	5.445	5.467	-0.022	94	23609	0.1587	0.1738	
30 1,1,2-Trichloro-1,2,2-trif	101	5.516	5.521	-0.005	94	32632	0.1587	0.1586	
31 Methylene Chloride	84	5.650	5.656	-0.006	87	18584	0.1587	0.2309	

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	5.667	5.673	-0.006	91	13978	0.1587	0.1616	
33 Carbon disulfide	76	5.791	5.797	-0.006	100	36441	0.1587	0.1604	
34 trans-1,2-Dichloroethene	96	6.384	6.393	-0.009	95	13700	0.1587	0.1571	
35 2-Methylpentane	43	6.421	6.426	-0.005	93	28701	0.1587	0.1677	
36 Methyl tert-butyl ether	73	6.519	6.513	0.005	96	42292	0.1587	0.1633	
37 1,1-Dichloroethane	63	6.767	6.771	-0.004	100	27828	0.1587	0.1635	
38 Vinyl acetate	43	6.880	6.881	-0.001	99	30561	0.1587	0.1563	
39 2-Butanone (MEK)	72	7.279	7.283	-0.004	98	6361	0.1587	0.1670	
40 Hexane	56	7.333	7.336	-0.003	81	10820	0.1587	0.1637	
41 Isopropyl ether	45	7.484	7.483	0.001	93	40414	0.1587	0.1662	
42 cis-1,2-Dichloroethene	96	7.689	7.691	-0.002	95	14847	0.1587	0.1603	
43 Ethyl acetate	43	7.872	7.880	-0.008	98	26514	0.1587	0.1644	
44 Chloroform	83	8.012	8.019	-0.007	95	37079	0.1587	0.1580	
45 Tert-butyl ethyl ether	59	8.120	8.122	-0.002	96	39200	0.1587	0.1604	
46 Tetrahydrofuran	42	8.390	8.387	0.003	86	13762	0.1587	0.1611	
47 1,1,1-Trichloroethane	97	8.988	8.997	-0.009	94	43037	0.1587	0.1585	
48 1,2-Dichloroethane	62	9.074	9.087	-0.013	99	27277	0.1587	0.1624	
49 Benzene	78	9.576	9.582	-0.006	97	44171	0.1587	0.1563	
50 Cyclohexane	69	9.587	9.590	-0.003	95	7351	0.1587	0.1545	
52 n-Butanol	31	9.603	9.606	-0.003	62	5160	0.1587	0.1706	
51 Carbon tetrachloride	117	9.603	9.611	-0.008	96	42733	0.1587	0.1447	
53 2,3-Dimethylpentane	71	9.738	9.740	-0.002	89	10219	0.1587	0.1571	
54 Thiophene	84	9.846	9.855	-0.009	94	25238	0.1587	0.1598	
55 Tert-amyl methyl ether	73	10.099	10.100	-0.001	97	39025	0.1587	0.1506	
56 Isooctane	57	10.412	10.414	-0.002	96	67131	0.1587	0.1600	
57 n-Heptane	71	10.811	10.816	-0.005	90	16529	0.1587	0.1577	
58 1,2-Dichloropropane	63	10.838	10.846	-0.008	82	15995	0.1587	0.1666	
59 Trichloroethene	130	10.892	10.897	-0.005	93	23332	0.1587	0.1524	
60 Dibromomethane	93	10.956	10.961	-0.005	95	18824	0.1587	0.1476	
61 Dichlorobromomethane	83	11.118	11.126	-0.008	98	35557	0.1587	0.1452	
62 1,4-Dioxane	88	11.151	11.152	-0.001	96	6069	0.1587	0.1586	
63 Methyl methacrylate	41	11.258	11.260	-0.002	93	16201	0.1587	0.1528	
64 Methylcyclohexane	83	11.695	11.704	-0.009	95	34804	0.1587	0.1581	
65 4-Methyl-2-pentanone (MIBK)	43	12.132	12.133	-0.001	95	26186	0.1587	0.1613	
66 cis-1,3-Dichloropropene	75	12.170	12.174	-0.004	96	26770	0.1587	0.1506	
67 trans-1,3-Dichloropropene	75	12.892	12.897	-0.005	97	26814	0.1587	0.1586	
68 Toluene	91	13.016	13.021	-0.005	93	49691	0.1587	0.1581	
69 1,1,2-Trichloroethane	83	13.081	13.091	-0.010	95	15096	0.1587	0.1602	
70 2-Methylthiophene	97	13.167	13.173	-0.006	97	41117	0.1587	0.1558	
71 3-Methylthiophene	97	13.378	13.381	-0.003	99	40017	0.1587	0.1532	
72 2-Hexanone	58	13.518	13.519	-0.001	94	11715	0.1587	0.1557	
73 n-Octane	85	13.777	13.780	-0.003	89	18002	0.1587	0.1585	
74 Chlorodibromomethane	129	13.798	13.803	-0.005	97	31316	0.1587	0.1332	
75 Ethylene Dibromide	107	14.089	14.092	-0.003	98	26740	0.1587	0.1449	
76 Tetrachloroethene	129	14.192	14.195	-0.003	91	21668	0.1587	0.1507	
77 Chlorobenzene	112	15.076	15.082	-0.006	92	41319	0.1587	0.1553	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	91	44892	0.1587	0.1668	
79 Ethylbenzene	91	15.389	15.393	-0.004	99	69301	0.1587	0.1578	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	52367	0.1587	0.1514	
81 m-Xylene & p-Xylene	91	15.556	15.559	-0.003	100	110203	0.3174	0.3107	
82 Bromoform	173	15.971	15.979	-0.008	93	27441	0.1587	0.1166	
83 Styrene	104	16.025	16.027	-0.002	93	31773	0.1587	0.1358	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.025	16.029	-0.004	89	32630	0.1587	0.1693	
85 o-Xylene	91	16.085	16.088	-0.003	97	56948	0.1587	0.1570	
86 1,1,2,2-Tetrachloroethane	83	16.403	16.411	-0.008	98	33152	0.1587	0.1450	
87 1,2,3-Trichloropropane	110	16.559	16.565	-0.006	96	12888	0.1587	0.1541	
88 Isopropylbenzene	105	16.689	16.692	-0.003	96	82210	0.1587	0.1561	
89 N-Propylbenzene	120	17.244	17.246	-0.002	98	20666	0.1587	0.1496	
90 2-Chlorotoluene	126	17.276	17.278	-0.002	97	19395	0.1587	0.1505	
91 4-Ethyltoluene	105	17.406	17.409	-0.003	98	74487	0.1587	0.1502	
92 1,3,5-Trimethylbenzene	120	17.487	17.490	-0.003	91	33353	0.1587	0.1434	
93 Alpha Methyl Styrene	118	17.729	17.734	-0.005	88	22891	0.1587	0.1263	
94 n-Decane	57	17.832	17.837	-0.005	93	38214	0.1587	0.1617	
95 tert-Butylbenzene	119	17.934	17.939	-0.005	91	72279	0.1587	0.1475	
96 1,2,4-Trimethylbenzene	105	17.945	17.953	-0.008	96	66195	0.1587	0.1486	
98 sec-Butylbenzene	105	18.220	18.223	-0.003	98	92643	0.1587	0.1477	
97 1,3-Dichlorobenzene	146	18.220	18.223	-0.003	96	46148	0.1587	0.1373	
99 Benzyl chloride	91	18.295	18.303	-0.008	97	61054	0.1587	0.1453	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	93	46292	0.1587	0.1409	
101 4-Isopropyltoluene	119	18.398	18.400	-0.002	97	83608	0.1587	0.1509	
102 1,2,3-Trimethylbenzene	105	18.441	18.445	-0.004	98	50998	0.1587	0.1533	
103 Butylcyclohexane	83	18.517	18.520	-0.003	94	52392	0.1587	0.1596	
104 1,2-Dichlorobenzene	146	18.684	18.689	-0.005	91	43975	0.1587	0.1373	
105 2,3-Dihydroindene	117	18.689	18.693	-0.004	93	58519	0.1587	0.1442	
106 Indene	116	18.824	18.827	-0.003	92	39915	0.1587	0.1346	
107 n-Butylbenzene	91	18.851	18.854	-0.003	97	80658	0.1587	0.1557	
108 Undecane	57	19.207	19.209	-0.002	93	44209	0.1587	0.1594	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.234	19.239	-0.005	96	59995	0.1587	0.1451	
110 1,2-Dibromo-3-Chloropropan	157	19.304	19.308	-0.004	88	16001	0.1587	0.1165	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.634	-0.001	96	70829	0.1587	0.1426	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	94	42400	0.1587	0.1418	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	96	58175	0.1587	0.1425	
114 Dodecane	57	20.280	20.280	0.000	93	39684	0.1587	0.1613	
115 1,2,4-Trichlorobenzene	180	20.415	20.418	-0.003	94	35767	0.1587	0.1269	
116 Naphthalene	128	20.544	20.545	-0.001	98	78779	0.1587	0.1334	
117 Benzo(b)thiophene	134	20.641	20.645	-0.004	98	46547	0.1587	0.1355	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	92	37819	0.1587	0.1361	
119 1,2,3-Trichlorobenzene	180	20.824	20.825	-0.001	94	35163	0.1587	0.1322	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	99	46113	0.4801	0.3761	
121 1-Methylnaphthalene	142	21.800	21.801	-0.001	98	44542	0.4801	0.3648	
A 122 C6 Range	1	7.334	(7.303-7.383)		0	107367	0.1587	0.1640	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	124912	0.1587	0.1569	
S 126 Xylenes, Total	100				0		0.4761	0.4678	
S 127 1,2-Dichloroethene, Total	1				0		0.3174	0.3174	

Reagents:

40L3DNP_00011

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC03.D

Injection Date: 15-Mar-2017 16:02:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L3

Worklist Smp#: 5

Client ID:

Purge Vol: 500.000 mL

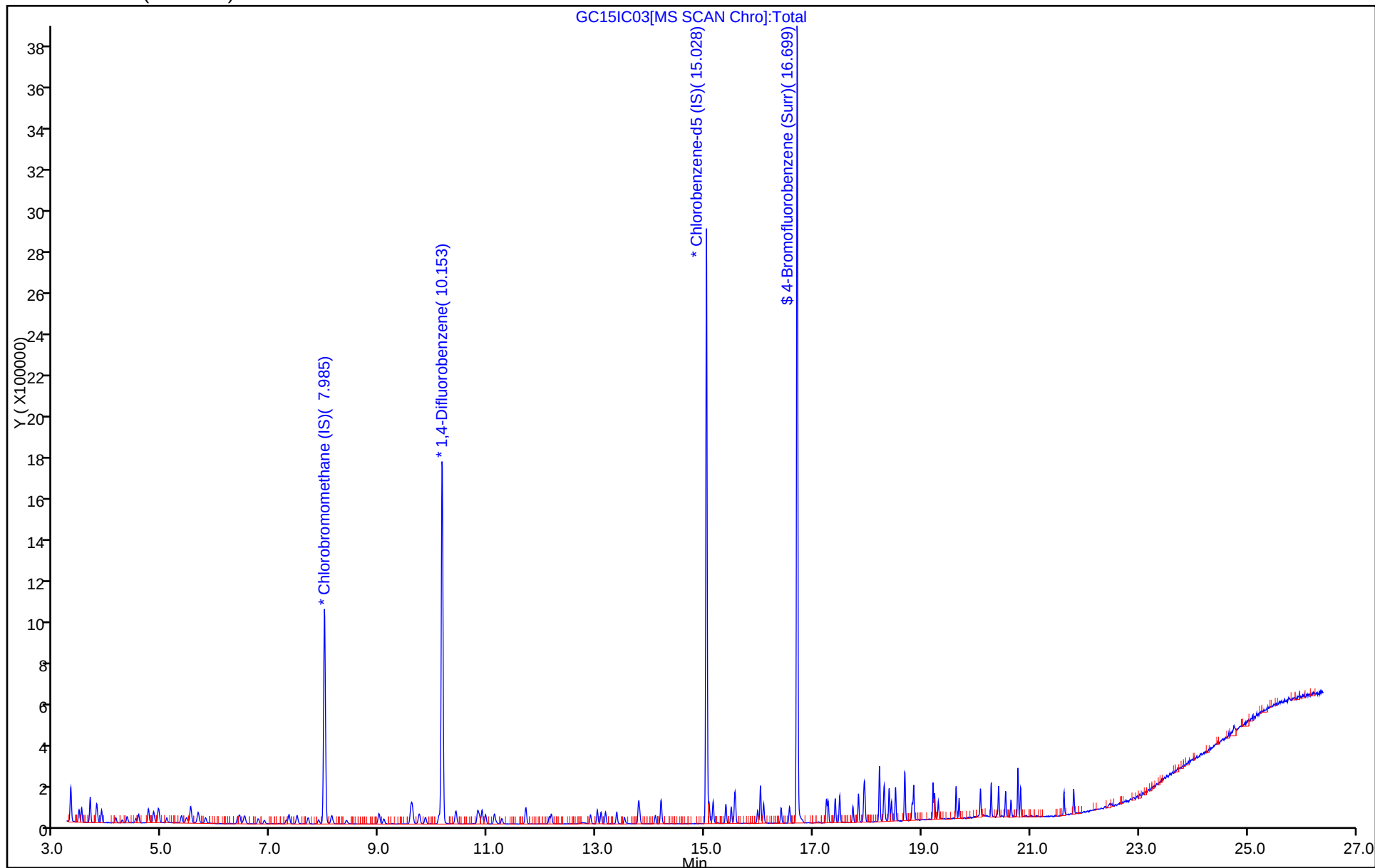
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC03.D

Injection Date: 15-Mar-2017 16:02:30

Instrument ID: MG

Lims ID: IC L3

Client ID:

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 5

Purge Vol: 500.000 mL

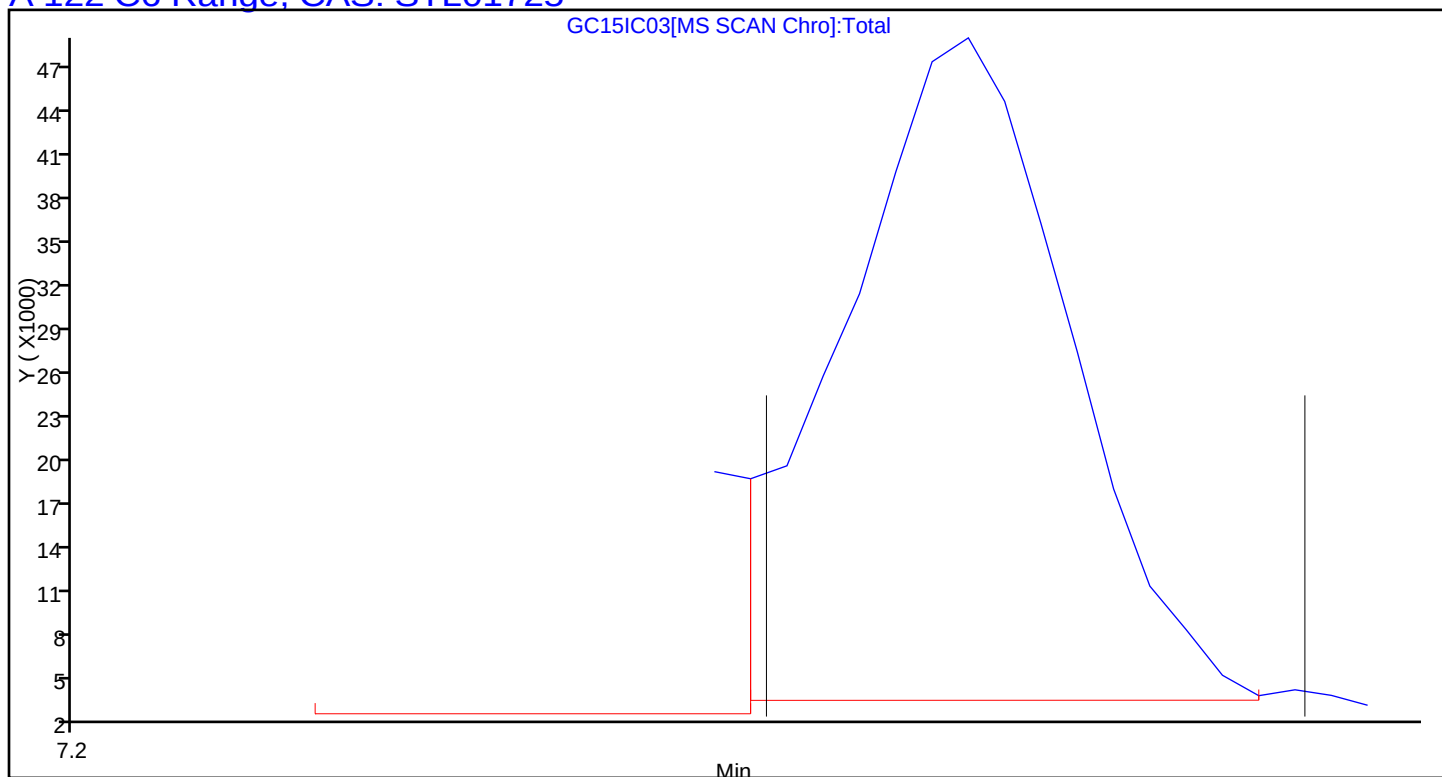
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC03.D

Injection Date: 15-Mar-2017 16:02:30

Instrument ID: MG

Lims ID: IC L3

Client ID:

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 5

Purge Vol: 500.000 mL

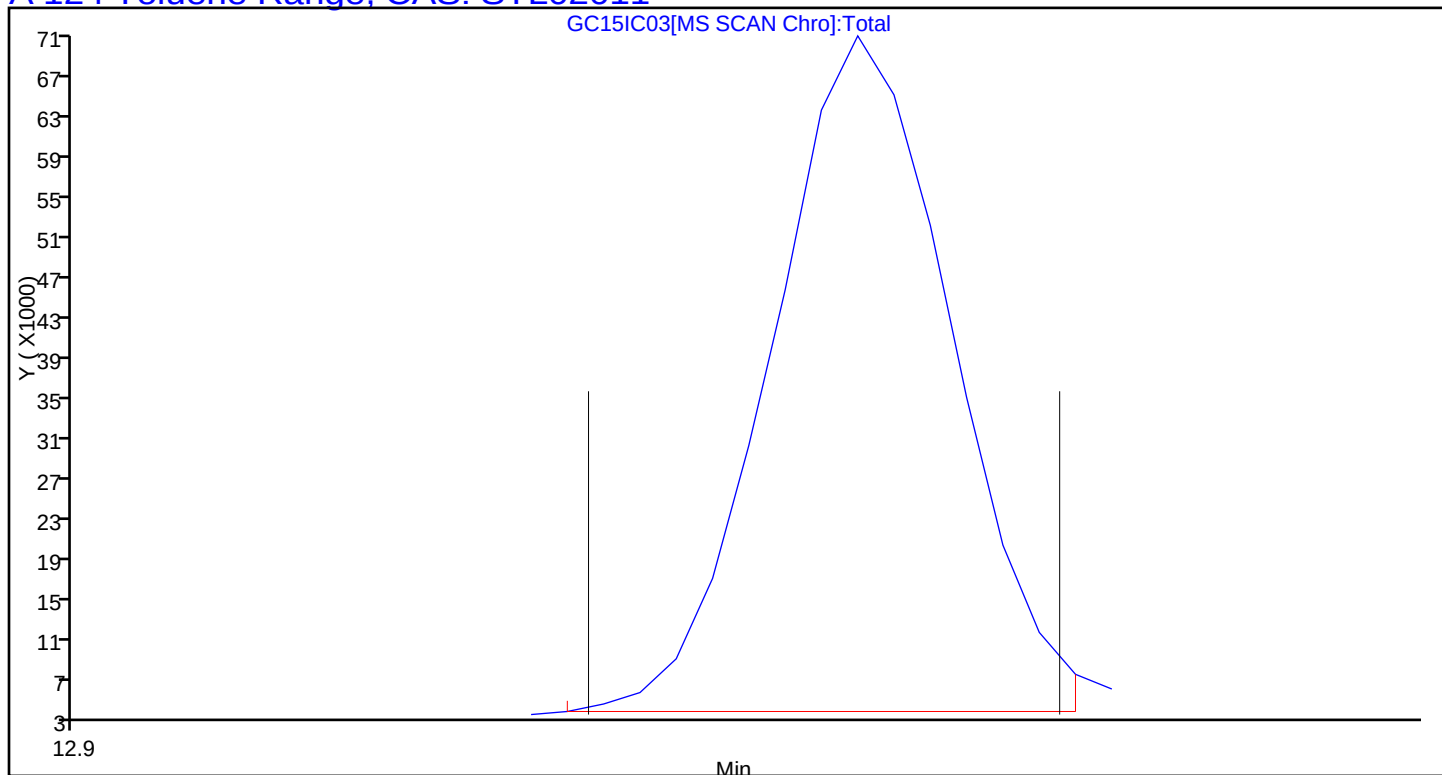
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC04.D
 Lims ID: IC L4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 15-Mar-2017 16:45:30 ALS Bottle#: 3 Worklist Smp#: 6
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-006
 Misc. Info.: 083681
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:11:31 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: barlozhetskayaa

Date: 15-Mar-2017 17:56:08

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	7.985	7.993	-0.008	82	343423	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.153	10.161	-0.008	95	1710584	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.028	15.034	-0.006	88	1638521	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.699	16.705	-0.006	94	1296737	4.00	4.00	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	97	16118	0.4001	0.4221	
7 Propene	41	3.466	3.466	0.000	98	38073	0.4001	0.4191	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	147329	0.4001	0.4053	
9 Chloromethane	52	3.661	3.659	0.002	98	10845	0.4001	0.4435	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.666	3.669	-0.003	92	85416	0.4001	0.3948	
11 Acetaldehyde	44	3.785	3.786	-0.001	88	72210	2.00	2.51	
12 Vinyl chloride	62	3.801	3.803	-0.002	99	41537	0.4001	0.4135	
13 Butadiene	54	3.871	3.876	-0.005	68	28287	0.4001	0.4228	
14 Butane	43	3.876	3.879	-0.003	86	59701	0.4001	0.4194	
15 Bromomethane	94	4.141	4.141	0.000	97	39896	0.4001	0.4019	
16 Chloroethane	64	4.254	4.258	-0.004	92	19908	0.4001	0.4095	
17 Ethanol	31	4.345	4.357	-0.012	98	69923	2.00	2.02	
18 Vinyl bromide	106	4.507	4.511	-0.004	97	37848	0.4001	0.4023	
19 2-Methylbutane	43	4.556	4.560	-0.004	88	38853	0.4001	0.4040	
21 Acrolein	56	4.734	4.742	-0.008	28	4862	0.4001	0.3456	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	99	144284	0.4001	0.3986	
22 Acetonitrile	40	4.788	4.793	-0.005	94	12605	0.4001	0.4373	
23 Acetone	58	4.831	4.835	-0.004	99	46214	1.17	1.37	
25 Pentane	72	4.933	4.937	-0.004	96	6934	0.4001	0.3964	
24 Isopropyl alcohol	45	4.917	4.939	-0.022	93	159557	1.17	1.37	
26 Ethyl ether	31	5.068	5.075	-0.007	92	32090	0.4001	0.4045	
27 1,1-Dichloroethene	96	5.348	5.354	-0.006	98	36376	0.4001	0.3974	
28 Acrylonitrile	53	5.429	5.435	-0.006	97	16558	0.4001	0.3967	
29 2-Methyl-2-propanol	59	5.451	5.467	-0.016	95	55009	0.4001	0.3945	
30 1,1,2-Trichloro-1,2,2-trif	101	5.516	5.521	-0.005	94	84505	0.4001	0.4002	
31 Methylene Chloride	84	5.645	5.656	-0.011	89	36046	0.4001	0.4365	

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	5.667	5.673	-0.006	93	34533	0.4001	0.3890	
33 Carbon disulfide	76	5.791	5.797	-0.006	99	91859	0.4001	0.3939	
34 trans-1,2-Dichloroethene	96	6.384	6.393	-0.009	95	34363	0.4001	0.3840	
35 2-Methylpentane	43	6.422	6.426	-0.004	92	71301	0.4001	0.4061	
36 Methyl tert-butyl ether	73	6.508	6.513	-0.005	95	105435	0.4001	0.3966	
37 1,1-Dichloroethane	63	6.767	6.771	-0.004	100	69127	0.4001	0.3957	
38 Vinyl acetate	43	6.874	6.881	-0.007	99	79405	0.4001	0.3958	
39 2-Butanone (MEK)	72	7.273	7.283	-0.010	99	15082	0.4001	0.3859	
40 Hexane	56	7.333	7.336	-0.003	84	27547	0.4001	0.4062	
41 Isopropyl ether	45	7.473	7.483	-0.010	93	101005	0.4001	0.4047	
42 cis-1,2-Dichloroethene	96	7.683	7.691	-0.008	95	36823	0.4001	0.3874	
43 Ethyl acetate	43	7.872	7.880	-0.008	98	66315	0.4001	0.4007	
44 Chloroform	83	8.007	8.019	-0.012	95	95787	0.4001	0.3976	
45 Tert-butyl ethyl ether	59	8.115	8.122	-0.007	95	99212	0.4001	0.3955	
46 Tetrahydrofuran	42	8.379	8.387	-0.008	92	35542	0.4001	0.4054	
47 1,1,1-Trichloroethane	97	8.994	8.997	-0.003	94	108746	0.4001	0.3902	
48 1,2-Dichloroethane	62	9.080	9.087	-0.007	99	67175	0.4001	0.3890	
49 Benzene	78	9.576	9.582	-0.006	97	110029	0.4001	0.3786	
50 Cyclohexane	69	9.587	9.590	-0.003	89	19497	0.4001	0.3986	
52 n-Butanol	31	9.598	9.606	-0.008	66	12296	0.4001	0.3953	
51 Carbon tetrachloride	117	9.608	9.611	-0.003	98	113747	0.4001	0.3745	
53 2,3-Dimethylpentane	71	9.738	9.740	-0.002	89	26444	0.4001	0.3953	
54 Thiophene	84	9.851	9.855	-0.004	95	63320	0.4001	0.3900	
55 Tert-amyl methyl ether	73	10.094	10.100	-0.006	98	107357	0.4001	0.4030	
56 Isooctane	57	10.406	10.414	-0.008	97	172066	0.4001	0.3989	
57 n-Heptane	71	10.811	10.816	-0.005	91	40968	0.4001	0.3802	
58 1,2-Dichloropropane	63	10.838	10.846	-0.008	84	39466	0.4001	0.3998	
59 Trichloroethene	130	10.892	10.897	-0.005	94	58508	0.4001	0.3717	
60 Dibromomethane	93	10.956	10.961	-0.005	94	49152	0.4001	0.3747	
61 Dichlorobromomethane	83	11.118	11.126	-0.008	98	95415	0.4001	0.3789	
62 1,4-Dioxane	88	11.151	11.152	-0.001	94	15307	0.4001	0.3891	
63 Methyl methacrylate	41	11.253	11.260	-0.007	93	40539	0.4001	0.3718	
64 Methylcyclohexane	83	11.701	11.704	-0.003	95	87846	0.4001	0.3880	
65 4-Methyl-2-pentanone (MIBK)	43	12.121	12.133	-0.012	97	64835	0.4001	0.3884	
66 cis-1,3-Dichloropropene	75	12.170	12.174	-0.004	95	69133	0.4001	0.3783	
67 trans-1,3-Dichloropropene	75	12.892	12.897	-0.005	97	68241	0.4001	0.3888	
68 Toluene	91	13.016	13.021	-0.005	93	126815	0.4001	0.3885	
69 1,1,2-Trichloroethane	83	13.086	13.091	-0.005	97	37911	0.4001	0.3874	
70 2-Methylthiophene	97	13.167	13.173	-0.006	98	107989	0.4001	0.3941	
71 3-Methylthiophene	97	13.372	13.381	-0.009	99	105015	0.4001	0.3872	
72 2-Hexanone	58	13.512	13.519	-0.007	93	29914	0.4001	0.3829	
73 n-Octane	85	13.777	13.780	-0.003	90	45217	0.4001	0.3833	
74 Chlorodibromomethane	129	13.798	13.803	-0.005	97	85348	0.4001	0.3496	
75 Ethylene Dibromide	107	14.084	14.092	-0.008	96	72403	0.4001	0.3778	
76 Tetrachloroethene	129	14.192	14.195	-0.003	94	54718	0.4001	0.3665	
77 Chlorobenzene	112	15.076	15.082	-0.006	92	106057	0.4001	0.3839	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	91	114675	0.4001	0.4103	
79 Ethylbenzene	91	15.389	15.393	-0.004	99	175356	0.4001	0.3846	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	139782	0.4001	0.3892	
81 m-Xylene & p-Xylene	91	15.551	15.559	-0.008	100	284366	0.8002	0.7722	
82 Bromoform	173	15.971	15.979	-0.008	94	77559	0.4001	0.3174	
83 Styrene	104	16.020	16.027	-0.007	97	87701	0.4001	0.3610	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.025	16.029	-0.004	88	80602	0.4001	0.4027	
85 o-Xylene	91	16.085	16.088	-0.003	98	144970	0.4001	0.3850	
86 1,1,2,2-Tetrachloroethane	83	16.403	16.411	-0.008	98	90906	0.4001	0.3830	
87 1,2,3-Trichloropropane	110	16.559	16.565	-0.006	96	32782	0.4001	0.3774	
88 Isopropylbenzene	105	16.689	16.692	-0.003	98	207127	0.4001	0.3788	
89 N-Propylbenzene	120	17.244	17.246	-0.002	99	54076	0.4001	0.3770	
90 2-Chlorotoluene	126	17.271	17.278	-0.007	97	49412	0.4001	0.3692	
91 4-Ethyltoluene	105	17.406	17.409	-0.003	98	193325	0.4001	0.3754	
92 1,3,5-Trimethylbenzene	120	17.487	17.490	-0.003	92	89762	0.4001	0.3717	
93 Alpha Methyl Styrene	118	17.729	17.734	-0.005	86	63304	0.4001	0.3364	
94 n-Decane	57	17.832	17.837	-0.005	93	100736	0.4001	0.4105	
95 tert-Butylbenzene	119	17.934	17.939	-0.005	90	186533	0.4001	0.3667	
96 1,2,4-Trimethylbenzene	105	17.950	17.953	-0.003	96	173218	0.4001	0.3744	
98 sec-Butylbenzene	105	18.220	18.223	-0.003	98	243244	0.4001	0.3734	
97 1,3-Dichlorobenzene	146	18.215	18.223	-0.008	96	120087	0.4001	0.3442	
99 Benzyl chloride	91	18.295	18.303	-0.008	97	161617	0.4001	0.3703	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	94	120739	0.4001	0.3540	
101 4-Isopropyltoluene	119	18.398	18.400	-0.002	97	214236	0.4001	0.3724	
102 1,2,3-Trimethylbenzene	105	18.441	18.445	-0.004	98	130876	0.4001	0.3790	
103 Butylcyclohexane	83	18.517	18.520	-0.003	94	134750	0.4001	0.3954	
104 1,2-Dichlorobenzene	146	18.684	18.689	-0.005	92	115468	0.4001	0.3473	
105 2,3-Dihydroindene	117	18.689	18.693	-0.004	93	150042	0.4001	0.3560	
106 Indene	116	18.824	18.827	-0.003	91	108215	0.4001	0.3514	
107 n-Butylbenzene	91	18.851	18.854	-0.003	98	207014	0.4001	0.3850	
108 Undecane	57	19.207	19.209	-0.002	94	117141	0.4001	0.4068	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.239	19.239	0.000	97	157840	0.4001	0.3676	
110 1,2-Dibromo-3-Chloropropan	157	19.304	19.308	-0.004	92	46413	0.4001	0.3255	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.634	-0.001	96	189973	0.4001	0.3683	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	94	114039	0.4001	0.3674	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	96	153792	0.4001	0.3629	
114 Dodecane	57	20.280	20.280	0.000	93	100417	0.4001	0.3931	
115 1,2,4-Trichlorobenzene	180	20.415	20.418	-0.003	93	94904	0.4001	0.3243	
116 Naphthalene	128	20.544	20.545	-0.001	99	208260	0.4001	0.3397	
117 Benzo(b)thiophene	134	20.641	20.645	-0.004	99	123697	0.4001	0.3469	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	93	98425	0.4001	0.3411	
119 1,2,3-Trichlorobenzene	180	20.819	20.825	-0.006	94	91350	0.4001	0.3308	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	99	105461	1.21	0.8284	
121 1-Methylnaphthalene	142	21.801	21.801	0.000	100	100155	1.21	0.7901	
A 122 C6 Range	1	7.343	(7.303-7.383)		0	265311	0.4001	0.3940	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	317115	0.4001	0.3874	
S 126 Xylenes, Total	100				0		1.20	1.16	
S 127 1,2-Dichloroethene, Total	1				0		0.8002	0.7713	

Reagents:

40L4DNP_00010

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 16-Mar-2017 14:11:32

Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC04.D

Injection Date: 15-Mar-2017 16:45:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L4

Worklist Smp#: 6

Client ID:

Purge Vol: 500.000 mL

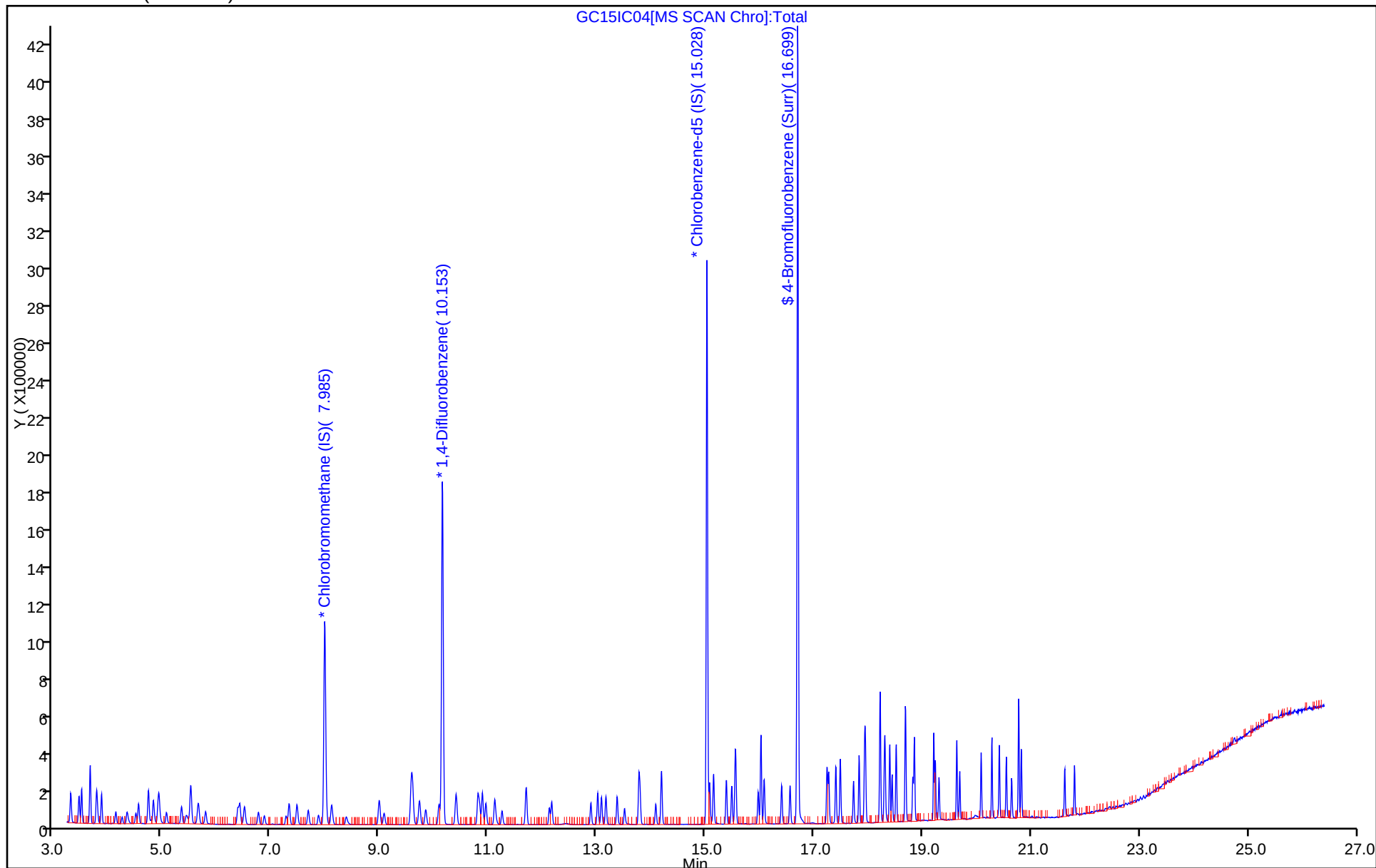
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC04.D

Injection Date: 15-Mar-2017 16:45:30

Instrument ID: MG

Lims ID: IC L4

Client ID:

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 6

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

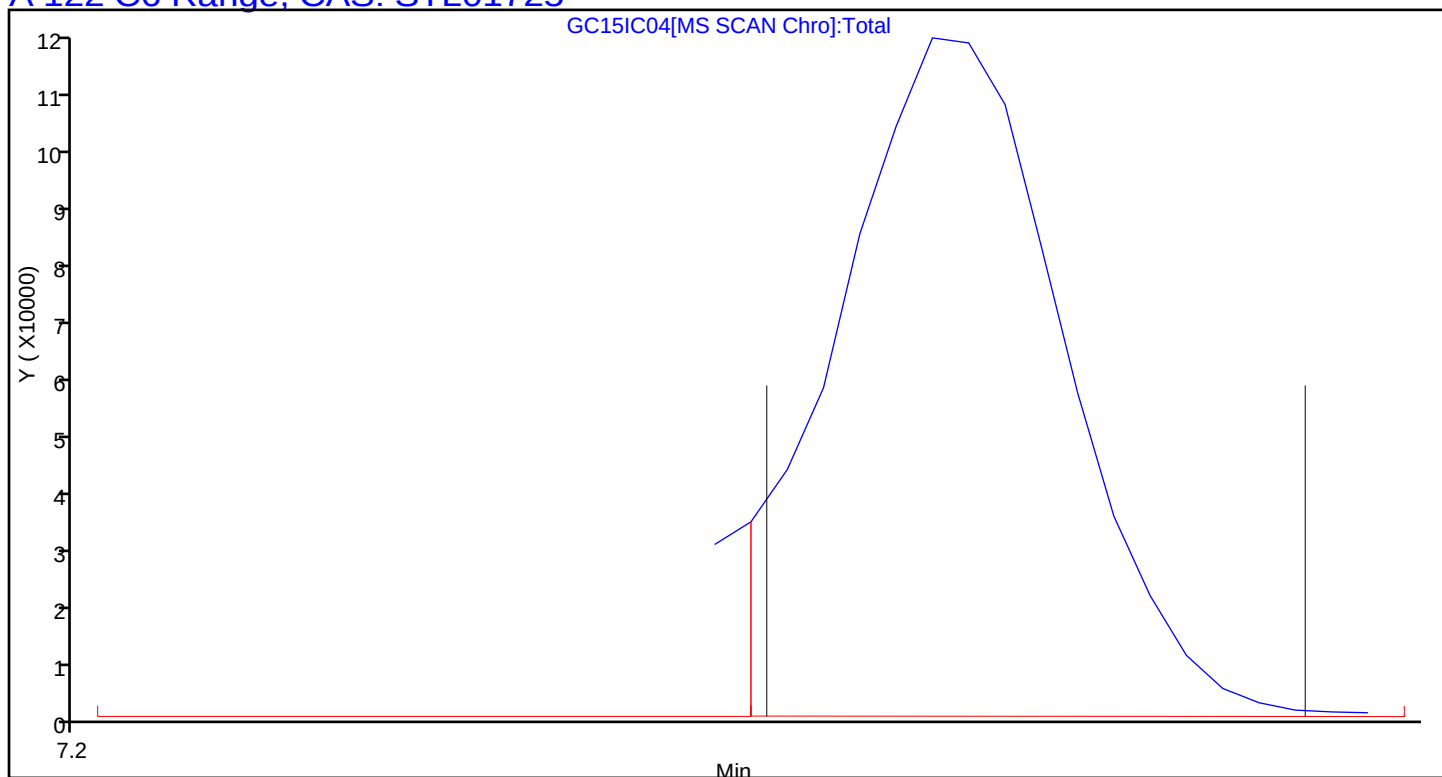
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC04.D

Injection Date: 15-Mar-2017 16:45:30

Instrument ID: MG

Lims ID: IC L4

Client ID:

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 6

Purge Vol: 500.000 mL

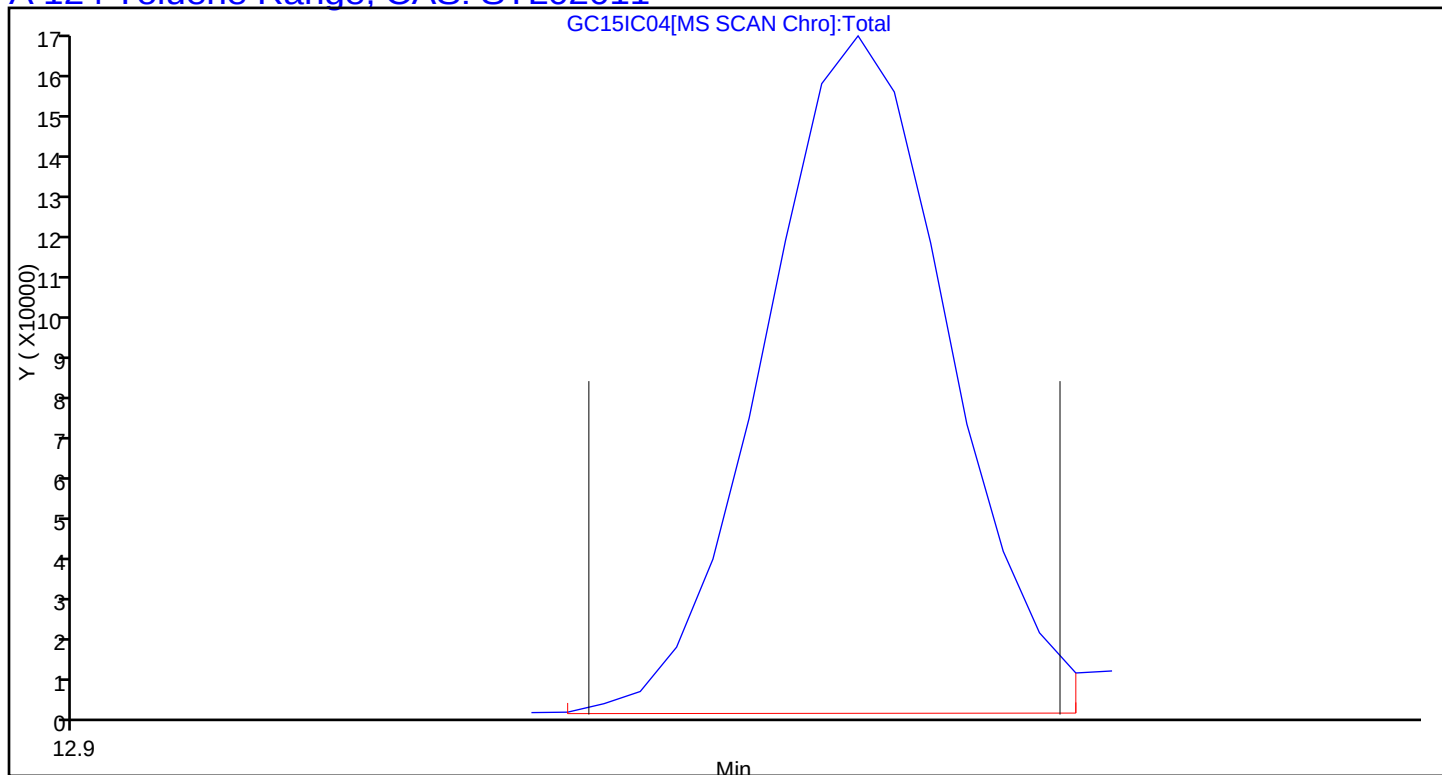
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 124 Toluene Range, CAS: STL02011

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC05.D
 Lims ID: IC L5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 15-Mar-2017 17:29:30 ALS Bottle#: 4 Worklist Smp#: 7
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-007
 Misc. Info.: 083680
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:12:36 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: barlozhetskayaa

Date: 16-Mar-2017 09:26:11

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	7.985	7.993	-0.008	82	336824	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.158	10.161	-0.003	95	1711373	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.028	15.034	-0.006	88	1669250	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.705	16.705	0.000	95	1347272	4.00	4.08	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	97	38106	1.00	1.02	
7 Propene	41	3.466	3.466	0.000	97	93889	1.00	1.05	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	367220	1.00	1.03	
9 Chloromethane	52	3.661	3.659	0.002	97	25770	1.00	1.07	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.666	3.669	-0.003	92	208904	1.00	0.9845	
11 Acetaldehyde	44	3.779	3.786	-0.007	88	165163	5.01	5.86	
12 Vinyl chloride	62	3.801	3.803	-0.002	99	100829	1.00	1.02	
13 Butadiene	54	3.871	3.876	-0.005	70	68804	1.00	1.05	
14 Butane	43	3.876	3.879	-0.003	85	142250	1.00	1.02	
15 Bromomethane	94	4.135	4.141	-0.006	98	99093	1.00	1.02	
16 Chloroethane	64	4.254	4.258	-0.004	93	49038	1.00	1.03	
17 Ethanol	31	4.340	4.357	-0.017	97	174754	5.01	5.16	
18 Vinyl bromide	106	4.507	4.511	-0.004	97	92859	1.00	1.01	
19 2-Methylbutane	43	4.556	4.560	-0.004	89	95489	1.00	1.01	
21 Acrolein	56	4.734	4.742	-0.008	28	12471	1.00	0.9040	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	99	358635	1.00	1.01	
22 Acetonitrile	40	4.782	4.793	-0.011	96	31325	1.00	1.11	
23 Acetone	58	4.825	4.835	-0.010	99	107750	2.94	3.26	
25 Pentane	72	4.933	4.937	-0.004	98	17688	1.00	1.03	
24 Isopropyl alcohol	45	4.912	4.939	-0.027	98	343901	2.94	3.01	
26 Ethyl ether	31	5.063	5.075	-0.012	92	82779	1.00	1.06	
27 1,1-Dichloroethene	96	5.348	5.354	-0.006	97	89728	1.00	1.00	
28 Acrylonitrile	53	5.424	5.435	-0.011	95	42053	1.00	1.03	
29 2-Methyl-2-propanol	59	5.435	5.467	-0.032	95	138675	1.00	1.01	
30 1,1,2-Trichloro-1,2,2-trif	101	5.516	5.521	-0.005	93	209870	1.00	1.01	
31 Methylene Chloride	84	5.650	5.656	-0.006	89	81013	1.00	1.00	

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	5.667	5.673	-0.006	93	87550	1.00	1.01	
33 Carbon disulfide	76	5.791	5.797	-0.006	100	229458	1.00	1.00	
34 trans-1,2-Dichloroethene	96	6.389	6.393	-0.004	97	88680	1.00	1.01	
35 2-Methylpentane	43	6.421	6.426	-0.005	93	177996	1.00	1.03	
36 Methyl tert-butyl ether	73	6.502	6.513	-0.011	95	273536	1.00	1.05	
37 1,1-Dichloroethane	63	6.767	6.771	-0.004	100	173008	1.00	1.01	
38 Vinyl acetate	43	6.869	6.881	-0.012	99	207726	1.00	1.06	
39 2-Butanone (MEK)	72	7.268	7.283	-0.015	99	39027	1.00	1.02	
40 Hexane	56	7.333	7.336	-0.003	85	67446	1.00	1.01	
41 Isopropyl ether	45	7.468	7.483	-0.015	94	262185	1.00	1.07	
42 cis-1,2-Dichloroethene	96	7.683	7.691	-0.008	96	92674	1.00	0.99	
43 Ethyl acetate	43	7.867	7.880	-0.013	98	171642	1.00	1.06	
44 Chloroform	83	8.012	8.019	-0.007	96	243090	1.00	1.03	
45 Tert-butyl ethyl ether	59	8.109	8.122	-0.013	95	259723	1.00	1.06	
46 Tetrahydrofuran	42	8.374	8.387	-0.013	89	89552	1.00	1.04	
47 1,1,1-Trichloroethane	97	8.988	8.997	-0.009	94	276845	1.00	1.01	
48 1,2-Dichloroethane	62	9.080	9.087	-0.007	99	172041	1.00	1.00	
49 Benzene	78	9.576	9.582	-0.006	96	279122	1.00	0.9601	
50 Cyclohexane	69	9.581	9.590	-0.009	92	48328	1.00	0.9876	
52 n-Butanol	31	9.587	9.606	-0.019	66	29171	1.00	0.9374	
51 Carbon tetrachloride	117	9.608	9.611	-0.003	97	296576	1.00	0.9761	
53 2,3-Dimethylpentane	71	9.732	9.740	-0.008	90	67650	1.00	1.01	
54 Thiophene	84	9.851	9.855	-0.004	95	161878	1.00	1.00	
55 Tert-amyl methyl ether	73	10.088	10.100	-0.012	98	277565	1.00	1.04	
56 Isooctane	57	10.406	10.414	-0.008	97	433667	1.00	1.00	
57 n-Heptane	71	10.811	10.816	-0.005	91	106290	1.00	0.9861	
58 1,2-Dichloropropane	63	10.843	10.846	-0.003	83	97796	1.00	0.99	
59 Trichloroethene	130	10.892	10.897	-0.005	95	150217	1.00	0.9539	
60 Dibromomethane	93	10.956	10.961	-0.005	95	127996	1.00	0.9753	
61 Dichlorobromomethane	83	11.124	11.126	-0.002	98	253630	1.00	1.01	
62 1,4-Dioxane	88	11.134	11.152	-0.018	94	39782	1.00	1.01	
63 Methyl methacrylate	41	11.248	11.260	-0.012	93	108599	1.00	1.00	
64 Methylcyclohexane	83	11.701	11.704	-0.003	95	227011	1.00	1.00	
65 4-Methyl-2-pentanone (MIBK)	43	12.121	12.133	-0.012	97	170118	1.00	1.02	
66 cis-1,3-Dichloropropene	75	12.170	12.174	-0.004	96	184126	1.00	1.01	
67 trans-1,3-Dichloropropene	75	12.892	12.897	-0.005	97	178625	1.00	1.00	
68 Toluene	91	13.016	13.021	-0.005	94	329471	1.00	0.99	
69 1,1,2-Trichloroethane	83	13.086	13.091	-0.005	98	98117	1.00	0.9842	
70 2-Methylthiophene	97	13.167	13.173	-0.006	98	280205	1.00	1.00	
71 3-Methylthiophene	97	13.378	13.381	-0.003	99	279432	1.00	1.01	
72 2-Hexanone	58	13.507	13.519	-0.012	93	78752	1.00	0.9894	
73 n-Octane	85	13.777	13.780	-0.003	89	121262	1.00	1.01	
74 Chlorodibromomethane	129	13.798	13.803	-0.005	97	249183	1.00	1.00	
75 Ethylene Dibromide	107	14.089	14.092	-0.003	97	197523	1.00	1.01	
76 Tetrachloroethene	129	14.192	14.195	-0.003	95	148601	1.00	0.9769	
77 Chlorobenzene	112	15.076	15.082	-0.006	92	274196	1.00	0.9743	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	91	291234	1.00	1.02	
79 Ethylbenzene	91	15.389	15.393	-0.004	99	465478	1.00	1.00	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	370649	1.00	1.01	
81 m-Xylene & p-Xylene	91	15.556	15.559	-0.003	100	752459	2.00	2.01	
82 Bromoform	173	15.977	15.979	-0.002	95	241462	1.00	0.9699	
83 Styrene	104	16.020	16.027	-0.007	97	258497	1.00	1.04	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.025	16.029	-0.004	89	214597	1.00	1.05	
85 o-Xylene	91	16.085	16.088	-0.003	98	382052	1.00	1.00	
86 1,1,2,2-Tetrachloroethane	83	16.408	16.411	-0.003	98	256086	1.00	1.06	
87 1,2,3-Trichloropropane	110	16.559	16.565	-0.006	96	89439	1.00	1.01	
88 Isopropylbenzene	105	16.689	16.692	-0.003	98	556209	1.00	1.00	
89 N-Propylbenzene	120	17.244	17.246	-0.002	99	146598	1.00	1.00	
90 2-Chlorotoluene	126	17.271	17.278	-0.007	96	135063	1.00	0.99	
91 4-Ethyltoluene	105	17.406	17.409	-0.003	98	533550	1.00	1.02	
92 1,3,5-Trimethylbenzene	120	17.487	17.490	-0.003	92	251859	1.00	1.02	
93 Alpha Methyl Styrene	118	17.729	17.734	-0.005	87	199600	1.00	1.04	
94 n-Decane	57	17.832	17.837	-0.005	93	269524	1.00	1.08	
95 tert-Butylbenzene	119	17.934	17.939	-0.005	90	522916	1.00	1.01	
96 1,2,4-Trimethylbenzene	105	17.950	17.953	-0.003	96	479730	1.00	1.02	
98 sec-Butylbenzene	105	18.220	18.223	-0.003	97	678287	1.00	1.02	
97 1,3-Dichlorobenzene	146	18.220	18.223	-0.003	97	340580	1.00	0.9581	
99 Benzyl chloride	91	18.301	18.303	-0.002	98	452529	1.00	1.02	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	95	337505	1.00	0.9714	
101 4-Isopropyltoluene	119	18.398	18.400	-0.002	97	607035	1.00	1.04	
102 1,2,3-Trimethylbenzene	105	18.441	18.445	-0.004	98	366844	1.00	1.04	
103 Butylcyclohexane	83	18.517	18.520	-0.003	95	365451	1.00	1.05	
104 1,2-Dichlorobenzene	146	18.684	18.689	-0.005	95	328983	1.00	0.9712	
105 2,3-Dihydroindene	117	18.689	18.693	-0.004	93	433789	1.00	1.01	
106 Indene	116	18.824	18.827	-0.003	91	318543	1.00	1.02	
107 n-Butylbenzene	91	18.851	18.854	-0.003	98	573821	1.00	1.05	
108 Undecane	57	19.207	19.209	-0.002	93	330016	1.00	1.13	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.239	19.239	0.000	97	457261	1.00	1.05	
110 1,2-Dibromo-3-Chloropropan	157	19.304	19.308	-0.004	94	149226	1.00	1.03	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.634	-0.001	96	562520	1.00	1.07	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	94	340236	1.00	1.08	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	96	471400	1.00	1.09	
114 Dodecane	57	20.280	20.280	0.000	93	328197	1.00	1.26	
115 1,2,4-Trichlorobenzene	180	20.415	20.418	-0.003	94	323309	1.00	1.08	
116 Naphthalene	128	20.544	20.545	-0.001	99	693914	1.00	1.11	
117 Benzo(b)thiophene	134	20.647	20.645	0.002	99	408835	1.00	1.13	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	94	327761	1.00	1.11	
119 1,2,3-Trichlorobenzene	180	20.824	20.825	-0.001	94	318023	1.00	1.13	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	100	379553	3.03	2.93	
121 1-Methylnaphthalene	142	21.801	21.801	-0.001	99	379039	3.03	2.94	
A 122 C6 Range	1	7.343	(7.303-7.383)		0	680124	1.00	1.01	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	825588	1.00	1.01	
S 126 Xylenes, Total	100				0		3.01	3.00	
S 127 1,2-Dichloroethene, Total	1				0		2.00	2.00	

Reagents:

40L5DNP_00010

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 16-Mar-2017 14:12:38

Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC05.D

Injection Date: 15-Mar-2017 17:29:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L5

Worklist Smp#: 7

Client ID:

Purge Vol: 500.000 mL

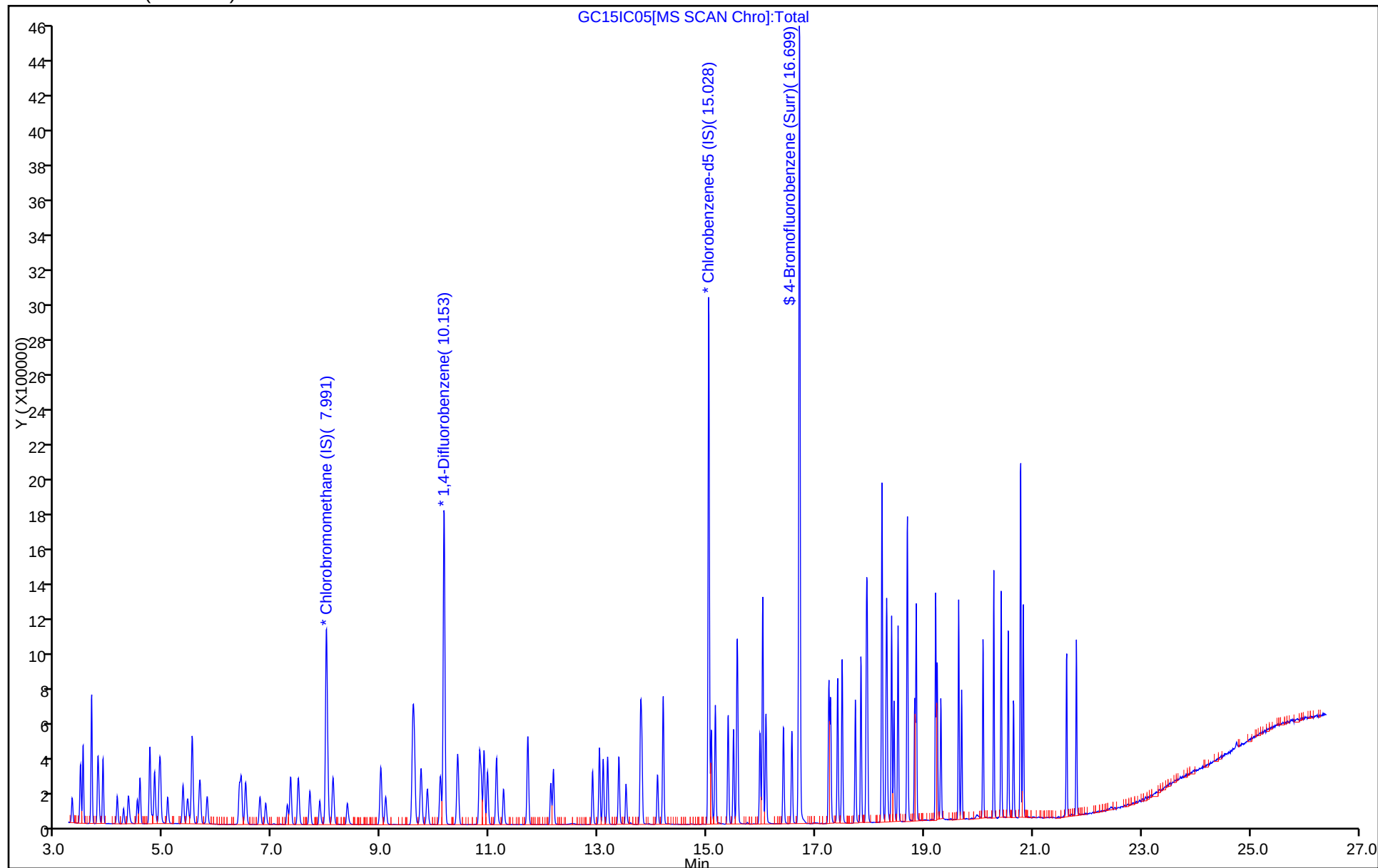
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC05.D

Injection Date: 15-Mar-2017 17:29:30

Instrument ID: MG

Lims ID: IC L5

Client ID:

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 7

Purge Vol: 500.000 mL

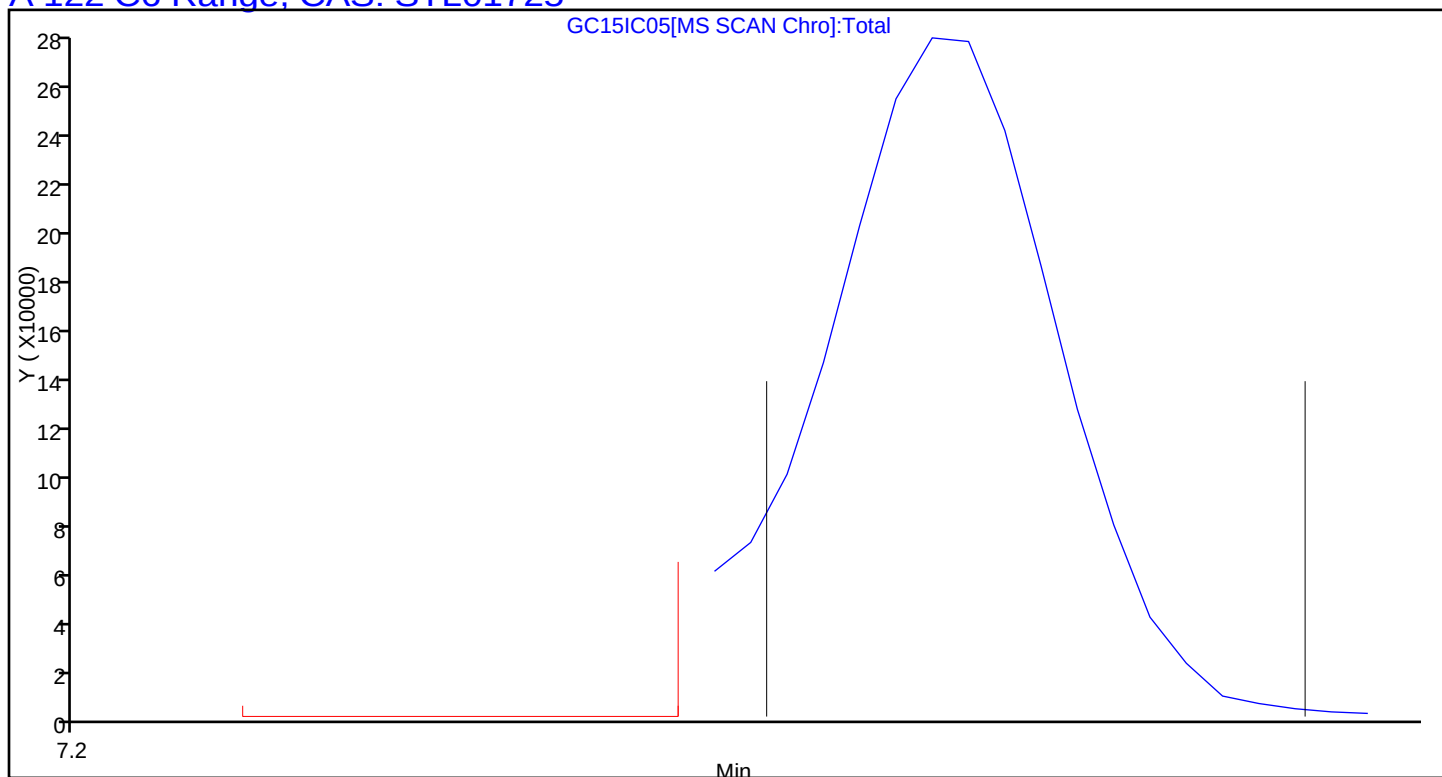
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC05.D

Injection Date: 15-Mar-2017 17:29:30

Instrument ID: MG

Lims ID: IC L5

Client ID:

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 7

Purge Vol: 500.000 mL

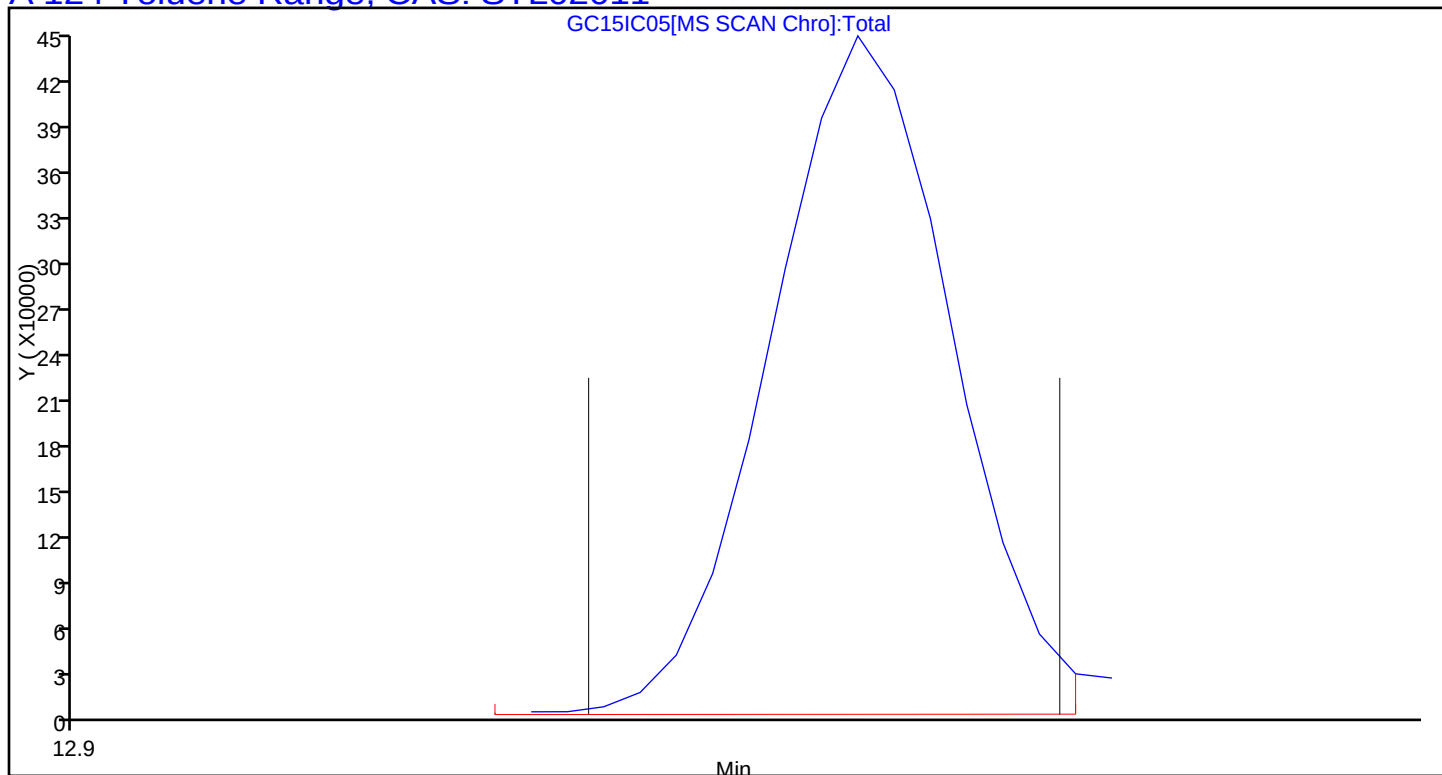
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC06.D
 Lims ID: ICIS L6
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 15-Mar-2017 18:13:30 ALS Bottle#: 5 Worklist Smp#: 8
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-008
 Misc. Info.: 083679
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:38:36 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: barlozhetskayaa

Date: 16-Mar-2017 14:38:36

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	7.991	7.993	-0.002	82	356237	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.158	10.161	-0.003	95	1693700	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.033	15.034	-0.001	88	1673092	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.705	16.705	0.000	96	1311298	4.00	3.97	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	96	79923	2.00	2.02	
7 Propene	41	3.466	3.466	0.000	97	186431	2.00	1.98	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	749517	2.00	1.99	
9 Chloromethane	52	3.655	3.659	-0.004	97	51943	2.00	2.05	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.666	3.669	-0.003	91	436402	2.00	1.94	
11 Acetaldehyde	44	3.785	3.786	-0.001	89	313096	9.99	10.5	
12 Vinyl chloride	62	3.801	3.803	-0.002	99	210834	2.00	2.02	
13 Butadiene	54	3.876	3.876	0.000	85	143038	2.00	2.06	
14 Butane	43	3.876	3.879	-0.003	94	293638	2.00	1.99	
15 Bromomethane	94	4.141	4.141	-0.001	98	204127	2.00	1.98	
16 Chloroethane	64	4.254	4.258	-0.004	91	98257	2.00	1.95	
17 Ethanol	31	4.345	4.357	-0.012	97	345378	9.99	9.64	
18 Vinyl bromide	106	4.507	4.511	-0.004	97	194576	2.00	1.99	
19 2-Methylbutane	43	4.556	4.560	-0.004	89	196053	2.00	1.97	
21 Acrolein	56	4.739	4.742	-0.003	28	30056	2.00	2.06	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	99	743344	2.00	1.98	
22 Acetonitrile	40	4.788	4.793	-0.005	98	61466	2.00	2.06	
23 Acetone	58	4.825	4.835	-0.010	99	208378	5.87	5.96	
25 Pentane	72	4.933	4.937	-0.004	98	37027	2.00	2.04	
24 Isopropyl alcohol	45	4.922	4.939	-0.017	98	695832	5.87	5.75	
26 Ethyl ether	31	5.068	5.075	-0.007	92	162376	2.00	1.97	
27 1,1-Dichloroethene	96	5.354	5.354	0.000	98	187192	2.00	1.97	
28 Acrylonitrile	53	5.429	5.435	-0.006	95	84597	2.00	1.95	
29 2-Methyl-2-propanol	59	5.445	5.467	-0.022	95	283850	2.00	1.96	
30 1,1,2-Trichloro-1,2,2-trif	101	5.521	5.521	0.000	94	432242	2.00	1.97	
31 Methylene Chloride	84	5.656	5.656	0.000	89	158311	2.00	1.85	

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	5.672	5.673	-0.001	93	177955	2.00	1.93	
33 Carbon disulfide	76	5.796	5.797	-0.001	100	478845	2.00	1.98	
34 trans-1,2-Dichloroethene	96	6.389	6.393	-0.004	97	182249	2.00	1.96	
35 2-Methylpentane	43	6.421	6.426	-0.005	92	357751	2.00	1.96	
36 Methyl tert-butyl ether	73	6.502	6.513	-0.011	95	546952	2.00	1.98	
37 1,1-Dichloroethane	63	6.772	6.771	0.001	100	354630	2.00	1.96	
38 Vinyl acetate	43	6.874	6.881	-0.007	99	426758	2.00	2.05	
39 2-Butanone (MEK)	72	7.273	7.283	-0.010	99	79660	2.00	1.97	
40 Hexane	56	7.333	7.336	-0.003	85	138819	2.00	1.97	
41 Isopropyl ether	45	7.473	7.483	-0.010	94	526080	2.00	2.03	
42 cis-1,2-Dichloroethene	96	7.689	7.691	-0.002	95	196676	2.00	1.99	
43 Ethyl acetate	43	7.872	7.880	-0.008	98	346406	2.00	2.02	
44 Chloroform	83	8.018	8.019	-0.001	96	494799	2.00	1.98	
45 Tert-butyl ethyl ether	59	8.115	8.122	-0.007	95	525778	2.00	2.02	
46 Tetrahydrofuran	42	8.374	8.387	-0.013	88	177245	2.00	1.95	
47 1,1,1-Trichloroethane	97	8.994	8.997	-0.003	94	568413	2.00	1.97	
48 1,2-Dichloroethane	62	9.085	9.087	-0.002	99	350677	2.00	2.05	
49 Benzene	78	9.581	9.582	-0.001	96	572098	2.00	1.99	
50 Cyclohexane	69	9.587	9.590	-0.003	93	99763	2.00	2.06	
52 n-Butanol	31	9.576	9.606	-0.030	70	63344	2.00	2.06	
51 Carbon tetrachloride	117	9.608	9.611	-0.003	97	624502	2.00	2.08	
53 2,3-Dimethylpentane	71	9.738	9.740	-0.002	89	136123	2.00	2.06	
54 Thiophene	84	9.851	9.855	-0.004	95	332092	2.00	2.07	
55 Tert-amyl methyl ether	73	10.088	10.100	-0.012	98	556050	2.00	2.11	
56 Isooctane	57	10.412	10.414	-0.002	97	874389	2.00	2.05	
57 n-Heptane	71	10.811	10.816	-0.005	91	220272	2.00	2.06	
58 1,2-Dichloropropane	63	10.843	10.846	-0.003	84	201269	2.00	2.06	
59 Trichloroethene	130	10.897	10.897	0.000	95	315722	2.00	2.03	
60 Dibromomethane	93	10.956	10.961	-0.005	94	267885	2.00	2.06	
61 Dichlorobromomethane	83	11.124	11.126	-0.002	98	529608	2.00	2.12	
62 1,4-Dioxane	88	11.134	11.152	-0.018	90	83850	2.00	2.15	
63 Methyl methacrylate	41	11.253	11.260	-0.007	93	229984	2.00	2.13	
64 Methylcyclohexane	83	11.701	11.704	-0.003	95	465979	2.00	2.08	
65 4-Methyl-2-pentanone (MIBK)	43	12.121	12.133	-0.012	97	348265	2.00	2.11	
66 cis-1,3-Dichloropropene	75	12.170	12.174	-0.004	95	379694	2.00	2.10	
67 trans-1,3-Dichloropropene	75	12.892	12.897	-0.005	97	373664	2.00	2.09	
68 Toluene	91	13.016	13.021	-0.005	93	676247	2.00	2.03	
69 1,1,2-Trichloroethane	83	13.092	13.091	0.001	98	206257	2.00	2.06	
70 2-Methylthiophene	97	13.173	13.173	0.000	97	580302	2.00	2.07	
71 3-Methylthiophene	97	13.378	13.381	-0.003	99	571930	2.00	2.06	
72 2-Hexanone	58	13.507	13.519	-0.012	94	174060	2.00	2.18	
73 n-Octane	85	13.777	13.780	-0.003	88	249240	2.00	2.07	
74 Chlorodibromomethane	129	13.798	13.803	-0.005	97	534023	2.00	2.14	
75 Ethylene Dibromide	107	14.089	14.092	-0.003	98	416730	2.00	2.13	
76 Tetrachloroethene	129	14.192	14.195	-0.003	95	310406	2.00	2.04	
77 Chlorobenzene	112	15.082	15.082	0.000	93	575122	2.00	2.04	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	90	577752	2.00	2.02	
79 Ethylbenzene	91	15.389	15.393	-0.004	99	954045	2.00	2.05	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	772778	2.00	2.11	
81 m-Xylene & p-Xylene	91	15.556	15.559	-0.003	99	1555433	4.00	4.14	
82 Bromoform	173	15.977	15.979	-0.002	96	503085	2.00	2.15	
83 Styrene	104	16.025	16.027	-0.002	97	554081	2.00	2.23	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.025	16.029	-0.004	89	424281	2.00	2.08	
85 o-Xylene	91	16.085	16.088	-0.003	98	789853	2.00	2.05	
86 1,1,2,2-Tetrachloroethane	83	16.408	16.411	-0.003	98	522069	2.00	2.15	
87 1,2,3-Trichloropropane	110	16.565	16.565	0.000	96	184265	2.00	2.08	
88 Isopropylbenzene	105	16.689	16.692	-0.003	97	1134088	2.00	2.03	
89 N-Propylbenzene	120	17.244	17.246	-0.002	99	308856	2.00	2.11	
90 2-Chlorotoluene	126	17.276	17.278	-0.002	97	279105	2.00	2.04	
91 4-Ethyltoluene	105	17.406	17.409	-0.003	98	1105029	2.00	2.10	
92 1,3,5-Trimethylbenzene	120	17.487	17.490	-0.003	92	521704	2.00	2.12	
93 Alpha Methyl Styrene	118	17.735	17.734	0.001	87	435119	2.00	2.19	
94 n-Decane	57	17.837	17.837	0.000	93	533364	2.00	2.13	
95 tert-Butylbenzene	119	17.940	17.939	0.001	92	1088441	2.00	2.10	
96 1,2,4-Trimethylbenzene	105	17.950	17.953	-0.003	96	993298	2.00	2.10	
97 1,3-Dichlorobenzene	146	18.220	18.223	-0.003	97	730798	2.00	2.05	
98 sec-Butylbenzene	105	18.225	18.225	0.000	98	1415485	2.00	2.13	
99 Benzyl chloride	91	18.301	18.303	-0.002	98	961111	2.00	2.16	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	94	714901	2.00	2.05	
101 4-Isopropyltoluene	119	18.398	18.402	-0.004	97	1259395	2.00	2.14	
102 1,2,3-Trimethylbenzene	105	18.441	18.445	-0.004	98	749546	2.00	2.13	
103 Butylcyclohexane	83	18.517	18.520	-0.003	95	729918	2.00	2.10	
104 1,2-Dichlorobenzene	146	18.689	18.689	0.000	94	701112	2.00	2.07	
105 2,3-Dihydroindene	117	18.689	18.693	-0.004	93	908631	2.00	2.11	
106 Indene	116	18.824	18.827	-0.003	91	670154	2.00	2.13	
107 n-Butylbenzene	91	18.851	18.854	-0.003	98	1164905	2.00	2.12	
108 Undecane	57	19.207	19.209	-0.002	92	622503	2.00	2.12	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.239	19.239	0.000	97	931315	2.00	2.12	
110 1,2-Dibromo-3-Chloropropan	157	19.309	19.308	0.001	99	302962	2.00	2.08	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.635	-0.002	96	1160795	2.00	2.20	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	94	687501	2.00	2.17	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	96	955751	2.00	2.21	
114 Dodecane	57	20.280	20.280	0.000	93	556303	2.00	2.13	
115 1,2,4-Trichlorobenzene	180	20.420	20.418	0.002	94	668939	2.00	2.24	
116 Naphthalene	128	20.544	20.546	-0.002	99	1395111	2.00	2.23	
117 Benzo(b)thiophene	134	20.647	20.645	0.002	99	820908	2.00	2.25	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	95	640650	2.00	2.17	
119 1,2,3-Trichlorobenzene	180	20.825	20.825	-0.001	95	640410	2.00	2.27	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	99	852913	6.04	6.56	
121 1-Methylnaphthalene	142	21.801	21.801	0.000	100	834902	6.04	6.45	
A 122 C6 Range	1	7.343	(7.303-7.383)		0	1313930	2.00	2.03	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	1704710	2.00	2.10	
S 126 Xylenes, Total	100				0		5.99	6.19	
S 127 1,2-Dichloroethene, Total	1				0		4.00	3.96	

Reagents:

40L6DNP_00011

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC06.D

Injection Date: 15-Mar-2017 18:13:30

Instrument ID: MG

Operator ID: 7126

Lims ID: ICIS L6

Worklist Smp#: 8

Client ID:

Purge Vol: 500.000 mL

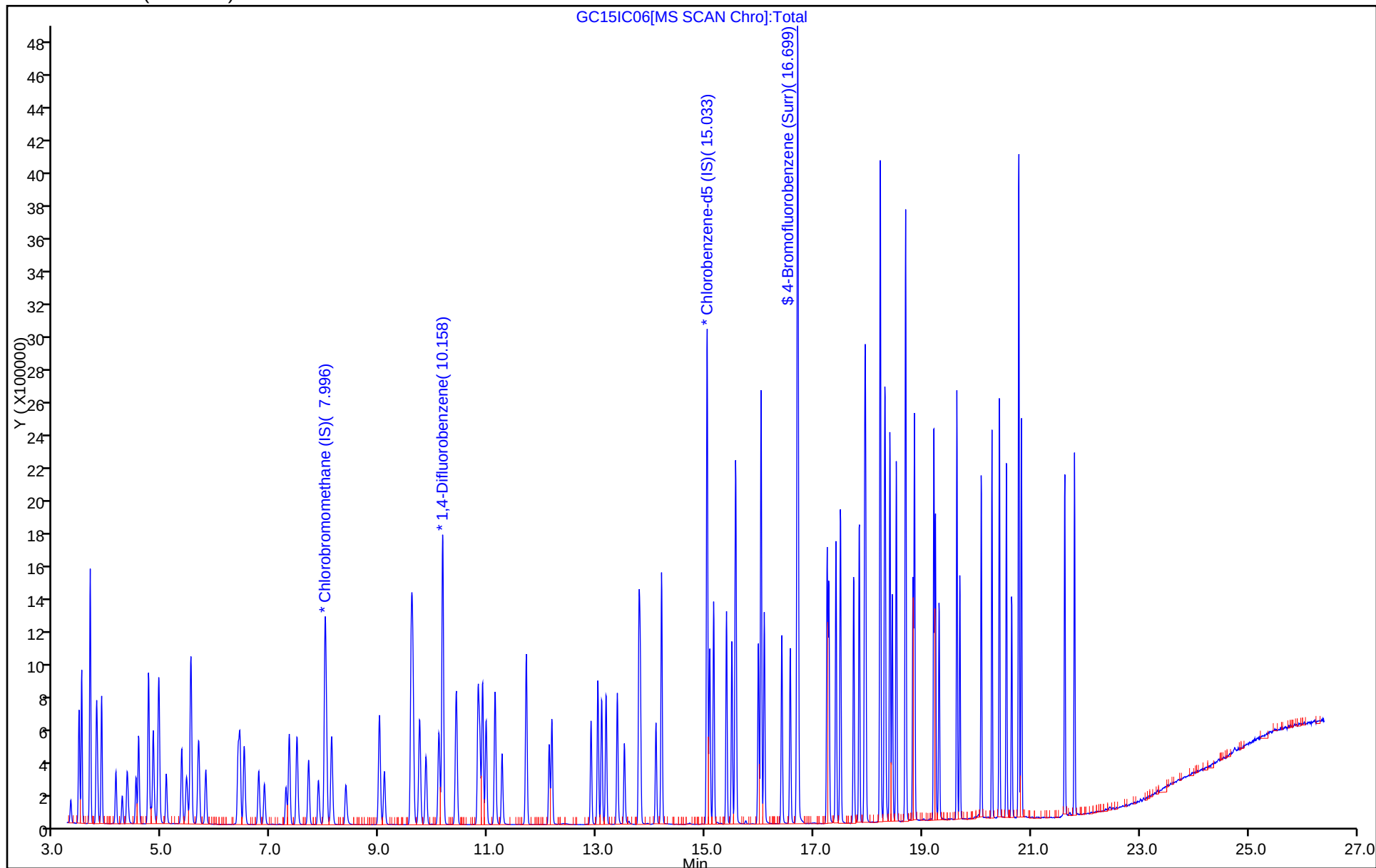
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC06.D

Injection Date: 15-Mar-2017 18:13:30

Instrument ID: MG

Lims ID: ICIS L6

Client ID:

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 8

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

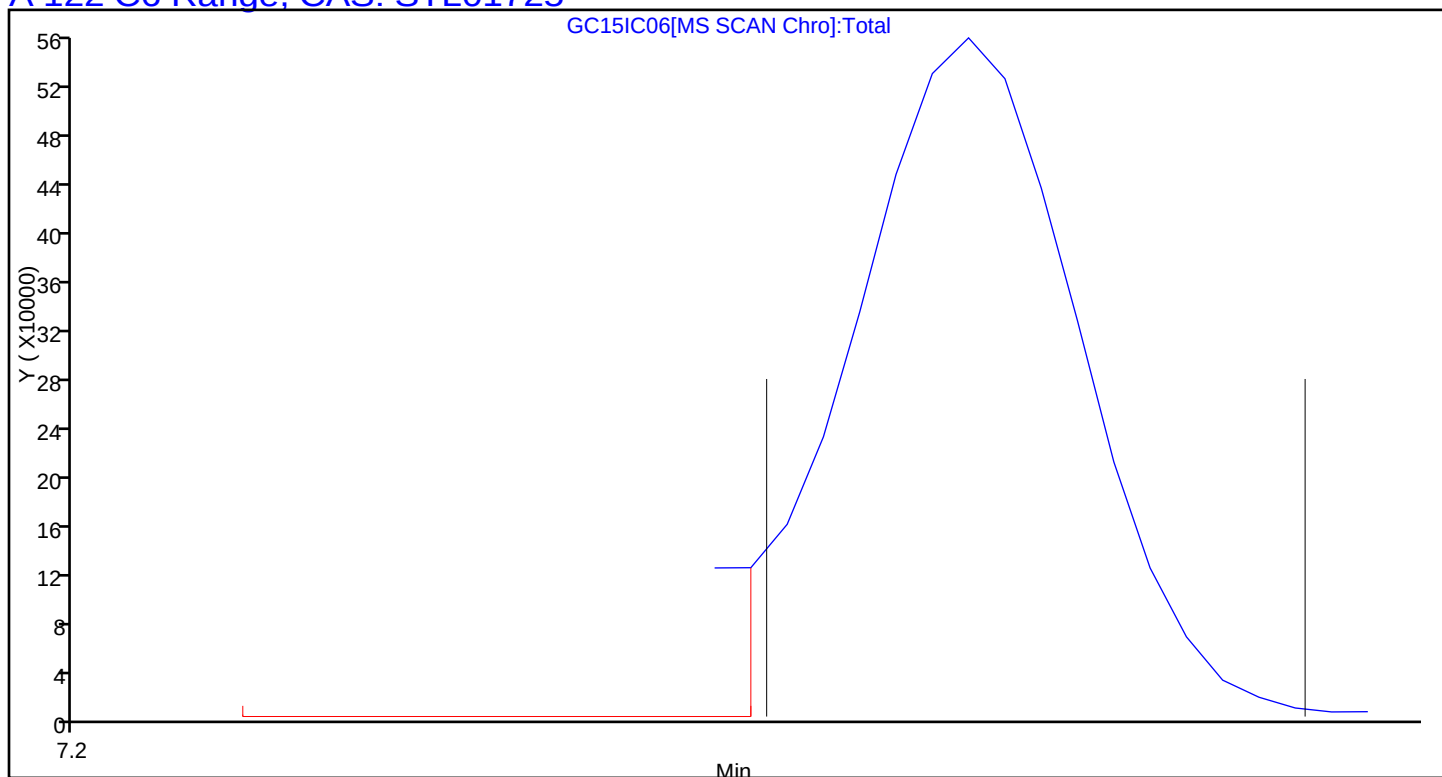
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC06.D

Injection Date: 15-Mar-2017 18:13:30

Instrument ID: MG

Lims ID: ICIS L6

Client ID:

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 8

Purge Vol: 500.000 mL

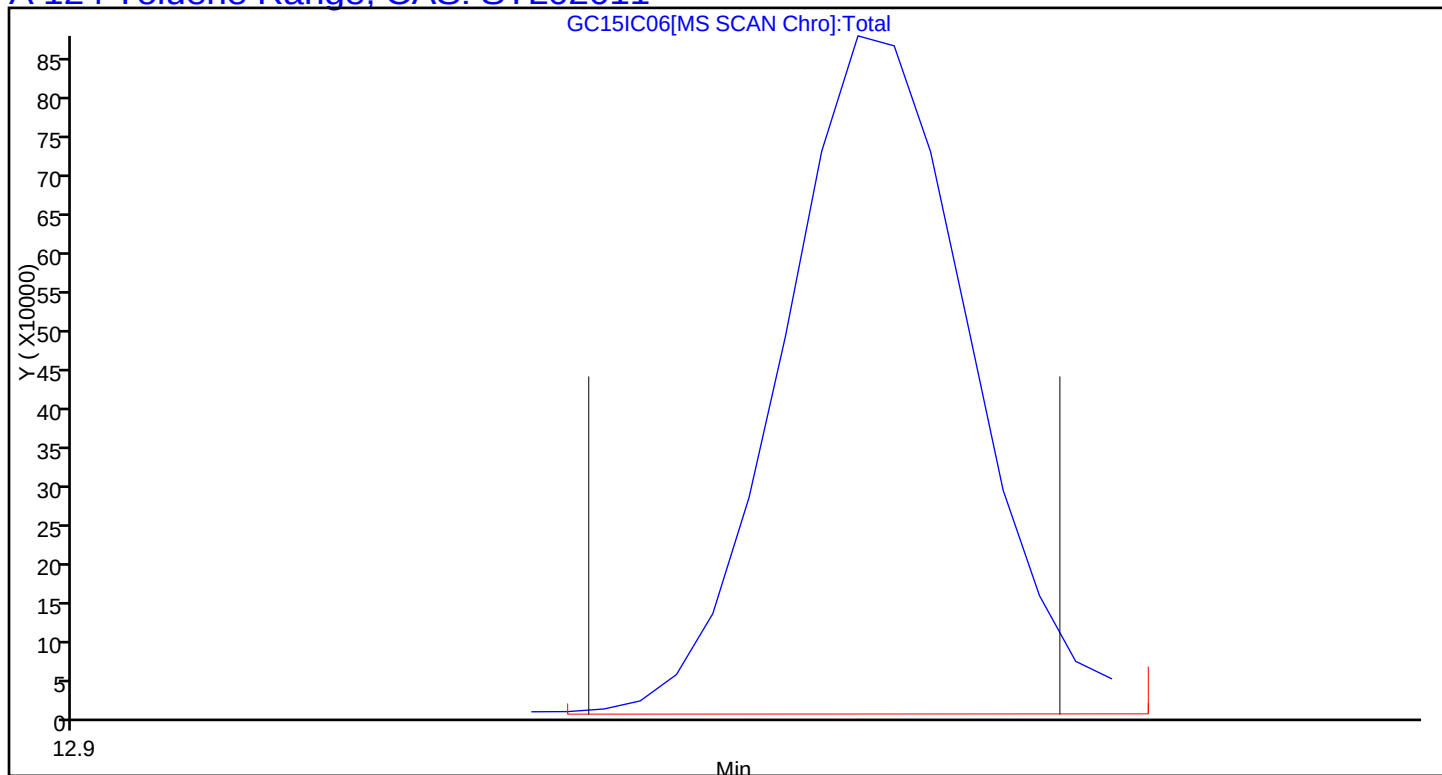
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC07.D
 Lims ID: IC L7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 15-Mar-2017 18:56:30 ALS Bottle#: 6 Worklist Smp#: 9
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-009
 Misc. Info.: 083678
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:22:47 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: tajh

Date: 16-Mar-2017 11:56:48

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	7.996	7.993	0.003	84	379572	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.164	10.161	0.003	94	1825436	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.039	15.034	0.005	87	1827873	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.710	16.705	0.005	95	1443792	4.00	4.00	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	96	161083	4.00	3.82	
7 Propene	41	3.466	3.466	0.000	97	366636	4.00	3.65	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	1518249	4.00	3.78	
9 Chloromethane	52	3.661	3.659	0.002	97	102473	4.00	3.79	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.669	0.002	91	925480	4.00	3.87	
11 Acetaldehyde	44	3.785	3.786	-0.001	89	595674	20.0	18.8	
12 Vinyl chloride	62	3.806	3.803	0.003	99	414360	4.00	3.73	
13 Butadiene	54	3.876	3.876	0.000	70	283835	4.00	3.84	
14 Butane	43	3.882	3.879	0.003	85	583059	4.00	3.71	
15 Bromomethane	94	4.141	4.141	0.000	98	425627	4.00	3.88	
16 Chloroethane	64	4.259	4.258	0.001	92	204064	4.00	3.80	
17 Ethanol	31	4.356	4.357	-0.001	98	707984	20.0	18.5	
18 Vinyl bromide	106	4.513	4.511	0.002	96	403357	4.00	3.88	
19 2-Methylbutane	43	4.561	4.560	0.001	89	399830	4.00	3.76	
21 Acrolein	56	4.739	4.742	-0.003	96	69764	4.00	4.49	
20 Trichlorofluoromethane	101	4.744	4.743	0.001	99	1532462	4.00	3.83	
22 Acetonitrile	40	4.793	4.793	0.000	98	123503	4.00	3.88	
23 Acetone	58	4.831	4.835	-0.004	99	417742	11.7	11.2	
25 Pentane	72	4.939	4.937	0.002	95	74522	4.00	3.85	
24 Isopropyl alcohol	45	4.939	4.939	0.000	93	1433726	11.7	11.1	
26 Ethyl ether	31	5.068	5.075	-0.007	92	331731	4.00	3.78	
27 1,1-Dichloroethene	96	5.354	5.354	0.000	98	387339	4.00	3.83	
28 Acrylonitrile	53	5.435	5.435	0.000	95	176062	4.00	3.82	
29 2-Methyl-2-propanol	59	5.462	5.467	-0.005	95	610004	4.00	3.96	
30 1,1,2-Trichloro-1,2,2-trif	101	5.521	5.521	0.000	94	891000	4.00	3.82	
31 Methylene Chloride	84	5.661	5.656	0.005	88	319885	4.00	3.50	

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	5.677	5.673	0.004	93	358922	4.00	3.66	
33 Carbon disulfide	76	5.801	5.797	0.004	100	979418	4.00	3.80	
34 trans-1,2-Dichloroethene	96	6.395	6.393	0.002	98	385716	4.00	3.90	
35 2-Methylpentane	43	6.427	6.426	0.001	92	714141	4.00	3.68	
36 Methyl tert-butyl ether	73	6.508	6.513	-0.005	95	1134810	4.00	3.86	
37 1,1-Dichloroethane	63	6.777	6.771	0.006	100	724800	4.00	3.75	
38 Vinyl acetate	43	6.880	6.881	-0.001	99	894260	4.00	4.03	
39 2-Butanone (MEK)	72	7.279	7.283	-0.004	99	166968	4.00	3.87	
40 Hexane	56	7.338	7.336	0.002	85	281421	4.00	3.75	
41 Isopropyl ether	45	7.478	7.483	-0.005	93	1079183	4.00	3.91	
42 cis-1,2-Dichloroethene	96	7.694	7.691	0.003	96	407485	4.00	3.88	
43 Ethyl acetate	43	7.877	7.880	-0.003	98	713928	4.00	3.90	
44 Chloroform	83	8.023	8.019	0.004	96	1012011	4.00	3.80	
45 Tert-butyl ethyl ether	59	8.120	8.122	-0.002	94	1073194	4.00	3.87	
46 Tetrahydrofuran	42	8.379	8.387	-0.008	89	365105	4.00	3.77	
47 1,1,1-Trichloroethane	97	8.999	8.997	0.002	94	1184348	4.00	3.85	
48 1,2-Dichloroethane	62	9.091	9.087	0.004	99	713806	4.00	3.87	
49 Benzene	78	9.581	9.582	-0.001	96	1173319	4.00	3.78	
50 Cyclohexane	69	9.592	9.590	0.002	93	203651	4.00	3.90	
52 n-Butanol	31	9.587	9.606	-0.019	70	136613	4.00	4.12	
51 Carbon tetrachloride	117	9.614	9.611	0.003	98	1329349	4.00	4.10	
53 2,3-Dimethylpentane	71	9.738	9.740	-0.002	89	282206	4.00	3.95	
54 Thiophene	84	9.856	9.855	0.001	95	686171	4.00	3.96	
55 Tert-amyl methyl ether	73	10.094	10.100	-0.006	98	1157370	4.00	4.07	
56 Isooctane	57	10.412	10.414	-0.002	97	1779183	4.00	3.87	
57 n-Heptane	71	10.816	10.816	0.000	90	450272	4.00	3.92	
58 1,2-Dichloropropane	63	10.849	10.846	0.003	87	408812	4.00	3.88	
59 Trichloroethene	130	10.897	10.897	0.000	95	664844	4.00	3.96	
60 Dibromomethane	93	10.962	10.961	0.001	93	556851	4.00	3.98	
61 Dichlorobromomethane	83	11.129	11.126	0.003	98	1122661	4.00	4.18	
62 1,4-Dioxane	88	11.145	11.152	-0.007	89	171415	4.00	4.08	
63 Methyl methacrylate	41	11.258	11.260	-0.002	93	487379	4.00	4.19	
64 Methylcyclohexane	83	11.706	11.704	0.002	94	959276	4.00	3.97	
65 4-Methyl-2-pentanone (MIBK)	43	12.127	12.133	-0.006	97	733481	4.00	4.12	
66 cis-1,3-Dichloropropene	75	12.175	12.174	0.001	95	790238	4.00	4.05	
67 trans-1,3-Dichloropropene	75	12.898	12.897	0.001	97	789307	4.00	4.03	
68 Toluene	91	13.022	13.021	0.001	94	1420544	4.00	3.90	
69 1,1,2-Trichloroethane	83	13.092	13.091	0.001	98	426290	4.00	3.90	
70 2-Methylthiophene	97	13.173	13.173	0.000	97	1212899	4.00	3.97	
71 3-Methylthiophene	97	13.383	13.381	0.002	99	1202168	4.00	3.97	
72 2-Hexanone	58	13.512	13.519	-0.007	94	373275	4.00	4.28	
73 n-Octane	85	13.782	13.780	0.002	87	522104	4.00	3.97	
74 Chlorodibromomethane	129	13.804	13.803	0.001	97	1217195	4.00	4.47	
75 Ethylene Dibromide	107	14.095	14.092	0.003	97	890944	4.00	4.17	
76 Tetrachloroethene	129	14.197	14.195	0.002	95	660677	4.00	3.97	
77 Chlorobenzene	112	15.082	15.082	0.000	93	1217110	4.00	3.95	
78 2,3-Dimethylheptane	43	15.157	15.155	0.002	88	1160951	4.00	3.72	
79 Ethylbenzene	91	15.394	15.393	0.001	98	2020166	4.00	3.97	
80 2-Ethylthiophene	97	15.491	15.491	0.000	98	1634721	4.00	4.08	
81 m-Xylene & p-Xylene	91	15.562	15.559	0.003	99	3265060	8.00	7.95	
82 Bromoform	173	15.982	15.979	0.003	97	1302027	4.00	4.78	
83 Styrene	104	16.031	16.027	0.004	97	1208558	4.00	4.46	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.031	16.029	0.002	88	848900	4.00	3.80	
85 o-Xylene	91	16.090	16.088	0.002	98	1652204	4.00	3.93	
86 1,1,2,2-Tetrachloroethane	83	16.414	16.411	0.003	99	1097235	4.00	4.14	
87 1,2,3-Trichloropropane	110	16.570	16.565	0.005	96	385852	4.00	3.98	
88 Isopropylbenzene	105	16.694	16.692	0.002	97	2402575	4.00	3.94	
89 N-Propylbenzene	120	17.249	17.246	0.003	99	660707	4.00	4.13	
90 2-Chlorotoluene	126	17.282	17.278	0.004	96	602879	4.00	4.04	
91 4-Ethyltoluene	105	17.411	17.409	0.002	98	2357742	4.00	4.10	
92 1,3,5-Trimethylbenzene	120	17.492	17.490	0.002	92	1116920	4.00	4.15	
93 Alpha Methyl Styrene	118	17.735	17.734	0.001	88	987378	4.00	4.70	
94 n-Decane	57	17.837	17.837	0.000	94	1089510	4.00	3.98	
95 tert-Butylbenzene	119	17.940	17.939	0.001	93	2353545	4.00	4.15	
96 1,2,4-Trimethylbenzene	105	17.956	17.953	0.003	95	2134348	4.00	4.14	
98 sec-Butylbenzene	105	18.225	18.223	0.002	97	3068495	4.00	4.22	
97 1,3-Dichlorobenzene	146	18.225	18.223	0.002	98	1666142	4.00	4.28	
99 Benzyl chloride	91	18.306	18.303	0.003	98	2087808	4.00	4.29	
100 1,4-Dichlorobenzene	146	18.317	18.316	0.001	97	1576716	4.00	4.14	
101 4-Isopropyltoluene	119	18.403	18.400	0.003	97	2688329	4.00	4.19	
102 1,2,3-Trimethylbenzene	105	18.447	18.445	0.001	97	1558491	4.00	4.05	
103 Butylcyclohexane	83	18.522	18.520	0.002	96	1513686	4.00	3.98	
104 1,2-Dichlorobenzene	146	18.689	18.689	0.000	95	1579523	4.00	4.26	
105 2,3-Dihydroindene	117	18.695	18.693	0.002	94	1987507	4.00	4.23	
106 Indene	116	18.829	18.827	0.002	92	1470712	4.00	4.28	
107 n-Butylbenzene	91	18.856	18.854	0.002	97	2406878	4.00	4.01	
108 Undecane	57	19.212	19.209	0.003	91	1224656	4.00	3.81	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.239	19.239	0.000	97	1953205	4.00	4.08	
110 1,2-Dibromo-3-Chloropropan	157	19.309	19.308	0.001	99	710910	4.00	4.47	
111 1,2,4,5-Tetramethylbenzene	119	19.638	19.634	0.004	96	2396674	4.00	4.16	
112 1,2,3,5-Tetramethylbenzene	119	19.692	19.689	0.003	95	1394400	4.00	4.03	
113 1,2,3,4-Tetramethylbenzene	119	20.086	20.083	0.003	96	1927205	4.00	4.08	
114 Dodecane	57	20.280	20.280	0.000	93	1015546	4.00	3.56	
115 1,2,4-Trichlorobenzene	180	20.420	20.418	0.002	94	1358330	4.00	4.16	
116 Naphthalene	128	20.550	20.545	0.005	99	2902807	4.00	4.24	
117 Benzo(b)thiophene	134	20.647	20.645	0.002	99	1724284	4.00	4.33	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	96	1288187	4.00	4.00	
119 1,2,3-Trichlorobenzene	180	20.825	20.825	0.000	95	1263910	4.00	4.10	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	100	2020346	12.1	14.2	
121 1-Methylnaphthalene	142	21.801	21.801	0.000	100	2020334	12.1	14.3	
A 122 C6 Range	1	7.348	(7.308-7.388)		0	2723811	4.00	3.79	
A 124 Toluene Range	1	13.017	(12.982-13.052)		0	3522873	4.00	4.03	
S 126 Xylenes, Total	100				0		12.0	11.9	
S 127 1,2-Dichloroethene, Total	1				0		8.00	7.78	

Reagents:

40L7DNP_00010

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 16-Mar-2017 14:22:48

Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC07.D

Injection Date: 15-Mar-2017 18:56:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L7

Worklist Smp#: 9

Client ID:

Purge Vol: 500.000 mL

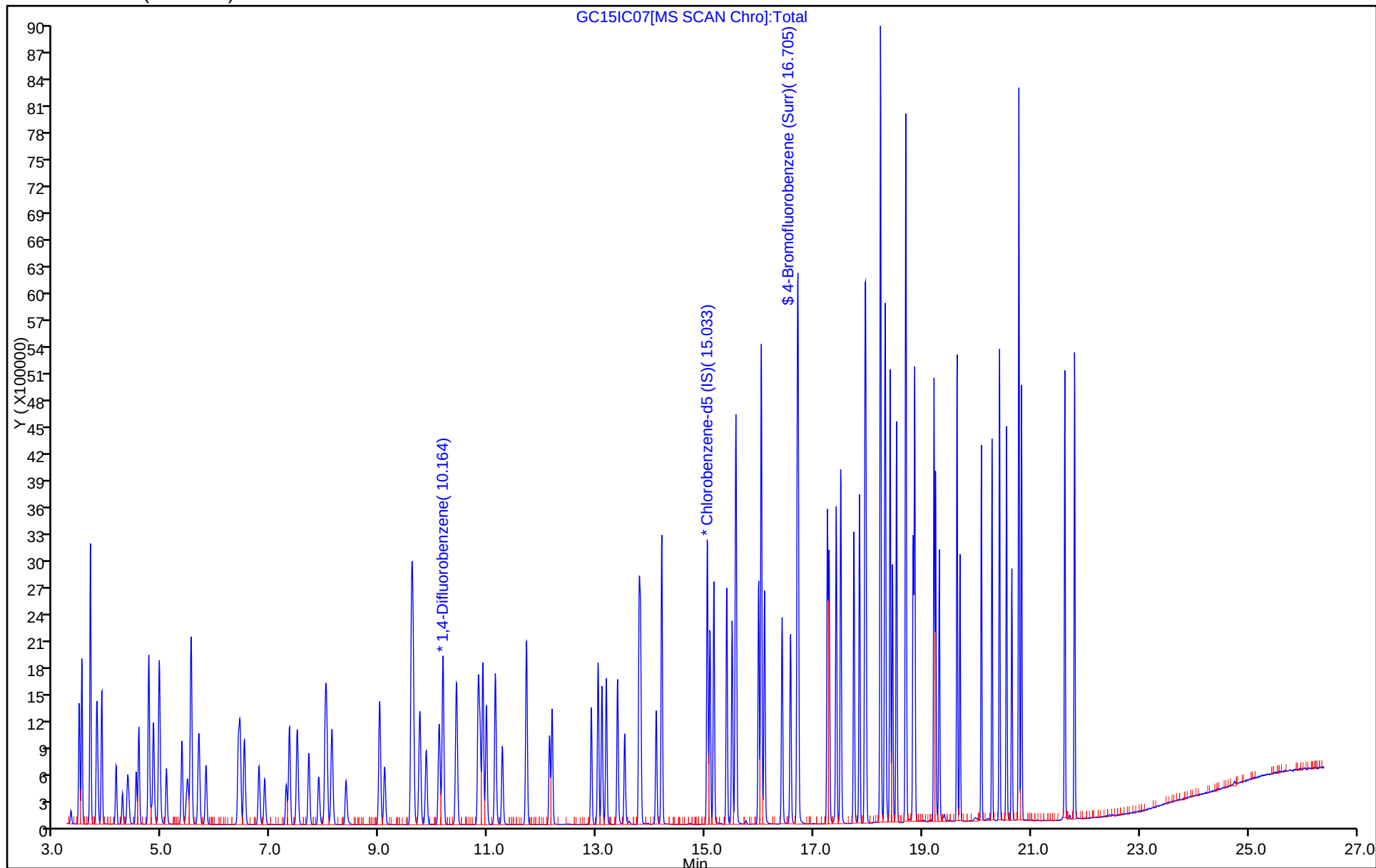
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC07.D

Injection Date: 15-Mar-2017 18:56:30

Instrument ID: MG

Lims ID: IC L7

Client ID:

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 9

Purge Vol: 500.000 mL

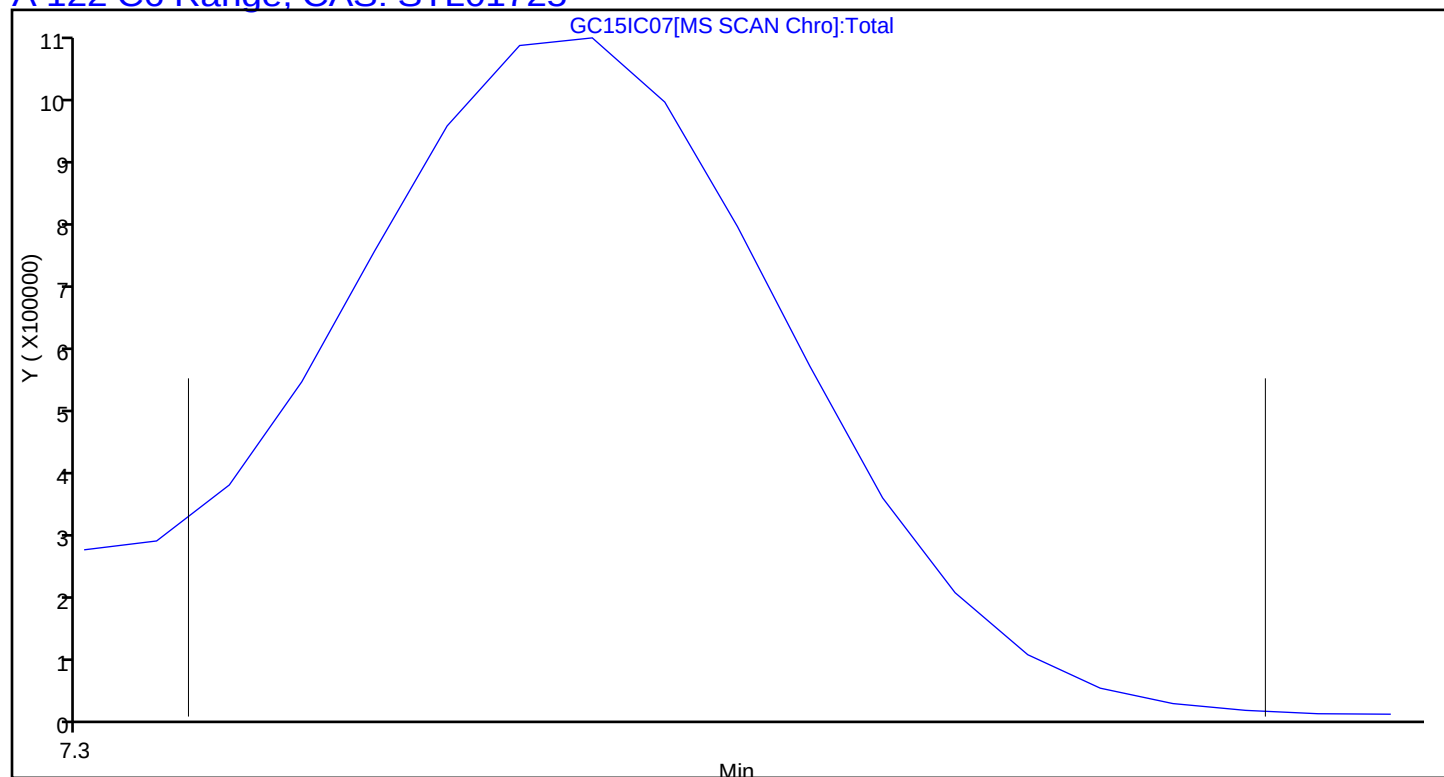
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC07.D

Injection Date: 15-Mar-2017 18:56:30

Instrument ID: MG

Lims ID: IC L7

Client ID:

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 9

Purge Vol: 500.000 mL

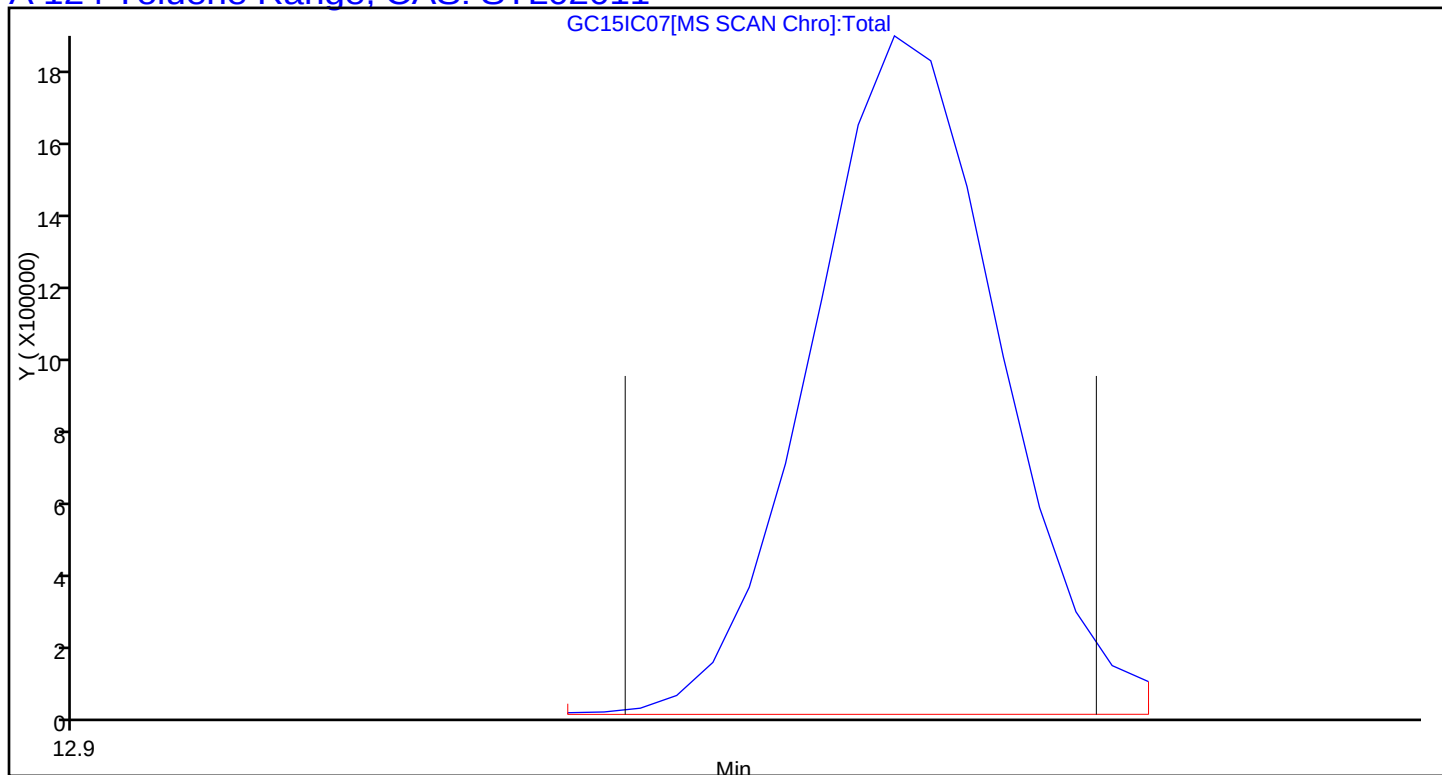
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC08.D
 Lims ID: IC L8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 15-Mar-2017 19:39:30 ALS Bottle#: 7 Worklist Smp#: 10
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-010
 Misc. Info.: 083677
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:24:45 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: tajh

Date: 16-Mar-2017 08:39:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.002	7.993	0.009	82	401002	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.169	10.161	0.008	94	1924493	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.039	15.034	0.005	87	1944152	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.710	16.705	0.005	95	1558022	4.00	4.06	
6 Chlorodifluoromethane	67	3.461	3.457	0.004	96	317499	8.00	7.12	
7 Propene	41	3.467	3.466	0.001	97	715294	8.00	6.74	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	3065573	8.00	7.22	
9 Chloromethane	52	3.661	3.659	0.002	100	195522	8.00	6.85	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.669	0.002	89	1944481	8.00	7.70	
11 Acetaldehyde	44	3.785	3.786	-0.001	90	1132144	40.0	33.8	
12 Vinyl chloride	62	3.806	3.803	0.003	99	808059	8.00	6.89	
13 Butadiene	54	3.876	3.876	0.000	71	549398	8.00	7.03	
14 Butane	43	3.882	3.879	0.003	84	1092508	8.00	6.57	
15 Bromomethane	94	4.141	4.141	0.000	98	850291	8.00	7.34	
16 Chloroethane	64	4.259	4.258	0.001	93	409306	8.00	7.21	
17 Ethanol	31	4.372	4.357	0.015	98	1409489	40.0	34.9	
18 Vinyl bromide	106	4.518	4.511	0.007	96	817628	8.00	7.44	
19 2-Methylbutane	43	4.561	4.560	0.001	89	786537	8.00	7.00	
21 Acrolein	56	4.739	4.742	-0.003	99	133516	8.00	8.13	
20 Trichlorofluoromethane	101	4.745	4.743	0.001	99	3119354	8.00	7.38	
22 Acetonitrile	40	4.798	4.793	0.005	98	247919	8.00	7.37	
23 Acetone	58	4.836	4.835	0.001	99	841477	23.5	21.4	
25 Pentane	72	4.939	4.937	0.002	96	151563	8.00	7.42	
24 Isopropyl alcohol	45	4.960	4.939	0.021	97	2844607	23.5	20.9	
26 Ethyl ether	31	5.073	5.075	-0.002	92	672373	8.00	7.26	
27 1,1-Dichloroethene	96	5.359	5.354	0.005	99	797692	8.00	7.46	
28 Acrylonitrile	53	5.440	5.435	0.005	95	356803	8.00	7.32	
29 2-Methyl-2-propanol	59	5.483	5.467	0.016	95	1241041	8.00	7.62	
30 1,1,2-Trichloro-1,2,2-trif	101	5.526	5.521	0.005	92	1855781	8.00	7.53	
31 Methylene Chloride	84	5.661	5.656	0.005	87	646443	8.00	6.70	

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	5.677	5.673	0.004	92	711970	8.00	6.87	
33 Carbon disulfide	76	5.801	5.797	0.004	100	1984338	8.00	7.29	
34 trans-1,2-Dichloroethene	96	6.400	6.393	0.007	98	803766	8.00	7.69	
35 2-Methylpentane	43	6.427	6.426	0.001	91	1428051	8.00	6.96	
36 Methyl tert-butyl ether	73	6.508	6.513	-0.005	95	2321003	8.00	7.48	
37 1,1-Dichloroethane	63	6.777	6.771	0.006	100	1462691	8.00	7.17	
38 Vinyl acetate	43	6.885	6.881	0.004	99	1793080	8.00	7.65	
39 2-Butanone (MEK)	72	7.284	7.283	0.001	99	344230	8.00	7.54	
40 Hexane	56	7.338	7.336	0.002	84	560820	8.00	7.08	
41 Isopropyl ether	45	7.484	7.483	0.001	93	2148000	8.00	7.37	
42 cis-1,2-Dichloroethene	96	7.700	7.691	0.009	95	845905	8.00	7.62	
43 Ethyl acetate	43	7.883	7.880	0.003	98	1449886	8.00	7.50	
44 Chloroform	83	8.028	8.019	0.009	96	2066202	8.00	7.35	
45 Tert-butyl ethyl ether	59	8.126	8.122	0.004	94	2202848	8.00	7.52	
46 Tetrahydrofuran	42	8.384	8.387	-0.003	88	742637	8.00	7.25	
47 1,1,1-Trichloroethane	97	9.004	8.997	0.007	94	2454172	8.00	7.54	
48 1,2-Dichloroethane	62	9.096	9.087	0.009	99	1447194	8.00	7.45	
49 Benzene	78	9.592	9.582	0.010	96	2421461	8.00	7.41	
50 Cyclohexane	69	9.592	9.590	0.002	95	407285	8.00	7.40	
52 n-Butanol	31	9.608	9.606	0.002	70	273762	8.00	7.82	
51 Carbon tetrachloride	117	9.619	9.611	0.008	98	2797102	8.00	8.19	
53 2,3-Dimethylpentane	71	9.743	9.740	0.003	88	569652	8.00	7.57	
54 Thiophene	84	9.862	9.855	0.007	94	1402526	8.00	7.68	
55 Tert-amyl methyl ether	73	10.099	10.100	-0.001	98	2396229	8.00	7.99	
56 Isooctane	57	10.417	10.414	0.003	97	3578687	8.00	7.37	
57 n-Heptane	71	10.822	10.816	0.006	88	916791	8.00	7.56	
58 1,2-Dichloropropane	63	10.854	10.846	0.008	83	823056	8.00	7.41	
59 Trichloroethene	130	10.903	10.897	0.006	97	1460218	8.00	8.25	
60 Dibromomethane	93	10.973	10.961	0.012	91	1171750	8.00	7.94	
61 Dichlorobromomethane	83	11.134	11.126	0.008	98	2343991	8.00	8.27	
62 1,4-Dioxane	88	11.151	11.152	-0.001	89	354151	8.00	8.00	
63 Methyl methacrylate	41	11.264	11.260	0.004	94	988227	8.00	8.06	
64 Methylcyclohexane	83	11.706	11.704	0.002	94	1980430	8.00	7.77	
65 4-Methyl-2-pentanone (MIBK)	43	12.137	12.133	0.004	96	1511574	8.00	8.05	
66 cis-1,3-Dichloropropene	75	12.181	12.174	0.007	94	1637962	8.00	7.97	
67 trans-1,3-Dichloropropene	75	12.903	12.897	0.006	97	1645268	8.00	7.90	
68 Toluene	91	13.027	13.021	0.006	94	2972164	8.00	7.67	
69 1,1,2-Trichloroethane	83	13.097	13.091	0.006	98	890354	8.00	7.67	
70 2-Methylthiophene	97	13.178	13.173	0.005	97	2514496	8.00	7.73	
71 3-Methylthiophene	97	13.388	13.381	0.007	99	2520669	8.00	7.83	
72 2-Hexanone	58	13.518	13.519	-0.001	94	769096	8.00	8.30	
73 n-Octane	85	13.782	13.780	0.002	85	1089002	8.00	7.78	
74 Chlorodibromomethane	129	13.809	13.803	0.006	97	2716554	8.00	9.38	
75 Ethylene Dibromide	107	14.100	14.092	0.008	98	1908708	8.00	8.39	
76 Tetrachloroethene	129	14.197	14.195	0.002	95	1442699	8.00	8.14	
77 Chlorobenzene	112	15.087	15.082	0.005	94	2618941	8.00	7.99	
78 2,3-Dimethylheptane	43	15.157	15.155	0.002	86	2286470	8.00	6.90	
79 Ethylbenzene	91	15.400	15.393	0.007	98	4239909	8.00	7.84	
80 2-Ethylthiophene	97	15.497	15.491	0.006	97	3415104	8.00	8.01	
81 m-Xylene & p-Xylene	91	15.567	15.559	0.008	99	6914176	16.0	15.8	
82 Bromoform	173	15.988	15.979	0.009	98	3110131	8.00	10.7	
83 Styrene	104	16.031	16.027	0.004	97	2643863	8.00	9.17	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.036	16.029	0.007	85	1702072	8.00	7.17	
85 o-Xylene	91	16.095	16.088	0.007	98	3451230	8.00	7.73	
86 1,1,2,2-Tetrachloroethane	83	16.419	16.411	0.008	99	2243454	8.00	7.97	
87 1,2,3-Trichloropropane	110	16.575	16.565	0.010	96	819612	8.00	7.95	
88 Isopropylbenzene	105	16.699	16.692	0.007	96	5091349	8.00	7.85	
89 N-Propylbenzene	120	17.249	17.246	0.003	100	1438960	8.00	8.46	
90 2-Chlorotoluene	126	17.282	17.278	0.004	97	1300045	8.00	8.19	
91 4-Ethyltoluene	105	17.417	17.409	0.008	98	5056909	8.00	8.28	
92 1,3,5-Trimethylbenzene	120	17.497	17.490	0.007	93	2423508	8.00	8.46	
93 Alpha Methyl Styrene	118	17.740	17.734	0.006	89	2181723	8.00	9.77	
94 n-Decane	57	17.843	17.837	0.006	94	2139210	8.00	7.35	
95 tert-Butylbenzene	119	17.945	17.939	0.006	92	5188127	8.00	8.59	
96 1,2,4-Trimethylbenzene	105	17.961	17.953	0.008	95	4611406	8.00	8.40	
98 sec-Butylbenzene	105	18.231	18.223	0.008	98	6810067	8.00	8.81	
97 1,3-Dichlorobenzene	146	18.231	18.223	0.008	97	3893907	8.00	9.41	
99 Benzyl chloride	91	18.312	18.303	0.009	99	4505667	8.00	8.70	
100 1,4-Dichlorobenzene	146	18.322	18.316	0.006	96	3654606	8.00	9.03	
101 4-Isopropyltoluene	119	18.409	18.400	0.009	97	5874319	8.00	8.61	
102 1,2,3-Trimethylbenzene	105	18.452	18.445	0.007	97	3285785	8.00	8.02	
103 Butylcyclohexane	83	18.522	18.520	0.002	96	3168620	8.00	7.84	
104 1,2-Dichlorobenzene	146	18.695	18.689	0.006	96	3656010	8.00	9.27	
105 2,3-Dihydroindene	117	18.700	18.693	0.007	93	4472405	8.00	8.94	
106 Indene	116	18.829	18.827	0.002	92	3210332	8.00	8.79	
107 n-Butylbenzene	91	18.856	18.854	0.002	97	5130283	8.00	8.04	
108 Undecane	57	19.212	19.209	0.003	90	2502915	8.00	7.33	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.245	19.239	0.006	97	4317337	8.00	8.47	
110 1,2-Dibromo-3-Chloropropan	157	19.315	19.308	0.007	97	1636568	8.00	9.67	
111 1,2,4,5-Tetramethylbenzene	119	19.638	19.634	0.004	96	5566375	8.00	9.09	
112 1,2,3,5-Tetramethylbenzene	119	19.692	19.689	0.003	95	3139429	8.00	8.53	
113 1,2,3,4-Tetramethylbenzene	119	20.086	20.083	0.003	97	4503997	8.00	8.96	
114 Dodecane	57	20.280	20.280	0.000	92	2482191	8.00	8.19	
115 1,2,4-Trichlorobenzene	180	20.420	20.418	0.002	93	3616219	8.00	10.4	
116 Naphthalene	128	20.550	20.545	0.005	99	6639288	8.00	9.13	
117 Benzo(b)thiophene	134	20.647	20.645	0.002	99	3862788	8.00	9.13	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	96	3465632	8.00	10.1	
119 1,2,3-Trichlorobenzene	180	20.825	20.825	0.000	96	3268537	8.00	9.98	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	99	5256646	24.2	34.8	
121 1-Methylnaphthalene	142	21.806	21.801	0.005	99	5132440	24.2	34.1	
A 122 C6 Range	1	7.348	(7.308-7.388)		0	5679805	8.00	7.50	
A 124 Toluene Range	1	13.022	(12.987-13.057)		0	7223375	8.00	7.84	
S 126 Xylenes, Total	100				0		24.0	23.5	
S 127 1,2-Dichloroethene, Total	1				0		16.0	15.3	

Reagents:

40L8DNP_00010

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC08.D

Injection Date: 15-Mar-2017 19:39:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L8

Worklist Smp#: 10

Client ID:

Purge Vol: 500.000 mL

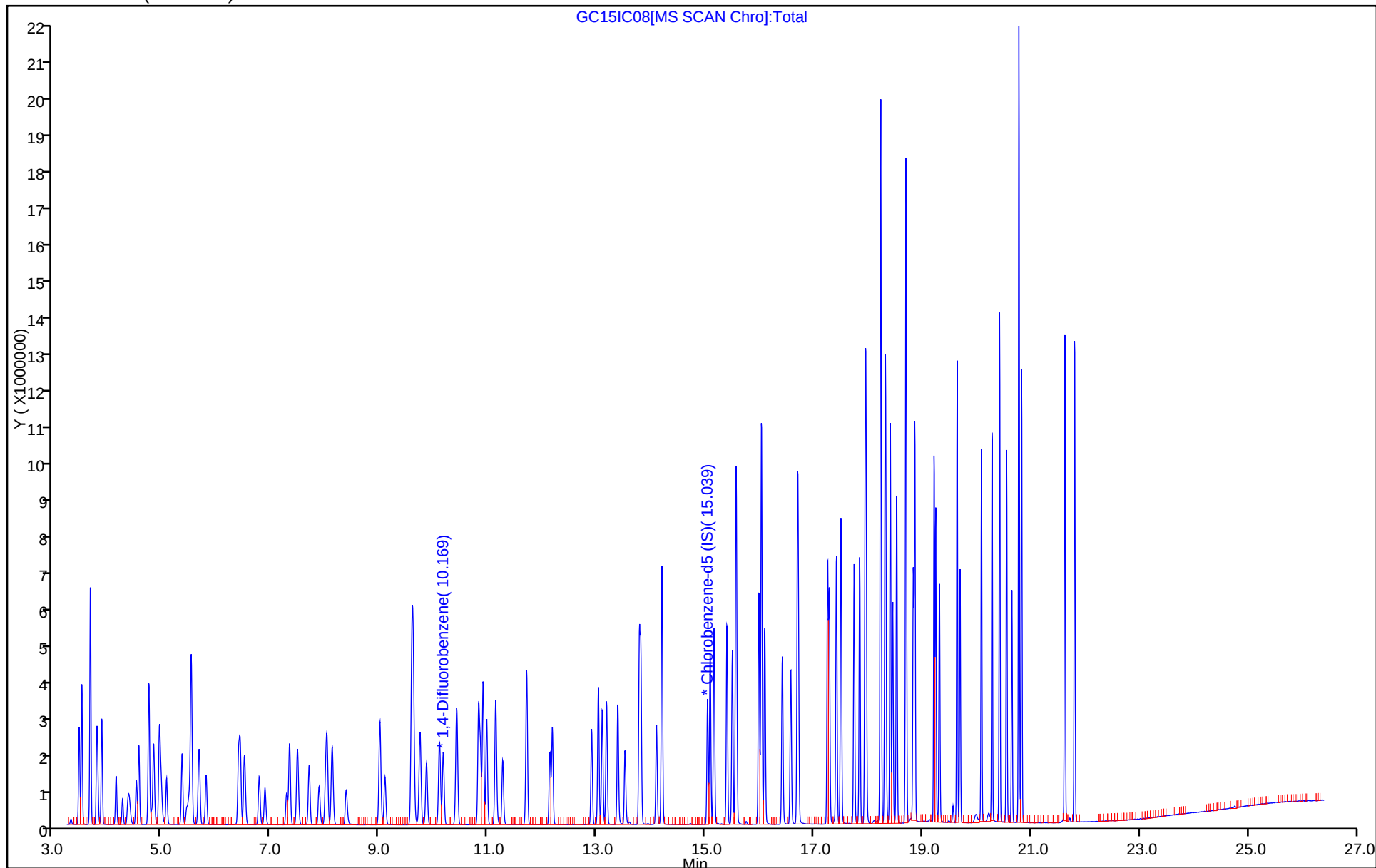
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC08.D

Injection Date: 15-Mar-2017 19:39:30

Instrument ID: MG

Lims ID: IC L8

Client ID:

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 10

Purge Vol: 500.000 mL

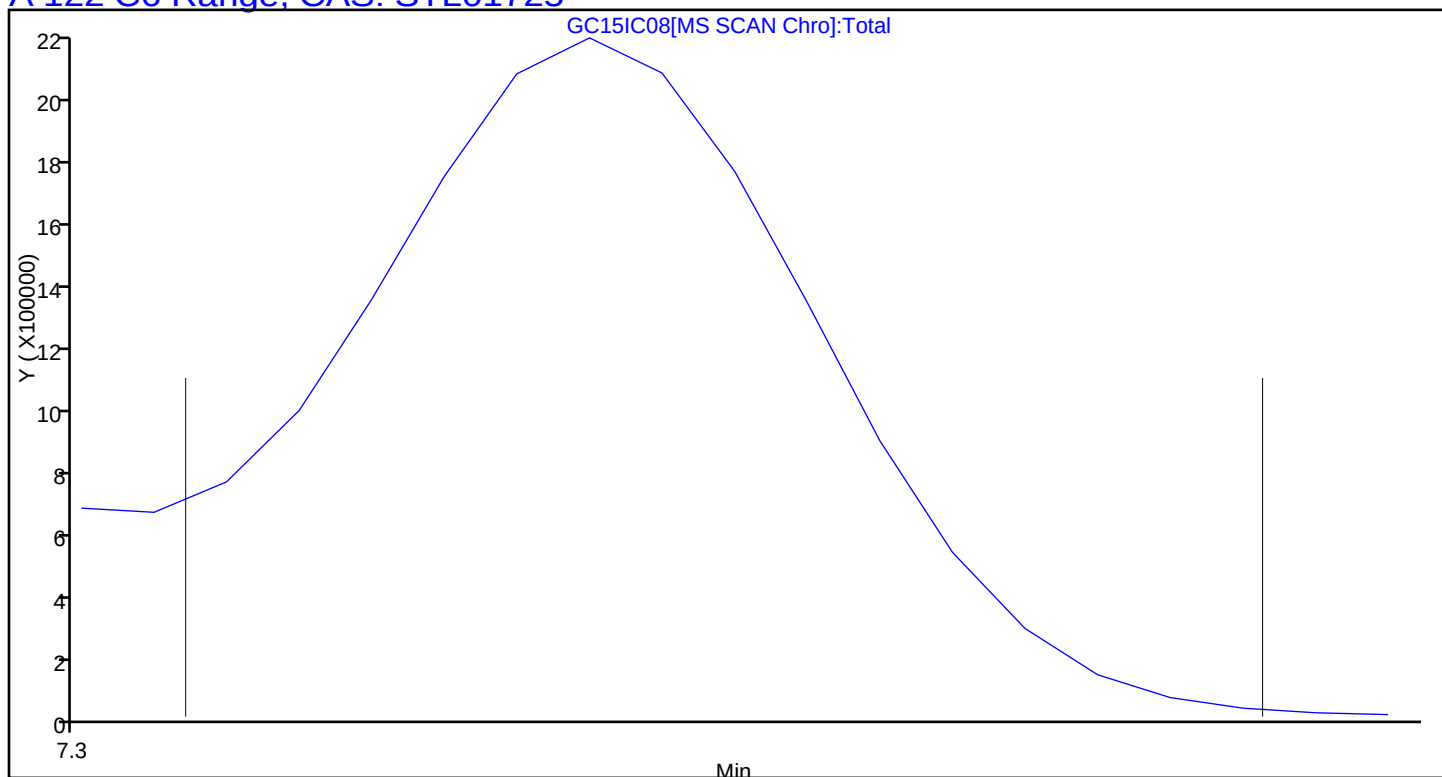
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC08.D

Injection Date: 15-Mar-2017 19:39:30

Instrument ID: MG

Lims ID: IC L8

Client ID:

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 10

Purge Vol: 500.000 mL

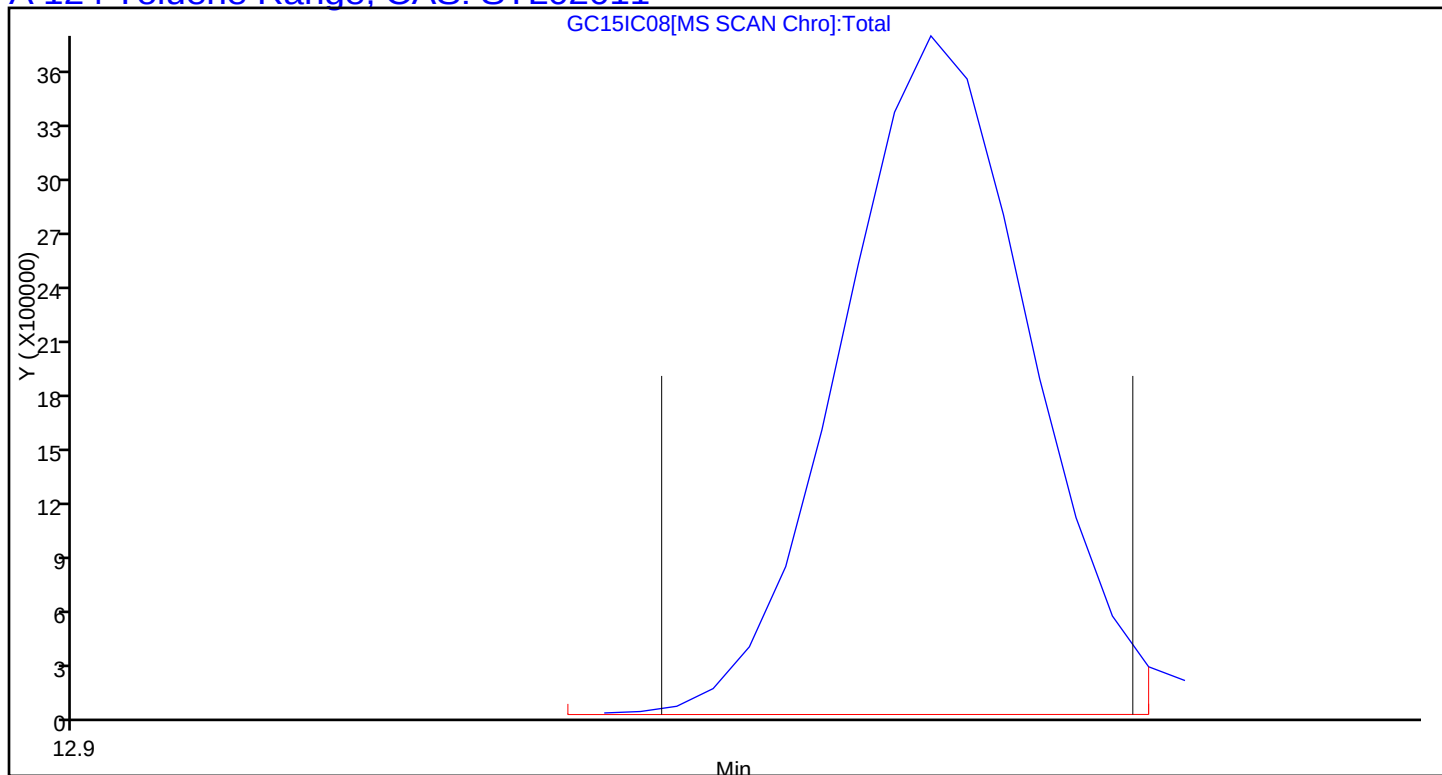
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Lims ID: IC L9
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 15-Mar-2017 20:21:30 ALS Bottle#: 8 Worklist Smp#: 11
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-011
 Misc. Info.: 083675
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 11-Apr-2017 10:07:15 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK028

First Level Reviewer: barlozhetskayaa

Date: 16-Mar-2017 14:32:37

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	8.023	7.993	0.030	87	442071	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.191	10.161	0.030	94	2104470	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.055	15.034	0.021	88	2112068	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.721	16.705	0.016	95	1689695	4.00	4.05	
6 Chlorodifluoromethane	67	3.461	3.457	0.004	96	648102	16.0	13.2	
7 Propene	41	3.472	3.466	0.006	97	1334692	16.0	11.4	
8 Dichlorodifluoromethane	85	3.515	3.510	0.005	99	6309639	16.0	13.5	
9 Chloromethane	52	3.666	3.659	0.007	97	381523	16.0	12.1	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.677	3.669	0.008	88	4340354	16.0	15.6	
11 Acetaldehyde	44	3.801	3.786	0.015	90	2180620	80.0	59.0	
12 Vinyl chloride	62	3.812	3.803	0.009	99	1585259	16.0	12.3	
13 Butadiene	54	3.887	3.876	0.011	71	1072769	16.0	12.5	
14 Butane	43	3.887	3.879	0.008	83	2112304	16.0	11.5	
15 Bromomethane	94	4.151	4.141	0.010	98	1772157	16.0	13.9	
16 Chloroethane	64	4.275	4.258	0.017	93	830849	16.0	13.3	
17 Ethanol	31	4.410	4.357	0.053	98	2735400	80.0	61.5	
18 Vinyl bromide	106	4.529	4.511	0.018	96	1728343	16.0	14.3	
19 2-Methylbutane	43	4.572	4.560	0.012	88	1595022	16.0	12.9	
21 Acrolein	56	4.761	4.742	0.019	82	330540	16.0	18.3	
20 Trichlorofluoromethane	101	4.761	4.743	0.018	99	6686372	16.0	14.3	
22 Acetonitrile	40	4.820	4.793	0.027	98	523809	16.0	14.1	
23 Acetone	58	4.852	4.835	0.017	99	1728119	47.0	39.8	
25 Pentane	72	4.955	4.937	0.018	97	323924	16.0	14.4	
24 Isopropyl alcohol	45	5.036	4.939	0.097	98	6495368	47.0	43.3	
26 Ethyl ether	31	5.090	5.075	0.015	85	1560739	16.0	15.3	
27 1,1-Dichloroethene	96	5.375	5.354	0.021	100	1773303	16.0	15.1	
28 Acrylonitrile	53	5.467	5.435	0.032	95	774315	16.0	14.4	
29 2-Methyl-2-propanol	59	5.559	5.467	0.092	95	2500383	16.0	13.9	
30 1,1,2-Trichloro-1,2,2-trif	101	5.543	5.521	0.022	91	4102363	16.0	15.1	
31 Methylene Chloride	84	5.683	5.656	0.027	86	1389569	16.0	13.1	

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	5.694	5.673	0.021	95	1527575	16.0	13.4	
33 Carbon disulfide	76	5.818	5.797	0.021	100	4378380	16.0	14.6	
34 trans-1,2-Dichloroethene	96	6.416	6.393	0.023	97	1798426	16.0	15.6	
35 2-Methylpentane	43	6.443	6.426	0.017	91	2917758	16.0	12.9	
36 Methyl tert-butyl ether	73	6.524	6.513	0.011	93	4996692	16.0	14.6	
37 1,1-Dichloroethane	63	6.799	6.771	0.028	100	3131504	16.0	13.9	
38 Vinyl acetate	43	6.907	6.881	0.026	99	3848118	16.0	14.9	
39 2-Butanone (MEK)	72	7.317	7.283	0.034	98	734059	16.0	14.6	
40 Hexane	56	7.354	7.336	0.018	92	1158063	16.0	13.3	
41 Isopropyl ether	45	7.511	7.483	0.028	93	4485105	16.0	14.0	
42 cis-1,2-Dichloroethene	96	7.721	7.691	0.030	93	1869513	16.0	15.3	
43 Ethyl acetate	43	7.910	7.880	0.030	98	3038641	16.0	14.3	
44 Chloroform	83	8.050	8.019	0.031	95	4480470	16.0	14.4	
45 Tert-butyl ethyl ether	59	8.147	8.122	0.025	94	4640558	16.0	14.4	
46 Tetrahydrofuran	42	8.401	8.387	0.014	89	1562956	16.0	13.8	
47 1,1,1-Trichloroethane	97	9.021	8.997	0.024	93	5396460	16.0	15.0	
48 1,2-Dichloroethane	62	9.118	9.087	0.031	99	3085614	16.0	14.5	
49 Benzene	78	9.608	9.582	0.026	95	5257486	16.0	14.7	
50 Cyclohexane	69	9.608	9.590	0.018	75	863041	16.0	14.3	
52 n-Butanol	31	9.673	9.606	0.067	84	591245	16.0	15.5	
51 Carbon tetrachloride	117	9.635	9.611	0.024	98	6365119	16.0	17.0	
53 2,3-Dimethylpentane	71	9.759	9.740	0.019	88	1206293	16.0	14.7	
54 Thiophene	84	9.884	9.855	0.029	93	2998594	16.0	15.0	
55 Tert-amyl methyl ether	73	10.126	10.100	0.026	98	5052003	16.0	15.4	
56 Isooctane	57	10.434	10.414	0.020	97	7435991	16.0	14.0	
57 n-Heptane	71	10.838	10.816	0.022	87	1934212	16.0	14.6	
58 1,2-Dichloropropane	63	10.876	10.846	0.030	82	1721134	16.0	14.2	
59 Trichloroethene	130	10.924	10.897	0.027	98	3208650	16.0	16.6	
60 Dibromomethane	93	10.989	10.961	0.028	89	2546424	16.0	15.8	
61 Dichlorobromomethane	83	11.156	11.126	0.030	97	5078012	16.0	16.4	
62 1,4-Dioxane	88	11.178	11.152	0.026	88	711143	16.0	14.7	
63 Methyl methacrylate	41	11.291	11.260	0.031	95	2072888	16.0	15.5	
64 Methylcyclohexane	83	11.722	11.704	0.018	92	4285973	16.0	15.4	
65 4-Methyl-2-pentanone (MIBK)	43	12.164	12.133	0.031	95	3039224	16.0	14.8	
66 cis-1,3-Dichloropropene	75	12.197	12.174	0.023	97	3479031	16.0	15.5	
67 trans-1,3-Dichloropropene	75	12.925	12.897	0.028	97	3558024	16.0	15.7	
68 Toluene	91	13.043	13.021	0.022	94	6568341	16.0	15.6	
69 1,1,2-Trichloroethane	83	13.119	13.091	0.028	97	1930179	16.0	15.3	
70 2-Methylthiophene	97	13.194	13.173	0.021	97	5571008	16.0	15.8	
71 3-Methylthiophene	97	13.405	13.381	0.024	99	5522937	16.0	15.8	
72 2-Hexanone	58	13.545	13.519	0.026	95	1588026	16.0	15.8	
73 n-Octane	85	13.798	13.780	0.018	83	2331636	16.0	15.3	
74 Chlorodibromomethane	129	13.831	13.803	0.028	97	6180157	16.0	19.6	
75 Ethylene Dibromide	107	14.117	14.092	0.024	98	4223710	16.0	17.1	
76 Tetrachloroethene	129	14.214	14.195	0.019	96	3341461	16.0	17.4	
77 Chlorobenzene	112	15.103	15.082	0.021	95	5872788	16.0	16.5	
78 2,3-Dimethylheptane	43	15.168	15.155	0.013	84	4561552	16.0	12.7	
79 Ethylbenzene	91	15.411	15.393	0.018	98	9378439	16.0	16.0	
80 2-Ethylthiophene	97	15.513	15.491	0.022	97	7482070	16.0	16.2	
81 m-Xylene & p-Xylene	91	15.578	15.559	0.019	98	15254685	32.0	32.1	
82 Bromoform	173	15.998	15.979	0.019	98	7554567	16.0	25.6	
83 Styrene	104	16.047	16.027	0.020	96	5980940	16.0	19.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.047	16.029	0.018	83	3451826	16.0	13.4	
85 o-Xylene	91	16.106	16.088	0.018	98	7495466	16.0	15.4	
86 1,1,2,2-Tetrachloroethane	83	16.430	16.411	0.019	98	4930342	16.0	16.1	
87 1,2,3-Trichloropropane	110	16.586	16.565	0.021	95	1792574	16.0	16.0	
88 Isopropylbenzene	105	16.710	16.692	0.018	96	11190142	16.0	15.9	
89 N-Propylbenzene	120	17.266	17.246	0.020	100	3302547	16.0	17.9	
90 2-Chlorotoluene	126	17.293	17.278	0.015	96	2937732	16.0	17.0	
91 4-Ethyltoluene	105	17.427	17.409	0.018	98	11212261	16.0	16.9	
92 1,3,5-Trimethylbenzene	120	17.508	17.490	0.018	93	5491943	16.0	17.6	
93 Alpha Methyl Styrene	118	17.751	17.734	0.017	90	4952983	16.0	19.7	
94 n-Decane	57	17.853	17.837	0.016	94	4265576	16.0	13.5	
95 tert-Butylbenzene	119	17.956	17.939	0.017	94	11616984	16.0	17.7	
96 1,2,4-Trimethylbenzene	105	17.972	17.953	0.019	95	10291549	16.0	17.3	
97 1,3-Dichlorobenzene	146	18.236	18.223	0.013	97	8814211	16.0	19.6	
99 Benzyl chloride	91	18.323	18.303	0.020	99	9733935	16.0	17.3	
100 1,4-Dichlorobenzene	146	18.333	18.316	0.017	97	8414582	16.0	19.1	
102 1,2,3-Trimethylbenzene	105	18.463	18.445	0.018	98	7156186	16.0	16.1	
103 Butylcyclohexane	83	18.533	18.520	0.013	96	6495136	16.0	14.8	
104 1,2-Dichlorobenzene	146	18.705	18.689	0.016	97	8346220	16.0	19.5	
105 2,3-Dihydroindene	117	18.705	18.693	0.012	94	10165330	16.0	18.7	
106 Indene	116	18.840	18.827	0.013	92	7281318	16.0	18.3	
107 n-Butylbenzene	91	18.867	18.854	0.013	97	10638853	16.0	15.3	
108 Undecane	57	19.218	19.209	0.009	89	4746027	16.0	12.8	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.250	19.239	0.011	97	9283464	16.0	16.8	
110 1,2-Dibromo-3-Chloropropan	157	19.320	19.308	0.012	94	3651422	16.0	19.9	
112 1,2,3,5-Tetramethylbenzene	119	19.698	19.689	0.009	95	6557823	16.0	16.4	
113 1,2,3,4-Tetramethylbenzene	119	20.091	20.083	0.008	97	8848915	16.0	16.2	
114 Dodecane	57	20.285	20.280	0.005	92	3238859	16.0	9.84	
115 1,2,4-Trichlorobenzene	180	20.426	20.418	0.008	93	6264846	16.0	16.6	
117 Benzo(b)thiophene	134	20.652	20.645	0.007	99	6618484	16.0	14.4	
118 Hexachlorobutadiene	225	20.781	20.776	0.005	93	5626941	16.0	15.1	
119 1,2,3-Trichlorobenzene	180	20.830	20.825	0.005	96	4303288	16.0	12.1	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	100	932756	48.4	5.68	
121 1-Methylnaphthalene	142	21.801	21.801	0.000	100	649010	48.4	3.97	
A 122 C6 Range	1	7.364	(7.324-7.404)		0	15062569	16.0	18.7	
A 124 Toluene Range	1	13.038	(13.003-13.073)		0	15867496	16.0	15.8	
S 126 Xylenes, Total	100				0		48.0	47.6	
S 127 1,2-Dichloroethene, Total	1				0		32.0	30.9	

Reagents:

40L9DNP_00013

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 11-Apr-2017 10:07:16

Chrom Revision: 2.2 10-Apr-2017 06:51:18

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D

Injection Date: 15-Mar-2017 20:21:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L9

Worklist Smp#: 11

Client ID:

Purge Vol: 500.000 mL

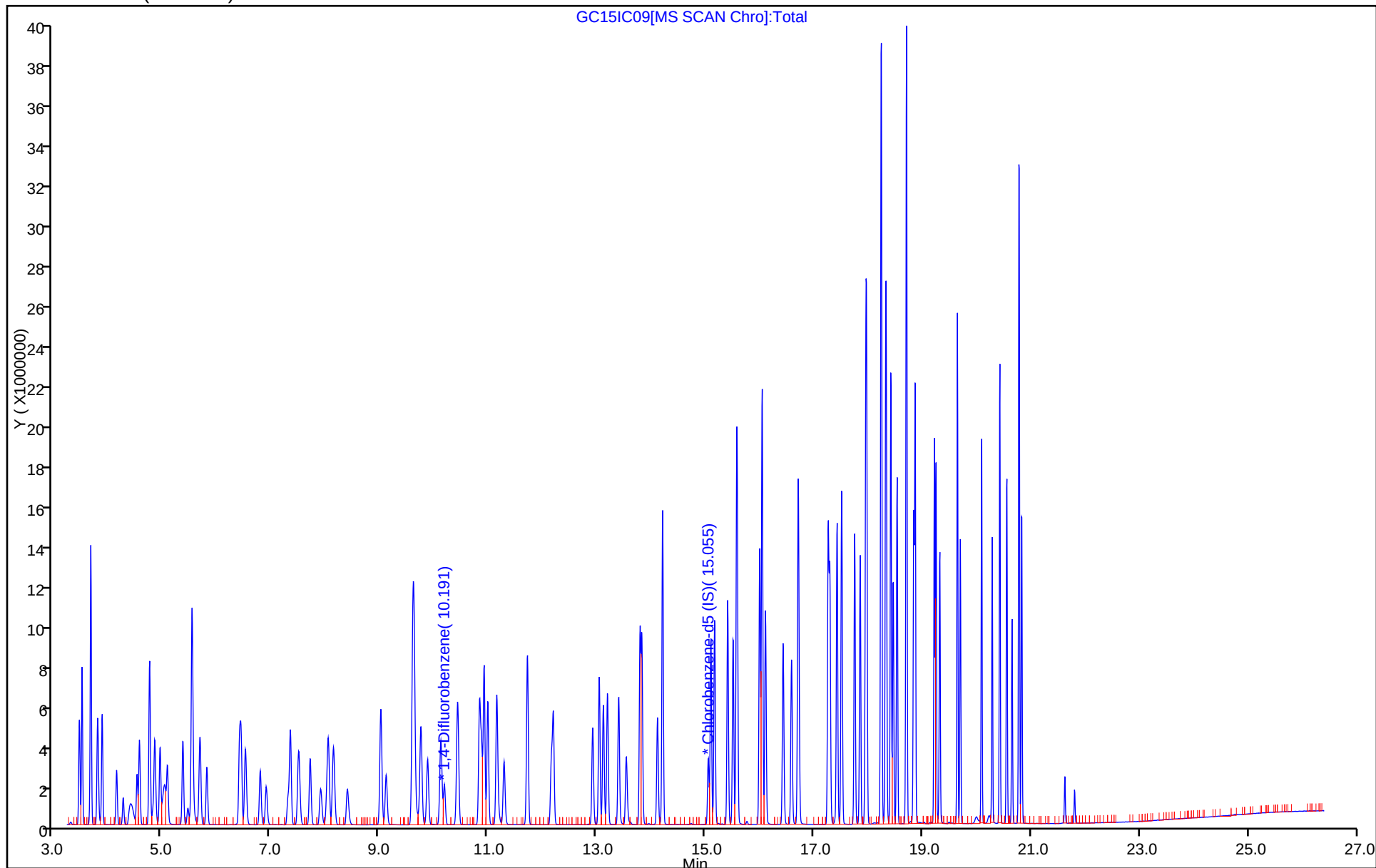
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



04/14/2017

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D

Injection Date: 15-Mar-2017 20:21:30

Instrument ID: MG

Lims ID: IC L9

Client ID:

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 11

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

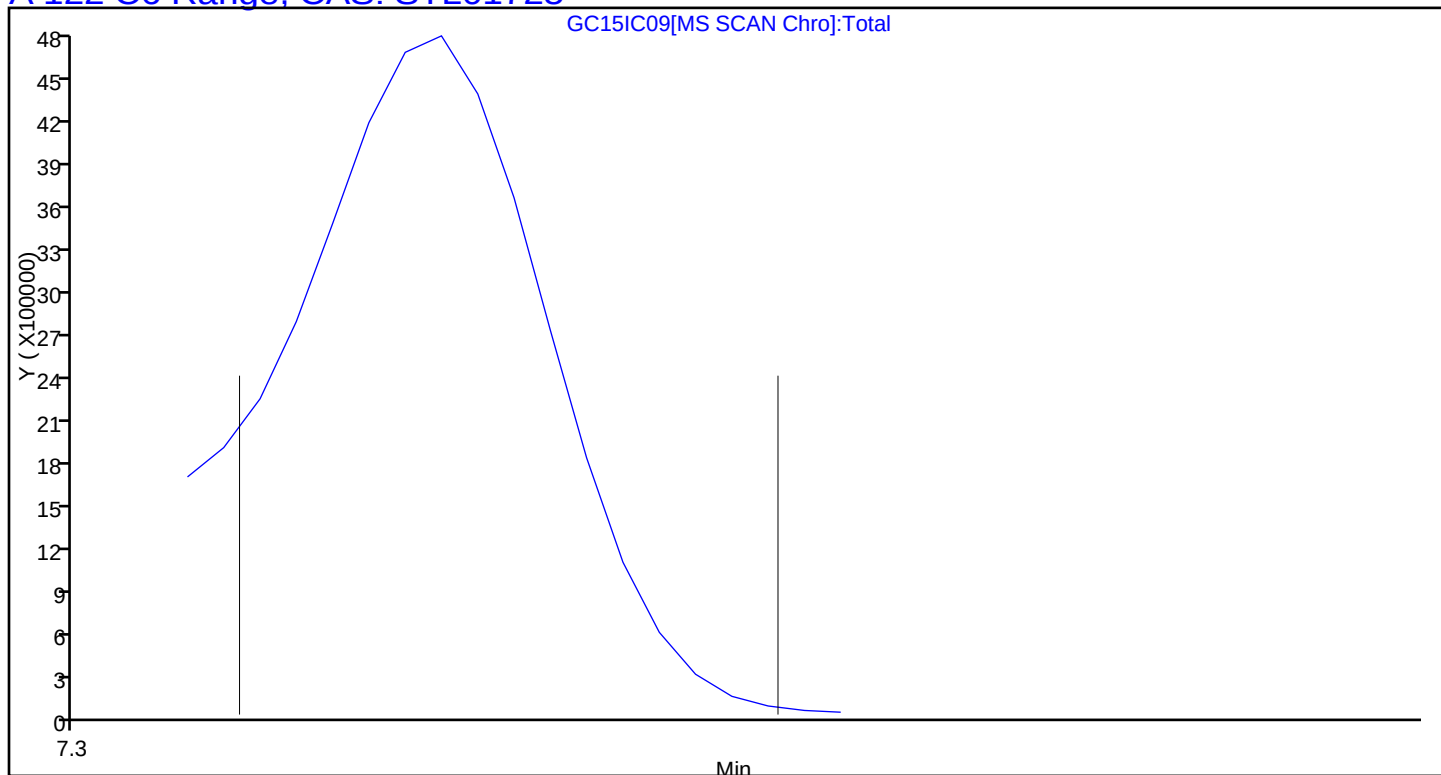
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D

Injection Date: 15-Mar-2017 20:21:30

Instrument ID: MG

Lims ID: IC L9

Client ID:

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 11

Purge Vol: 500.000 mL

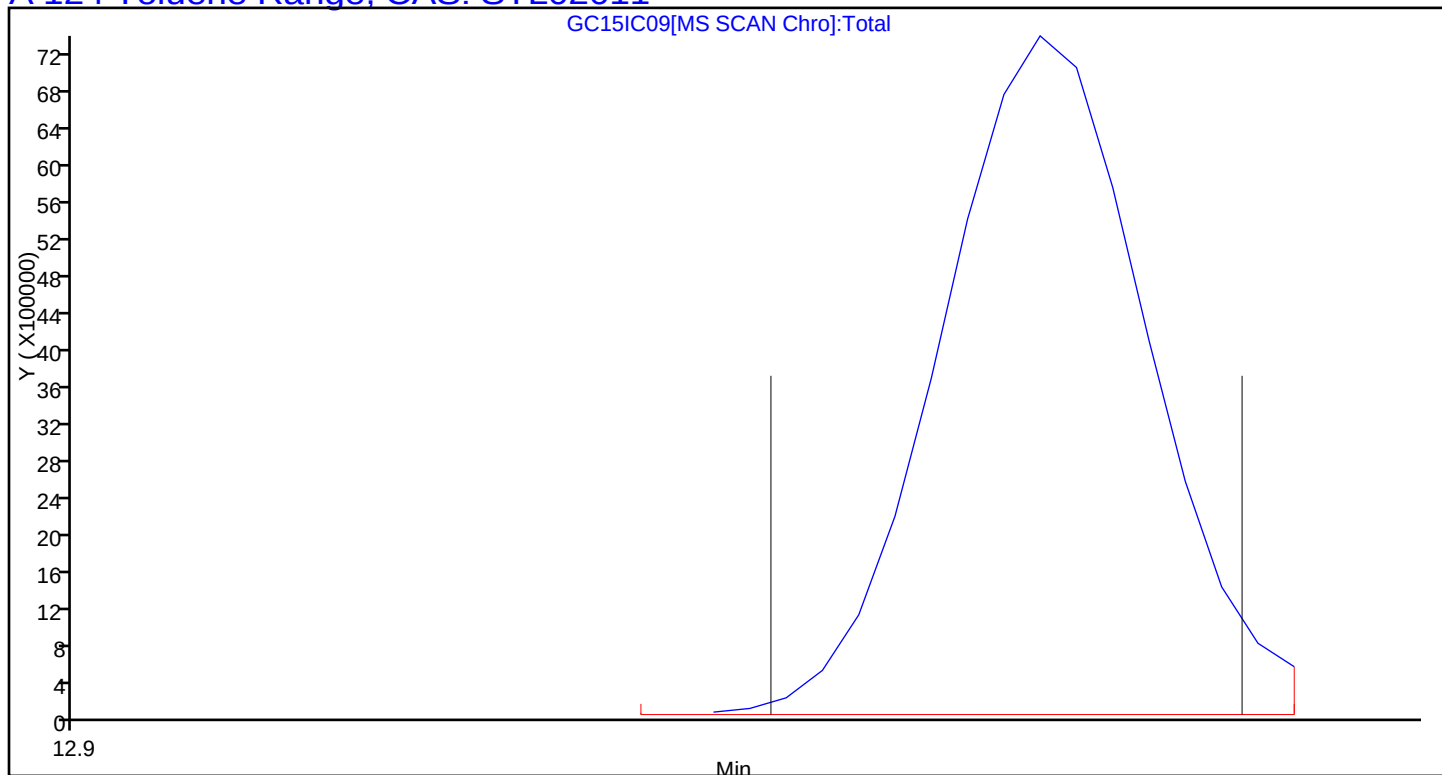
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9602

SDG No.: _____

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

Calibration Start Date: 03/24/2017 11:31 Calibration End Date: 03/24/2017 17:35 Calibration ID: 978

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-9602/2	JC24IC01.D
Level 2	IC 140-9602/3	JC24IC02.D
Level 3	IC 140-9602/4	JC24IC03.D
Level 4	IC 140-9602/5	JC24IC04.D
Level 5	IC 140-9602/6	JC24IC05.D
Level 6	ICIS 140-9602/7	JC24IC06.D
Level 7	IC 140-9602/8	JC24IC07.D
Level 8	IC 140-9602/9	JC24IC08.D
Level 9	IC 140-9602/10	JC24IC09.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	+++++ 0.3753	0.3441 0.3356	0.3227 0.3189	0.3338 0.3305	0.3258	Ave		0.3358				5.3		30.0			
Propene	+++++ 1.2668	1.3959 1.1126	1.2756 1.0416	1.2328 1.0312	1.1355	Ave		1.1865				10.7		30.0			
Dichlorodifluoromethane	3.8766 3.7488	3.3790 3.3407	3.3968 3.1490	3.4725 3.1844	3.3080	Ave		3.4284				7.1		30.0			
Chloromethane	+++++ 0.3928	+++++ 0.3475	0.4498 0.3215	0.4273 0.3272	0.3658	Ave		0.3760				13.1		30.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.8273 1.5639	1.5651 1.4343	1.5493 1.3714	1.3895 1.3324	1.6350	Ave		1.5187				10.3		30.0			
Acetaldehyde	+++++ 0.3622	+++++ 0.3050	+++++ 0.2746	0.5186 0.3224	0.3780	Ave		0.3601				24.0		30.0			
Vinyl chloride	1.1374 1.2058	1.1577 1.0825	1.0871 1.0137	1.1012 1.0773	1.0889	Ave		1.1057				5.0		30.0			
1,3-Butadiene	0.8876 0.9009	0.8813 0.8103	0.8027 0.7453	0.8256 0.8007	0.8044	Ave		0.8287				6.2		30.0			
Butane	1.7753 1.7945	1.8298 1.5962	1.7057 1.4399	1.6897 1.5386	1.6299	Ave		1.6666				7.7		30.0			
Bromomethane	1.3126 1.0595	1.1261 0.9770	1.0034 0.9104	0.9711 0.9673	0.9563	Ave		1.0315				11.9		30.0			
Chloroethane	+++++ 0.5086	0.4261 0.4619	0.4395 0.4279	0.4535 0.4579	0.4676	Ave		0.4554				5.8		30.0			
Ethanol	+++++ 0.2536	0.2862 0.2159	0.2735 0.1987	0.2577 0.1820	0.2191	Ave		0.2358				15.8		30.0			
Vinyl bromide	0.9297 0.9782	0.9281 0.9070	0.8589 0.8500	0.8410 0.9064	0.8742	Ave		0.8970				5.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9602

SDG No.: _____

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

Calibration Start Date: 03/24/2017 11:31 Calibration End Date: 03/24/2017 17:35 Calibration ID: 978

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	++++ 1.5582	1.8609 1.4374	1.6340 1.3154	1.2918 1.3932	1.4491	Ave		1.4925				12.6		30.0			
Trichlorofluoromethane	3.1676 3.4507	3.3388 3.1984	3.1226 2.9658	2.8225 3.1257	3.1389	Ave		3.1479				5.9		30.0			
Acrolein	++++ 0.2627	++++ 0.2560	0.3096 0.1925	0.3353 0.2867	0.2687	Ave		0.2731				16.6		30.0			
Acetonitrile	++++ 0.3743	++++ 0.3192	0.3872 0.2687	0.3938 0.3708	0.3045	Ave		0.3455				13.9		30.0			
Acetone	++++ 0.3779	++++ 0.2990	++++ 0.2556	0.4575 0.2826	0.3415	Ave		0.3357				22.0		30.0			
Isopropyl alcohol	1.4096 1.5146	1.4711 1.3260	1.4719 1.2355	1.5638 1.1107	1.2693	Ave		1.3747				10.8		30.0			
Pentane	++++ 0.2019	++++ 0.1893	0.1566 0.1708	0.1724 0.1766	0.1832	Ave		0.1787				8.1		30.0			
Ethyl ether	++++ 1.1414	1.0249 1.0132	1.0630 0.8986	1.1971 1.0646	1.0727	Ave		1.0594				8.4		30.0			
1,1-Dichloroethene	1.2757 1.3203	1.2111 1.2279	1.1796 1.1335	1.0874 1.2149	1.1907	Ave		1.2046				5.8		30.0			
Acrylonitrile	++++ 0.6312	0.5404 0.5730	0.5836 0.4738	0.7185 0.6580	0.5959	Ave		0.5968				12.5		30.0			
tert-Butyl alcohol	1.4826 1.6717	1.4997 1.5036	1.5448 1.4655	1.4157 1.3757	1.3892	Ave		1.4832				6.1		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	2.6104 2.8410	2.6233 2.5691	2.4835 2.3747	2.4050 2.4491	2.5600	Ave		2.5462				5.6		30.0			
Methylene Chloride	++++ 1.2742	++++ 1.1181	1.6690 1.0310	1.3048 1.0636	1.1909	Ave		1.2359				17.5		30.0			
3-Chloropropene	++++ 1.3891	1.3102 1.1944	1.1647 1.0831	1.2357 1.1360	1.1687	Ave		1.2103				8.2		30.0			
Carbon disulfide	3.5705 3.8868	3.6740 3.5441	3.4184 3.2293	3.2772 3.4421	3.4426	Ave		3.4983				5.7		30.0			
trans-1,2-Dichloroethene	1.2671 1.3602	1.2022 1.2482	1.1875 1.1577	1.1639 1.1944	1.2348	Ave		1.2240				5.2		30.0			
2-Methylpentane	3.2236 3.1086	2.9938 2.8044	2.8179 2.5791	2.6950 2.5776	2.8341	Ave		2.8482				7.9		30.0			
Methyl tert-butyl ether	1.5402 2.0272	1.9577 1.7648	1.9002 1.6021	2.0404 1.8823	1.7757	Ave		1.8323				9.7		30.0			
1,1-Dichloroethane	2.4257 2.6140	2.4829 2.3755	2.3351 2.1968	2.4158 2.3018	2.3995	Ave		2.3941				4.9		30.0			
Vinyl acetate	++++ 2.1224	1.9173 1.8265	1.8781 1.5317	2.3004 2.1965	1.8460	Ave		1.9524				12.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9602
SDG No.: _____
Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/24/2017 11:31 Calibration End Date: 03/24/2017 17:35 Calibration ID: 978

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 (MEK)	++++ 0.3317	0.3075 0.2728	0.3609 0.2537	0.3215 0.2302	0.2762	Ave		0.2943				14.8		30.0			
Hexane	1.0958 1.1694	1.0499 1.0546	1.0290 0.9840	1.0015 1.0160	1.0494	Ave		1.0500				5.3		30.0			
Isopropyl ether	++++ 2.8432	2.6910 2.4431	2.7413 2.2555	2.8649 2.5350	2.4448	Ave		2.6023				8.3		30.0			
cis-1,2-Dichloroethene	1.3477 1.4171	1.2485 1.2917	1.2556 1.1861	1.2682 1.2537	1.2776	Ave		1.2829				5.1		30.0			
Ethyl acetate	1.2103 1.6242	1.5041 1.3539	1.5806 1.2435	1.5336 1.2094	1.3328	Ave		1.3992				11.7		30.0			
Chloroform	2.7691 2.8586	2.7647 2.5717	2.6588 2.3277	2.6876 2.4983	2.6217	Ave		2.6398				6.1		30.0			
Tert-butyl ethyl ether	1.7159 2.3467	2.1788 2.0110	2.2511 1.9048	2.2797 2.0399	1.9847	Ave		2.0792				9.8		30.0			
Tetrahydrofuran	0.6951 0.9067	0.8309 0.7715	0.8719 0.6973	0.8717 0.7995	0.7599	Ave		0.8005				9.5		30.0			
1,1,1-Trichloroethane	2.8290 3.0383	2.7465 2.7741	2.6846 2.5286	2.6961 2.6887	2.7186	Ave		2.7449				5.0		30.0			
1,2-Dichloroethane	0.3802 0.4114	0.3724 0.3959	0.3874 0.3605	0.3749 0.3602	0.3854	Ave		0.3809				4.3		30.0			
1-Butanol	++++ 0.0778	0.0621 0.0754	0.0687 0.0733	0.0647 0.0619	0.0640	Ave		0.0685				9.2		30.0			
Cyclohexane	0.1119 0.1377	0.1156 0.1333	0.1187 0.1184	0.1145 0.1083	0.1286	Ave		0.1208				8.4		30.0			
Benzene	0.9631 0.8080	0.8720 0.7642	0.8091 0.6743	0.7742 0.6263	0.7644	Ave		0.7840				12.7		30.0			
Carbon tetrachloride	0.5862 0.6698	0.6057 0.6549	0.5980 0.5898	0.5541 0.5644	0.6199	Ave		0.6048				6.3		30.0			
2,3-Dimethylpentane	0.1482 0.1899	0.1835 0.1812	0.1720 0.1624	0.1604 0.1564	0.1742	Ave		0.1698				8.2		30.0			
Thiophene	0.4573 0.4752	0.4482 0.4601	0.4488 0.4127	0.4444 0.4078	0.4499	Ave		0.4449				4.9		30.0			
Tert-amyl methyl ether	++++ 0.4463	0.4244 0.4076	0.4019 0.3859	0.4576 0.3636	0.4046	Ave		0.4115				7.5		30.0			
2,2,4-Trimethylpentane	1.5252 1.4387	1.4292 1.3649	1.4096 1.2070	1.3020 1.1533	1.3556	Ave		1.3539				8.7		30.0			
Heptane	0.2815 0.2777	0.2701 0.2652	0.2731 0.2368	0.2510 0.2287	0.2642	Ave		0.2609				7.0		30.0			
1,2-Dichloropropane	0.2564 0.3085	0.2996 0.3017	0.2876 0.2716	0.2860 0.2692	0.2963	Ave		0.2863				6.1		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9602

SDG No.: _____

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

Calibration Start Date: 03/24/2017 11:31 Calibration End Date: 03/24/2017 17:35 Calibration ID: 978

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								
Trichloroethene	0.4602 0.4593	0.4272 0.4372	0.4591 0.3962	0.4038 0.3523	0.4165	Ave		0.4235				8.5		30.0			
Dibromomethane	0.3319 0.3587	0.3276 0.3365	0.3353 0.3021	0.3153 0.2939	0.3307	Ave		0.3258				6.0		30.0			
Bromodichloromethane	0.5064 0.5949	0.5270 0.5789	0.5388 0.5301	0.5223 0.5310	0.5523	Ave		0.5424				5.2		30.0			
1,4-Dioxane	++++ 0.0755	0.0704 0.0693	0.0772 0.0656	0.0641 0.0503	0.0648	Ave		0.0672				12.4		30.0			
Methyl methacrylate	++++ 0.2077	0.1885 0.1857	0.1933 0.1734	0.1767 0.1597	0.1697	Ave		0.1818				8.3		30.0			
Methylcyclohexane	0.6102 0.6426	0.6030 0.6079	0.6065 0.5440	0.5484 0.5067	0.6040	Ave		0.5859				7.3		30.0			
4-Methyl-2-pentanone (MIBK)	++++ 0.3639	0.3655 0.3447	0.3784 0.3326	0.3208 0.2737	0.3070	Ave		0.3358				10.4		30.0			
cis-1,3-Dichloropropene	0.3984 0.4700	0.4109 0.4553	0.4265 0.4156	0.4178 0.4160	0.4335	Ave		0.4271				5.3		30.0			
trans-1,3-Dichloropropene	0.3539 0.4210	0.3641 0.4212	0.3855 0.3963	0.4035 0.4118	0.4170	Ave		0.3971				6.2		30.0			
Toluene	0.8007 0.8647	0.9159 0.8496	0.8554 0.7701	0.8928 0.7967	0.8664	Ave		0.8458				5.6		30.0			
Toluene Range	++++ 2.1181	++++ 2.0870	++++ 1.9196	2.1046 1.9840	2.0993	Ave		2.0521				3.9		30.0			
1,1,2-Trichloroethane	0.2348 0.2735	0.2636 0.2710	0.2733 0.2514	0.2790 0.2511	0.2774	Ave		0.2639				5.7		30.0			
2-Methylthiophene	0.6815 0.8074	0.7661 0.7869	0.7694 0.7197	0.7932 0.7260	0.7898	Ave		0.7600				5.5		30.0			
3-Methylthiophene	0.6684 0.7812	0.7630 0.7690	0.7608 0.7053	0.7656 0.7088	0.7760	Ave		0.7442				5.3		30.0			
2-Hexanone	++++ 0.1886	0.1697 0.1861	0.1807 0.1819	0.1651 0.1546	0.1696	Ave		0.1745				6.7		30.0			
C8 Range	++++ 2.8584	++++ 2.7316	++++ 2.4877	2.9489 2.3694	2.8665	Ave		2.7104				8.6		30.0			
Octane	0.3157 0.2965	0.3121 0.2859	0.2898 0.2596	0.3025 0.2524	0.2953	Ave		0.2900				7.4		30.0			
Dibromochloromethane	0.4696 0.5942	0.5031 0.6067	0.5108 0.5742	0.5557 0.5758	0.5871	Ave		0.5530				8.6		30.0			
1,2-Dibromoethane (EDB)	0.4191 0.5284	0.4665 0.5174	0.4898 0.4782	0.4927 0.4786	0.5176	Ave		0.4876				6.8		30.0			
Tetrachloroethene	0.3606 0.3629	0.3865 0.3480	0.3667 0.3108	0.3554 0.3067	0.3626	Ave		0.3511				7.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9602

SDG No.: _____

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

Calibration Start Date: 03/24/2017 11:31 Calibration End Date: 03/24/2017 17:35 Calibration ID: 978

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								
Chlorobenzene	0.6874 0.7531	0.7527 0.7278	0.7628 0.6652	0.7572 0.6433	0.7545	Ave		0.7227				6.3		30.0			
2,3-Dimethylheptane	0.9926 0.9212	0.9800 0.8633	0.9670 0.7656	0.9662 0.6934	0.9188	Ave		0.8964				11.6		30.0			
Ethylbenzene	0.7869 0.9801	0.9923 0.9510	0.9920 0.8649	1.0936 0.9072	1.0272	Ave		0.9550				9.5		30.0			
2-Ethylthiophene	0.6477 0.8185	0.8067 0.7978	0.7933 0.7367	0.8463 0.7613	0.8261	Ave		0.7816				7.7		30.0			
m-Xylene & p-Xylene	0.5633 0.6970	0.7150 0.6827	0.7184 0.6103	0.8332 0.6346	0.7632	Ave		0.6909				11.8		30.0			
Nonane	0.6953 0.6502	0.6368 0.6091	0.6588 0.5315	0.6571 0.4615	0.6429	Ave		0.6159				11.9		30.0			
Bromoform	++++ 0.5604	0.4482 0.6413	0.4812 0.6085	0.5337 0.5728	0.5977	Ave		0.5555				11.7		30.0			
Styrene	++++ 0.5390	0.4399 0.5378	0.4762 0.4882	0.5812 0.5040	0.5630	Ave		0.5162				9.2		30.0			
o-Xylene	0.6012 0.6958	0.7361 0.6779	0.7176 0.6139	0.8600 0.6776	0.7603	Ave		0.7045				11.1		30.0			
1,1,2,2-Tetrachloroethane	0.4226 0.5090	0.4920 0.4789	0.4566 0.4199	0.5559 0.4666	0.5068	Ave		0.4787				9.1		30.0			
1,2,3-Trichloropropane	++++ 0.1230	0.1133 0.1134	0.1247 0.1055	0.1314 0.1162	0.1193	Ave		0.1184				6.8		30.0			
Isopropylbenzene	0.8145 0.8801	0.9595 0.8488	0.9380 0.7636	1.0877 0.8549	0.9255	Ave		0.8969				10.6		30.0			
Propylbenzene	0.1822 0.2395	0.2327 0.2243	0.2447 0.2066	0.2749 0.2383	0.2368	Ave		0.2311				11.1		30.0			
2-Chlorotoluene	0.2411 0.2952	0.2955 0.2850	0.3066 0.2649	0.3143 0.2663	0.3039	Ave		0.2859				8.4		30.0			
4-Ethyltoluene	0.6473 0.8178	0.8561 0.7535	0.8519 0.7067	0.8747 0.7788	0.7824	Ave		0.7855				9.5		30.0			
1,3,5-Trimethylbenzene	0.3192 0.3871	0.3768 0.3505	0.4110 0.3293	0.4114 0.3585	0.3668	Ave		0.3678				8.8		30.0			
Alpha Methyl Styrene	++++ 0.3390	0.2428 0.3379	0.2792 0.3204	0.3286 0.3673	0.3162	Ave		0.3164				12.3		30.0			
Decane	0.6447 0.7107	0.7153 0.6782	0.7111 0.6006	0.7713 0.5751	0.7372	Ave		0.6827				9.4		30.0			
tert-Butylbenzene	0.6345 0.7331	0.7715 0.6592	0.7838 0.6157	0.7759 0.6338	0.6990	Ave		0.7007				9.6		30.0			
1,2,4-Trimethylbenzene	0.5224 0.6736	0.6850 0.6041	0.7151 0.5707	0.7080 0.5791	0.6342	Ave		0.6325				10.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9602

SDG No.: _____

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

Calibration Start Date: 03/24/2017 11:31 Calibration End Date: 03/24/2017 17:35 Calibration ID: 978

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								
sec-Butylbenzene	0.8693 1.0052	1.0448 0.9111	1.0791 0.8380	1.0740 0.8362	0.9817	Ave		0.9599				10.3		30.0			
1,3-Dichlorobenzene	0.5230 0.6425	0.6117 0.6129	0.6301 0.5765	0.6499 0.5622	0.6489	Ave		0.6064				7.2		30.0			
Benzyl chloride	0.3822 0.5514	0.4555 0.5243	0.5132 0.5282	0.4924 0.5156	0.5103	Ave		0.4970				10.2		30.0			
1,4-Dichlorobenzene	0.4835 0.6281	0.5837 0.6012	0.5955 0.5668	0.6250 0.5642	0.6288	Ave		0.5863				7.8		30.0			
4-Isopropyltoluene	0.6832 0.8204	0.8045 0.7398	0.8309 0.7047	0.8215 0.6718	0.7625	Ave		0.7599				8.3		30.0			
1,2,3-Trimethylbenzene	0.4256 0.5065	0.5200 0.4579	0.5387 0.4416	0.5068 0.4405	0.4824	Ave		0.4800				8.4		30.0			
Butylcyclohexane	0.8256 0.8474	0.8424 0.8060	0.8532 0.7226	0.8743 0.6811	0.8623	Ave		0.8128				8.2		30.0			
1,2-Dichlorobenzene	0.4729 0.5639	0.5732 0.5325	0.5775 0.4893	0.6215 0.4910	0.5907	Ave		0.5458				9.5		30.0			
Indane	0.5583 0.6623	0.6674 0.5986	0.6895 0.5596	0.7231 0.5874	0.6522	Ave		0.6332				9.3		30.0			
Indene	++++ 0.4632	0.4126 0.4279	0.4251 0.4164	0.4455 0.4250	0.4359	Ave		0.4315				3.8		30.0			
Butylbenzene	0.7454 0.8025	0.8072 0.7086	0.8308 0.6823	0.8039 0.6154	0.7547	Ave		0.7501				9.4		30.0			
Undecane	0.5495 0.6454	0.6112 0.5904	0.6289 0.5357	0.6857 0.5359	0.6475	Ave		0.6033				9.0		30.0			
1,2-Dimethyl-4-Ethylbenzene	0.5418 0.5908	0.5714 0.5237	0.5833 0.5188	0.5613 0.4765	0.5456	Ave		0.5459				6.6		30.0			
1,2-Dibromo-3-Chloropropane	0.1448 0.1797	0.1412 0.1803	0.1538 0.1910	0.1579 0.1778	0.1745	Ave		0.1668				10.6		30.0			
1,2,4,5-Tetramethylbenzene	0.6288 0.6794	0.6797 0.6103	0.6617 0.6055	0.6285 0.5402	0.6244	Ave		0.6287				6.9		30.0			
1,2,3,5-Tetramethylbenzene	0.4635 0.4178	0.4271 0.3762	0.4094 0.3743	0.3969 0.3398	0.3886	Ave		0.3993				8.9		30.0			
1,2,3,4-Tetramethylbenzene	0.6198 0.5377	0.5448 0.4903	0.5270 0.4939	0.4929 0.4371	0.5160	Ave		0.5177				9.7		30.0			
Dodecane	0.4746 0.5868	0.5108 0.5172	0.5123 0.4984	0.4917 0.4346	0.5820	Ave		0.5120				9.4		30.0			
1,2,4-Trichlorobenzene	0.2048 0.3423	0.2779 0.3098	0.2762 0.3290	0.2783 0.3374	0.3218	Ave		0.2975				14.6		30.0			
Naphthalene	0.4024 0.6424	0.5424 0.5733	0.5540 0.6044	0.5069 0.5422	0.5999	Ave		0.5520				12.5		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9602
SDG No.: _____
Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/24/2017 11:31 Calibration End Date: 03/24/2017 17:35 Calibration ID: 978

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													
Benzo(b)thiophene	+++++ 0.3159	0.2356 0.2849	0.2502 0.3168	0.2390 0.2936	0.2903	Ave		0.2783				11.7		30.0			
Hexachlorobutadiene	0.5411 0.5395	0.5578 0.4999	0.5030 0.4679	0.5679 0.4577	0.5859	Ave		0.5245				8.5		30.0			
1,2,3-Trichlorobenzene	0.2483 0.3159	0.2853 0.2792	0.2816 0.2919	0.2540 0.2695	0.3100	Ave		0.2818				8.1		30.0			
2-Methylnaphthalene	+++++ 0.0466	0.0266 0.0421	0.0279 0.0478	0.0236 0.0383	0.0436	Ave		0.0371				26.1		50.0			
1-Methylnaphthalene	+++++ 0.0495	0.0382 0.0429	0.0360 0.0461	0.0257 0.0361	0.0499	Ave		0.0406				20.2		50.0			
4-Bromofluorobenzene (Surr)	0.6800 0.7154	0.6771 0.7048	0.6825 0.7129	0.7066 0.7114	0.6934	Ave		0.6982				2.2		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9602

SDG No.: _____

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

Calibration Start Date: 03/24/2017 11:31 Calibration End Date: 03/24/2017 17:35 Calibration ID: 978

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-9602/2	JC24IC01.D
Level 2	IC 140-9602/3	JC24IC02.D
Level 3	IC 140-9602/4	JC24IC03.D
Level 4	IC 140-9602/5	JC24IC04.D
Level 5	IC 140-9602/6	JC24IC05.D
Level 6	ICIS 140-9602/7	JC24IC06.D
Level 7	IC 140-9602/8	JC24IC07.D
Level 8	IC 140-9602/9	JC24IC08.D
Level 9	IC 140-9602/10	JC24IC09.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	+++++ 43402	1816 85529	3288 169716	8143 335135	21639	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Propene	CBM	Ave	+++++ 146518	7367 283520	12999 554396	30076 1045688	75414	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Dichlorodifluoromethane	CBM	Ave	8940 433589	17833 851279	34614 1676054	84716 3228972	219695	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Chloromethane	CBM	Ave	+++++ 45432	+++++ 88555	4584 171125	10425 331742	24297	+++++ 2.00	+++++ 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dichloro-1,1,2,2-tetrafluoroethane	CBM	Ave	4214 180886	8260 365483	15788 729958	33898 1351025	108588	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Acetaldehyde	CBM	Ave	+++++ 209476	+++++ 388595	+++++ 730718	63260 1634496	125535	+++++ 9.99	+++++ 20.0	+++++ 40.0	2.00 80.0	5.01
Vinyl chloride	CBM	Ave	2623 139468	6110 275832	11078 539544	26865 1092378	72316	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,3-Butadiene	CBM	Ave	2047 104197	4651 206478	8180 396694	20141 811868	53423	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Butane	CBM	Ave	4094 207548	9657 406745	17381 766368	41221 1560166	108245	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Bromomethane	CBM	Ave	3027 122542	5943 248962	10225 484577	23692 980840	63511	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Chloroethane	CBM	Ave	+++++ 58830	2249 117703	4479 227756	11063 464349	31052	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Ethanol	CBM	Ave	+++++ 146657	7551 275139	13934 528666	31436 922606	72742	+++++ 9.99	0.392 20.0	0.794 40.0	2.00 80.0	5.01
Vinyl bromide	CBM	Ave	2144 113140	4898 231133	8752 452410	20516 919063	58059	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Methylbutane	CBM	Ave	+++++ 180221	9821 366269	16651 700105	31515 1412761	96238	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9602

SDG No.: _____

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

Calibration Start Date: 03/24/2017 11:31 Calibration End Date: 03/24/2017 17:35 Calibration ID: 978

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	7305 399106	17621 815022	31820 1578566	68858 3169455	208467	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Acrolein	CBM	Ave	++++ 30387	++++ 65230	3155 102471	8181 290691	17846	++++ 2.00	++++ 4.00	0.159 8.00	0.400 16.0	1.00
Acetonitrile	CBM	Ave	++++ 43287	++++ 81334	3946 143017	9606 376004	20225	++++ 2.00	++++ 4.00	0.159 8.00	0.400 16.0	1.00
Acetone	CBM	Ave	++++ 128336	++++ 223745	++++ 399470	32772 841632	66610	++++ 5.87	++++ 11.7	++++ 23.5	1.17 47.0	2.94
Isopropyl alcohol	CBM	Ave	9546 514406	22799 992211	44045 1931000	112034 3307384	247537	0.115 5.87	0.230 11.7	0.466 23.5	1.17 47.0	2.94
Pentane	CBM	Ave	++++ 23356	++++ 48246	1596 90887	4207 179088	12170	++++ 2.00	++++ 4.00	0.159 8.00	0.400 16.0	1.00
Ethyl ether	CBM	Ave	++++ 132014	5409 258181	10832 478285	29204 1079497	71239	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1-Dichloroethene	CBM	Ave	2942 152708	6392 312906	12020 603327	26528 1231917	79076	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Acrylonitrile	CBM	Ave	++++ 73008	2852 146018	5947 252183	17528 667216	39574	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
tert-Butyl alcohol	CBM	Ave	3419 193347	7915 383148	15742 780014	34537 1395017	92261	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1,2-Trichloro-1,2,2-trifluoroethane	CBM	Ave	6020 328597	13845 654655	25307 1263946	58673 2483416	170020	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Methylene Chloride	CBM	Ave	++++ 147376	++++ 284917	17007 548763	31831 1078459	79092	++++ 2.00	++++ 4.00	0.159 8.00	0.400 16.0	1.00
3-Chloropropene	CBM	Ave	++++ 160663	6915 304356	11869 576469	30147 1151910	77620	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Carbon disulfide	CBM	Ave	8234 449551	19390 903118	34834 1718809	79950 3490363	228634	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
trans-1,2-Dichloroethene	CBM	Ave	2922 157327	6345 318056	12101 616200	28394 1211127	82007	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Methylpentane	CBM	Ave	7434 359539	15800 714622	28715 1372731	65747 2613669	188220	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Methyl tert-butyl ether	CBM	Ave	3552 234466	10332 449702	19363 852718	49779 1908670	117931	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1-Dichloroethane	CBM	Ave	5594 302332	13104 605318	23795 1169271	58937 2334013	159357	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Vinyl acetate	CBM	Ave	++++ 245483	10119 465416	19138 815240	56121 2227273	122602	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Butanone (MEK)	CBM	Ave	++++ 38362	1623 69526	3678 135045	7843 233393	18341	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Hexane	CBM	Ave	2527 135250	5541 268736	10486 523745	24433 1030279	69696	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00

FORM VI
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RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9602

SDG No.: _____

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

Calibration Start Date: 03/24/2017 11:31 Calibration End Date: 03/24/2017 17:35 Calibration ID: 978

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
Isopropyl ether	CBM	Ave	+++++ 328842	14202 622559	27934 1200487	69892 2570530	162367	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
cis-1,2-Dichloroethene	CBM	Ave	3108 163904	6589 329150	12795 631283	30938 1271241	84853	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Ethyl acetate	CBM	Ave	2791 187852	7938 345012	16107 661850	37413 1226388	88516	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Chloroform	CBM	Ave	6386 330631	14591 655318	27094 1238922	65567 2533326	174118	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Tert-butyl ethyl ether	CBM	Ave	3957 271417	11499 512444	22939 1013817	55616 2068493	131813	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Tetrahydrofuran	CBM	Ave	1603 104869	4385 196593	8885 371130	21267 810678	50465	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1,1-Trichloroethane	CBM	Ave	6524 351407	14495 706900	27357 1345848	65774 2726347	180553	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dichloroethane	DFBZ	Ave	3908 222582	8900 442977	17815 848176	43197 1745806	116036	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1-Butanol	DFBZ	Ave	+++++ 42083	1485 84359	3158 172486	7450 299753	19278	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Cyclohexane	DFBZ	Ave	1150 74470	2763 149186	5458 278583	13196 524740	38721	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Benzene	DFBZ	Ave	9899 437140	20840 855015	37205 1586431	89218 3035346	230160	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Carbon tetrachloride	DFBZ	Ave	6025 362372	14474 732758	27498 1387515	63856 2735035	186656	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2,3-Dimethylpentane	DFBZ	Ave	1523 102755	4385 202681	7907 381951	18484 757792	52446	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Thiophene	DFBZ	Ave	4700 257056	10711 514735	20637 970981	51210 1976083	135457	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Tert-amyl methyl ether	CBZd 5	Ave	+++++ 235550	9173 439396	17071 876189	47123 1663304	112168	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2,2,4-Trimethylpentane	DFBZ	Ave	15676 778312	34154 1527164	64818 2839517	150029 5589142	408197	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Heptane	DFBZ	Ave	2893 150262	6455 296746	12558 557129	28922 1108390	79541	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dichloropropane	DFBZ	Ave	2635 166887	7160 337576	13224 638984	32959 1304842	89216	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Trichloroethene	DFBZ	Ave	4730 248507	10208 489195	21113 932122	46534 1707390	125422	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Dibromomethane	DFBZ	Ave	3411 194031	7830 376491	15419 710629	36329 1424109	99583	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Bromodichloromethane	DFBZ	Ave	5205 321832	12595 647712	24774 1247198	60187 2573564	166313	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9602

SDG No.: _____

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

Calibration Start Date: 03/24/2017 11:31 Calibration End Date: 03/24/2017 17:35 Calibration ID: 978

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
1,4-Dioxane	DFBZ	Ave	++++ 40831	1683 77550	3551 154334	7383 243836	19508	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Methyl methacrylate	DFBZ	Ave	++++ 112353	4505 207785	8889 407854	20366 773766	51104	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Methylcyclohexane	DFBZ	Ave	6272 347625	14410 680111	27890 1279709	63189 2455783	181878	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	++++ 196853	8735 385671	17401 782519	36967 1326528	92449	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
cis-1,3-Dichloropropene	DFBZ	Ave	4095 254283	9819 509357	19614 977793	48146 2016227	130533	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
trans-1,3-Dichloropropene	CBZd 5	Ave	3377 222209	7869 454066	16374 899809	41552 1883809	115599	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Toluene	CBZd 5	Ave	7642 456364	19797 915773	36334 1748504	91946 3644860	240173	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Toluene Range	CBZd 5	Ave	++++ 1117814	++++ 2249708	++++ 4358144	216753 9076964	581924	++++ 2.00	++++ 4.00	++++ 8.00	0.400 16.0	1.00
1,1,2-Trichloroethane	CBZd 5	Ave	2241 144323	5698 292125	11608 570770	28730 1148949	76895	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Methylthiophene	CBZd 5	Ave	6504 426102	16558 848277	32680 1634059	81695 3321530	218937	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
3-Methylthiophene	CBZd 5	Ave	6379 412267	16491 828956	32317 1601255	78853 3242609	215106	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Hexanone	CBZd 5	Ave	++++ 99511	3667 200606	7674 413064	17005 707229	47006	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
C8 Range	CBZd 5	Ave	++++ 1508522	++++ 2944501	++++ 5647961	303706 10840031	794616	++++ 2.00	++++ 4.00	++++ 8.00	0.400 16.0	1.00
Octane	CBZd 5	Ave	3013 156495	6745 308131	12310 589410	31157 1154854	81847	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Dibromochloromethane	CBZd 5	Ave	4482 313571	10874 653988	21697 1303695	57234 2634433	162740	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dibromoethane (EDB)	CBZd 5	Ave	4000 278847	10084 557685	20806 1085693	50743 2189748	143468	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Tetrachloroethene	CBZd 5	Ave	3441 191531	8353 375100	15577 705657	36604 1403388	100522	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Chlorobenzene	CBZd 5	Ave	6560 397449	16269 784490	32400 1510186	77984 2942999	209153	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2,3-Dimethylheptane	CBZd 5	Ave	9473 486182	21181 930604	41073 1738139	99511 3172200	254690	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Ethylbenzene	CBZd 5	Ave	7510 517252	21447 1025077	42135 1963698	112625 4150627	284749	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Ethylthiophene	CBZd 5	Ave	6181 431981	17436 859967	33699 1672512	87162 3483070	228997	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00

FORM VI
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RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9602

SDG No.: _____

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

Calibration Start Date: 03/24/2017 11:31 Calibration End Date: 03/24/2017 17:35 Calibration ID: 978

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
m-Xylene & p-Xylene	CBZd 5	Ave	10752 735710	30909 1471883	61033 2771180	171615 5806752	423132	0.0784 4.00	0.157 8.00	0.317 16.0	0.800 32.0	2.00
Nonane	CBZd 5	Ave	6636 343171	13763 656530	27982 1206806	67679 2111184	178214	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Bromoform	CBZd 5	Ave	++++ 295766	9687 691238	20439 1381449	54967 2620482	165698	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Styrene	CBZd 5	Ave	++++ 284470	9509 579696	20227 1108413	59858 2306046	156076	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
o-Xylene	CBZd 5	Ave	5738 367193	15911 730773	30482 1393893	88569 3100029	210753	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	4033 268605	10635 516240	19396 953336	57251 2134850	140499	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,3-Trichloropropane	CBZd 5	Ave	++++ 64921	2448 122279	5296 239633	13537 531499	33077	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Isopropylbenzene	CBZd 5	Ave	7773 464464	20738 914971	39844 1733562	112022 3911212	256542	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Propylbenzene	CBZd 5	Ave	1739 126374	5030 241768	10395 468955	28314 1090460	65645	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Chlorotoluene	CBZd 5	Ave	2301 155813	6386 307196	13023 601349	32367 1218343	84237	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
4-Ethyltoluene	CBZd 5	Ave	6178 431615	18503 812221	36185 1604596	90088 3563117	216891	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,3,5-Trimethylbenzene	CBZd 5	Ave	3046 204275	8144 377863	17459 747534	42367 1640005	101677	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Alpha Methyl Styrene	CBZd 5	Ave	++++ 178912	5248 364260	11861 727504	33847 1680241	87652	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Decane	CBZd 5	Ave	6153 375067	15461 731024	30204 1363686	79439 2630997	204347	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
tert-Butylbenzene	CBZd 5	Ave	6055 386891	16675 710529	33295 1397875	79912 2899542	193770	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,4-Trimethylbenzene	CBZd 5	Ave	4986 355471	14806 651135	30374 1295741	72913 2649356	175803	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
sec-Butylbenzene	CBZd 5	Ave	8296 530500	22583 982166	45836 1902507	110612 3825733	272134	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,3-Dichlorobenzene	CBZd 5	Ave	4991 339062	13221 660724	26765 1308965	66929 2571995	179883	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Benzyl chloride	CBZd 5	Ave	3648 291022	9846 565161	21798 1199154	50707 2359025	141453	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,4-Dichlorobenzene	CBZd 5	Ave	4614 331460	12616 648039	25293 1286956	64366 2581388	174308	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
4-Isopropyltoluene	CBZd 5	Ave	6520 432952	17388 797486	35295 1599862	84609 3073644	211366	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1 Analy Batch No.: 9602
SDG No.: _____
Instrument ID: MJ GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/24/2017 11:31 Calibration End Date: 03/24/2017 17:35 Calibration ID: 978

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
1,2,3-Trimethylbenzene	CBZd 5	Ave	4062 267294	11240 493601	22881 1002550	52195 2015135	133728	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Butylcyclohexane	CBZd 5	Ave	7879 447237	18208 868816	36240 1640613	90046 3116127	239041	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dichlorobenzene	CBZd 5	Ave	4513 297580	12390 574045	24531 1111009	64009 2246516	163731	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Indane	CBZd 5	Ave	5328 349528	14426 645298	29289 1270545	74472 2687490	180784	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Indene	CBZd 5	Ave	++++ 244429	8918 461247	18059 945358	45883 1944503	120836	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Butylbenzene	CBZd 5	Ave	7114 423537	17448 763788	35291 1549140	82788 2815357	209196	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Undecane	CBZd 5	Ave	5244 340608	13210 636409	26713 1216179	70617 2451756	179487	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dimethyl-4-Ethylbenzene	CBZd 5	Ave	5171 311817	12350 564527	24778 1177906	57805 2179865	151244	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dibromo-3-Chloropropane	CBZd 5	Ave	1382 94829	3052 194383	6532 433759	16264 813480	48361	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,4,5-Tetramethylbenzene	CBZd 5	Ave	6001 358561	14691 657901	28106 1374659	64731 2471667	173093	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,3,5-Tetramethylbenzene	CBZd 5	Ave	4423 220501	9231 405521	17391 849841	40879 1554582	107734	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,3,4-Tetramethylbenzene	CBZd 5	Ave	5915 283775	11776 528556	22386 1121362	50767 1999910	143031	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Dodecane	CBZd 5	Ave	4529 309677	11041 557521	21762 1131558	50636 1988165	161335	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,4-Trichlorobenzene	CBZd 5	Ave	1955 180641	6006 333949	11734 746955	28658 1543505	89202	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Naphthalene	CBZd 5	Ave	3840 339004	11724 618026	23534 1372304	52201 2480762	166284	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Benzo(b)thiophene	CBZd 5	Ave	++++ 166740	5093 307143	10627 719374	24613 1343287	80463	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Hexachlorobutadiene	CBZd 5	Ave	5164 284742	12057 538916	21366 1062355	58489 2093974	162409	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,3-Trichlorobenzene	CBZd 5	Ave	2370 166727	6166 300947	11962 662625	26163 1233209	85944	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Methylnaphthalene	CBZd 5	Ave	++++ 74396	1737 137333	3586 328431	7339 530404	36589	++++ 6.04	0.237 12.1	0.480 24.2	1.21 48.4	3.03
1-Methylnaphthalene	CBZd 5	Ave	++++ 78987	2497 139874	4628 316908	8021 499473	41884	++++ 6.04	0.237 12.1	0.480 24.2	1.21 48.4	3.03
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	662043 755928	746526 759541	730689 809058	727612 813488	767497	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00	4.00

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

Lab Name: <u>TestAmerica Knoxville</u>	Job No.: <u>140-7685-1</u>	Analy Batch No.: <u>9602</u>
SDG No.: _____		
Instrument ID: <u>MJ</u>	GC Column: <u>RTX-5</u> ID: <u>0.32 (mm)</u>	Heated Purge: (Y/N) <u>N</u>
Calibration Start Date: <u>03/24/2017 11:31</u>	Calibration End Date: <u>03/24/2017 17:35</u>	Calibration ID: <u>978</u>

Curve Type Legend:

Ave = Average ISTD

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC01.D
 Lims ID: IC L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 24-Mar-2017 11:31:30 ALS Bottle#: 1 Worklist Smp#: 2
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004355-002
 Misc. Info.: 083683
 Operator ID: 007126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 27-Mar-2017 11:47:55 Calib Date: 24-Mar-2017 17:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: tajh

Date: 24-Mar-2017 12:57:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.551	8.549	0.002	96	235269	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.746	10.746	0.000	95	1048575	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.523	15.525	-0.002	88	973624	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.175	17.172	0.003	94	662043	4.00	3.90	
6 Chlorodifluoromethane	67	3.570	3.563	0.007	93	570	0.0392	0.0289	
7 Propene	41	3.575	3.572	0.003	94	4164	0.0392	0.0597	
8 Dichlorodifluoromethane	85	3.629	3.621	0.008	99	8940	0.0392	0.0443	
9 Chloromethane	52	3.807	3.795	0.012	50	994	0.0392	0.0449	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.807	3.799	0.008	94	4214	0.0392	0.0472	
11 Acetaldehyde	44	3.946	3.940	0.006	99	16283	0.1960	0.7687	
12 Vinyl chloride	62	3.963	3.955	0.008	95	2623	0.0392	0.0403	
14 Butadiene	54	4.038	4.037	0.001	68	2047	0.0392	0.0420	
13 Butane	43	4.043	4.038	0.005	82	4094	0.0392	0.0418	
15 Bromomethane	94	4.345	4.343	0.001	92	3027	0.0392	0.0499	
16 Chloroethane	64	4.484	4.477	0.007	84	1021	0.0392	0.0381	
17 Ethanol	31	4.576	4.568	0.008	93	3710	0.1960	0.2675	
18 Vinyl bromide	106	4.764	4.762	0.002	98	2144	0.0392	0.0406	
19 2-Methylbutane	43	4.813	4.811	0.002	90	5348	0.0392	0.0609	
20 Trichlorofluoromethane	101	5.033	5.022	0.011	96	7305	0.0392	0.0395	
23 Acetone	58	5.168	5.150	0.018	97	3397	0.1151	0.1721	
24 Isopropyl alcohol	45	5.254	5.228	0.026	91	9546	0.1151	0.1181	
26 Ethyl ether	31	5.426	5.407	0.019	88	1719	0.0392	0.0276	
27 1,1-Dichloroethene	96	5.706	5.707	-0.001	96	2942	0.0392	0.0415	
28 2-Methyl-2-propanol	59	5.845	5.808	0.037	88	3419	0.0392	0.0392	
30 1,1,2-Trichloro-1,2,2-trif	101	5.883	5.878	0.005	97	6020	0.0392	0.0402	
31 Methylene Chloride	84	6.044	6.043	0.001	98	8170	0.0392	0.1124	
32 3-Chloro-1-propene	39	6.061	6.059	0.002	95	3757	0.0392	0.0528	
33 Carbon disulfide	76	6.211	6.203	0.008	99	8234	0.0392	0.0400	
34 trans-1,2-Dichloroethene	96	6.841	6.838	0.003	94	2922	0.0392	0.0406	
35 2-Methylpentane	43	6.857	6.854	0.003	93	7434	0.0392	0.0444	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
36 Methyl tert-butyl ether	73	6.997	6.977	0.020	90	3552	0.0392	0.0330	
37 1,1-Dichloroethane	63	7.249	7.249	0.000	94	5594	0.0392	0.0397	
38 Vinyl acetate	43	7.362	7.359	0.003	98	3107	0.0392	0.0271	
40 Hexane	56	7.825	7.821	0.004	91	2527	0.0392	0.0409	
42 cis-1,2-Dichloroethene	96	8.218	8.220	-0.002	90	3108	0.0392	0.0412	
43 Ethyl acetate	43	8.444	8.423	0.021	89	2791	0.0392	0.0339	
44 Chloroform	83	8.562	8.561	0.001	34	6386	0.0392	0.0411	
45 Tert-butyl ethyl ether	59	8.686	8.662	0.024	92	3957	0.0392	0.0324	
46 Tetrahydrofuran	42	9.014	8.989	0.025	76	1603	0.0392	0.0340	
47 1,1,1-Trichloroethane	97	9.584	9.579	0.005	92	6524	0.0392	0.0404	
48 1,2-Dichloroethane	62	9.692	9.691	0.001	90	3908	0.0392	0.0391	
50 Cyclohexane	69	10.187	10.185	0.002	77	1150	0.0392	0.0363	
51 Benzene	78	10.192	10.186	0.006	94	9899	0.0392	0.0482	
52 Carbon tetrachloride	117	10.208	10.210	-0.002	95	6025	0.0392	0.0380	
53 2,3-Dimethylpentane	71	10.316	10.313	0.003	87	1523	0.0392	0.0342	
54 Thiophene	84	10.461	10.464	-0.003	92	4700	0.0392	0.0403	
56 Isooctane	57	10.961	10.965	-0.004	97	15676	0.0392	0.0442	
57 n-Heptane	71	11.359	11.353	0.006	92	2893	0.0392	0.0423	
58 1,2-Dichloropropane	63	11.429	11.430	-0.001	89	2635	0.0392	0.0351	
59 Trichloroethene	130	11.462	11.466	-0.004	92	4730	0.0392	0.0426	
60 Dibromomethane	93	11.553	11.549	0.004	97	3411	0.0392	0.0399	
62 Dichlorobromomethane	83	11.698	11.699	-0.001	94	5205	0.0392	0.0366	
63 Methyl methacrylate	41	11.817	11.811	0.006	51	1294	0.0392	0.0271	
64 Methylcyclohexane	83	12.247	12.246	0.001	92	6272	0.0392	0.0408	
66 cis-1,3-Dichloropropene	75	12.715	12.717	-0.002	90	4095	0.0392	0.0366	
67 trans-1,3-Dichloropropene	75	13.420	13.421	-0.001	93	3377	0.0392	0.0349	
68 Toluene	91	13.538	13.542	-0.004	92	7642	0.0392	0.0371	
69 1,1,2-Trichloroethane	83	13.624	13.621	0.003	91	2241	0.0392	0.0349	
70 2-Methylthiophene	97	13.694	13.695	-0.001	95	6504	0.0392	0.0352	
71 3-Methylthiophene	97	13.893	13.897	-0.004	96	6379	0.0392	0.0352	
73 n-Octane	85	14.243	14.244	-0.001	93	3013	0.0392	0.0427	
74 Chlorodibromomethane	129	14.323	14.325	-0.002	95	4482	0.0392	0.0333	
75 Ethylene Dibromide	107	14.614	14.616	-0.002	96	4000	0.0392	0.0337	
76 Tetrachloroethene	129	14.689	14.690	-0.001	93	3441	0.0392	0.0403	
78 Chlorobenzene	112	15.571	15.573	-0.002	92	6560	0.0392	0.0373	
77 2,3-Dimethylheptane	43	15.604	15.601	0.003	95	9473	0.0392	0.0434	
79 Ethylbenzene	91	15.867	15.866	0.001	96	7510	0.0392	0.0323	
80 2-Ethylthiophene	97	15.964	15.967	-0.003	96	6181	0.0392	0.0325	
81 m-Xylene & p-Xylene	91	16.029	16.029	0.000	98	10752	0.0784	0.0639	
82 n-Nonane	57	16.454	16.456	-0.002	90	6636	0.0392	0.0443	
83 Bromoform	173	16.475	16.474	0.001	94	3858	0.0392	0.0285	
84 Styrene	104	16.491	16.494	-0.003	94	3281	0.0392	0.0261	
85 o-Xylene	91	16.556	16.555	0.001	95	5738	0.0392	0.0335	
86 1,1,2,2-Tetrachloroethane	83	16.879	16.880	-0.001	91	4033	0.0392	0.0346	
87 1,2,3-Trichloropropane	110	17.040	17.039	0.001	88	727	0.0392	0.0252	
88 Isopropylbenzene	105	17.142	17.143	-0.001	94	7773	0.0392	0.0356	
89 N-Propylbenzene	120	17.686	17.690	-0.004	98	1739	0.0392	0.0309	
90 2-Chlorotoluene	126	17.729	17.733	-0.004	94	2301	0.0392	0.0331	
91 4-Ethyltoluene	105	17.847	17.845	0.002	97	6178	0.0392	0.0323	
92 1,3,5-Trimethylbenzene	120	17.922	17.920	0.002	93	3046	0.0392	0.0340	
93 Alpha Methyl Styrene	118	18.154	18.154	0.000	91	1900	0.0392	0.0247	
94 n-Decane	57	18.218	18.218	0.000	89	6153	0.0392	0.0370	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
95 tert-Butylbenzene	119	18.347	18.349	-0.002	89	6055	0.0392	0.0355	
96 1,2,4-Trimethylbenzene	105	18.363	18.364	-0.001	92	4986	0.0392	0.0324	
97 sec-Butylbenzene	105	18.622	18.623	-0.001	97	8296	0.0392	0.0355	
98 1,3-Dichlorobenzene	146	18.638	18.636	0.002	95	4991	0.0392	0.0338	
99 Benzyl chloride	91	18.713	18.712	0.001	69	3648	0.0392	0.0302	
100 1,4-Dichlorobenzene	146	18.724	18.724	0.000	92	4614	0.0392	0.0323	
101 4-Isopropyltoluene	119	18.788	18.788	0.000	95	6520	0.0392	0.0352	
102 1,2,3-Trimethylbenzene	105	18.837	18.839	-0.002	94	4062	0.0392	0.0348	
103 Butylcyclohexane	83	18.896	18.897	-0.001	92	7879	0.0392	0.0398	
105 1,2-Dichlorobenzene	146	19.084	19.087	-0.003	90	4513	0.0392	0.0340	
104 2,3-Dihydroindene	117	19.090	19.087	0.003	92	5328	0.0392	0.0346	
107 Indene	116	19.219	19.219	0.000	89	2859	0.0392	0.0272	
106 n-Butylbenzene	91	19.229	19.227	0.002	96	7114	0.0392	0.0390	
108 Undecane	57	19.547	19.546	0.001	93	5244	0.0392	0.0357	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.601	19.602	-0.001	95	5171	0.0392	0.0389	
110 1,2-Dibromo-3-Chloropropan	157	19.698	19.698	0.000	83	1382	0.0392	0.0340	
111 1,2,4,5-Tetramethylbenzene	119	19.988	19.989	-0.001	95	6001	0.0392	0.0392	
112 1,2,3,5-Tetramethylbenzene	119	20.047	20.044	0.003	93	4423	0.0392	0.0455	
113 1,2,3,4-Tetramethylbenzene	119	20.440	20.440	0.000	94	5915	0.0392	0.0469	
114 Dodecane	57	20.607	20.607	0.000	89	4529	0.0392	0.0363	
115 1,2,4-Trichlorobenzene	180	20.795	20.796	-0.001	85	1955	0.0392	0.0270	
116 Naphthalene	128	20.940	20.937	0.003	97	3840	0.0392	0.0286	
117 Benzo(b)thiophene	134	21.042	21.042	0.000	93	1752	0.0392	0.0259	
118 Hexachlorobutadiene	225	21.155	21.157	-0.002	92	5164	0.0392	0.0404	
119 1,2,3-Trichlorobenzene	180	21.231	21.227	0.004	89	2370	0.0392	0.0346	
120 2-Methylnaphthalene	142	21.919	21.921	-0.002	75	465	0.1186	0.0515	
121 1-Methylnaphthalene	142	22.048	22.049	-0.001	88	792	0.1186	0.0802	
A 124 Toluene Range	1	13.538	(13.508-13.568)		0	16310	0.0392	0.0327	
A 125 C8 Range	1	14.248	(14.231-14.280)		0	27892	0.0392	0.0423	
S 126 Xylenes, Total	100				0		0.1176	0.0974	
S 127 1,2-Dichloroethene, Total	1				0		0.0784	0.0818	

Reagents:

40L12DNP_00010

Amount Added: 100.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC01.D

Injection Date: 24-Mar-2017 11:31:30

Instrument ID: MJ

Operator ID: 007126

Lims ID: IC L1

Worklist Smp#: 2

Client ID:

Purge Vol: 500.000 mL

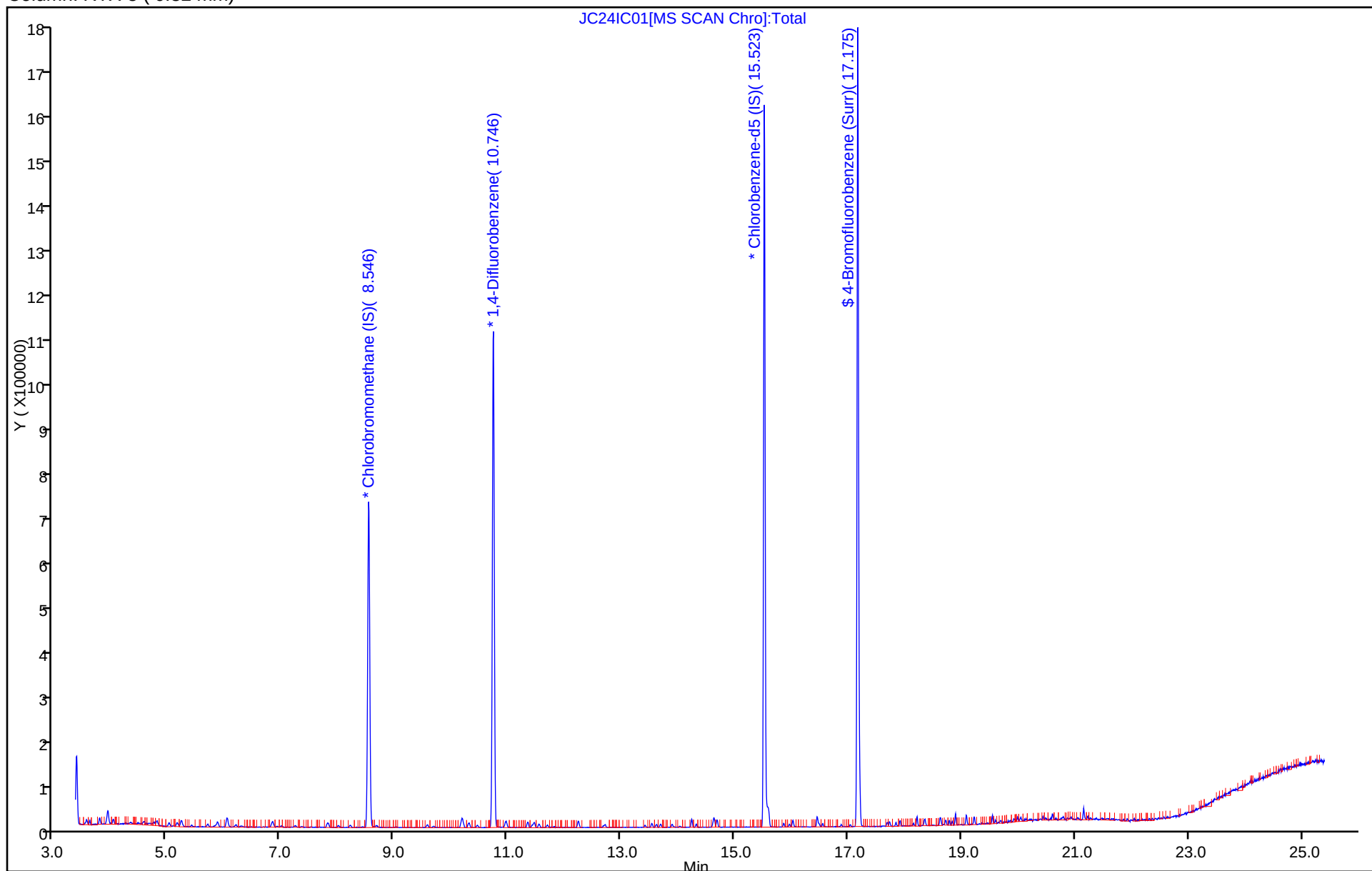
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC01.D

Injection Date: 24-Mar-2017 11:31:30

Instrument ID: MJ

Lims ID: IC L1

Client ID:

Operator ID: 007126

ALS Bottle#: 1

Worklist Smp#: 2

Purge Vol: 500.000 mL

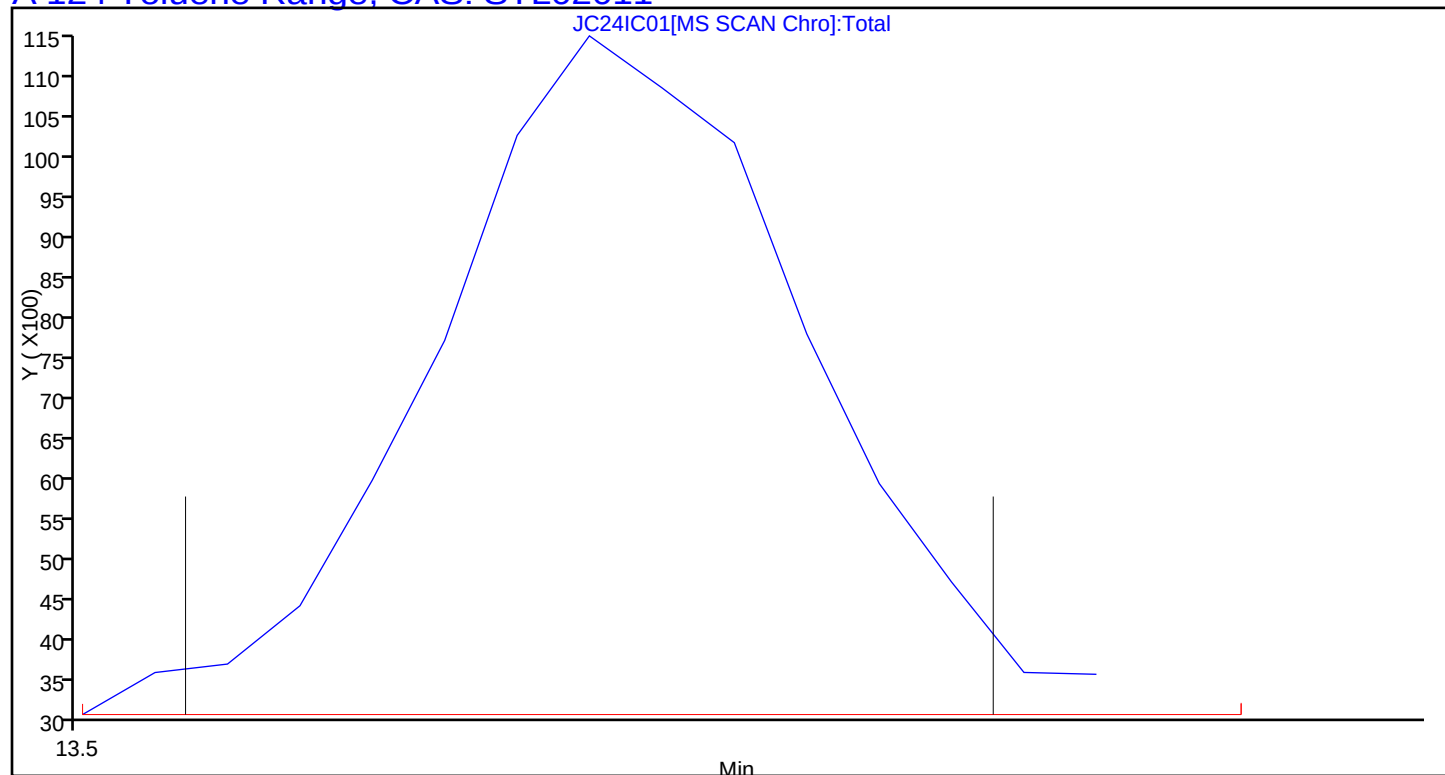
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 124 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC01.D

Injection Date: 24-Mar-2017 11:31:30

Instrument ID: MJ

Lims ID: IC L1

Client ID:

Operator ID: 007126

ALS Bottle#: 1

Worklist Smp#: 2

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

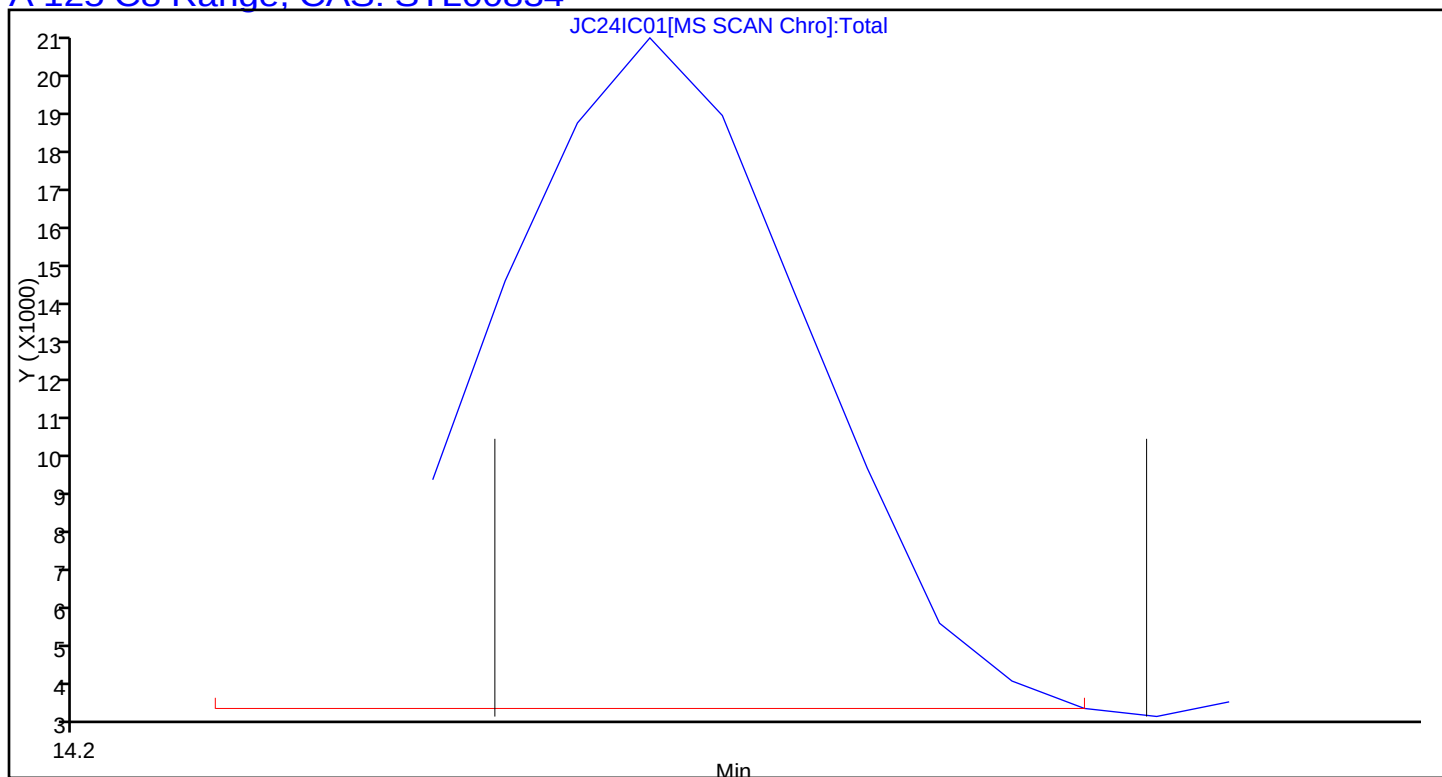
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 125 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC02.D
 Lims ID: IC L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 24-Mar-2017 12:16:30 ALS Bottle#: 1 Worklist Smp#: 3
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004355-003
 Misc. Info.: 083683
 Operator ID: 007126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 27-Mar-2017 11:48:08 Calib Date: 24-Mar-2017 17:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: tajh

Date: 24-Mar-2017 13:21:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.546	8.549	-0.003	96	269209	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.741	10.746	-0.005	95	1219011	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.523	15.525	-0.002	88	1102529	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.170	17.172	-0.002	95	746526	4.00	3.88	
6 Chlorodifluoromethane	67	3.559	3.563	-0.004	96	1816	0.0784	0.0803	
7 Propene	41	3.570	3.572	-0.002	98	7367	0.0784	0.0923	
8 Dichlorodifluoromethane	85	3.619	3.621	-0.002	99	17833	0.0784	0.0773	
9 Chloromethane	52	3.796	3.795	0.001	64	3339	0.0784	0.1319	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.796	3.799	-0.003	90	8260	0.0784	0.0808	
11 Acetaldehyde	44	3.941	3.940	0.001	100	28617	0.3921	1.18	
12 Vinyl chloride	62	3.952	3.955	-0.003	95	6110	0.0784	0.0821	
14 Butadiene	54	4.033	4.037	-0.004	65	4651	0.0784	0.0834	
13 Butane	43	4.033	4.038	-0.005	85	9657	0.0784	0.0861	
15 Bromomethane	94	4.345	4.343	0.002	95	5943	0.0784	0.0856	
16 Chloroethane	64	4.474	4.477	-0.003	95	2249	0.0784	0.0734	
17 Ethanol	31	4.565	4.568	-0.003	95	7551	0.3921	0.4758	
18 Vinyl bromide	106	4.759	4.762	-0.003	96	4898	0.0784	0.0811	
19 2-Methylbutane	43	4.813	4.811	0.002	91	9821	0.0784	0.0978	
20 Trichlorofluoromethane	101	5.017	5.022	-0.005	99	17621	0.0784	0.0832	
21 Acrolein	56	5.028	5.034	-0.006	26	1482	0.0784	0.0806	
22 Acetonitrile	40	5.098	5.098	0.000	96	2285	0.0784	0.0983	
23 Acetone	58	5.152	5.150	0.002	98	10120	0.2303	0.4479	
24 Isopropyl alcohol	45	5.232	5.228	0.004	77	22799	0.2303	0.2464	
25 Pentane	72	5.227	5.233	-0.006	83	761	0.0784	0.0633	
26 Ethyl ether	31	5.415	5.407	0.008	93	5409	0.0784	0.0759	
27 1,1-Dichloroethene	96	5.711	5.707	0.004	96	6392	0.0784	0.0788	
28 2-Methyl-2-propanol	59	5.819	5.808	0.011	92	7915	0.0784	0.0793	
29 Acrylonitrile	53	5.808	5.809	-0.001	88	2852	0.0784	0.0710	
30 1,1,2-Trichloro-1,2,2-trif	101	5.873	5.878	-0.005	97	13845	0.0784	0.0808	
31 Methylene Chloride	84	6.039	6.043	-0.004	99	12071	0.0784	0.1451	

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	6.050	6.059	-0.009	94	6915	0.0784	0.0849	
33 Carbon disulfide	76	6.201	6.203	-0.002	99	19390	0.0784	0.0824	
34 trans-1,2-Dichloroethene	96	6.836	6.838	-0.002	97	6345	0.0784	0.0770	
35 2-Methylpentane	43	6.852	6.854	-0.002	95	15800	0.0784	0.0824	
36 Methyl tert-butyl ether	73	6.986	6.977	0.009	96	10332	0.0784	0.0838	
37 1,1-Dichloroethane	63	7.244	7.249	-0.005	98	13104	0.0784	0.0813	
38 Vinyl acetate	43	7.363	7.359	0.004	99	10119	0.0784	0.0770	
39 2-Butanone (MEK)	72	7.820	7.810	0.010	93	1623	0.0784	0.0819	
40 Hexane	56	7.815	7.821	-0.006	80	5541	0.0784	0.0784	
41 Isopropyl ether	45	7.998	7.988	0.010	98	14202	0.0784	0.0811	
42 cis-1,2-Dichloroethene	96	8.213	8.220	-0.007	95	6589	0.0784	0.0763	
43 Ethyl acetate	43	8.428	8.423	0.005	96	7938	0.0784	0.0843	
44 Chloroform	83	8.557	8.561	-0.004	28	14591	0.0784	0.0821	
45 Tert-butyl ethyl ether	59	8.670	8.662	0.008	95	11499	0.0784	0.0822	
46 Tetrahydrofuran	42	9.009	8.989	0.020	90	4385	0.0784	0.0814	
47 1,1,1-Trichloroethane	97	9.574	9.579	-0.005	97	14495	0.0784	0.0785	
48 1,2-Dichloroethane	62	9.687	9.691	-0.004	94	8900	0.0784	0.0767	
49 n-Butanol	31	10.182	10.166	0.016	52	1485	0.0784	0.0712	
50 Cyclohexane	69	10.182	10.185	-0.003	74	2763	0.0784	0.0751	
51 Benzene	78	10.182	10.186	-0.004	96	20840	0.0784	0.0872	
52 Carbon tetrachloride	117	10.208	10.210	-0.002	96	14474	0.0784	0.0785	
53 2,3-Dimethylpentane	71	10.316	10.313	0.003	91	4385	0.0784	0.0847	
54 Thiophene	84	10.456	10.464	-0.008	94	10711	0.0784	0.0790	
55 Tert-amyl methyl ether	73	10.693	10.688	0.005	39	9173	0.0784	0.0809	M
56 Isooctane	57	10.962	10.965	-0.003	98	34154	0.0784	0.0828	
57 n-Heptane	71	11.349	11.353	-0.004	93	6455	0.0784	0.0812	
58 1,2-Dichloropropane	63	11.430	11.430	0.000	86	7160	0.0784	0.0821	
59 Trichloroethene	130	11.462	11.466	-0.004	96	10208	0.0784	0.0791	
60 Dibromomethane	93	11.543	11.549	-0.006	95	7830	0.0784	0.0789	
62 Dichlorobromomethane	83	11.699	11.699	0.000	98	12595	0.0784	0.0762	
61 1,4-Dioxane	88	11.747	11.735	0.012	65	1683	0.0784	0.0822	
63 Methyl methacrylate	41	11.817	11.811	0.006	88	4505	0.0784	0.0813	
64 Methylcyclohexane	83	12.242	12.246	-0.004	93	14410	0.0784	0.0807	
65 4-Methyl-2-pentanone (MIBK)	43	12.678	12.672	0.006	96	8735	0.0784	0.0853	
66 cis-1,3-Dichloropropene	75	12.715	12.717	-0.002	96	9819	0.0784	0.0754	
67 trans-1,3-Dichloropropene	75	13.420	13.421	-0.001	97	7869	0.0784	0.0719	
68 Toluene	91	13.544	13.542	0.002	94	19797	0.0784	0.0849	
69 1,1,2-Trichloroethane	83	13.614	13.621	-0.007	95	5698	0.0784	0.0783	
70 2-Methylthiophene	97	13.689	13.695	-0.006	98	16558	0.0784	0.0790	
71 3-Methylthiophene	97	13.893	13.897	-0.004	98	16491	0.0784	0.0804	
72 2-Hexanone	58	14.023	14.020	0.003	91	3667	0.0784	0.0762	
73 n-Octane	85	14.243	14.244	-0.001	94	6745	0.0784	0.0844	
74 Chlorodibromomethane	129	14.318	14.325	-0.007	97	10874	0.0784	0.0713	
75 Ethylene Dibromide	107	14.614	14.616	-0.002	97	10084	0.0784	0.0750	
76 Tetrachloroethene	129	14.690	14.690	0.000	96	8353	0.0784	0.0863	
78 Chlorobenzene	112	15.572	15.573	-0.001	96	16269	0.0784	0.0817	
77 2,3-Dimethylheptane	43	15.599	15.601	-0.002	96	21181	0.0784	0.0857	
79 Ethylbenzene	91	15.868	15.866	0.002	98	21447	0.0784	0.0815	
80 2-Ethylthiophene	97	15.965	15.967	-0.002	97	17436	0.0784	0.0809	
81 m-Xylene & p-Xylene	91	16.029	16.029	0.000	99	30909	0.1568	0.1623	
82 n-Nonane	57	16.454	16.456	-0.002	95	13763	0.0784	0.0811	
83 Bromoform	173	16.470	16.474	-0.004	94	9687	0.0784	0.0633	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Styrene	104	16.497	16.494	0.003	97	9509	0.0784	0.0668	
85 o-Xylene	91	16.556	16.555	0.001	97	15911	0.0784	0.0819	
86 1,1,2,2-Tetrachloroethane	83	16.879	16.880	-0.001	97	10635	0.0784	0.0806	
87 1,2,3-Trichloropropane	110	17.040	17.039	0.001	96	2448	0.0784	0.0750	
88 Isopropylbenzene	105	17.143	17.143	0.000	97	20738	0.0784	0.0839	
89 N-Propylbenzene	120	17.686	17.690	-0.004	99	5030	0.0784	0.0790	
90 2-Chlorotoluene	126	17.729	17.733	-0.004	96	6386	0.0784	0.0811	
91 4-Ethyltoluene	105	17.842	17.845	-0.003	98	18503	0.0784	0.0855	
92 1,3,5-Trimethylbenzene	120	17.917	17.920	-0.003	92	8144	0.0784	0.0803	
93 Alpha Methyl Styrene	118	18.154	18.154	0.000	85	5248	0.0784	0.0602	
94 n-Decane	57	18.219	18.218	0.000	89	15461	0.0784	0.0822	
95 tert-Butylbenzene	119	18.348	18.349	-0.001	92	16675	0.0784	0.0863	
96 1,2,4-Trimethylbenzene	105	18.364	18.364	0.000	95	14806	0.0784	0.0849	
97 sec-Butylbenzene	105	18.622	18.623	-0.001	98	22583	0.0784	0.0854	
98 1,3-Dichlorobenzene	146	18.638	18.636	0.002	98	13221	0.0784	0.0791	
99 Benzyl chloride	91	18.708	18.712	-0.004	74	9846	0.0784	0.0719	
100 1,4-Dichlorobenzene	146	18.724	18.724	0.000	92	12616	0.0784	0.0781	
101 4-Isopropyltoluene	119	18.789	18.788	0.001	97	17388	0.0784	0.0830	
102 1,2,3-Trimethylbenzene	105	18.837	18.839	-0.002	98	11240	0.0784	0.0850	
103 Butylcyclohexane	83	18.896	18.897	-0.001	92	18208	0.0784	0.0813	
105 1,2-Dichlorobenzene	146	19.085	19.087	-0.002	90	12390	0.0784	0.0824	
104 2,3-Dihydroindene	117	19.085	19.087	-0.002	93	14426	0.0784	0.0827	
107 Indene	116	19.219	19.219	0.000	91	8918	0.0784	0.0750	
106 n-Butylbenzene	91	19.224	19.227	-0.003	98	17448	0.0784	0.0844	
108 Undecane	57	19.547	19.546	0.001	95	13210	0.0784	0.0794	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.601	19.602	-0.001	98	12350	0.0784	0.0821	
110 1,2-Dibromo-3-Chloropropan	157	19.698	19.698	0.000	90	3052	0.0784	0.0664	
111 1,2,4,5-Tetramethylbenzene	119	19.988	19.989	-0.001	97	14691	0.0784	0.0848	
112 1,2,3,5-Tetramethylbenzene	119	20.042	20.044	-0.002	94	9231	0.0784	0.0839	
113 1,2,3,4-Tetramethylbenzene	119	20.440	20.440	0.000	96	11776	0.0784	0.0825	
114 Dodecane	57	20.607	20.607	0.000	93	11041	0.0784	0.0782	
115 1,2,4-Trichlorobenzene	180	20.795	20.796	-0.001	92	6006	0.0784	0.0732	
116 Naphthalene	128	20.935	20.937	-0.002	98	11724	0.0784	0.0771	
117 Benzo(b)thiophene	134	21.043	21.042	0.001	97	5093	0.0784	0.0664	
118 Hexachlorobutadiene	225	21.156	21.157	-0.001	95	12057	0.0784	0.0834	
119 1,2,3-Trichlorobenzene	180	21.226	21.227	-0.001	92	6166	0.0784	0.0794	
120 2-Methylnaphthalene	142	21.920	21.921	-0.001	95	1737	0.2372	0.1700	
121 1-Methylnaphthalene	142	22.049	22.049	0.000	95	2497	0.2372	0.2234	
A 124 Toluene Range	1	13.544	(13.514-13.574)		0	43413	0.0784	0.0768	
A 125 C8 Range	1	14.246	(14.215-14.296)		0	66260	0.0784	0.0887	
S 126 Xylenes, Total	100				0		0.2353	0.2443	
S 127 1,2-Dichloroethene, Total	1				0		0.1568	0.1533	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

40L12DNP_00010

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC02.D

Injection Date: 24-Mar-2017 12:16:30

Instrument ID: MJ

Operator ID: 007126

Lims ID: IC L2

Worklist Smp#: 3

Client ID:

Purge Vol: 500.000 mL

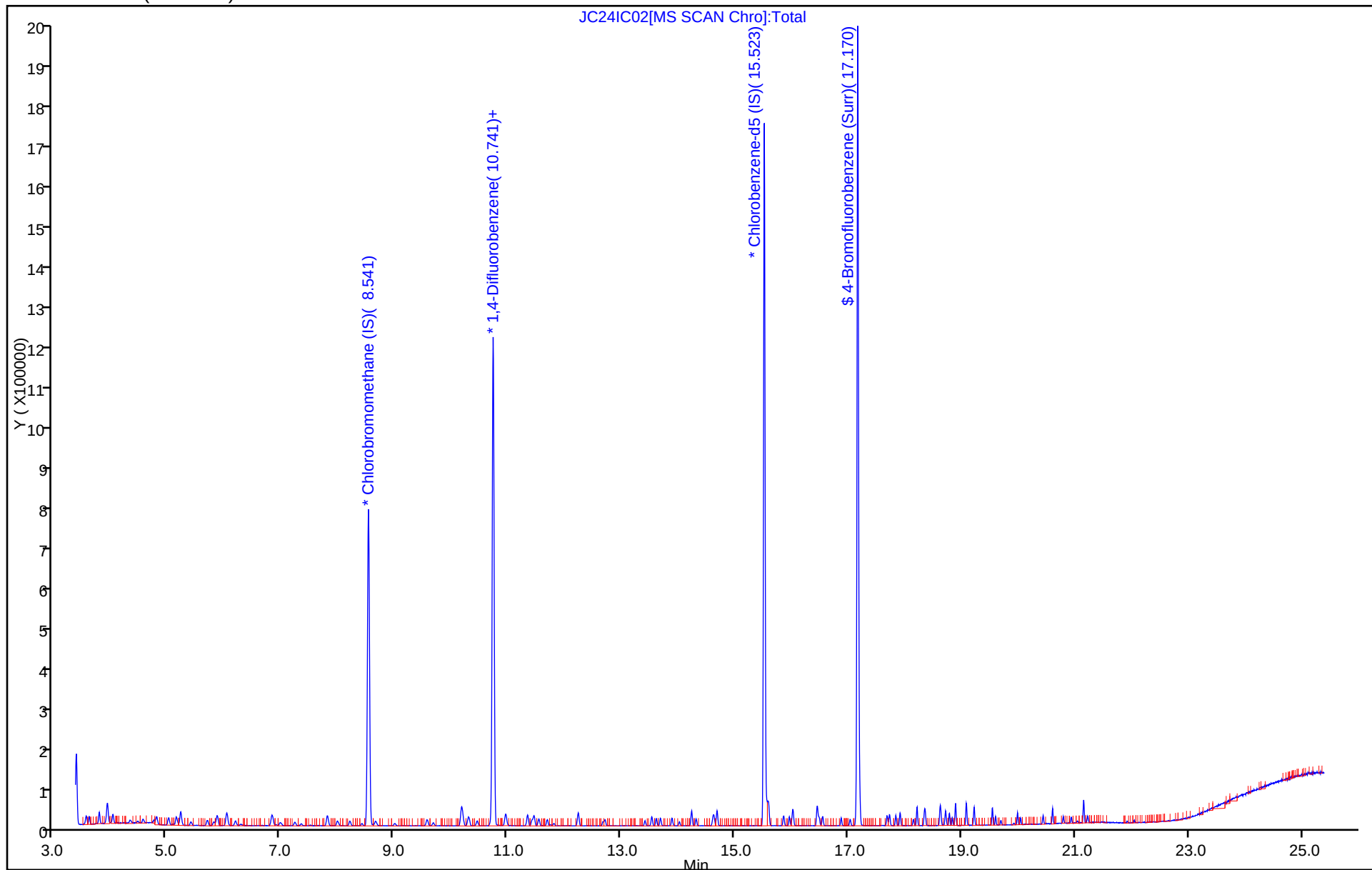
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC02.D

Injection Date: 24-Mar-2017 12:16:30

Instrument ID: MJ

Lims ID: IC L2

Client ID:

Operator ID: 007126

ALS Bottle#: 1

Worklist Smp#: 3

Purge Vol: 500.000 mL

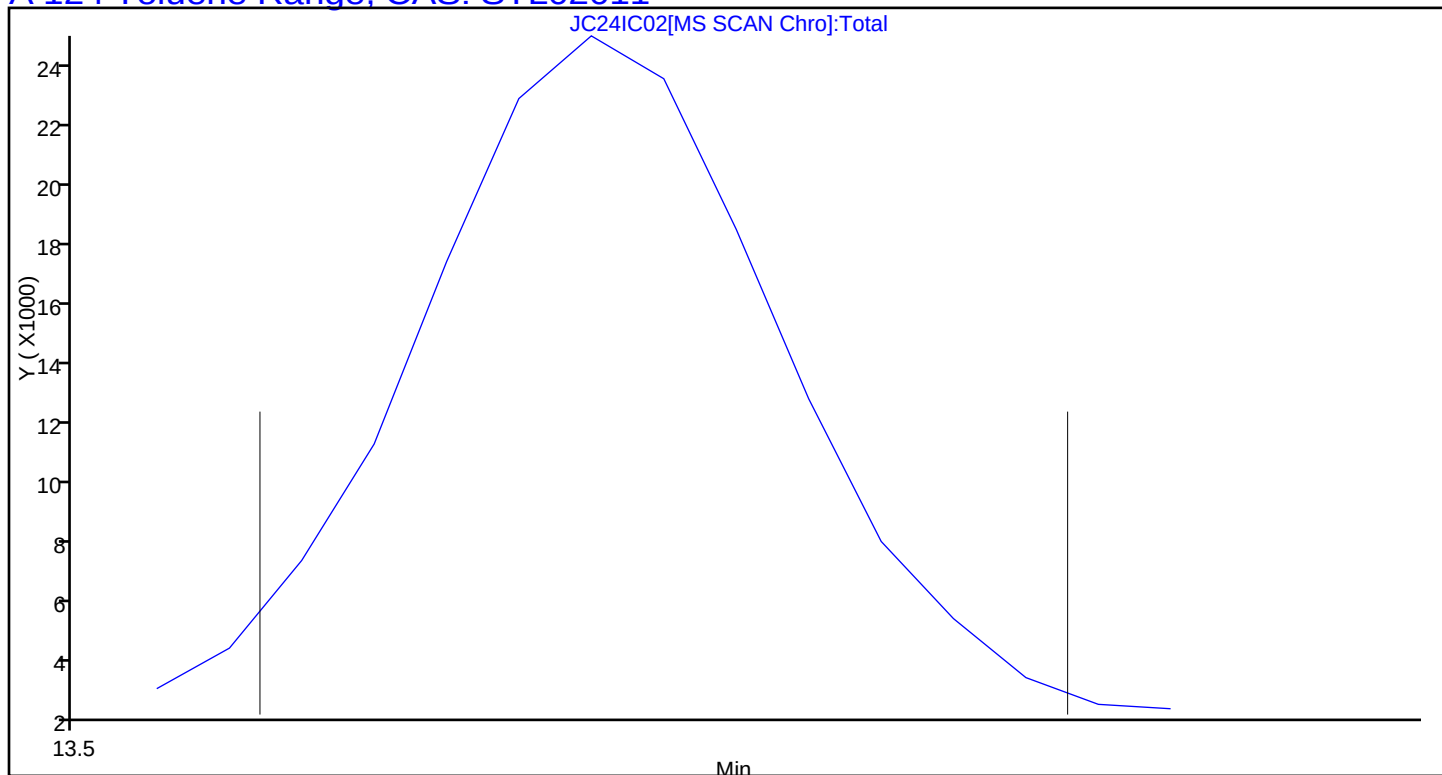
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC02.D

Injection Date: 24-Mar-2017 12:16:30

Instrument ID: MJ

Lims ID: IC L2

Client ID:

Operator ID: 007126

ALS Bottle#: 1

Worklist Smp#: 3

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

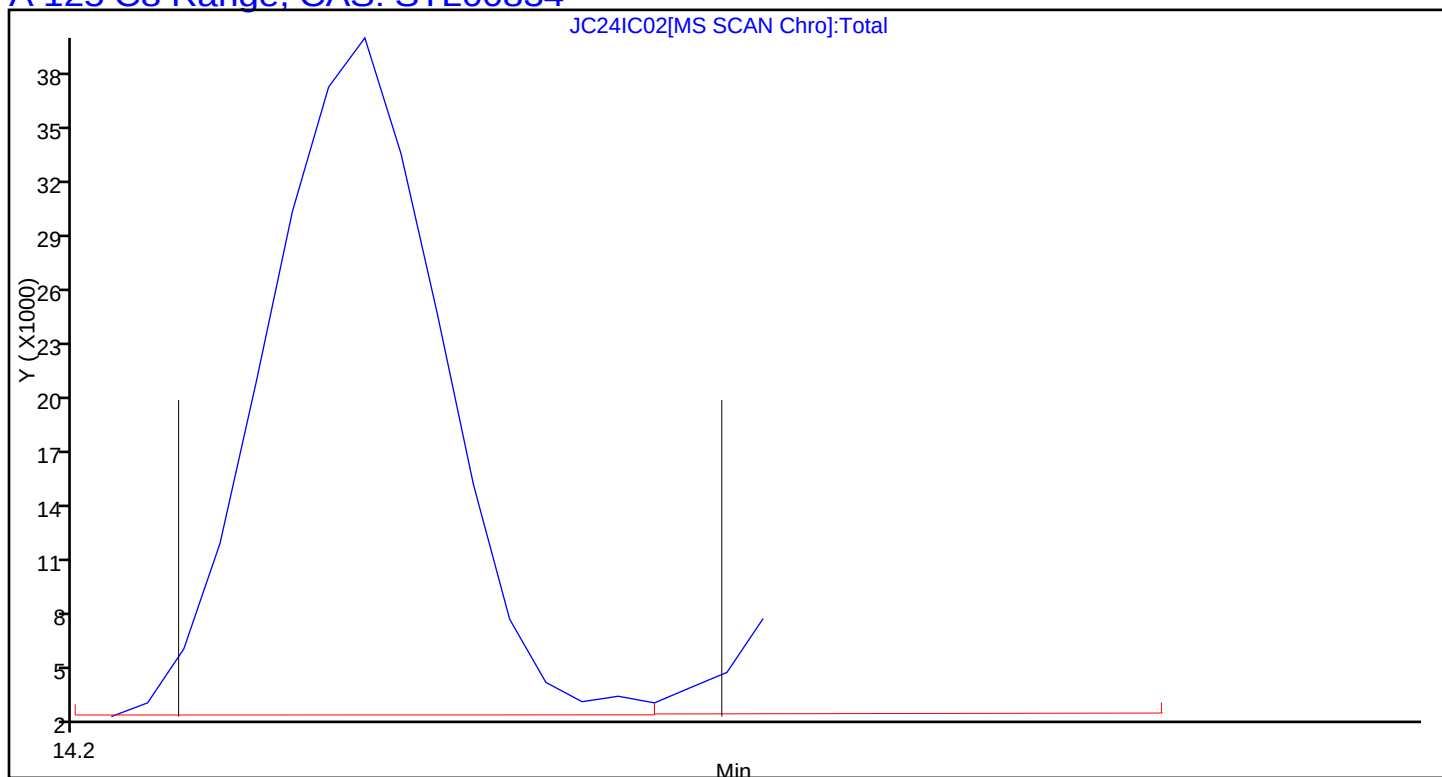
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 125 C8 Range, CAS: STL00834



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC02.D

Injection Date: 24-Mar-2017 12:16:30

Instrument ID: MJ

Lims ID: IC L2

Client ID:

Operator ID: 007126

ALS Bottle#:

1

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)

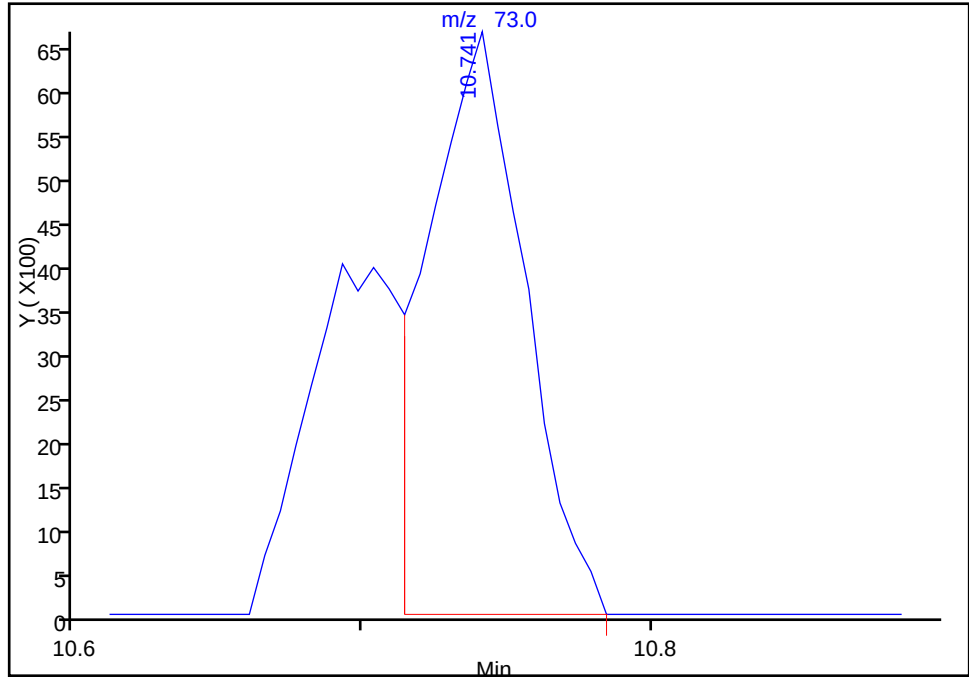
Detector MS SCAN

55 Tert-amyl methyl ether, CAS: 994-05-8

Signal: 1

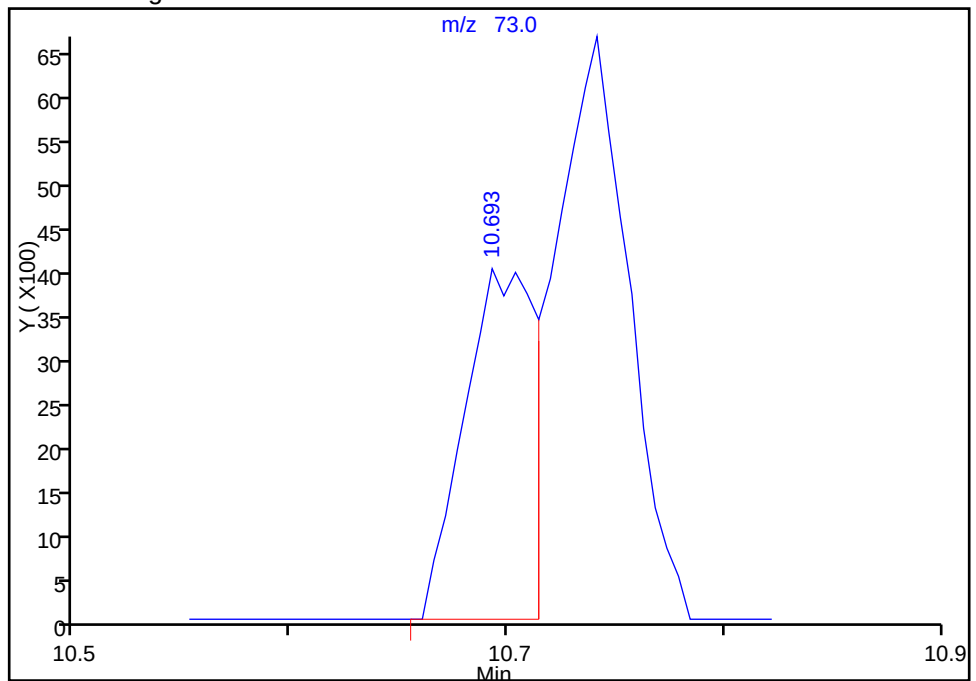
RT: 10.74
Area: 15707
Amount: 0.125853
Amount Units: ppb v/v

Processing Integration Results



RT: 10.69
Area: 9173
Amount: 0.080877
Amount Units: ppb v/v

Manual Integration Results



Reviewer: barlozhetskayaa, 27-Mar-2017 11:48:05

Audit Action: Split an Integrated Peak

Audit Reason: Wrong peak

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC03.D
 Lims ID: IC L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 24-Mar-2017 13:02:30 ALS Bottle#: 2 Worklist Smp#: 4
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004355-004
 Misc. Info.: 083682
 Operator ID: 007126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 27-Mar-2017 11:48:26 Calib Date: 24-Mar-2017 17:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: tajh

Date: 24-Mar-2017 13:44:44

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	8.542	8.549	-0.007	96	256840	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.742	10.746	-0.004	95	1159010	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.524	15.525	-0.001	88	1070614	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.170	17.172	-0.002	94	730689	4.00	3.91	
6 Chlorodifluoromethane	67	3.560	3.563	-0.003	97	3288	0.1587	0.1525	
7 Propene	41	3.571	3.572	-0.001	98	12999	0.1587	0.1706	
8 Dichlorodifluoromethane	85	3.619	3.621	-0.002	100	34614	0.1587	0.1572	
9 Chloromethane	52	3.797	3.795	0.002	60	4584	0.1587	0.1899	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.792	3.799	-0.007	91	15788	0.1587	0.1619	
11 Acetaldehyde	44	3.937	3.940	-0.003	98	37196	0.7935	1.61	
12 Vinyl chloride	62	3.948	3.955	-0.007	98	11078	0.1587	0.1560	
14 Butadiene	54	4.034	4.037	-0.003	67	8180	0.1587	0.1537	
13 Butane	43	4.034	4.038	-0.004	86	17381	0.1587	0.1624	
15 Bromomethane	94	4.340	4.343	-0.003	97	10225	0.1587	0.1544	
16 Chloroethane	64	4.469	4.477	-0.008	94	4479	0.1587	0.1532	
17 Ethanol	31	4.566	4.568	-0.002	97	13934	0.7935	0.9202	
18 Vinyl bromide	106	4.760	4.762	-0.002	97	8752	0.1587	0.1519	
19 2-Methylbutane	43	4.808	4.811	-0.003	93	16651	0.1587	0.1738	
20 Trichlorofluoromethane	101	5.018	5.022	-0.004	100	31820	0.1587	0.1574	
21 Acrolein	56	5.029	5.034	-0.005	91	3155	0.1587	0.1799	
22 Acetonitrile	40	5.099	5.098	0.001	98	3946	0.1587	0.1779	
23 Acetone	58	5.153	5.150	0.003	98	17099	0.4660	0.7933	
24 Isopropyl alcohol	45	5.223	5.228	-0.006	94	44045	0.4660	0.4990	
25 Pentane	72	5.233	5.233	0.000	90	1596	0.1587	0.1391	
26 Ethyl ether	31	5.405	5.407	-0.002	92	10832	0.1587	0.1592	
27 1,1-Dichloroethene	96	5.707	5.707	0.000	97	12020	0.1587	0.1554	
28 2-Methyl-2-propanol	59	5.803	5.808	-0.005	94	15742	0.1587	0.1653	
29 Acrylonitrile	53	5.798	5.809	-0.011	49	5947	0.1587	0.1552	
30 1,1,2-Trichloro-1,2,2-trif	101	5.873	5.878	-0.005	96	25307	0.1587	0.1548	
31 Methylene Chloride	84	6.035	6.043	-0.008	99	17007	0.1587	0.2143	

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	6.056	6.059	-0.003	96	11869	0.1587	0.1527	
33 Carbon disulfide	76	6.196	6.203	-0.007	99	34834	0.1587	0.1551	
34 trans-1,2-Dichloroethene	96	6.836	6.838	-0.002	97	12101	0.1587	0.1540	
35 2-Methylpentane	43	6.847	6.854	-0.007	95	28715	0.1587	0.1570	
36 Methyl tert-butyl ether	73	6.976	6.977	-0.001	96	19363	0.1587	0.1646	
37 1,1-Dichloroethane	63	7.245	7.249	-0.004	98	23795	0.1587	0.1548	
38 Vinyl acetate	43	7.353	7.359	-0.006	100	19138	0.1587	0.1527	
39 2-Butanone (MEK)	72	7.815	7.810	0.005	82	3678	0.1587	0.1946	
40 Hexane	56	7.815	7.821	-0.006	78	10486	0.1587	0.1555	
41 Isopropyl ether	45	7.988	7.988	0.000	97	27934	0.1587	0.1672	
42 cis-1,2-Dichloroethene	96	8.208	8.220	-0.012	95	12795	0.1587	0.1553	
43 Ethyl acetate	43	8.418	8.423	-0.005	98	16107	0.1587	0.1793	
44 Chloroform	83	8.552	8.561	-0.009	88	27094	0.1587	0.1598	
45 Tert-butyl ethyl ether	59	8.660	8.662	-0.002	96	22939	0.1587	0.1718	
46 Tetrahydrofuran	42	8.994	8.989	0.005	94	8885	0.1587	0.1729	
47 1,1,1-Trichloroethane	97	9.574	9.579	-0.005	96	27357	0.1587	0.1552	
48 1,2-Dichloroethane	62	9.687	9.691	-0.004	96	17815	0.1587	0.1614	
49 n-Butanol	31	10.172	10.166	0.006	53	3158	0.1587	0.1592	
50 Cyclohexane	69	10.177	10.185	-0.008	77	5458	0.1587	0.1560	
51 Benzene	78	10.182	10.186	-0.004	97	37205	0.1587	0.1638	
52 Carbon tetrachloride	117	10.204	10.210	-0.006	97	27498	0.1587	0.1569	
53 2,3-Dimethylpentane	71	10.311	10.313	-0.002	91	7907	0.1587	0.1607	
54 Thiophene	84	10.462	10.464	-0.002	97	20637	0.1587	0.1601	
55 Tert-amyl methyl ether	73	10.693	10.688	0.005	90	17071	0.1587	0.1550	
56 Isooctane	57	10.962	10.965	-0.003	98	64818	0.1587	0.1652	
57 n-Heptane	71	11.350	11.353	-0.003	93	12558	0.1587	0.1661	
58 1,2-Dichloropropane	63	11.425	11.430	-0.005	91	13224	0.1587	0.1594	
59 Trichloroethene	130	11.463	11.466	-0.003	95	21113	0.1587	0.1720	
60 Dibromomethane	93	11.543	11.549	-0.006	96	15419	0.1587	0.1634	
62 Dichlorobromomethane	83	11.694	11.699	-0.005	99	24774	0.1587	0.1576	
61 1,4-Dioxane	88	11.748	11.735	0.013	89	3551	0.1587	0.1825	
63 Methyl methacrylate	41	11.807	11.811	-0.004	92	8889	0.1587	0.1687	
64 Methylcyclohexane	83	12.243	12.246	-0.003	95	27890	0.1587	0.1643	
65 4-Methyl-2-pentanone (MIBK)	43	12.673	12.672	0.001	97	17401	0.1587	0.1788	
66 cis-1,3-Dichloropropene	75	12.711	12.717	-0.006	94	19614	0.1587	0.1585	
67 trans-1,3-Dichloropropene	75	13.415	13.421	-0.006	99	16374	0.1587	0.1540	
68 Toluene	91	13.539	13.542	-0.003	93	36334	0.1587	0.1605	
69 1,1,2-Trichloroethane	83	13.620	13.621	-0.001	98	11608	0.1587	0.1643	
70 2-Methylthiophene	97	13.695	13.695	0.000	97	32680	0.1587	0.1607	
71 3-Methylthiophene	97	13.900	13.897	0.003	99	32317	0.1587	0.1622	
72 2-Hexanone	58	14.023	14.020	0.003	93	7674	0.1587	0.1643	
73 n-Octane	85	14.238	14.244	-0.006	95	12310	0.1587	0.1586	
74 Chlorodibromomethane	129	14.325	14.325	0.000	97	21697	0.1587	0.1466	
75 Ethylene Dibromide	107	14.615	14.616	-0.001	97	20806	0.1587	0.1594	
76 Tetrachloroethene	129	14.685	14.690	-0.005	95	15577	0.1587	0.1657	
78 Chlorobenzene	112	15.567	15.573	-0.006	94	32400	0.1587	0.1675	
77 2,3-Dimethylheptane	43	15.599	15.601	-0.002	96	41073	0.1587	0.1712	
79 Ethylbenzene	91	15.863	15.866	-0.003	98	42135	0.1587	0.1648	
80 2-Ethylthiophene	97	15.965	15.967	-0.002	98	33699	0.1587	0.1611	
81 m-Xylene & p-Xylene	91	16.030	16.029	0.001	99	61033	0.3174	0.3301	
82 n-Nonane	57	16.455	16.456	-0.001	93	27982	0.1587	0.1697	
83 Bromoform	173	16.471	16.474	-0.003	96	20439	0.1587	0.1375	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Styrene	104	16.492	16.494	-0.002	98	20227	0.1587	0.1464	
85 o-Xylene	91	16.552	16.555	-0.003	99	30482	0.1587	0.1617	
86 1,1,2,2-Tetrachloroethane	83	16.880	16.880	0.000	99	19396	0.1587	0.1514	
87 1,2,3-Trichloropropane	110	17.036	17.039	-0.003	96	5296	0.1587	0.1672	
88 Isopropylbenzene	105	17.143	17.143	0.000	96	39844	0.1587	0.1660	
89 N-Propylbenzene	120	17.692	17.690	0.002	99	10395	0.1587	0.1680	
90 2-Chlorotoluene	126	17.730	17.733	-0.003	97	13023	0.1587	0.1702	
91 4-Ethyltoluene	105	17.843	17.845	-0.002	98	36185	0.1587	0.1721	
92 1,3,5-Trimethylbenzene	120	17.918	17.920	-0.002	94	17459	0.1587	0.1773	
93 Alpha Methyl Styrene	118	18.149	18.154	-0.005	86	11861	0.1587	0.1400	
94 n-Decane	57	18.214	18.218	-0.004	90	30204	0.1587	0.1653	
95 tert-Butylbenzene	119	18.348	18.349	-0.001	93	33295	0.1587	0.1775	
96 1,2,4-Trimethylbenzene	105	18.365	18.364	0.001	96	30374	0.1587	0.1794	
97 sec-Butylbenzene	105	18.623	18.623	0.000	98	45836	0.1587	0.1784	
98 1,3-Dichlorobenzene	146	18.634	18.636	-0.002	98	26765	0.1587	0.1649	
99 Benzyl chloride	91	18.709	18.712	-0.003	98	21798	0.1587	0.1639	
100 1,4-Dichlorobenzene	146	18.725	18.724	0.001	95	25293	0.1587	0.1612	
101 4-Isopropyltoluene	119	18.784	18.788	-0.004	97	35295	0.1587	0.1735	
102 1,2,3-Trimethylbenzene	105	18.838	18.839	-0.001	98	22881	0.1587	0.1781	
103 Butylcyclohexane	83	18.897	18.897	0.000	92	36240	0.1587	0.1666	
105 1,2-Dichlorobenzene	146	19.085	19.087	-0.002	88	24531	0.1587	0.1679	
104 2,3-Dihydroindene	117	19.085	19.087	-0.002	94	29289	0.1587	0.1728	
107 Indene	116	19.220	19.219	0.001	88	18059	0.1587	0.1564	
106 n-Butylbenzene	91	19.225	19.227	-0.002	98	35291	0.1587	0.1758	
108 Undecane	57	19.543	19.546	-0.003	96	26713	0.1587	0.1654	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.602	19.602	0.000	98	24778	0.1587	0.1696	
110 1,2-Dibromo-3-Chloropropan	157	19.699	19.698	0.001	96	6532	0.1587	0.1463	
111 1,2,4,5-Tetramethylbenzene	119	19.989	19.989	0.000	97	28106	0.1587	0.1670	
112 1,2,3,5-Tetramethylbenzene	119	20.043	20.044	-0.001	95	17391	0.1587	0.1627	
113 1,2,3,4-Tetramethylbenzene	119	20.436	20.440	-0.004	98	22386	0.1587	0.1615	
114 Dodecane	57	20.608	20.607	0.001	95	21762	0.1587	0.1588	
115 1,2,4-Trichlorobenzene	180	20.796	20.796	0.000	92	11734	0.1587	0.1474	
116 Naphthalene	128	20.936	20.937	-0.001	99	23534	0.1587	0.1593	
117 Benzo(b)thiophene	134	21.044	21.042	0.002	99	10627	0.1587	0.1427	
118 Hexachlorobutadiene	225	21.156	21.157	-0.001	95	21366	0.1587	0.1522	
119 1,2,3-Trichlorobenzene	180	21.226	21.227	-0.001	95	11962	0.1587	0.1586	
120 2-Methylnaphthalene	142	21.920	21.921	-0.001	97	3586	0.4801	0.3615	
121 1-Methylnaphthalene	142	22.049	22.049	0.000	97	4628	0.4801	0.4263	
A 124 Toluene Range	1	13.539	(13.509-13.569)		0	81668	0.1587	0.1487	
A 125 C8 Range	1	14.241	(14.216-14.281)		0	125560	0.1587	0.1731	
S 126 Xylenes, Total	100				0		0.4761	0.4917	
S 127 1,2-Dichloroethene, Total	1				0		0.3174	0.3093	

Reagents:

40L3DNP_00011

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC03.D

Injection Date: 24-Mar-2017 13:02:30

Instrument ID: MJ

Operator ID: 007126

Lims ID: IC L3

Worklist Smp#: 4

Client ID:

Purge Vol: 500.000 mL

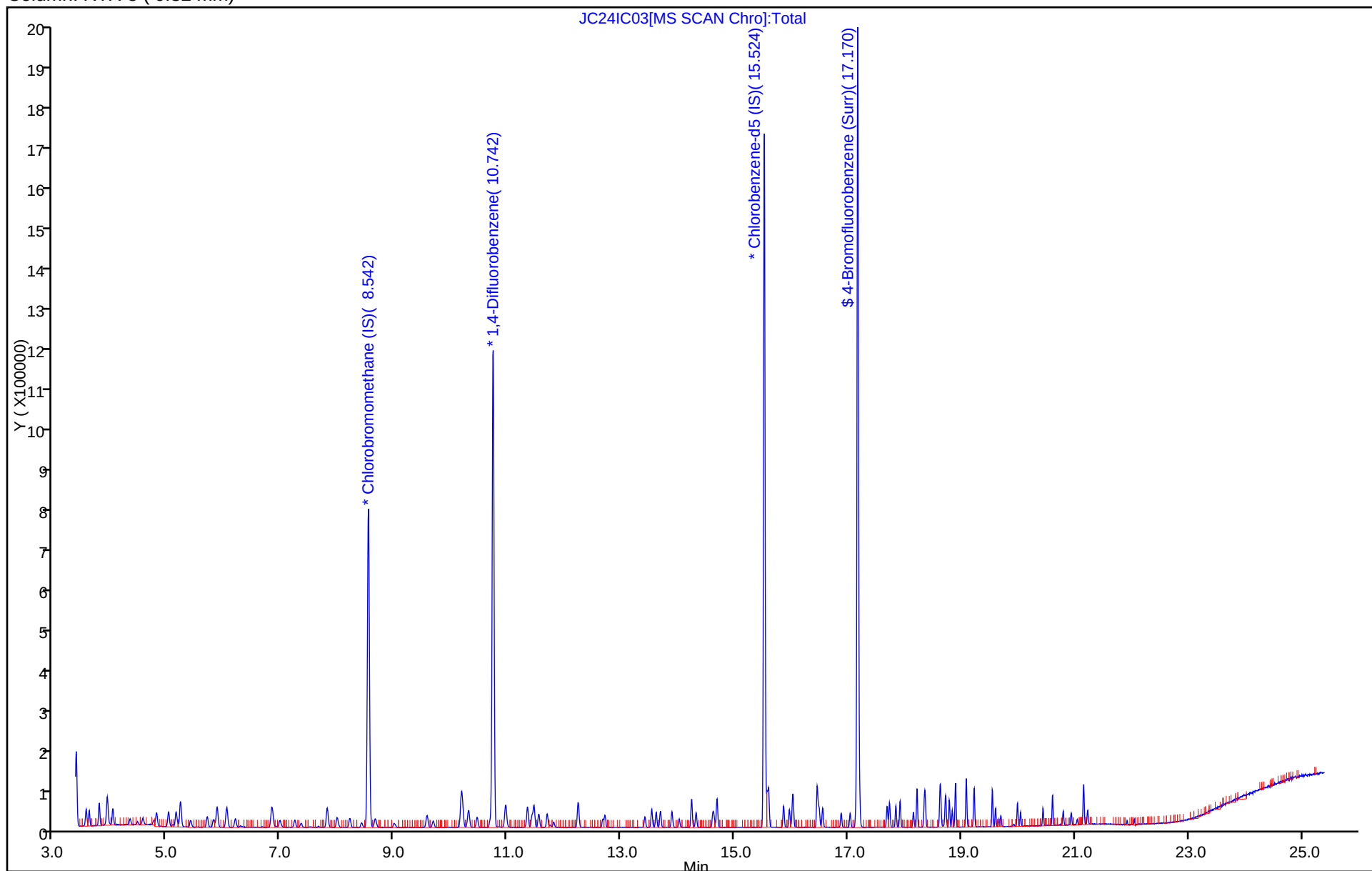
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC03.D

Injection Date: 24-Mar-2017 13:02:30

Instrument ID: MJ

Lims ID: IC L3

Client ID:

Operator ID: 007126

ALS Bottle#: 2

Worklist Smp#: 4

Purge Vol: 500.000 mL

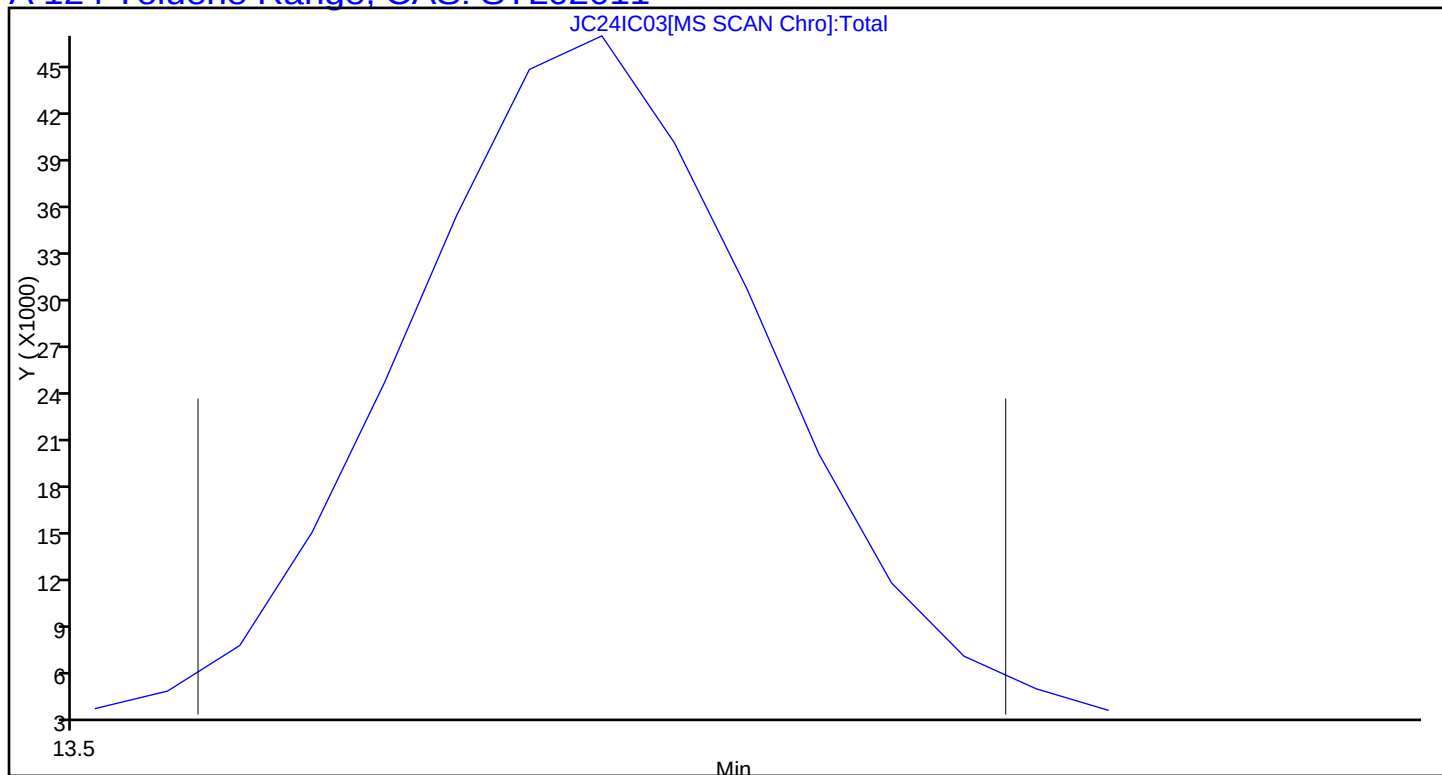
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 124 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC03.D

Injection Date: 24-Mar-2017 13:02:30

Instrument ID: MJ

Lims ID: IC L3

Client ID:

Operator ID: 007126

ALS Bottle#: 2

Worklist Smp#: 4

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

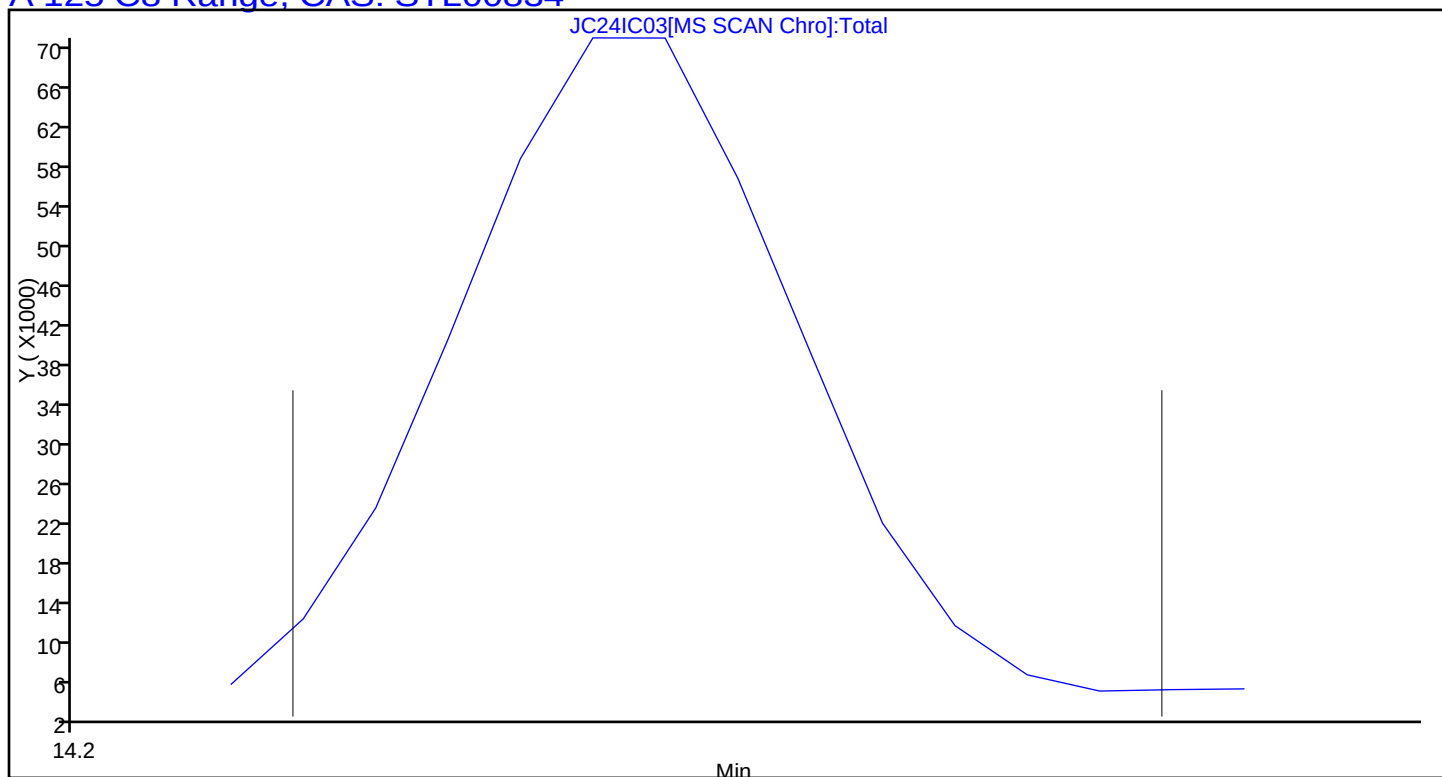
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 125 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC04.D
 Lims ID: IC L4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 24-Mar-2017 13:48:30 ALS Bottle#: 3 Worklist Smp#: 5
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004355-005
 Misc. Info.: 083681
 Operator ID: 007126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 27-Mar-2017 11:48:38 Calib Date: 24-Mar-2017 17:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: tajh

Date: 24-Mar-2017 14:27:41

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	8.547	8.549	-0.002	96	243909	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.742	10.746	-0.004	95	1152077	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.524	15.525	-0.001	88	1029669	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.170	17.172	-0.002	94	727612	4.00	4.05	
6 Chlorodifluoromethane	67	3.566	3.563	0.003	97	8143	0.4001	0.3976	
7 Propene	41	3.571	3.572	-0.001	99	30076	0.4001	0.4157	
8 Dichlorodifluoromethane	85	3.620	3.621	-0.001	100	84716	0.4001	0.4052	
9 Chloromethane	52	3.792	3.795	-0.003	73	10425	0.4001	0.4547	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.797	3.799	-0.002	92	33898	0.4001	0.3660	
11 Acetaldehyde	44	3.937	3.940	-0.003	98	63260	2.00	2.88	
12 Vinyl chloride	62	3.953	3.955	-0.002	99	26865	0.4001	0.3984	
14 Butadiene	54	4.034	4.037	-0.003	67	20141	0.4001	0.3986	
13 Butane	43	4.039	4.038	0.001	85	41221	0.4001	0.4056	
15 Bromomethane	94	4.340	4.343	-0.003	98	23692	0.4001	0.3767	
16 Chloroethane	64	4.480	4.477	0.003	93	11063	0.4001	0.3984	
17 Ethanol	31	4.566	4.568	-0.002	97	31436	2.00	2.19	
18 Vinyl bromide	106	4.760	4.762	-0.002	98	20516	0.4001	0.3751	
19 2-Methylbutane	43	4.808	4.811	-0.003	92	31515	0.4001	0.3463	
20 Trichlorofluoromethane	101	5.018	5.022	-0.004	100	68858	0.4001	0.3587	
21 Acrolein	56	5.029	5.034	-0.005	94	8181	0.4001	0.4913	
22 Acetonitrile	40	5.094	5.098	-0.004	99	9606	0.4001	0.4560	
23 Acetone	58	5.153	5.150	0.003	98	32772	1.17	1.60	
24 Isopropyl alcohol	45	5.223	5.228	-0.005	93	112034	1.17	1.34	
25 Pentane	72	5.233	5.233	0.000	94	4207	0.4001	0.3861	
26 Ethyl ether	31	5.406	5.407	-0.001	93	29204	0.4001	0.4521	
27 1,1-Dichloroethene	96	5.701	5.707	-0.006	95	26528	0.4001	0.3612	
28 2-Methyl-2-propanol	59	5.804	5.808	-0.004	94	34537	0.4001	0.3819	
29 Acrylonitrile	53	5.809	5.809	0.000	68	17528	0.4001	0.4817	
30 1,1,2-Trichloro-1,2,2-trif	101	5.879	5.878	0.001	97	58673	0.4001	0.3779	
31 Methylene Chloride	84	6.040	6.043	-0.003	99	31831	0.4001	0.4224	

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	6.056	6.059	-0.003	95	30147	0.4001	0.4085	
33 Carbon disulfide	76	6.202	6.203	-0.001	99	79950	0.4001	0.3748	
34 trans-1,2-Dichloroethene	96	6.831	6.838	-0.007	96	28394	0.4001	0.3804	
35 2-Methylpentane	43	6.853	6.854	-0.001	96	65747	0.4001	0.3786	
36 Methyl tert-butyl ether	73	6.976	6.977	-0.001	97	49779	0.4001	0.4455	
37 1,1-Dichloroethane	63	7.245	7.249	-0.004	100	58937	0.4001	0.4037	
38 Vinyl acetate	43	7.353	7.359	-0.006	100	56121	0.4001	0.4714	
39 2-Butanone (MEK)	72	7.816	7.810	0.006	95	7843	0.4001	0.4370	
40 Hexane	56	7.821	7.821	0.000	80	24433	0.4001	0.3816	
41 Isopropyl ether	45	7.988	7.988	0.000	97	69892	0.4001	0.4404	
42 cis-1,2-Dichloroethene	96	8.219	8.220	-0.001	96	30938	0.4001	0.3955	
43 Ethyl acetate	43	8.418	8.423	-0.005	98	37413	0.4001	0.4385	
44 Chloroform	83	8.558	8.561	-0.003	96	65567	0.4001	0.4073	
45 Tert-butyl ethyl ether	59	8.660	8.662	-0.002	96	55616	0.4001	0.4387	
46 Tetrahydrofuran	42	8.988	8.989	-0.001	94	21267	0.4001	0.4357	
47 1,1,1-Trichloroethane	97	9.575	9.579	-0.004	96	65774	0.4001	0.3930	
48 1,2-Dichloroethane	62	9.688	9.691	-0.003	97	43197	0.4001	0.3937	
49 n-Butanol	31	10.172	10.166	0.006	60	7450	0.4001	0.3777	
50 Cyclohexane	69	10.183	10.185	-0.002	73	13196	0.4001	0.3793	
51 Benzene	78	10.183	10.186	-0.003	97	89218	0.4001	0.3951	
52 Carbon tetrachloride	117	10.209	10.210	-0.001	97	63856	0.4001	0.3666	
53 2,3-Dimethylpentane	71	10.306	10.313	-0.007	90	18484	0.4001	0.3780	
54 Thiophene	84	10.462	10.464	-0.002	97	51210	0.4001	0.3996	
55 Tert-amyl methyl ether	73	10.694	10.688	0.006	94	47123	0.4001	0.4449	
56 Isooctane	57	10.963	10.965	-0.002	99	150029	0.4001	0.3847	
57 n-Heptane	71	11.350	11.353	-0.003	94	28922	0.4001	0.3849	
58 1,2-Dichloropropane	63	11.425	11.430	-0.005	90	32959	0.4001	0.3997	
59 Trichloroethene	130	11.463	11.466	-0.003	97	46534	0.4001	0.3815	
60 Dibromomethane	93	11.549	11.549	0.000	96	36329	0.4001	0.3872	
62 Dichlorobromomethane	83	11.700	11.699	0.001	99	60187	0.4001	0.3852	
61 1,4-Dioxane	88	11.737	11.735	0.002	91	7383	0.4001	0.3817	
63 Methyl methacrylate	41	11.807	11.811	-0.004	93	20366	0.4001	0.3889	
64 Methylcyclohexane	83	12.243	12.246	-0.003	94	63189	0.4001	0.3744	
65 4-Methyl-2-pentanone (MIBK)	43	12.673	12.672	0.001	97	36967	0.4001	0.3822	
66 cis-1,3-Dichloropropene	75	12.716	12.717	-0.001	95	48146	0.4001	0.3914	
67 trans-1,3-Dichloropropene	75	13.421	13.421	0.000	99	41552	0.4001	0.4065	
68 Toluene	91	13.539	13.542	-0.003	93	91946	0.4001	0.4223	
69 1,1,2-Trichloroethane	83	13.620	13.621	-0.001	98	28730	0.4001	0.4229	
70 2-Methylthiophene	97	13.695	13.695	0.000	98	81695	0.4001	0.4176	
71 3-Methylthiophene	97	13.894	13.897	-0.003	99	78853	0.4001	0.4116	
72 2-Hexanone	58	14.023	14.020	0.003	93	17005	0.4001	0.3785	
73 n-Octane	85	14.239	14.244	-0.005	95	31157	0.4001	0.4174	
74 Chlorodibromomethane	129	14.325	14.325	0.000	98	57234	0.4001	0.4020	
75 Ethylene Dibromide	107	14.615	14.616	-0.001	99	50743	0.4001	0.4043	
76 Tetrachloroethene	129	14.691	14.690	0.001	96	36604	0.4001	0.4050	
78 Chlorobenzene	112	15.573	15.573	0.000	94	77984	0.4001	0.4192	
77 2,3-Dimethylheptane	43	15.600	15.601	-0.001	96	99511	0.4001	0.4312	
79 Ethylbenzene	91	15.863	15.866	-0.003	98	112625	0.4001	0.4581	
80 2-Ethylthiophene	97	15.965	15.967	-0.002	98	87162	0.4001	0.4332	
81 m-Xylene & p-Xylene	91	16.025	16.029	-0.004	99	171615	0.8002	0.9650	
82 n-Nonane	57	16.455	16.456	-0.001	94	67679	0.4001	0.4269	
83 Bromoform	173	16.471	16.474	-0.003	97	54967	0.4001	0.3844	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Styrene	104	16.493	16.494	-0.001	98	59858	0.4001	0.4505	
85 o-Xylene	91	16.552	16.555	-0.003	99	88569	0.4001	0.4884	
86 1,1,2,2-Tetrachloroethane	83	16.880	16.880	0.000	99	57251	0.4001	0.4646	
87 1,2,3-Trichloropropane	110	17.036	17.039	-0.003	97	13537	0.4001	0.4443	
88 Isopropylbenzene	105	17.144	17.143	0.001	97	112022	0.4001	0.4852	
89 N-Propylbenzene	120	17.692	17.690	0.002	99	28314	0.4001	0.4759	
90 2-Chlorotoluene	126	17.735	17.733	0.002	97	32367	0.4001	0.4399	
91 4-Ethyltoluene	105	17.843	17.845	-0.002	98	90088	0.4001	0.4455	
92 1,3,5-Trimethylbenzene	120	17.918	17.920	-0.002	93	42367	0.4001	0.4474	
93 Alpha Methyl Styrene	118	18.155	18.154	0.001	88	33847	0.4001	0.4155	
94 n-Decane	57	18.214	18.218	-0.004	89	79439	0.4001	0.4520	
95 tert-Butylbenzene	119	18.349	18.349	0.000	92	79912	0.4001	0.4430	
96 1,2,4-Trimethylbenzene	105	18.365	18.364	0.001	96	72913	0.4001	0.4479	
97 sec-Butylbenzene	105	18.623	18.623	0.000	98	110612	0.4001	0.4476	
98 1,3-Dichlorobenzene	146	18.634	18.636	-0.002	98	66929	0.4001	0.4288	
99 Benzyl chloride	91	18.709	18.712	-0.003	98	50707	0.4001	0.3963	
100 1,4-Dichlorobenzene	146	18.720	18.724	-0.004	95	64366	0.4001	0.4265	
101 4-Isopropyltoluene	119	18.784	18.788	-0.004	97	84609	0.4001	0.4325	
102 1,2,3-Trimethylbenzene	105	18.838	18.839	-0.001	98	52195	0.4001	0.4224	
103 Butylcyclohexane	83	18.897	18.897	0.000	92	90046	0.4001	0.4304	
105 1,2-Dichlorobenzene	146	19.086	19.087	-0.001	89	64009	0.4001	0.4556	
104 2,3-Dihydroindene	117	19.086	19.087	-0.001	93	74472	0.4001	0.4569	
107 Indene	116	19.220	19.219	0.001	94	45883	0.4001	0.4131	
106 n-Butylbenzene	91	19.225	19.227	-0.002	98	82788	0.4001	0.4288	
108 Undecane	57	19.543	19.546	-0.003	96	70617	0.4001	0.4547	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.602	19.602	0.000	98	57805	0.4001	0.4113	
110 1,2-Dibromo-3-Chloropropan	157	19.699	19.698	0.001	95	16264	0.4001	0.3788	
111 1,2,4,5-Tetramethylbenzene	119	19.989	19.989	0.000	97	64731	0.4001	0.4000	
112 1,2,3,5-Tetramethylbenzene	119	20.043	20.044	-0.001	95	40879	0.4001	0.3977	
113 1,2,3,4-Tetramethylbenzene	119	20.441	20.440	0.001	97	50767	0.4001	0.3809	
114 Dodecane	57	20.608	20.607	0.001	95	50636	0.4001	0.3842	
115 1,2,4-Trichlorobenzene	180	20.796	20.796	0.000	94	28658	0.4001	0.3742	
116 Naphthalene	128	20.936	20.937	-0.001	99	52201	0.4001	0.3674	
117 Benzo(b)thiophene	134	21.044	21.042	0.002	99	24613	0.4001	0.3436	
118 Hexachlorobutadiene	225	21.157	21.157	0.000	87	58489	0.4001	0.4332	
119 1,2,3-Trichlorobenzene	180	21.227	21.227	0.000	94	26163	0.4001	0.3607	
120 2-Methylnaphthalene	142	21.921	21.921	0.000	96	7339	1.21	0.7692	
121 1-Methylnaphthalene	142	22.050	22.049	0.001	98	8021	1.21	0.7682	
A 124 Toluene Range	1	13.539	(13.509-13.569)		0	216753	0.4001	0.4103	
A 125 C8 Range	1	14.247	(14.216-14.297)		0	303706	0.4001	0.4353	
S 126 Xylenes, Total	100				0		1.20	1.45	
S 127 1,2-Dichloroethene, Total	1				0		0.8002	0.7759	

Reagents:

40L4DNP_00010

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC04.D

Injection Date: 24-Mar-2017 13:48:30

Instrument ID: MJ

Operator ID: 007126

Lims ID: IC L4

Worklist Smp#: 5

Client ID:

Purge Vol: 500.000 mL

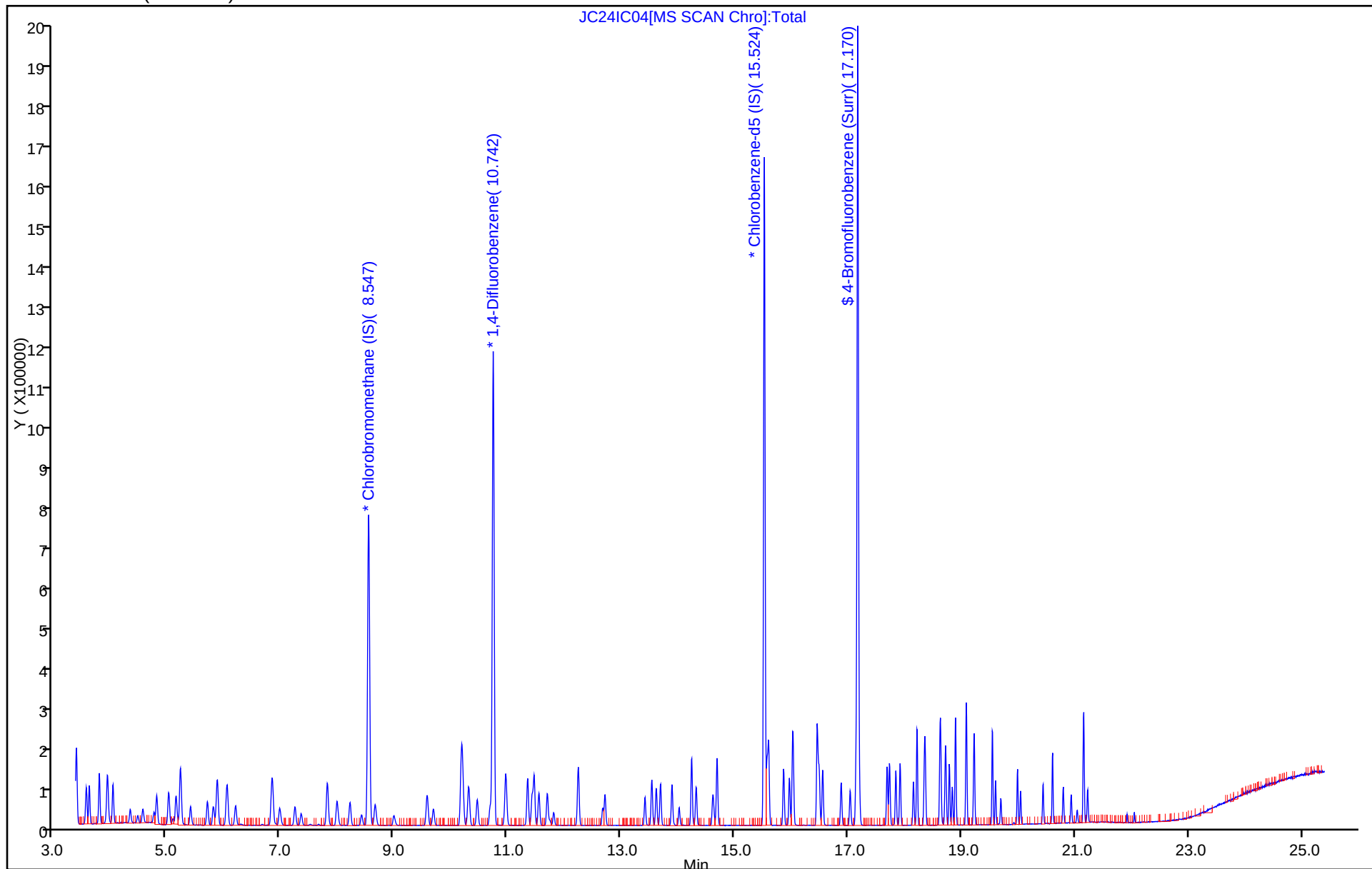
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC04.D

Injection Date: 24-Mar-2017 13:48:30

Instrument ID: MJ

Lims ID: IC L4

Client ID:

Operator ID: 007126

ALS Bottle#: 3

Worklist Smp#: 5

Purge Vol: 500.000 mL

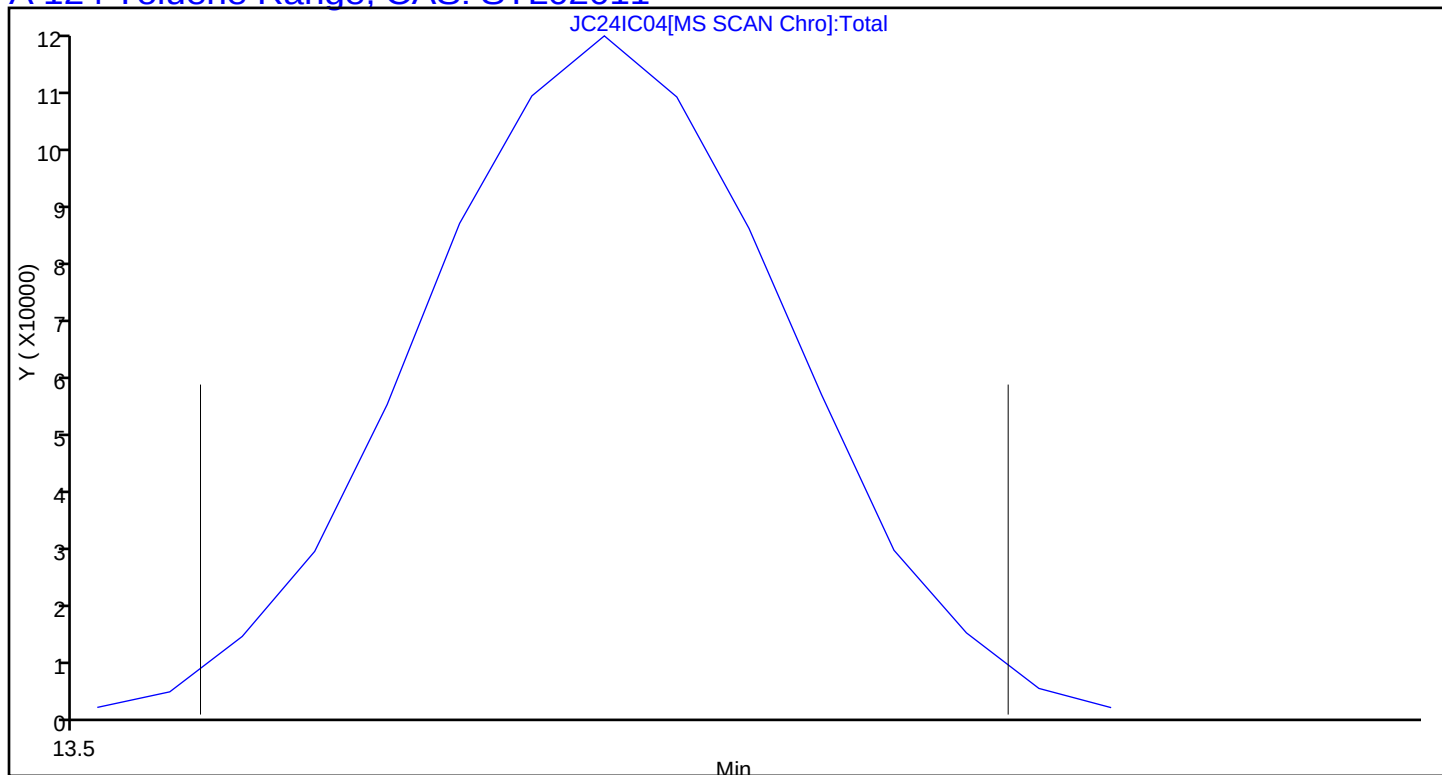
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 124 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC04.D

Injection Date: 24-Mar-2017 13:48:30

Instrument ID: MJ

Lims ID: IC L4

Client ID:

Operator ID: 007126

ALS Bottle#: 3

Worklist Smp#: 5

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

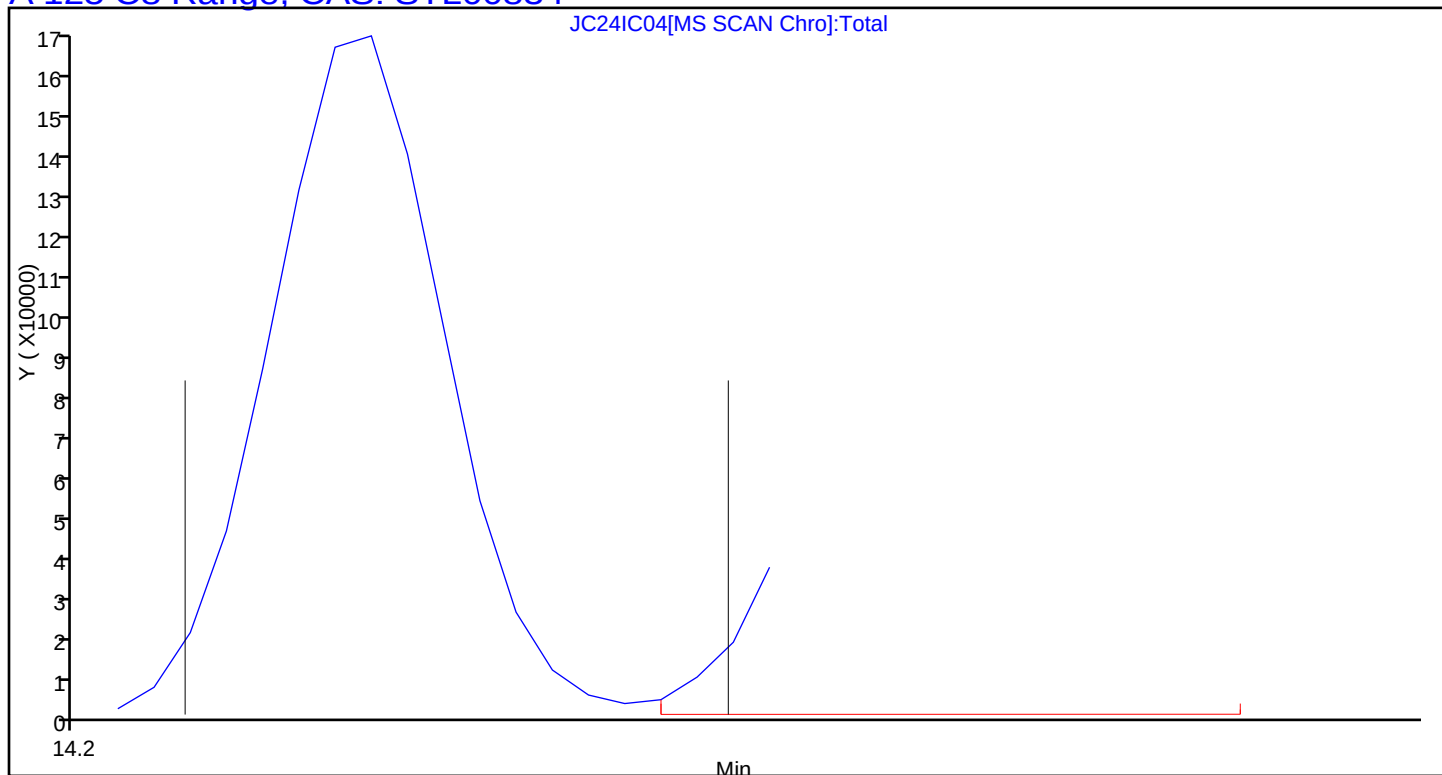
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 125 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC05.D
 Lims ID: IC L5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 24-Mar-2017 14:35:30 ALS Bottle#: 4 Worklist Smp#: 6
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004355-006
 Misc. Info.: 083680
 Operator ID: 007126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 27-Mar-2017 11:48:50 Calib Date: 24-Mar-2017 17:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: tajh

Date: 24-Mar-2017 15:17:38

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	8.546	8.549	-0.003	96	265173	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.741	10.746	-0.005	95	1202269	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.523	15.525	-0.002	88	1106803	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.170	17.172	-0.002	95	767497	4.00	3.97	
6 Chlorodifluoromethane	67	3.560	3.563	-0.003	97	21639	1.00	0.9720	
7 Propene	41	3.570	3.572	-0.002	99	75414	1.00	0.9588	
8 Dichlorodifluoromethane	85	3.619	3.621	-0.002	100	219695	1.00	0.9666	
9 Chloromethane	52	3.791	3.795	-0.004	99	24297	1.00	0.9748	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.796	3.799	-0.003	92	108588	1.00	1.08	
11 Acetaldehyde	44	3.936	3.940	-0.004	99	125535	5.01	5.26	
12 Vinyl chloride	62	3.952	3.955	-0.003	99	72316	1.00	0.9865	
14 Butadiene	54	4.033	4.037	-0.004	68	53423	1.00	0.9724	
13 Butane	43	4.033	4.038	-0.005	85	108245	1.00	0.9797	
15 Bromomethane	94	4.340	4.343	-0.003	98	63511	1.00	0.9288	
16 Chloroethane	64	4.474	4.477	-0.003	94	31052	1.00	1.03	
17 Ethanol	31	4.560	4.568	-0.008	97	72742	5.01	4.65	
18 Vinyl bromide	106	4.759	4.762	-0.003	98	58059	1.00	0.9763	
19 2-Methylbutane	43	4.808	4.811	-0.003	94	96238	1.00	0.9727	
20 Trichlorofluoromethane	101	5.017	5.022	-0.005	99	208467	1.00	1.00	
21 Acrolein	56	5.033	5.034	-0.001	94	17846	1.00	0.9858	
22 Acetonitrile	40	5.093	5.098	-0.005	99	20225	1.00	0.8830	
23 Acetone	58	5.146	5.150	-0.004	98	66610	2.94	2.99	
24 Isopropyl alcohol	45	5.216	5.228	-0.012	95	247537	2.94	2.72	
25 Pentane	72	5.227	5.233	-0.006	97	12170	1.00	1.03	
26 Ethyl ether	31	5.399	5.407	-0.008	93	71239	1.00	1.01	
27 1,1-Dichloroethene	96	5.701	5.707	-0.006	96	79076	1.00	0.99	
28 2-Methyl-2-propanol	59	5.797	5.808	-0.011	95	92261	1.00	0.9383	
29 Acrylonitrile	53	5.808	5.809	-0.001	94	39574	1.00	1.00	
30 1,1,2-Trichloro-1,2,2-trif	101	5.873	5.878	-0.005	97	170020	1.00	1.01	
31 Methylene Chloride	84	6.039	6.043	-0.004	99	79092	1.00	0.9653	

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	6.056	6.059	-0.003	94	77620	1.00	0.9675	
33 Carbon disulfide	76	6.201	6.203	-0.002	99	228634	1.00	0.9858	
34 trans-1,2-Dichloroethene	96	6.836	6.838	-0.002	97	82007	1.00	1.01	
35 2-Methylpentane	43	6.852	6.854	-0.002	96	188220	1.00	1.00	
36 Methyl tert-butyl ether	73	6.970	6.977	-0.007	97	117931	1.00	0.9709	
37 1,1-Dichloroethane	63	7.250	7.249	0.001	100	159357	1.00	1.00	
38 Vinyl acetate	43	7.357	7.359	-0.002	100	122602	1.00	0.9473	
39 2-Butanone (MEK)	72	7.804	7.810	-0.006	95	18341	1.00	0.9400	
40 Hexane	56	7.815	7.821	-0.006	89	69696	1.00	1.00	
41 Isopropyl ether	45	7.981	7.988	-0.007	98	162367	1.00	0.9412	
42 cis-1,2-Dichloroethene	96	8.218	8.220	-0.002	96	84853	1.00	1.00	
43 Ethyl acetate	43	8.417	8.423	-0.006	98	88516	1.00	0.9543	
44 Chloroform	83	8.557	8.561	-0.004	97	174118	1.00	0.99	
45 Tert-butyl ethyl ether	59	8.654	8.662	-0.008	96	131813	1.00	0.9563	
46 Tetrahydrofuran	42	8.982	8.989	-0.007	94	50465	1.00	0.9510	
47 1,1,1-Trichloroethane	97	9.579	9.579	0.000	96	180553	1.00	0.99	
48 1,2-Dichloroethane	62	9.687	9.691	-0.004	97	116036	1.00	1.01	
49 n-Butanol	31	10.160	10.166	-0.006	90	19278	1.00	0.9366	
50 Cyclohexane	69	10.182	10.185	-0.003	75	38721	1.00	1.07	
51 Benzene	78	10.182	10.186	-0.004	97	230160	1.00	0.9768	
52 Carbon tetrachloride	117	10.209	10.210	-0.001	97	186656	1.00	1.03	
53 2,3-Dimethylpentane	71	10.311	10.313	-0.002	91	52446	1.00	1.03	
54 Thiophene	84	10.461	10.464	-0.003	97	135457	1.00	1.01	
55 Tert-amyl methyl ether	73	10.682	10.688	-0.006	97	112168	1.00	0.9851	
56 Isooctane	57	10.962	10.965	-0.003	99	408197	1.00	1.00	
57 n-Heptane	71	11.349	11.353	-0.004	94	79541	1.00	1.01	
58 1,2-Dichloropropane	63	11.430	11.430	0.000	90	89216	1.00	1.04	
59 Trichloroethene	130	11.462	11.466	-0.004	98	125422	1.00	0.9852	
60 Dibromomethane	93	11.548	11.549	-0.001	96	99583	1.00	1.02	
62 Dichlorobromomethane	83	11.699	11.699	0.000	99	166313	1.00	1.02	
61 1,4-Dioxane	88	11.731	11.735	-0.004	91	19508	1.00	0.9665	
63 Methyl methacrylate	41	11.806	11.811	-0.005	93	51104	1.00	0.9350	
64 Methylcyclohexane	83	12.247	12.246	0.001	96	181878	1.00	1.03	
65 4-Methyl-2-pentanone (MIBK)	43	12.667	12.672	-0.005	97	92449	1.00	0.9159	
66 cis-1,3-Dichloropropene	75	12.715	12.717	-0.002	95	130533	1.00	1.02	
67 trans-1,3-Dichloropropene	75	13.420	13.421	-0.001	99	115599	1.00	1.05	
68 Toluene	91	13.538	13.542	-0.004	94	240173	1.00	1.03	
69 1,1,2-Trichloroethane	83	13.619	13.621	-0.002	98	76895	1.00	1.05	
70 2-Methylthiophene	97	13.694	13.695	-0.001	97	218937	1.00	1.04	
71 3-Methylthiophene	97	13.899	13.897	0.002	99	215106	1.00	1.04	
72 2-Hexanone	58	14.017	14.020	-0.003	93	47006	1.00	0.9734	
73 n-Octane	85	14.243	14.244	-0.001	96	81847	1.00	1.02	
74 Chlorodibromomethane	129	14.324	14.325	-0.001	98	162740	1.00	1.06	
75 Ethylene Dibromide	107	14.614	14.616	-0.002	99	143468	1.00	1.06	
76 Tetrachloroethene	129	14.690	14.690	0.000	96	100522	1.00	1.03	
78 Chlorobenzene	112	15.572	15.573	-0.001	95	209153	1.00	1.05	
77 2,3-Dimethylheptane	43	15.599	15.601	-0.002	96	254690	1.00	1.03	
79 Ethylbenzene	91	15.862	15.866	-0.004	99	284749	1.00	1.08	
80 2-Ethylthiophene	97	15.965	15.967	-0.002	98	228997	1.00	1.06	
81 m-Xylene & p-Xylene	91	16.029	16.029	0.000	99	423132	2.00	2.21	
82 n-Nonane	57	16.454	16.456	-0.002	94	178214	1.00	1.05	
83 Bromoform	173	16.476	16.474	0.002	97	165698	1.00	1.08	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Styrene	104	16.492	16.494	-0.002	99	156076	1.00	1.09	
85 o-Xylene	91	16.556	16.555	0.001	99	210753	1.00	1.08	
86 1,1,2,2-Tetrachloroethane	83	16.879	16.880	-0.001	99	140499	1.00	1.06	
87 1,2,3-Trichloropropane	110	17.040	17.039	0.001	98	33077	1.00	1.01	
88 Isopropylbenzene	105	17.143	17.143	0.000	97	256542	1.00	1.03	
89 N-Propylbenzene	120	17.691	17.690	0.001	99	65645	1.00	1.03	
90 2-Chlorotoluene	126	17.734	17.733	0.001	97	84237	1.00	1.06	
91 4-Ethyltoluene	105	17.842	17.845	-0.003	98	216891	1.00	1.00	
92 1,3,5-Trimethylbenzene	120	17.917	17.920	-0.003	93	101677	1.00	1.00	
93 Alpha Methyl Styrene	118	18.154	18.154	0.000	89	87652	1.00	1.00	
94 n-Decane	57	18.219	18.218	0.001	89	204347	1.00	1.08	
95 tert-Butylbenzene	119	18.348	18.349	-0.001	95	193770	1.00	1.00	
96 1,2,4-Trimethylbenzene	105	18.364	18.364	0.000	96	175803	1.00	1.00	
97 sec-Butylbenzene	105	18.622	18.623	-0.001	98	272134	1.00	1.02	
98 1,3-Dichlorobenzene	146	18.633	18.636	-0.003	98	179883	1.00	1.07	
99 Benzyl chloride	91	18.713	18.712	0.001	98	141453	1.00	1.03	
100 1,4-Dichlorobenzene	146	18.724	18.724	0.000	95	174308	1.00	1.07	
101 4-Isopropyltoluene	119	18.789	18.788	0.001	97	211366	1.00	1.01	
102 1,2,3-Trimethylbenzene	105	18.837	18.839	-0.002	98	133728	1.00	1.01	
103 Butylcyclohexane	83	18.896	18.897	-0.001	92	239041	1.00	1.06	
105 1,2-Dichlorobenzene	146	19.085	19.087	-0.002	91	163731	1.00	1.08	
104 2,3-Dihydroindene	117	19.085	19.087	-0.002	93	180784	1.00	1.03	
107 Indene	116	19.219	19.219	0.000	93	120836	1.00	1.01	
106 n-Butylbenzene	91	19.225	19.227	-0.003	99	209196	1.00	1.01	
108 Undecane	57	19.547	19.546	0.001	96	179487	1.00	1.08	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.601	19.602	-0.001	98	151244	1.00	1.00	
110 1,2-Dibromo-3-Chloropropan	157	19.698	19.698	0.000	94	48361	1.00	1.05	
111 1,2,4,5-Tetramethylbenzene	119	19.988	19.989	-0.001	97	173093	1.00	0.99	
112 1,2,3,5-Tetramethylbenzene	119	20.042	20.044	-0.002	95	107734	1.00	0.9751	
113 1,2,3,4-Tetramethylbenzene	119	20.440	20.440	0.000	97	143031	1.00	1.00	
114 Dodecane	57	20.607	20.607	0.000	95	161335	1.00	1.14	
115 1,2,4-Trichlorobenzene	180	20.795	20.796	-0.001	94	89202	1.00	1.08	
116 Naphthalene	128	20.935	20.937	-0.002	99	166284	1.00	1.09	
117 Benzo(b)thiophene	134	21.043	21.042	0.001	99	80463	1.00	1.04	
118 Hexachlorobutadiene	225	21.156	21.157	-0.001	95	162409	1.00	1.12	
119 1,2,3-Trichlorobenzene	180	21.226	21.227	-0.001	94	85944	1.00	1.10	
120 2-Methylnaphthalene	142	21.920	21.921	-0.001	100	36589	3.03	3.57	
121 1-Methylnaphthalene	142	22.049	22.049	0.000	99	41884	3.03	3.73	
A 124 Toluene Range	1	13.538	(13.508-13.568)		0	581924	1.00	1.02	
A 125 C8 Range	1	14.238	(14.199-14.296)		0	794616	1.00	1.06	
S 126 Xylenes, Total	100				0		3.01	3.29	
S 127 1,2-Dichloroethene, Total	1				0		2.00	2.01	

Reagents:

40L5DNP_00010

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC05.D

Injection Date: 24-Mar-2017 14:35:30

Instrument ID: MJ

Operator ID: 007126

Lims ID: IC L5

Worklist Smp#: 6

Client ID:

Purge Vol: 500.000 mL

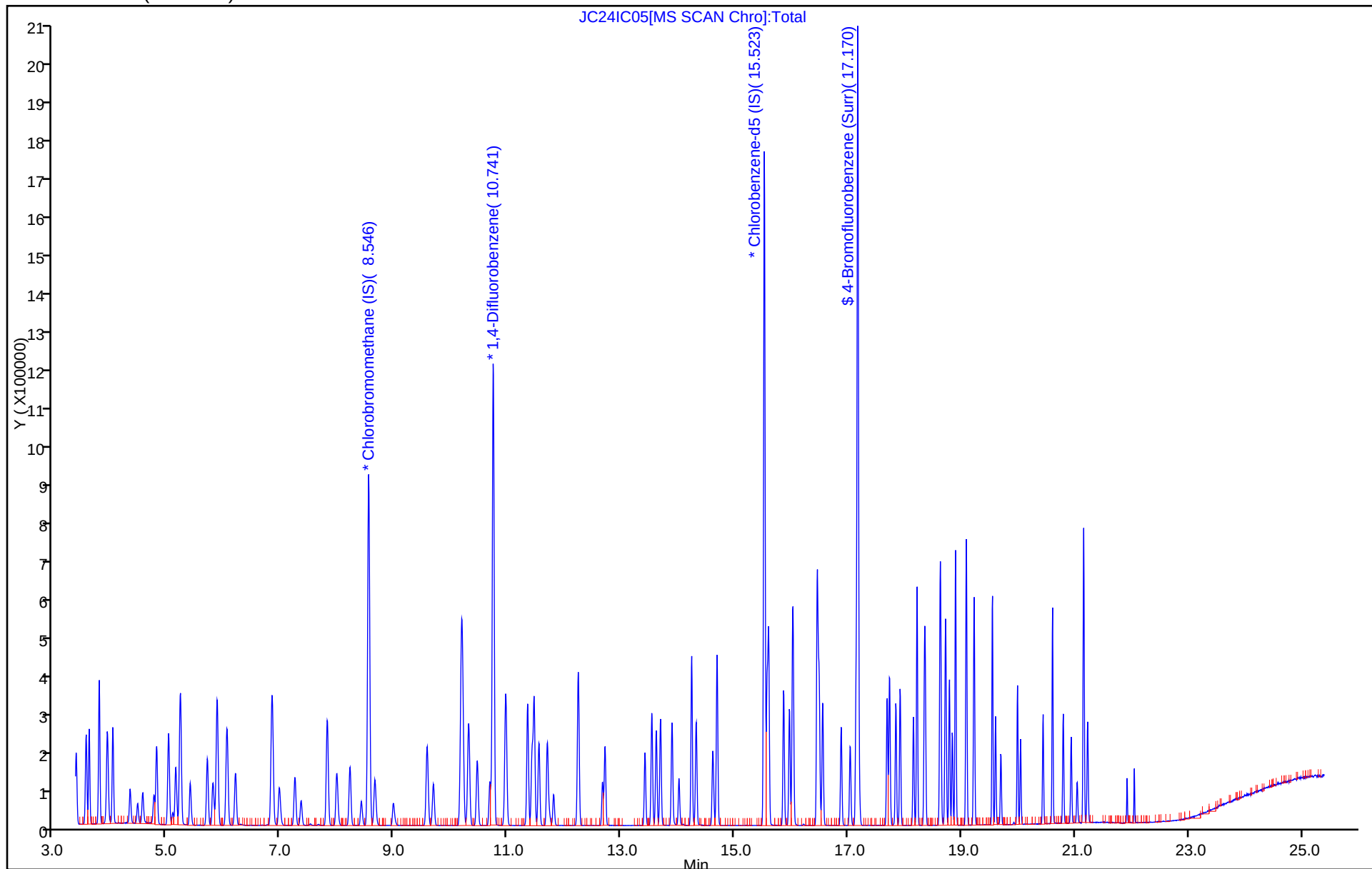
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC05.D

Injection Date: 24-Mar-2017 14:35:30

Instrument ID: MJ

Lims ID: IC L5

Client ID:

Operator ID: 007126

ALS Bottle#: 4

Worklist Smp#: 6

Purge Vol: 500.000 mL

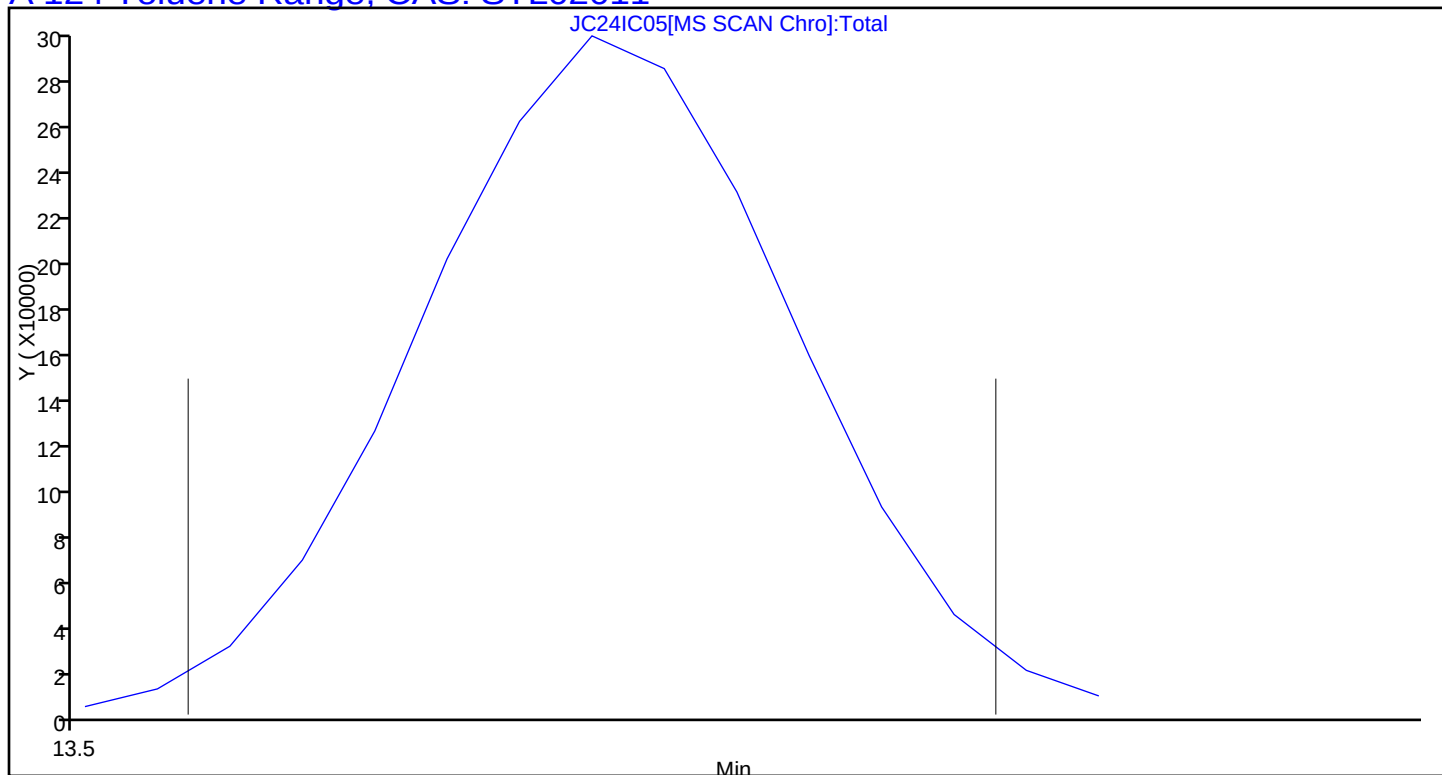
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 124 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC05.D

Injection Date: 24-Mar-2017 14:35:30

Instrument ID: MJ

Lims ID: IC L5

Client ID:

Operator ID: 007126

ALS Bottle#: 4

Worklist Smp#: 6

Purge Vol: 500.000 mL

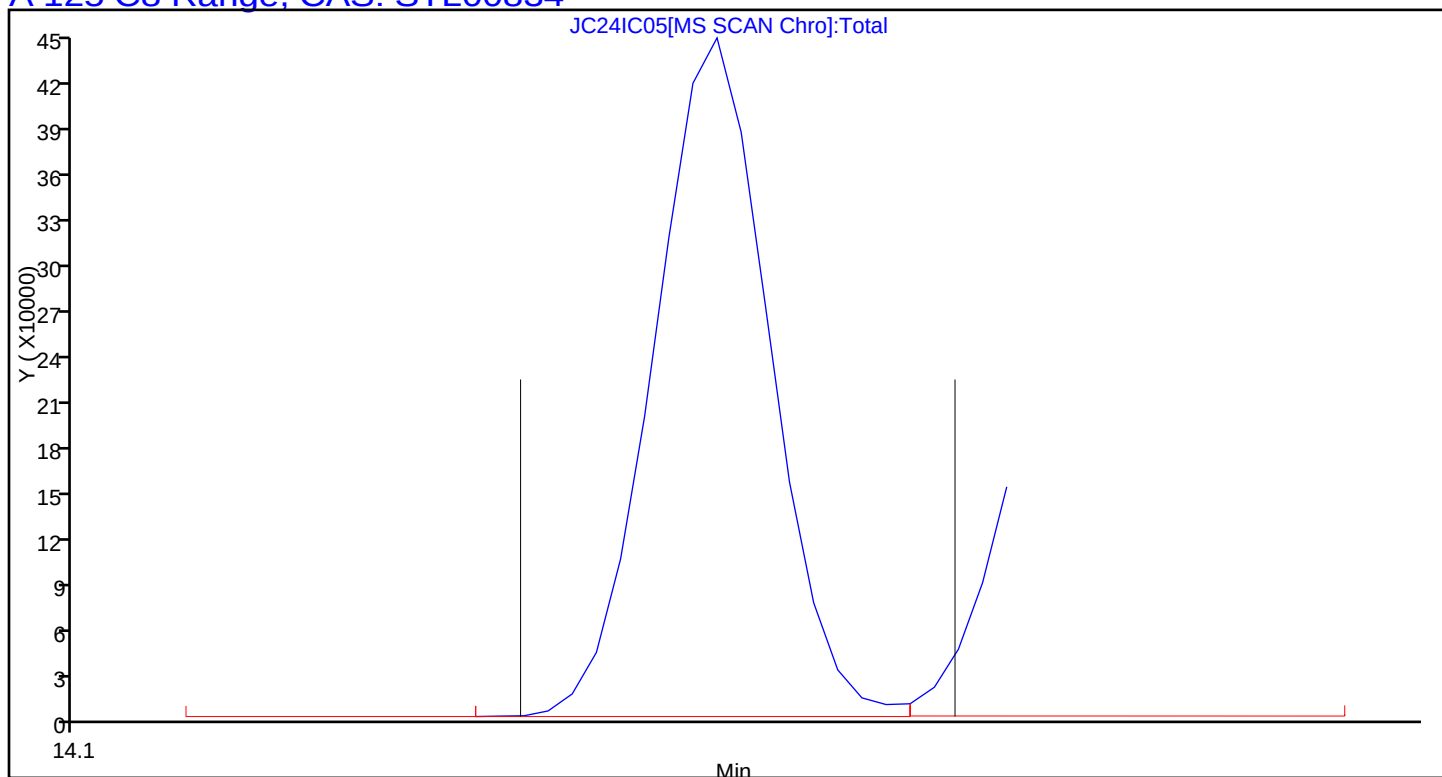
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 125 C8 Range, CAS: STL00834

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC06.D
 Lims ID: ICIS L6
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 24-Mar-2017 15:21:30 ALS Bottle#: 5 Worklist Smp#: 7
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004355-007
 Misc. Info.: 083679
 Operator ID: 007126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 27-Mar-2017 11:49:01 Calib Date: 24-Mar-2017 17:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: tajh

Date: 24-Mar-2017 16:27:53

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	8.550	8.549	0.001	96	231580	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.745	10.746	-0.001	95	1083209	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.527	15.525	0.002	88	1056687	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.173	17.172	0.001	95	755928	4.00	4.10	
6 Chlorodifluoromethane	67	3.563	3.563	0.000	97	43402	2.00	2.23	
7 Propene	41	3.574	3.572	0.002	99	146518	2.00	2.13	
8 Dichlorodifluoromethane	85	3.622	3.621	0.001	100	433589	2.00	2.18	
9 Chloromethane	52	3.794	3.795	-0.001	99	45432	2.00	2.09	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.800	3.799	0.001	92	180886	2.00	2.06	
11 Acetaldehyde	44	3.940	3.940	0.000	99	209476	9.99	10.0	
12 Vinyl chloride	62	3.956	3.955	0.001	99	139468	2.00	2.18	
14 Butadiene	54	4.036	4.037	-0.001	68	104197	2.00	2.17	
13 Butane	43	4.036	4.038	-0.002	85	207548	2.00	2.15	
15 Bromomethane	94	4.343	4.343	0.000	98	122542	2.00	2.05	
16 Chloroethane	64	4.478	4.477	0.001	93	58830	2.00	2.23	
17 Ethanol	31	4.564	4.568	-0.004	96	146657	9.99	10.7	
18 Vinyl bromide	106	4.763	4.762	0.001	98	113140	2.00	2.18	
19 2-Methylbutane	43	4.811	4.811	0.000	92	180221	2.00	2.09	
20 Trichlorofluoromethane	101	5.021	5.022	-0.001	100	399106	2.00	2.19	
21 Acrolein	56	5.032	5.034	-0.002	92	30387	2.00	1.92	
22 Acetonitrile	40	5.096	5.098	-0.002	100	43287	2.00	2.16	
23 Acetone	58	5.145	5.150	-0.005	98	128336	5.87	6.60	
24 Isopropyl alcohol	45	5.220	5.228	-0.008	95	514406	5.87	6.46	
25 Pentane	72	5.236	5.233	0.003	95	23356	2.00	2.26	
26 Ethyl ether	31	5.403	5.407	-0.004	94	132014	2.00	2.15	
27 1,1-Dichloroethene	96	5.704	5.707	-0.003	96	152708	2.00	2.19	
28 2-Methyl-2-propanol	59	5.796	5.808	-0.012	95	193347	2.00	2.25	
29 Acrylonitrile	53	5.806	5.809	-0.003	94	73008	2.00	2.11	
30 1,1,2-Trichloro-1,2,2-trif	101	5.876	5.878	-0.002	97	328597	2.00	2.23	
31 Methylene Chloride	84	6.043	6.043	0.000	98	147376	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
32 3-Chloro-1-propene	39	6.059	6.059	0.000	95	160663	2.00	2.29	
33 Carbon disulfide	76	6.199	6.203	-0.004	99	449551	2.00	2.22	
34 trans-1,2-Dichloroethene	96	6.839	6.838	0.001	97	157327	2.00	2.22	
35 2-Methylpentane	43	6.855	6.854	0.001	96	359539	2.00	2.18	
36 Methyl tert-butyl ether	73	6.968	6.977	-0.009	97	234466	2.00	2.21	
37 1,1-Dichloroethane	63	7.248	7.249	-0.001	100	302332	2.00	2.18	
38 Vinyl acetate	43	7.356	7.359	-0.003	100	245483	2.00	2.17	
39 2-Butanone (MEK)	72	7.802	7.810	-0.008	95	38362	2.00	2.25	
40 Hexane	56	7.824	7.821	0.003	90	135250	2.00	2.22	
41 Isopropyl ether	45	7.985	7.988	-0.003	98	328842	2.00	2.18	
42 cis-1,2-Dichloroethene	96	8.222	8.220	0.002	96	163904	2.00	2.21	
43 Ethyl acetate	43	8.415	8.423	-0.008	99	187852	2.00	2.32	
44 Chloroform	83	8.561	8.561	0.000	97	330631	2.00	2.16	
45 Tert-butyl ethyl ether	59	8.657	8.662	-0.005	96	271417	2.00	2.25	
46 Tetrahydrofuran	42	8.980	8.989	-0.009	96	104869	2.00	2.26	
47 1,1,1-Trichloroethane	97	9.577	9.579	-0.002	96	351407	2.00	2.21	
48 1,2-Dichloroethane	62	9.690	9.691	-0.001	97	222582	2.00	2.16	
49 n-Butanol	31	10.153	10.166	-0.013	90	42083	2.00	2.27	
50 Cyclohexane	69	10.185	10.185	0.000	75	74470	2.00	2.28	
51 Benzene	78	10.185	10.186	-0.001	98	437140	2.00	2.06	
52 Carbon tetrachloride	117	10.212	10.210	0.002	97	362372	2.00	2.21	
53 2,3-Dimethylpentane	71	10.314	10.313	0.001	91	102755	2.00	2.23	
54 Thiophene	84	10.465	10.464	0.001	98	257056	2.00	2.13	
55 Tert-amyl methyl ether	73	10.685	10.688	-0.003	98	235550	2.00	2.17	M
56 Isooctane	57	10.965	10.965	0.000	99	778312	2.00	2.12	
57 n-Heptane	71	11.353	11.353	0.000	94	150262	2.00	2.13	
58 1,2-Dichloropropane	63	11.428	11.430	-0.002	91	166887	2.00	2.15	
59 Trichloroethene	130	11.466	11.466	0.000	97	248507	2.00	2.17	
60 Dibromomethane	93	11.552	11.549	0.003	96	194031	2.00	2.20	
62 Dichlorobromomethane	83	11.697	11.699	-0.002	99	321832	2.00	2.19	
61 1,4-Dioxane	88	11.729	11.735	-0.006	93	40831	2.00	2.25	
63 Methyl methacrylate	41	11.810	11.811	-0.001	92	112353	2.00	2.28	
64 Methylcyclohexane	83	12.246	12.246	0.000	95	347625	2.00	2.19	
65 4-Methyl-2-pentanone (MIBK)	43	12.671	12.672	-0.002	96	196853	2.00	2.16	
66 cis-1,3-Dichloropropene	75	12.719	12.717	0.002	95	254283	2.00	2.20	
67 trans-1,3-Dichloropropene	75	13.418	13.421	-0.003	99	222209	2.00	2.12	
68 Toluene	91	13.542	13.542	0.000	94	456364	2.00	2.04	
69 1,1,2-Trichloroethane	83	13.617	13.621	-0.004	99	144323	2.00	2.07	
70 2-Methylthiophene	97	13.693	13.695	-0.002	98	426102	2.00	2.12	
71 3-Methylthiophene	97	13.897	13.897	0.000	99	412267	2.00	2.10	
72 2-Hexanone	58	14.021	14.020	0.001	92	99511	2.00	2.16	
73 n-Octane	85	14.247	14.244	0.003	95	156495	2.00	2.04	
74 Chlorodibromomethane	129	14.322	14.325	-0.003	98	313571	2.00	2.15	
75 Ethylene Dibromide	107	14.618	14.616	0.002	99	278847	2.00	2.16	
76 Tetrachloroethene	129	14.688	14.690	-0.002	96	191531	2.00	2.06	
78 Chlorobenzene	112	15.575	15.573	0.002	94	397449	2.00	2.08	
77 2,3-Dimethylheptane	43	15.602	15.601	0.001	96	486182	2.00	2.05	
79 Ethylbenzene	91	15.866	15.866	0.000	99	517252	2.00	2.05	
80 2-Ethylthiophene	97	15.968	15.967	0.001	98	431981	2.00	2.09	
81 m-Xylene & p-Xylene	91	16.027	16.029	-0.002	99	735710	4.00	4.03	
82 n-Nonane	57	16.458	16.456	0.002	94	343171	2.00	2.11	
83 Bromoform	173	16.474	16.474	0.000	97	295766	2.00	2.02	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Styrene	104	16.495	16.494	0.001	99	284470	2.00	2.09	
85 o-Xylene	91	16.554	16.555	-0.001	99	367193	2.00	1.97	
86 1,1,2,2-Tetrachloroethane	83	16.877	16.880	-0.003	99	268605	2.00	2.12	
87 1,2,3-Trichloropropane	110	17.039	17.039	0.000	98	64921	2.00	2.08	
88 Isopropylbenzene	105	17.141	17.143	-0.002	97	464464	2.00	1.96	
89 N-Propylbenzene	120	17.690	17.690	0.000	99	126374	2.00	2.07	
90 2-Chlorotoluene	126	17.733	17.733	0.000	97	155813	2.00	2.06	
91 4-Ethyltoluene	105	17.846	17.845	0.001	98	431615	2.00	2.08	
92 1,3,5-Trimethylbenzene	120	17.921	17.920	0.001	93	204275	2.00	2.10	
93 Alpha Methyl Styrene	118	18.152	18.154	-0.002	88	178912	2.00	2.14	
94 n-Decane	57	18.217	18.218	-0.001	89	375067	2.00	2.08	
95 tert-Butylbenzene	119	18.351	18.349	0.002	93	386891	2.00	2.09	
96 1,2,4-Trimethylbenzene	105	18.362	18.364	-0.002	96	355471	2.00	2.13	
97 sec-Butylbenzene	105	18.620	18.623	-0.003	98	530500	2.00	2.09	
98 1,3-Dichlorobenzene	146	18.636	18.636	0.000	98	339062	2.00	2.12	
99 Benzyl chloride	91	18.712	18.712	0.000	98	291022	2.00	2.22	
100 1,4-Dichlorobenzene	146	18.722	18.724	-0.002	95	331460	2.00	2.14	
101 4-Isopropyltoluene	119	18.787	18.788	-0.001	97	432952	2.00	2.16	
102 1,2,3-Trimethylbenzene	105	18.841	18.839	0.002	98	267294	2.00	2.11	
103 Butylcyclohexane	83	18.895	18.897	-0.002	92	447237	2.00	2.08	
105 1,2-Dichlorobenzene	146	19.088	19.087	0.001	89	297580	2.00	2.06	
104 2,3-Dihydroindene	117	19.088	19.087	0.001	93	349528	2.00	2.09	
107 Indene	116	19.217	19.219	-0.002	92	244429	2.00	2.14	
106 n-Butylbenzene	91	19.228	19.227	0.001	98	423537	2.00	2.14	
108 Undecane	57	19.545	19.546	-0.001	96	340608	2.00	2.14	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.599	19.602	-0.003	98	311817	2.00	2.16	
110 1,2-Dibromo-3-Chloropropan	157	19.696	19.698	-0.002	97	94829	2.00	2.15	
111 1,2,4,5-Tetramethylbenzene	119	19.987	19.989	-0.002	97	358561	2.00	2.16	
112 1,2,3,5-Tetramethylbenzene	119	20.046	20.044	0.002	95	220501	2.00	2.09	
113 1,2,3,4-Tetramethylbenzene	119	20.438	20.440	-0.002	97	283775	2.00	2.07	
114 Dodecane	57	20.605	20.607	-0.002	95	309677	2.00	2.29	
115 1,2,4-Trichlorobenzene	180	20.793	20.796	-0.003	94	180641	2.00	2.30	
116 Naphthalene	128	20.933	20.937	-0.004	99	339004	2.00	2.32	
117 Benzo(b)thiophene	134	21.041	21.042	-0.001	99	166740	2.00	2.27	
118 Hexachlorobutadiene	225	21.159	21.157	0.002	95	284742	2.00	2.05	
119 1,2,3-Trichlorobenzene	180	21.224	21.227	-0.003	94	166727	2.00	2.24	
120 2-Methylnaphthalene	142	21.923	21.921	0.002	100	74396	6.04	7.60	
121 1-Methylnaphthalene	142	22.047	22.049	-0.002	99	78987	6.04	7.37	
A 124 Toluene Range	1	13.542	(13.512-13.572)		0	1117814	2.00	2.06	
A 125 C8 Range	1	14.241	(14.214-14.310)		0	1508522	2.00	2.11	
S 126 Xylenes, Total	100				0		5.99	6.00	
S 127 1,2-Dichloroethene, Total	1				0		4.00	4.43	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

40L6DNP_00011

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC06.D

Injection Date: 24-Mar-2017 15:21:30

Instrument ID: MJ

Operator ID: 007126

Lims ID: ICIS L6

Worklist Smp#: 7

Client ID:

Purge Vol: 500.000 mL

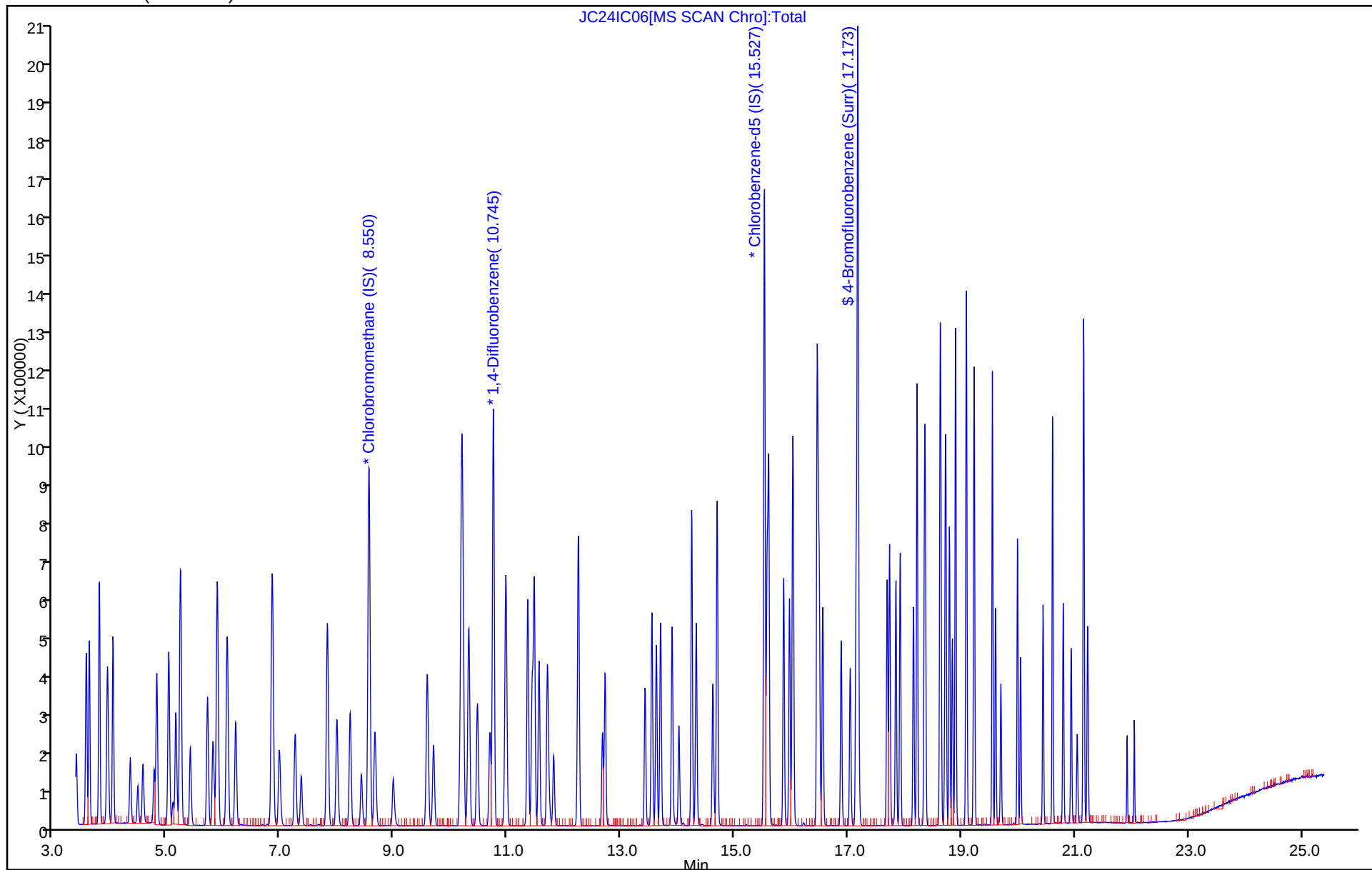
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC06.D

Injection Date: 24-Mar-2017 15:21:30

Instrument ID: MJ

Lims ID: ICIS L6

Client ID:

Operator ID: 007126

ALS Bottle#: 5

Worklist Smp#: 7

Purge Vol: 500.000 mL

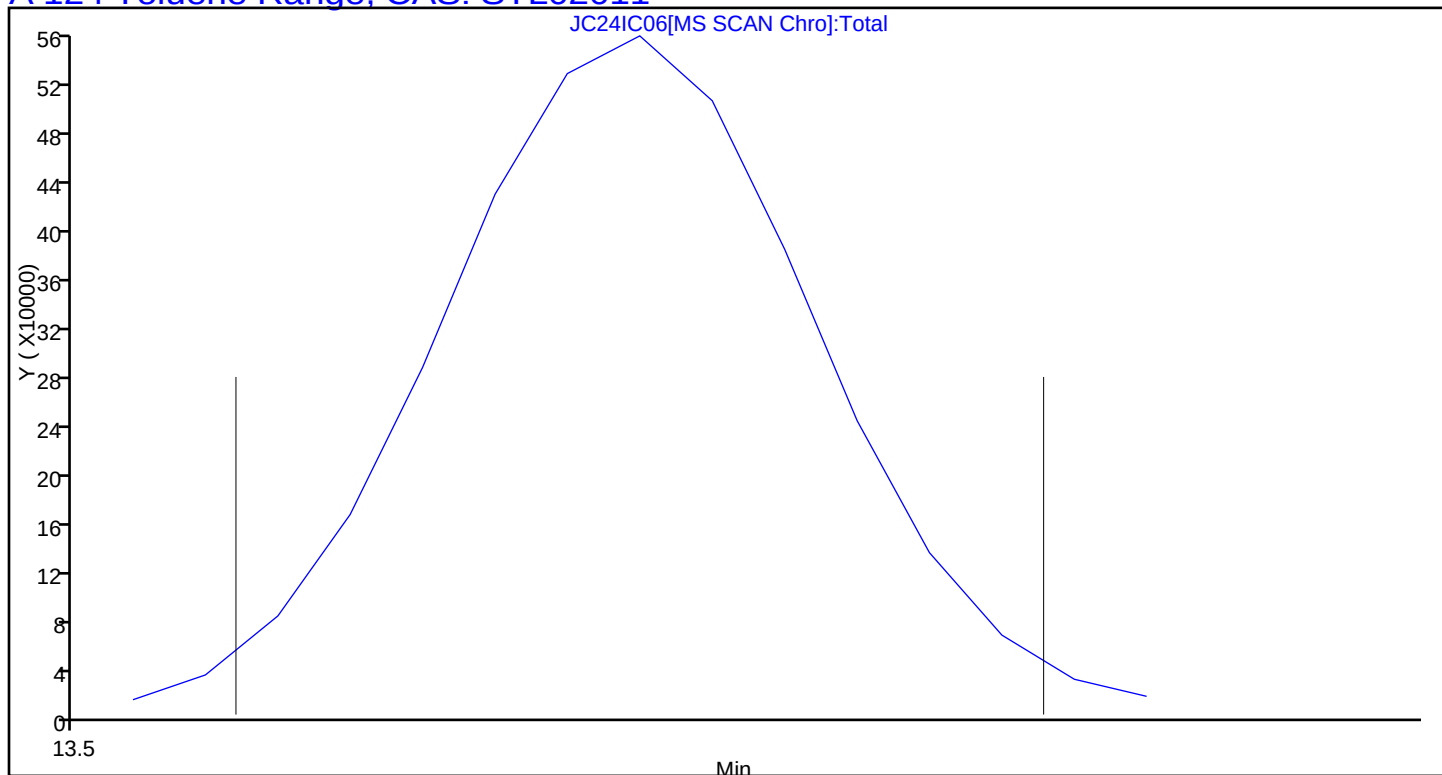
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 124 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC06.D

Injection Date: 24-Mar-2017 15:21:30

Instrument ID: MJ

Lims ID: ICIS L6

Client ID:

Operator ID: 007126

ALS Bottle#: 5

Worklist Smp#: 7

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

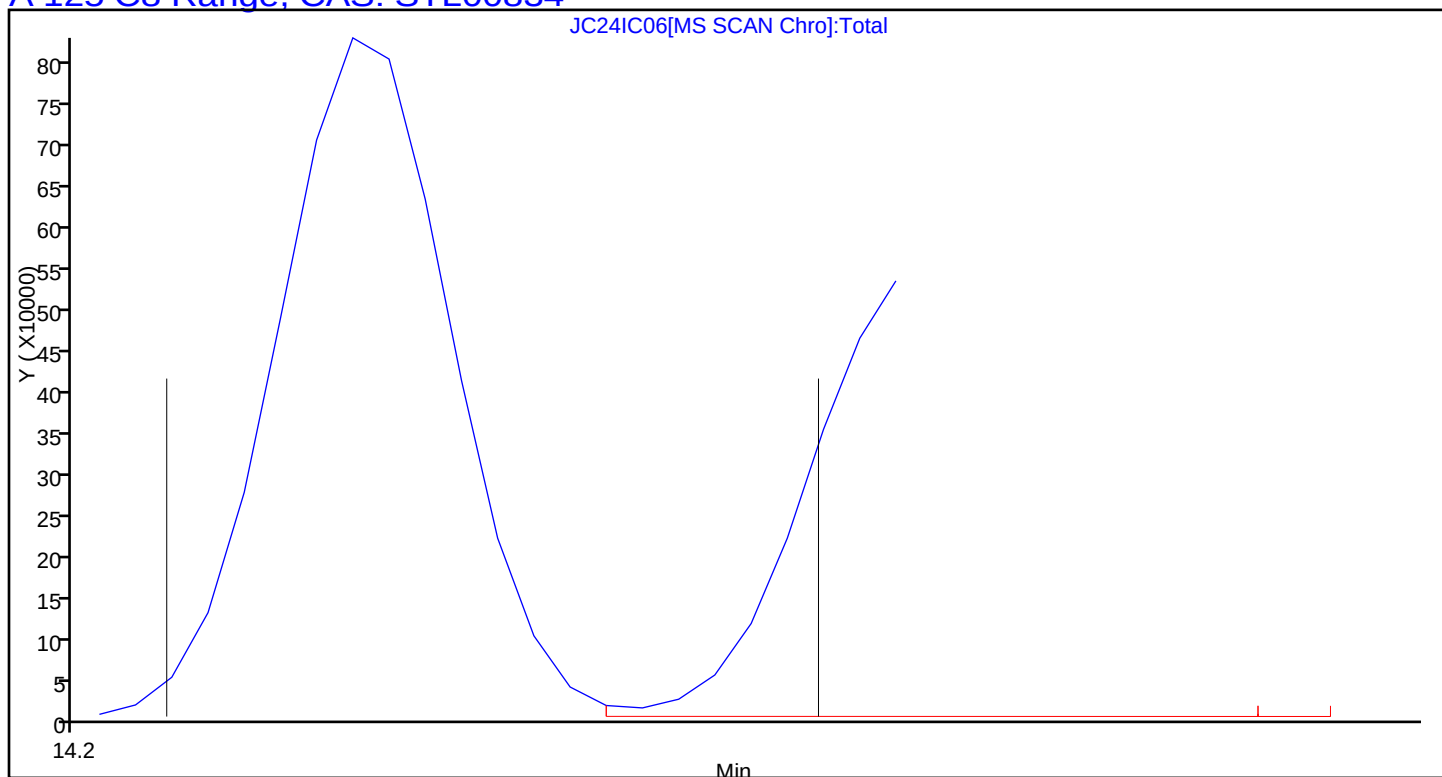
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 125 C8 Range, CAS: STL00834



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24\IC06.D

Injection Date: 24-Mar-2017 15:21:30

Instrument ID: MJ

Lims ID: ICIS L6

Client ID:

Operator ID: 007126

ALS Bottle#:

5

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)

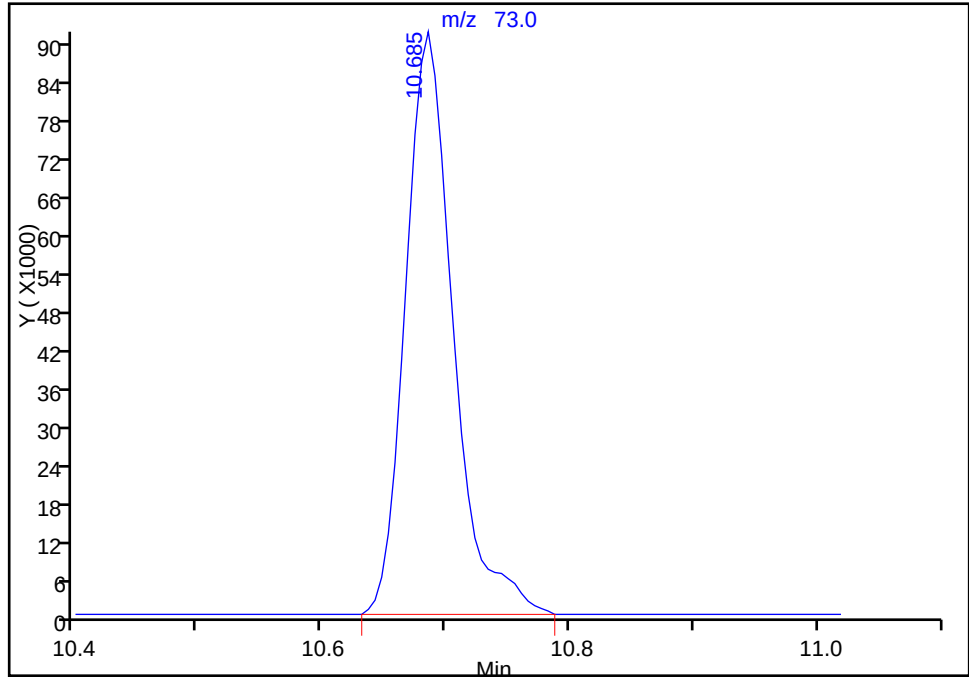
Detector: MS SCAN

55 Tert-amyl methyl ether, CAS: 994-05-8

Signal: 1

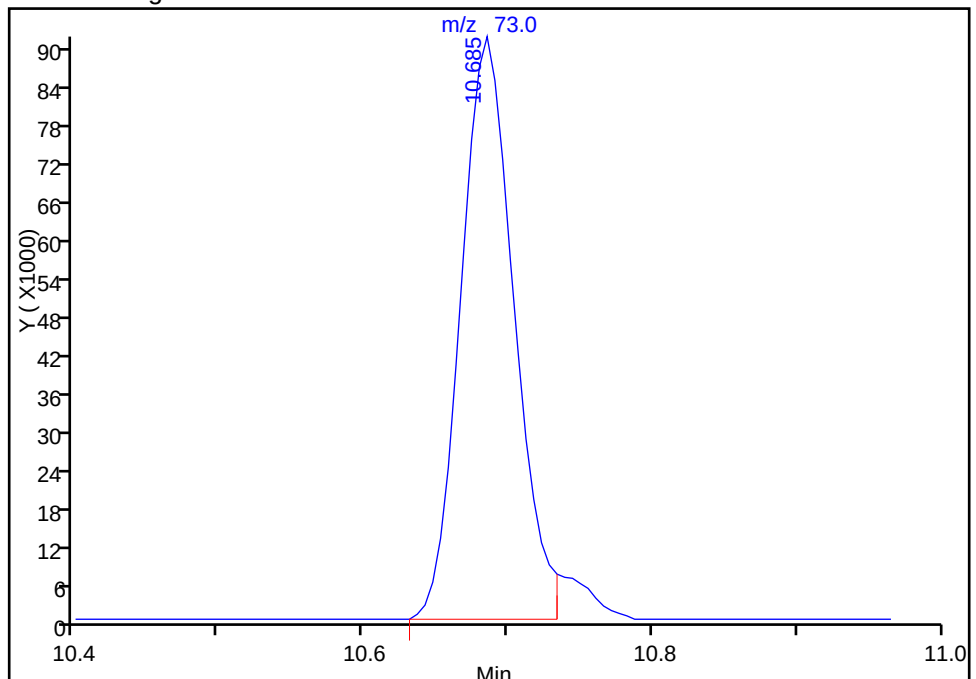
RT: 10.69
Area: 245824
Amount: 2.242244
Amount Units: ppb v/v

Processing Integration Results



RT: 10.69
Area: 235550
Amount: 2.166901
Amount Units: ppb v/v

Manual Integration Results



Reviewer: barlozhetskayaa, 27-Mar-2017 11:48:57

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC07.D
 Lims ID: IC L7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 24-Mar-2017 16:06:30 ALS Bottle#: 6 Worklist Smp#: 8
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004355-008
 Misc. Info.: 083678
 Operator ID: 007126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 27-Mar-2017 11:49:24 Calib Date: 24-Mar-2017 17:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: barlozhetskayaa

Date: 25-Mar-2017 12:07:40

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.549	8.549	0.000	96	254765	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.750	10.746	0.004	95	1118607	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.527	15.525	0.002	87	1077711	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.173	17.172	0.001	95	759541	4.00	4.04	
6 Chlorodifluoromethane	67	3.563	3.563	0.000	97	85529	4.00	4.00	
7 Propene	41	3.573	3.572	0.001	99	283520	4.00	3.75	
8 Dichlorodifluoromethane	85	3.622	3.621	0.001	100	851279	4.00	3.90	
9 Chloromethane	52	3.794	3.795	-0.001	99	88555	4.00	3.70	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.799	3.799	0.000	92	365483	4.00	3.78	
11 Acetaldehyde	44	3.939	3.940	-0.001	99	388595	20.0	16.9	
12 Vinyl chloride	62	3.955	3.955	0.000	99	275832	4.00	3.92	
14 Butadiene	54	4.041	4.037	0.004	69	206478	4.00	3.91	
13 Butane	43	4.041	4.038	0.003	85	406745	4.00	3.83	
15 Bromomethane	94	4.343	4.343	0.000	99	248962	4.00	3.79	
16 Chloroethane	64	4.477	4.477	0.000	95	117703	4.00	4.06	
17 Ethanol	31	4.569	4.568	0.001	96	275139	20.0	18.3	
18 Vinyl bromide	106	4.762	4.762	0.000	98	231133	4.00	4.05	
19 2-Methylbutane	43	4.811	4.811	0.000	92	366269	4.00	3.85	
20 Trichlorofluoromethane	101	5.020	5.022	-0.002	100	815022	4.00	4.07	
21 Acrolein	56	5.031	5.034	-0.003	94	65230	4.00	3.75	
22 Acetonitrile	40	5.096	5.098	-0.002	98	81334	4.00	3.70	
23 Acetone	58	5.144	5.150	-0.006	98	223745	11.7	10.5	
24 Isopropyl alcohol	45	5.225	5.228	-0.003	97	992211	11.7	11.3	
25 Pentane	72	5.236	5.233	0.003	95	48246	4.00	4.24	
26 Ethyl ether	31	5.402	5.407	-0.005	94	258181	4.00	3.83	
27 1,1-Dichloroethene	96	5.709	5.707	0.002	96	312906	4.00	4.08	
28 2-Methyl-2-propanol	59	5.800	5.808	-0.008	95	383148	4.00	4.06	
29 Acrylonitrile	53	5.811	5.809	0.002	96	146018	4.00	3.84	
30 1,1,2-Trichloro-1,2,2-trif	101	5.876	5.878	-0.002	97	654655	4.00	4.04	
31 Methylene Chloride	84	6.048	6.043	0.005	99	284917	4.00	3.62	

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	6.064	6.059	0.005	95	304356	4.00	3.95	
33 Carbon disulfide	76	6.204	6.203	0.001	99	903118	4.00	4.05	
34 trans-1,2-Dichloroethene	96	6.839	6.838	0.001	97	318056	4.00	4.08	
35 2-Methylpentane	43	6.855	6.854	0.001	96	714622	4.00	3.94	
36 Methyl tert-butyl ether	73	6.973	6.977	-0.004	97	449702	4.00	3.85	
37 1,1-Dichloroethane	63	7.253	7.249	0.004	100	605318	4.00	3.97	
38 Vinyl acetate	43	7.361	7.359	0.002	100	465416	4.00	3.74	
39 2-Butanone (MEK)	72	7.802	7.810	-0.008	94	69526	4.00	3.71	
40 Hexane	56	7.823	7.821	0.002	91	268736	4.00	4.02	
41 Isopropyl ether	45	7.990	7.988	0.002	98	622559	4.00	3.76	
42 cis-1,2-Dichloroethene	96	8.221	8.220	0.001	96	329150	4.00	4.03	
43 Ethyl acetate	43	8.420	8.423	-0.003	99	345012	4.00	3.87	
44 Chloroform	83	8.566	8.561	0.005	98	655318	4.00	3.90	
45 Tert-butyl ethyl ether	59	8.657	8.662	-0.005	96	512444	4.00	3.87	
46 Tetrahydrofuran	42	8.980	8.989	-0.009	95	196593	4.00	3.86	
47 1,1,1-Trichloroethane	97	9.582	9.579	0.003	96	706900	4.00	4.04	
48 1,2-Dichloroethane	62	9.690	9.691	-0.001	97	442977	4.00	4.16	
49 n-Butanol	31	10.152	10.166	-0.014	86	84359	4.00	4.40	
50 Cyclohexane	69	10.190	10.185	0.005	74	149186	4.00	4.42	
51 Benzene	78	10.185	10.186	-0.001	98	855015	4.00	3.90	
52 Carbon tetrachloride	117	10.212	10.210	0.002	97	732758	4.00	4.33	
53 2,3-Dimethylpentane	71	10.314	10.313	0.001	91	202681	4.00	4.27	
54 Thiophene	84	10.464	10.464	0.000	97	514735	4.00	4.14	
55 Tert-amyl methyl ether	73	10.685	10.688	-0.003	97	439396	4.00	3.96	M
56 Isooctane	57	10.965	10.965	0.000	99	1527164	4.00	4.03	
57 n-Heptane	71	11.352	11.353	-0.001	93	296746	4.00	4.07	
58 1,2-Dichloropropane	63	11.433	11.430	0.003	91	337576	4.00	4.22	
59 Trichloroethene	130	11.470	11.466	0.004	96	489195	4.00	4.13	
60 Dibromomethane	93	11.551	11.549	0.002	95	376491	4.00	4.13	
62 Dichlorobromomethane	83	11.702	11.699	0.003	99	647712	4.00	4.27	
61 1,4-Dioxane	88	11.729	11.735	-0.006	93	77550	4.00	4.13	
63 Methyl methacrylate	41	11.809	11.811	-0.002	92	207785	4.00	4.09	
64 Methylcyclohexane	83	12.245	12.246	-0.001	95	680111	4.00	4.15	
65 4-Methyl-2-pentanone (MIBK)	43	12.670	12.672	-0.002	96	385671	4.00	4.11	
66 cis-1,3-Dichloropropene	75	12.718	12.717	0.001	94	509357	4.00	4.26	
67 trans-1,3-Dichloropropene	75	13.423	13.421	0.002	99	454066	4.00	4.24	
68 Toluene	91	13.542	13.542	0.000	94	915773	4.00	4.02	
69 1,1,2-Trichloroethane	83	13.622	13.621	0.001	99	292125	4.00	4.11	
70 2-Methylthiophene	97	13.698	13.695	0.003	97	848277	4.00	4.14	
71 3-Methylthiophene	97	13.897	13.897	0.000	99	828956	4.00	4.13	
72 2-Hexanone	58	14.015	14.020	-0.005	93	200606	4.00	4.27	
73 n-Octane	85	14.246	14.244	0.002	95	308131	4.00	3.94	
74 Chlorodibromomethane	129	14.327	14.325	0.002	98	653988	4.00	4.39	
75 Ethylene Dibromide	107	14.617	14.616	0.001	100	557685	4.00	4.25	
76 Tetrachloroethene	129	14.693	14.690	0.003	96	375100	4.00	3.96	
78 Chlorobenzene	112	15.575	15.573	0.002	94	784490	4.00	4.03	
77 2,3-Dimethylheptane	43	15.602	15.601	0.001	96	930604	4.00	3.85	
79 Ethylbenzene	91	15.865	15.866	-0.001	99	1025077	4.00	3.98	
80 2-Ethylthiophene	97	15.968	15.967	0.001	98	859967	4.00	4.08	
81 m-Xylene & p-Xylene	91	16.027	16.029	-0.002	99	1471883	8.00	7.91	
82 n-Nonane	57	16.457	16.456	0.001	93	656530	4.00	3.96	
83 Bromoform	173	16.473	16.474	-0.001	97	691238	4.00	4.62	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Styrene	104	16.495	16.494	0.001	99	579696	4.00	4.17	
85 o-Xylene	91	16.554	16.555	-0.001	99	730773	4.00	3.85	
86 1,1,2,2-Tetrachloroethane	83	16.882	16.880	0.002	99	516240	4.00	4.00	
87 1,2,3-Trichloropropane	110	17.038	17.039	-0.001	98	122279	4.00	3.83	
88 Isopropylbenzene	105	17.140	17.143	-0.003	97	914971	4.00	3.79	
89 N-Propylbenzene	120	17.689	17.690	-0.001	99	241768	4.00	3.88	
90 2-Chlorotoluene	126	17.732	17.733	-0.001	97	307196	4.00	3.99	
91 4-Ethyltoluene	105	17.845	17.845	0.000	98	812221	4.00	3.84	
92 1,3,5-Trimethylbenzene	120	17.920	17.920	0.000	93	377863	4.00	3.81	
93 Alpha Methyl Styrene	118	18.152	18.154	-0.002	89	364260	4.00	4.27	
94 n-Decane	57	18.216	18.218	-0.002	89	731024	4.00	3.97	
95 tert-Butylbenzene	119	18.351	18.349	0.002	91	710529	4.00	3.76	
96 1,2,4-Trimethylbenzene	105	18.362	18.364	-0.002	96	651135	4.00	3.82	
97 sec-Butylbenzene	105	18.625	18.623	0.002	99	982166	4.00	3.80	
98 1,3-Dichlorobenzene	146	18.636	18.636	0.000	99	660724	4.00	4.04	
99 Benzyl chloride	91	18.711	18.712	-0.001	98	565161	4.00	4.22	
100 1,4-Dichlorobenzene	146	18.722	18.724	-0.002	95	648039	4.00	4.10	
101 4-Isopropyltoluene	119	18.787	18.788	-0.001	97	797486	4.00	3.90	
102 1,2,3-Trimethylbenzene	105	18.840	18.839	0.001	98	493601	4.00	3.82	
103 Butylcyclohexane	83	18.899	18.897	0.002	92	868816	4.00	3.97	
105 1,2-Dichlorobenzene	146	19.088	19.087	0.001	90	574045	4.00	3.90	
104 2,3-Dihydroindene	117	19.088	19.087	0.001	94	645298	4.00	3.78	
107 Indene	116	19.217	19.219	-0.002	90	461247	4.00	3.97	
106 n-Butylbenzene	91	19.228	19.227	0.001	98	763788	4.00	3.78	
108 Undecane	57	19.545	19.546	-0.001	96	636409	4.00	3.92	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.604	19.602	0.002	98	564527	4.00	3.84	
110 1,2-Dibromo-3-Chloropropan	157	19.696	19.698	-0.002	98	194383	4.00	4.33	
111 1,2,4,5-Tetramethylbenzene	119	19.992	19.989	0.003	97	657901	4.00	3.88	
112 1,2,3,5-Tetramethylbenzene	119	20.045	20.044	0.001	96	405521	4.00	3.77	
113 1,2,3,4-Tetramethylbenzene	119	20.438	20.440	-0.002	97	528556	4.00	3.79	
114 Dodecane	57	20.605	20.607	-0.002	95	557521	4.00	4.04	
115 1,2,4-Trichlorobenzene	180	20.798	20.796	0.002	94	333949	4.00	4.17	
116 Naphthalene	128	20.938	20.937	0.001	99	618026	4.00	4.16	
117 Benzo(b)thiophene	134	21.041	21.042	-0.001	99	307143	4.00	4.10	
118 Hexachlorobutadiene	225	21.159	21.157	0.002	95	538916	4.00	3.81	
119 1,2,3-Trichlorobenzene	180	21.229	21.227	0.002	94	300947	4.00	3.96	
120 2-Methylnaphthalene	142	21.923	21.921	0.002	99	137333	12.1	13.8	
121 1-Methylnaphthalene	142	22.046	22.049	-0.003	100	139874	12.1	12.8	
A 124 Toluene Range	1	13.542	(13.512-13.572)	0	0	2249708	4.00	4.07	
A 125 C8 Range	1	14.235	(14.202-14.299)	0	0	2944501	4.00	4.03	
S 126 Xylenes, Total	100				0		12.0	11.8	
S 127 1,2-Dichloroethene, Total	1				0		8.00	8.11	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

40L7DNP_00010

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 27-Mar-2017 11:49:25

Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC07.D

Injection Date: 24-Mar-2017 16:06:30

Instrument ID: MJ

Operator ID: 007126

Lims ID: IC L7

Worklist Smp#: 8

Client ID:

Purge Vol: 500.000 mL

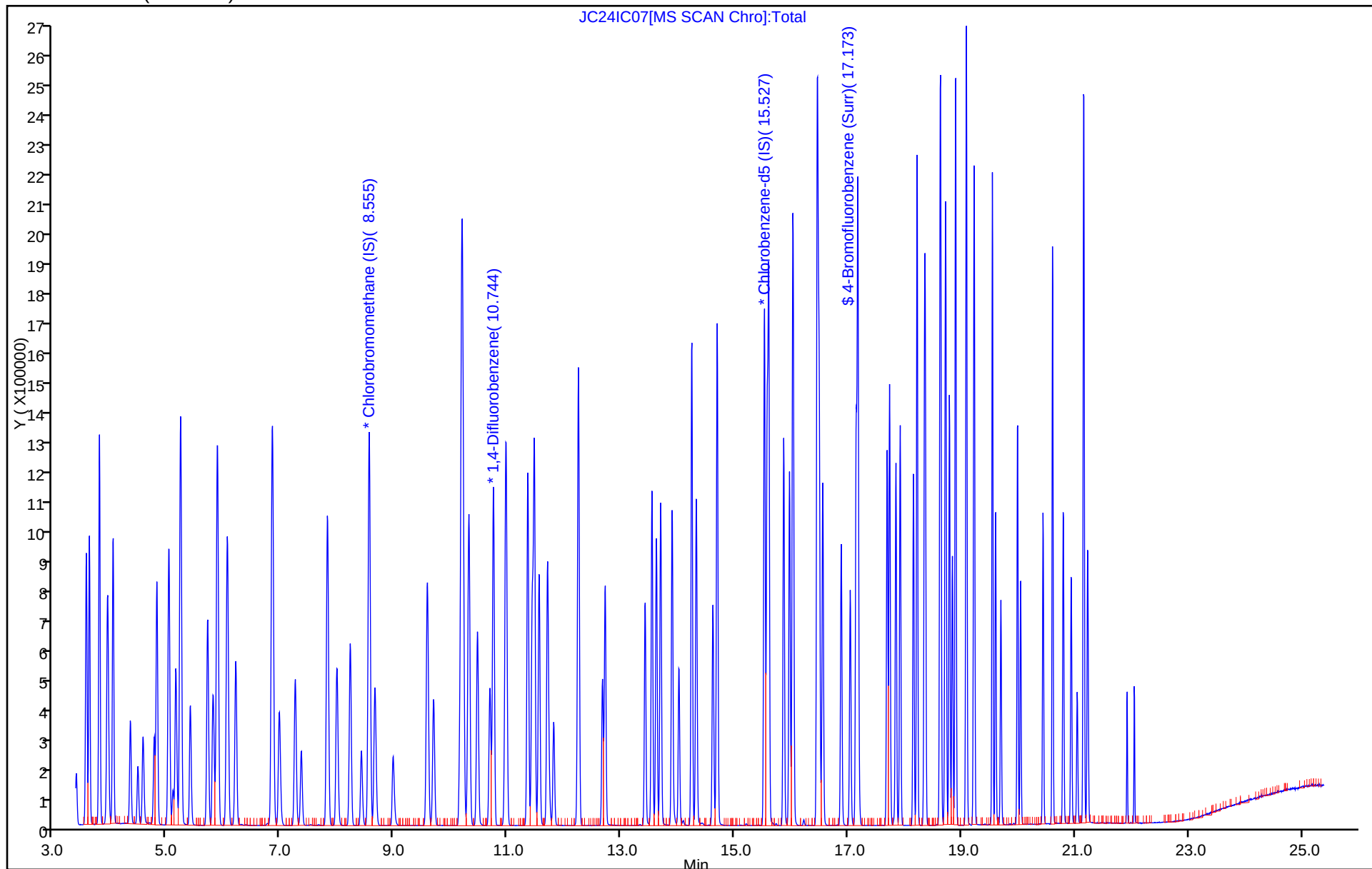
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC07.D

Injection Date: 24-Mar-2017 16:06:30

Instrument ID: MJ

Lims ID: IC L7

Client ID:

Operator ID: 007126

ALS Bottle#: 6

Worklist Smp#: 8

Purge Vol: 500.000 mL

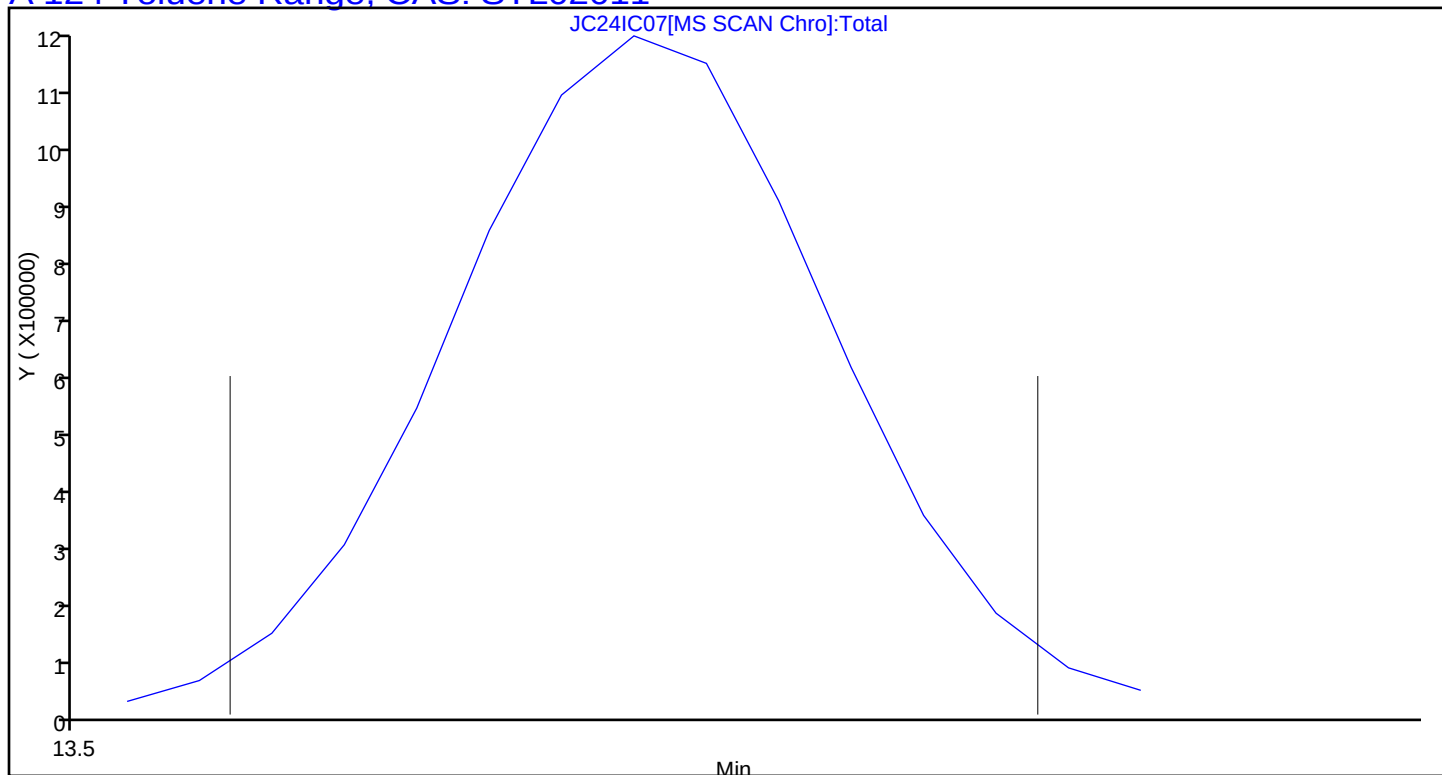
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 124 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC07.D

Injection Date: 24-Mar-2017 16:06:30

Instrument ID: MJ

Lims ID: IC L7

Client ID:

Operator ID: 007126

ALS Bottle#: 6

Worklist Smp#: 8

Purge Vol: 500.000 mL

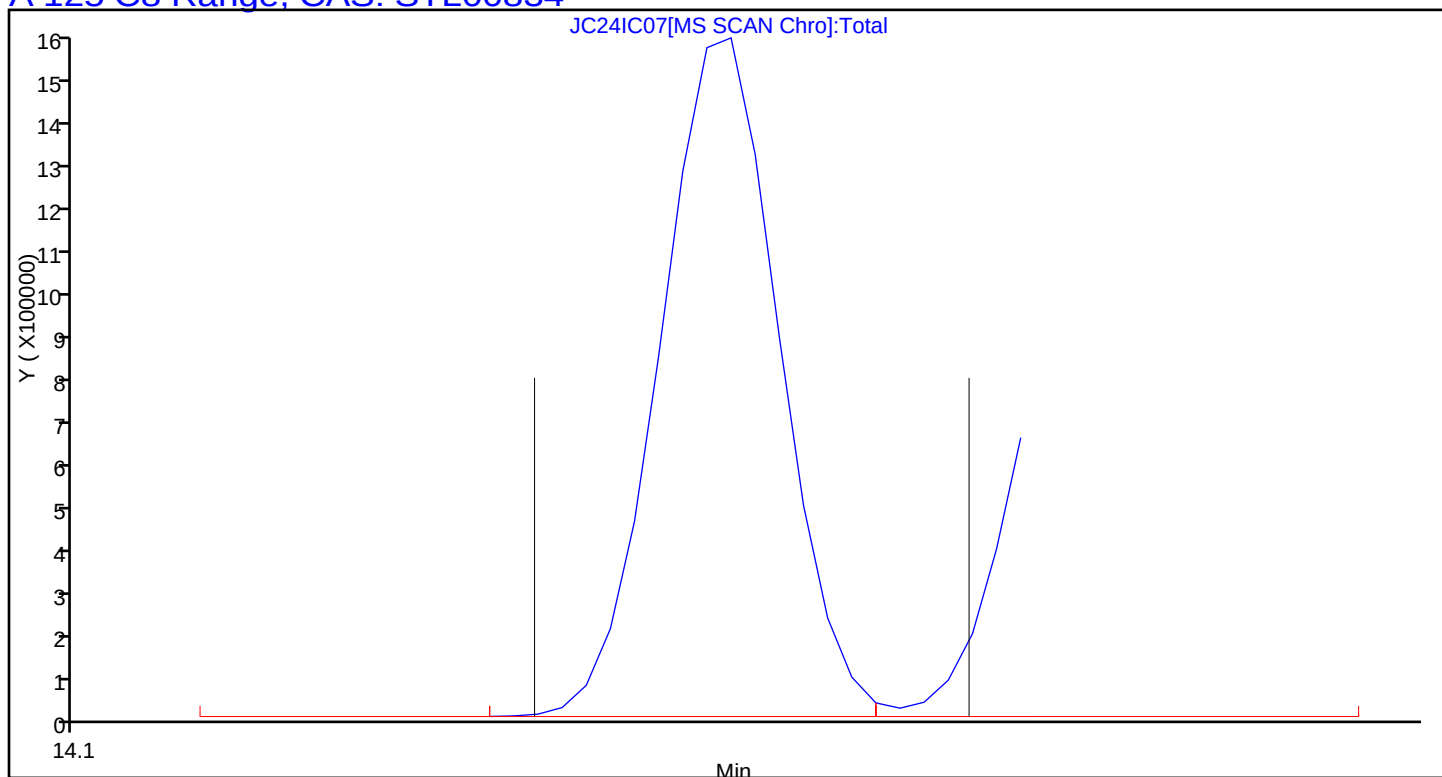
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 125 C8 Range, CAS: STL00834

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC07.D

Injection Date: 24-Mar-2017 16:06:30

Instrument ID: MJ

Lims ID: IC L7

Client ID:

Operator ID: 007126

ALS Bottle#:

6

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

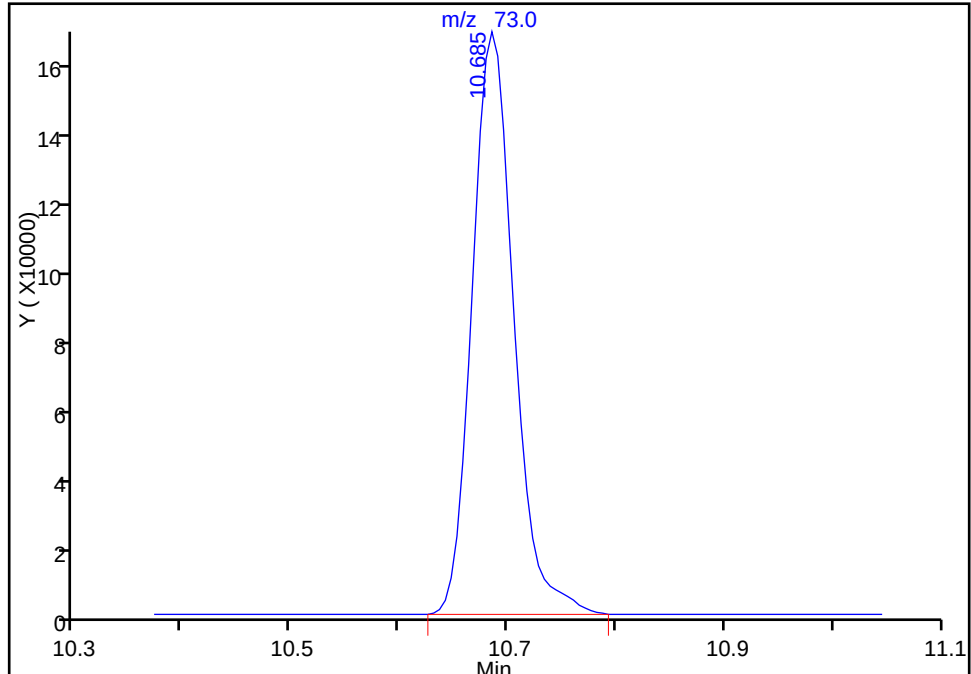
MS SCAN

55 Tert-amyl methyl ether, CAS: 994-05-8

Signal: 1

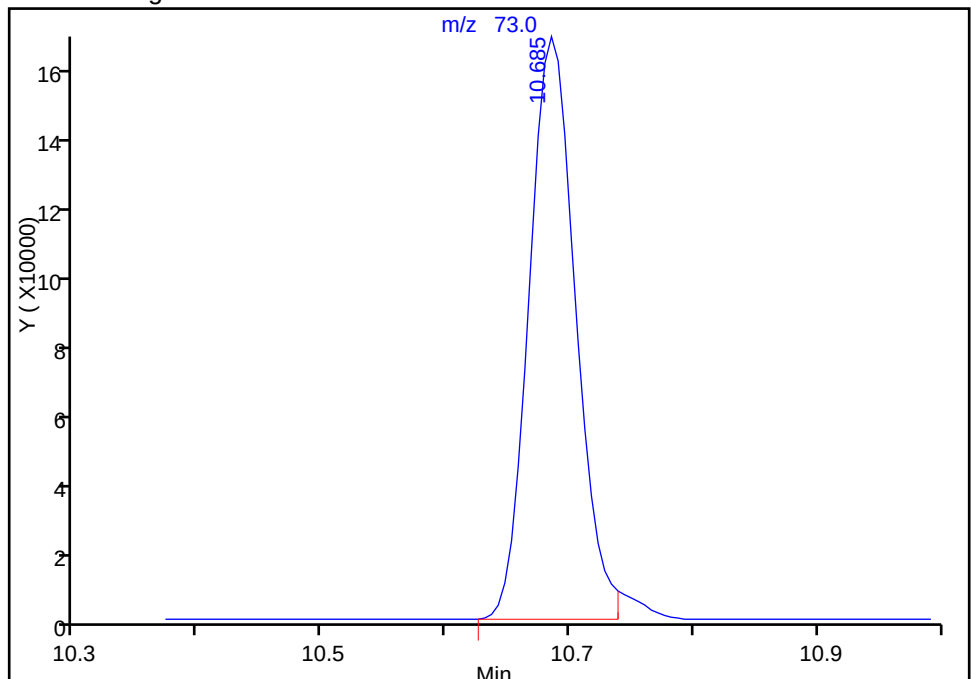
RT: 10.69
Area: 448750
Amount: 4.032060
Amount Units: ppb v/v

Processing Integration Results



RT: 10.69
Area: 439396
Amount: 3.963293
Amount Units: ppb v/v

Manual Integration Results



Reviewer: barlozhetskayaa, 27-Mar-2017 11:49:22

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC08.D
 Lims ID: IC L8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 24-Mar-2017 16:50:30 ALS Bottle#: 7 Worklist Smp#: 9
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004355-009
 Misc. Info.: 083677
 Operator ID: 007126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 27-Mar-2017 11:49:35 Calib Date: 24-Mar-2017 17:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: barlozhetskayaa

Date: 25-Mar-2017 12:08:11

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	8.554	8.549	0.005	97	266070	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.749	10.746	0.003	95	1176035	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.526	15.525	0.001	87	1134953	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.172	17.172	0.000	95	809058	4.00	4.08	
6 Chlorodifluoromethane	67	3.562	3.563	-0.001	97	169716	8.00	7.60	
7 Propene	41	3.573	3.572	0.001	99	554396	8.00	7.02	
8 Dichlorodifluoromethane	85	3.621	3.621	0.000	100	1676054	8.00	7.35	
9 Chloromethane	52	3.793	3.795	-0.002	99	171125	8.00	6.84	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.798	3.799	-0.001	92	729958	8.00	7.23	
11 Acetaldehyde	44	3.938	3.940	-0.002	99	730718	40.0	30.5	
12 Vinyl chloride	62	3.954	3.955	-0.001	99	539544	8.00	7.34	
14 Butadiene	54	4.041	4.037	0.004	69	396694	8.00	7.20	
13 Butane	43	4.041	4.038	0.003	84	766368	8.00	6.91	
15 Bromomethane	94	4.342	4.343	-0.001	99	484577	8.00	7.06	
16 Chloroethane	64	4.476	4.477	-0.001	94	227756	8.00	7.52	
17 Ethanol	31	4.568	4.568	0.000	96	528666	40.0	33.7	
18 Vinyl bromide	106	4.767	4.762	0.005	98	452410	8.00	7.58	
19 2-Methylbutane	43	4.810	4.811	-0.001	92	700105	8.00	7.05	
20 Trichlorofluoromethane	101	5.025	5.022	0.003	100	1578566	8.00	7.54	
21 Acrolein	56	5.036	5.034	0.002	94	102471	8.00	5.64	
22 Acetonitrile	40	5.100	5.098	0.002	99	143017	8.00	6.22	
23 Acetone	58	5.143	5.150	-0.007	98	399470	23.5	17.9	
24 Isopropyl alcohol	45	5.224	5.228	-0.004	97	1931000	23.5	21.1	
25 Pentane	72	5.235	5.233	0.002	96	90887	8.00	7.65	
26 Ethyl ether	31	5.402	5.407	-0.005	94	478285	8.00	6.79	
27 1,1-Dichloroethene	96	5.708	5.707	0.001	96	603327	8.00	7.53	
28 2-Methyl-2-propanol	59	5.800	5.808	-0.008	95	780014	8.00	7.91	
29 Acrylonitrile	53	5.810	5.809	0.001	95	252183	8.00	6.35	
30 1,1,2-Trichloro-1,2,2-trif	101	5.880	5.878	0.002	98	1263946	8.00	7.46	
31 Methylene Chloride	84	6.047	6.043	0.004	99	548763	8.00	6.68	

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	6.063	6.059	0.004	95	576469	8.00	7.16	
33 Carbon disulfide	76	6.203	6.203	0.000	99	1718809	8.00	7.39	
34 trans-1,2-Dichloroethene	96	6.838	6.838	0.000	97	616200	8.00	7.57	
35 2-Methylpentane	43	6.859	6.854	0.005	95	1372731	8.00	7.25	
36 Methyl tert-butyl ether	73	6.972	6.977	-0.005	97	852718	8.00	7.00	
37 1,1-Dichloroethane	63	7.252	7.249	0.003	100	1169271	8.00	7.34	
38 Vinyl acetate	43	7.360	7.359	0.001	100	815240	8.00	6.28	
39 2-Butanone (MEK)	72	7.806	7.810	-0.004	95	135045	8.00	6.90	
40 Hexane	56	7.822	7.821	0.001	91	523745	8.00	7.50	
41 Isopropyl ether	45	7.984	7.988	-0.004	98	1200487	8.00	6.94	
42 cis-1,2-Dichloroethene	96	8.226	8.220	0.006	96	631283	8.00	7.40	
43 Ethyl acetate	43	8.419	8.423	-0.004	99	661850	8.00	7.11	
44 Chloroform	83	8.565	8.561	0.004	98	1238922	8.00	7.06	
45 Tert-butyl ethyl ether	59	8.656	8.662	-0.006	95	1013817	8.00	7.33	
46 Tetrahydrofuran	42	8.974	8.989	-0.015	95	371130	8.00	6.97	
47 1,1,1-Trichloroethane	97	9.581	9.579	0.002	96	1345848	8.00	7.37	
48 1,2-Dichloroethane	62	9.694	9.691	0.003	97	848176	8.00	7.57	
49 n-Butanol	31	10.152	10.166	-0.014	76	172486	8.00	8.57	
50 Cyclohexane	69	10.189	10.185	0.004	95	278583	8.00	7.85	
51 Benzene	78	10.189	10.186	0.003	97	1586431	8.00	6.88	
52 Carbon tetrachloride	117	10.211	10.210	0.001	97	1387515	8.00	7.80	
53 2,3-Dimethylpentane	71	10.313	10.313	0.000	91	381951	8.00	7.65	
54 Thiophene	84	10.469	10.464	0.005	97	970981	8.00	7.42	
55 Tert-amyl methyl ether	73	10.684	10.688	-0.004	97	876189	8.00	7.50	
56 Isooctane	57	10.969	10.965	0.004	98	2839517	8.00	7.13	
57 n-Heptane	71	11.357	11.353	0.004	93	557129	8.00	7.26	
58 1,2-Dichloropropane	63	11.432	11.430	0.002	91	638984	8.00	7.59	
59 Trichloroethene	130	11.470	11.466	0.004	96	932122	8.00	7.49	
60 Dibromomethane	93	11.550	11.549	0.001	95	710629	8.00	7.42	
62 Dichlorobromomethane	83	11.701	11.699	0.002	100	1247198	8.00	7.82	
61 1,4-Dioxane	88	11.728	11.735	-0.007	93	154334	8.00	7.82	
63 Methyl methacrylate	41	11.809	11.811	-0.003	93	407854	8.00	7.63	
64 Methylcyclohexane	83	12.250	12.246	0.004	95	1279709	8.00	7.43	
65 4-Methyl-2-pentanone (MIBK)	43	12.669	12.672	-0.003	96	782519	8.00	7.93	
66 cis-1,3-Dichloropropene	75	12.718	12.717	0.001	94	977793	8.00	7.79	
67 trans-1,3-Dichloropropene	75	13.422	13.421	0.001	99	899809	8.00	7.99	
68 Toluene	91	13.546	13.542	0.004	94	1748504	8.00	7.29	
69 1,1,2-Trichloroethane	83	13.621	13.621	0.000	99	570770	8.00	7.62	
70 2-Methylthiophene	97	13.697	13.695	0.002	97	1634059	8.00	7.58	
71 3-Methylthiophene	97	13.901	13.897	0.004	99	1601255	8.00	7.58	
72 2-Hexanone	58	14.019	14.020	-0.001	93	413064	8.00	8.34	
73 n-Octane	85	14.245	14.244	0.001	94	589410	8.00	7.16	
74 Chlorodibromomethane	129	14.326	14.325	0.001	98	1303695	8.00	8.31	
75 Ethylene Dibromide	107	14.617	14.616	0.001	100	1085693	8.00	7.85	
76 Tetrachloroethene	129	14.692	14.690	0.002	96	705657	8.00	7.08	
78 Chlorobenzene	112	15.574	15.573	0.001	94	1510186	8.00	7.37	
77 2,3-Dimethylheptane	43	15.601	15.601	0.000	96	1738139	8.00	6.83	
79 Ethylbenzene	91	15.865	15.866	-0.001	98	1963698	8.00	7.25	
80 2-Ethylthiophene	97	15.972	15.967	0.005	98	1672512	8.00	7.54	
81 m-Xylene & p-Xylene	91	16.031	16.029	0.002	99	2771180	16.0	14.1	
82 n-Nonane	57	16.456	16.456	0.000	92	1206806	8.00	6.91	
83 Bromoform	173	16.478	16.474	0.004	97	1381449	8.00	8.77	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Styrene	104	16.494	16.494	0.000	99	1108413	8.00	7.57	
85 o-Xylene	91	16.553	16.555	-0.002	99	1393893	8.00	6.97	
86 1,1,2,2-Tetrachloroethane	83	16.881	16.880	0.001	99	953336	8.00	7.02	
87 1,2,3-Trichloropropane	110	17.037	17.039	-0.002	98	239633	8.00	7.14	
88 Isopropylbenzene	105	17.145	17.143	0.002	96	1733562	8.00	6.81	
89 N-Propylbenzene	120	17.694	17.690	0.004	99	468955	8.00	7.15	
90 2-Chlorotoluene	126	17.737	17.733	0.004	97	601349	8.00	7.41	
91 4-Ethyltoluene	105	17.844	17.845	-0.001	98	1604596	8.00	7.20	
92 1,3,5-Trimethylbenzene	120	17.920	17.920	0.000	93	747534	8.00	7.16	
93 Alpha Methyl Styrene	118	18.156	18.154	0.002	89	727504	8.00	8.10	
94 n-Decane	57	18.221	18.218	0.003	90	1363686	8.00	7.04	
95 tert-Butylbenzene	119	18.350	18.349	0.001	93	1397875	8.00	7.03	
96 1,2,4-Trimethylbenzene	105	18.366	18.364	0.002	96	1295741	8.00	7.22	
97 sec-Butylbenzene	105	18.624	18.623	0.001	98	1902507	8.00	6.98	
98 1,3-Dichlorobenzene	146	18.635	18.636	-0.001	99	1308965	8.00	7.61	
99 Benzyl chloride	91	18.716	18.712	0.004	98	1199154	8.00	8.50	
100 1,4-Dichlorobenzene	146	18.727	18.724	0.002	95	1286956	8.00	7.74	
101 4-Isopropyltoluene	119	18.791	18.788	0.003	97	1599862	8.00	7.42	
102 1,2,3-Trimethylbenzene	105	18.839	18.839	0.000	98	1002550	8.00	7.36	
103 Butylcyclohexane	83	18.899	18.897	0.002	92	1640613	8.00	7.11	
105 1,2-Dichlorobenzene	146	19.087	19.087	0.000	91	1111009	8.00	7.17	
104 2,3-Dihydroindene	117	19.087	19.087	0.000	94	1270545	8.00	7.07	
107 Indene	116	19.221	19.219	0.002	91	945358	8.00	7.72	
106 n-Butylbenzene	91	19.227	19.227	0.000	98	1549140	8.00	7.28	
108 Undecane	57	19.550	19.546	0.004	96	1216179	8.00	7.10	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.603	19.602	0.001	98	1177906	8.00	7.60	
110 1,2-Dibromo-3-Chloropropan	157	19.695	19.698	-0.003	99	433759	8.00	9.17	
111 1,2,4,5-Tetramethylbenzene	119	19.991	19.989	0.002	97	1374659	8.00	7.71	
112 1,2,3,5-Tetramethylbenzene	119	20.044	20.044	0.000	95	849841	8.00	7.50	
113 1,2,3,4-Tetramethylbenzene	119	20.443	20.440	0.003	97	1121362	8.00	7.63	
114 Dodecane	57	20.609	20.607	0.002	96	1131558	8.00	7.79	
115 1,2,4-Trichlorobenzene	180	20.798	20.796	0.002	93	746955	8.00	8.85	
116 Naphthalene	128	20.937	20.937	0.000	99	1372304	8.00	8.76	
117 Benzo(b)thiophene	134	21.040	21.042	-0.002	99	719374	8.00	9.11	
118 Hexachlorobutadiene	225	21.158	21.157	0.001	95	1062355	8.00	7.14	
119 1,2,3-Trichlorobenzene	180	21.228	21.227	0.001	94	662625	8.00	8.29	
120 2-Methylnaphthalene	142	21.922	21.921	0.001	99	328431	24.2	31.2	
121 1-Methylnaphthalene	142	22.051	22.049	0.002	99	316908	24.2	27.5	
A 124 Toluene Range	1	13.546	(13.516-13.576)		0	4358144	8.00	7.48	
A 125 C8 Range	1	14.240	(14.202-14.315)		0	5647961	8.00	7.34	
S 126 Xylenes, Total	100				0		24.0	21.1	
S 127 1,2-Dichloroethene, Total	1				0		16.0	15.0	

Reagents:

40L8DNP_00010

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC08.D

Injection Date: 24-Mar-2017 16:50:30

Instrument ID: MJ

Operator ID: 007126

Lims ID: IC L8

Worklist Smp#: 9

Client ID:

Purge Vol: 500.000 mL

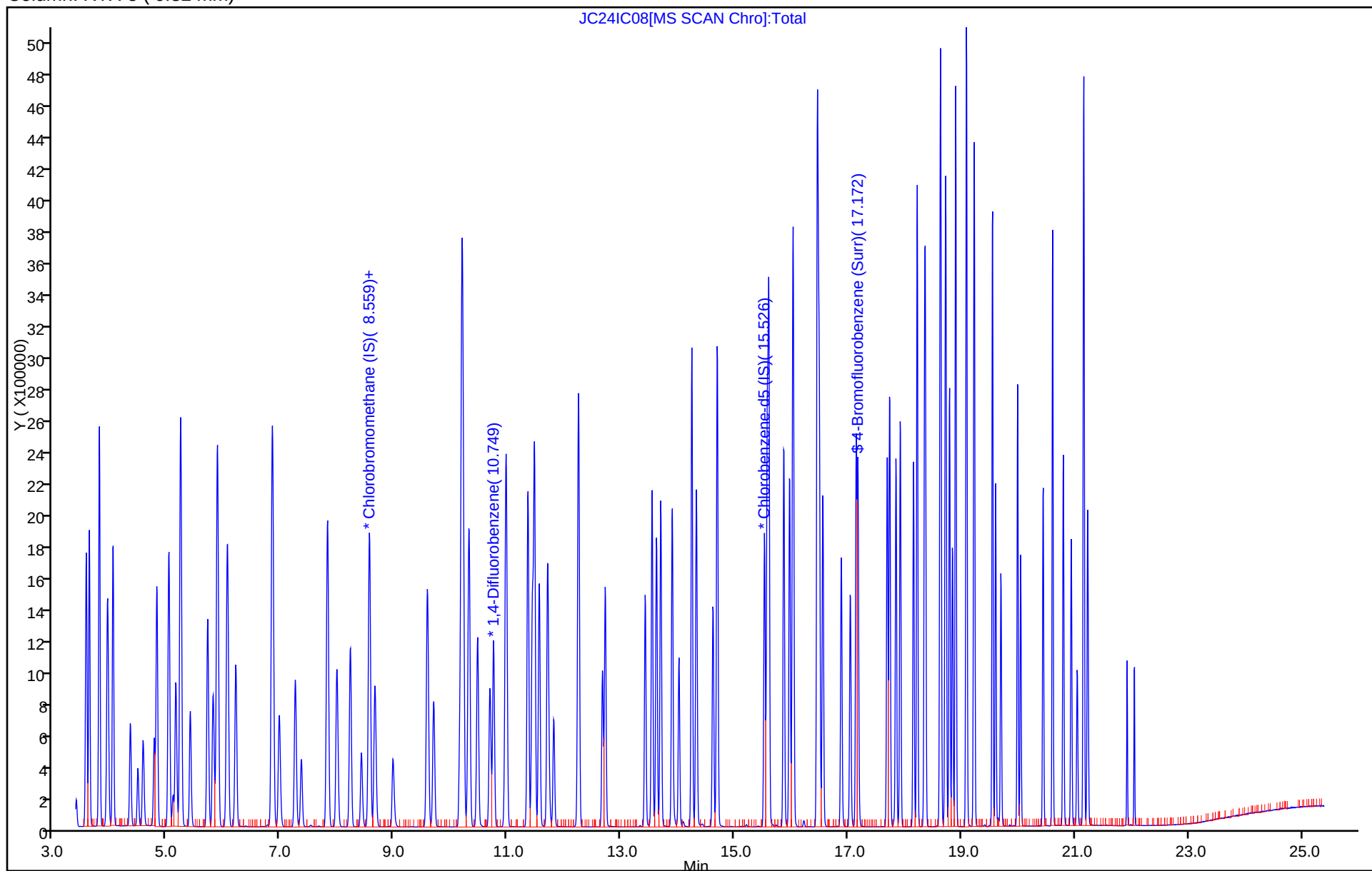
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC08.D

Injection Date: 24-Mar-2017 16:50:30

Instrument ID: MJ

Lims ID: IC L8

Client ID:

Operator ID: 007126

ALS Bottle#: 7

Worklist Smp#: 9

Purge Vol: 500.000 mL

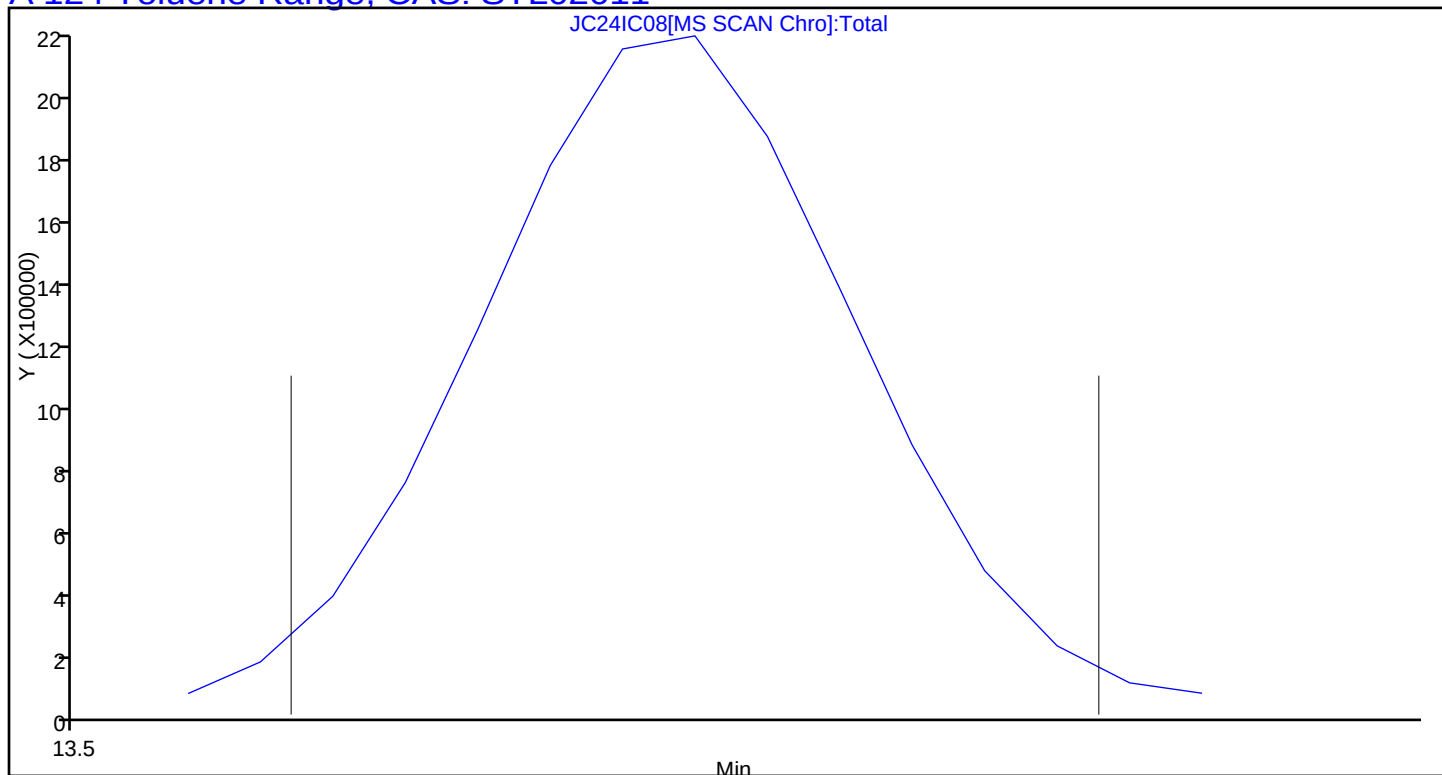
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 124 Toluene Range, CAS: STL02011

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC08.D

Injection Date: 24-Mar-2017 16:50:30

Instrument ID: MJ

Lims ID: IC L8

Client ID:

Operator ID: 007126

ALS Bottle#: 7

Worklist Smp#: 9

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

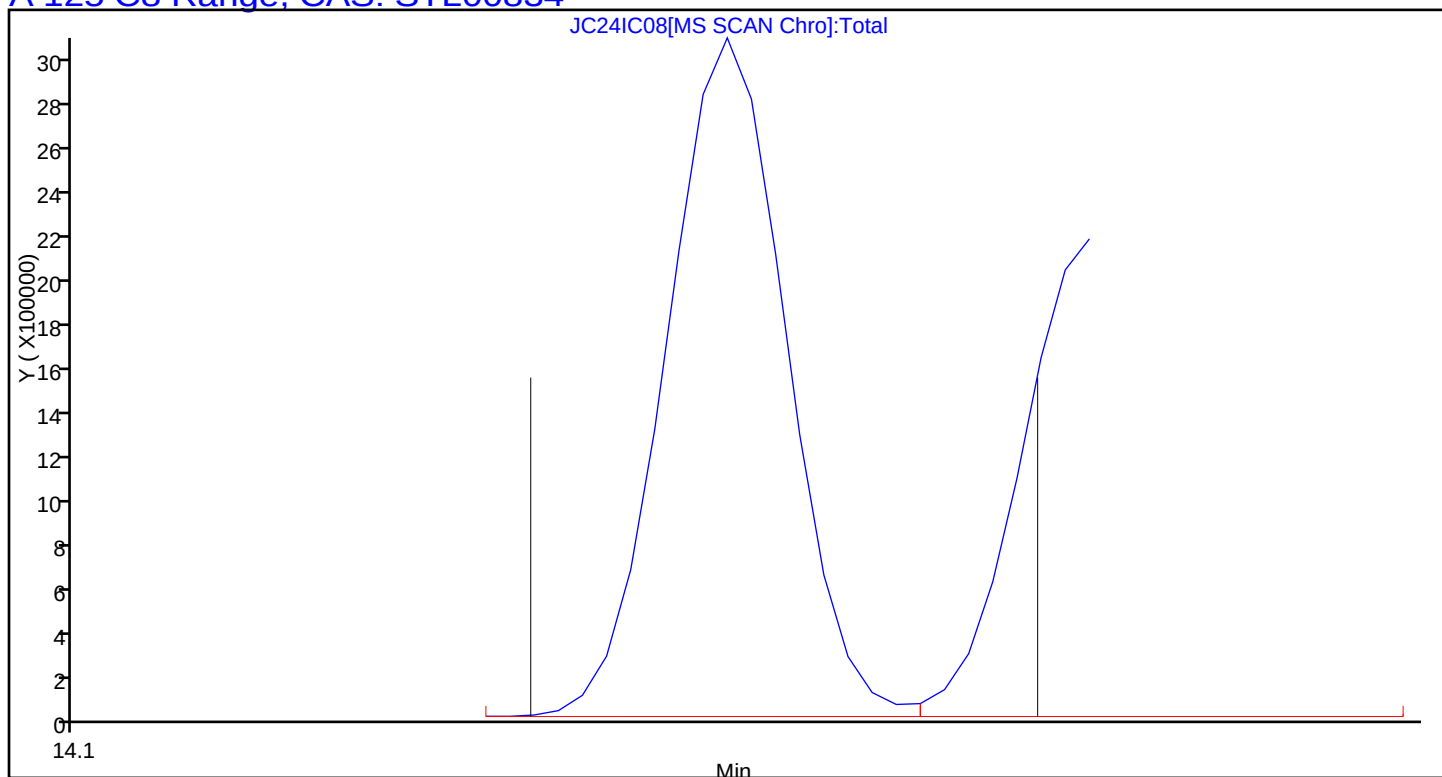
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 125 C8 Range, CAS: STL00834



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D
 Lims ID: IC L9
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 24-Mar-2017 17:35:30 ALS Bottle#: 8 Worklist Smp#: 10
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004355-010
 Misc. Info.: 083675
 Operator ID: 007126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 27-Mar-2017 11:49:47 Calib Date: 24-Mar-2017 17:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: barlozhetskayaa

Date: 25-Mar-2017 11:49:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.560	8.549	0.011	96	253448	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.755	10.746	0.009	95	1211299	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.532	15.525	0.007	87	1143526	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.178	17.172	0.006	95	813488	4.00	4.08	
6 Chlorodifluoromethane	67	3.562	3.563	-0.001	96	335135	16.0	15.7	
7 Propene	41	3.573	3.572	0.001	99	1045688	16.0	13.9	
8 Dichlorodifluoromethane	85	3.621	3.621	0.000	100	3228972	16.0	14.9	
9 Chloromethane	52	3.794	3.795	-0.001	99	331742	16.0	13.9	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.804	3.799	0.005	92	1351025	16.0	14.0	
11 Acetaldehyde	44	3.944	3.940	0.004	100	1634496	80.0	71.6	
12 Vinyl chloride	62	3.960	3.955	0.005	99	1092378	16.0	15.6	
14 Butadiene	54	4.041	4.037	0.004	69	811868	16.0	15.5	
13 Butane	43	4.041	4.038	0.003	84	1560166	16.0	14.8	
15 Bromomethane	94	4.348	4.343	0.005	99	980840	16.0	15.0	
16 Chloroethane	64	4.482	4.477	0.005	95	464349	16.0	16.1	
17 Ethanol	31	4.579	4.568	0.011	96	922606	80.0	61.7	
18 Vinyl bromide	106	4.767	4.762	0.005	99	919063	16.0	16.2	
19 2-Methylbutane	43	4.816	4.811	0.005	92	1412761	16.0	14.9	
20 Trichlorofluoromethane	101	5.025	5.022	0.003	100	3169455	16.0	15.9	
21 Acrolein	56	5.036	5.034	0.002	93	290691	16.0	16.8	
22 Acetonitrile	40	5.101	5.098	0.003	99	376004	16.0	17.2	
23 Acetone	58	5.149	5.150	-0.001	98	841632	47.0	39.6	
24 Isopropyl alcohol	45	5.235	5.228	0.007	93	3307384	47.0	38.0	
25 Pentane	72	5.241	5.233	0.008	96	179088	16.0	15.8	
26 Ethyl ether	31	5.402	5.407	-0.005	94	1079497	16.0	16.1	
27 1,1-Dichloroethene	96	5.714	5.707	0.007	96	1231917	16.0	16.1	
28 2-Methyl-2-propanol	59	5.811	5.808	0.003	95	1395017	16.0	14.8	
29 Acrylonitrile	53	5.816	5.809	0.007	97	667216	16.0	17.6	
30 1,1,2-Trichloro-1,2,2-trif	101	5.886	5.878	0.008	97	2483416	16.0	15.4	
31 Methylene Chloride	84	6.053	6.043	0.010	99	1078459	16.0	13.8	

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	6.069	6.059	0.010	96	1151910	16.0	15.0	
33 Carbon disulfide	76	6.209	6.203	0.006	99	3490363	16.0	15.7	
34 trans-1,2-Dichloroethene	96	6.844	6.838	0.006	97	1211127	16.0	15.6	
35 2-Methylpentane	43	6.860	6.854	0.006	96	2613669	16.0	14.5	
36 Methyl tert-butyl ether	73	6.973	6.977	-0.004	97	1908670	16.0	16.4	
37 1,1-Dichloroethane	63	7.258	7.249	0.009	100	2334013	16.0	15.4	
38 Vinyl acetate	43	7.365	7.359	0.006	100	2227273	16.0	18.0	
39 2-Butanone (MEK)	72	7.812	7.810	0.002	95	233393	16.0	12.5	
40 Hexane	56	7.828	7.821	0.007	91	1030279	16.0	15.5	
41 Isopropyl ether	45	7.989	7.988	0.001	98	2570530	16.0	15.6	
42 cis-1,2-Dichloroethene	96	8.232	8.220	0.012	96	1271241	16.0	15.6	
43 Ethyl acetate	43	8.425	8.423	0.002	99	1226388	16.0	13.8	
44 Chloroform	83	8.570	8.561	0.009	97	2533326	16.0	15.1	
45 Tert-butyl ethyl ether	59	8.662	8.662	0.000	95	2068493	16.0	15.7	
46 Tetrahydrofuran	42	8.979	8.989	-0.010	95	810678	16.0	16.0	
47 1,1,1-Trichloroethane	97	9.587	9.579	0.008	96	2726347	16.0	15.7	
48 1,2-Dichloroethane	62	9.700	9.691	0.009	97	1745806	16.0	15.1	
49 n-Butanol	31	10.157	10.166	-0.009	82	299753	16.0	14.5	
50 Cyclohexane	69	10.190	10.185	0.005	76	524740	16.0	14.3	
51 Benzene	78	10.195	10.186	0.009	97	3035346	16.0	12.8	
52 Carbon tetrachloride	117	10.217	10.210	0.007	99	2735035	16.0	14.9	
53 2,3-Dimethylpentane	71	10.319	10.313	0.006	90	757792	16.0	14.7	
54 Thiophene	84	10.475	10.464	0.011	97	1976083	16.0	14.7	
55 Tert-amyl methyl ether	73	10.690	10.688	0.002	97	1663304	16.0	14.1	
56 Isooctane	57	10.975	10.965	0.010	98	5589142	16.0	13.6	
57 n-Heptane	71	11.362	11.353	0.009	92	1108390	16.0	14.0	
58 1,2-Dichloropropane	63	11.438	11.430	0.008	90	1304842	16.0	15.0	
59 Trichloroethene	130	11.475	11.466	0.009	96	1707390	16.0	13.3	
60 Dibromomethane	93	11.556	11.549	0.007	95	1424109	16.0	14.4	
62 Dichlorobromomethane	83	11.707	11.699	0.008	99	2573564	16.0	15.7	
61 1,4-Dioxane	88	11.734	11.735	-0.001	92	243836	16.0	12.0	
63 Methyl methacrylate	41	11.814	11.811	0.003	93	773766	16.0	14.1	
64 Methylcyclohexane	83	12.250	12.246	0.004	94	2455783	16.0	13.8	
65 4-Methyl-2-pentanone (MIBK)	43	12.675	12.672	0.003	96	1326528	16.0	13.0	
66 cis-1,3-Dichloropropene	75	12.723	12.717	0.006	95	2016227	16.0	15.6	
67 trans-1,3-Dichloropropene	75	13.428	13.421	0.007	99	1883809	16.0	16.6	
68 Toluene	91	13.546	13.542	0.004	94	3644860	16.0	15.1	
69 1,1,2-Trichloroethane	83	13.627	13.621	0.006	99	1148949	16.0	15.2	
70 2-Methylthiophene	97	13.702	13.695	0.007	97	3321530	16.0	15.3	
71 3-Methylthiophene	97	13.902	13.897	0.005	99	3242609	16.0	15.2	
72 2-Hexanone	58	14.020	14.020	0.000	93	707229	16.0	14.2	
73 n-Octane	85	14.251	14.244	0.007	93	1154854	16.0	13.9	
74 Chlorodibromomethane	129	14.332	14.325	0.007	98	2634433	16.0	16.7	
75 Ethylene Dibromide	107	14.622	14.616	0.006	100	2189748	16.0	15.7	
76 Tetrachloroethene	129	14.698	14.690	0.008	96	1403388	16.0	14.0	
78 Chlorobenzene	112	15.580	15.573	0.007	94	2942999	16.0	14.2	
77 2,3-Dimethylheptane	43	15.607	15.601	0.006	95	3172200	16.0	12.4	
79 Ethylbenzene	91	15.870	15.866	0.004	98	4150627	16.0	15.2	
80 2-Ethylthiophene	97	15.973	15.967	0.006	98	3483070	16.0	15.6	
81 m-Xylene & p-Xylene	91	16.032	16.029	0.003	99	5806752	32.0	29.4	
82 n-Nonane	57	16.457	16.456	0.001	89	2111184	16.0	12.0	
83 Bromoform	173	16.478	16.474	0.004	97	2620482	16.0	16.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Styrene	104	16.500	16.494	0.006	99	2306046	16.0	15.6	
85 o-Xylene	91	16.559	16.555	0.004	99	3100029	16.0	15.4	
86 1,1,2,2-Tetrachloroethane	83	16.882	16.880	0.002	99	2134850	16.0	15.6	
87 1,2,3-Trichloropropane	110	17.043	17.039	0.004	98	531499	16.0	15.7	
88 Isopropylbenzene	105	17.145	17.143	0.002	97	3911212	16.0	15.3	
89 N-Propylbenzene	120	17.694	17.690	0.004	99	1090460	16.0	16.5	
90 2-Chlorotoluene	126	17.737	17.733	0.004	97	1218343	16.0	14.9	
91 4-Ethyltoluene	105	17.850	17.845	0.005	98	3563117	16.0	15.9	
92 1,3,5-Trimethylbenzene	120	17.925	17.920	0.005	93	1640005	16.0	15.6	
93 Alpha Methyl Styrene	118	18.157	18.154	0.003	89	1680241	16.0	18.6	
94 n-Decane	57	18.221	18.218	0.003	91	2630997	16.0	13.5	
95 tert-Butylbenzene	119	18.350	18.349	0.001	94	2899542	16.0	14.5	
96 1,2,4-Trimethylbenzene	105	18.366	18.364	0.002	96	2649356	16.0	14.7	
97 sec-Butylbenzene	105	18.625	18.623	0.002	98	3825733	16.0	13.9	
98 1,3-Dichlorobenzene	146	18.641	18.636	0.005	99	2571995	16.0	14.8	
99 Benzyl chloride	91	18.716	18.712	0.004	98	2359025	16.0	16.6	
100 1,4-Dichlorobenzene	146	18.727	18.724	0.003	95	2581388	16.0	15.4	
101 4-Isopropyltoluene	119	18.791	18.788	0.003	97	3073644	16.0	14.1	
102 1,2,3-Trimethylbenzene	105	18.845	18.839	0.006	99	2015135	16.0	14.7	
103 Butylcyclohexane	83	18.899	18.897	0.002	93	3116127	16.0	13.4	
105 1,2-Dichlorobenzene	146	19.093	19.087	0.006	87	2246516	16.0	14.4	
104 2,3-Dihydroindene	117	19.093	19.087	0.006	94	2687490	16.0	14.8	
107 Indene	116	19.222	19.219	0.003	91	1944503	16.0	15.8	
106 n-Butylbenzene	91	19.227	19.227	0.000	99	2815357	16.0	13.1	
108 Undecane	57	19.550	19.546	0.004	95	2451756	16.0	14.2	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.604	19.602	0.002	98	2179865	16.0	14.0	
110 1,2-Dibromo-3-Chloropropan	157	19.701	19.698	0.003	98	813480	16.0	17.1	
111 1,2,4,5-Tetramethylbenzene	119	19.991	19.989	0.002	97	2471667	16.0	13.8	
112 1,2,3,5-Tetramethylbenzene	119	20.045	20.044	0.001	95	1554582	16.0	13.6	
113 1,2,3,4-Tetramethylbenzene	119	20.443	20.440	0.003	97	1999910	16.0	13.5	
114 Dodecane	57	20.610	20.607	0.003	96	1988165	16.0	13.6	
115 1,2,4-Trichlorobenzene	180	20.798	20.796	0.002	94	1543505	16.0	18.1	
116 Naphthalene	128	20.938	20.937	0.001	99	2480762	16.0	15.7	
117 Benzo(b)thiophene	134	21.045	21.042	0.003	99	1343287	16.0	16.9	
118 Hexachlorobutadiene	225	21.158	21.157	0.001	95	2093974	16.0	14.0	
119 1,2,3-Trichlorobenzene	180	21.228	21.227	0.001	94	1233209	16.0	15.3	
120 2-Methylnaphthalene	142	21.922	21.921	0.001	99	530404	48.4	50.1	
121 1-Methylnaphthalene	142	22.051	22.049	0.002	99	499473	48.4	43.1	
A 124 Toluene Range	1	13.546	(13.516-13.576)		0	9076964	16.0	15.5	
A 125 C8 Range	1	14.246	(14.202-14.315)		0	10840031	16.0	14.0	
S 126 Xylenes, Total	100				0		48.0	44.8	
S 127 1,2-Dichloroethene, Total	1				0		32.0	31.3	

Reagents:

40L9DNP_00013

Amount Added: 200.00

Units: ml

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 27-Mar-2017 11:49:49

Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D

Injection Date: 24-Mar-2017 17:35:30

Instrument ID: MJ

Operator ID: 007126

Lims ID: IC L9

Worklist Smp#: 10

Client ID:

Purge Vol: 500.000 mL

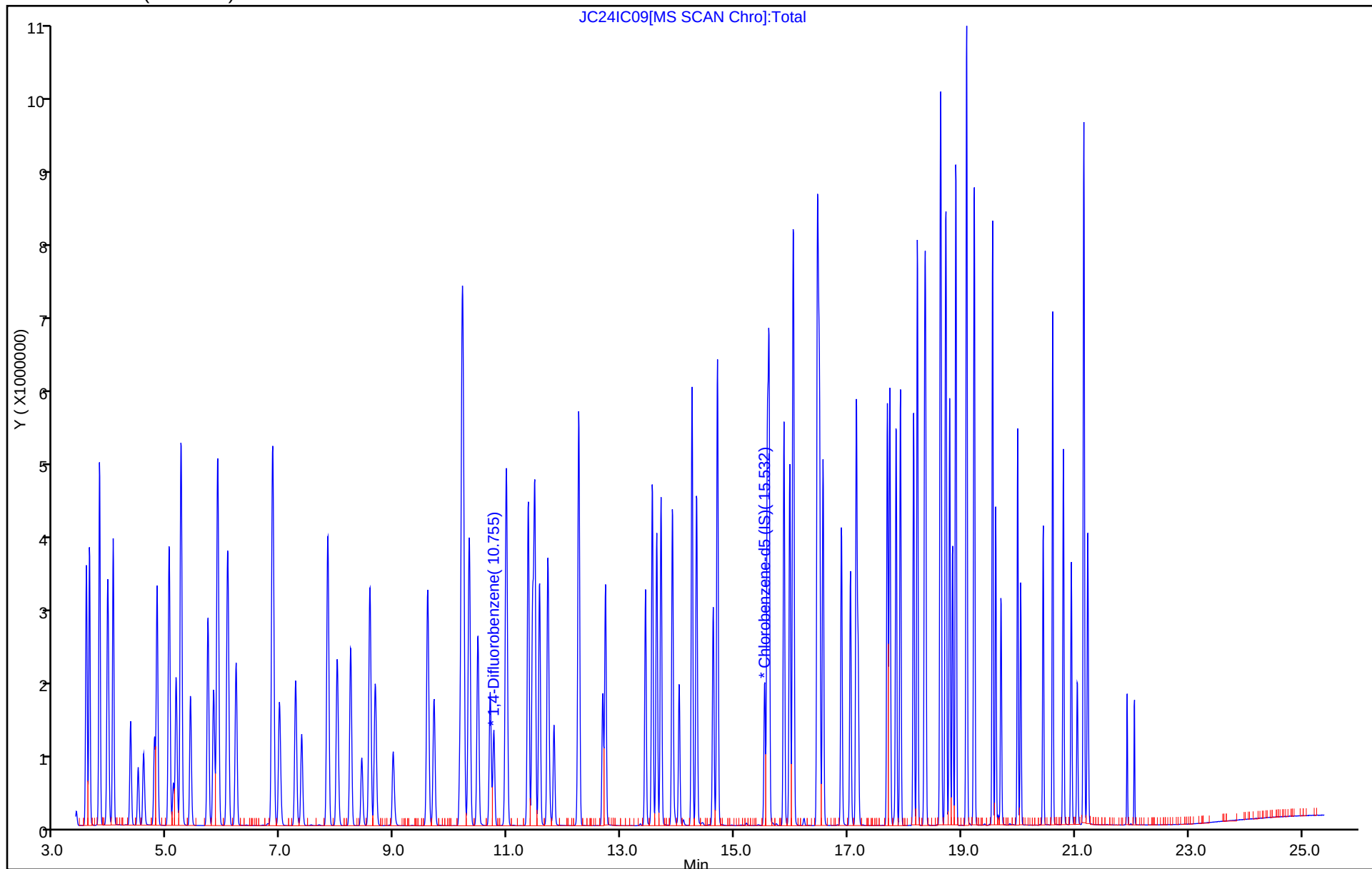
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D

Injection Date: 24-Mar-2017 17:35:30

Instrument ID: MJ

Lims ID: IC L9

Client ID:

Operator ID: 007126

ALS Bottle#: 8

Worklist Smp#: 10

Purge Vol: 500.000 mL

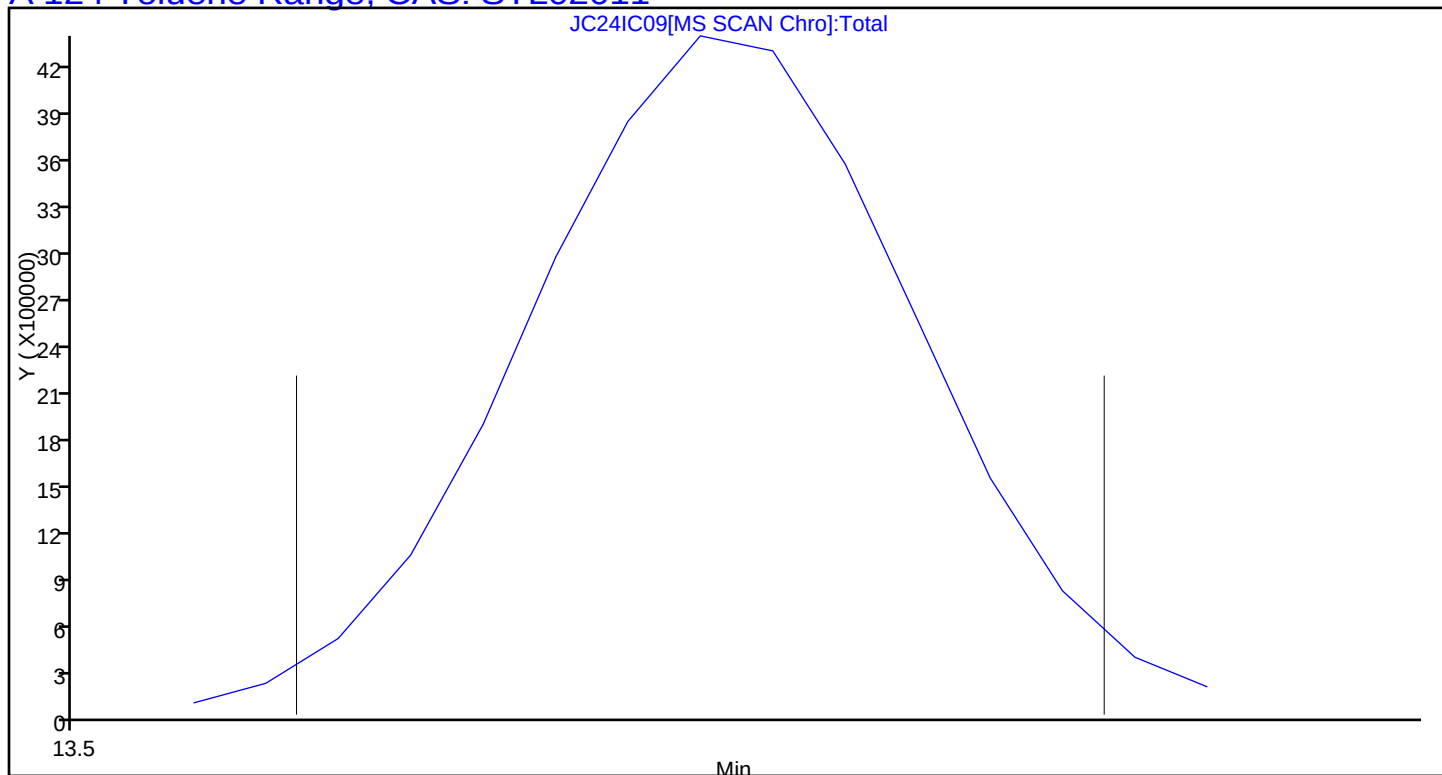
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D

Injection Date: 24-Mar-2017 17:35:30

Instrument ID: MJ

Lims ID: IC L9

Client ID:

Operator ID: 007126

ALS Bottle#: 8

Worklist Smp#: 10

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

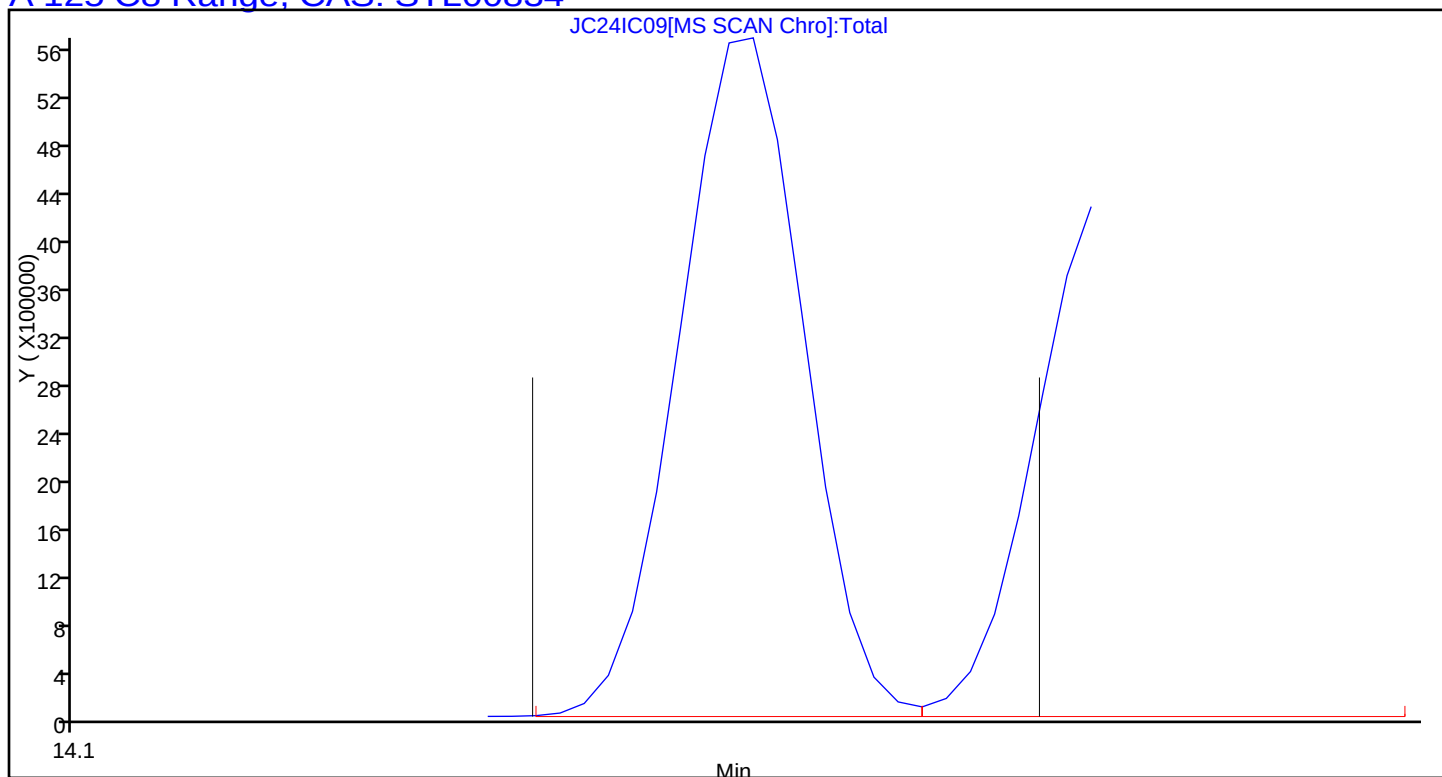
Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 125 C8 Range, CAS: STL00834



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1

SDG No.: _____

Lab Sample ID: ICV 140-9482/13 Calibration Date: 03/15/2017 21:46

Instrument ID: MG Calib Start Date: 03/15/2017 14:36

GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/15/2017 20:21

Lab File ID: GICVC15.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	0.4447	0.4195		1.89	2.00	-5.7	35.0
Propene	Ave	1.058	0.9888		1.87	2.00	-6.5	35.0
Dichlorodifluoromethane	Ave	4.233	4.005		1.89	2.00	-5.4	35.0
Chloromethane	Ave	0.2848	0.2718		1.91	2.00	-4.6	35.0
1,2-Dichlorotetrafluoroethane	Ave	2.520	2.459		1.95	2.00	-2.4	35.0
Acetaldehyde	Ave	0.3344	0.2828		8.46	10.0	-15.4	35.0
Vinyl chloride	Ave	1.170	1.152		1.97	2.00	-1.6	35.0
1,3-Butadiene	Ave	0.7793	0.7583		1.95	2.00	-2.7	35.0
Butane	Ave	1.658	1.586		1.91	2.00	-4.3	35.0
Bromomethane	Ave	1.156	1.113		1.92	2.00	-3.8	35.0
Chloroethane	Ave	0.5663	0.5570		1.97	2.00	-1.6	35.0
Ethanol	Ave	0.4025	0.3613		8.98	10.0	-10.2	35.0
Vinyl bromide	Ave	1.096	1.145		2.09	2.00	4.5	35.0
2-Methylbutane	Ave	1.120	1.090		1.95	2.00	-2.7	35.0
Acrolein	Ave	0.1638	0.1720		2.10	2.00	5.0	35.0
Trichlorofluoromethane	Ave	4.216	3.908		1.85	2.00	-7.3	35.0
Acetonitrile	Ave	0.3357	0.2765		1.65	2.00	-17.6	35.0
Acetone	Ave	0.3928	0.2866		4.38	6.00	-27.0	35.0
Isopropyl alcohol	Ave	1.359	0.9130		4.03	6.00	-32.8	35.0
Pentane	Ave	0.2037	0.2013		1.98	2.00	-1.2	35.0
Ethyl ether	Ave	0.9241	0.7238		1.57	2.00	-21.7	35.0
1,1-Dichloroethene	Ave	1.066	1.018		1.91	2.00	-4.5	35.0
Acrylonitrile	Ave	0.4861	0.4093		1.68	2.00	-15.8	35.0
t-Butyl alcohol	Ave	1.624	1.441		1.77	2.00	-11.3	35.0
1,1,2-Trichlorotrifluoroethane	Ave	2.459	2.373		1.93	2.00	-3.5	35.0
Methylene Chloride	Ave	0.9619	0.8705		1.81	2.00	-9.5	35.0
3-Chloropropene	Ave	1.034	0.9533		1.84	2.00	-7.8	35.0
Carbon disulfide	Ave	2.716	2.579		1.90	2.00	-5.1	35.0
trans-1,2-Dichloroethene	Ave	1.042	1.038		1.99	2.00	-0.4	35.0
2-Methylpentane	Ave	2.045	2.174		2.13	2.00	6.3	35.0
Methyl tert-butyl ether	Ave	3.096	2.652		1.71	2.00	-14.3	35.0
1,1-Dichloroethane	Ave	2.035	1.947		1.91	2.00	-4.3	35.0
Vinyl acetate	Ave	2.337	2.078		1.78	2.00	-11.1	35.0
2-Butanone	Ave	0.4552	0.3871		1.70	2.00	-15.0	35.0
Hexane	Ave	0.7899	0.7696		1.95	2.00	-2.6	35.0
Isopropyl ether	Ave	2.907	2.543		1.75	2.00	-12.5	35.0
cis-1,2-Dichloroethene	Ave	1.107	1.110		2.00	2.00	0.2	35.0
Ethyl acetate	Ave	1.927	1.556		1.61	2.00	-19.3	35.0
Chloroform	Ave	2.806	2.675		1.91	2.00	-4.7	35.0
Tert-butyl ethyl ether	Ave	2.922	2.660		1.82	2.00	-9.0	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Lab Sample ID: ICV 140-9482/13 Calibration Date: 03/15/2017 21:46
 Instrument ID: MG Calib Start Date: 03/15/2017 14:36
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/15/2017 20:21
 Lab File ID: GICVC15.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	1.021	0.8506		1.67	2.00	-16.7	35.0
1,1,1-Trichloroethane	Ave	3.246	3.062		1.89	2.00	-5.7	35.0
1,2-Dichloroethane	Ave	0.4038	0.3835		1.90	2.00	-5.0	35.0
Benzene	Ave	0.6795	0.6694		1.97	2.00	-1.5	35.0
1-Butanol	Ave	0.0727	0.0709		1.95	2.00	-2.5	35.0
Cyclohexane	Ave	0.1144	0.1156		2.02	2.00	1.0	35.0
Carbon tetrachloride	Ave	0.7102	0.6979		1.97	2.00	-1.7	35.0
2,3-Dimethylpentane	Ave	0.1564	0.1474		1.88	2.00	-5.8	35.0
Thiophene	Ave	0.3797	0.4001		2.11	2.00	5.4	35.0
Tert-amyl methyl ether	Ave	0.6230	0.5616		1.80	2.00	-9.9	35.0
2,2,4-Trimethylpentane	Ave	1.009	1.009		2.00	2.00	0.0	35.0
Heptane	Ave	0.2519	0.2479		1.97	2.00	-1.6	35.0
1,2-Dichloropropane	Ave	0.2308	0.2192		1.90	2.00	-5.0	35.0
Trichloroethene	Ave	0.3681	0.3977		2.16	2.00	8.0	35.0
Dibromomethane	Ave	0.3067	0.3038		1.98	2.00	-1.0	35.0
Bromodichloromethane	Ave	0.5888	0.5946		2.02	2.00	1.0	35.0
1,4-Dioxane	Ave	0.0920	0.0826		1.80	2.00	-10.2	35.0
Methyl methacrylate	Ave	0.2550	0.2190		1.72	2.00	-14.1	35.0
Methylcyclohexane	Ave	0.5294	0.4319		1.63	2.00	-18.4	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3903	0.3266		1.67	2.00	-16.3	35.0
cis-1,3-Dichloropropene	Ave	0.4274	0.4321		2.02	2.00	1.1	35.0
trans-1,3-Dichloropropene	Ave	0.4284	0.4207		1.96	2.00	-1.8	35.0
Toluene	Ave	0.7969	0.7662		1.92	2.00	-3.9	35.0
1,1,2-Trichloroethane	Ave	0.2389	0.2248		1.88	2.00	-5.9	35.0
2-Methylthiophene	Ave	0.6689	0.6855		2.05	2.00	2.5	35.0
3-Methylthiophene	Ave	0.6622	0.7015		2.12	2.00	5.9	35.0
2-Hexanone	Ave	0.1907	0.1692		1.77	2.00	-11.3	35.0
Octane	Ave	0.2880	0.2951		2.05	2.00	2.5	35.0
Dibromochloromethane	Ave	0.5960	0.6258		2.10	2.00	5.0	35.0
1,2-Dibromoethane	Ave	0.4679	0.4673		2.00	2.00	-0.1	35.0
Tetrachloroethene	Ave	0.3645	0.3606		1.98	2.00	-1.1	35.0
Chlorobenzene	Ave	0.6744	0.6601		1.96	2.00	-2.1	35.0
2,3-Dimethylheptane	Ave	0.6822	0.6877		2.02	2.00	0.8	35.0
Ethylbenzene	Ave	1.113	0.9942		1.79	2.00	-10.7	35.0
2-Ethylthiophene	Ave	0.8768	0.8035		1.83	2.00	-8.4	35.0
m-Xylene & p-Xylene	Ave	0.8990	0.8022		3.57	4.00	-10.8	35.0
Bromoform	Ave	0.5594	0.6080		2.17	2.00	8.7	35.0
Nonane	Ave	0.4886	0.4940		2.02	2.00	1.1	35.0
Styrene	Ave	0.5931	0.5871		1.98	2.00	-1.0	35.0
o-Xylene	Ave	0.9191	0.8040		1.75	2.00	-12.5	35.0
1,1,2,2-Tetrachloroethane	Ave	0.5794	0.5324		1.84	2.00	-8.1	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Lab Sample ID: ICV 140-9482/13 Calibration Date: 03/15/2017 21:46
 Instrument ID: MG Calib Start Date: 03/15/2017 14:36
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/15/2017 20:21
 Lab File ID: GICVC15.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	0.2120	0.1848		1.74	2.00	-12.9	35.0
Isopropylbenzene	Ave	1.335	1.181		1.77	2.00	-11.6	35.0
Propylbenzene	Ave	0.3502	0.3227		1.84	2.00	-7.8	35.0
2-Chlorotoluene	Ave	0.3267	0.3097		1.90	2.00	-5.2	35.0
4-Ethyltoluene	Ave	1.257	1.076		1.71	2.00	-14.4	35.0
1,3,5-Trimethylbenzene	Ave	0.5895	0.5364		1.82	2.00	-9.0	35.0
Alpha Methyl Styrene	Ave	0.4751	0.4525		1.90	2.00	-4.8	35.0
Decane	Ave	0.5991	0.5941		1.98	2.00	-0.8	35.0
tert-Butylbenzene	Ave	1.242	1.099		1.77	2.00	-11.5	35.0
1,2,4-Trimethylbenzene	Ave	1.129	1.005		1.78	2.00	-11.0	35.0
1,3-Dichlorobenzene	Ave	0.8518	0.7863		1.85	2.00	-7.7	35.0
sec-Butylbenzene	Ave	1.590	1.436		1.81	2.00	-9.7	35.0
Benzyl chloride	Ave	1.065	0.9701		1.82	2.00	-8.9	35.0
1,4-Dichlorobenzene	Ave	0.8325	0.7695		1.85	2.00	-7.6	35.0
4-Isopropyltoluene	Ave	1.404	1.253		1.78	2.00	-10.8	35.0
1,2,3-Trimethylbenzene	Ave	0.8430	0.8126		1.93	2.00	-3.6	35.0
Butylcyclohexane	Ave	0.8320	0.7981		1.92	2.00	-4.1	35.0
1,2-Dichlorobenzene	Ave	0.8117	0.7324		1.80	2.00	-9.8	35.0
Indane	Ave	1.029	0.8707		1.69	2.00	-15.4	35.0
Indene	Ave	0.7517	0.8606		2.29	2.00	14.5	35.0
Butylbenzene	Ave	1.313	1.174		1.79	2.00	-10.6	35.0
Undecane	Ave	0.7029	0.6633		1.89	2.00	-5.6	35.0
1,2-Dimethyl-4-Ethylbenzene	Ave	1.048	1.175		2.24	2.00	12.1	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.3481	0.2673		1.54	2.00	-23.2	35.0
1,2,4,5-Tetramethylbenzene	Ave	1.259	1.269		2.02	2.00	0.8	35.0
1,2,3,5-Tetramethylbenzene	Ave	0.7577	0.7776		2.05	2.00	2.6	35.0
1,2,3,4-Tetramethylbenzene	Ave	1.035	1.033		2.00	2.00	-0.2	35.0
Dodecane	Ave	0.6236	0.5937		1.90	2.00	-4.8	35.0
1,2,4-Trichlorobenzene	Ave	0.7144	0.7323		2.05	2.00	2.5	35.0
Naphthalene	Ave	1.497	1.474		1.97	2.00	-1.5	35.0
Benzo (b) thiophene	Ave	0.8706	0.9324		2.14	2.00	7.1	35.0
Hexachlorobutadiene	Ave	0.7045	0.6788		1.93	2.00	-3.6	35.0
1,2,3-Trichlorobenzene	Ave	0.6741	0.7177		2.13	2.00	6.5	35.0
2-Methylnaphthalene	Ave	0.3108	0.2469		4.97	6.25	-20.6	50.0
1-Methylnaphthalene	Ave	0.3095	0.2503		5.06	6.25	-19.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7905	0.7720		3.91	4.00	-2.3	35.0

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GICVC15.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 15-Mar-2017 21:46:30 ALS Bottle#: 9 Worklist Smp#: 13
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-013
 Misc. Info.: 083671
 Operator ID: 7126 Instrument ID: MG
 Sublist:
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:43:35 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: barlozhetskayaa

Date: 16-Mar-2017 14:45:52

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	7.991	7.993	-0.002	81	414852	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.158	10.161	-0.003	94	2002906	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.033	15.034	-0.001	87	1960813	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.705	16.705	0.000	95	1513670	4.00	3.91	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	96	87006	2.00	1.89	
7 Propene	41	3.466	3.466	0.000	98	205110	2.00	1.87	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	99	830764	2.00	1.89	
9 Chloromethane	52	3.660	3.659	0.001	97	56384	2.00	1.91	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.666	3.669	-0.003	91	510128	2.00	1.95	
11 Acetaldehyde	44	3.785	3.786	-0.001	88	293266	10.0	8.46	
12 Vinyl chloride	62	3.801	3.803	-0.002	99	238858	2.00	1.97	
13 Butadiene	54	3.876	3.876	0.000	85	157294	2.00	1.95	
14 Butane	43	3.876	3.879	-0.003	94	328986	2.00	1.91	
15 Bromomethane	94	4.140	4.141	-0.001	98	230800	2.00	1.92	
16 Chloroethane	64	4.254	4.258	-0.004	93	115537	2.00	1.97	
17 Ethanol	31	4.345	4.357	-0.012	98	374711	10.0	8.98	
18 Vinyl bromide	106	4.507	4.511	-0.004	97	237558	2.00	2.09	
19 2-Methylbutane	43	4.556	4.560	-0.004	88	226177	2.00	1.95	
21 Acrolein	56	4.734	4.742	-0.008	29	35670	2.00	2.10	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	99	810646	2.00	1.85	
22 Acetonitrile	40	4.788	4.793	-0.005	98	57349	2.00	1.65	
23 Acetone	58	4.825	4.835	-0.010	99	178365	6.00	4.38	
25 Pentane	72	4.933	4.937	-0.004	95	41761	2.00	1.98	
24 Isopropyl alcohol	45	4.922	4.939	-0.017	94	568170	6.00	4.03	
26 Ethyl ether	31	5.068	5.075	-0.007	92	150139	2.00	1.57	
27 1,1-Dichloroethene	96	5.354	5.354	0.000	98	211079	2.00	1.91	
28 Acrylonitrile	53	5.429	5.435	-0.006	94	84890	2.00	1.68	
29 2-Methyl-2-propanol	59	5.445	5.467	-0.022	94	298931	2.00	1.77	
30 1,1,2-Trichloro-1,2,2-trif	101	5.521	5.521	0.000	93	492319	2.00	1.93	
31 Methylene Chloride	84	5.656	5.656	0.000	87	180559	2.00	1.81	

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	5.666	5.673	-0.007	93	197747	2.00	1.84	
33 Carbon disulfide	76	5.796	5.797	-0.001	100	534876	2.00	1.90	
34 trans-1,2-Dichloroethene	96	6.389	6.393	-0.004	98	215378	2.00	1.99	
35 2-Methylpentane	43	6.421	6.426	-0.005	93	450992	2.00	2.13	
36 Methyl tert-butyl ether	73	6.502	6.513	-0.011	95	550186	2.00	1.71	
37 1,1-Dichloroethane	63	6.772	6.771	0.001	100	403782	2.00	1.91	
38 Vinyl acetate	43	6.874	6.881	-0.007	99	431077	2.00	1.78	
39 2-Butanone (MEK)	72	7.273	7.283	-0.010	99	80291	2.00	1.70	
40 Hexane	56	7.333	7.336	-0.003	87	159634	2.00	1.95	
41 Isopropyl ether	45	7.478	7.483	-0.005	94	527483	2.00	1.75	
42 cis-1,2-Dichloroethene	96	7.689	7.691	-0.002	95	230210	2.00	2.00	
43 Ethyl acetate	43	7.872	7.880	-0.008	98	322802	2.00	1.61	
44 Chloroform	83	8.018	8.019	-0.001	97	554919	2.00	1.91	
45 Tert-butyl ethyl ether	59	8.115	8.122	-0.007	94	551783	2.00	1.82	
46 Tetrahydrofuran	42	8.373	8.387	-0.014	90	176435	2.00	1.67	
47 1,1,1-Trichloroethane	97	8.994	8.997	-0.003	94	635165	2.00	1.89	
48 1,2-Dichloroethane	62	9.085	9.087	-0.002	99	384058	2.00	1.90	
49 Benzene	78	9.576	9.582	-0.006	96	670379	2.00	1.97	
50 Cyclohexane	69	9.592	9.590	0.002	94	115721	2.00	2.02	
52 n-Butanol	31	9.581	9.606	-0.025	61	70993	2.00	1.95	
51 Carbon tetrachloride	117	9.614	9.611	0.003	97	698916	2.00	1.97	
53 2,3-Dimethylpentane	71	9.732	9.740	-0.008	89	147657	2.00	1.88	
54 Thiophene	84	9.851	9.855	-0.004	95	400715	2.00	2.11	
55 Tert-amyl methyl ether	73	10.094	10.100	-0.006	98	562460	2.00	1.80	
56 Isooctane	57	10.412	10.414	-0.002	97	1010798	2.00	2.00	
57 n-Heptane	71	10.816	10.816	0.000	90	248245	2.00	1.97	
58 1,2-Dichloropropane	63	10.843	10.846	-0.003	84	219508	2.00	1.90	
59 Trichloroethene	130	10.897	10.897	0.000	97	398239	2.00	2.16	
60 Dibromomethane	93	10.962	10.961	0.001	94	304219	2.00	1.98	
61 Dichlorobromomethane	83	11.124	11.126	-0.002	98	595437	2.00	2.02	
62 1,4-Dioxane	88	11.140	11.152	-0.012	90	82734	2.00	1.80	
63 Methyl methacrylate	41	11.253	11.260	-0.007	94	219347	2.00	1.72	
64 Methylcyclohexane	83	11.701	11.704	-0.003	95	432488	2.00	1.63	
65 4-Methyl-2-pentanone (MIBK)	43	12.121	12.133	-0.012	96	327042	2.00	1.67	
66 cis-1,3-Dichloropropene	75	12.175	12.174	0.001	95	432682	2.00	2.02	
67 trans-1,3-Dichloropropene	75	12.892	12.897	-0.005	97	412484	2.00	1.96	
68 Toluene	91	13.022	13.021	0.001	94	751169	2.00	1.92	
69 1,1,2-Trichloroethane	83	13.092	13.091	0.001	99	220432	2.00	1.88	
70 2-Methylthiophene	97	13.173	13.173	0.000	97	672059	2.00	2.05	
71 3-Methylthiophene	97	13.378	13.381	-0.003	99	687752	2.00	2.12	
72 2-Hexanone	58	13.507	13.519	-0.012	94	165901	2.00	1.77	
73 n-Octane	85	13.777	13.780	-0.003	89	289336	2.00	2.05	
74 Chlorodibromomethane	129	13.798	13.803	-0.005	97	613573	2.00	2.10	
75 Ethylene Dibromide	107	14.089	14.092	-0.003	98	458135	2.00	2.00	
76 Tetrachloroethene	129	14.192	14.195	-0.003	95	353576	2.00	1.98	
77 Chlorobenzene	112	15.082	15.082	0.000	93	647192	2.00	1.96	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	89	674189	2.00	2.02	
79 Ethylbenzene	91	15.389	15.393	-0.004	99	974667	2.00	1.79	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	787782	2.00	1.83	
81 m-Xylene & p-Xylene	91	15.556	15.559	-0.003	99	1572879	4.00	3.57	
82 Bromoform	173	15.977	15.979	-0.002	96	596040	2.00	2.17	
83 Styrene	104	16.025	16.027	-0.002	98	575572	2.00	1.98	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.025	16.029	-0.004	88	484291	2.00	2.02	
85 o-Xylene	91	16.085	16.088	-0.003	98	788290	2.00	1.75	
86 1,1,2,2-Tetrachloroethane	83	16.408	16.411	-0.003	99	521988	2.00	1.84	
87 1,2,3-Trichloropropane	110	16.564	16.565	-0.001	97	181130	2.00	1.74	
88 Isopropylbenzene	105	16.688	16.692	-0.004	96	1157421	2.00	1.77	
89 N-Propylbenzene	120	17.244	17.246	-0.002	99	316400	2.00	1.84	
90 2-Chlorotoluene	126	17.276	17.278	-0.002	97	303603	2.00	1.90	
91 4-Ethyltoluene	105	17.406	17.409	-0.003	98	1054948	2.00	1.71	
92 1,3,5-Trimethylbenzene	120	17.487	17.490	-0.003	92	525880	2.00	1.82	
93 Alpha Methyl Styrene	118	17.735	17.734	0.001	88	443671	2.00	1.90	
94 n-Decane	57	17.837	17.837	0.000	93	582480	2.00	1.98	
95 tert-Butylbenzene	119	17.939	17.939	0.000	94	1077330	2.00	1.77	
96 1,2,4-Trimethylbenzene	105	17.950	17.953	-0.003	96	985498	2.00	1.78	
97 1,3-Dichlorobenzene	146	18.220	18.223	-0.003	98	770930	2.00	1.85	
98 sec-Butylbenzene	105	18.225	18.225	0.000	98	1407422	2.00	1.81	
99 Benzyl chloride	91	18.301	18.303	-0.002	98	951071	2.00	1.82	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	95	754441	2.00	1.85	
101 4-Isopropyltoluene	119	18.398	18.402	-0.004	97	1228683	2.00	1.78	
102 1,2,3-Trimethylbenzene	105	18.446	18.445	0.001	98	796705	2.00	1.93	
103 Butylcyclohexane	83	18.516	18.520	-0.004	96	782474	2.00	1.92	
104 1,2-Dichlorobenzene	146	18.689	18.689	0.000	95	718038	2.00	1.80	
105 2,3-Dihydroindene	117	18.694	18.693	0.001	93	853643	2.00	1.69	
106 Indene	116	18.824	18.827	-0.003	95	843748	2.00	2.29	
107 n-Butylbenzene	91	18.851	18.854	-0.003	98	1150538	2.00	1.79	
108 Undecane	57	19.212	19.209	0.003	92	650345	2.00	1.89	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.239	19.239	0.000	97	1152241	2.00	2.24	
110 1,2-Dibromo-3-Chloropropan	157	19.309	19.308	0.001	97	262104	2.00	1.54	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.635	-0.002	96	1244340	2.00	2.02	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	95	762366	2.00	2.05	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	96	1012561	2.00	2.00	
114 Dodecane	57	20.280	20.280	0.000	94	582064	2.00	1.90	
115 1,2,4-Trichlorobenzene	180	20.420	20.418	0.002	94	717902	2.00	2.05	
116 Naphthalene	128	20.544	20.546	-0.002	99	1444732	2.00	1.97	
117 Benzo(b)thiophene	134	20.646	20.645	0.001	99	914096	2.00	2.14	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	95	665473	2.00	1.93	
119 1,2,3-Trichlorobenzene	180	20.824	20.825	-0.001	95	703642	2.00	2.13	
120 2-Methylnaphthalene	142	21.622	21.623	-0.001	100	756538	6.25	4.97	
121 1-Methylnaphthalene	142	21.800	21.801	-0.001	100	767056	6.25	5.06	
A 122 C6 Range	1	7.343	(7.303-7.383)		0	1488733	2.00	1.94	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	1863072	2.00	1.94	
S 126 Xylenes, Total	100				0		6.00	5.32	
S 127 1,2-Dichloroethene, Total	1				0		4.00	4.00	

Reagents:

40CV101S_00036

Amount Added: 100.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 16-Mar-2017 14:45:54

Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GICVC15.D

Injection Date: 15-Mar-2017 21:46:30

Instrument ID: MG

Operator ID: 7126

Lims ID: ICV

Worklist Smp#: 13

Client ID:

Purge Vol: 500.000 mL

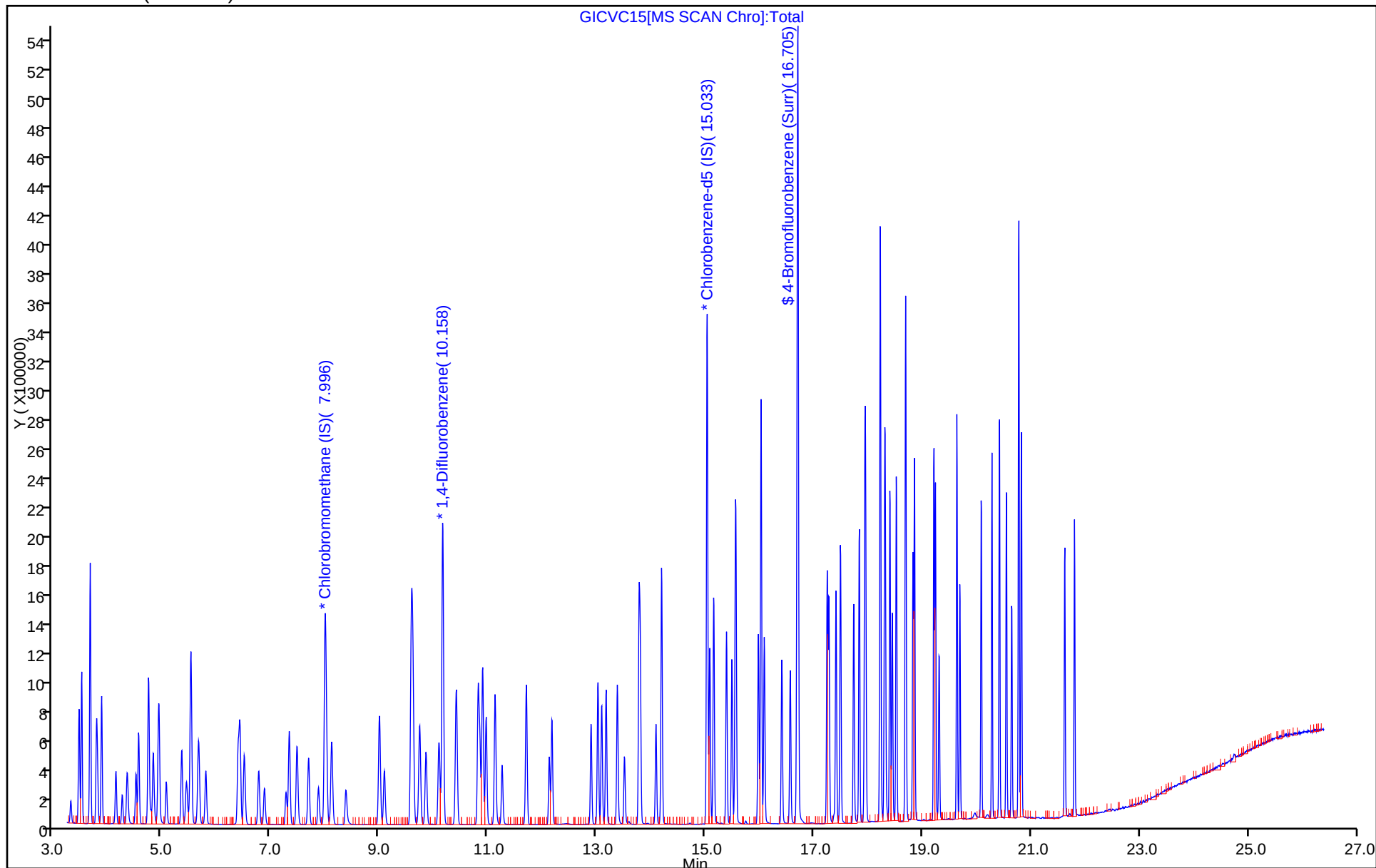
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MG_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.: 140-7685-1

SDG No.: _____

Lab Sample ID: CCVIS 140-10155/6 Calibration Date: 04/04/2017 12:01

Instrument ID: MG Calib Start Date: 03/15/2017 14:36

GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/15/2017 20:21

Lab File ID: GCCVD04A.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	0.4447	0.5424		2.44	2.00	22.0	30.0
Propene	Ave	1.058	0.8221		1.55	2.00	-22.3	30.0
Dichlorodifluoromethane	Ave	4.233	5.010		2.37	2.00	18.3	30.0
Chloromethane	Ave	0.2848	0.2318		1.63	2.00	-18.6	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.520	2.990		2.37	2.00	18.7	30.0
Acetaldehyde	Ave	0.3344	0.2207		6.60	10.0	-34.0*	30.0
Vinyl chloride	Ave	1.170	1.065		1.82	2.00	-9.0	30.0
1,3-Butadiene	Ave	0.7793	0.6475		1.66	2.00	-16.9	30.0
Butane	Ave	1.658	1.393		1.68	2.00	-16.0	30.0
Bromomethane	Ave	1.156	1.168		2.02	2.00	1.0	30.0
Chloroethane	Ave	0.5663	0.5022		1.77	2.00	-11.3	30.0
Ethanol	Ave	0.4025	0.3045		7.57	10.0	-24.3	30.0
Vinyl bromide	Ave	1.096	1.210		2.21	2.00	10.5	30.0
2-Methylbutane	Ave	1.120	0.9942		1.78	2.00	-11.2	30.0
Acrolein	Ave	0.1638	0.1388		1.70	2.00	-15.3	30.0
Trichlorofluoromethane	Ave	4.216	5.379		2.55	2.00	27.6	30.0
Acetonitrile	Ave	0.3357	0.2451		1.46	2.00	-27.0	30.0
Acetone	Ave	0.3928	0.2562		3.92	6.00	-34.8*	30.0
Isopropyl alcohol	Ave	1.359	0.8475		3.75	6.00	-37.6*	30.0
Pentane	Ave	0.2037	0.2203		2.16	2.00	8.1	30.0
Ethyl ether	Ave	0.9241	0.7774		1.68	2.00	-15.9	30.0
1,1-Dichloroethene	Ave	1.066	1.122		2.11	2.00	5.3	30.0
Acrylonitrile	Ave	0.4861	0.3763		1.55	2.00	-22.6	30.0
t-Butyl alcohol	Ave	1.624	1.443		1.78	2.00	-11.2	30.0
1,1,2-Trichlorotrifluoroethane	Ave	2.459	2.845		2.32	2.00	15.7	30.0
Methylene Chloride	Ave	0.9619	0.9458		1.97	2.00	-1.7	30.0
3-Chloropropene	Ave	1.034	1.110		2.15	2.00	7.4	30.0
Carbon disulfide	Ave	2.716	2.858		2.11	2.00	5.2	30.0
trans-1,2-Dichloroethene	Ave	1.042	1.016		1.95	2.00	-2.6	30.0
2-Methylpentane	Ave	2.045	1.848		1.81	2.00	-9.6	30.0
Methyl tert-butyl ether	Ave	3.096	2.605		1.68	2.00	-15.9	30.0
1,1-Dichloroethane	Ave	2.035	1.862		1.83	2.00	-8.5	30.0
Vinyl acetate	Ave	2.337	1.716		1.47	2.00	-26.6	30.0
2-Butanone	Ave	0.4552	0.3341		1.47	2.00	-26.6	30.0
Hexane	Ave	0.7899	0.6617		1.68	2.00	-16.2	30.0
Isopropyl ether	Ave	2.907	2.033		1.40	2.00	-30.1*	30.0
cis-1,2-Dichloroethene	Ave	1.107	1.080		1.95	2.00	-2.5	30.0
Ethyl acetate	Ave	1.927	1.314		1.36	2.00	-31.8*	30.0
Chloroform	Ave	2.806	3.050		2.18	2.00	8.7	30.0
Tert-butyl ethyl ether	Ave	2.922	2.401		1.64	2.00	-17.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-10155/6 Calibration Date: 04/04/2017 12:01
 Instrument ID: MG Calib Start Date: 03/15/2017 14:36
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/15/2017 20:21
 Lab File ID: GCCVD04A.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	1.021	0.6964		1.36	2.00	-31.8*	30.0
1,1,1-Trichloroethane	Ave	3.246	3.818		2.35	2.00	17.6	30.0
1,2-Dichloroethane	Ave	0.4038	0.4541		2.25	2.00	12.4	30.0
Benzene	Ave	0.6795	0.6387		1.88	2.00	-6.0	30.0
Cyclohexane	Ave	0.1144	0.1125		1.97	2.00	-1.6	30.0
1-Butanol	Ave	0.0727	0.0565		1.55	2.00	-22.4	30.0
Carbon tetrachloride	Ave	0.7102	0.9172		2.58	2.00	29.2	30.0
2,3-Dimethylpentane	Ave	0.1564	0.1342		1.72	2.00	-14.2	30.0
Thiophene	Ave	0.3797	0.3810		2.01	2.00	0.3	30.0
Tert-amyl methyl ether	Ave	0.6230	0.5405		1.74	2.00	-13.2	30.0
2,2,4-Trimethylpentane	Ave	1.009	0.8988		1.78	2.00	-10.9	30.0
Heptane	Ave	0.2519	0.2375		1.89	2.00	-5.7	30.0
1,2-Dichloropropane	Ave	0.2308	0.2067		1.79	2.00	-10.4	30.0
Trichloroethene	Ave	0.3681	0.4097		2.23	2.00	11.3	30.0
Dibromomethane	Ave	0.3067	0.3418		2.23	2.00	11.4	30.0
Bromodichloromethane	Ave	0.5888	0.6936		2.36	2.00	17.8	30.0
1,4-Dioxane	Ave	0.0920	0.0729		1.59	2.00	-20.7	30.0
Methyl methacrylate	Ave	0.2550	0.1979		1.55	2.00	-22.4	30.0
Methylcyclohexane	Ave	0.5294	0.4200		1.59	2.00	-20.7	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3903	0.2809		1.44	2.00	-28.0	30.0
cis-1,3-Dichloropropene	Ave	0.4274	0.4529		2.12	2.00	6.0	30.0
trans-1,3-Dichloropropene	Ave	0.4284	0.4488		2.10	2.00	4.7	30.0
Toluene	Ave	0.7969	0.7554		1.90	2.00	-5.2	30.0
1,1,2-Trichloroethane	Ave	0.2389	0.2247		1.88	2.00	-6.0	30.0
2-Methylthiophene	Ave	0.6689	0.6936		2.07	2.00	3.7	30.0
3-Methylthiophene	Ave	0.6622	0.7154		2.16	2.00	8.0	30.0
2-Hexanone	Ave	0.1907	0.1317		1.38	2.00	-30.9*	30.0
Octane	Ave	0.2880	0.2853		1.98	2.00	-0.9	30.0
Dibromochloromethane	Ave	0.5960	0.7353		2.47	2.00	23.4	30.0
1,2-Dibromoethane	Ave	0.4679	0.5018		2.15	2.00	7.2	30.0
Tetrachloroethene	Ave	0.3645	0.3964		2.18	2.00	8.8	30.0
Chlorobenzene	Ave	0.6744	0.6696		1.99	2.00	-0.7	30.0
2,3-Dimethylheptane	Ave	0.6822	0.6214		1.82	2.00	-8.9	30.0
Ethylbenzene	Ave	1.113	1.017		1.83	2.00	-8.7	30.0
2-Ethylthiophene	Ave	0.8768	0.8596		1.96	2.00	-2.0	30.0
m-Xylene & p-Xylene	Ave	0.8990	0.8310		3.70	4.00	-7.6	30.0
Bromoform	Ave	0.5594	0.7487		2.68	2.00	33.8*	30.0
Nonane	Ave	0.4886	0.4550		1.86	2.00	-6.9	30.0
Styrene	Ave	0.5931	0.5874		1.98	2.00	-1.0	30.0
o-Xylene	Ave	0.9191	0.8206		1.79	2.00	-10.7	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5794	0.4995		1.73	2.00	-13.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-10155/6 Calibration Date: 04/04/2017 12:01
 Instrument ID: MG Calib Start Date: 03/15/2017 14:36
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/15/2017 20:21
 Lab File ID: GCCVD04A.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	0.2120	0.1973		1.86	2.00	-7.0	30.0
Isopropylbenzene	Ave	1.335	1.247		1.87	2.00	-6.6	30.0
Propylbenzene	Ave	0.3502	0.3129		1.79	2.00	-10.6	30.0
2-Chlorotoluene	Ave	0.3267	0.3200		1.96	2.00	-2.0	30.0
4-Ethyltoluene	Ave	1.257	1.066		1.70	2.00	-15.2	30.0
1,3,5-Trimethylbenzene	Ave	0.5895	0.5280		1.79	2.00	-10.4	30.0
Alpha Methyl Styrene	Ave	0.4751	0.4381		1.85	2.00	-7.8	30.0
Decane	Ave	0.5991	0.5246		1.75	2.00	-12.4	30.0
tert-Butylbenzene	Ave	1.242	1.154		1.86	2.00	-7.1	30.0
1,2,4-Trimethylbenzene	Ave	1.129	1.027		1.82	2.00	-9.1	30.0
1,3-Dichlorobenzene	Ave	0.8518	0.8386		1.97	2.00	-1.6	30.0
sec-Butylbenzene	Ave	1.590	1.458		1.83	2.00	-8.3	30.0
Benzyl chloride	Ave	1.065	1.007		1.89	2.00	-5.5	30.0
1,4-Dichlorobenzene	Ave	0.8325	0.8086		1.94	2.00	-2.9	30.0
4-Isopropyltoluene	Ave	1.404	1.294		1.84	2.00	-7.9	30.0
1,2,3-Trimethylbenzene	Ave	0.8430	0.8251		1.96	2.00	-2.1	30.0
Butylcyclohexane	Ave	0.8320	0.7787		1.87	2.00	-6.4	30.0
1,2-Dichlorobenzene	Ave	0.8117	0.7697		1.90	2.00	-5.2	30.0
Indane	Ave	1.029	0.8626		1.68	2.00	-16.2	30.0
Indene	Ave	0.7517	0.8293		2.21	2.00	10.3	30.0
Butylbenzene	Ave	1.313	1.177		1.79	2.00	-10.3	30.0
Undecane	Ave	0.7029	0.5701		1.62	2.00	-18.9	30.0
1,2-Dimethyl-4-Ethylbenzene	Ave	1.048	1.195		2.28	2.00	14.0	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.3481	0.2796		1.61	2.00	-19.7	30.0
1,2,4,5-Tetramethylbenzene	Ave	1.259	1.301		2.07	2.00	3.3	30.0
1,2,3,5-Tetramethylbenzene	Ave	0.7577	0.7891		2.08	2.00	4.1	30.0
1,2,3,4-Tetramethylbenzene	Ave	1.035	1.041		2.01	2.00	0.6	30.0
Dodecane	Ave	0.6236	0.5058		1.62	2.00	-18.9	30.0
1,2,4-Trichlorobenzene	Ave	0.7144	0.7230		2.03	2.00	1.2	30.0
Naphthalene	Ave	1.497	1.381		1.85	2.00	-7.7	30.0
Benzo (b) thiophene	Ave	0.8706	0.8622		1.98	2.00	-1.0	30.0
Hexachlorobutadiene	Ave	0.7045	0.7667		2.18	2.00	8.8	30.0
1,2,3-Trichlorobenzene	Ave	0.6741	0.6832		2.03	2.00	1.4	30.0
2-Methylnaphthalene	Ave	0.3108	0.1718		3.46	6.25	-44.7	50.0
1-Methylnaphthalene	Ave	0.3095	0.1702		3.44	6.25	-45.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7905	0.8540		4.32	4.00	8.0	30.0

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GCCVD04A.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 04-Apr-2017 12:01:30 ALS Bottle#: 15 Worklist Smp#: 6
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004508-002
 Misc. Info.: S34
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Apr-2017 15:06:47 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK008

First Level Reviewer: tajh

Date: 04-Apr-2017 12:55:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.980	7.980	0.000	73	244231	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.148	10.148	0.000	95	1213084	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.022	15.022	0.000	89	1220793	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.694	16.694	0.000	95	1042603	4.00	4.32	
6 Chlorodifluoromethane	67	3.461	3.461	0.000	96	66271	2.00	2.44	
7 Propene	41	3.472	3.472	0.000	95	100444	2.00	1.55	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	100	612131	2.00	2.37	
9 Chloromethane	52	3.666	3.666	0.000	95	28324	2.00	1.63	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.671	0.000	89	365335	2.00	2.37	
11 Acetaldehyde	44	3.790	3.790	0.000	83	134818	10.0	6.60	
12 Vinyl chloride	62	3.806	3.806	0.000	100	130068	2.00	1.82	
13 Butadiene	54	3.882	3.882	0.000	80	79111	2.00	1.66	
14 Butane	43	3.882	3.882	0.000	91	170203	2.00	1.68	
15 Bromomethane	94	4.140	4.140	0.000	97	142690	2.00	2.02	
16 Chloroethane	64	4.259	4.259	0.000	86	61358	2.00	1.77	
17 Ethanol	31	4.356	4.356	0.000	96	186010	10.0	7.57	
18 Vinyl bromide	106	4.513	4.513	0.000	94	147896	2.00	2.21	
19 2-Methylbutane	43	4.561	4.561	0.000	87	121475	2.00	1.78	
21 Acrolein	56	4.739	4.739	0.000	28	16956	2.00	1.70	
20 Trichlorofluoromethane	101	4.744	4.744	0.000	99	657154	2.00	2.55	
22 Acetonitrile	40	4.793	4.793	0.000	97	29944	2.00	1.46	
23 Acetone	58	4.831	4.831	0.000	100	93919	6.00	3.92	
25 Pentane	72	4.933	4.933	0.000	92	26918	2.00	2.16	
24 Isopropyl alcohol	45	4.933	4.933	0.000	62	310648	6.00	3.75	
26 Ethyl ether	31	5.068	5.068	0.000	89	94988	2.00	1.68	
27 1,1-Dichloroethene	96	5.348	5.348	0.000	97	137127	2.00	2.11	
28 Acrylonitrile	53	5.429	5.429	0.000	93	45977	2.00	1.55	
29 2-Methyl-2-propanol	59	5.456	5.456	0.000	95	176265	2.00	1.78	
30 1,1,2-Trichloro-1,2,2-trif	101	5.521	5.521	0.000	92	347620	2.00	2.32	
31 Methylene Chloride	84	5.650	5.650	0.000	88	115562	2.00	1.97	

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	5.666	5.666	0.000	88	135622	2.00	2.15	
33 Carbon disulfide	76	5.791	5.791	0.000	98	349177	2.00	2.11	
34 trans-1,2-Dichloroethene	96	6.384	6.384	0.000	97	124090	2.00	1.95	
35 2-Methylpentane	43	6.416	6.416	0.000	89	225812	2.00	1.81	
36 Methyl tert-butyl ether	73	6.502	6.502	0.000	94	318329	2.00	1.68	
37 1,1-Dichloroethane	63	6.761	6.761	0.000	99	227551	2.00	1.83	
38 Vinyl acetate	43	6.869	6.869	0.000	99	209605	2.00	1.47	
39 2-Butanone (MEK)	72	7.268	7.268	0.000	98	40820	2.00	1.47	
40 Hexane	56	7.327	7.327	0.000	83	80850	2.00	1.68	
41 Isopropyl ether	45	7.468	7.468	0.000	89	248401	2.00	1.40	
42 cis-1,2-Dichloroethene	96	7.678	7.678	0.000	96	131948	2.00	1.95	
43 Ethyl acetate	43	7.867	7.867	0.000	97	160497	2.00	1.36	
44 Chloroform	83	8.007	8.007	0.000	97	372678	2.00	2.18	
45 Tert-butyl ethyl ether	59	8.109	8.109	0.000	94	293354	2.00	1.64	
46 Tetrahydrofuran	42	8.368	8.368	0.000	82	85085	2.00	1.36	
47 1,1,1-Trichloroethane	97	8.983	8.983	0.000	94	466440	2.00	2.35	
48 1,2-Dichloroethane	62	9.074	9.074	0.000	98	275560	2.00	2.25	
49 Benzene	78	9.565	9.565	0.000	97	387619	2.00	1.88	
50 Cyclohexane	69	9.576	9.576	0.000	91	68270	2.00	1.97	
52 n-Butanol	31	9.598	9.598	0.000	63	34269	2.00	1.55	
51 Carbon tetrachloride	117	9.598	9.598	0.000	98	556641	2.00	2.58	
53 2,3-Dimethylpentane	71	9.722	9.722	0.000	85	81411	2.00	1.72	
54 Thiophene	84	9.840	9.840	0.000	95	231186	2.00	2.01	
55 Tert-amyl methyl ether	73	10.083	10.083	0.000	97	328072	2.00	1.74	
56 Isooctane	57	10.396	10.396	0.000	95	545446	2.00	1.78	
57 n-Heptane	71	10.800	10.800	0.000	89	144107	2.00	1.89	
58 1,2-Dichloropropane	63	10.827	10.827	0.000	77	125465	2.00	1.79	
59 Trichloroethene	130	10.881	10.881	0.000	94	248624	2.00	2.23	
60 Dibromomethane	93	10.946	10.946	0.000	93	207420	2.00	2.23	
61 Dichlorobromomethane	83	11.113	11.113	0.000	97	420944	2.00	2.36	
62 1,4-Dioxane	88	11.129	11.129	0.000	92	44256	2.00	1.59	
63 Methyl methacrylate	41	11.248	11.248	0.000	91	120110	2.00	1.55	
64 Methylcyclohexane	83	11.690	11.690	0.000	93	254870	2.00	1.59	
65 4-Methyl-2-pentanone (MIBK)	43	12.116	12.116	0.000	94	170450	2.00	1.44	
66 cis-1,3-Dichloropropene	75	12.159	12.159	0.000	97	274862	2.00	2.12	
67 trans-1,3-Dichloropropene	75	12.881	12.881	0.000	96	274065	2.00	2.10	
68 Toluene	91	13.006	13.006	0.000	93	461326	2.00	1.90	
69 1,1,2-Trichloroethane	83	13.076	13.076	0.000	96	137197	2.00	1.88	
70 2-Methylthiophene	97	13.156	13.156	0.000	98	423579	2.00	2.07	
71 3-Methylthiophene	97	13.367	13.367	0.000	99	436901	2.00	2.16	
72 2-Hexanone	58	13.496	13.496	0.000	93	80438	2.00	1.38	
73 n-Octane	85	13.766	13.766	0.000	82	174242	2.00	1.98	
74 Chlorodibromomethane	129	13.787	13.787	0.000	96	449053	2.00	2.47	
75 Ethylene Dibromide	107	14.079	14.079	0.000	97	306439	2.00	2.15	
76 Tetrachloroethene	129	14.181	14.181	0.000	93	242105	2.00	2.18	
77 Chlorobenzene	112	15.071	15.071	0.000	91	408932	2.00	1.99	
78 2,3-Dimethylheptane	43	15.141	15.141	0.000	86	379509	2.00	1.82	
79 Ethylbenzene	91	15.378	15.378	0.000	99	620957	2.00	1.83	
80 2-Ethylthiophene	97	15.475	15.475	0.000	98	525000	2.00	1.96	
81 m-Xylene & p-Xylene	91	15.545	15.545	0.000	100	1014987	4.00	3.70	
82 Bromoform	173	15.966	15.966	0.000	95	457246	2.00	2.68	
84 n-Nonane	57	16.014	16.014	0.000	85	277886	2.00	1.86	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
83 Styrene	104	16.014	16.014	0.000	96	358722	2.00	1.98	
85 o-Xylene	91	16.074	16.074	0.000	97	501158	2.00	1.79	
86 1,1,2,2-Tetrachloroethane	83	16.397	16.397	0.000	96	305071	2.00	1.73	
87 1,2,3-Trichloropropane	110	16.554	16.554	0.000	95	120465	2.00	1.86	
88 Isopropylbenzene	105	16.678	16.678	0.000	97	761393	2.00	1.87	
89 N-Propylbenzene	120	17.233	17.233	0.000	99	191109	2.00	1.79	
90 2-Chlorotoluene	126	17.260	17.260	0.000	97	195442	2.00	1.96	
91 4-Ethyltoluene	105	17.395	17.395	0.000	98	650852	2.00	1.70	
92 1,3,5-Trimethylbenzene	120	17.481	17.481	0.000	91	322440	2.00	1.79	
93 Alpha Methyl Styrene	118	17.724	17.724	0.000	86	267555	2.00	1.85	
94 n-Decane	57	17.826	17.826	0.000	94	320366	2.00	1.75	
95 tert-Butylbenzene	119	17.929	17.929	0.000	93	704609	2.00	1.86	
96 1,2,4-Trimethylbenzene	105	17.940	17.940	0.000	96	627266	2.00	1.82	
97 1,3-Dichlorobenzene	146	18.209	18.209	0.000	97	512160	2.00	1.97	
98 sec-Butylbenzene	105	18.215	18.215	0.000	97	890213	2.00	1.83	
99 Benzyl chloride	91	18.290	18.290	0.000	97	614943	2.00	1.89	
100 1,4-Dichlorobenzene	146	18.301	18.301	0.000	94	493846	2.00	1.94	
101 4-Isopropyltoluene	119	18.387	18.387	0.000	96	790169	2.00	1.84	
102 1,2,3-Trimethylbenzene	105	18.430	18.430	0.000	98	503890	2.00	1.96	
103 Butylcyclohexane	83	18.506	18.506	0.000	94	475562	2.00	1.87	
104 1,2-Dichlorobenzene	146	18.673	18.673	0.000	96	470067	2.00	1.90	
105 2,3-Dihydroindene	117	18.678	18.678	0.000	93	526810	2.00	1.68	
106 Indene	116	18.813	18.813	0.000	90	506483	2.00	2.21	
107 n-Butylbenzene	91	18.840	18.840	0.000	97	718777	2.00	1.79	
108 Undecane	57	19.201	19.201	0.000	90	348162	2.00	1.62	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.228	19.228	0.000	96	730028	2.00	2.28	
110 1,2-Dibromo-3-Chloropropan	157	19.298	19.298	0.000	98	170793	2.00	1.61	
111 1,2,4,5-Tetramethylbenzene	119	19.622	19.622	0.000	95	794280	2.00	2.07	
112 1,2,3,5-Tetramethylbenzene	119	19.676	19.676	0.000	94	481926	2.00	2.08	
113 1,2,3,4-Tetramethylbenzene	119	20.075	20.075	0.000	96	635860	2.00	2.01	
114 Dodecane	57	20.269	20.269	0.000	88	308911	2.00	1.62	
115 1,2,4-Trichlorobenzene	180	20.409	20.409	0.000	94	441560	2.00	2.03	
116 Naphthalene	128	20.533	20.533	0.000	98	843392	2.00	1.85	
117 Benzo(b)thiophene	134	20.636	20.636	0.000	99	526575	2.00	1.98	
118 Hexachlorobutadiene	225	20.765	20.765	0.000	93	468266	2.00	2.18	
119 1,2,3-Trichlorobenzene	180	20.814	20.814	0.000	94	417268	2.00	2.03	
120 2-Methylnaphthalene	142	21.612	21.612	0.000	99	327933	6.25	3.46	
121 1-Methylnaphthalene	142	21.790	21.790	0.000	99	324905	6.25	3.44	
A 122 C6 Range	1	7.337	(7.297-7.377)		0	841066	2.00	1.81	
A 124 Toluene Range	1	13.001	(12.966-13.036)		0	1172683	2.00	2.02	
S 126 Xylenes, Total	100				0		6.00	5.49	
S 127 1,2-Dichloroethene, Total	1				0		4.00	3.90	

Reagents:

40CV101S_00034

Amount Added: 100.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GCCVD04A.D

Injection Date: 04-Apr-2017 12:01:30

Instrument ID: MG

Operator ID: 7126

Lims ID: CCVIS

Worklist Smp#: 6

Client ID:

Purge Vol: 500.000 mL

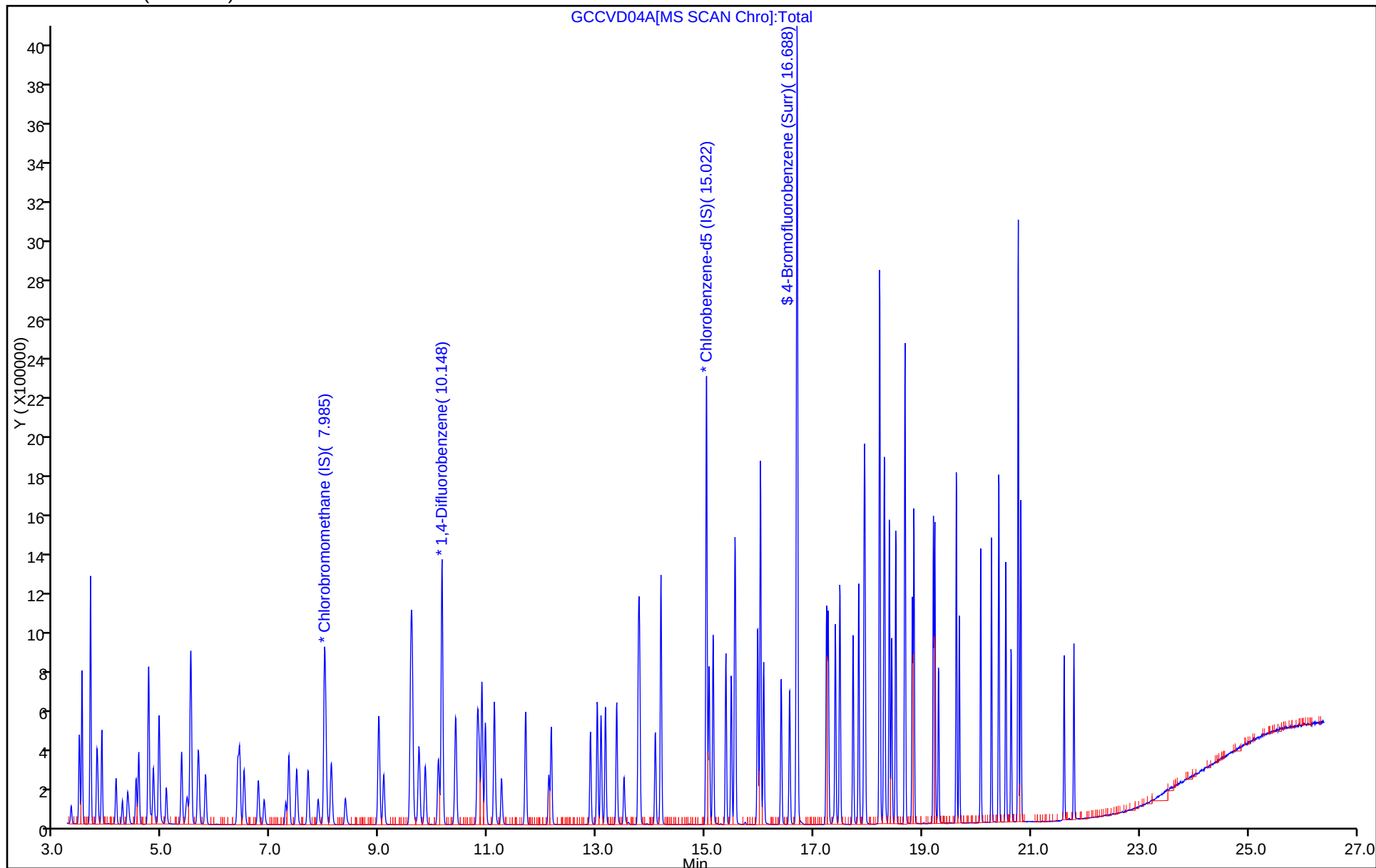
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MG_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.: 140-7685-1
 SDG No.: _____
 Lab Sample ID: ICV 140-9602/18 Calibration Date: 03/24/2017 23:36
 Instrument ID: MJ Calib Start Date: 03/24/2017 11:31
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/24/2017 17:35
 Lab File ID: JLCSC24.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	0.3358	0.3662		2.18	2.00	9.0	35.0
Propene	Ave	1.187	1.151		1.94	2.00	-3.0	35.0
Dichlorodifluoromethane	Ave	3.428	3.531		2.06	2.00	3.0	35.0
Chloromethane	Ave	0.3760	0.3627		1.93	2.00	-3.5	35.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	1.519	1.562		2.06	2.00	2.8	35.0
Acetaldehyde	Ave	0.3601	0.2357		6.55	10.0	-34.6	35.0
Vinyl chloride	Ave	1.106	1.161		2.10	2.00	5.0	35.0
1,3-Butadiene	Ave	0.8287	0.8291		2.00	2.00	0.0	35.0
Butane	Ave	1.667	1.693		2.03	2.00	1.6	35.0
Bromomethane	Ave	1.032	0.9844		1.91	2.00	-4.6	35.0
Chloroethane	Ave	0.4554	0.4769		2.10	2.00	4.7	35.0
Ethanol	Ave	0.2358	0.2278		9.67	10.0	-3.4	35.0
Vinyl bromide	Ave	0.8970	0.9745		2.17	2.00	8.6	35.0
2-Methylbutane	Ave	1.492	1.527		2.05	2.00	2.3	35.0
Trichlorofluoromethane	Ave	3.148	3.336		2.12	2.00	6.0	35.0
Acrolein	Ave	0.2731	0.2073		1.52	2.00	-24.1	35.0
Acetonitrile	Ave	0.3455	0.2486		1.44	2.00	-28.0	35.0
Acetone	Ave	0.3357	0.2409		4.31	6.00	-28.2	35.0
Isopropyl alcohol	Ave	1.375	1.146		5.00	6.00	-16.7	35.0
Pentane	Ave	0.1787	0.2014		2.25	2.00	12.7	35.0
Ethyl ether	Ave	1.059	0.8417		1.59	2.00	-20.6	35.0
1,1-Dichloroethene	Ave	1.205	1.265		2.10	2.00	5.0	35.0
tert-Butyl alcohol	Ave	1.483	1.623		2.19	2.00	9.4	35.0
Acrylonitrile	Ave	0.5968	0.4223		1.42	2.00	-29.2	35.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.546	2.695		2.12	2.00	5.8	35.0
Methylene Chloride	Ave	1.236	1.195		1.94	2.00	-3.3	35.0
3-Chloropropene	Ave	1.210	1.137		1.88	2.00	-6.1	35.0
Carbon disulfide	Ave	3.498	3.616		2.07	2.00	3.4	35.0
trans-1,2-Dichloroethene	Ave	1.224	1.273		2.08	2.00	4.0	35.0
2-Methylpentane	Ave	2.848	3.198		2.25	2.00	12.3	35.0
Methyl tert-butyl ether	Ave	1.832	1.637		1.79	2.00	-10.6	35.0
1,1-Dichloroethane	Ave	2.394	2.426		2.03	2.00	1.3	35.0
Vinyl acetate	Ave	1.952	1.391		1.43	2.00	-28.7	35.0
2-Butanone (MEK)	Ave	0.2943	0.2662		1.81	2.00	-9.6	35.0
Hexane	Ave	1.050	1.091		2.08	2.00	3.9	35.0
Isopropyl ether	Ave	2.602	2.329		1.79	2.00	-10.5	35.0
cis-1,2-Dichloroethene	Ave	1.283	1.325		2.07	2.00	3.3	35.0
Ethyl acetate	Ave	1.399	1.267		1.81	2.00	-9.5	35.0
Chloroform	Ave	2.640	2.546		1.93	2.00	-3.5	35.0
Tert-butyl ethyl ether	Ave	2.079	2.057		1.98	2.00	-1.1	35.0

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 SDG No.: _____
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 Instrument ID: MJ Calib Start Date: 03/24/2017 11:31
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/24/2017 17:35
 Lab File ID: JLCSC24.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	0.8005	0.7130		1.78	2.00	-10.9	35.0
1,1,1-Trichloroethane	Ave	2.745	2.793		2.04	2.00	1.7	35.0
1,2-Dichloroethane	Ave	0.3809	0.3813		2.00	2.00	0.0	35.0
1-Butanol	Ave	0.0685	0.0812		2.37	2.00	18.6	35.0
Benzene	Ave	0.7840	0.7580		1.93	2.00	-3.3	35.0
Cyclohexane	Ave	0.1208	0.1357		2.25	2.00	12.3	35.0
Carbon tetrachloride	Ave	0.6048	0.6565		2.17	2.00	8.6	35.0
2,3-Dimethylpentane	Ave	0.1698	0.1655		1.95	2.00	-2.5	35.0
Thiophene	Ave	0.4449	0.4595		2.07	2.00	3.3	35.0
Tert-amyl methyl ether	Ave	0.4115	0.4389		2.13	2.00	6.7	35.0
2,2,4-Trimethylpentane	Ave	1.354	1.324		1.96	2.00	-2.2	35.0
Heptane	Ave	0.2609	0.2546		1.95	2.00	-2.4	35.0
1,2-Dichloropropane	Ave	0.2863	0.2577		1.80	2.00	-10.0	35.0
Trichloroethene	Ave	0.4235	0.4468		2.11	2.00	5.5	35.0
Dibromomethane	Ave	0.3258	0.3283		2.02	2.00	0.8	35.0
Bromodichloromethane	Ave	0.5424	0.5485		2.02	2.00	1.1	35.0
1,4-Dioxane	Ave	0.0672	0.0722		2.15	2.00	7.5	35.0
Methyl methacrylate	Ave	0.1818	0.1691		1.86	2.00	-7.0	35.0
Methylcyclohexane	Ave	0.5859	0.4848		1.66	2.00	-17.3	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3358	0.3556		2.12	2.00	5.9	35.0
cis-1,3-Dichloropropene	Ave	0.4271	0.4330		2.03	2.00	1.4	35.0
trans-1,3-Dichloropropene	Ave	0.3971	0.3781		1.91	2.00	-4.8	35.0
Toluene	Ave	0.8458	0.7440		1.76	2.00	-12.0	35.0
1,1,2-Trichloroethane	Ave	0.2639	0.2462		1.87	2.00	-6.7	35.0
2-Methylthiophene	Ave	0.7600	0.7520		1.98	2.00	-1.1	35.0
3-Methylthiophene	Ave	0.7442	0.7590		2.04	2.00	2.0	35.0
2-Hexanone	Ave	0.1745	0.1978		2.27	2.00	13.4	35.0
Octane	Ave	0.2900	0.2899		2.00	2.00	-0.0	35.0
Dibromochloromethane	Ave	0.5530	0.5953		2.15	2.00	7.6	35.0
1,2-Dibromoethane (EDB)	Ave	0.4876	0.4880		2.00	2.00	0.0	35.0
Tetrachloroethene	Ave	0.3511	0.3485		1.99	2.00	-0.8	35.0
Chlorobenzene	Ave	0.7227	0.7114		1.97	2.00	-1.6	35.0
2,3-Dimethylheptane	Ave	0.8964	0.9171		2.05	2.00	2.3	35.0
Ethylbenzene	Ave	0.9550	0.7826		1.64	2.00	-18.1	35.0
2-Ethylthiophene	Ave	0.7816	0.6641		1.70	2.00	-15.0	35.0
m-Xylene & p-Xylene	Ave	0.6909	0.5759		3.34	4.00	-16.6	35.0
Nonane	Ave	0.6159	0.6267		2.04	2.00	1.8	35.0
Bromoform	Ave	0.5555	0.5906		2.13	2.00	6.3	35.0
Styrene	Ave	0.5162	0.4513		1.75	2.00	-12.6	35.0
o-Xylene	Ave	0.7045	0.5803		1.65	2.00	-17.6	35.0
1,1,2,2-Tetrachloroethane	Ave	0.4787	0.4432		1.85	2.00	-7.4	35.0

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 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/24/2017 17:35
 Lab File ID: JLCSC24.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	0.1184	0.1070		1.81	2.00	-9.6	35.0
Isopropylbenzene	Ave	0.8969	0.7634		1.70	2.00	-14.9	35.0
Propylbenzene	Ave	0.2311	0.2151		1.86	2.00	-7.0	35.0
2-Chlorotoluene	Ave	0.2859	0.2573		1.80	2.00	-10.0	35.0
4-Ethyltoluene	Ave	0.7855	0.6957		1.77	2.00	-11.4	35.0
1,3,5-Trimethylbenzene	Ave	0.3678	0.3517		1.91	2.00	-4.4	35.0
Alpha Methyl Styrene	Ave	0.3164	0.3093		1.96	2.00	-2.2	35.0
Decane	Ave	0.6827	0.6369		1.87	2.00	-6.7	35.0
tert-Butylbenzene	Ave	0.7007	0.6654		1.90	2.00	-5.0	35.0
1,2,4-Trimethylbenzene	Ave	0.6325	0.6204		1.96	2.00	-1.9	35.0
sec-Butylbenzene	Ave	0.9599	0.9225		1.92	2.00	-3.9	35.0
1,3-Dichlorobenzene	Ave	0.6064	0.5581		1.84	2.00	-8.0	35.0
Benzyl chloride	Ave	0.4970	0.5149		2.07	2.00	3.6	35.0
1,4-Dichlorobenzene	Ave	0.5863	0.5263		1.80	2.00	-10.2	35.0
4-Isopropyltoluene	Ave	0.7599	0.7560		1.99	2.00	-0.5	35.0
1,2,3-Trimethylbenzene	Ave	0.4800	0.5022		2.09	2.00	4.6	35.0
Butylcyclohexane	Ave	0.8128	0.7502		1.85	2.00	-7.7	35.0
1,2-Dichlorobenzene	Ave	0.5458	0.4859		1.78	2.00	-11.0	35.0
Indane	Ave	0.6332	0.5570		1.76	2.00	-12.0	35.0
Indene	Ave	0.4315	0.5246		2.43	2.00	21.6	35.0
Butylbenzene	Ave	0.7501	0.7475		1.99	2.00	-0.4	35.0
Undecane	Ave	0.6033	0.5859		1.94	2.00	-2.9	35.0
1,2-Dimethyl-4-Ethylbenzene	Ave	0.5459	0.6953		2.55	2.00	27.4	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.1668	0.1514		1.82	2.00	-9.2	35.0
1,2,4,5-Tetramethylbenzene	Ave	0.6287	0.7183		2.29	2.00	14.2	35.0
1,2,3,5-Tetramethylbenzene	Ave	0.3993	0.4588		2.30	2.00	14.9	35.0
1,2,3,4-Tetramethylbenzene	Ave	0.5177	0.5860		2.27	2.00	13.2	35.0
Dodecane	Ave	0.5120	0.5746		2.25	2.00	12.2	35.0
1,2,4-Trichlorobenzene	Ave	0.2975	0.3056		2.06	2.00	2.7	35.0
Naphthalene	Ave	0.5520	0.6112		2.22	2.00	10.7	35.0
Benzo (b) thiophene	Ave	0.2783	0.3047		2.19	2.00	9.5	35.0
Hexachlorobutadiene	Ave	0.5245	0.4803		1.83	2.00	-8.4	35.0
1,2,3-Trichlorobenzene	Ave	0.2818	0.3017		2.14	2.00	7.1	35.0
2-Methylnaphthalene	Ave	0.0371	0.0270		4.55	6.25	-27.3	50.0
1-Methylnaphthalene	Ave	0.0406	0.0259		3.99	6.25	-36.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6982	0.7059		4.04	4.00	1.1	35.0

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JLCSC24.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 24-Mar-2017 23:36:30 ALS Bottle#: 15 Worklist Smp#: 18
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004355-018
 Misc. Info.: 083670
 Operator ID: 007126 Instrument ID: MJ
 Sublist:
 Method: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 27-Mar-2017 13:12:28 Calib Date: 24-Mar-2017 17:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK029

First Level Reviewer: barlozhetskayaa

Date: 27-Mar-2017 13:12:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.551	8.549	0.002	97	256445	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.746	10.746	0.000	95	1157126	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.523	15.525	-0.002	88	1073197	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.174	17.169	0.002	95	757527	4.00	4.04	
6 Chlorodifluoromethane	67	3.564	3.563	0.001	97	46979	2.00	2.18	
7 Propene	41	3.575	3.573	0.003	99	147707	2.00	1.94	
8 Dichlorodifluoromethane	85	3.624	3.622	0.003	100	452957	2.00	2.06	
9 Chloromethane	52	3.796	3.796	0.001	98	46528	2.00	1.93	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.801	3.800	0.002	97	200368	2.00	2.06	
11 Acetaldehyde	44	3.941	3.941	0.001	99	151162	10.0	6.55	
12 Vinyl chloride	62	3.957	3.956	0.002	99	148894	2.00	2.10	
14 Butadiene	54	4.043	4.037	0.006	67	106369	2.00	2.00	
13 Butane	43	4.043	4.039	0.005	85	217182	2.00	2.03	
15 Bromomethane	94	4.344	4.344	0.001	98	126286	2.00	1.91	
16 Chloroethane	64	4.479	4.478	0.002	93	61183	2.00	2.10	
17 Ethanol	31	4.570	4.569	0.002	96	146124	10.0	9.67	
18 Vinyl bromide	106	4.764	4.763	0.002	98	125019	2.00	2.17	
19 2-Methylbutane	43	4.812	4.812	0.001	92	195921	2.00	2.05	
20 Trichlorofluoromethane	101	5.022	5.023	0.000	100	428016	2.00	2.12	
21 Acrolein	56	5.033	5.035	-0.001	92	26600	2.00	1.52	
22 Acetonitrile	40	5.097	5.099	-0.001	99	31897	2.00	1.44	
23 Acetone	58	5.151	5.151	0.001	98	92715	6.00	4.31	
24 Isopropyl alcohol	45	5.227	5.229	-0.001	94	440981	6.00	5.00	
25 Pentane	72	5.237	5.234	0.004	96	25831	2.00	2.25	
26 Ethyl ether	31	5.404	5.408	-0.003	94	107984	2.00	1.59	
27 1,1-Dichloroethene	96	5.711	5.708	0.004	96	162267	2.00	2.10	
28 2-Methyl-2-propanol	59	5.802	5.809	-0.006	95	208231	2.00	2.19	
29 Acrylonitrile	53	5.813	5.810	0.004	95	54172	2.00	1.42	
30 1,1,2-Trichloro-1,2,2-trif	101	5.878	5.879	0.000	97	345766	2.00	2.12	
31 Methylene Chloride	84	6.050	6.044	0.007	99	153371	2.00	1.94	

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	6.060	6.061	0.001	95	145862	2.00	1.88	
33 Carbon disulfide	76	6.206	6.204	0.003	99	463864	2.00	2.07	
34 trans-1,2-Dichloroethene	96	6.840	6.839	0.002	97	163304	2.00	2.08	
35 2-Methylpentane	43	6.857	6.856	0.003	96	410327	2.00	2.25	
36 Methyl tert-butyl ether	73	6.975	6.978	-0.002	97	210060	2.00	1.79	
37 1,1-Dichloroethane	63	7.255	7.251	0.006	100	311171	2.00	2.03	
38 Vinyl acetate	43	7.362	7.360	0.003	100	178461	2.00	1.43	
39 2-Butanone (MEK)	72	7.809	7.811	-0.001	95	34144	2.00	1.81	
40 Hexane	56	7.825	7.822	0.004	90	139992	2.00	2.08	
41 Isopropyl ether	45	7.992	7.989	0.004	98	298787	2.00	1.79	
42 cis-1,2-Dichloroethene	96	8.223	8.221	0.003	96	169979	2.00	2.07	
43 Ethyl acetate	43	8.417	8.424	-0.006	99	162512	2.00	1.81	
44 Chloroform	83	8.562	8.562	0.001	98	326643	2.00	1.93	
45 Tert-butyl ethyl ether	59	8.659	8.664	-0.003	95	263870	2.00	1.98	
46 Tetrahydrofuran	42	8.981	8.991	-0.008	96	91470	2.00	1.78	
47 1,1,1-Trichloroethane	97	9.579	9.581	0.000	96	358301	2.00	2.04	
48 1,2-Dichloroethane	62	9.692	9.691	0.001	97	220697	2.00	2.00	
49 n-Butanol	31	10.160	10.167	-0.006	89	47020	2.00	2.37	
50 Cyclohexane	69	10.186	10.185	0.001	80	78530	2.00	2.25	
51 Benzene	78	10.186	10.186	0.000	97	438756	2.00	1.93	
52 Carbon tetrachloride	117	10.208	10.210	-0.002	97	380033	2.00	2.17	
53 2,3-Dimethylpentane	71	10.316	10.314	0.003	90	95772	2.00	1.95	
54 Thiophene	84	10.466	10.464	0.002	97	265991	2.00	2.07	
55 Tert-amyl methyl ether	73	10.687	10.687	-0.001	97	235684	2.00	2.13	
56 Isooctane	57	10.966	10.965	0.001	99	766599	2.00	1.96	
57 n-Heptane	71	11.354	11.354	0.001	94	147393	2.00	1.95	
58 1,2-Dichloropropane	63	11.429	11.430	-0.001	91	149196	2.00	1.80	
59 Trichloroethene	130	11.467	11.466	0.001	97	258610	2.00	2.11	
60 Dibromomethane	93	11.547	11.550	-0.002	96	190066	2.00	2.02	
62 Dichlorobromomethane	83	11.698	11.700	-0.001	99	317493	2.00	2.02	
61 1,4-Dioxane	88	11.730	11.736	-0.005	91	41774	2.00	2.15	
63 Methyl methacrylate	41	11.811	11.811	0.000	92	97897	2.00	1.86	
64 Methylcyclohexane	83	12.247	12.246	0.001	95	280636	2.00	1.66	
65 4-Methyl-2-pentanone (MIBK)	43	12.672	12.672	0.000	96	205822	2.00	2.12	
66 cis-1,3-Dichloropropene	75	12.715	12.717	-0.002	95	250628	2.00	2.03	
67 trans-1,3-Dichloropropene	75	13.420	13.419	-0.001	99	203011	2.00	1.91	
68 Toluene	91	13.543	13.539	0.001	94	399449	2.00	1.76	
69 1,1,2-Trichloroethane	83	13.619	13.623	-0.002	99	132163	2.00	1.87	
70 2-Methylthiophene	97	13.694	13.693	-0.001	98	403736	2.00	1.98	
71 3-Methylthiophene	97	13.898	13.895	0.001	99	407471	2.00	2.04	
72 2-Hexanone	58	14.017	14.018	-0.003	93	106213	2.00	2.27	
73 n-Octane	85	14.243	14.242	-0.001	95	155618	2.00	2.00	
74 Chlorodibromomethane	129	14.323	14.322	-0.002	98	319586	2.00	2.15	
75 Ethylene Dibromide	107	14.614	14.614	-0.002	98	262023	2.00	2.00	
76 Tetrachloroethene	129	14.694	14.688	0.004	95	187106	2.00	1.99	
78 Chlorobenzene	112	15.571	15.571	-0.002	94	381931	2.00	1.97	
77 2,3-Dimethylheptane	43	15.598	15.599	-0.003	96	492363	2.00	2.05	
79 Ethylbenzene	91	15.867	15.863	0.001	99	420165	2.00	1.64	
80 2-Ethylthiophene	97	15.969	15.965	0.002	98	356523	2.00	1.70	
81 m-Xylene & p-Xylene	91	16.029	16.026	0.000	99	618421	4.00	3.34	
82 n-Nonane	57	16.454	16.453	-0.002	94	336473	2.00	2.04	
83 Bromoform	173	16.475	16.471	0.001	97	317094	2.00	2.13	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Styrene	104	16.491	16.492	-0.003	98	242297	2.00	1.75	
85 o-Xylene	91	16.556	16.552	0.001	99	311550	2.00	1.65	
86 1,1,2,2-Tetrachloroethane	83	16.879	16.877	-0.001	99	237919	2.00	1.85	
87 1,2,3-Trichloropropane	110	17.040	17.036	0.001	98	57453	2.00	1.81	
88 Isopropylbenzene	105	17.142	17.140	-0.001	97	409873	2.00	1.70	
89 N-Propylbenzene	120	17.691	17.687	0.001	99	115459	2.00	1.86	
90 2-Chlorotoluene	126	17.734	17.730	0.001	97	138120	2.00	1.80	
91 4-Ethyltoluene	105	17.841	17.842	-0.004	98	373488	2.00	1.77	
92 1,3,5-Trimethylbenzene	120	17.922	17.917	0.002	93	188816	2.00	1.91	
93 Alpha Methyl Styrene	118	18.153	18.151	-0.001	89	166072	2.00	1.96	
94 n-Decane	57	18.218	18.215	0.000	89	341929	2.00	1.87	
95 tert-Butylbenzene	119	18.347	18.346	-0.002	91	357218	2.00	1.90	
96 1,2,4-Trimethylbenzene	105	18.363	18.361	-0.001	96	333097	2.00	1.96	
97 sec-Butylbenzene	105	18.621	18.620	-0.002	99	495269	2.00	1.92	
98 1,3-Dichlorobenzene	146	18.632	18.633	-0.004	98	299638	2.00	1.84	
99 Benzyl chloride	91	18.713	18.709	0.001	98	276420	2.00	2.07	
100 1,4-Dichlorobenzene	146	18.724	18.721	0.000	98	282541	2.00	1.80	
101 4-Isopropyltoluene	119	18.788	18.785	0.000	97	405896	2.00	1.99	
102 1,2,3-Trimethylbenzene	105	18.837	18.836	-0.002	98	269633	2.00	2.09	
103 Butylcyclohexane	83	18.896	18.894	-0.001	92	402782	2.00	1.85	
105 1,2-Dichlorobenzene	146	19.084	19.084	-0.003	89	260846	2.00	1.78	
104 2,3-Dihydroindene	117	19.089	19.084	0.002	93	299026	2.00	1.76	
107 Indene	116	19.219	19.216	0.000	91	281661	2.00	2.43	
106 n-Butylbenzene	91	19.224	19.223	-0.003	98	401298	2.00	1.99	
108 Undecane	57	19.547	19.543	0.001	96	314574	2.00	1.94	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.601	19.599	-0.001	98	373287	2.00	2.55	
110 1,2-Dibromo-3-Chloropropan	157	19.697	19.694	-0.001	97	81297	2.00	1.82	
111 1,2,4,5-Tetramethylbenzene	119	19.988	19.986	-0.001	97	385620	2.00	2.29	
112 1,2,3,5-Tetramethylbenzene	119	20.042	20.041	-0.002	95	246316	2.00	2.30	
113 1,2,3,4-Tetramethylbenzene	119	20.440	20.437	0.000	97	314630	2.00	2.27	
114 Dodecane	57	20.606	20.604	-0.001	95	308504	2.00	2.25	
115 1,2,4-Trichlorobenzene	180	20.795	20.793	-0.001	93	164083	2.00	2.06	
116 Naphthalene	128	20.935	20.933	-0.002	99	328118	2.00	2.22	
117 Benzo(b)thiophene	134	21.042	21.039	0.000	99	163568	2.00	2.19	
118 Hexachlorobutadiene	225	21.155	21.154	-0.002	95	257857	2.00	1.83	
119 1,2,3-Trichlorobenzene	180	21.225	21.224	-0.002	94	161992	2.00	2.14	
120 2-Methylnaphthalene	142	21.919	21.917	-0.002	99	45233	6.25	4.55	
121 1-Methylnaphthalene	142	22.048	22.045	-0.001	99	43441	6.25	3.99	
A 124 Toluene Range	1	13.546	(13.516-13.576)		0	990364	2.00	1.80	
A 125 C8 Range	1	14.239	(14.202-14.276)		0	1501727	2.00	2.07	
S 126 Xylenes, Total	100				0		6.00	4.98	
S 127 1,2-Dichloroethene, Total	1				0		4.00	4.15	

Reagents:

40CV101S_00035

Amount Added: 100.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 27-Mar-2017 13:12:29

Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JLCS24.D

Injection Date: 24-Mar-2017 23:36:30

Instrument ID: MJ

Operator ID: 007126

Lims ID: ICV

Worklist Smp#: 18

Client ID:

Purge Vol: 500.000 mL

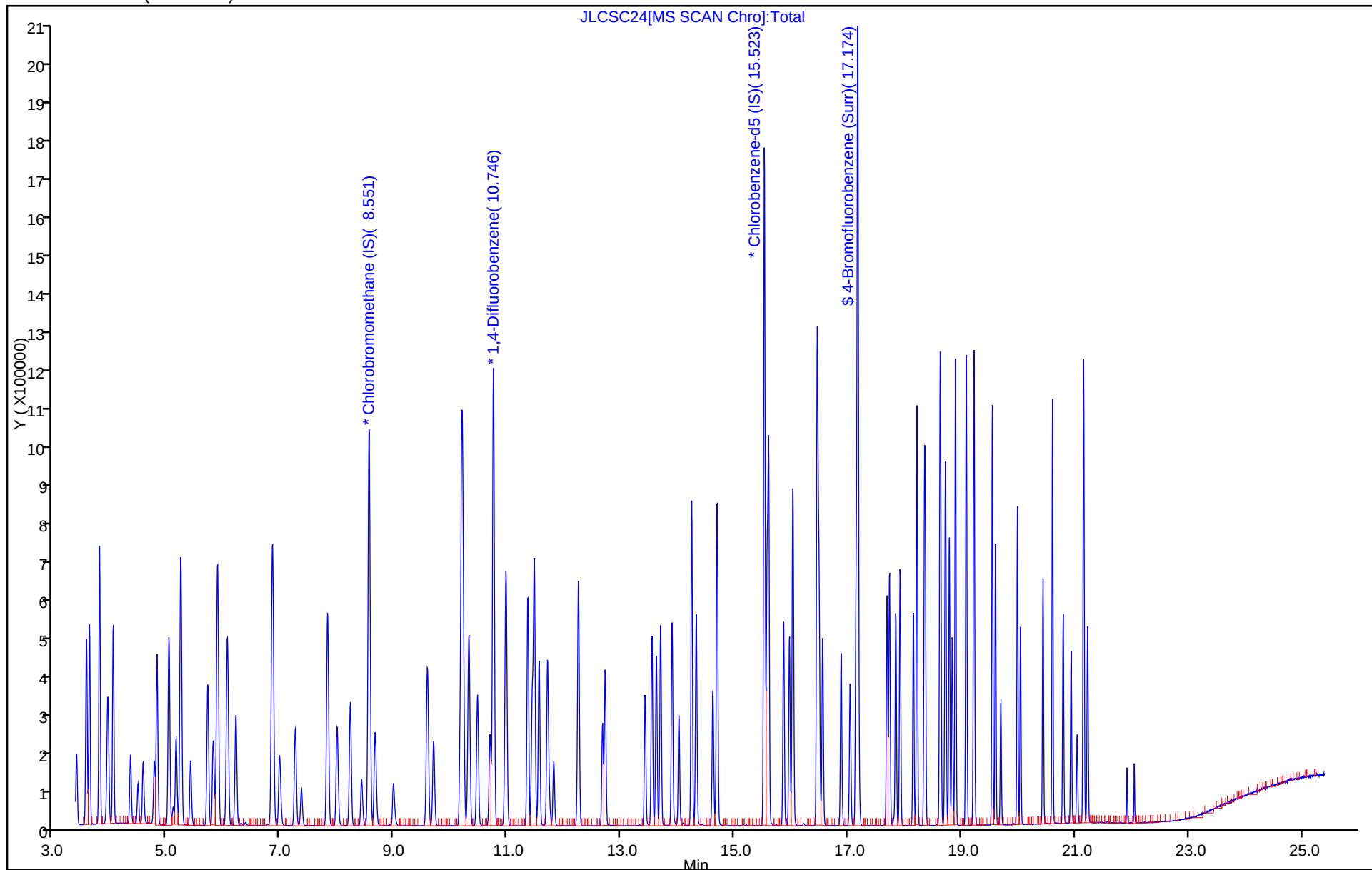
Dil. Factor: 1.0000

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.: 140-7685-1

SDG No.: _____

Lab Sample ID: CCVIS 140-10158/8 Calibration Date: 04/04/2017 13:50

Instrument ID: MJ Calib Start Date: 03/24/2017 11:31

GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/24/2017 17:35

Lab File ID: JCCVD04B.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	0.3358	0.4376		2.61	2.00	30.3*	30.0
Propene	Ave	1.187	1.262		2.13	2.00	6.3	30.0
Dichlorodifluoromethane	Ave	3.428	4.174		2.44	2.00	21.7	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	1.519	1.871		2.47	2.00	23.2	30.0
Chloromethane	Ave	0.3760	0.3300		1.76	2.00	-12.2	30.0
Acetaldehyde	Ave	0.3601	0.1826		5.07	10.0	-49.3*	30.0
Vinyl chloride	Ave	1.106	1.079		1.95	2.00	-2.4	30.0
1,3-Butadiene	Ave	0.8287	0.7756		1.87	2.00	-6.4	30.0
Butane	Ave	1.667	1.594		1.91	2.00	-4.4	30.0
Bromomethane	Ave	1.032	1.080		2.10	2.00	4.7	30.0
Chloroethane	Ave	0.4554	0.5149		2.26	2.00	13.1	30.0
Ethanol	Ave	0.2358	0.2767		11.7	10.0	17.3	30.0
Vinyl bromide	Ave	0.8970	1.130		2.52	2.00	26.0	30.0
2-Methylbutane	Ave	1.492	1.631		2.19	2.00	9.3	30.0
Trichlorofluoromethane	Ave	3.148	4.227		2.69	2.00	34.3*	30.0
Acrolein	Ave	0.2731	0.2385		1.75	2.00	-12.7	30.0
Acetonitrile	Ave	0.3455	0.3128		1.81	2.00	-9.5	30.0
Acetone	Ave	0.3357	0.2968		5.31	6.00	-11.6	30.0
Isopropyl alcohol	Ave	1.375	1.535		6.70	6.00	11.6	30.0
Pentane	Ave	0.1787	0.2417		2.71	2.00	35.3*	30.0
Ethyl ether	Ave	1.059	0.9335		1.76	2.00	-11.9	30.0
1,1-Dichloroethene	Ave	1.205	1.510		2.51	2.00	25.4	30.0
tert-Butyl alcohol	Ave	1.483	2.042		2.76	2.00	37.7*	30.0
Acrylonitrile	Ave	0.5968	0.4979		1.67	2.00	-16.6	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.546	3.027		2.38	2.00	18.9	30.0
Methylene Chloride	Ave	1.236	1.230		1.99	2.00	-0.5	30.0
3-Chloropropene	Ave	1.210	1.251		2.07	2.00	3.4	30.0
Carbon disulfide	Ave	3.498	3.740		2.14	2.00	6.9	30.0
trans-1,2-Dichloroethene	Ave	1.224	1.301		2.13	2.00	6.3	30.0
2-Methylpentane	Ave	2.848	3.347		2.35	2.00	17.5	30.0
Methyl tert-butyl ether	Ave	1.832	1.721		1.88	2.00	-6.1	30.0
1,1-Dichloroethane	Ave	2.394	2.427		2.03	2.00	1.4	30.0
Vinyl acetate	Ave	1.952	1.487		1.52	2.00	-23.9	30.0
2-Butanone (MEK)	Ave	0.2943	0.2758		1.88	2.00	-6.3	30.0
Hexane	Ave	1.050	1.091		2.08	2.00	3.9	30.0
Isopropyl ether	Ave	2.602	2.396		1.84	2.00	-7.9	30.0
cis-1,2-Dichloroethene	Ave	1.283	1.265		1.97	2.00	-1.4	30.0
Ethyl acetate	Ave	1.399	1.350		1.93	2.00	-3.5	30.0
Chloroform	Ave	2.640	2.686		2.04	2.00	1.8	30.0
Tert-butyl ethyl ether	Ave	2.079	2.166		2.09	2.00	4.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1

SDG No.: _____

Lab Sample ID: CCVIS 140-10158/8 Calibration Date: 04/04/2017 13:50

Instrument ID: MJ Calib Start Date: 03/24/2017 11:31

GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/24/2017 17:35

Lab File ID: JCCVD04B.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	0.8005	0.7400		1.85	2.00	-7.6	30.0
1,1,1-Trichloroethane	Ave	2.745	2.981		2.17	2.00	8.6	30.0
1,2-Dichloroethane	Ave	0.3809	0.4248		2.23	2.00	11.5	30.0
1-Butanol	Ave	0.0685	0.0874		2.55	2.00	27.6	30.0
Benzene	Ave	0.7840	0.7232		1.85	2.00	-7.8	30.0
Cyclohexane	Ave	0.1208	0.1332		2.21	2.00	10.3	30.0
Carbon tetrachloride	Ave	0.6048	0.7230		2.39	2.00	19.6	30.0
2,3-Dimethylpentane	Ave	0.1698	0.1543		1.82	2.00	-9.1	30.0
Thiophene	Ave	0.4449	0.4363		1.96	2.00	-1.9	30.0
Tert-amyl methyl ether	Ave	0.4115	0.4265		2.07	2.00	3.7	30.0
2,2,4-Trimethylpentane	Ave	1.354	1.291		1.91	2.00	-4.7	30.0
Heptane	Ave	0.2609	0.2375		1.82	2.00	-9.0	30.0
1,2-Dichloropropane	Ave	0.2863	0.2416		1.69	2.00	-15.6	30.0
Trichloroethene	Ave	0.4235	0.3996		1.89	2.00	-5.7	30.0
Dibromomethane	Ave	0.3258	0.3295		2.02	2.00	1.1	30.0
Bromodichloromethane	Ave	0.5424	0.5714		2.11	2.00	5.3	30.0
1,4-Dioxane	Ave	0.0672	0.0754		2.25	2.00	12.3	30.0
Methyl methacrylate	Ave	0.1818	0.1736		1.91	2.00	-4.5	30.0
Methylcyclohexane	Ave	0.5859	0.4519		1.54	2.00	-22.9	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3358	0.3733		2.22	2.00	11.2	30.0
cis-1,3-Dichloropropene	Ave	0.4271	0.4246		1.99	2.00	-0.6	30.0
trans-1,3-Dichloropropene	Ave	0.3971	0.3677		1.85	2.00	-7.4	30.0
Toluene	Ave	0.8458	0.7165		1.70	2.00	-15.3	30.0
1,1,2-Trichloroethane	Ave	0.2639	0.2312		1.75	2.00	-12.4	30.0
2-Methylthiophene	Ave	0.7600	0.7126		1.88	2.00	-6.2	30.0
3-Methylthiophene	Ave	0.7442	0.7214		1.94	2.00	-3.1	30.0
2-Hexanone	Ave	0.1745	0.1982		2.27	2.00	13.6	30.0
Octane	Ave	0.2900	0.2883		1.99	2.00	-0.6	30.0
Dibromochloromethane	Ave	0.5530	0.6097		2.21	2.00	10.2	30.0
1,2-Dibromoethane (EDB)	Ave	0.4876	0.4643		1.91	2.00	-4.8	30.0
Tetrachloroethene	Ave	0.3511	0.3579		2.04	2.00	1.9	30.0
Chlorobenzene	Ave	0.7227	0.6623		1.83	2.00	-8.4	30.0
2,3-Dimethylheptane	Ave	0.8964	0.9291		2.07	2.00	3.6	30.0
Ethylbenzene	Ave	0.9550	0.7266		1.52	2.00	-23.9	30.0
2-Ethylthiophene	Ave	0.7816	0.6277		1.61	2.00	-19.7	30.0
m-Xylene & p-Xylene	Ave	0.6909	0.5421		3.14	4.00	-21.5	30.0
Nonane	Ave	0.6159	0.6143		2.00	2.00	-0.3	30.0
Bromoform	Ave	0.5555	0.5475		1.97	2.00	-1.4	30.0
Styrene	Ave	0.5162	0.4076		1.58	2.00	-21.0	30.0
o-Xylene	Ave	0.7045	0.5493		1.56	2.00	-22.0	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4787	0.4109		1.72	2.00	-14.2	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-10158/8 Calibration Date: 04/04/2017 13:50
 Instrument ID: MJ Calib Start Date: 03/24/2017 11:31
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/24/2017 17:35
 Lab File ID: JCCVD04B.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	0.1184	0.1083		1.83	2.00	-8.5	30.0
Isopropylbenzene	Ave	0.8969	0.7460		1.66	2.00	-16.8	30.0
Propylbenzene	Ave	0.2311	0.1958		1.69	2.00	-15.3	30.0
2-Chlorotoluene	Ave	0.2859	0.2288		1.60	2.00	-20.0	30.0
4-Ethyltoluene	Ave	0.7855	0.6658		1.70	2.00	-15.2	30.0
1,3,5-Trimethylbenzene	Ave	0.3678	0.3303		1.80	2.00	-10.2	30.0
Alpha Methyl Styrene	Ave	0.3164	0.2625		1.66	2.00	-17.0	30.0
Decane	Ave	0.6827	0.5931		1.74	2.00	-13.1	30.0
tert-Butylbenzene	Ave	0.7007	0.6519		1.86	2.00	-7.0	30.0
1,2,4-Trimethylbenzene	Ave	0.6325	0.5929		1.88	2.00	-6.3	30.0
sec-Butylbenzene	Ave	0.9599	0.8922		1.86	2.00	-7.1	30.0
1,3-Dichlorobenzene	Ave	0.6064	0.4531		1.50	2.00	-25.3	30.0
Benzyl chloride	Ave	0.4970	0.4196		1.69	2.00	-15.6	30.0
1,4-Dichlorobenzene	Ave	0.5863	0.4192		1.43	2.00	-28.5	30.0
4-Isopropyltoluene	Ave	0.7599	0.7444		1.96	2.00	-2.0	30.0
1,2,3-Trimethylbenzene	Ave	0.4800	0.4978		2.08	2.00	3.7	30.0
Butylcyclohexane	Ave	0.8128	0.6932		1.71	2.00	-14.7	30.0
1,2-Dichlorobenzene	Ave	0.5458	0.4153		1.52	2.00	-23.9	30.0
Indane	Ave	0.6332	0.5053		1.60	2.00	-20.2	30.0
Indene	Ave	0.4315	0.4492		2.08	2.00	4.1	30.0
Butylbenzene	Ave	0.7501	0.7117		1.90	2.00	-5.1	30.0
Undecane	Ave	0.6033	0.5831		1.93	2.00	-3.4	30.0
1,2-Dimethyl-4-Ethylbenzene	Ave	0.5459	0.6823		2.50	2.00	25.0	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.1668	0.1266		1.52	2.00	-24.1	30.0
1,2,4,5-Tetramethylbenzene	Ave	0.6287	0.7347		2.34	2.00	16.9	30.0
1,2,3,5-Tetramethylbenzene	Ave	0.3993	0.4720		2.37	2.00	18.2	30.0
1,2,3,4-Tetramethylbenzene	Ave	0.5177	0.5850		2.26	2.00	13.0	30.0
Dodecane	Ave	0.5120	0.5707		2.23	2.00	11.5	30.0
1,2,4-Trichlorobenzene	Ave	0.2975	0.2092		1.41	2.00	-29.7	30.0
Naphthalene	Ave	0.5520	0.4590		1.66	2.00	-16.9	30.0
Benzo (b) thiophene	Ave	0.2783	0.2048		1.47	2.00	-26.4	30.0
Hexachlorobutadiene	Ave	0.5245	0.4806		1.83	2.00	-8.4	30.0
1,2,3-Trichlorobenzene	Ave	0.2818	0.2340		1.66	2.00	-16.9	30.0
2-Methylnaphthalene	Ave	0.0371	0.0233		3.93	6.25	-37.2	50.0
1-Methylnaphthalene	Ave	0.0406	0.0271		4.18	6.25	-33.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.6982	0.7293		4.18	4.00	4.4	30.0

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\JCCVD04B.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 04-Apr-2017 13:50:30 ALS Bottle#: 15 Worklist Smp#: 8
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004511-002
 Misc. Info.: P34
 Operator ID: 007126 Instrument ID: MJ
 Sublist: chrom-MJ_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 05-Apr-2017 10:21:37 Calib Date: 24-Mar-2017 17:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 10:21:37

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	8.538	8.538	0.000	97	203985	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.739	10.739	0.000	96	928483	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.521	15.521	0.000	89	837978	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.167	17.167	0.000	93	611100	4.00	4.18	
6 Chlorodifluoromethane	67	3.562	3.562	0.000	97	44658	2.00	2.61	
7 Propene	41	3.568	3.568	0.000	98	128739	2.00	2.13	
8 Dichlorodifluoromethane	85	3.622	3.622	0.000	100	425934	2.00	2.44	
9 Chloromethane	52	3.794	3.794	0.000	99	33677	2.00	1.76	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.794	3.794	0.000	95	190975	2.00	2.47	
11 Acetaldehyde	44	3.934	3.934	0.000	95	93141	10.0	5.07	
12 Vinyl chloride	62	3.955	3.955	0.000	99	110092	2.00	1.95	
13 Butane	43	4.036	4.036	0.000	84	162669	2.00	1.91	
14 Butadiene	54	4.036	4.036	0.000	68	79150	2.00	1.87	
15 Bromomethane	94	4.337	4.337	0.000	98	110241	2.00	2.10	
16 Chloroethane	64	4.472	4.472	0.000	91	52547	2.00	2.26	
17 Ethanol	31	4.558	4.558	0.000	96	141165	10.0	11.7	
18 Vinyl bromide	106	4.757	4.757	0.000	97	115305	2.00	2.52	
19 2-Methylbutane	43	4.805	4.805	0.000	92	166413	2.00	2.19	
20 Trichlorofluoromethane	101	5.015	5.015	0.000	100	431342	2.00	2.69	
21 Acrolein	56	5.026	5.026	0.000	95	24340	2.00	1.75	
22 Acetonitrile	40	5.090	5.090	0.000	99	31922	2.00	1.81	
23 Acetone	58	5.139	5.139	0.000	98	90875	6.00	5.31	
24 Isopropyl alcohol	45	5.214	5.214	0.000	93	469816	6.00	6.70	
25 Pentane	72	5.230	5.230	0.000	95	24666	2.00	2.71	
26 Ethyl ether	31	5.397	5.397	0.000	93	95259	2.00	1.76	
27 1,1-Dichloroethene	96	5.698	5.698	0.000	95	154113	2.00	2.51	
28 2-Methyl-2-propanol	59	5.790	5.790	0.000	96	208384	2.00	2.76	
29 Acrylonitrile	53	5.800	5.800	0.000	93	50804	2.00	1.67	
30 1,1,2-Trichloro-1,2,2-trif	101	5.870	5.870	0.000	97	308845	2.00	2.38	
31 Methylene Chloride	84	6.037	6.037	0.000	97	125469	2.00	1.99	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	6.053	6.053	0.000	96	127644	2.00	2.07	
33 Carbon disulfide	76	6.193	6.193	0.000	100	381677	2.00	2.14	
34 trans-1,2-Dichloroethene	96	6.828	6.828	0.000	96	132770	2.00	2.13	
35 2-Methylpentane	43	6.844	6.844	0.000	95	341571	2.00	2.35	
36 Methyl tert-butyl ether	73	6.962	6.962	0.000	97	175572	2.00	1.88	
37 1,1-Dichloroethane	63	7.242	7.242	0.000	100	247628	2.00	2.03	
38 Vinyl acetate	43	7.350	7.350	0.000	100	151704	2.00	1.52	
39 2-Butanone (MEK)	72	7.796	7.796	0.000	95	28147	2.00	1.88	
40 Hexane	56	7.812	7.812	0.000	89	111292	2.00	2.08	
41 Isopropyl ether	45	7.979	7.979	0.000	97	244574	2.00	1.84	
42 cis-1,2-Dichloroethene	96	8.210	8.210	0.000	97	129039	2.00	1.97	
43 Ethyl acetate	43	8.409	8.409	0.000	98	137757	2.00	1.93	
44 Chloroform	83	8.555	8.555	0.000	98	274117	2.00	2.04	
45 Tert-butyl ethyl ether	59	8.651	8.651	0.000	96	221099	2.00	2.09	
46 Tetrahydrofuran	42	8.969	8.969	0.000	93	75515	2.00	1.85	
47 1,1,1-Trichloroethane	97	9.571	9.571	0.000	96	304223	2.00	2.17	
48 1,2-Dichloroethane	62	9.679	9.679	0.000	98	197310	2.00	2.23	
49 n-Butanol	31	10.147	10.147	0.000	92	40574	2.00	2.55	
51 Benzene	78	10.179	10.179	0.000	97	335903	2.00	1.85	
50 Cyclohexane	69	10.185	10.185	0.000	79	61865	2.00	2.21	
52 Carbon tetrachloride	117	10.201	10.201	0.000	97	335819	2.00	2.39	
53 2,3-Dimethylpentane	71	10.303	10.303	0.000	90	71676	2.00	1.82	
54 Thiophene	84	10.454	10.454	0.000	98	202661	2.00	1.96	
55 Tert-amyl methyl ether	73	10.674	10.674	0.000	96	178830	2.00	2.07	
56 Isooctane	57	10.959	10.959	0.000	98	599477	2.00	1.91	
57 n-Heptane	71	11.347	11.347	0.000	94	110317	2.00	1.82	
58 1,2-Dichloropropane	63	11.422	11.422	0.000	87	112229	2.00	1.69	
59 Trichloroethene	130	11.459	11.459	0.000	96	185611	2.00	1.89	
60 Dibromomethane	93	11.540	11.540	0.000	96	153039	2.00	2.02	
62 Dichlorobromomethane	83	11.691	11.691	0.000	99	265420	2.00	2.11	
61 1,4-Dioxane	88	11.723	11.723	0.000	94	35025	2.00	2.25	
63 Methyl methacrylate	41	11.804	11.804	0.000	90	80653	2.00	1.91	
64 Methylcyclohexane	83	12.234	12.234	0.000	92	209898	2.00	1.54	
65 4-Methyl-2-pentanone (MIBK)	43	12.664	12.664	0.000	97	173401	2.00	2.22	
66 cis-1,3-Dichloropropene	75	12.708	12.708	0.000	96	197205	2.00	1.99	
67 trans-1,3-Dichloropropene	75	13.418	13.418	0.000	99	154161	2.00	1.85	
68 Toluene	91	13.536	13.536	0.000	94	300362	2.00	1.70	
69 1,1,2-Trichloroethane	83	13.611	13.611	0.000	99	96937	2.00	1.75	
70 2-Methylthiophene	97	13.687	13.687	0.000	98	298740	2.00	1.88	
71 3-Methylthiophene	97	13.891	13.891	0.000	99	302400	2.00	1.94	
72 2-Hexanone	58	14.009	14.009	0.000	92	83088	2.00	2.27	
73 n-Octane	85	14.241	14.241	0.000	95	120854	2.00	1.99	
74 Chlorodibromomethane	129	14.321	14.321	0.000	98	255592	2.00	2.21	
75 Ethylene Dibromide	107	14.612	14.612	0.000	99	194631	2.00	1.91	
76 Tetrachloroethene	129	14.687	14.687	0.000	95	150023	2.00	2.04	
78 Chlorobenzene	112	15.569	15.569	0.000	93	277629	2.00	1.83	
77 2,3-Dimethylheptane	43	15.596	15.596	0.000	95	389472	2.00	2.07	
79 Ethylbenzene	91	15.860	15.860	0.000	99	304606	2.00	1.52	
80 2-Ethylthiophene	97	15.962	15.962	0.000	99	263131	2.00	1.61	
81 m-Xylene & p-Xylene	91	16.021	16.021	0.000	99	454505	4.00	3.14	
82 n-Nonane	57	16.452	16.452	0.000	94	257512	2.00	2.00	
83 Bromoform	173	16.468	16.468	0.000	96	229531	2.00	1.97	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Styrene	104	16.489	16.489	0.000	99	170849	2.00	1.58	
85 o-Xylene	91	16.548	16.548	0.000	98	230256	2.00	1.56	
86 1,1,2,2-Tetrachloroethane	83	16.877	16.877	0.000	99	172260	2.00	1.72	
87 1,2,3-Trichloropropane	110	17.033	17.033	0.000	97	45409	2.00	1.83	
88 Isopropylbenzene	105	17.140	17.140	0.000	97	312724	2.00	1.66	
89 N-Propylbenzene	120	17.684	17.684	0.000	99	82064	2.00	1.69	
90 2-Chlorotoluene	126	17.727	17.727	0.000	97	95911	2.00	1.60	
91 4-Ethyltoluene	105	17.840	17.840	0.000	98	279111	2.00	1.70	
92 1,3,5-Trimethylbenzene	120	17.915	17.915	0.000	92	138484	2.00	1.80	
93 Alpha Methyl Styrene	118	18.152	18.152	0.000	87	110047	2.00	1.66	
94 n-Decane	57	18.216	18.216	0.000	90	248634	2.00	1.74	
95 tert-Butylbenzene	119	18.345	18.345	0.000	91	273282	2.00	1.86	
96 1,2,4-Trimethylbenzene	105	18.361	18.361	0.000	96	248550	2.00	1.88	
97 sec-Butylbenzene	105	18.620	18.620	0.000	98	373999	2.00	1.86	
98 1,3-Dichlorobenzene	146	18.630	18.630	0.000	98	189932	2.00	1.50	
99 Benzyl chloride	91	18.711	18.711	0.000	97	175881	2.00	1.69	
100 1,4-Dichlorobenzene	146	18.722	18.722	0.000	94	175752	2.00	1.43	
101 4-Isopropyltoluene	119	18.786	18.786	0.000	97	312052	2.00	1.96	
102 1,2,3-Trimethylbenzene	105	18.835	18.835	0.000	99	208688	2.00	2.08	
103 Butylcyclohexane	83	18.894	18.894	0.000	91	290615	2.00	1.71	
105 1,2-Dichlorobenzene	146	19.082	19.082	0.000	86	174091	2.00	1.52	
104 2,3-Dihydroindene	117	19.082	19.082	0.000	95	211843	2.00	1.60	
107 Indene	116	19.217	19.217	0.000	90	188307	2.00	2.08	
106 n-Butylbenzene	91	19.222	19.222	0.000	98	298337	2.00	1.90	
108 Undecane	57	19.545	19.545	0.000	95	244435	2.00	1.93	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.599	19.599	0.000	98	286026	2.00	2.50	
110 1,2-Dibromo-3-Chloropropan	157	19.695	19.695	0.000	96	53065	2.00	1.52	
111 1,2,4,5-Tetramethylbenzene	119	19.986	19.986	0.000	97	307984	2.00	2.34	
112 1,2,3,5-Tetramethylbenzene	119	20.040	20.040	0.000	94	197849	2.00	2.37	
113 1,2,3,4-Tetramethylbenzene	119	20.438	20.438	0.000	97	245238	2.00	2.26	
114 Dodecane	57	20.605	20.605	0.000	94	239255	2.00	2.23	
115 1,2,4-Trichlorobenzene	180	20.793	20.793	0.000	94	87681	2.00	1.41	
116 Naphthalene	128	20.933	20.933	0.000	99	192402	2.00	1.66	
117 Benzo(b)thiophene	134	21.040	21.040	0.000	99	85870	2.00	1.47	
118 Hexachlorobutadiene	225	21.153	21.153	0.000	95	201472	2.00	1.83	
119 1,2,3-Trichlorobenzene	180	21.223	21.223	0.000	94	98106	2.00	1.66	
120 2-Methylnaphthalene	142	21.917	21.917	0.000	100	30504	6.25	3.93	
121 1-Methylnaphthalene	142	22.046	22.046	0.000	100	35519	6.25	4.18	
A 124 Toluene Range	1	13.536	(13.506-13.566)		0	764808	2.00	1.78	
A 125 C8 Range	1	14.235	(14.202-14.299)		0	1209374	2.00	2.13	
S 126 Xylenes, Total	100				0		6.00	4.70	
S 127 1,2-Dichloroethene, Total	1				0		4.00	4.10	

Reagents:

40CV101S_00035

Amount Added: 100.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\JCCVD04B.D

Injection Date: 04-Apr-2017 13:50:30

Instrument ID: MJ

Operator ID: 007126

Lims ID: CCVIS

Worklist Smp#: 8

Client ID:

Purge Vol: 500.000 mL

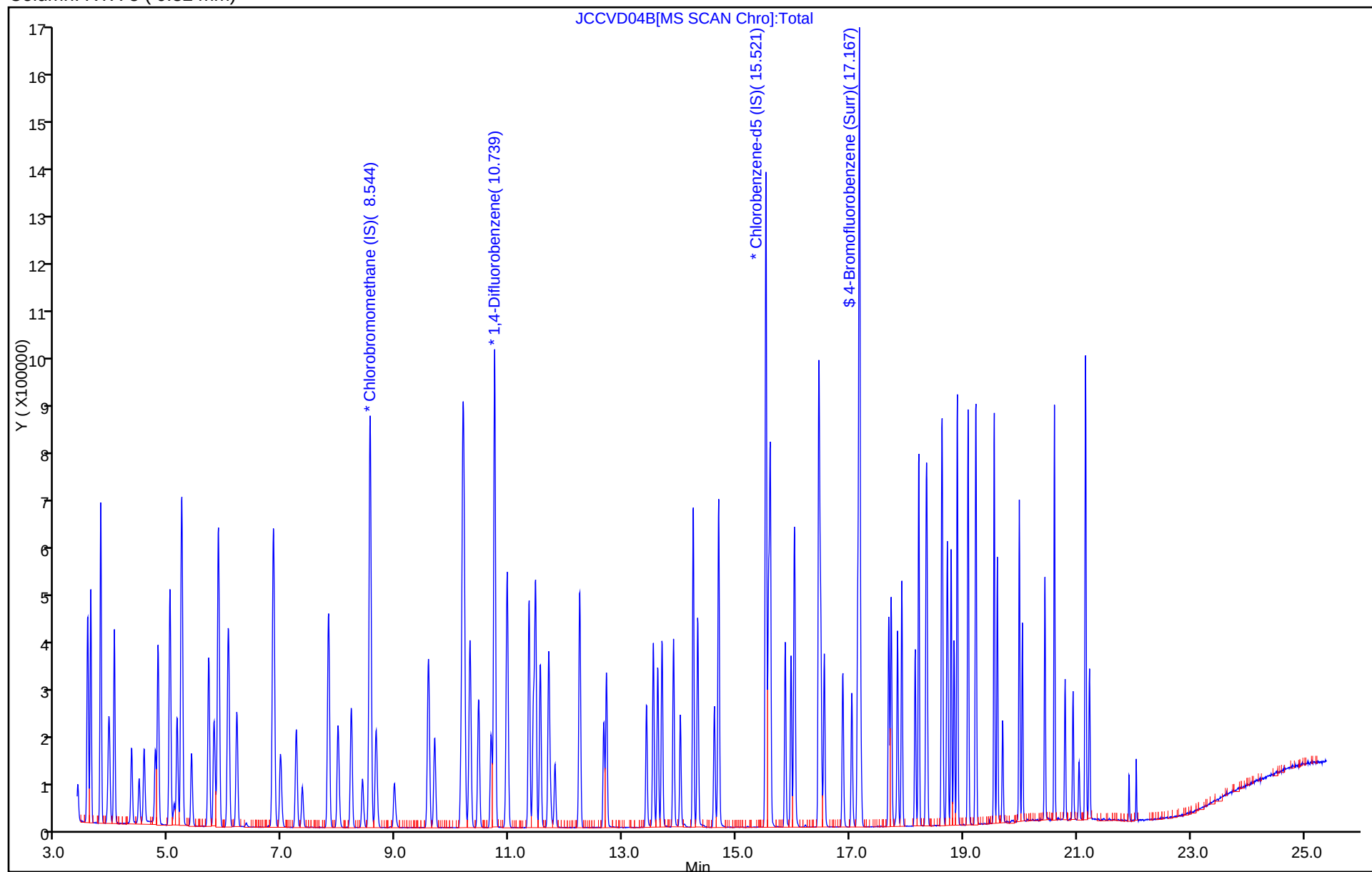
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GBFBC15.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 15-Mar-2017 14:04:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0004323-001
Misc. Info.: BFB
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Mar-2017 12:19:31 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: tajh

Date: 16-Mar-2017 12:19:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags

\$ 5 BFB	95	4.717	4.717	0.000	0	1116686	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

40MXSUR_00001

Amount Added: 40.00

Units: mL

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GBFBC15.D

Injection Date: 15-Mar-2017 14:04:30

Instrument ID: MG

Lims ID: BFB

Client ID:

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 1

Injection Vol: 500.0 mL

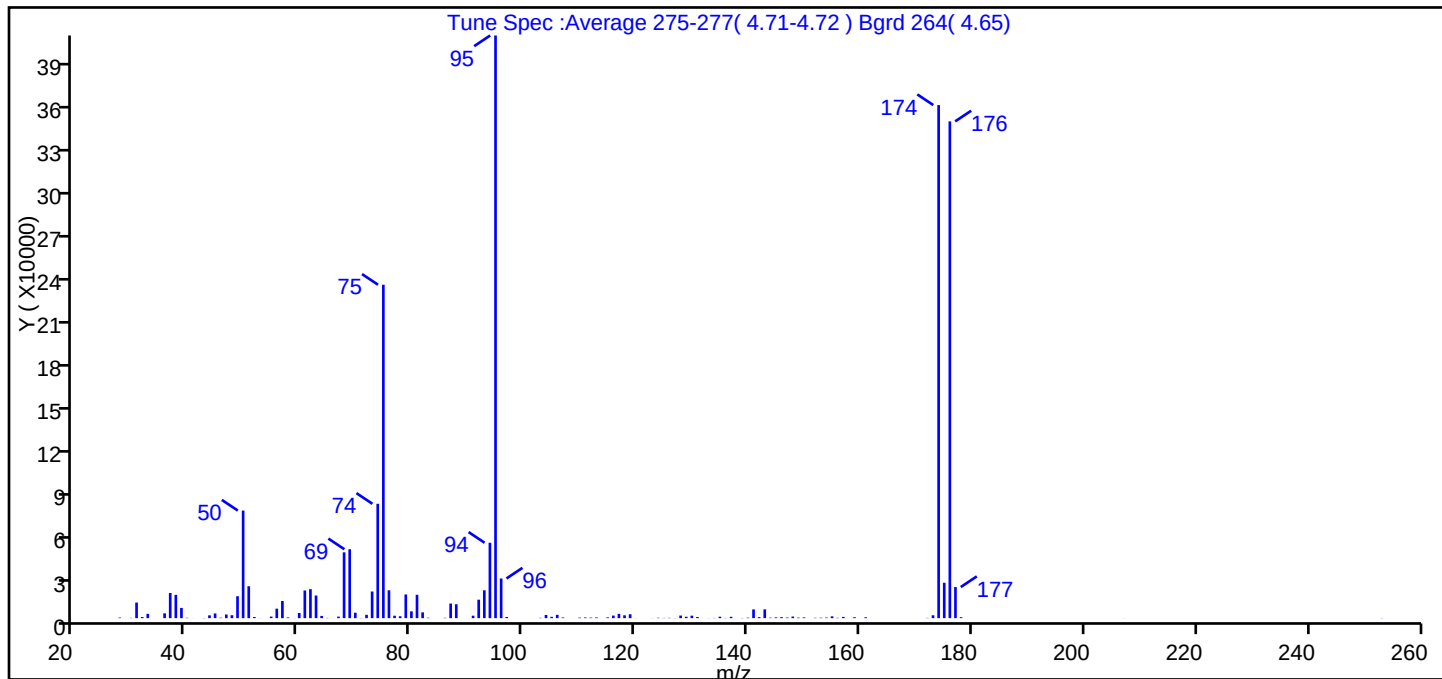
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Tune Method: BFB Method 8260

\$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.5
75	30 to 60% of m/z 95	57.2
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.5 (0.6)
174	50 to 120% of m/z 95	88.1
175	5 to 9% of m/z 174	6.1 (6.9)
176	Greater than 95% but less than 101% of m/z 174	85.3 (96.8)
177	5 to 9% of m/z 176	5.3 (6.3)

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GBFBC15.D\MG_TO15.rslt\spectra.d
Injection Date: 15-Mar-2017 14:04:30
Spectrum: Tune Spec :Average 275-277(4.71-4.72) Bgrd 264(4.65)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 117

m/z	Y	m/z	Y	m/z	Y	m/z	Y
28.00	409	64.00	1536	104.00	2199	141.00	6035
30.00	188	65.00	166	105.00	907	142.00	723
31.00	10758	67.00	1069	106.00	2285	143.00	6088
32.00	766	68.00	45464	107.00	469	144.00	319
33.00	2961	69.00	47584	110.00	375	145.00	537
36.00	3330	70.00	3735	111.00	475	146.00	686
37.00	17360	71.00	120	112.00	373	147.00	417
38.00	16084	72.00	2290	113.00	485	148.00	1105
39.00	7056	73.00	18408	115.00	536	149.00	367
40.00	266	74.00	78984	116.00	1763	150.00	513
41.00	40	75.00	230272	117.00	2969	152.00	258
43.00	124	76.00	19224	118.00	1965	153.00	307
44.00	1942	77.00	1681	119.00	2695	154.00	401
45.00	3252	78.00	1293	120.00	60	155.00	1247
46.00	314	79.00	16348	123.00	52	156.00	242
47.00	2522	80.00	4690	124.00	273	157.00	846
48.00	2030	81.00	16127	125.00	134	159.00	624
49.00	15149	82.00	3989	126.00	226	161.00	624
50.00	74312	83.00	279	127.00	86	172.00	178
51.00	22024	86.00	248	128.00	1782	173.00	1987
52.00	791	87.00	10097	129.00	968	174.00	354368
53.00	50	88.00	9600	130.00	1708	175.00	24432
55.00	1070	91.00	1693	131.00	775	176.00	343104
56.00	6545	92.00	12747	133.00	52	177.00	21480
57.00	11828	93.00	19232	134.00	131	178.00	635
58.00	499	94.00	52072	135.00	989	207.00	46
60.00	3534	95.00	402432	136.00	138	253.00	102
61.00	19104	96.00	27384	137.00	918		
62.00	20032	97.00	791	139.00	127		
63.00	15625	103.00	237	140.00	350		

Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GBFBC15.D

Injection Date: 15-Mar-2017 14:04:30

Instrument ID: MG

Operator ID: 7126

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 500.0 mL

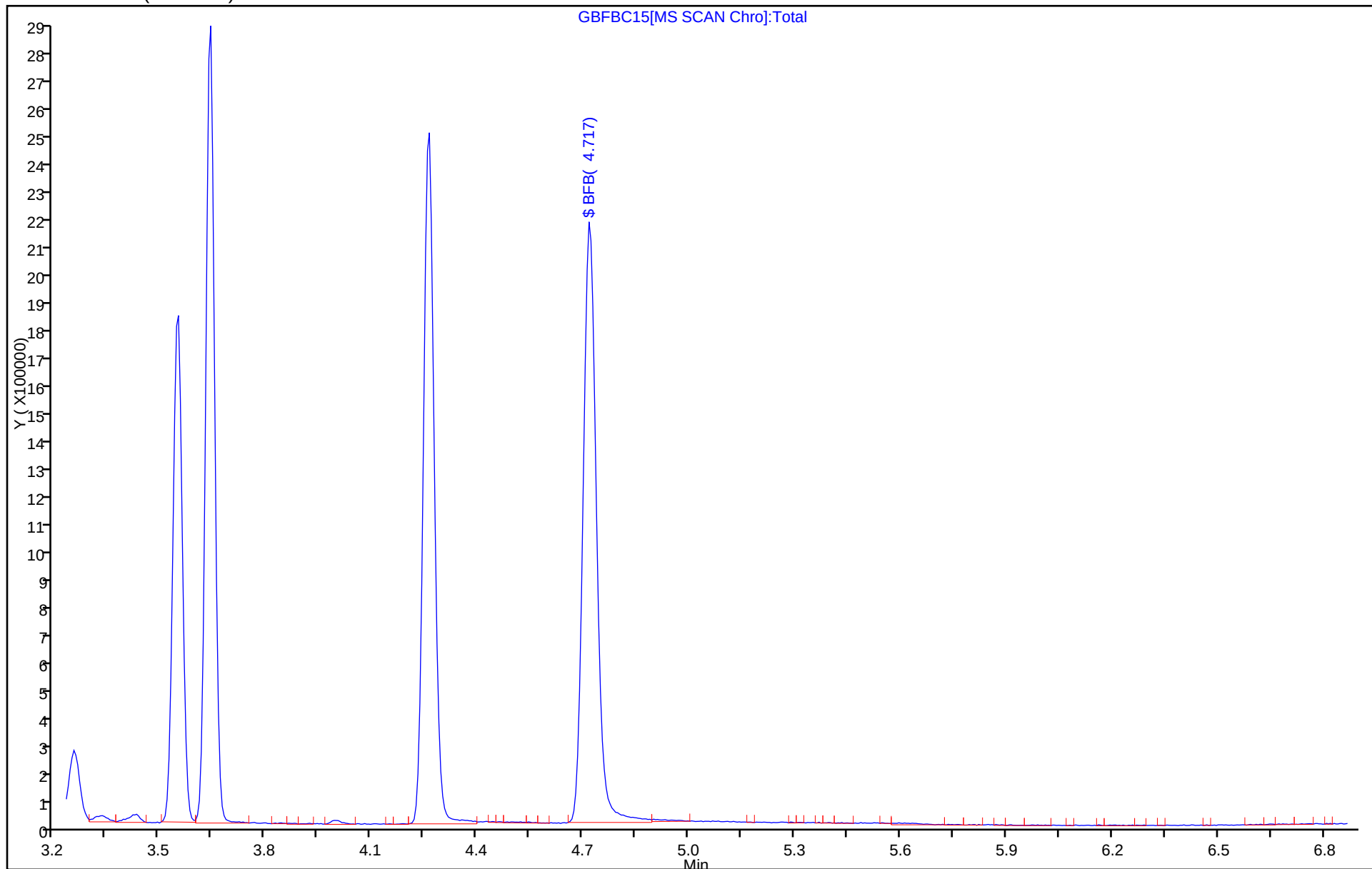
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MG TO15

Limit Group: MSA TO14A 15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GBFBD04A.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 04-Apr-2017 11:30:30 ALS Bottle#: 16 Worklist Smp#: 5
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0004508-001
Misc. Info.: BFB
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Apr-2017 15:06:46 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK008

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags

\$ 5 BFB	95	4.745	4.745	0.000	0	1081384	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

40MXSUR_00001

Amount Added: 40.00

Units: mL

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GBFBD04A.D

Injection Date: 04-Apr-2017 11:30:30

Instrument ID: MG

Lims ID: BFB

Client ID:

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 5

Injection Vol: 500.0 mL

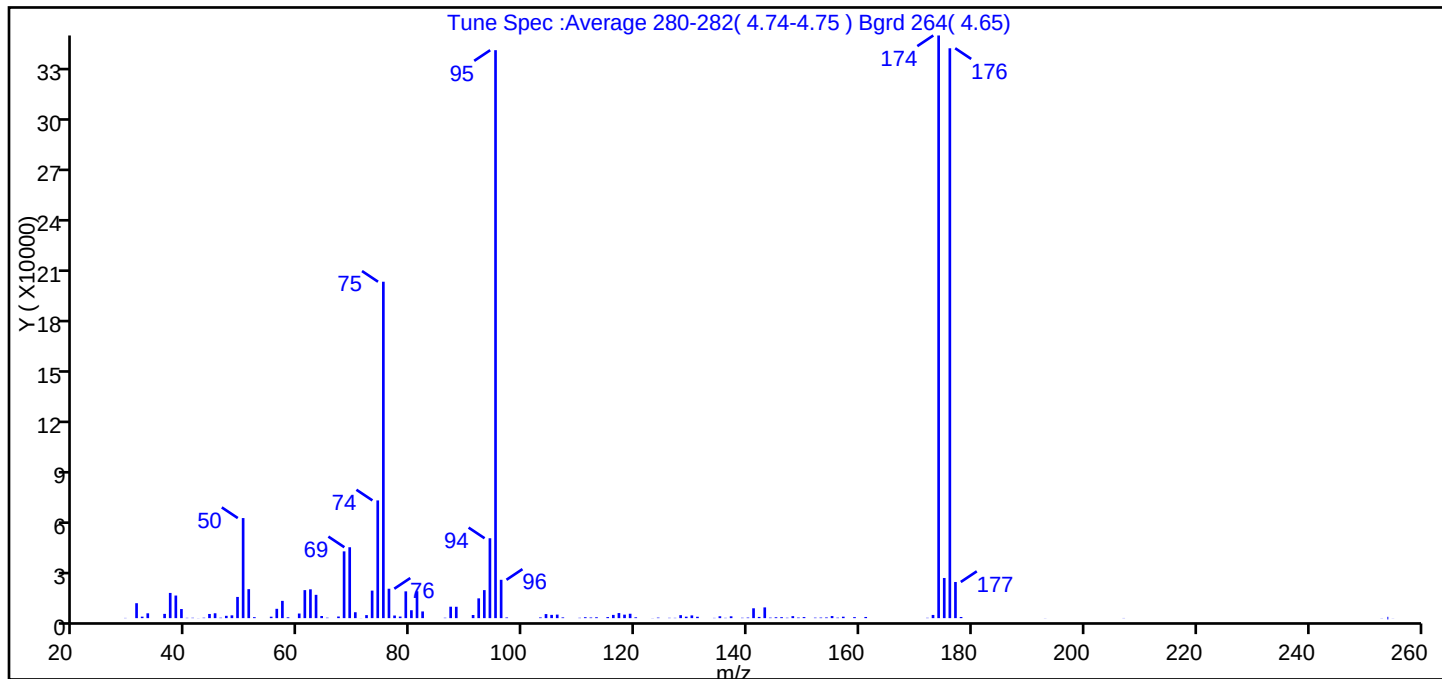
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Tune Method: BFB Method 8260

\$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.6
75	30 to 60% of m/z 95	59.2
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.6 (0.5)
174	50 to 120% of m/z 95	102.6
175	5 to 9% of m/z 174	7.1 (6.9)
176	Greater than 95% but less than 101% of m/z 174	100.3 (97.8)
177	5 to 9% of m/z 176	6.4 (6.3)

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GBFBD04A.D\MG_TO15.rslt\spectra.d
Injection Date: 04-Apr-2017 11:30:30
Spectrum: Tune Spec :Average 280-282(4.74-4.75) Bgrd 264(4.65)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 116

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	134	64.00	1279	104.00	2435	142.00	735
31.00	8970	65.00	263	105.00	1958	143.00	6448
32.00	890	67.00	976	106.00	2132	144.00	311
33.00	2901	68.00	40096	107.00	451	145.00	526
36.00	2565	69.00	42568	110.00	207	146.00	584
37.00	15139	70.00	3542	111.00	548	147.00	243
38.00	13569	71.00	52	112.00	392	148.00	1197
39.00	5465	72.00	1819	113.00	530	149.00	346
40.00	186	73.00	16528	115.00	632	150.00	638
41.00	220	74.00	70688	116.00	1950	152.00	292
42.00	62	75.00	201984	117.00	3053	153.00	350
43.00	261	76.00	17664	118.00	2095	154.00	419
44.00	2508	77.00	1583	119.00	2642	155.00	1251
45.00	2927	78.00	955	120.00	511	156.00	283
46.00	263	79.00	16089	123.00	78	157.00	867
47.00	1400	80.00	4749	124.00	318	159.00	609
48.00	1689	81.00	16162	126.00	196	161.00	702
49.00	12734	82.00	4025	127.00	176	172.00	195
50.00	60080	86.00	229	128.00	1808	173.00	1918
51.00	17408	87.00	6864	129.00	875	174.00	349824
52.00	586	88.00	6828	130.00	1658	175.00	24112
55.00	865	91.00	1890	131.00	821	176.00	342144
56.00	5604	92.00	11883	134.00	157	177.00	21712
57.00	10370	93.00	16824	135.00	1138	178.00	694
58.00	495	94.00	47960	136.00	183	193.00	62
60.00	2771	95.00	340992	137.00	1098	207.00	102
61.00	16816	96.00	23024	139.00	229	253.00	88
62.00	17304	97.00	400	140.00	342	254.00	1
63.00	13996	103.00	433	141.00	5915	255.00	57

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GBFBD04A.D

Injection Date: 04-Apr-2017 11:30:30

Instrument ID: MG

Operator ID: 7126

Lims ID: BFB

Worklist Smp#: 5

Client ID:

Injection Vol: 500.0 mL

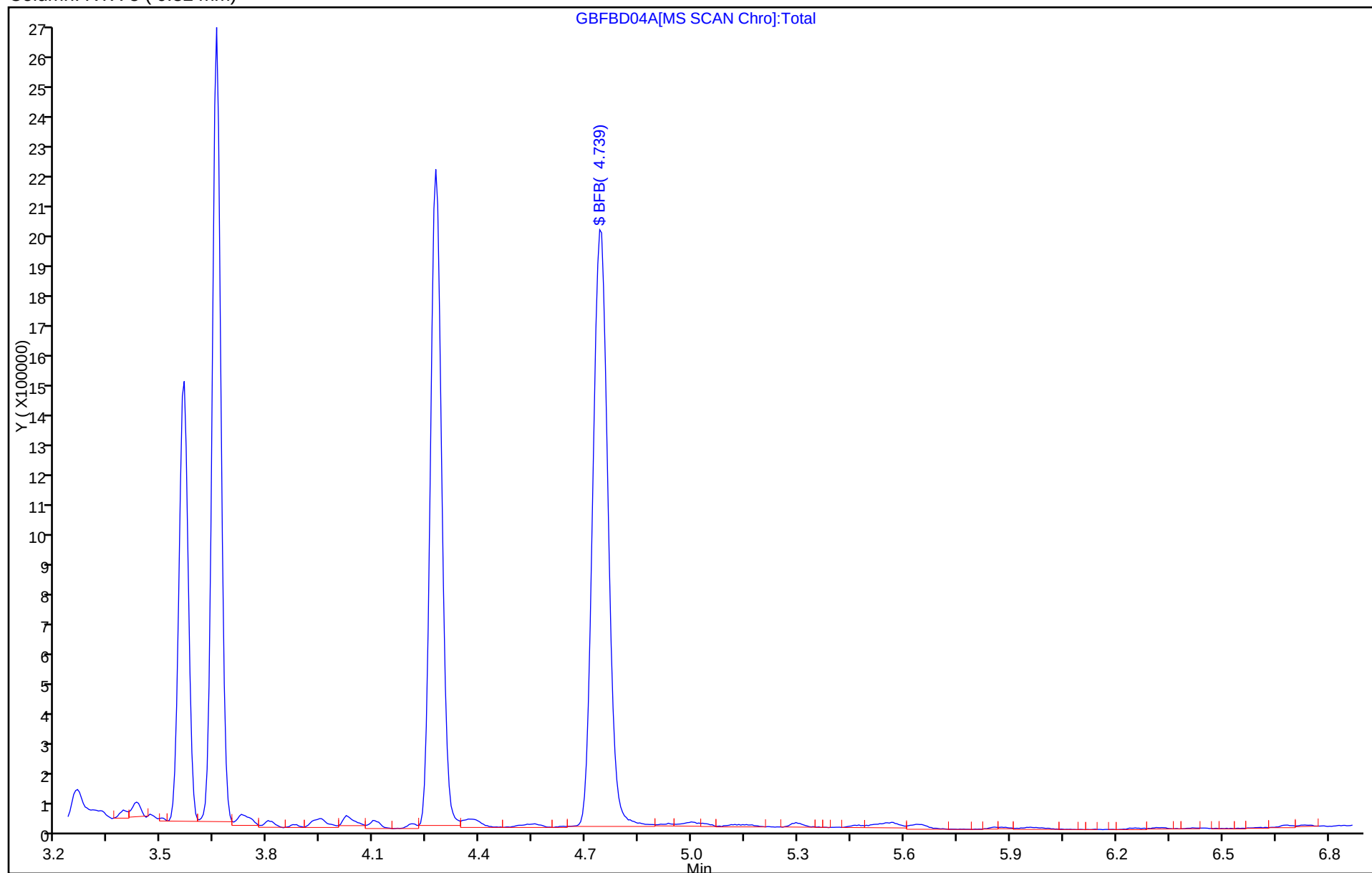
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JBFBFC24.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 24-Mar-2017 11:04:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0004355-001
Misc. Info.: BFB
Operator ID: 007126 Instrument ID: MJ
Method: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\MJ_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 27-Mar-2017 11:47:46 Calib Date: 24-Mar-2017 17:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: barlozhetskayaa

Date: 25-Mar-2017 14:57:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags

\$ 5 BFB	95	3.641	3.641	0.000	0	302297	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

40MXSUR_00001

Amount Added: 40.00

Units: mL

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JBFBFC24.D

Injection Date: 24-Mar-2017 11:04:30

Instrument ID: MJ

Lims ID: BFB

Client ID:

Operator ID: 007126

ALS Bottle#: 16

Worklist Smp#: 1

Injection Vol: 500.0 mL

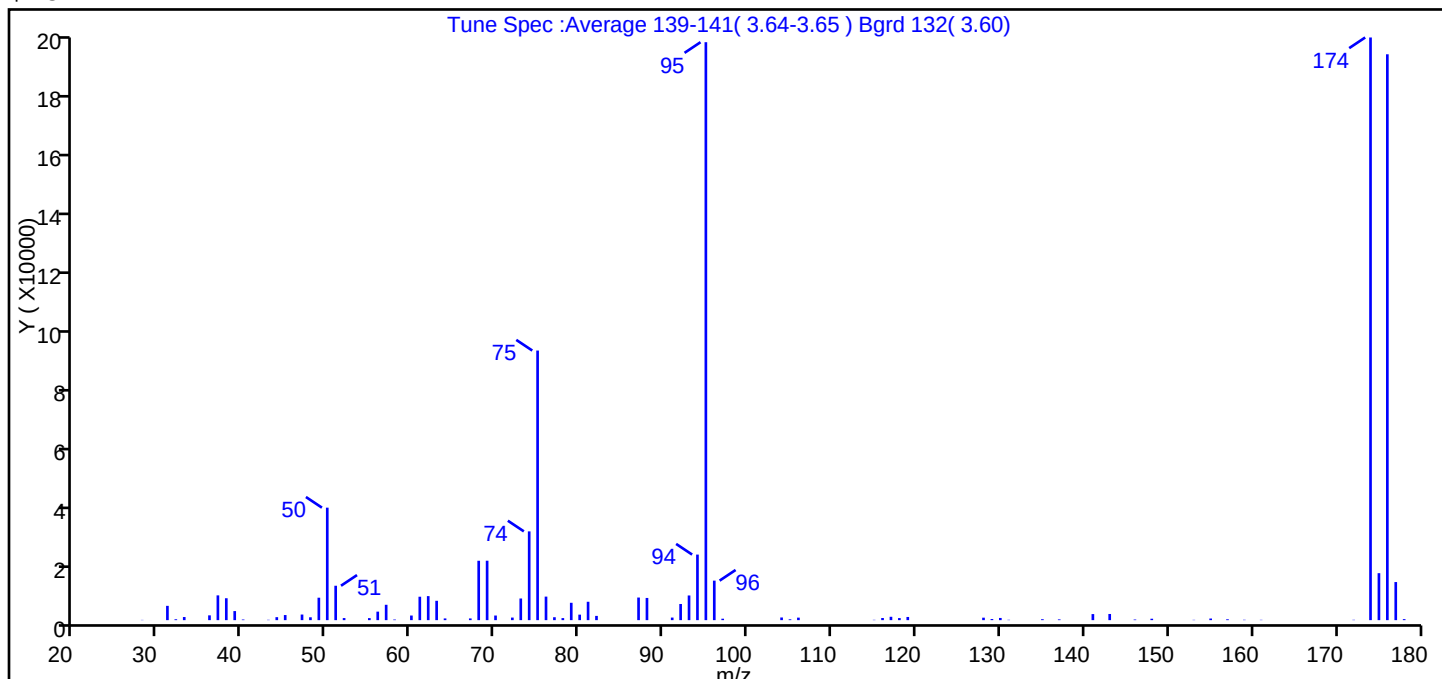
Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Tune Method: BFB Method 8260

\$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.5
75	30 to 60% of m/z 95	46.6
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	100.8
175	5 to 9% of m/z 174	8.1 (8.1)
176	Greater than 95% but less than 101% of m/z 174	97.9 (97.1)
177	5 to 9% of m/z 176	6.6 (6.7)

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JBFB24.D\MJ_TO15.rslt\spectra.d
Injection Date: 24-Mar-2017 11:04:30
Spectrum: Tune Spec :Average 139-141(3.64-3.65) Bgrd 132(3.60)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 81

m/z	Y	m/z	Y	m/z	Y	m/z	Y
28.00	83	57.00	5206	82.00	1437	131.00	118
29.00	8	58.00	206	87.00	7662	135.00	312
31.00	4845	60.00	1564	88.00	7523	137.00	257
32.00	297	61.00	7940	91.00	874	141.00	2055
33.00	1055	62.00	8145	92.00	5474	143.00	2088
36.00	1624	63.00	6556	93.00	8363	146.00	210
37.00	8397	64.00	582	94.00	22224	148.00	480
38.00	7425	67.00	581	95.00	195904	153.00	102
39.00	3071	68.00	20128	96.00	13392	155.00	546
40.00	212	69.00	20144	97.00	487	157.00	287
43.00	118	70.00	1563	104.00	902	159.00	127
44.00	1010	72.00	873	105.00	281	161.00	110
45.00	1726	73.00	7339	106.00	851	172.00	114
47.00	1900	74.00	30088	115.00	108	174.00	197504
48.00	969	75.00	91384	116.00	727	175.00	15919
49.00	7605	76.00	7977	117.00	1137	176.00	191808
50.00	38128	77.00	989	118.00	698	177.00	12913
51.00	11660	78.00	694	119.00	1076	178.00	344
52.00	708	79.00	5882	128.00	836		
55.00	687	80.00	1863	129.00	375		
56.00	2881	81.00	6229	130.00	743		

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JBFBC24.D

Injection Date: 24-Mar-2017 11:04:30

Instrument ID: MJ

Operator ID: 007126

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 500.0 mL

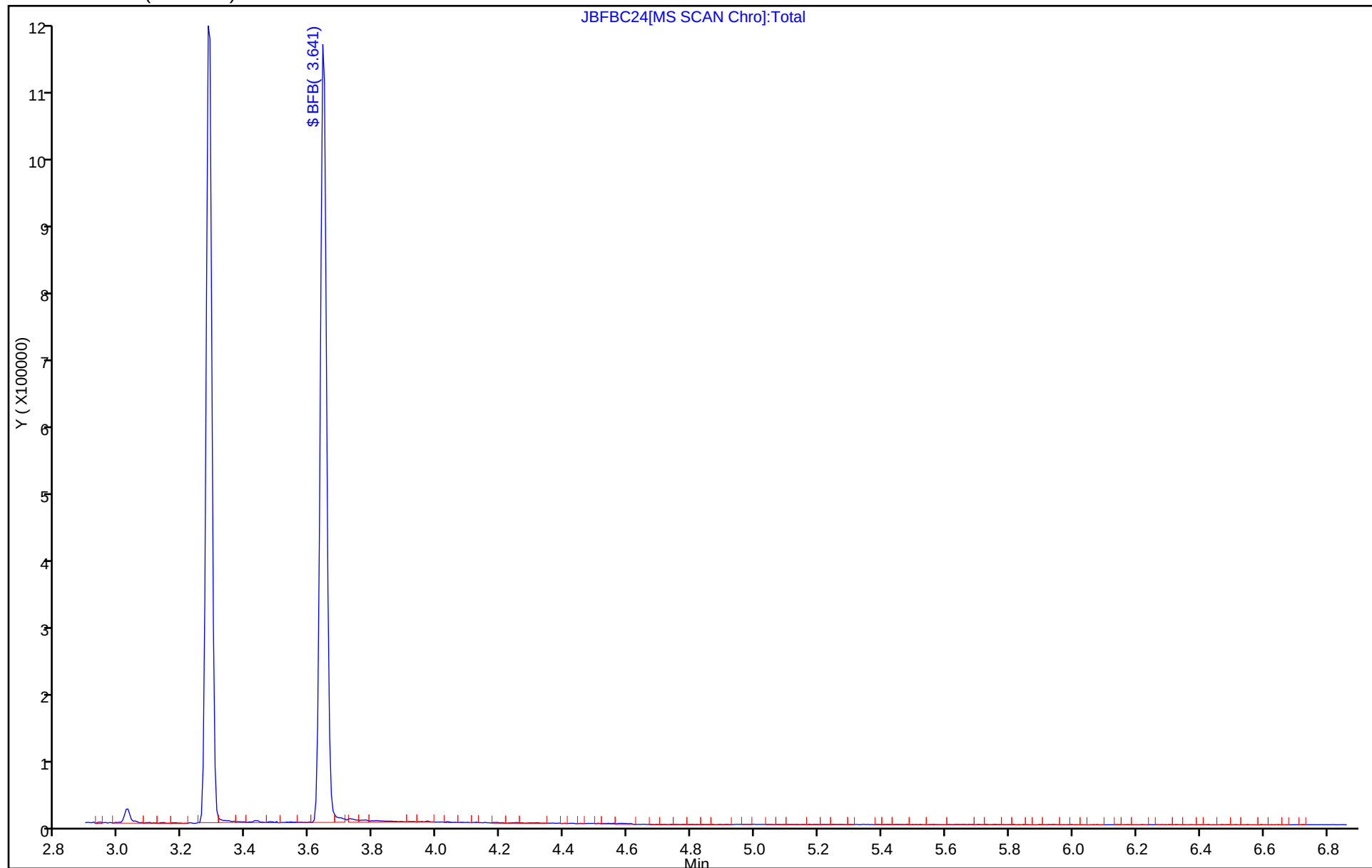
Dil. Factor: 1.0000

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: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\JBFBBD04B.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 04-Apr-2017 13:22:30 ALS Bottle#: 16 Worklist Smp#: 7
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0004511-001
Misc. Info.: BFB
Operator ID: 007126 Instrument ID: MJ
Method: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\MJ_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 05-Apr-2017 10:19:16 Calib Date: 24-Mar-2017 17:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags

\$ 5 BFB	95	3.630	3.630	0.000	0	202218	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

40MXSUR_00001

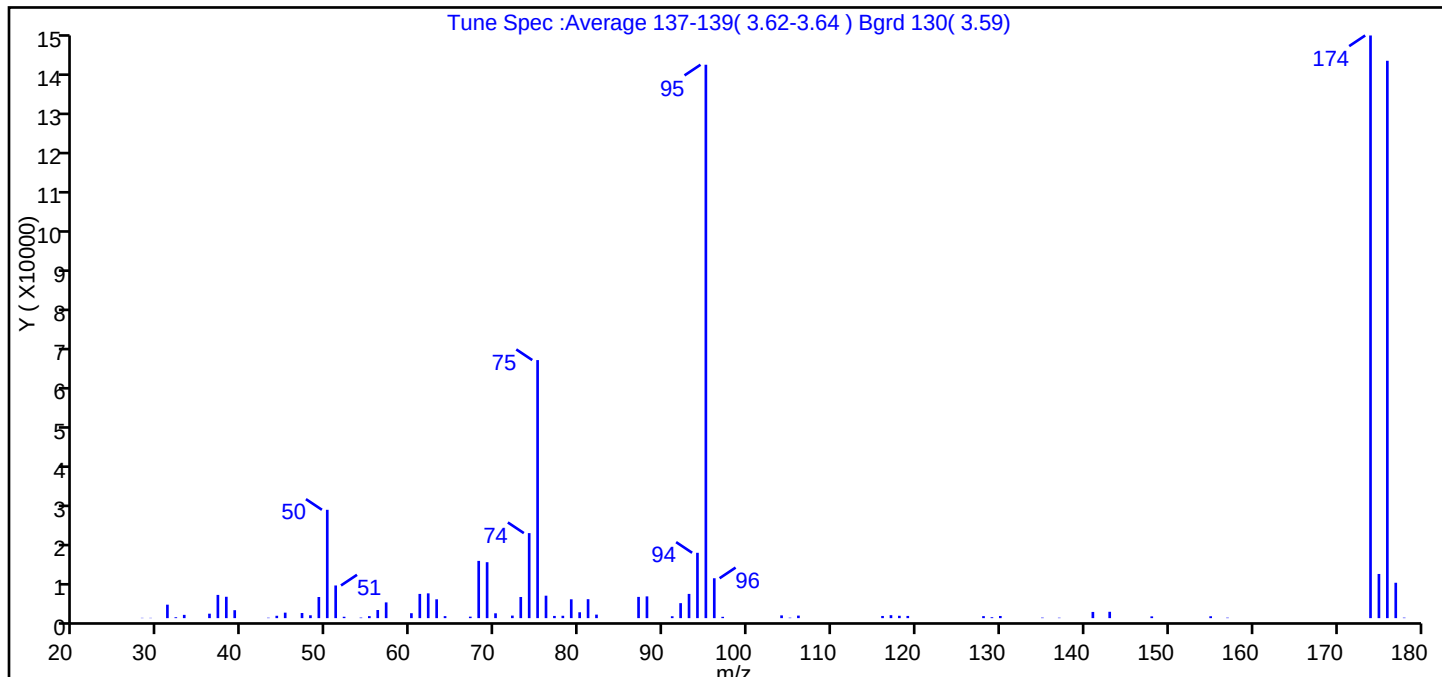
Amount Added: 40.00

Units: mL

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\JBFB04B.D
Injection Date: 04-Apr-2017 13:22:30 Instrument ID: MJ
Lims ID: BFB
Client ID:
Operator ID: 007126 ALS Bottle#: 16 Worklist Smp#: 7
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MJ_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

\$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.6
75	30 to 60% of m/z 95	46.6
96	5 to 9% of m/z 95	7.2
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	105.3
175	5 to 9% of m/z 174	8.0 (7.6)
176	Greater than 95% but less than 101% of m/z 174	100.7 (95.7)
177	5 to 9% of m/z 176	6.4 (6.3)

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\JBFB04B.D\MJ_TO15.rslt\spectra.d
Injection Date: 04-Apr-2017 13:22:30
Spectrum: Tune Spec :Average 137-139(3.62-3.64) Bgrd 130(3.59)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 73

m/z	Y	m/z	Y	m/z	Y	m/z	Y
28.00	71	55.00	486	79.00	4578	119.00	537
29.00	67	56.00	1976	80.00	1429	128.00	489
31.00	3271	57.00	3827	81.00	4605	129.00	218
32.00	218	60.00	1198	82.00	857	130.00	526
33.00	797	61.00	5886	87.00	5162	135.00	125
36.00	1082	62.00	6022	88.00	5285	137.00	103
37.00	5641	63.00	4577	91.00	458	141.00	1508
38.00	5191	64.00	489	92.00	3641	143.00	1544
39.00	1930	67.00	364	93.00	5887	148.00	433
43.00	102	68.00	13905	94.00	15871	155.00	459
44.00	577	69.00	13587	95.00	134400	157.00	114
45.00	1333	70.00	1175	96.00	9690	174.00	141504
47.00	1246	72.00	620	97.00	324	175.00	10730
48.00	695	73.00	5138	104.00	671	176.00	135360
49.00	5136	74.00	20648	105.00	110	177.00	8594
50.00	26312	75.00	62672	106.00	618	178.00	118
51.00	7934	76.00	5454	116.00	531		
52.00	337	77.00	538	117.00	721		
54.00	134	78.00	578	118.00	576		

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\JBFBBD04B.D

Injection Date: 04-Apr-2017 13:22:30

Instrument ID: MJ

Operator ID: 007126

Lims ID: BFB

Worklist Smp#: 7

Client ID:

Injection Vol: 500.0 mL

Dil. Factor: 1.0000

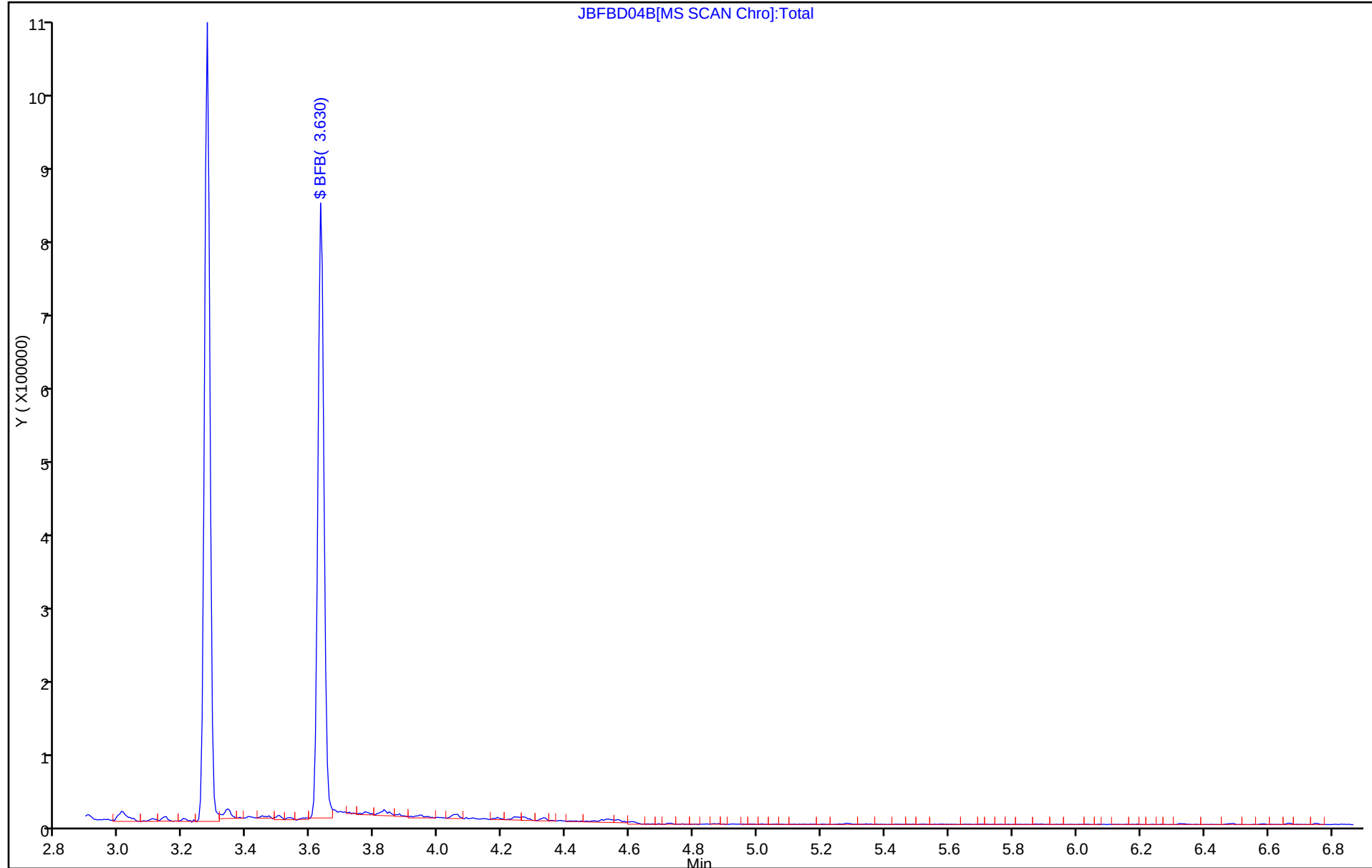
ALS Bottle#: 16

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

JBFBBD04B[MS SCAN Chro]:Total



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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-10155/8
 Matrix: Air Lab File ID: GMB500D04.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 14:18
 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.: 10155 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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-10155/8
 Matrix: Air Lab File ID: GMB500D04.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 14:18
 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.: 10155 Units: ppb v/v

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	105		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-10155/8
 Matrix: Air Lab File ID: GMB500D04.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 14:18
 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.: 10155 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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-10155/8
 Matrix: Air Lab File ID: GMB500D04.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 14:18
 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.: 10155 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	
64-17-5	Ethanol	46.07	ND		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	ND		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.21	
75-69-4	Trichlorofluoromethane	137.37	ND		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	105		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GMB500D04.D
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 04-Apr-2017 14:18:30 ALS Bottle#: 16 Worklist Smp#: 8
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004508-008
 Misc. Info.: 500ML BLK
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Apr-2017 15:06:47 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK008

First Level Reviewer: tajh

Date: 04-Apr-2017 15:06:36

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	7.975	7.980	-0.005	72	244042	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.142	10.148	-0.006	95	1217189	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.017	15.022	-0.005	89	1195456	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.689	16.694	-0.005	93	988802	4.00	4.19	
31 Methylene Chloride	84	5.645	5.650	-0.005	85	5358		0.0913	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GMB500D04.D

Injection Date: 04-Apr-2017 14:18:30

Instrument ID: MG

Operator ID: 7126

Lims ID: mb

Worklist Smp#: 8

Client ID:

Purge Vol: 500.000 mL

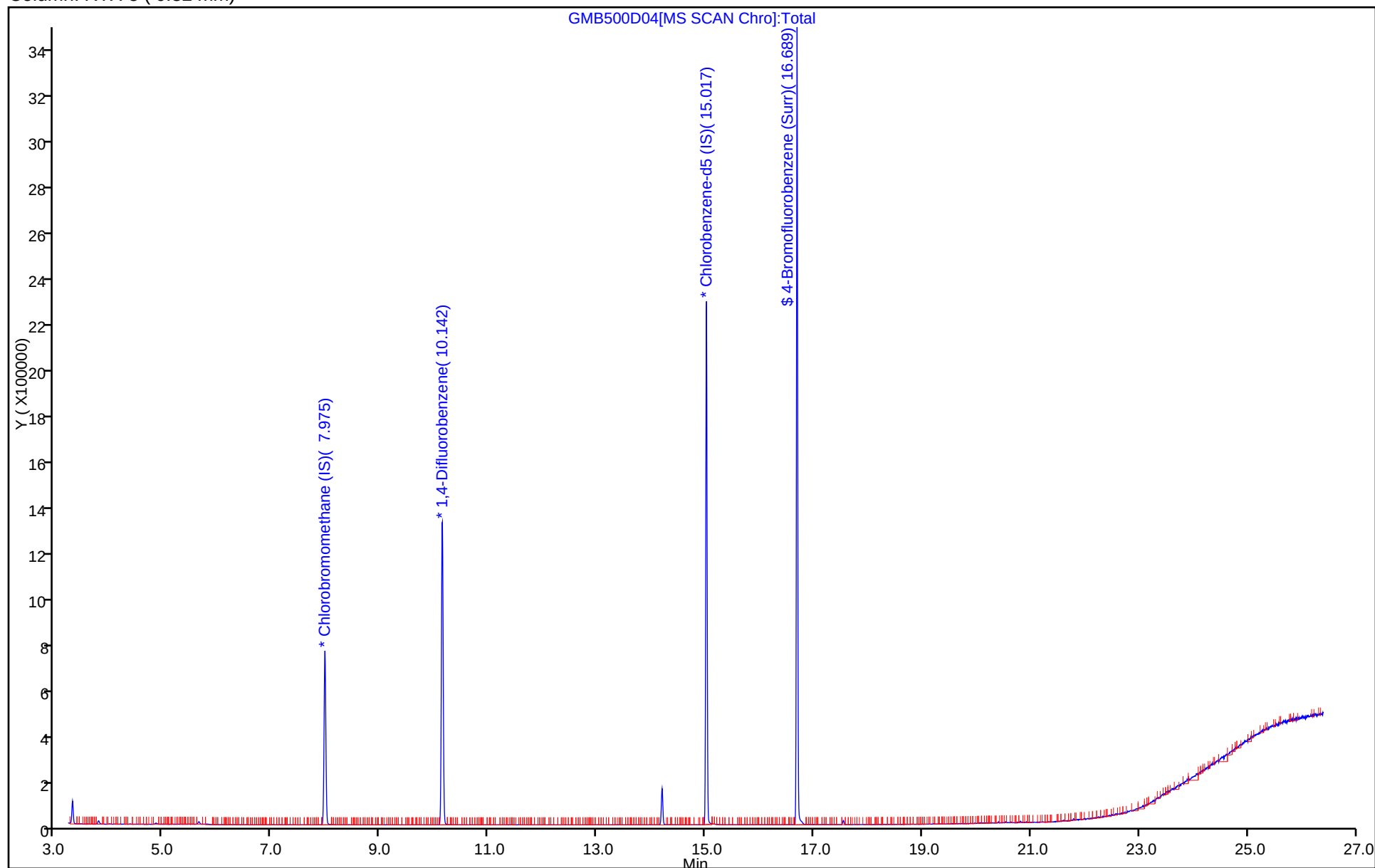
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GMB500D04.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 04-Apr-2017 14:18:30 ALS Bottle#: 16 Worklist Smp#: 8
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004508-008
Misc. Info.: 500ML BLK
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Apr-2017 15:06:47 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: tajh

Date: 04-Apr-2017 15:06:36

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.19	104.64

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-10158/15
 Matrix: Air Lab File ID: J500D04.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 19:15
 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.: 10158 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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-10158/15
 Matrix: Air Lab File ID: J500D04.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 19:15
 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.: 10158 Units: ppb v/v

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

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

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-10158/15
 Matrix: Air Lab File ID: J500D04.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 19:15
 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.: 10158 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.: 140-7685-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-10158/15
 Matrix: Air Lab File ID: J500D04.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 19:15
 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.: 10158 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	
64-17-5	Ethanol	46.07	ND		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	ND		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.21	
75-69-4	Trichlorofluoromethane	137.37	ND		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

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

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\J500D04.D
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 04-Apr-2017 19:15:30 ALS Bottle#: 16 Worklist Smp#: 15
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004511-015
 Misc. Info.: 500ML BLK
 Operator ID: 7126 Instrument ID: MJ
 Method: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 05-Apr-2017 10:19:18 Calib Date: 24-Mar-2017 17:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 09:39:50

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	8.536	8.538	-0.002	97	184654	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.731	10.739	-0.008	96	827113	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.519	15.521	-0.002	90	715251	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.165	17.167	-0.002	92	485097	4.00	3.89	
31 Methylene Chloride	84	6.035	6.037	-0.002	96	4257		0.0746	

Reagents:

40MXISSURP_00001 Amount Added: 40.00 Units: mL Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\J500D04.D

Injection Date: 04-Apr-2017 19:15:30

Instrument ID: MJ

Operator ID: 7126

Lims ID: mb

Worklist Smp#: 15

Client ID:

Purge Vol: 500.000 mL

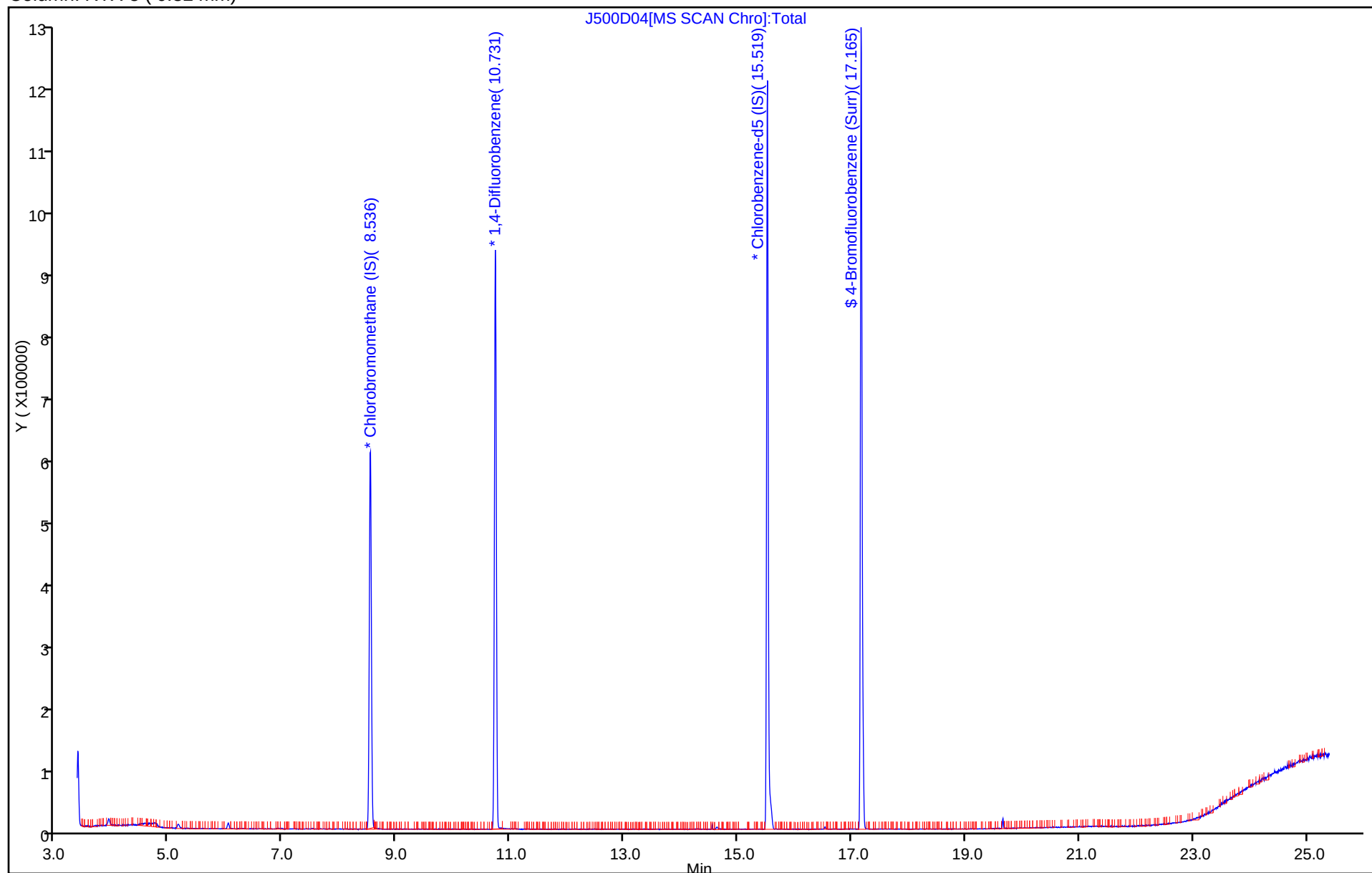
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\J500D04.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 04-Apr-2017 19:15:30 ALS Bottle#: 16 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004511-015
Misc. Info.: 500ML BLK
Operator ID: 7126 Instrument ID: MJ
Method: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\MJ_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 05-Apr-2017 10:19:18 Calib Date: 24-Mar-2017 17:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 09:39:50

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	3.89	97.13

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 140-10155/1006
 Matrix: Air Lab File ID: GCCVD04A-LCS.d
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 12:01
 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.: 10155 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	2.35		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.73		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	1.88		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	2.32		0.080	
75-34-3	1,1-Dichloroethane	98.96	1.83		0.080	
75-35-4	1,1-Dichloroethene	96.94	2.11		0.080	
120-82-1	1,2,4-Trichlorobenzene	181.45	2.03		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	1.82		0.080	
106-93-4	1,2-Dibromoethane	187.87	2.15		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	1.90		0.080	
107-06-2	1,2-Dichloroethane	98.96	2.25		0.080	
78-87-5	1,2-Dichloropropane	112.99	1.79		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.37		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	1.79		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	1.97		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	1.94		0.080	
123-91-1	1,4-Dioxane	88.11	1.59		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	1.78		0.20	
78-93-3	2-Butanone	72.11	1.47		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.44		0.20	
71-43-2	Benzene	78.11	1.88		0.080	
100-44-7	Benzyl chloride	126.58	1.89		0.16	
75-27-4	Bromodichloromethane	163.83	2.36		0.080	
75-25-2	Bromoform	252.75	2.68		0.080	
74-83-9	Bromomethane	94.94	2.02		0.080	
56-23-5	Carbon tetrachloride	153.81	2.58		0.040	
108-90-7	Chlorobenzene	112.56	1.99		0.080	
75-00-3	Chloroethane	64.52	1.77		0.080	
67-66-3	Chloroform	119.38	2.18		0.080	
74-87-3	Chloromethane	50.49	1.63		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	1.95		0.080	
10061-01-5	cis-1,3-Dichloropropene	110.97	2.12		0.080	
110-82-7	Cyclohexane	84.16	1.97		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 140-10155/1006
 Matrix: Air Lab File ID: GCCVD04A-LCS.d
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 12:01
 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.: 10155 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	2.47		0.080	
75-71-8	Dichlorodifluoromethane	120.91	2.37		0.080	
64-17-5	Ethanol	46.07	7.57		2.0	
100-41-4	Ethylbenzene	106.17	1.83		0.080	
87-68-3	Hexachlorobutadiene	260.76	2.18		0.080	
110-54-3	Hexane	86.17	1.68		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	1.68		0.16	
75-09-2	Methylene Chloride	84.93	1.97		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	3.70		0.080	
95-47-6	o-Xylene	106.17	1.79		0.080	
100-42-5	Styrene	104.15	1.98		0.080	
75-65-0	t-Butyl alcohol	74.12	1.78		0.32	
127-18-4	Tetrachloroethene	165.83	2.18		0.080	
108-88-3	Toluene	92.14	1.90		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	1.95		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	2.10		0.080	
79-01-6	Trichloroethene	131.39	2.23		0.040	
75-69-4	Trichlorofluoromethane	137.37	2.55		0.080	
75-01-4	Vinyl chloride	62.50	1.82		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	108		60-140

TestAmerica Laboratories
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GCCVD04A-LCS.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 04-Apr-2017 12:01:30 ALS Bottle#: 15 Worklist Smp#: 1006
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004508-002
 Misc. Info.: S34
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Apr-2017 15:06:47 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK008

First Level Reviewer: tajh

Date: 04-Apr-2017 12:55:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.980	7.980	0.000	73	244231	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.148	10.148	0.000	95	1213084	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.022	15.022	0.000	89	1220793	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.694	16.694	0.000	95	1042603	4.00	4.32	
6 Chlorodifluoromethane	67	3.461	3.461	0.000	96	66271	2.00	2.44	
7 Propene	41	3.472	3.472	0.000	95	100444	2.00	1.55	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	100	612131	2.00	2.37	
9 Chloromethane	52	3.666	3.666	0.000	95	28324	2.00	1.63	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.671	0.000	89	365335	2.00	2.37	
11 Acetaldehyde	44	3.790	3.790	0.000	83	134818	10.0	6.60	
12 Vinyl chloride	62	3.806	3.806	0.000	100	130068	2.00	1.82	
13 Butadiene	54	3.882	3.882	0.000	80	79111	2.00	1.66	
14 Butane	43	3.882	3.882	0.000	91	170203	2.00	1.68	
15 Bromomethane	94	4.140	4.140	0.000	97	142690	2.00	2.02	
16 Chloroethane	64	4.259	4.259	0.000	86	61358	2.00	1.77	
17 Ethanol	31	4.356	4.356	0.000	96	186010	10.0	7.57	
18 Vinyl bromide	106	4.513	4.513	0.000	94	147896	2.00	2.21	
19 2-Methylbutane	43	4.561	4.561	0.000	87	121475	2.00	1.78	
21 Acrolein	56	4.739	4.739	0.000	28	16956	2.00	1.70	
20 Trichlorofluoromethane	101	4.744	4.744	0.000	99	657154	2.00	2.55	
22 Acetonitrile	40	4.793	4.793	0.000	97	29944	2.00	1.46	
23 Acetone	58	4.831	4.831	0.000	100	93919	6.00	3.92	
25 Pentane	72	4.933	4.933	0.000	92	26918	2.00	2.16	
24 Isopropyl alcohol	45	4.933	4.933	0.000	62	310648	6.00	3.75	
26 Ethyl ether	31	5.068	5.068	0.000	89	94988	2.00	1.68	
27 1,1-Dichloroethene	96	5.348	5.348	0.000	97	137127	2.00	2.11	
28 Acrylonitrile	53	5.429	5.429	0.000	93	45977	2.00	1.55	
29 2-Methyl-2-propanol	59	5.456	5.456	0.000	95	176265	2.00	1.78	
30 1,1,2-Trichloro-1,2,2-trif	101	5.521	5.521	0.000	92	347620	2.00	2.32	
31 Methylene Chloride	84	5.650	5.650	0.000	88	115562	2.00	1.97	
32 3-Chloro-1-propene	39	5.666	5.666	0.000	88	135622	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
33 Carbon disulfide	76	5.791	5.791	0.000	98	349177	2.00	2.11	
34 trans-1,2-Dichloroethene	96	6.384	6.384	0.000	97	124090	2.00	1.95	
35 2-Methylpentane	43	6.416	6.416	0.000	89	225812	2.00	1.81	
36 Methyl tert-butyl ether	73	6.502	6.502	0.000	94	318329	2.00	1.68	
37 1,1-Dichloroethane	63	6.761	6.761	0.000	99	227551	2.00	1.83	
38 Vinyl acetate	43	6.869	6.869	0.000	99	209605	2.00	1.47	
39 2-Butanone (MEK)	72	7.268	7.268	0.000	98	40820	2.00	1.47	
40 Hexane	56	7.327	7.327	0.000	83	80850	2.00	1.68	
41 Isopropyl ether	45	7.468	7.468	0.000	89	248401	2.00	1.40	
42 cis-1,2-Dichloroethene	96	7.678	7.678	0.000	96	131948	2.00	1.95	
43 Ethyl acetate	43	7.867	7.867	0.000	97	160497	2.00	1.36	
44 Chloroform	83	8.007	8.007	0.000	97	372678	2.00	2.18	
45 Tert-butyl ethyl ether	59	8.109	8.109	0.000	94	293354	2.00	1.64	
46 Tetrahydrofuran	42	8.368	8.368	0.000	82	85085	2.00	1.36	
47 1,1,1-Trichloroethane	97	8.983	8.983	0.000	94	466440	2.00	2.35	
48 1,2-Dichloroethane	62	9.074	9.074	0.000	98	275560	2.00	2.25	
49 Benzene	78	9.565	9.565	0.000	97	387619	2.00	1.88	
50 Cyclohexane	69	9.576	9.576	0.000	91	68270	2.00	1.97	
52 n-Butanol	31	9.598	9.598	0.000	63	34269	2.00	1.55	
51 Carbon tetrachloride	117	9.598	9.598	0.000	98	556641	2.00	2.58	
53 2,3-Dimethylpentane	71	9.722	9.722	0.000	85	81411	2.00	1.72	
54 Thiophene	84	9.840	9.840	0.000	95	231186	2.00	2.01	
55 Tert-amyl methyl ether	73	10.083	10.083	0.000	97	328072	2.00	1.74	
56 Isooctane	57	10.396	10.396	0.000	95	545446	2.00	1.78	
57 n-Heptane	71	10.800	10.800	0.000	89	144107	2.00	1.89	
58 1,2-Dichloropropane	63	10.827	10.827	0.000	77	125465	2.00	1.79	
59 Trichloroethene	130	10.881	10.881	0.000	94	248624	2.00	2.23	
60 Dibromomethane	93	10.946	10.946	0.000	93	207420	2.00	2.23	
61 Dichlorobromomethane	83	11.113	11.113	0.000	97	420944	2.00	2.36	
62 1,4-Dioxane	88	11.129	11.129	0.000	92	44256	2.00	1.59	
63 Methyl methacrylate	41	11.248	11.248	0.000	91	120110	2.00	1.55	
64 Methylcyclohexane	83	11.690	11.690	0.000	93	254870	2.00	1.59	
65 4-Methyl-2-pentanone (MIBK)	43	12.116	12.116	0.000	94	170450	2.00	1.44	
66 cis-1,3-Dichloropropene	75	12.159	12.159	0.000	97	274862	2.00	2.12	
67 trans-1,3-Dichloropropene	75	12.881	12.881	0.000	96	274065	2.00	2.10	
68 Toluene	91	13.006	13.006	0.000	93	461326	2.00	1.90	
69 1,1,2-Trichloroethane	83	13.076	13.076	0.000	96	137197	2.00	1.88	
70 2-Methylthiophene	97	13.156	13.156	0.000	98	423579	2.00	2.07	
71 3-Methylthiophene	97	13.367	13.367	0.000	99	436901	2.00	2.16	
72 2-Hexanone	58	13.496	13.496	0.000	93	80438	2.00	1.38	
73 n-Octane	85	13.766	13.766	0.000	82	174242	2.00	1.98	
74 Chlorodibromomethane	129	13.787	13.787	0.000	96	449053	2.00	2.47	
75 Ethylene Dibromide	107	14.079	14.079	0.000	97	306439	2.00	2.15	
76 Tetrachloroethene	129	14.181	14.181	0.000	93	242105	2.00	2.18	
77 Chlorobenzene	112	15.071	15.071	0.000	91	408932	2.00	1.99	
78 2,3-Dimethylheptane	43	15.141	15.141	0.000	86	379509	2.00	1.82	
79 Ethylbenzene	91	15.378	15.378	0.000	99	620957	2.00	1.83	
80 2-Ethylthiophene	97	15.475	15.475	0.000	98	525000	2.00	1.96	
81 m-Xylene & p-Xylene	91	15.545	15.545	0.000	100	1014987	4.00	3.70	
82 Bromoform	173	15.966	15.966	0.000	95	457246	2.00	2.68	
84 n-Nonane	57	16.014	16.014	0.000	85	277886	2.00	1.86	
83 Styrene	104	16.014	16.014	0.000	96	358722	2.00	1.98	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 o-Xylene	91	16.074	16.074	0.000	97	501158	2.00	1.79	
86 1,1,2,2-Tetrachloroethane	83	16.397	16.397	0.000	96	305071	2.00	1.73	
87 1,2,3-Trichloropropane	110	16.554	16.554	0.000	95	120465	2.00	1.86	
88 Isopropylbenzene	105	16.678	16.678	0.000	97	761393	2.00	1.87	
89 N-Propylbenzene	120	17.233	17.233	0.000	99	191109	2.00	1.79	
90 2-Chlorotoluene	126	17.260	17.260	0.000	97	195442	2.00	1.96	
91 4-Ethyltoluene	105	17.395	17.395	0.000	98	650852	2.00	1.70	
92 1,3,5-Trimethylbenzene	120	17.481	17.481	0.000	91	322440	2.00	1.79	
93 Alpha Methyl Styrene	118	17.724	17.724	0.000	86	267555	2.00	1.85	
94 n-Decane	57	17.826	17.826	0.000	94	320366	2.00	1.75	
95 tert-Butylbenzene	119	17.929	17.929	0.000	93	704609	2.00	1.86	
96 1,2,4-Trimethylbenzene	105	17.940	17.940	0.000	96	627266	2.00	1.82	
97 1,3-Dichlorobenzene	146	18.209	18.209	0.000	97	512160	2.00	1.97	
98 sec-Butylbenzene	105	18.215	18.215	0.000	97	890213	2.00	1.83	
99 Benzyl chloride	91	18.290	18.290	0.000	97	614943	2.00	1.89	
100 1,4-Dichlorobenzene	146	18.301	18.301	0.000	94	493846	2.00	1.94	
101 4-Isopropyltoluene	119	18.387	18.387	0.000	96	790169	2.00	1.84	
102 1,2,3-Trimethylbenzene	105	18.430	18.430	0.000	98	503890	2.00	1.96	
103 Butylcyclohexane	83	18.506	18.506	0.000	94	475562	2.00	1.87	
104 1,2-Dichlorobenzene	146	18.673	18.673	0.000	96	470067	2.00	1.90	
105 2,3-Dihydroindene	117	18.678	18.678	0.000	93	526810	2.00	1.68	
106 Indene	116	18.813	18.813	0.000	90	506483	2.00	2.21	
107 n-Butylbenzene	91	18.840	18.840	0.000	97	718777	2.00	1.79	
108 Undecane	57	19.201	19.201	0.000	90	348162	2.00	1.62	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.228	19.228	0.000	96	730028	2.00	2.28	
110 1,2-Dibromo-3-Chloropropan	157	19.298	19.298	0.000	98	170793	2.00	1.61	
111 1,2,4,5-Tetramethylbenzene	119	19.622	19.622	0.000	95	794280	2.00	2.07	
112 1,2,3,5-Tetramethylbenzene	119	19.676	19.676	0.000	94	481926	2.00	2.08	
113 1,2,3,4-Tetramethylbenzene	119	20.075	20.075	0.000	96	635860	2.00	2.01	
114 Dodecane	57	20.269	20.269	0.000	88	308911	2.00	1.62	
115 1,2,4-Trichlorobenzene	180	20.409	20.409	0.000	94	441560	2.00	2.03	
116 Naphthalene	128	20.533	20.533	0.000	98	843392	2.00	1.85	
117 Benzo(b)thiophene	134	20.636	20.636	0.000	99	526575	2.00	1.98	
118 Hexachlorobutadiene	225	20.765	20.765	0.000	93	468266	2.00	2.18	
119 1,2,3-Trichlorobenzene	180	20.814	20.814	0.000	94	417268	2.00	2.03	
120 2-Methylnaphthalene	142	21.612	21.612	0.000	99	327933	6.25	3.46	
121 1-Methylnaphthalene	142	21.790	21.790	0.000	99	324905	6.25	3.44	
A 122 C6 Range	1	7.337	(7.297-7.377)		0	841066	2.00	1.81	
A 124 Toluene Range	1	13.001	(12.966-13.036)		0	1172683	2.00	2.02	
S 126 Xylenes, Total	100				0		6.00	5.49	
S 127 1,2-Dichloroethene, Total	1				0		4.00	3.90	

Reagents:

40CV101S_00034

Amount Added: 100.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Laboratories

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GCCVD04A-LCS.d

Injection Date: 04-Apr-2017 12:01:30

Instrument ID: MG

Operator ID: 7126

Lims ID: LCS

Worklist Smp#: 1006

Client ID:

Purge Vol: 500.000 mL

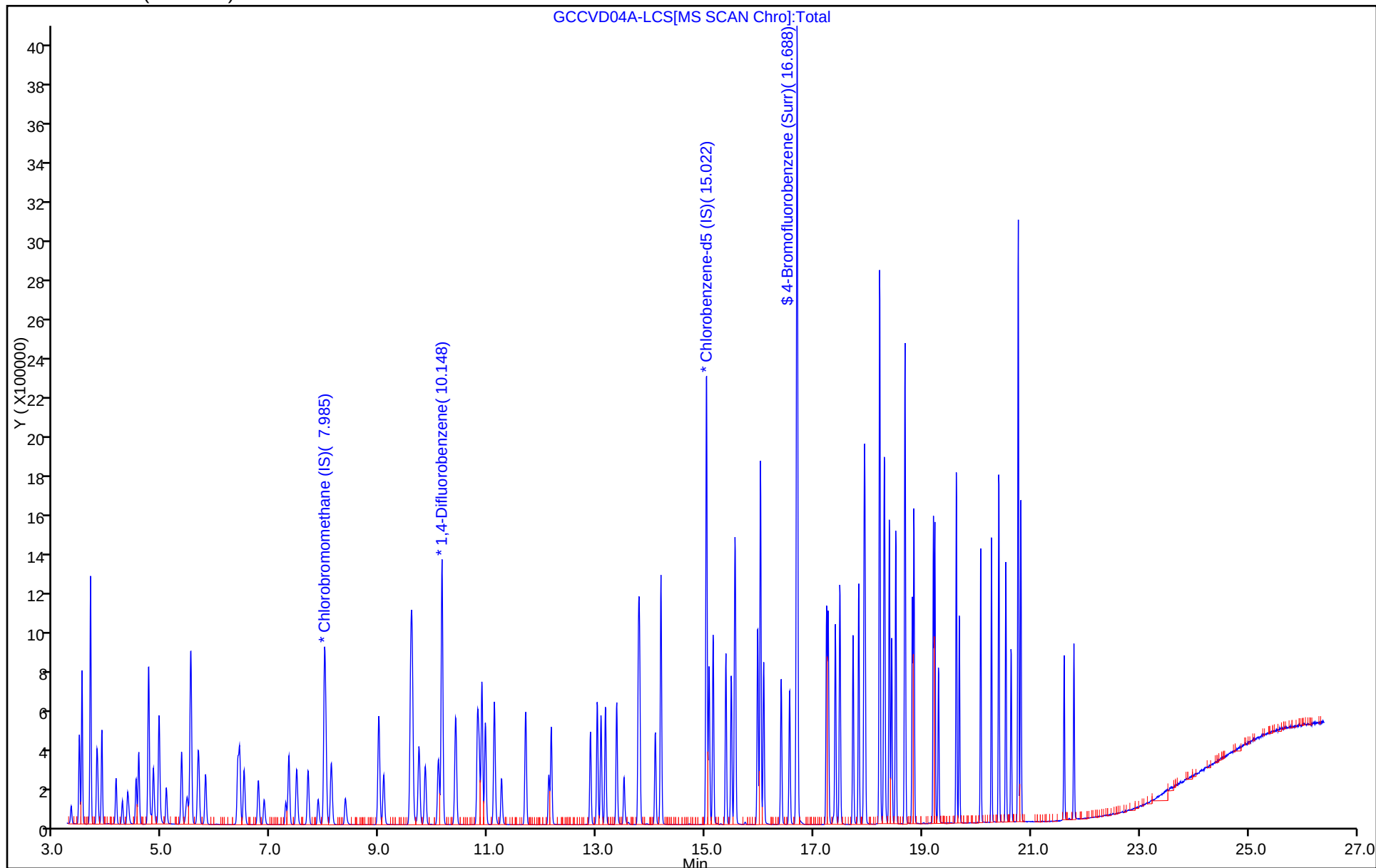
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Laboratories
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\GCCVD04A-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 04-Apr-2017 12:01:30 ALS Bottle#: 15 Worklist Smp#: 1006
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004508-002
Misc. Info.: S34
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4508.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Apr-2017 15:06:47 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: tajh

Date: 04-Apr-2017 12:55:21

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.32	108.04

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 140-10158/1008
 Matrix: Air Lab File ID: JCCVD04B-LCS.d
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 13:50
 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.: 10158 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	2.17		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.72		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	1.75		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	2.38		0.080	
75-34-3	1,1-Dichloroethane	98.96	2.03		0.080	
75-35-4	1,1-Dichloroethene	96.94	2.51		0.080	
120-82-1	1,2,4-Trichlorobenzene	181.45	1.41		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	1.88		0.080	
106-93-4	1,2-Dibromoethane	187.87	1.91		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	1.52		0.080	
107-06-2	1,2-Dichloroethane	98.96	2.23		0.080	
78-87-5	1,2-Dichloropropane	112.99	1.69		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.47		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	1.80		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	1.50		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	1.43		0.080	
123-91-1	1,4-Dioxane	88.11	2.25		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	1.91		0.20	
78-93-3	2-Butanone	72.11	1.88		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	2.22		0.20	
71-43-2	Benzene	78.11	1.85		0.080	
100-44-7	Benzyl chloride	126.58	1.69		0.16	
75-27-4	Bromodichloromethane	163.83	2.11		0.080	
75-25-2	Bromoform	252.75	1.97		0.080	
74-83-9	Bromomethane	94.94	2.10		0.080	
56-23-5	Carbon tetrachloride	153.81	2.39		0.040	
108-90-7	Chlorobenzene	112.56	1.83		0.080	
75-00-3	Chloroethane	64.52	2.26		0.080	
67-66-3	Chloroform	119.38	2.04		0.080	
74-87-3	Chloromethane	50.49	1.76		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	1.97		0.080	
10061-01-5	cis-1,3-Dichloropropene	110.97	1.99		0.080	
110-82-7	Cyclohexane	84.16	2.21		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 140-10158/1008
 Matrix: Air Lab File ID: JCCVD04B-LCS.d
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/04/2017 13:50
 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.: 10158 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	2.44		0.080	
64-17-5	Ethanol	46.07	11.7		2.0	
100-41-4	Ethylbenzene	106.17	1.52		0.080	
87-68-3	Hexachlorobutadiene	260.76	1.83		0.080	
110-54-3	Hexane	86.17	2.08		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	1.88		0.16	
75-09-2	Methylene Chloride	84.93	1.99		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	3.14		0.080	
95-47-6	o-Xylene	106.17	1.56		0.080	
100-42-5	Styrene	104.15	1.58		0.080	
75-65-0	t-Butyl alcohol	74.12	2.76		0.32	
127-18-4	Tetrachloroethene	165.83	2.04		0.080	
108-88-3	Toluene	92.14	1.70		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	2.13		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	1.85		0.080	
79-01-6	Trichloroethene	131.39	1.89		0.040	
75-69-4	Trichlorofluoromethane	137.37	2.69		0.080	
75-01-4	Vinyl chloride	62.50	1.95		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

TestAmerica Laboratories
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\JCCVD04B-LCS.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 04-Apr-2017 13:50:30 ALS Bottle#: 15 Worklist Smp#: 1008
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004511-002
 Misc. Info.: P34
 Operator ID: 007126 Instrument ID: MJ
 Method: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 05-Apr-2017 10:21:37 Calib Date: 24-Mar-2017 17:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 10:21:37

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	8.538	8.538	0.000	97	203985	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.739	10.739	0.000	96	928483	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.521	15.521	0.000	89	837978	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.167	17.167	0.000	93	611100	4.00	4.18	
6 Chlorodifluoromethane	67	3.562	3.562	0.000	97	44658	2.00	2.61	
7 Propene	41	3.568	3.568	0.000	98	128739	2.00	2.13	
8 Dichlorodifluoromethane	85	3.622	3.622	0.000	100	425934	2.00	2.44	
9 Chloromethane	52	3.794	3.794	0.000	99	33677	2.00	1.76	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.794	3.794	0.000	95	190975	2.00	2.47	
11 Acetaldehyde	44	3.934	3.934	0.000	95	93141	10.0	5.07	
12 Vinyl chloride	62	3.955	3.955	0.000	99	110092	2.00	1.95	
13 Butane	43	4.036	4.036	0.000	84	162669	2.00	1.91	
14 Butadiene	54	4.036	4.036	0.000	68	79150	2.00	1.87	
15 Bromomethane	94	4.337	4.337	0.000	98	110241	2.00	2.10	
16 Chloroethane	64	4.472	4.472	0.000	91	52547	2.00	2.26	
17 Ethanol	31	4.558	4.558	0.000	96	141165	10.0	11.7	
18 Vinyl bromide	106	4.757	4.757	0.000	97	115305	2.00	2.52	
19 2-Methylbutane	43	4.805	4.805	0.000	92	166413	2.00	2.19	
20 Trichlorofluoromethane	101	5.015	5.015	0.000	100	431342	2.00	2.69	
21 Acrolein	56	5.026	5.026	0.000	95	24340	2.00	1.75	
22 Acetonitrile	40	5.090	5.090	0.000	99	31922	2.00	1.81	
23 Acetone	58	5.139	5.139	0.000	98	90875	6.00	5.31	
24 Isopropyl alcohol	45	5.214	5.214	0.000	93	469816	6.00	6.70	
25 Pentane	72	5.230	5.230	0.000	95	24666	2.00	2.71	
26 Ethyl ether	31	5.397	5.397	0.000	93	95259	2.00	1.76	
27 1,1-Dichloroethene	96	5.698	5.698	0.000	95	154113	2.00	2.51	
28 2-Methyl-2-propanol	59	5.790	5.790	0.000	96	208384	2.00	2.76	
29 Acrylonitrile	53	5.800	5.800	0.000	93	50804	2.00	1.67	
30 1,1,2-Trichloro-1,2,2-trif	101	5.870	5.870	0.000	97	308845	2.00	2.38	
31 Methylene Chloride	84	6.037	6.037	0.000	97	125469	2.00	1.99	
32 3-Chloro-1-propene	39	6.053	6.053	0.000	96	127644	2.00	2.07	

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	6.193	6.193	0.000	100	381677	2.00	2.14	
34 trans-1,2-Dichloroethene	96	6.828	6.828	0.000	96	132770	2.00	2.13	
35 2-Methylpentane	43	6.844	6.844	0.000	95	341571	2.00	2.35	
36 Methyl tert-butyl ether	73	6.962	6.962	0.000	97	175572	2.00	1.88	
37 1,1-Dichloroethane	63	7.242	7.242	0.000	100	247628	2.00	2.03	
38 Vinyl acetate	43	7.350	7.350	0.000	100	151704	2.00	1.52	
39 2-Butanone (MEK)	72	7.796	7.796	0.000	95	28147	2.00	1.88	
40 Hexane	56	7.812	7.812	0.000	89	111292	2.00	2.08	
41 Isopropyl ether	45	7.979	7.979	0.000	97	244574	2.00	1.84	
42 cis-1,2-Dichloroethene	96	8.210	8.210	0.000	97	129039	2.00	1.97	
43 Ethyl acetate	43	8.409	8.409	0.000	98	137757	2.00	1.93	
44 Chloroform	83	8.555	8.555	0.000	98	274117	2.00	2.04	
45 Tert-butyl ethyl ether	59	8.651	8.651	0.000	96	221099	2.00	2.09	
46 Tetrahydrofuran	42	8.969	8.969	0.000	93	75515	2.00	1.85	
47 1,1,1-Trichloroethane	97	9.571	9.571	0.000	96	304223	2.00	2.17	
48 1,2-Dichloroethane	62	9.679	9.679	0.000	98	197310	2.00	2.23	
49 n-Butanol	31	10.147	10.147	0.000	92	40574	2.00	2.55	
51 Benzene	78	10.179	10.179	0.000	97	335903	2.00	1.85	
50 Cyclohexane	69	10.185	10.185	0.000	79	61865	2.00	2.21	
52 Carbon tetrachloride	117	10.201	10.201	0.000	97	335819	2.00	2.39	
53 2,3-Dimethylpentane	71	10.303	10.303	0.000	90	71676	2.00	1.82	
54 Thiophene	84	10.454	10.454	0.000	98	202661	2.00	1.96	
55 Tert-amyl methyl ether	73	10.674	10.674	0.000	96	178830	2.00	2.07	
56 Isooctane	57	10.959	10.959	0.000	98	599477	2.00	1.91	
57 n-Heptane	71	11.347	11.347	0.000	94	110317	2.00	1.82	
58 1,2-Dichloropropane	63	11.422	11.422	0.000	87	112229	2.00	1.69	
59 Trichloroethene	130	11.459	11.459	0.000	96	185611	2.00	1.89	
60 Dibromomethane	93	11.540	11.540	0.000	96	153039	2.00	2.02	
62 Dichlorobromomethane	83	11.691	11.691	0.000	99	265420	2.00	2.11	
61 1,4-Dioxane	88	11.723	11.723	0.000	94	35025	2.00	2.25	
63 Methyl methacrylate	41	11.804	11.804	0.000	90	80653	2.00	1.91	
64 Methylcyclohexane	83	12.234	12.234	0.000	92	209898	2.00	1.54	
65 4-Methyl-2-pentanone (MIBK)	43	12.664	12.664	0.000	97	173401	2.00	2.22	
66 cis-1,3-Dichloropropene	75	12.708	12.708	0.000	96	197205	2.00	1.99	
67 trans-1,3-Dichloropropene	75	13.418	13.418	0.000	99	154161	2.00	1.85	
68 Toluene	91	13.536	13.536	0.000	94	300362	2.00	1.70	
69 1,1,2-Trichloroethane	83	13.611	13.611	0.000	99	96937	2.00	1.75	
70 2-Methylthiophene	97	13.687	13.687	0.000	98	298740	2.00	1.88	
71 3-Methylthiophene	97	13.891	13.891	0.000	99	302400	2.00	1.94	
72 2-Hexanone	58	14.009	14.009	0.000	92	83088	2.00	2.27	
73 n-Octane	85	14.241	14.241	0.000	95	120854	2.00	1.99	
74 Chlorodibromomethane	129	14.321	14.321	0.000	98	255592	2.00	2.21	
75 Ethylene Dibromide	107	14.612	14.612	0.000	99	194631	2.00	1.91	
76 Tetrachloroethene	129	14.687	14.687	0.000	95	150023	2.00	2.04	
78 Chlorobenzene	112	15.569	15.569	0.000	93	277629	2.00	1.83	
77 2,3-Dimethylheptane	43	15.596	15.596	0.000	95	389472	2.00	2.07	
79 Ethylbenzene	91	15.860	15.860	0.000	99	304606	2.00	1.52	
80 2-Ethylthiophene	97	15.962	15.962	0.000	99	263131	2.00	1.61	
81 m-Xylene & p-Xylene	91	16.021	16.021	0.000	99	454505	4.00	3.14	
82 n-Nonane	57	16.452	16.452	0.000	94	257512	2.00	2.00	
83 Bromoform	173	16.468	16.468	0.000	96	229531	2.00	1.97	
84 Styrene	104	16.489	16.489	0.000	99	170849	2.00	1.58	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 o-Xylene	91	16.548	16.548	0.000	98	230256	2.00	1.56	
86 1,1,2,2-Tetrachloroethane	83	16.877	16.877	0.000	99	172260	2.00	1.72	
87 1,2,3-Trichloropropane	110	17.033	17.033	0.000	97	45409	2.00	1.83	
88 Isopropylbenzene	105	17.140	17.140	0.000	97	312724	2.00	1.66	
89 N-Propylbenzene	120	17.684	17.684	0.000	99	82064	2.00	1.69	
90 2-Chlorotoluene	126	17.727	17.727	0.000	97	95911	2.00	1.60	
91 4-Ethyltoluene	105	17.840	17.840	0.000	98	279111	2.00	1.70	
92 1,3,5-Trimethylbenzene	120	17.915	17.915	0.000	92	138484	2.00	1.80	
93 Alpha Methyl Styrene	118	18.152	18.152	0.000	87	110047	2.00	1.66	
94 n-Decane	57	18.216	18.216	0.000	90	248634	2.00	1.74	
95 tert-Butylbenzene	119	18.345	18.345	0.000	91	273282	2.00	1.86	
96 1,2,4-Trimethylbenzene	105	18.361	18.361	0.000	96	248550	2.00	1.88	
97 sec-Butylbenzene	105	18.620	18.620	0.000	98	373999	2.00	1.86	
98 1,3-Dichlorobenzene	146	18.630	18.630	0.000	98	189932	2.00	1.50	
99 Benzyl chloride	91	18.711	18.711	0.000	97	175881	2.00	1.69	
100 1,4-Dichlorobenzene	146	18.722	18.722	0.000	94	175752	2.00	1.43	
101 4-Isopropyltoluene	119	18.786	18.786	0.000	97	312052	2.00	1.96	
102 1,2,3-Trimethylbenzene	105	18.835	18.835	0.000	99	208688	2.00	2.08	
103 Butylcyclohexane	83	18.894	18.894	0.000	91	290615	2.00	1.71	
105 1,2-Dichlorobenzene	146	19.082	19.082	0.000	86	174091	2.00	1.52	
104 2,3-Dihydroindene	117	19.082	19.082	0.000	95	211843	2.00	1.60	
107 Indene	116	19.217	19.217	0.000	90	188307	2.00	2.08	
106 n-Butylbenzene	91	19.222	19.222	0.000	98	298337	2.00	1.90	
108 Undecane	57	19.545	19.545	0.000	95	244435	2.00	1.93	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.599	19.599	0.000	98	286026	2.00	2.50	
110 1,2-Dibromo-3-Chloropropan	157	19.695	19.695	0.000	96	53065	2.00	1.52	
111 1,2,4,5-Tetramethylbenzene	119	19.986	19.986	0.000	97	307984	2.00	2.34	
112 1,2,3,5-Tetramethylbenzene	119	20.040	20.040	0.000	94	197849	2.00	2.37	
113 1,2,3,4-Tetramethylbenzene	119	20.438	20.438	0.000	97	245238	2.00	2.26	
114 Dodecane	57	20.605	20.605	0.000	94	239255	2.00	2.23	
115 1,2,4-Trichlorobenzene	180	20.793	20.793	0.000	94	87681	2.00	1.41	
116 Naphthalene	128	20.933	20.933	0.000	99	192402	2.00	1.66	
117 Benzo(b)thiophene	134	21.040	21.040	0.000	99	85870	2.00	1.47	
118 Hexachlorobutadiene	225	21.153	21.153	0.000	95	201472	2.00	1.83	
119 1,2,3-Trichlorobenzene	180	21.223	21.223	0.000	94	98106	2.00	1.66	
120 2-Methylnaphthalene	142	21.917	21.917	0.000	100	30504	6.25	3.93	
121 1-Methylnaphthalene	142	22.046	22.046	0.000	100	35519	6.25	4.18	
A 124 Toluene Range	1	13.536	(13.506-13.566)		0	764808	2.00	1.78	
A 125 C8 Range	1	14.235	(14.202-14.299)		0	1209374	2.00	2.13	
S 126 Xylenes, Total	100				0		6.00	4.70	
S 127 1,2-Dichloroethene, Total	1				0		4.00	4.10	

Reagents:

40CV101S_00035

Amount Added: 100.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 05-Apr-2017 10:21:39

Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Laboratories

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\JCCVD04B-LCS.d

Injection Date: 04-Apr-2017 13:50:30

Instrument ID: MJ

Operator ID: 007126

Lims ID: LCS

Worklist Smp#: 1008

Client ID:

Purge Vol: 500.000 mL

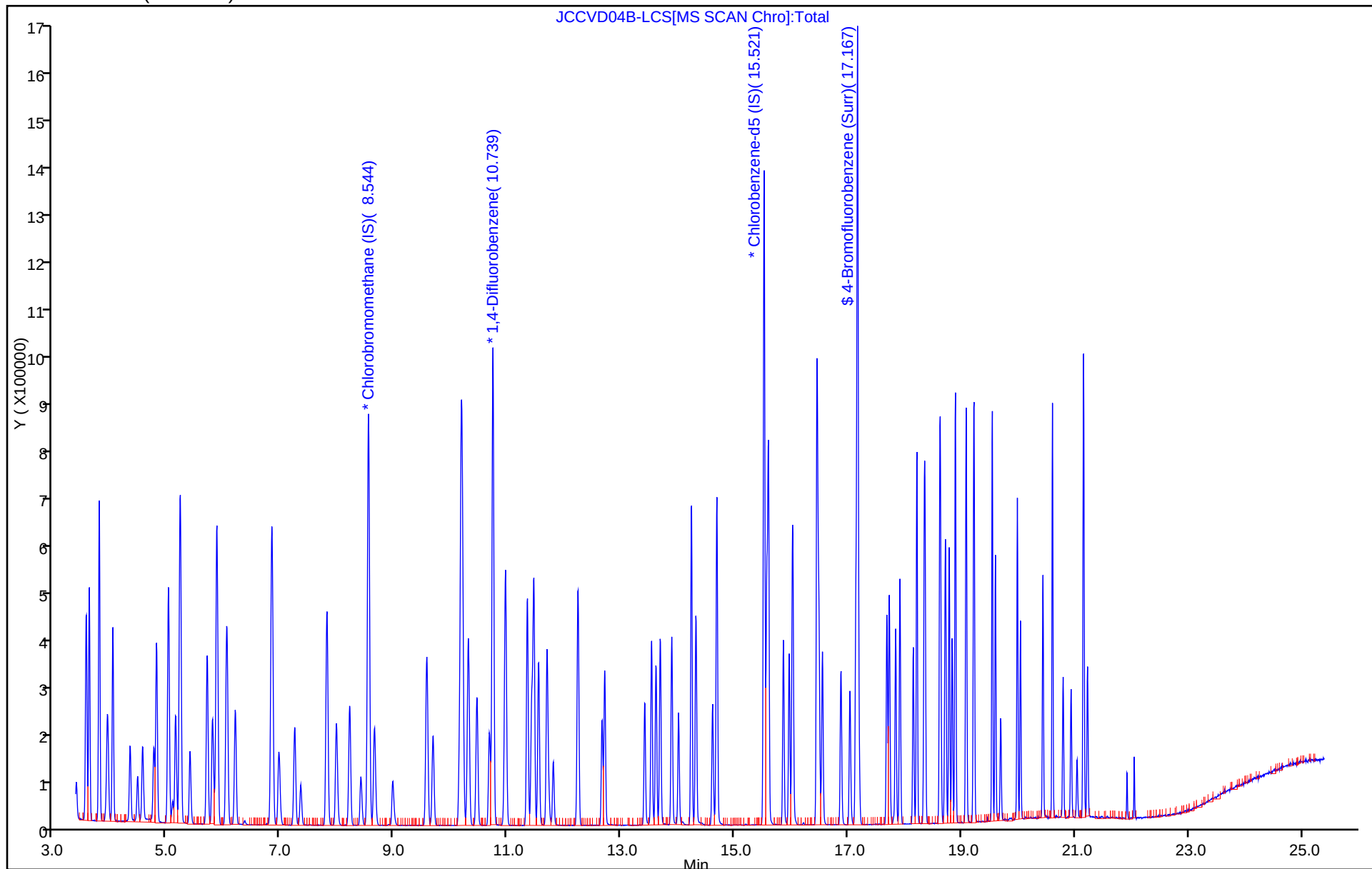
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Laboratories
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\JCCVD04B-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 04-Apr-2017 13:50:30 ALS Bottle#: 15 Worklist Smp#: 1008
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004511-002
Misc. Info.: P34
Operator ID: 007126 Instrument ID: MJ
Method: \\ChromNA\Knoxville\ChromData\MJ\20170402-4511.b\MJ_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 05-Apr-2017 10:21:37 Calib Date: 24-Mar-2017 17:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MJ\20170319-4355.b\JC24IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: tajh

Date: 05-Apr-2017 10:21:37

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.18	104.44

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1

SDG No.: _____

Instrument ID: MG Start Date: 03/15/2017 14:04Analysis Batch Number: 9482 End Date: 03/15/2017 21:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-9482/1		03/15/2017 14:04	1	GBFBC15.D	RTX-5 0.32 (mm)
IC 140-9482/3		03/15/2017 14:36	1	GC15IC01.D	RTX-5 0.32 (mm)
IC 140-9482/4		03/15/2017 15:20	1	GC15IC02.D	RTX-5 0.32 (mm)
IC 140-9482/5		03/15/2017 16:02	1	GC15IC03.D	RTX-5 0.32 (mm)
IC 140-9482/6		03/15/2017 16:45	1	GC15IC04.D	RTX-5 0.32 (mm)
IC 140-9482/7		03/15/2017 17:29	1	GC15IC05.D	RTX-5 0.32 (mm)
ICIS 140-9482/8		03/15/2017 18:13	1	GC15IC06.D	RTX-5 0.32 (mm)
IC 140-9482/9		03/15/2017 18:56	1	GC15IC07.D	RTX-5 0.32 (mm)
IC 140-9482/10		03/15/2017 19:39	1	GC15IC08.D	RTX-5 0.32 (mm)
IC 140-9482/11		03/15/2017 20:21	1	GC15IC09.D	RTX-5 0.32 (mm)
ICV 140-9482/13		03/15/2017 21:46	1	GICVC15.D	RTX-5 0.32 (mm)

170315.ZZZ

TA-Knoxville
TO-14 Autosampler Log

Sample	Position/Volume	psia	Date	Time
BFB	16 - 101 mL	34.3	3/15/2017	2:04:08 PM
ICAL01	1 - 101 mL	35.6	3/15/2017	2:36:45 PM
ICAL02	1 - 201 mL	35.4	3/15/2017	3:20:37 PM
ICAL03	2 - 201 mL	34.7	3/15/2017	4:02:35 PM
ICAL04	3 - 201 mL	34.9	3/15/2017	4:45:20 PM
ICAL05	4 - 201 mL	35	3/15/2017	5:29:49 PM
ICAL06	5 - 201 mL	34.9	3/15/2017	6:13:24 PM
ICAL07	6 - 201 mL	33.2	3/15/2017	6:56:24 PM
ICAL08	7 - 201 mL	31.1	3/15/2017	7:39:21 PM
ICAL09	8 - 201 mL	34.7	3/15/2017	8:21:54 PM
PRIME	9 - 51 mL	33.8	3/15/2017	9:03:56 PM
ICV	9 - 101 mL	33.1	3/15/2017	9:45:59 PM
PRIME	15 - 52 mL	33.8	3/15/2017	10:28:06 PM
LCS	15 - 101 mL	33.5	3/15/2017	11:10:25 PM
MB	16 - 500 mL	33.6	3/15/2017	11:56:20 PM
MB	16 - 500 mL	32.9	3/16/2017	12:42:02 AM
MDL	1 - 50 mL	35.4	3/16/2017	1:24:20 AM

MG WL 4323

TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 17 & KNOX-MS-0023, Rev 2

Analysis Date:	3/15/17	Instrument:	HG	Chrom WL #:	4323	TALS Batch & Event #	TO14/15: 9482 962	AFCEE: 9503 / 965	
							DOD: 9502 / 964	OHIO: 9501 / 963	
Chrom/Worklist Review						1 st	Comments		
1. Re-read each Limit Group [method editor-limit groups]						/			
2. Verify LODV in Chrom [method editor -> edit -> LODV]						/			
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]						/	#98, #101, #111, #116		
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]						/	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?						/	C6, to 1, (no C8)		
MLG Review						TO-	AFC	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% [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 - icv]						/	/	/	IPA 62%
22. Analyst/Date:						2nd Level Reviewer/Date:			
Comments:						3/15/17			
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 issue>						/	/	/	/
30. Checklist & Entech report scanned, attached & assigned properly?						/	/	/	/
Analyst:						2nd Level Reviewer:			
Date: 3/16/17						Date: 3/16/17			
Comments: UR8 (5) sec-butylbenz., 4 FPHD.									
1M5THBE, naph.									

MS017r41, 5/25/2016

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1

SDG No.: _____

Instrument ID: MJ Start Date: 03/24/2017 11:04Analysis Batch Number: 9602 End Date: 03/25/2017 00:49

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-9602/1		03/24/2017 11:04	1	JBFBC24.D	RTX-5 0.32 (mm)
IC 140-9602/2		03/24/2017 11:31	1	JC24IC01.D	RTX-5 0.32 (mm)
140-7158-A-1 MDLV		03/24/2017 11:31	1		RTX-5 0.32 (mm)
IC 140-9602/3		03/24/2017 12:16	1	JC24IC02.D	RTX-5 0.32 (mm)
140-7158-A-2 MDLV		03/24/2017 12:16	1		RTX-5 0.32 (mm)
IC 140-9602/4		03/24/2017 13:02	1	JC24IC03.D	RTX-5 0.32 (mm)
140-7158-A-3 MDLV		03/24/2017 13:02	1		RTX-5 0.32 (mm)
IC 140-9602/5		03/24/2017 13:48	1	JC24IC04.D	RTX-5 0.32 (mm)
140-7158-A-4 MDLV		03/24/2017 13:48	1		RTX-5 0.32 (mm)
IC 140-9602/6		03/24/2017 14:35	1	JC24IC05.D	RTX-5 0.32 (mm)
140-7158-A-5 MDLV		03/24/2017 14:35	1		RTX-5 0.32 (mm)
ICIS 140-9602/7		03/24/2017 15:21	1	JC24IC06.D	RTX-5 0.32 (mm)
IC 140-9602/8		03/24/2017 16:06	1	JC24IC07.D	RTX-5 0.32 (mm)
IC 140-9602/9		03/24/2017 16:50	1	JC24IC08.D	RTX-5 0.32 (mm)
IC 140-9602/10		03/24/2017 17:35	1	JC24IC09.D	RTX-5 0.32 (mm)
ICV 140-9602/18		03/24/2017 23:36	1	JLCSC24.D	RTX-5 0.32 (mm)
ZZZZZ		03/25/2017 00:49	1		RTX-5 0.32 (mm)

170324

TA-Knoxville
TO-14 Autosampler Log

Sample	Position/Volume	psia	Date	Time
BFB	16 - 101 mL	29.7	3/24/2017	11:04:02 AM
IC01	1 - 101 mL	29.8	3/24/2017	11:31:44 AM
IC02	1 - 200 mL	29.1	3/24/2017	12:16:31 PM
IC03	2 - 200 mL	33.7	3/24/2017	1:02:15 PM
IC04	3 - 200 mL	33.5	3/24/2017	1:48:55 PM
IC05	4 - 200 mL	33.8	3/24/2017	2:35:43 PM
IC06	5 - 202 mL	33.7	3/24/2017	3:21:01 PM
IC07	6 - 201 mL	31.6	3/24/2017	4:06:02 PM
IC08	7 - 201 mL	30.4	3/24/2017	4:50:55 PM
IC09	8 - 201 mL	33.4	3/24/2017	5:35:41 PM
PRIME	9 - 22 mL	32.1	3/24/2017	6:20:22 PM
ICV	9 - 101 mL	30.9	3/24/2017	7:05:43 PM
EXPSTD10	10 - 21 mL	22.8	3/24/2017	7:51:45 PM
EXPSTD11	11 - 20 mL	20	3/24/2017	8:36:33 PM
EXPSTD12	12 - 21 mL	20.5	3/24/2017	9:21:26 PM
EXPSTD13	13 - 21 mL	28	3/24/2017	10:06:05 PM
EXPSTD14	14 - 20 mL	26	3/24/2017	10:51:04 PM
LCS	15 - 101 mL	27.6	3/24/2017	11:36:04 PM

MJ WL 4355 ICAL

TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 17 & KNOX-MS-0023, Rev 2

Analysis Date:	3/24/17	Instrument:	MJ	Chrom WL #:	4355	TALS Batch & Event #	TO14/15: 9602 / 938	AFCEE: 9743 / 981	
							DOD: 9742 / 980	OHIO: 9741 / 979	
Chrom/Worklist Review						1 st	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]						✓	✓	✓	
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?						✓	DNU TPH as C6.		
MLG Review						TO-	AFC	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% [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 - icv]						✓	✓	✓	✓
22. Analyst/Date:						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:						2nd Level Reviewer:			
Date: 3/27/17						Date: 3/27/17			
Comments:									

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1

SDG No.: _____

Instrument ID: MG Start Date: 04/04/2017 11:30Analysis Batch Number: 10155 End Date: 04/05/2017 10:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-10155/5		04/04/2017 11:30	1	GBFBD04A.D	RTX-5 0.32 (mm)
CCVIS 140-10155/6		04/04/2017 12:01	1	GCCVD04A.D	RTX-5 0.32 (mm)
LCS 140-10155/1006		04/04/2017 12:01	1	GCCVD04A-LCS.d	RTX-5 0.32 (mm)
MB 140-10155/8		04/04/2017 14:18	1	GMB500D04.D	RTX-5 0.32 (mm)
140-7685-1		04/04/2017 15:02	1	GD04P101.D	RTX-5 0.32 (mm)
140-7685-2		04/04/2017 15:51	1	GD04P102.D	RTX-5 0.32 (mm)
140-7685-3		04/04/2017 16:41	1	GD04P103.D	RTX-5 0.32 (mm)
140-7685-6		04/04/2017 19:01	1	GD04P106.D	RTX-5 0.32 (mm)
140-7685-7		04/04/2017 19:49	1	GD04P107.D	RTX-5 0.32 (mm)
140-7685-8		04/04/2017 20:38	1	GD04P108.D	RTX-5 0.32 (mm)
140-7685-9		04/04/2017 21:26	1	GD04P109.D	RTX-5 0.32 (mm)
140-7685-10		04/04/2017 22:16	1	GD04P110.D	RTX-5 0.32 (mm)
140-7685-11		04/04/2017 23:08	1	GD04P111.D	RTX-5 0.32 (mm)
140-7685-12		04/04/2017 23:57	1	GD04P112.D	RTX-5 0.32 (mm)
ZZZZZ		04/05/2017 00:46	1		RTX-5 0.32 (mm)
140-7685-4		04/05/2017 10:09	1	GD04P104R.D	RTX-5 0.32 (mm)
140-7685-5		04/05/2017 10:54	1	GD04P105R.D	RTX-5 0.32 (mm)

170404.ZZZ

TA-Knoxville
TO-14 Autosampler Log

Sample	Position/Volume	psia	Date	Time
BFB	16 - 101 mL	34.1	4/4/2017	11:30:05 AM
CCVIS	15 - 101 mL	24.4	4/4/2017	12:01:07 PM
DNULEAK	16 - 21 mL	33.8	4/4/2017	1:39:20 PM
BLANK	16 - 500 mL	32.8	4/4/2017	2:18:53 PM
7685-01	1 - 251 mL	5.1	4/4/2017	3:02:26 PM
7685-02	2 - 500 mL	6.4	4/4/2017	3:51:48 PM
7685-03	3 - 500 mL	7.4	4/4/2017	4:40:59 PM
7685-04	4 - 250 mL	7.8	4/4/2017	5:28:28 PM
7685-05	5 - 250 mL	8.7	4/4/2017	6:14:36 PM
7685-06	6 - 501 mL	11.4	4/4/2017	7:01:44 PM
7685-07	7 - 500 mL	8.8	4/4/2017	7:49:17 PM
7685-08	8 - 500 mL	8.5	4/4/2017	8:38:24 PM
7685-09	9 - 501 mL	7	4/4/2017	9:26:21 PM
7685-10	10 - 500 mL	11	4/4/2017	10:16:33 PM
7685-11	11 - 500 mL	8.4	4/4/2017	11:08:06 PM
7685-12	12 - 500 mL	6.8	4/4/2017	11:57:41 PM
7685-12	12 - 501 mL	2.1	4/5/2017	12:46:53 AM
7685-04	4 - 501 mL	4.5	4/5/2017	10:08:59 AM
7685-05	5 - 500 mL	6	4/5/2017	10:54:49 AM

MG WL 4508

TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 17 & KNOX-MS-0023, Rev 2

Page 1 of 2

Instrument/Date	MG 4/4/17		Routine	AFCEE	DOD	OHIO
CCAL Chrom WL #	4508	CCAL Batch #	10155			
ICAL Chrom WL #	4323	ICAL Batch # / Event #	9482 962	/	/	/

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>actone, IPA, EtA</i> <i>[≤ 40% for AFCEE non-table analytes] TH, 2-hexa</i> <i>[≤ 50% for 1&2 methylnaphthalene] Bromofen</i> [Chrom-F8] [TALS-Sample Results Tab]	✓	☒ CCV - %D - LCS criteria met (NCM# <u>7173</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-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: <i>4/4/17</i>	2nd Level Reviewer: <i>[Signature]</i> Date: <i>4/5/17</i>		
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:	✓	☐ 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: Sample Reason Sample Reason		☐ (1) Reporting Limit - Dilution, Matrix (NCM# _____) ☐ (2) Reporting Limit - Dilution, Non-Target (NCM# _____) ☐ (3) Issues with initial collection volume; see DRC.	
17. RIC inspected for proper integration for TPH?	✓		✓
18. Obvious non-TPH peaks excluded?	✓		✓

Page 2 of 2

[illegible]

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Knoxville Job No.: 140-7685-1

SDG No.: _____

Instrument ID: MJ Start Date: 04/04/2017 13:22Analysis Batch Number: 10158 End Date: 04/05/2017 10:50

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-10158/7		04/04/2017 13:22	1	JBFBD04B.D	RTX-5 0.32 (mm)
CCVIS 140-10158/8		04/04/2017 13:50	1	JCCVD04B.D	RTX-5 0.32 (mm)
LCS 140-10158/1008		04/04/2017 13:50	1	JCCVD04B-LCS.d	RTX-5 0.32 (mm)
ZZZZZ		04/04/2017 15:17	1		RTX-5 0.32 (mm)
ZZZZZ		04/04/2017 16:03	1		RTX-5 0.32 (mm)
ZZZZZ		04/04/2017 16:49	1		RTX-5 0.32 (mm)
ZZZZZ		04/04/2017 17:39	1		RTX-5 0.32 (mm)
ZZZZZ		04/04/2017 18:27	1		RTX-5 0.32 (mm)
MB 140-10158/15		04/04/2017 19:15	1	J500D04.D	RTX-5 0.32 (mm)
ZZZZZ		04/04/2017 20:06	1.36		RTX-5 0.32 (mm)
ZZZZZ		04/04/2017 20:55	1.14		RTX-5 0.32 (mm)
ZZZZZ		04/05/2017 10:04	1.14		RTX-5 0.32 (mm)
140-7685-12 DL		04/05/2017 10:50	1	JD04P106DL.D	RTX-5 0.32 (mm)

170404

TA-Knoxville
TO-14 Autosampler Log

Sample	Position/Volume	psia	Date	Time
BFB	16 - 102 mL	34.6	4/4/2017	1:22:52 PM
CCV	9 - 100 mL	22.2	4/4/2017	1:50:13 PM
dnuf flush	16 - 20 mL	35.8	4/4/2017	2:49:58 PM
mb200	16 - 202 mL	34.1	4/4/2017	3:17:50 PM
7695-01	1 - 20 mL	9	4/4/2017	4:03:32 PM
7695-01	1 - 20 mL	8.7	4/4/2017	4:49:52 PM
LOT7681	2 - 500 mL	20	4/4/2017	5:39:00 PM
LOT7683	3 - 502 mL	21.4	4/4/2017	6:27:05 PM
mb500	16 - 500 mL	33.9	4/4/2017	7:15:35 PM
7696-1	4 - 681 mL	11.6	4/4/2017	8:06:06 PM
7696-02	5 - 571 mL	10.9	4/4/2017	8:55:02 PM
7696-02	5 - 101 mL	11.1	4/5/2017	10:04:26 AM
7685-12	6 - 100 mL	2.6	4/5/2017	10:50:04 AM

MJ WL 4511

TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 17 & KNOX-MS-0023, Rev 2

Page 1 of 2

Instrument/Date	MJ 4/13/17	Routine	AFCEE	DOD	OHIO
CCAL Chrom WL #	451	CCAL Batch #	10158		
ICAL Chrom WL #	4355	ICAL Batch # / Event #	9602 / 978	/	/

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] <i>TPH</i> [≤ 50% for 1&2 methyl naphthalene] [Chrom-F8] [TALS-Sample Results Tab]	/	☒ CCV - %D - LCS criteria met (NCM# <i>7182</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?	<i>NP</i>		<i>NP</i>
7. Has the RT been updated to the method?	/		/
Analyst: <i>[Signature]</i> Date: <i>4/15/17</i>		2nd Level Reviewer: <i>[Signature]</i> Date: <i>04/06/17</i>	
Comments:		Comments:	
8. Has the vol injected been verified vs Lintech & 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 Result-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:	/	☐ 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?	<i>NP</i>		<i>NP</i>
18. Obvious non-TPH peaks excluded?	/		/

Page 2 of 2

04/14/2017

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

Lab Name: <u>TestAmerica Knoxville</u>	Job No.: <u>140-7529-1</u>
SDG No.: _____	
Client Sample ID: <u>11155</u>	Lab Sample ID: <u>140-7529-2</u>
Matrix: <u>Air</u>	Lab File ID: <u>LOT7529.D</u>
Analysis Method: <u>TO 15 LL</u>	Date Collected: <u>03/19/2017 12:20</u>
Sample wt/vol: <u>500 (mL)</u>	Date Analyzed: <u>03/22/2017 04:55</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>9530</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: <u>TestAmerica Knoxville</u>	Job No.: <u>140-7529-1</u>
SDG No.: _____	
Client Sample ID: <u>11155</u>	Lab Sample ID: <u>140-7529-2</u>
Matrix: <u>Air</u>	Lab File ID: <u>LOT7529.D</u>
Analysis Method: <u>TO 15 LL</u>	Date Collected: <u>03/19/2017 12:20</u>
Sample wt/vol: <u>500 (mL)</u>	Date Analyzed: <u>03/22/2017 04:55</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>9530</u>	Units: <u>ppb v/v</u>

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		2.0	
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.: 140-7529-1
 SDG No.: _____
 Client Sample ID: 11155 Lab Sample ID: 140-7529-2
 Matrix: Air Lab File ID: LOT7529.D
 Analysis Method: TO 15 LL Date Collected: 03/19/2017 12:20
 Sample wt/vol: 500 (mL) Date Analyzed: 03/22/2017 04:55
 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.: 9530 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.: 140-7529-1
SDG No.: _____
Client Sample ID: 11155 Lab Sample ID: 140-7529-2
Matrix: Air Lab File ID: LOT7529.D
Analysis Method: TO 15 LL Date Collected: 03/19/2017 12:20
Sample wt/vol: 500 (mL) Date Analyzed: 03/22/2017 04:55
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.: 9530 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: \\ChromNA\Knoxville\ChromData\MG\20170316-4340.b\LOT7529.D
 Lims ID: 140-7529-A-2
 Client ID: 11155
 Sample Type: Client
 Inject. Date: 22-Mar-2017 04:55:30 ALS Bottle#: 2 Worklist Smp#: 29
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004340-029
 Misc. Info.: 11155
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170316-4340.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 22-Mar-2017 09:58:01 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK015

First Level Reviewer: tajh

Date: 22-Mar-2017 09:41:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.991	7.991	0.000	78	294410	4.00	
* 2 1,4-Difluorobenzene	114	10.153	10.158	-0.005	95	1487644	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.028	15.033	-0.005	88	1444225	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.699	16.705	-0.006	93	1160297	4.07	
31 Methylene Chloride	84	5.661	5.656	0.005	88	6103	0.0862	
47 1,1,1-Trichloroethane	97	8.999	8.994	0.005	95	11505	0.0482	

Reagents:

40MXISSURP_00001 Amount Added: 40.00 Units: mL Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170316-4340.b\LOT7529.D

Injection Date: 22-Mar-2017 04:55:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7529-A-2

Lab Sample ID: 140-7529-2

Worklist Smp#: 29

Client ID: 11155

Purge Vol: 500.000 mL

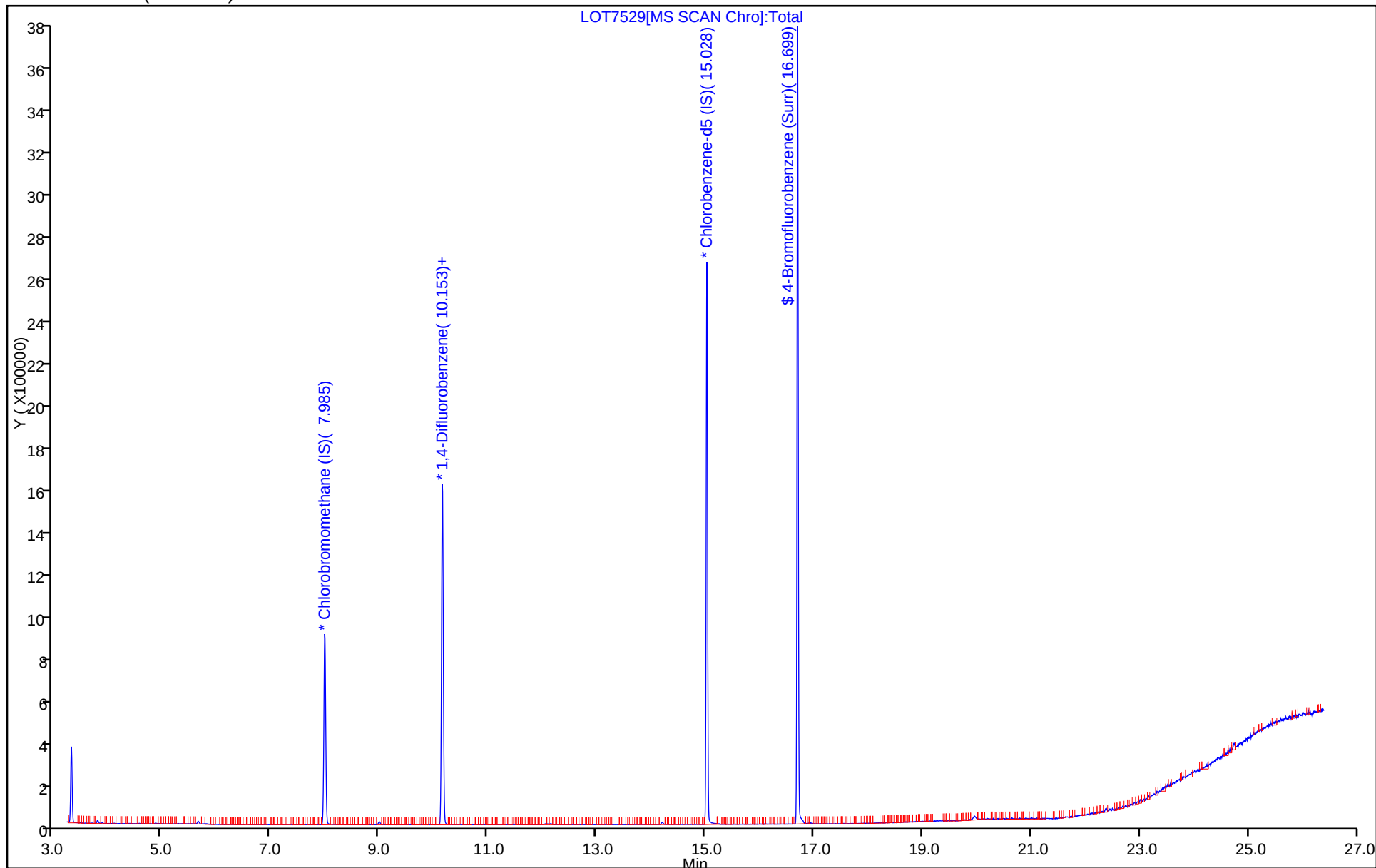
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MG_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>140-7547-1</u>
SDG No.: _____	
Client Sample ID: <u>11566</u>	Lab Sample ID: <u>140-7547-16</u>
Matrix: <u>Air</u>	Lab File ID: <u>LOT7547.D</u>
Analysis Method: <u>TO 15 LL</u>	Date Collected: <u>03/21/2017 10:45</u>
Sample wt/vol: <u>500 (mL)</u>	Date Analyzed: <u>03/23/2017 02:16</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>9672</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: <u>TestAmerica Knoxville</u>	Job No.: <u>140-7547-1</u>
SDG No.: _____	
Client Sample ID: <u>11566</u>	Lab Sample ID: <u>140-7547-16</u>
Matrix: <u>Air</u>	Lab File ID: <u>LOT7547.D</u>
Analysis Method: <u>TO 15 LL</u>	Date Collected: <u>03/21/2017 10:45</u>
Sample wt/vol: <u>500 (mL)</u>	Date Analyzed: <u>03/23/2017 02:16</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>9672</u>	Units: <u>ppb v/v</u>

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		2.0	
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: <u>TestAmerica Knoxville</u>	Job No.: <u>140-7547-1</u>
SDG No.: _____	
Client Sample ID: <u>11566</u>	Lab Sample ID: <u>140-7547-16</u>
Matrix: <u>Air</u>	Lab File ID: <u>LOT7547.D</u>
Analysis Method: <u>TO 15 LL</u>	Date Collected: <u>03/21/2017 10:45</u>
Sample wt/vol: <u>500 (mL)</u>	Date Analyzed: <u>03/23/2017 02:16</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>9672</u>	Units: <u>ppb v/v</u>

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.: 140-7547-1
SDG No.: _____
Client Sample ID: 11566 Lab Sample ID: 140-7547-16
Matrix: Air Lab File ID: LOT7547.D
Analysis Method: TO 15 LL Date Collected: 03/21/2017 10:45
Sample wt/vol: 500 (mL) Date Analyzed: 03/23/2017 02:16
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.: 9672 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: \\ChromNA\Knoxville\ChromData\MG\20170321-4369.b\LOT7547.D
 Lims ID: 140-7547-A-16
 Client ID: 11566
 Sample Type: Client
 Inject. Date: 23-Mar-2017 02:16:30 ALS Bottle#: 16 Worklist Smp#: 26
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004369-026
 Misc. Info.: 11566
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170321-4369.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 23-Mar-2017 08:46:11 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK019

First Level Reviewer: tajh

Date: 23-Mar-2017 08:46:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.001	7.996	0.005	78	297515	4.00	
* 2 1,4-Difluorobenzene	114	10.164	10.164	0.000	95	1498417	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.028	15.028	0.000	88	1441446	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.699	16.699	0.000	93	1125348	3.95	
31 Methylene Chloride	84	5.677	5.661	0.016	81	6366	0.0890	
47 1,1,1-Trichloroethane	97	9.004	8.999	0.005	95	11890	0.0493	

Reagents:

40MXISSURP_00001 Amount Added: 40.00 Units: mL Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170321-4369.b\LOT7547.D

Injection Date: 23-Mar-2017 02:16:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7547-A-16

Lab Sample ID: 140-7547-16

Worklist Smp#: 26

Client ID: 11566

Purge Vol: 500.000 mL

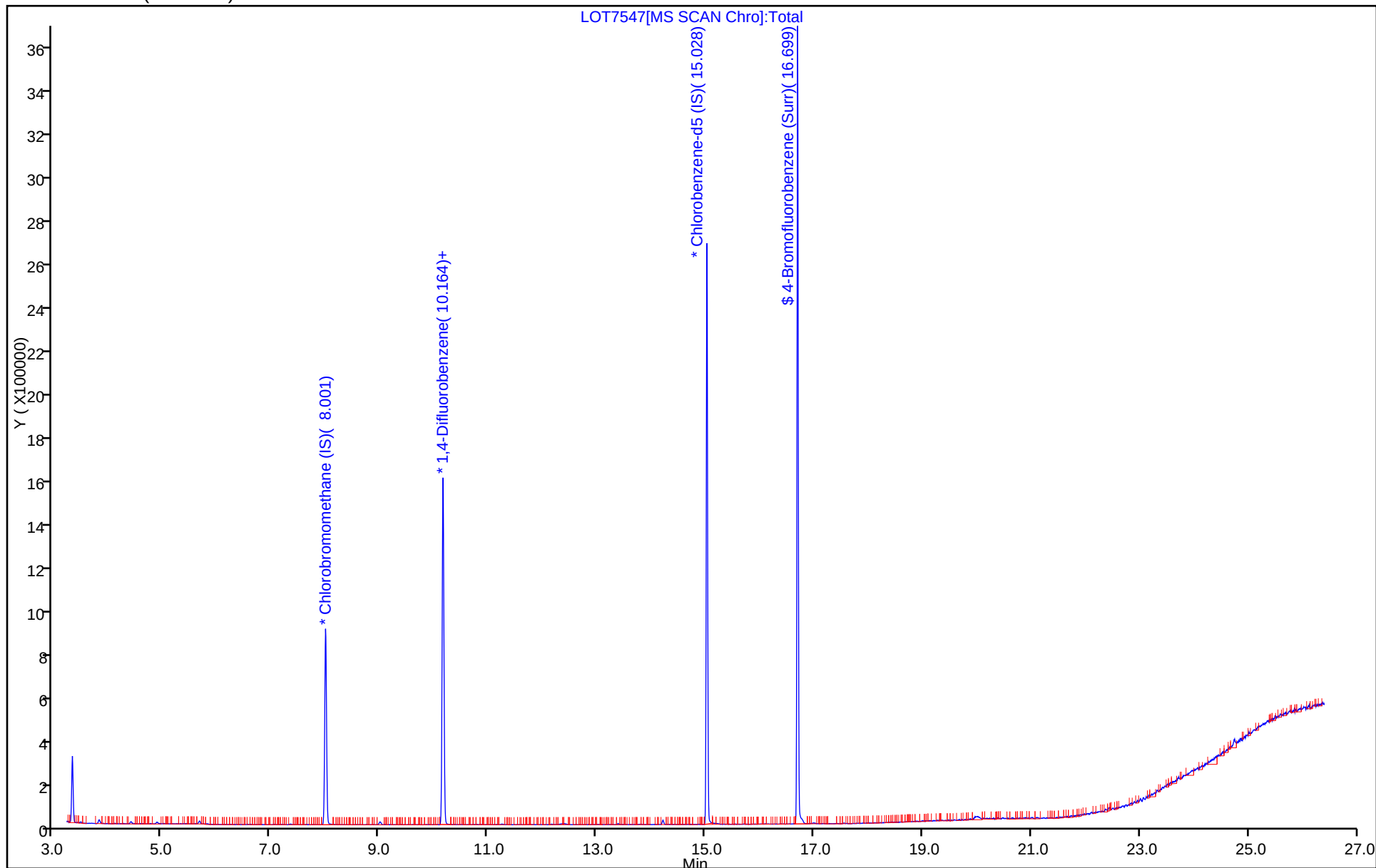
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Shipping and Receiving Documents

TAL Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
phone 865-291-3000 fax 865-584-4315

Canister Samples Chain of Custody Record

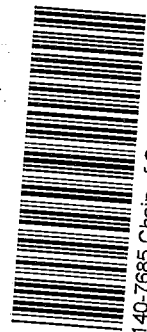
TestAmerica

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

THE LEADER IN ENVIRONMENTAL TESTING

Client Contact Information		Project Manager: Gary P. Riscetti		Sampled By: GB / GWP		1 of 2 COCs	
Company: NYSDEC		Phone: (607) 775-1545 x 116					
Address: 1679 Route 11		Site Contact:					
City/State/Zip: Kingston, NY / 12175		TAL Contact: gary.p.riscetti@dec.ny.gov					
Phone: (607) 775-2545 x 116							
FAX:							
Project Name: Fur Injection Gun off-site		Analysis Turnaround Time					
Site/location: CT55019A		K Standard (Specify) 30-day					
PO # Cabot 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	Canister ID
H33-C5	3-28-17	8:52	8:31	-29	-1	8799	10701
H33-BA-1	3-28-17	8:53	8:31	-30	-5.5	8549	10535
H33-BA-2	3-28-17	8:52	8:32	-30	-5	7461	09982
H35-BA	3-28-17	9:10	8:42	-30	-8	7197	10812
Field DUP 1	3-28-17	—	—	-30	-6	8461	10231
H16-OA	3-28-17	9:37	9:01	-30	-4	8829	09877
Sampled by:		Temperature (Fahrenheit)					
GB - Aztech		Interior		Ambient			
GWP - NYSDEC		Start		~ 43°			
		Stop		~ 35°			
		Interior		Pressure (inches of Hg)			
		Start		Ambient			
		Stop		29.9			
				30.2			
Special Instructions/QC Requirements & Comments:							
SS-Sub-slab vapor CS-Crawlspace air OA-Outdoor air							
BA-Basement air FF-First floor air							
Canisters Shipped by:		Date/Time:		Canisters Received by:			
Samples Relinquished by: Daniel Bubrick		Date/Time: 3-31-17 8:11		Received by: Daniel Bubrick		3-31-17 8:11	
Relinquished by: Daniel Bubrick		Date/Time: 3-31-17 1800		Received by: [Signature]		3-31-17 18:00	

CUSTODY SEALS INTACT
RECEIVED AT AMBIENT TRAP
6:30 4-3-17
2 BOXES FEDEX 7164 7164 5883 M
12 CANIS/12 FUMUS/12 G.C.



140-7685 Chain of Custody

TAL Knoxville 480501-Albany
 5815 Middlebrook Pike
 Knoxville, TN 37921
 phone 865-291-3000 fax 865-584-4315

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		Project Manager: Gary Priscatt		Sampled By: GBB/GWR		2 of 2 COCs	
Company: NYSDDEC		Phone: (607) 755-2545 x116					
Address: 1679 Route 11		Site Contact:					
City/State/Zip: Kirkwood, NY 13795		TAL Contact: gary.priscatt@dec.ny.gov					
Phone: (607) 755-2545 x116							
FAX:							
Project Name: Fmr Thruway Gun off site		Analysis Turnaround Time					
Site/location: CTSS019A		Standard (Specify) 30-day					
PO # Callard: 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	Canister ID	ASTM D-1946					Other (Please specify in notes section)
								TO-15	TO-14A	EPA 30	EPA 25C	ASTM D-1946	
H16-BA	3-28-17	9:36	9:00	-30	-3.5	8749	10873	X					
H15-BA	3-28-17	9:33	8:59	-29	-4	7418	09995	X					
H36-SS	3-28-17	10:18	10:01	-30	-13	8782	10719	X					
H36-BA	3-28-17	10:20	10:02	-30	0	8741	11265	X					
H19-BA	3-28-17	13:18	13:01	-30	-3	7419	09871	X					
H19-FF	3-28-17	13:22	13:02	-30	-5	7044	10369	X					

Sampled by:	Temperature (Fahrenheit)	
	Interior	Ambient
GB - Aztech	Start	~43°
	Stop	~35°
GWR - NYSDDEC	Pressure (inches of Hg)	
	Interior	Ambient
	Start	29.9
	Stop	30.2

Special Instructions/QC Requirements & Comments:

SS - Substrate vapor CS - Canister pressure air OA - Outdoor air
 BA - Basement air FF - First floor air

Canisters Shipped by:	Date/Time:	Canisters Received by:
Received by: Daniel Bubish	Date/Time: 3-31-17 8:11	Received by: Daniel Bubish 3-31-17 8:11
Relinquished by: Daniel Bubish	Date/Time: 3-31-17 1800	Received by: [Signature] 4-3-17 12:00

Log In Number:

TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Are the shipping containers intact?	/			☐ Containers, Broken	
2. Were ambient air containers received intact?			/	☒ Checked in lab	
3. The coolers/containers custody seal if present, is it intact?	/			☐ Yes ☐ NA	
4. Is the cooler temperature within limits? (> freezing temp. of water to 6°C, VOST: 10°C) Thermometer ID: _____ Correction factor: _____			/	☐ Cooler Out of Temp, Client Contacted, Proceed/Cancel ☐ Cooler Out of Temp, Same Day Receipt	
5. Were all of the sample containers received intact?	/			☐ Containers, Broken	
6. Were samples received in appropriate containers?	/			☐ Containers, Improper; Client Contacted; Proceed/Cancel	
7. Do sample container labels match COC? (IDs, Dates, Times)	/			☐ COC & Samples Do Not Match ☐ COC Incorrect/Incomplete ☐ COC Not Received	
8. Were all of the samples listed on the COC received?	/			☐ Sample Received, Not on COC ☐ Sample on COC, Not Received	
9. Is the date/time of sample collection noted?	/			☐ COC; No Date/Time; Client Contacted	
10. Was the sampler identified on the COC?	/			☐ Sampler Not Listed on COC	
11. Is the client and project name/# identified?	/			☐ COC Incorrect/Incomplete	
12. Are tests/parameters listed for each sample?	/			☐ COC No tests on COC	
13. Is the matrix of the samples noted?	/			☐ COC Incorrect/Incomplete	
14. Was COC relinquished? (Signed/Dated/Timed)	/			☐ COC Incorrect/Incomplete	
15. Were samples received within holding time?	/			☐ Holding Time - Receipt	
16. Were samples received with correct chemical preservative (excluding Encore)?			/	☐ pH Adjusted, pH Included (See box 16A) ☐ Incorrect Preservative	
17. Were VOA samples received without headspace?			/	☐ Headspace (VOA only) ☐ Residual Chlorine	
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number: _____			/		
19. For 1613B water samples is pH<9?			/	☐ If no, lab will adjust	
20. For rad samples was sample activity info. Provided?			/	☐ Project missing info	
Project #: 14002111 PM Instructions: _____					

Box 16A: pH Preservation Box 18A: Residual Chlorine

Preservative: _____

Lot Number: _____

Exp Date: _____

Analyst: _____

Date: _____

Time: _____

Labeling Verified by: _____ Date: _____

pH test strip lot number: _____

Date: 4/3/17

QA026R30.doc, 080916

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5
Date: 4/4/2017

[illegible]

ANALYTICAL REPORT

Job Number: 140-7698-1

Job Description: Former Ithaca Gun Factory # C755019A

Contract Number: C008010

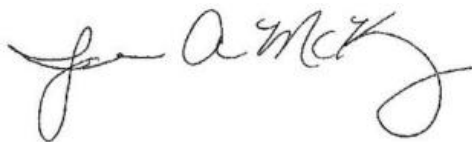
For:

New York State D.E.C.

1679 Rte. 11

Kirkwood, NY 13795

Attention: Gary Priscott



Approved for release.
Jamie A McKinney
Senior Project Manager
4/14/2017 11:49 AM

Jamie A McKinney, Senior Project Manager
5815 Middlebrook Pike, Knoxville, TN, 37921
(865)291-3000
jamie.mckinney@testamericainc.com
04/14/2017

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	17
Surrogate Summary	19
QC Sample Results	20
QC Association	25
Chronicle	26
Certification Summary	27
Method Summary	28
Sample Summary	29
Organic Sample Data	30
Air - GC/MS VOA	30
Method TO15 Low Level	30
Method TO15 Low Level QC Summary	31
Method TO15 Low Level Sample Data	39
Standards Data	118
Method TO15 Low Level ICAL Data	118
Method TO15 Low Level CCAL Data	186
Raw QC Data	200
Method TO15 Low Level Tune Data	200
Method TO15 Low Level Blank Data	208
Method TO15 Low Level LCS/LCSD Data	215

Table of Contents

Method TO15 Low Level Run Logs	222
Clean Canister Certification	229
Clean Canister Data	229
Shipping and Receiving Documents	241
Client Chain of Custody	242
Sample Receipt Checklist	244

Definitions/Glossary

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

TestAmerica Job ID: 140-7698-1

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
140-7698-1

Comments

No additional comments.

Receipt

The samples were received on 4/4/2017 2:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air - GC/MS VOA

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

Method(s) TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-10156 exhibited % difference of > 30% for the following analyte(s) Trichlorofluoromethane and Bromoform; 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.

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: 140-7698-1

Client Sample ID: H-37-BA

Lab Sample ID: 140-7698-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.11		0.080		ppb v/v	1		TO 15 LL	Total/NA
1,4-Dioxane	0.32		0.20		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.34		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	0.074		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.20		0.080		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.38		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	39		2.0		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
Tetrachloroethene	0.16		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.49		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.052		0.040		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.27		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	0.62		0.44		ug/m3	1		TO 15 LL	Total/NA
1,4-Dioxane	1.1		0.72		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	1.0		0.94		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.53		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.47		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.99		0.39		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.78		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.3		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	73		3.8		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.68		0.35		ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	1.1		0.54		ug/m3	1		TO 15 LL	Total/NA
Toluene	1.9		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	0.28		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.5		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H-37-FF

Lab Sample ID: 140-7698-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.085		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.77		0.32		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	0.082		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.34		0.080		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.39		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.49		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	220	E	2.0		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
Tetrachloroethene	0.12		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.63		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.043		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
Ethanol - DL	160	D	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	0.47		0.44		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	2.3		0.94		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: 140-7698-1

Client Sample ID: H-37-FF (Continued)

Lab Sample ID: 140-7698-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.69		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.51		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	1.6		0.39		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.81		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.4		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	410	E	3.8		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.70		0.35		ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	0.79		0.54		ug/m3	1		TO 15 LL	Total/NA
Toluene	2.4		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	0.23		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.6		0.45		ug/m3	1		TO 15 LL	Total/NA
Ethanol - DL	300	D	38		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H-37-SS

Lab Sample ID: 140-7698-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.1		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.40		0.32		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.23		0.080		ppb v/v	1		TO 15 LL	Total/NA
Bromodichloromethane	0.15		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.44		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	33	E	0.080		ppb v/v	1		TO 15 LL	Total/NA
Cyclohexane	0.26		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	2.0		2.0		ppb v/v	1		TO 15 LL	Total/NA
Hexane	0.61		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.35		0.080		ppb v/v	1		TO 15 LL	Total/NA
o-Xylene	0.095		0.080		ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	3.5		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.61		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	0.27		0.080		ppb v/v	1		TO 15 LL	Total/NA
Chloroform - DL	32	D	0.40		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	6.0		0.44		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	1.2		0.94		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.75		0.26		ug/m3	1		TO 15 LL	Total/NA
Bromodichloromethane	1.0		0.54		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	2.7		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	160	E	0.39		ug/m3	1		TO 15 LL	Total/NA
Cyclohexane	0.89		0.69		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.4		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	3.8		3.8		ug/m3	1		TO 15 LL	Total/NA
Hexane	2.1		0.70		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	0.41		0.35		ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	24		0.54		ug/m3	1		TO 15 LL	Total/NA
Toluene	2.3		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	64		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.5		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: 140-7698-1

Client Sample ID: H-37-SS (Continued)

Lab Sample ID: 140-7698-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform - DL	160	D	2.0		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: 140-7698-1

Client Sample ID: H-37-BA

Lab Sample ID: 140-7698-1

Date Collected: 03/28/17 16:33

Matrix: Air

Date Received: 04/04/17 14:20

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	0.11		0.080		ppb v/v			04/06/17 09:45	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/06/17 09:45	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/06/17 09:45	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/06/17 09:45	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/06/17 09:45	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/06/17 09:45	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/06/17 09:45	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			04/06/17 09:45	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/06/17 09:45	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/06/17 09:45	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/06/17 09:45	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/06/17 09:45	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/06/17 09:45	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/06/17 09:45	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/06/17 09:45	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/06/17 09:45	1
1,4-Dioxane	0.32		0.20		ppb v/v			04/06/17 09:45	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/06/17 09:45	1
2-Butanone	0.34		0.32		ppb v/v			04/06/17 09:45	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/06/17 09:45	1
Benzene	0.16		0.080		ppb v/v			04/06/17 09:45	1
Benzyl chloride	ND		0.16		ppb v/v			04/06/17 09:45	1
Bromodichloromethane	ND		0.080		ppb v/v			04/06/17 09:45	1
Bromoform	ND		0.080		ppb v/v			04/06/17 09:45	1
Bromomethane	ND		0.080		ppb v/v			04/06/17 09:45	1
Carbon tetrachloride	0.074		0.040		ppb v/v			04/06/17 09:45	1
Chlorobenzene	ND		0.080		ppb v/v			04/06/17 09:45	1
Chloroethane	ND		0.080		ppb v/v			04/06/17 09:45	1
Chloroform	0.20		0.080		ppb v/v			04/06/17 09:45	1
Chloromethane	0.38		0.20		ppb v/v			04/06/17 09:45	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/06/17 09:45	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/06/17 09:45	1
Cyclohexane	ND		0.20		ppb v/v			04/06/17 09:45	1
Dibromochloromethane	ND		0.080		ppb v/v			04/06/17 09:45	1
Dichlorodifluoromethane	0.47		0.080		ppb v/v			04/06/17 09:45	1
Ethanol	39		2.0		ppb v/v			04/06/17 09:45	1
Ethylbenzene	ND		0.080		ppb v/v			04/06/17 09:45	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/06/17 09:45	1
Hexane	ND		0.20		ppb v/v			04/06/17 09:45	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/06/17 09:45	1
Methylene Chloride	ND		0.20		ppb v/v			04/06/17 09:45	1
m-Xylene & p-Xylene	0.16		0.080		ppb v/v			04/06/17 09:45	1
o-Xylene	ND		0.080		ppb v/v			04/06/17 09:45	1
Styrene	ND		0.080		ppb v/v			04/06/17 09:45	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/06/17 09:45	1
Tetrachloroethene	0.16		0.080		ppb v/v			04/06/17 09:45	1
Toluene	0.49		0.12		ppb v/v			04/06/17 09:45	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/06/17 09:45	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7698-1

Client Sample ID: H-37-BA

Lab Sample ID: 140-7698-1

Date Collected: 03/28/17 16:33

Matrix: Air

Date Received: 04/04/17 14:20

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			04/06/17 09:45	1
Trichloroethene	0.052		0.040		ppb v/v			04/06/17 09:45	1
Trichlorofluoromethane	0.27		0.080		ppb v/v			04/06/17 09:45	1
Vinyl chloride	ND		0.040		ppb v/v			04/06/17 09:45	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.62		0.44		ug/m3			04/06/17 09:45	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/06/17 09:45	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/06/17 09:45	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/06/17 09:45	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/06/17 09:45	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/06/17 09:45	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/06/17 09:45	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			04/06/17 09:45	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/06/17 09:45	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/06/17 09:45	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/06/17 09:45	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/06/17 09:45	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/06/17 09:45	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/06/17 09:45	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/06/17 09:45	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/06/17 09:45	1
1,4-Dioxane	1.1		0.72		ug/m3			04/06/17 09:45	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/06/17 09:45	1
2-Butanone	1.0		0.94		ug/m3			04/06/17 09:45	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/06/17 09:45	1
Benzene	0.53		0.26		ug/m3			04/06/17 09:45	1
Benzyl chloride	ND		0.83		ug/m3			04/06/17 09:45	1
Bromodichloromethane	ND		0.54		ug/m3			04/06/17 09:45	1
Bromoform	ND		0.83		ug/m3			04/06/17 09:45	1
Bromomethane	ND		0.31		ug/m3			04/06/17 09:45	1
Carbon tetrachloride	0.47		0.25		ug/m3			04/06/17 09:45	1
Chlorobenzene	ND		0.37		ug/m3			04/06/17 09:45	1
Chloroethane	ND		0.21		ug/m3			04/06/17 09:45	1
Chloroform	0.99		0.39		ug/m3			04/06/17 09:45	1
Chloromethane	0.78		0.41		ug/m3			04/06/17 09:45	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/06/17 09:45	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/06/17 09:45	1
Cyclohexane	ND		0.69		ug/m3			04/06/17 09:45	1
Dibromochloromethane	ND		0.68		ug/m3			04/06/17 09:45	1
Dichlorodifluoromethane	2.3		0.40		ug/m3			04/06/17 09:45	1
Ethanol	73		3.8		ug/m3			04/06/17 09:45	1
Ethylbenzene	ND		0.35		ug/m3			04/06/17 09:45	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/06/17 09:45	1
Hexane	ND		0.70		ug/m3			04/06/17 09:45	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/06/17 09:45	1
Methylene Chloride	ND		0.69		ug/m3			04/06/17 09:45	1
m-Xylene & p-Xylene	0.68		0.35		ug/m3			04/06/17 09:45	1
o-Xylene	ND		0.35		ug/m3			04/06/17 09:45	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7698-1

Client Sample ID: H-37-BA

Lab Sample ID: 140-7698-1

Date Collected: 03/28/17 16:33

Matrix: Air

Date Received: 04/04/17 14:20

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			04/06/17 09:45	1
t-Butyl alcohol	ND		0.97		ug/m3			04/06/17 09:45	1
Tetrachloroethene	1.1		0.54		ug/m3			04/06/17 09:45	1
Toluene	1.9		0.45		ug/m3			04/06/17 09:45	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/06/17 09:45	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/06/17 09:45	1
Trichloroethene	0.28		0.21		ug/m3			04/06/17 09:45	1
Trichlorofluoromethane	1.5		0.45		ug/m3			04/06/17 09:45	1
Vinyl chloride	ND		0.10		ug/m3			04/06/17 09:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		60 - 140					04/06/17 09:45	1

Client Sample ID: H-37-FF

Lab Sample ID: 140-7698-2

Date Collected: 03/28/17 16:30

Matrix: Air

Date Received: 04/04/17 14:20

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	0.085		0.080		ppb v/v			04/06/17 01:38	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/06/17 01:38	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/06/17 01:38	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/06/17 01:38	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/06/17 01:38	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/06/17 01:38	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/06/17 01:38	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			04/06/17 01:38	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/06/17 01:38	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/06/17 01:38	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/06/17 01:38	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/06/17 01:38	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/06/17 01:38	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/06/17 01:38	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/06/17 01:38	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/06/17 01:38	1
1,4-Dioxane	ND		0.20		ppb v/v			04/06/17 01:38	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/06/17 01:38	1
2-Butanone	0.77		0.32		ppb v/v			04/06/17 01:38	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/06/17 01:38	1
Benzene	0.22		0.080		ppb v/v			04/06/17 01:38	1
Benzyl chloride	ND		0.16		ppb v/v			04/06/17 01:38	1
Bromodichloromethane	ND		0.080		ppb v/v			04/06/17 01:38	1
Bromoform	ND		0.080		ppb v/v			04/06/17 01:38	1
Bromomethane	ND		0.080		ppb v/v			04/06/17 01:38	1
Carbon tetrachloride	0.082		0.040		ppb v/v			04/06/17 01:38	1
Chlorobenzene	ND		0.080		ppb v/v			04/06/17 01:38	1
Chloroethane	ND		0.080		ppb v/v			04/06/17 01:38	1
Chloroform	0.34		0.080		ppb v/v			04/06/17 01:38	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7698-1

Client Sample ID: H-37-FF

Lab Sample ID: 140-7698-2

Date Collected: 03/28/17 16:30

Matrix: Air

Date Received: 04/04/17 14:20

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	0.39		0.20		ppb v/v			04/06/17 01:38	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/06/17 01:38	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/06/17 01:38	1
Cyclohexane	ND		0.20		ppb v/v			04/06/17 01:38	1
Dibromochloromethane	ND		0.080		ppb v/v			04/06/17 01:38	1
Dichlorodifluoromethane	0.49		0.080		ppb v/v			04/06/17 01:38	1
Ethanol	220	E	2.0		ppb v/v			04/06/17 01:38	1
Ethylbenzene	ND		0.080		ppb v/v			04/06/17 01:38	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/06/17 01:38	1
Hexane	ND		0.20		ppb v/v			04/06/17 01:38	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/06/17 01:38	1
Methylene Chloride	ND		0.20		ppb v/v			04/06/17 01:38	1
m-Xylene & p-Xylene	0.16		0.080		ppb v/v			04/06/17 01:38	1
o-Xylene	ND		0.080		ppb v/v			04/06/17 01:38	1
Styrene	ND		0.080		ppb v/v			04/06/17 01:38	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/06/17 01:38	1
Tetrachloroethene	0.12		0.080		ppb v/v			04/06/17 01:38	1
Toluene	0.63		0.12		ppb v/v			04/06/17 01:38	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/06/17 01:38	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/06/17 01:38	1
Trichloroethene	0.043		0.040		ppb v/v			04/06/17 01:38	1
Trichlorofluoromethane	0.29		0.080		ppb v/v			04/06/17 01:38	1
Vinyl chloride	ND		0.040		ppb v/v			04/06/17 01:38	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.47		0.44		ug/m3			04/06/17 01:38	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/06/17 01:38	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/06/17 01:38	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/06/17 01:38	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/06/17 01:38	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/06/17 01:38	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/06/17 01:38	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			04/06/17 01:38	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/06/17 01:38	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/06/17 01:38	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/06/17 01:38	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/06/17 01:38	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/06/17 01:38	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/06/17 01:38	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/06/17 01:38	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/06/17 01:38	1
1,4-Dioxane	ND		0.72		ug/m3			04/06/17 01:38	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/06/17 01:38	1
2-Butanone	2.3		0.94		ug/m3			04/06/17 01:38	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/06/17 01:38	1
Benzene	0.69		0.26		ug/m3			04/06/17 01:38	1
Benzyl chloride	ND		0.83		ug/m3			04/06/17 01:38	1
Bromodichloromethane	ND		0.54		ug/m3			04/06/17 01:38	1
Bromoform	ND		0.83		ug/m3			04/06/17 01:38	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7698-1

Client Sample ID: H-37-FF

Lab Sample ID: 140-7698-2

Date Collected: 03/28/17 16:30

Matrix: Air

Date Received: 04/04/17 14:20

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			04/06/17 01:38	1
Carbon tetrachloride	0.51		0.25		ug/m3			04/06/17 01:38	1
Chlorobenzene	ND		0.37		ug/m3			04/06/17 01:38	1
Chloroethane	ND		0.21		ug/m3			04/06/17 01:38	1
Chloroform	1.6		0.39		ug/m3			04/06/17 01:38	1
Chloromethane	0.81		0.41		ug/m3			04/06/17 01:38	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/06/17 01:38	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/06/17 01:38	1
Cyclohexane	ND		0.69		ug/m3			04/06/17 01:38	1
Dibromochloromethane	ND		0.68		ug/m3			04/06/17 01:38	1
Dichlorodifluoromethane	2.4		0.40		ug/m3			04/06/17 01:38	1
Ethanol	410 E		3.8		ug/m3			04/06/17 01:38	1
Ethylbenzene	ND		0.35		ug/m3			04/06/17 01:38	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/06/17 01:38	1
Hexane	ND		0.70		ug/m3			04/06/17 01:38	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/06/17 01:38	1
Methylene Chloride	ND		0.69		ug/m3			04/06/17 01:38	1
m-Xylene & p-Xylene	0.70		0.35		ug/m3			04/06/17 01:38	1
o-Xylene	ND		0.35		ug/m3			04/06/17 01:38	1
Styrene	ND		0.34		ug/m3			04/06/17 01:38	1
t-Butyl alcohol	ND		0.97		ug/m3			04/06/17 01:38	1
Tetrachloroethene	0.79		0.54		ug/m3			04/06/17 01:38	1
Toluene	2.4		0.45		ug/m3			04/06/17 01:38	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/06/17 01:38	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/06/17 01:38	1
Trichloroethene	0.23		0.21		ug/m3			04/06/17 01:38	1
Trichlorofluoromethane	1.6		0.45		ug/m3			04/06/17 01:38	1
Vinyl chloride	ND		0.10		ug/m3			04/06/17 01:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		60 - 140		04/06/17 01:38	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
Ethanol	160	D	20		ppb v/v			04/06/17 10:29	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	300	D	38		ug/m3			04/06/17 10:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		60 - 140		04/06/17 10:29	1

Client Sample ID: H-37-SS

Lab Sample ID: 140-7698-3

Date Collected: 03/28/17 16:32

Matrix: Air

Date Received: 04/04/17 14:20

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	1.1		0.080		ppb v/v			04/06/17 02:24	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7698-1

Client Sample ID: H-37-SS

Lab Sample ID: 140-7698-3

Date Collected: 03/28/17 16:32

Matrix: Air

Date Received: 04/04/17 14:20

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
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/06/17 02:24	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/06/17 02:24	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/06/17 02:24	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/06/17 02:24	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/06/17 02:24	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/06/17 02:24	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			04/06/17 02:24	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/06/17 02:24	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/06/17 02:24	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/06/17 02:24	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/06/17 02:24	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/06/17 02:24	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/06/17 02:24	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/06/17 02:24	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/06/17 02:24	1
1,4-Dioxane	ND		0.20		ppb v/v			04/06/17 02:24	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/06/17 02:24	1
2-Butanone	0.40		0.32		ppb v/v			04/06/17 02:24	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/06/17 02:24	1
Benzene	0.23		0.080		ppb v/v			04/06/17 02:24	1
Benzyl chloride	ND		0.16		ppb v/v			04/06/17 02:24	1
Bromodichloromethane	0.15		0.080		ppb v/v			04/06/17 02:24	1
Bromoform	ND		0.080		ppb v/v			04/06/17 02:24	1
Bromomethane	ND		0.080		ppb v/v			04/06/17 02:24	1
Carbon tetrachloride	0.44		0.040		ppb v/v			04/06/17 02:24	1
Chlorobenzene	ND		0.080		ppb v/v			04/06/17 02:24	1
Chloroethane	ND		0.080		ppb v/v			04/06/17 02:24	1
Chloroform	33 E		0.080		ppb v/v			04/06/17 02:24	1
Chloromethane	ND		0.20		ppb v/v			04/06/17 02:24	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/06/17 02:24	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/06/17 02:24	1
Cyclohexane	0.26		0.20		ppb v/v			04/06/17 02:24	1
Dibromochloromethane	ND		0.080		ppb v/v			04/06/17 02:24	1
Dichlorodifluoromethane	0.49		0.080		ppb v/v			04/06/17 02:24	1
Ethanol	2.0		2.0		ppb v/v			04/06/17 02:24	1
Ethylbenzene	ND		0.080		ppb v/v			04/06/17 02:24	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/06/17 02:24	1
Hexane	0.61		0.20		ppb v/v			04/06/17 02:24	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/06/17 02:24	1
Methylene Chloride	ND		0.20		ppb v/v			04/06/17 02:24	1
m-Xylene & p-Xylene	0.35		0.080		ppb v/v			04/06/17 02:24	1
o-Xylene	0.095		0.080		ppb v/v			04/06/17 02:24	1
Styrene	ND		0.080		ppb v/v			04/06/17 02:24	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/06/17 02:24	1
Tetrachloroethene	3.5		0.080		ppb v/v			04/06/17 02:24	1
Toluene	0.61		0.12		ppb v/v			04/06/17 02:24	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/06/17 02:24	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/06/17 02:24	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7698-1

Client Sample ID: H-37-SS

Lab Sample ID: 140-7698-3

Date Collected: 03/28/17 16:32

Matrix: Air

Date Received: 04/04/17 14:20

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
Trichloroethene	12		0.040		ppb v/v			04/06/17 02:24	1
Trichlorofluoromethane	0.27		0.080		ppb v/v			04/06/17 02:24	1
Vinyl chloride	ND		0.040		ppb v/v			04/06/17 02:24	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	6.0		0.44		ug/m3			04/06/17 02:24	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/06/17 02:24	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/06/17 02:24	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/06/17 02:24	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/06/17 02:24	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/06/17 02:24	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/06/17 02:24	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			04/06/17 02:24	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/06/17 02:24	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/06/17 02:24	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/06/17 02:24	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/06/17 02:24	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/06/17 02:24	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/06/17 02:24	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/06/17 02:24	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/06/17 02:24	1
1,4-Dioxane	ND		0.72		ug/m3			04/06/17 02:24	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/06/17 02:24	1
2-Butanone	1.2		0.94		ug/m3			04/06/17 02:24	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/06/17 02:24	1
Benzene	0.75		0.26		ug/m3			04/06/17 02:24	1
Benzyl chloride	ND		0.83		ug/m3			04/06/17 02:24	1
Bromodichloromethane	1.0		0.54		ug/m3			04/06/17 02:24	1
Bromoform	ND		0.83		ug/m3			04/06/17 02:24	1
Bromomethane	ND		0.31		ug/m3			04/06/17 02:24	1
Carbon tetrachloride	2.7		0.25		ug/m3			04/06/17 02:24	1
Chlorobenzene	ND		0.37		ug/m3			04/06/17 02:24	1
Chloroethane	ND		0.21		ug/m3			04/06/17 02:24	1
Chloroform	160 E		0.39		ug/m3			04/06/17 02:24	1
Chloromethane	ND		0.41		ug/m3			04/06/17 02:24	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/06/17 02:24	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/06/17 02:24	1
Cyclohexane	0.89		0.69		ug/m3			04/06/17 02:24	1
Dibromochloromethane	ND		0.68		ug/m3			04/06/17 02:24	1
Dichlorodifluoromethane	2.4		0.40		ug/m3			04/06/17 02:24	1
Ethanol	3.8		3.8		ug/m3			04/06/17 02:24	1
Ethylbenzene	ND		0.35		ug/m3			04/06/17 02:24	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/06/17 02:24	1
Hexane	2.1		0.70		ug/m3			04/06/17 02:24	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/06/17 02:24	1
Methylene Chloride	ND		0.69		ug/m3			04/06/17 02:24	1
m-Xylene & p-Xylene	1.5		0.35		ug/m3			04/06/17 02:24	1
o-Xylene	0.41		0.35		ug/m3			04/06/17 02:24	1
Styrene	ND		0.34		ug/m3			04/06/17 02:24	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7698-1

Client Sample ID: H-37-SS

Lab Sample ID: 140-7698-3

Date Collected: 03/28/17 16:32

Matrix: Air

Date Received: 04/04/17 14:20

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
t-Butyl alcohol	ND		0.97		ug/m3			04/06/17 02:24	1
Tetrachloroethene	24		0.54		ug/m3			04/06/17 02:24	1
Toluene	2.3		0.45		ug/m3			04/06/17 02:24	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/06/17 02:24	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/06/17 02:24	1
Trichloroethene	64		0.21		ug/m3			04/06/17 02:24	1
Trichlorofluoromethane	1.5		0.45		ug/m3			04/06/17 02:24	1
Vinyl chloride	ND		0.10		ug/m3			04/06/17 02:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		60 - 140		04/06/17 02:24	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	32	D	0.40		ppb v/v			04/06/17 11:12	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	160	D	2.0		ug/m3			04/06/17 11:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		60 - 140		04/06/17 11:12	1

Default Detection Limits

Client: New York State D.E.C.

TestAmerica Job ID: 140-7698-1

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: 140-7698-1

Project/Site: Former Ithaca Gun Factory # C755019A

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

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	2.0	0.64	ppb v/v	TO 15 LL
Ethanol	3.8	1.2	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	0.040	0.029	ppb v/v	TO 15 LL
Vinyl chloride	0.10	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: 140-7698-1

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)
140-7698-1	H-37-BA	103
140-7698-2	H-37-FF	103
140-7698-2 - DL	H-37-FF	99
140-7698-3	H-37-SS	104
140-7698-3 - DL	H-37-SS	102
LCS 140-10156/1002	Lab Control Sample	109
MB 140-10156/18	Method Blank	104

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: 140-7698-1

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

Lab Sample ID: MB 140-10156/18

Matrix: Air

Analysis Batch: 10156

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			04/05/17 14:19	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/05/17 14:19	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/05/17 14:19	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/05/17 14:19	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/05/17 14:19	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/05/17 14:19	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/05/17 14:19	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			04/05/17 14:19	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/05/17 14:19	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/05/17 14:19	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/05/17 14:19	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/05/17 14:19	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/05/17 14:19	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/05/17 14:19	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/05/17 14:19	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/05/17 14:19	1
1,4-Dioxane	ND		0.20		ppb v/v			04/05/17 14:19	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/05/17 14:19	1
2-Butanone	ND		0.32		ppb v/v			04/05/17 14:19	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/05/17 14:19	1
Benzene	ND		0.080		ppb v/v			04/05/17 14:19	1
Benzyl chloride	ND		0.16		ppb v/v			04/05/17 14:19	1
Bromodichloromethane	ND		0.080		ppb v/v			04/05/17 14:19	1
Bromoform	ND		0.080		ppb v/v			04/05/17 14:19	1
Bromomethane	ND		0.080		ppb v/v			04/05/17 14:19	1
Carbon tetrachloride	ND		0.040		ppb v/v			04/05/17 14:19	1
Chlorobenzene	ND		0.080		ppb v/v			04/05/17 14:19	1
Chloroethane	ND		0.080		ppb v/v			04/05/17 14:19	1
Chloroform	ND		0.080		ppb v/v			04/05/17 14:19	1
Chloromethane	ND		0.20		ppb v/v			04/05/17 14:19	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/05/17 14:19	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/05/17 14:19	1
Cyclohexane	ND		0.20		ppb v/v			04/05/17 14:19	1
Dibromochloromethane	ND		0.080		ppb v/v			04/05/17 14:19	1
Dichlorodifluoromethane	ND		0.080		ppb v/v			04/05/17 14:19	1
Ethanol	ND		2.0		ppb v/v			04/05/17 14:19	1
Ethylbenzene	ND		0.080		ppb v/v			04/05/17 14:19	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/05/17 14:19	1
Hexane	ND		0.20		ppb v/v			04/05/17 14:19	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/05/17 14:19	1
Methylene Chloride	ND		0.20		ppb v/v			04/05/17 14:19	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			04/05/17 14:19	1
o-Xylene	ND		0.080		ppb v/v			04/05/17 14:19	1
Styrene	ND		0.080		ppb v/v			04/05/17 14:19	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/05/17 14:19	1
Tetrachloroethene	ND		0.080		ppb v/v			04/05/17 14:19	1
Toluene	ND		0.12		ppb v/v			04/05/17 14:19	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/05/17 14:19	1

TestAmerica Knoxville

QC Sample Results

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

TestAmerica Job ID: 140-7698-1

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

Lab Sample ID: MB 140-10156/18
Matrix: Air
Analysis Batch: 10156

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			04/05/17 14:19	1
Trichloroethene	ND		0.040		ppb v/v			04/05/17 14:19	1
Trichlorofluoromethane	ND		0.080		ppb v/v			04/05/17 14:19	1
Vinyl chloride	ND		0.040		ppb v/v			04/05/17 14:19	1
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/05/17 14:19	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/05/17 14:19	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/05/17 14:19	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/05/17 14:19	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/05/17 14:19	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/05/17 14:19	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/05/17 14:19	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			04/05/17 14:19	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/05/17 14:19	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/05/17 14:19	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/05/17 14:19	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/05/17 14:19	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/05/17 14:19	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/05/17 14:19	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/05/17 14:19	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/05/17 14:19	1
1,4-Dioxane	ND		0.72		ug/m3			04/05/17 14:19	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/05/17 14:19	1
2-Butanone	ND		0.94		ug/m3			04/05/17 14:19	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/05/17 14:19	1
Benzene	ND		0.26		ug/m3			04/05/17 14:19	1
Benzyl chloride	ND		0.83		ug/m3			04/05/17 14:19	1
Bromodichloromethane	ND		0.54		ug/m3			04/05/17 14:19	1
Bromoform	ND		0.83		ug/m3			04/05/17 14:19	1
Bromomethane	ND		0.31		ug/m3			04/05/17 14:19	1
Carbon tetrachloride	ND		0.25		ug/m3			04/05/17 14:19	1
Chlorobenzene	ND		0.37		ug/m3			04/05/17 14:19	1
Chloroethane	ND		0.21		ug/m3			04/05/17 14:19	1
Chloroform	ND		0.39		ug/m3			04/05/17 14:19	1
Chloromethane	ND		0.41		ug/m3			04/05/17 14:19	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/05/17 14:19	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/05/17 14:19	1
Cyclohexane	ND		0.69		ug/m3			04/05/17 14:19	1
Dibromochloromethane	ND		0.68		ug/m3			04/05/17 14:19	1
Dichlorodifluoromethane	ND		0.40		ug/m3			04/05/17 14:19	1
Ethanol	ND		3.8		ug/m3			04/05/17 14:19	1
Ethylbenzene	ND		0.35		ug/m3			04/05/17 14:19	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/05/17 14:19	1
Hexane	ND		0.70		ug/m3			04/05/17 14:19	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/05/17 14:19	1
Methylene Chloride	ND		0.69		ug/m3			04/05/17 14:19	1

TestAmerica Knoxville

QC Sample Results

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

TestAmerica Job ID: 140-7698-1

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

Lab Sample ID: MB 140-10156/18

Matrix: Air

Analysis Batch: 10156

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			04/05/17 14:19	1
o-Xylene	ND		0.35		ug/m3			04/05/17 14:19	1
Styrene	ND		0.34		ug/m3			04/05/17 14:19	1
t-Butyl alcohol	ND		0.97		ug/m3			04/05/17 14:19	1
Tetrachloroethene	ND		0.54		ug/m3			04/05/17 14:19	1
Toluene	ND		0.45		ug/m3			04/05/17 14:19	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/05/17 14:19	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/05/17 14:19	1
Trichloroethene	ND		0.21		ug/m3			04/05/17 14:19	1
Trichlorofluoromethane	ND		0.45		ug/m3			04/05/17 14:19	1
Vinyl chloride	ND		0.10		ug/m3			04/05/17 14:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		60 - 140		04/05/17 14:19	1

Lab Sample ID: LCS 140-10156/1002

Matrix: Air

Analysis Batch: 10156

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	2.42		ppb v/v		121	70 - 130
1,1,2,2-Tetrachloroethane	2.00	1.81		ppb v/v		91	70 - 130
1,1,2-Trichloroethane	2.00	1.90		ppb v/v		95	70 - 130
1,1,2-Trichlorotrifluoroethane	2.00	2.34		ppb v/v		117	70 - 130
1,1-Dichloroethane	2.00	1.85		ppb v/v		92	70 - 130
1,1-Dichloroethene	2.00	2.16		ppb v/v		108	70 - 130
1,2,4-Trichlorobenzene	2.00	2.14		ppb v/v		107	60 - 140
1,2,4-Trimethylbenzene	2.00	1.90		ppb v/v		95	70 - 130
1,2-Dibromoethane	2.00	2.16		ppb v/v		108	70 - 130
1,2-Dichlorobenzene	2.00	1.98		ppb v/v		99	70 - 130
1,2-Dichloroethane	2.00	2.33		ppb v/v		116	70 - 130
1,2-Dichloropropane	2.00	1.81		ppb v/v		90	70 - 130
1,2-Dichlorotetrafluoroethane	2.00	2.44		ppb v/v		122	60 - 140
1,3,5-Trimethylbenzene	2.00	1.86		ppb v/v		93	70 - 130
1,3-Dichlorobenzene	2.00	2.05		ppb v/v		102	70 - 130
1,4-Dichlorobenzene	2.00	2.04		ppb v/v		102	70 - 130
1,4-Dioxane	2.00	1.70		ppb v/v		85	60 - 140
2,2,4-Trimethylpentane	2.00	1.83		ppb v/v		91	70 - 130
2-Butanone	2.00	1.53		ppb v/v		77	60 - 140
4-Methyl-2-pentanone (MIBK)	2.00	1.51		ppb v/v		75	60 - 140
Benzene	2.00	1.95		ppb v/v		98	70 - 130
Benzyl chloride	2.00	1.95		ppb v/v		97	70 - 130
Bromodichloromethane	2.00	2.44		ppb v/v		122	70 - 130
Bromoform	2.00	2.77		ppb v/v		138	60 - 140
Bromomethane	2.00	2.09		ppb v/v		104	70 - 130
Carbon tetrachloride	2.00	2.60		ppb v/v		130	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: 140-7698-1

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

Lab Sample ID: LCS 140-10156/1002

Matrix: Air

Analysis Batch: 10156

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	2.00	1.79		ppb v/v		89	70 - 130
Chloroform	2.00	2.23		ppb v/v		112	70 - 130
Chloromethane	2.00	1.65		ppb v/v		83	60 - 140
cis-1,2-Dichloroethene	2.00	2.01		ppb v/v		100	70 - 130
cis-1,3-Dichloropropene	2.00	2.16		ppb v/v		108	70 - 130
Cyclohexane	2.00	2.00		ppb v/v		100	70 - 130
Dibromochloromethane	2.00	2.58		ppb v/v		129	70 - 130
Dichlorodifluoromethane	2.00	2.47		ppb v/v		124	60 - 140
Ethanol	10.0	7.91		ppb v/v		79	60 - 140
Ethylbenzene	2.00	1.85		ppb v/v		93	70 - 130
Hexachlorobutadiene	2.00	2.23		ppb v/v		112	60 - 140
Hexane	2.00	1.69		ppb v/v		85	70 - 130
Methyl tert-butyl ether	2.00	1.75		ppb v/v		87	60 - 140
Methylene Chloride	2.00	2.00		ppb v/v		100	70 - 130
m-Xylene & p-Xylene	4.00	3.79		ppb v/v		95	70 - 130
o-Xylene	2.00	1.84		ppb v/v		92	70 - 130
Styrene	2.00	2.03		ppb v/v		101	70 - 130
t-Butyl alcohol	2.00	1.87		ppb v/v		93	60 - 140
Tetrachloroethene	2.00	2.24		ppb v/v		112	70 - 130
Toluene	2.00	1.93		ppb v/v		96	70 - 130
trans-1,2-Dichloroethene	2.00	1.95		ppb v/v		97	70 - 130
trans-1,3-Dichloropropene	2.00	2.12		ppb v/v		106	70 - 130
Trichloroethene	2.00	2.31		ppb v/v		116	70 - 130
Trichlorofluoromethane	2.00	2.65		ppb v/v		132	60 - 140
Vinyl chloride	2.00	1.90		ppb v/v		95	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	11	13.2		ug/m3		121	70 - 130
1,1,1,2-Tetrachloroethane	14	12.4		ug/m3		91	70 - 130
1,1,2-Trichloroethane	11	10.4		ug/m3		95	70 - 130
1,1,2-Trichlorotrifluoroethane	15	18.0		ug/m3		117	70 - 130
1,1-Dichloroethane	8.1	7.48		ug/m3		92	70 - 130
1,1-Dichloroethene	7.9	8.56		ug/m3		108	70 - 130
1,2,4-Trichlorobenzene	15	15.9		ug/m3		107	60 - 140
1,2,4-Trimethylbenzene	9.8	9.35		ug/m3		95	70 - 130
1,2-Dibromoethane	15	16.6		ug/m3		108	70 - 130
1,2-Dichlorobenzene	12	11.9		ug/m3		99	70 - 130
1,2-Dichloroethane	8.1	9.41		ug/m3		116	70 - 130
1,2-Dichloropropane	9.2	8.35		ug/m3		90	70 - 130
1,2-Dichlorotetrafluoroethane	14	17.1		ug/m3		122	60 - 140
1,3,5-Trimethylbenzene	9.8	9.16		ug/m3		93	70 - 130
1,3-Dichlorobenzene	12	12.3		ug/m3		102	70 - 130
1,4-Dichlorobenzene	12	12.2		ug/m3		102	70 - 130
1,4-Dioxane	7.2	6.13		ug/m3		85	60 - 140
2,2,4-Trimethylpentane	9.3	8.53		ug/m3		91	70 - 130
2-Butanone	5.9	4.52		ug/m3		77	60 - 140
4-Methyl-2-pentanone (MIBK)	8.2	6.18		ug/m3		75	60 - 140

TestAmerica Knoxville

QC Sample Results

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

TestAmerica Job ID: 140-7698-1

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

Lab Sample ID: LCS 140-10156/1002

Matrix: Air

Analysis Batch: 10156

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	6.24		ug/m3		98	70 - 130
Benzyl chloride	10	10.1		ug/m3		97	70 - 130
Bromodichloromethane	13	16.4		ug/m3		122	70 - 130
Bromoform	21	28.6		ug/m3		138	60 - 140
Bromomethane	7.8	8.12		ug/m3		104	70 - 130
Carbon tetrachloride	13	16.3		ug/m3		130	70 - 130
Chlorobenzene	9.2	9.37		ug/m3		102	70 - 130
Chloroethane	5.3	4.72		ug/m3		89	70 - 130
Chloroform	9.8	10.9		ug/m3		112	70 - 130
Chloromethane	4.1	3.42		ug/m3		83	60 - 140
cis-1,2-Dichloroethene	7.9	7.95		ug/m3		100	70 - 130
cis-1,3-Dichloropropene	9.1	9.79		ug/m3		108	70 - 130
Cyclohexane	6.9	6.88		ug/m3		100	70 - 130
Dibromochloromethane	17	22.0		ug/m3		129	70 - 130
Dichlorodifluoromethane	9.9	12.2		ug/m3		124	60 - 140
Ethanol	19	14.9		ug/m3		79	60 - 140
Ethylbenzene	8.7	8.05		ug/m3		93	70 - 130
Hexachlorobutadiene	21	23.8		ug/m3		112	60 - 140
Hexane	7.1	5.97		ug/m3		85	70 - 130
Methyl tert-butyl ether	7.2	6.30		ug/m3		87	60 - 140
Methylene Chloride	7.0	6.96		ug/m3		100	70 - 130
m-Xylene & p-Xylene	17	16.5		ug/m3		95	70 - 130
o-Xylene	8.7	7.97		ug/m3		92	70 - 130
Styrene	8.5	8.64		ug/m3		101	70 - 130
t-Butyl alcohol	6.1	5.66		ug/m3		93	60 - 140
Tetrachloroethene	14	15.2		ug/m3		112	70 - 130
Toluene	7.5	7.27		ug/m3		96	70 - 130
trans-1,2-Dichloroethene	7.9	7.73		ug/m3		97	70 - 130
trans-1,3-Dichloropropene	9.1	9.60		ug/m3		106	70 - 130
Trichloroethene	11	12.4		ug/m3		116	70 - 130
Trichlorofluoromethane	11	14.9		ug/m3		132	60 - 140
Vinyl chloride	5.1	4.86		ug/m3		95	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		60 - 140

QC Association Summary

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

TestAmerica Job ID: 140-7698-1

Air - GC/MS VOA

Analysis Batch: 10156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-7698-1	H-37-BA	Total/NA	Air	TO 15 LL	
140-7698-2	H-37-FF	Total/NA	Air	TO 15 LL	
140-7698-2 - DL	H-37-FF	Total/NA	Air	TO 15 LL	
140-7698-3	H-37-SS	Total/NA	Air	TO 15 LL	
140-7698-3 - DL	H-37-SS	Total/NA	Air	TO 15 LL	
MB 140-10156/18	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-10156/1002	Lab Control Sample	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: 140-7698-1

Client Sample ID: H-37-BA

Date Collected: 03/28/17 16:33

Date Received: 04/04/17 14:20

Lab Sample ID: 140-7698-1

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	10156	04/06/17 09:45	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H-37-FF

Date Collected: 03/28/17 16:30

Date Received: 04/04/17 14:20

Lab Sample ID: 140-7698-2

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	10156	04/06/17 01:38	HMT	TAL KNX
Instrument ID: MG										
Total/NA	Analysis	TO 15 LL	DL	1	50 mL	500 mL	10156	04/06/17 10:29	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H-37-SS

Date Collected: 03/28/17 16:32

Date Received: 04/04/17 14:20

Lab Sample ID: 140-7698-3

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	10156	04/06/17 02:24	HMT	TAL KNX
Instrument ID: MG										
Total/NA	Analysis	TO 15 LL	DL	1	100 mL	500 mL	10156	04/06/17 11:12	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: Method Blank

Date Collected: N/A

Date Received: N/A

Lab Sample ID: MB 140-10156/18

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	10156	04/05/17 14:19	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: Lab Control Sample

Date Collected: N/A

Date Received: N/A

Lab Sample ID: LCS 140-10156/1002

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	10156	04/05/17 12:12	HMT	TAL KNX
Instrument ID: MG										

Laboratory References:

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

Accreditation/Certification Summary

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

TestAmerica Job ID: 140-7698-1

Laboratory: TestAmerica Knoxville

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10781	03-31-18

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

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

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

Analysis Method	Prep Method	Matrix	Analyte
TO 15 LL		Air	Ethanol

Method Summary

Client: New York State D.E.C.

TestAmerica Job ID: 140-7698-1

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.
Project/Site: Former Ithaca Gun Factory # C755019A

TestAmerica Job ID: 140-7698-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
140-7698-1	H-37-BA	Air	03/28/17 16:33	04/04/17 14:20
140-7698-2	H-37-FF	Air	03/28/17 16:30	04/04/17 14:20
140-7698-3	H-37-SS	Air	03/28/17 16:32	04/04/17 14:20

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.: 140-7698-1
SDG No.: _____
Matrix: Air Level: Low
GC Column (1): RTX-5 ID: 0.32 (mm)

Client Sample ID	Lab Sample ID	BFB #
H-37-BA	140-7698-1	103
H-37-FF	140-7698-2	103
H-37-FF DL	140-7698-2 DL	99
H-37-SS	140-7698-3	104
H-37-SS DL	140-7698-3 DL	102
	MB 140-10156/18	104
	LCS 140-10156/1002	109

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.: 140-7698-1
 SDG No.: _____
 Matrix: Air Level: Low Lab File ID: GCCVD04-LCS.d
 Lab ID: LCS 140-10156/1002 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	2.00	2.42	121	70-130	
1,1,2,2-Tetrachloroethane	2.00	1.81	91	70-130	
1,1,2-Trichloroethane	2.00	1.90	95	70-130	
1,1,2-Trichlorotrifluoroethane	2.00	2.34	117	70-130	
1,1-Dichloroethane	2.00	1.85	92	70-130	
1,1-Dichloroethene	2.00	2.16	108	70-130	
1,2,4-Trichlorobenzene	2.00	2.14	107	60-140	
1,2,4-Trimethylbenzene	2.00	1.90	95	70-130	
1,2-Dibromoethane	2.00	2.16	108	70-130	
1,2-Dichlorobenzene	2.00	1.98	99	70-130	
1,2-Dichloroethane	2.00	2.33	116	70-130	
1,2-Dichloropropane	2.00	1.81	90	70-130	
1,2-Dichlorotetrafluoroethane	2.00	2.44	122	60-140	
1,3,5-Trimethylbenzene	2.00	1.86	93	70-130	
1,3-Dichlorobenzene	2.00	2.05	102	70-130	
1,4-Dichlorobenzene	2.00	2.04	102	70-130	
1,4-Dioxane	2.00	1.70	85	60-140	
2,2,4-Trimethylpentane	2.00	1.83	91	70-130	
2-Butanone	2.00	1.53	77	60-140	
4-Methyl-2-pentanone (MIBK)	2.00	1.51	75	60-140	
Benzene	2.00	1.95	98	70-130	
Benzyl chloride	2.00	1.95	97	70-130	
Bromodichloromethane	2.00	2.44	122	70-130	
Bromoform	2.00	2.77	138	60-140	
Bromomethane	2.00	2.09	104	70-130	
Carbon tetrachloride	2.00	2.60	130	70-130	
Chlorobenzene	2.00	2.03	102	70-130	
Chloroethane	2.00	1.79	89	70-130	
Chloroform	2.00	2.23	112	70-130	
Chloromethane	2.00	1.65	83	60-140	
cis-1,2-Dichloroethene	2.00	2.01	100	70-130	
cis-1,3-Dichloropropene	2.00	2.16	108	70-130	
Cyclohexane	2.00	2.00	100	70-130	
Dibromochloromethane	2.00	2.58	129	70-130	
Dichlorodifluoromethane	2.00	2.47	124	60-140	
Ethanol	10.0	7.91	79	60-140	
Ethylbenzene	2.00	1.85	93	70-130	
Hexachlorobutadiene	2.00	2.23	112	60-140	
Hexane	2.00	1.69	85	70-130	
Methyl tert-butyl ether	2.00	1.75	87	60-140	
Methylene Chloride	2.00	2.00	100	70-130	
m-Xylene & p-Xylene	4.00	3.79	95	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.: 140-7698-1
 SDG No.: _____
 Matrix: Air Level: Low Lab File ID: GCCVD04-LCS.d
 Lab ID: LCS 140-10156/1002 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
o-Xylene	2.00	1.84	92	70-130	
Styrene	2.00	2.03	101	70-130	
t-Butyl alcohol	2.00	1.87	93	60-140	
Tetrachloroethene	2.00	2.24	112	70-130	
Toluene	2.00	1.93	96	70-130	
trans-1,2-Dichloroethene	2.00	1.95	97	70-130	
trans-1,3-Dichloropropene	2.00	2.12	106	70-130	
Trichloroethene	2.00	2.31	116	70-130	
Trichlorofluoromethane	2.00	2.65	132	60-140	
Vinyl chloride	2.00	1.90	95	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.: 140-7698-1
SDG No.: _____
Lab File ID: GD05BLK5.D Lab Sample ID: MB 140-10156/18
Matrix: Air Heated Purge: (Y/N) N
Instrument ID: MG Date Analyzed: 04/05/2017 14:19
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 140-10156/1002	GCCVD04-LCS .d	04/05/2017 12:12
H-37-FF	140-7698-2	GD05P115.D	04/06/2017 01:38
H-37-SS	140-7698-3	GD05P116.D	04/06/2017 02:24
H-37-BA	140-7698-1	GD05P114R.D	04/06/2017 09:45
H-37-FF DL	140-7698-2 DL	GD05P115DL. D	04/06/2017 10:29
H-37-SS DL	140-7698-3 DL	GD05P116DL. D	04/06/2017 11:12

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1
 SDG No.: _____
 Lab File ID: GBFBC15.D BFB Injection Date: 03/15/2017
 Instrument ID: MG BFB Injection Time: 14:04
 Analysis Batch No.: 9482

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	18.5
75	30.0 - 60.0 % of mass 95	57.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.8
173	Less than 2.0 % of mass 174	0.5 (0.6) 1
174	50.0 - 120.00 % of mass 95	88.1
175	5.0 - 9.0 % of mass 174	6.1 (6.9) 1
176	95.0 - 101.0 % of mass 174	85.3 (96.8) 1
177	5.0 - 9.0 % of mass 176	5.3 (6.3) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-9482/3	GC15IC01.D	03/15/2017	14:36
	IC 140-9482/4	GC15IC02.D	03/15/2017	15:20
	IC 140-9482/5	GC15IC03.D	03/15/2017	16:02
	IC 140-9482/6	GC15IC04.D	03/15/2017	16:45
	IC 140-9482/7	GC15IC05.D	03/15/2017	17:29
	ICIS 140-9482/8	GC15IC06.D	03/15/2017	18:13
	IC 140-9482/9	GC15IC07.D	03/15/2017	18:56
	IC 140-9482/10	GC15IC08.D	03/15/2017	19:39
	IC 140-9482/11	GC15IC09.D	03/15/2017	20:21
	ICV 140-9482/13	GICVC15.D	03/15/2017	21:46

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1
 SDG No.: _____
 Lab File ID: GBFBD05.D BFB Injection Date: 04/05/2017
 Instrument ID: MG BFB Injection Time: 11:39
 Analysis Batch No.: 10156

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	17.8
75	30.0 - 60.0 % of mass 95	59.8
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	0.6 (0.6) 1
174	50.0 - 120.00 % of mass 95	100.1
175	5.0 - 9.0 % of mass 174	7.0 (7.0) 1
176	95.0 - 101.0 % of mass 174	96.6 (96.4) 1
177	5.0 - 9.0 % of mass 176	6.2 (6.4) 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 140-10156/2	GCCVD04.D	04/05/2017	12:12
	LCS 140-10156/1002	GCCVD04-LCS.d	04/05/2017	12:12
	MB 140-10156/18	GD05BLK5.D	04/05/2017	14:19
H-37-FF	140-7698-2	GD05P115.D	04/06/2017	01:38
H-37-SS	140-7698-3	GD05P116.D	04/06/2017	02:24
H-37-BA	140-7698-1	GD05P114R.D	04/06/2017	09:45
H-37-FF DL	140-7698-2 DL	GD05P115DL.D	04/06/2017	10:29
H-37-SS DL	140-7698-3 DL	GD05P116DL.D	04/06/2017	11:12

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1
 SDG No.: _____
 Sample No.: ICIS 140-9482/8 Date Analyzed: 03/15/2017 18:13
 Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm)
 Lab File ID (Standard): GC15IC06.D Heated Purge: (Y/N) N
 Calibration ID: 962

	CBM		DFBZ		CBZd5	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	356237	7.99	1693700	10.16	1673092	15.03
UPPER LIMIT	498732	8.32	2371180	10.49	2342329	15.36
LOWER LIMIT	213742	7.66	1016220	9.83	1003855	14.70
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 140-9482/13		414852	7.99	2002906	10.16	1960813 15.03

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

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

Column used to flag values outside QC limits

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1
 SDG No.: _____
 Sample No.: CCVIS 140-10156/2 Date Analyzed: 04/05/2017 12:12
 Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm)
 Lab File ID (Standard): GCCVD04.D Heated Purge: (Y/N) N
 Calibration ID: 962

	CBM		DFBZ		CBZd5	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	229652	7.98	1132685	10.15	1159488	15.02
UPPER LIMIT	321513	8.31	1585759	10.48	1623283	15.35
LOWER LIMIT	137791	7.65	679611	9.82	695693	14.69
LAB SAMPLE ID	CLIENT SAMPLE ID					
LCS 140-10156/1002		229652	7.98	1132685	10.15	1159488
MB 140-10156/18		227001	7.97	1048207	10.14	1069858
140-7698-2	H-37-FF	255279	7.98	1281085	10.15	1300680
140-7698-3	H-37-SS	289997	7.99	1202953	10.15	1260606
140-7698-1	H-37-BA	272447	7.98	1355565	10.14	1338553
140-7698-2 DL	H-37-FF DL	245184	7.98	1150430	10.14	1140361
140-7698-3 DL	H-37-SS DL	247103	8.00	1171811	10.16	1174724

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

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

Column used to flag values outside QC limits

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1
 SDG No.: _____
 Client Sample ID: H-37-BA Lab Sample ID: 140-7698-1
 Matrix: Air Lab File ID: GD05P114R.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 16:33
 Sample wt/vol: 500 (mL) Date Analyzed: 04/06/2017 09:45
 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.: 10156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	0.11		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	0.32		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.20	
78-93-3	2-Butanone	72.11	0.34		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	0.074		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	0.20		0.080	
74-87-3	Chloromethane	50.49	0.38		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.: 140-7698-1
 SDG No.: _____
 Client Sample ID: H-37-BA Lab Sample ID: 140-7698-1
 Matrix: Air Lab File ID: GD05P114R.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 16:33
 Sample wt/vol: 500 (mL) Date Analyzed: 04/06/2017 09:45
 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.: 10156 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	39		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	ND		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	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	0.16		0.080	
108-88-3	Toluene	92.14	0.49		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	0.052		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.27		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

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.: 140-7698-1

SDG No.: _____

Client Sample ID: H-37-BA Lab Sample ID: 140-7698-1

Matrix: Air Lab File ID: GD05P114R.D

Analysis Method: TO 15 LL Date Collected: 03/28/2017 16:33

Sample wt/vol: 500 (mL) Date Analyzed: 04/06/2017 09:45

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.: 10156 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	0.62		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	1.1		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	0.53		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	0.99		0.39	
74-87-3	Chloromethane	50.49	0.78		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.: 140-7698-1
 SDG No.: _____
 Client Sample ID: H-37-BA Lab Sample ID: 140-7698-1
 Matrix: Air Lab File ID: GD05P114R.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 16:33
 Sample wt/vol: 500 (mL) Date Analyzed: 04/06/2017 09:45
 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.: 10156 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	73		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	0.68		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	1.1		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	0.28		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.5		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P114R.D
 Lims ID: 140-7698-A-1
 Client ID: H-37-BA
 Sample Type: Client
 Inject. Date: 06-Apr-2017 09:45:30 ALS Bottle#: 14 Worklist Smp#: 25
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004509-025
 Misc. Info.: 140-7698-a-1
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 06-Apr-2017 10:19:21 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: tajh

Date: 06-Apr-2017 10:19:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.980	7.980	0.000	71	272447	4.00	
* 2 1,4-Difluorobenzene	114	10.142	10.148	-0.006	94	1355565	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.017	15.017	0.000	88	1338553	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.689	16.689	0.000	94	1090546	4.12	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	136744	0.4742	
9 Chloromethane	52	3.666	3.666	0.000	99	7309	0.3768	
17 Ethanol	31	4.389	4.356	0.033	96	1064602	38.8	
20 Trichlorofluoromethane	101	4.744	4.744	0.000	99	76930	0.2679	
29 2-Methyl-2-propanol	59	5.499	5.456	0.043	86	5939	0.0537	
30 1,1,2-Trichloro-1,2,2-trif	101	5.521	5.516	0.005	89	10313	0.0616	
31 Methylene Chloride	84	5.650	5.650	0.000	83	11620	0.1774	
39 2-Butanone (MEK)	72	7.279	7.268	0.011	97	10690	0.3448	
40 Hexane	56	7.322	7.327	-0.005	76	4363	0.0811	
44 Chloroform	83	8.001	8.007	-0.006	95	38739	0.2027	
47 1,1,1-Trichloroethane	97	8.977	8.983	-0.006	95	24958	0.1129	
48 1,2-Dichloroethane	62	9.075	9.075	0.000	95	3127	0.0228	
49 Benzene	78	9.560	9.565	-0.005	97	37875	0.1645	
50 Cyclohexane	69	9.571	9.576	-0.005	41	1323	0.0341	
51 Carbon tetrachloride	117	9.598	9.598	0.000	99	17846	0.0742	
56 Isooctane	57	10.390	10.396	-0.006	63	6841	0.0200	
59 Trichloroethene	130	10.876	10.881	-0.005	93	6425	0.0515	
62 1,4-Dioxane	88	11.129	11.124	0.005	94	9908	0.3179	
65 4-Methyl-2-pentanone (MIBK	43	12.121	12.116	0.005	95	4658	0.0352	
68 Toluene	91	13.006	13.006	0.000	93	131340	0.4925	
76 Tetrachloroethene	129	14.181	14.181	0.000	93	19718	0.1617	
79 Ethylbenzene	91	15.378	15.378	0.000	98	16093	0.0432	
81 m-Xylene & p-Xylene	91	15.540	15.545	-0.005	99	47112	0.1566	
83 Styrene	104	16.009	16.009	0.000	62	4609	0.0232	
85 o-Xylene	91	16.074	16.074	0.000	95	19413	0.0631	
96 1,2,4-Trimethylbenzene	105	17.940	17.940	0.000	98	28095	0.0743	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P114R.D

Injection Date: 06-Apr-2017 09:45:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7698-A-1

Lab Sample ID: 140-7698-1

Worklist Smp#: 25

Client ID: H-37-BA

Purge Vol: 500.000 mL

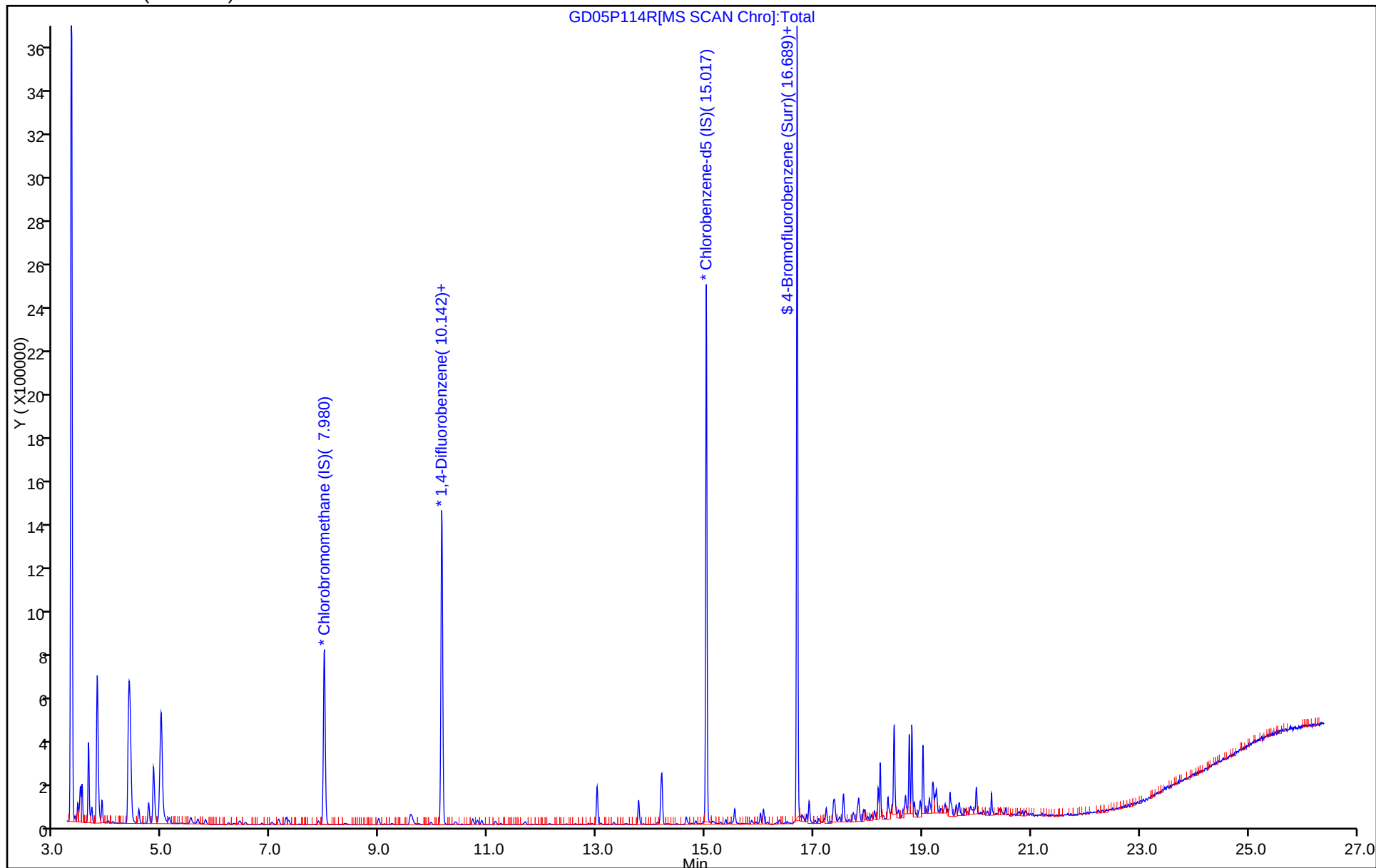
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P114R.D
Lims ID: 140-7698-A-1
Client ID: H-37-BA
Sample Type: Client
Inject. Date: 06-Apr-2017 09:45:30 ALS Bottle#: 14 Worklist Smp#: 25
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004509-025
Misc. Info.: 140-7698-a-1
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Apr-2017 10:19:21 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: tajh

Date: 06-Apr-2017 10:19:21

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.12	103.07

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P114R.D

Injection Date: 06-Apr-2017 09:45:30

Instrument ID: MG

Lims ID: 140-7698-A-1

Lab Sample ID: 140-7698-1

Client ID: H-37-BA

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 25

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

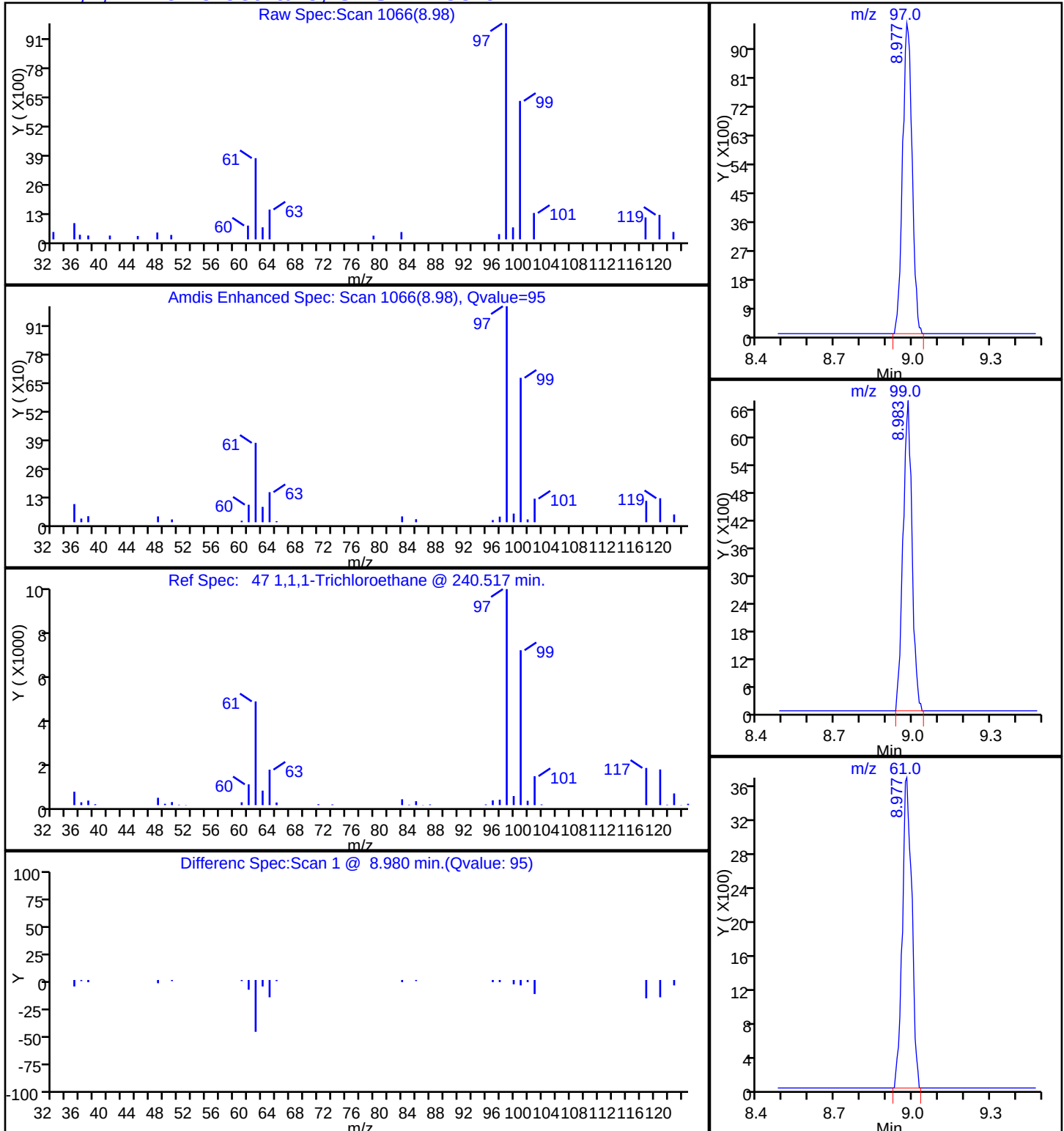
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

47 1,1,1-Trichloroethane, CAS: 71-55-6



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P114R.D

Injection Date: 06-Apr-2017 09:45:30

Instrument ID: MG

Lims ID: 140-7698-A-1

Lab Sample ID: 140-7698-1

Client ID: H-37-BA

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 25

Purge Vol: 500.000 mL

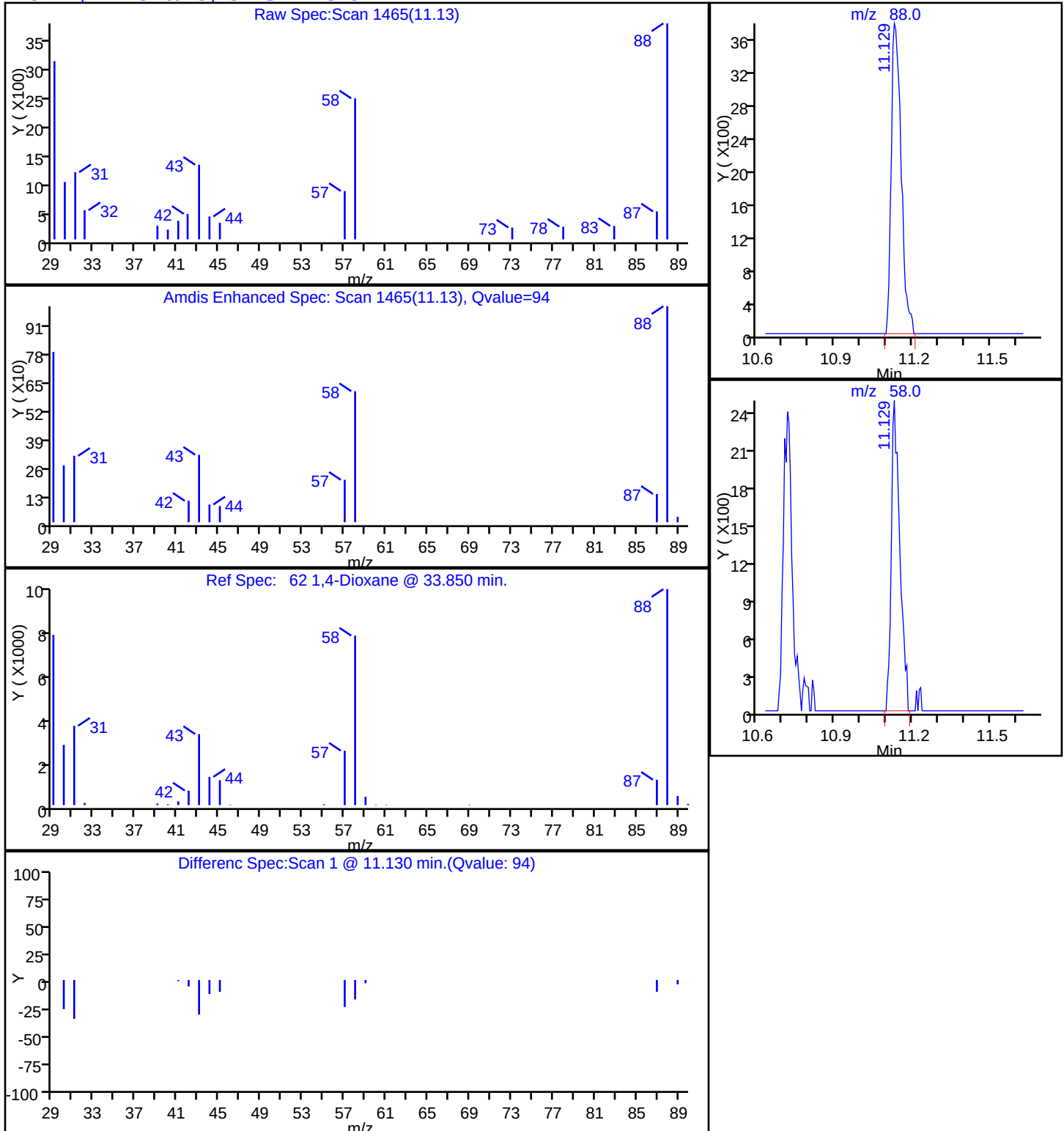
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

62 1,4-Dioxane, CAS: 123-91-1

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P114R.D

Injection Date: 06-Apr-2017 09:45:30

Instrument ID: MG

Lims ID: 140-7698-A-1

Lab Sample ID: 140-7698-1

Client ID: H-37-BA

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 25

Purge Vol: 500.000 mL

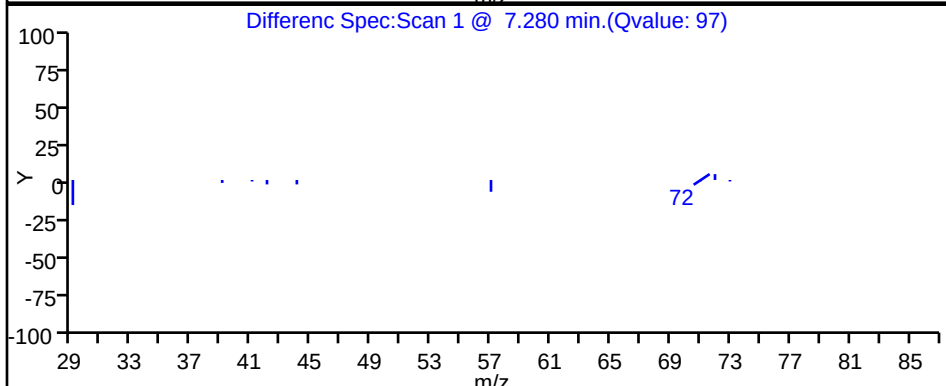
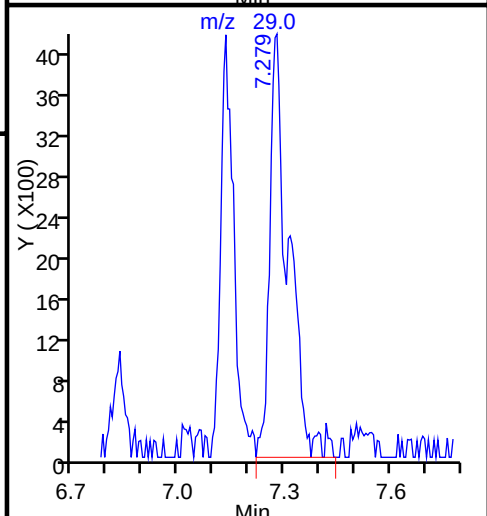
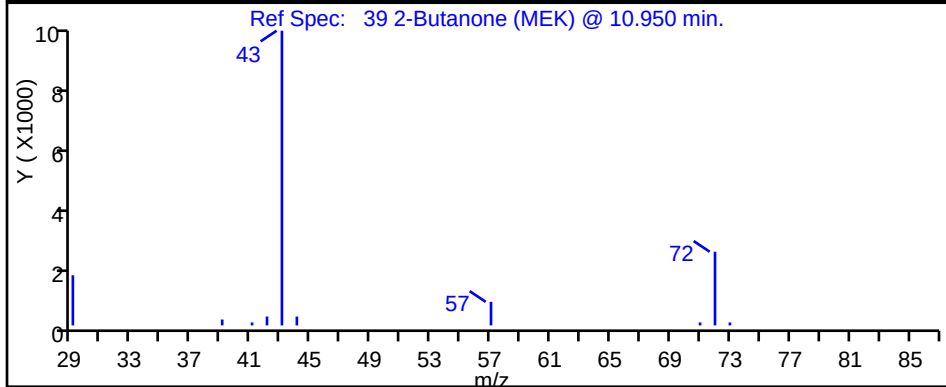
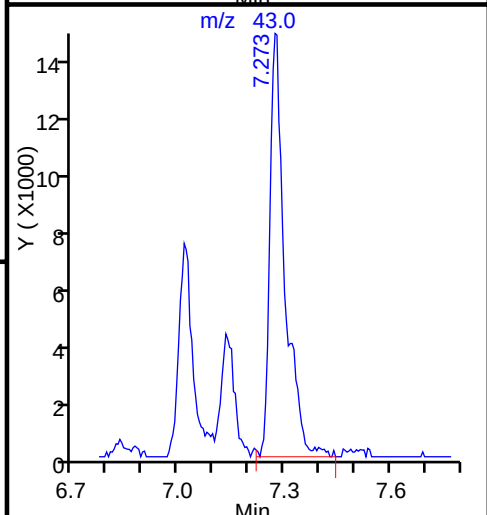
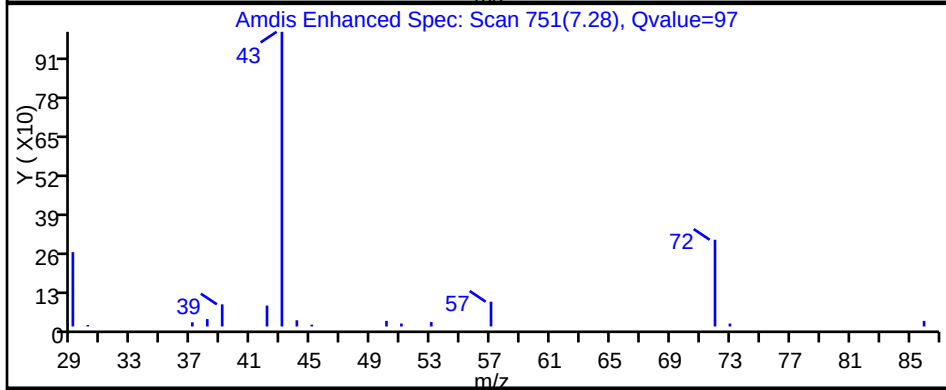
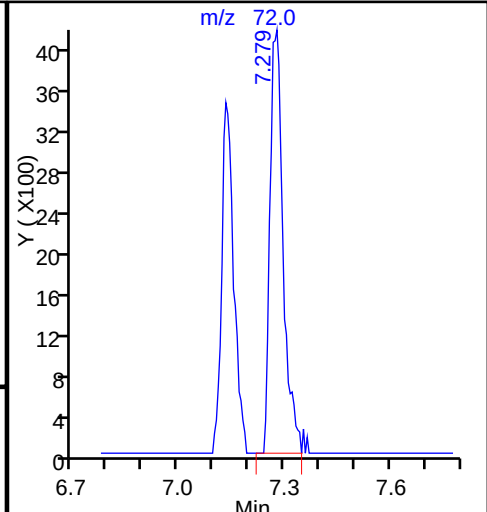
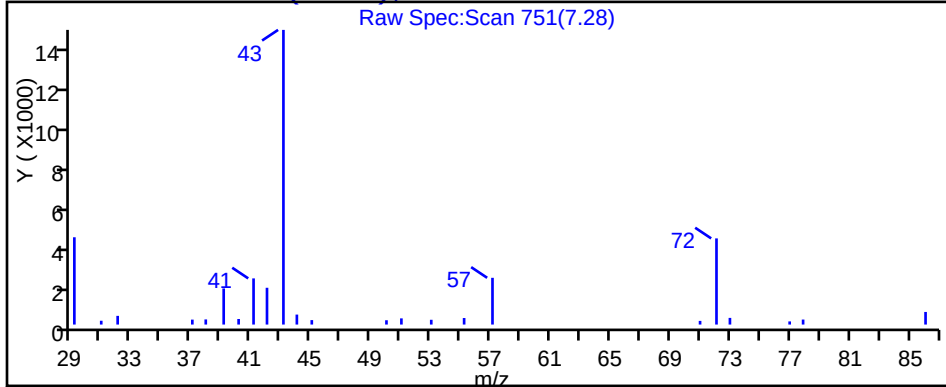
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P114R.D

Injection Date: 06-Apr-2017 09:45:30

Instrument ID: MG

Lims ID: 140-7698-A-1

Lab Sample ID: 140-7698-1

Client ID: H-37-BA

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 25

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

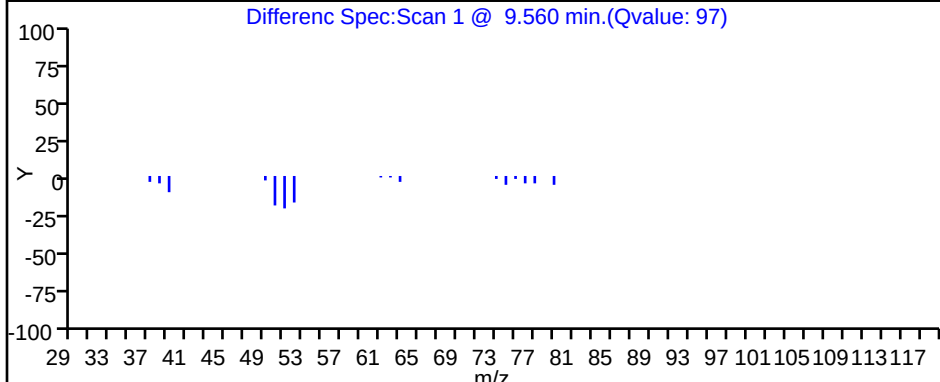
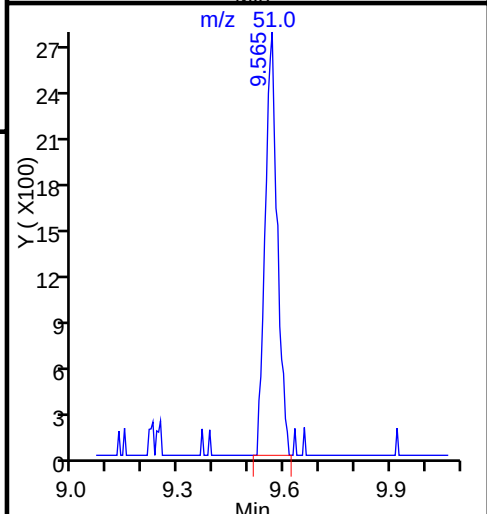
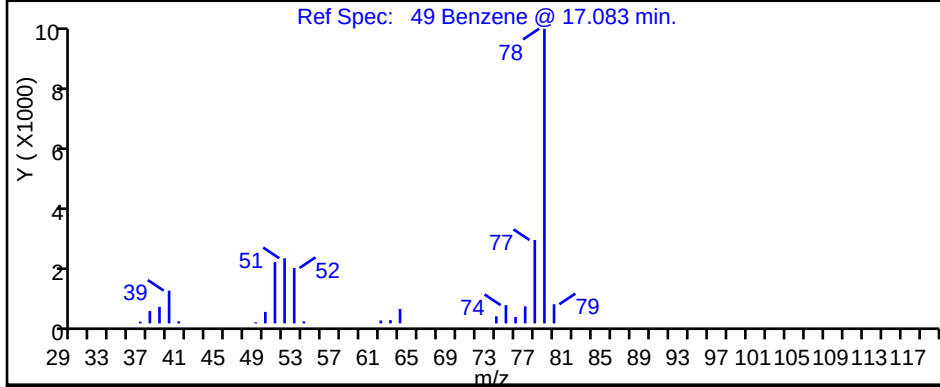
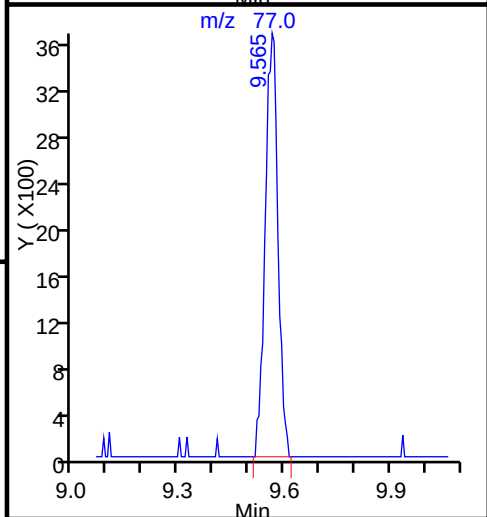
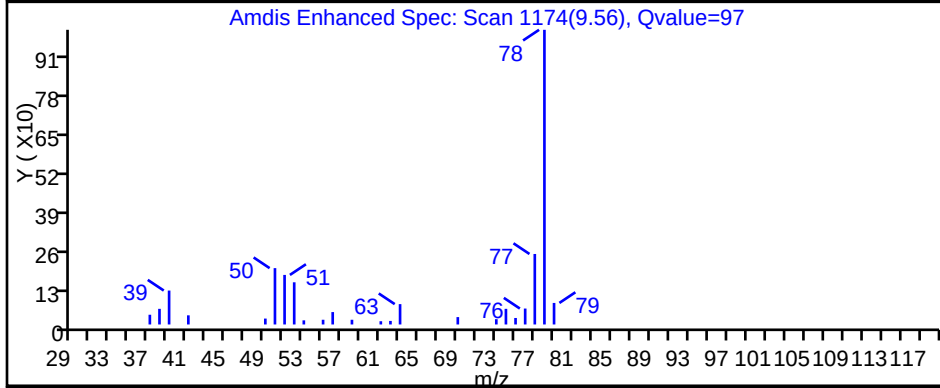
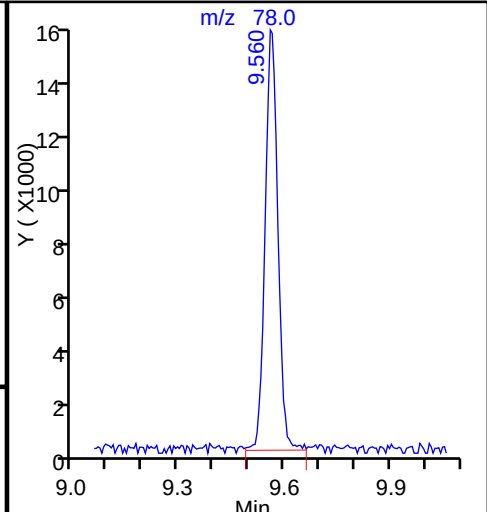
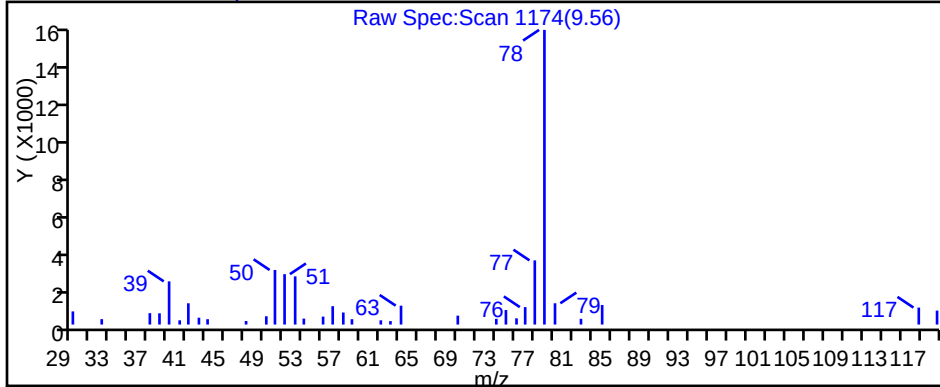
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P114R.D

Injection Date: 06-Apr-2017 09:45:30

Instrument ID: MG

Lims ID: 140-7698-A-1

Lab Sample ID: 140-7698-1

Client ID: H-37-BA

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 25

Purge Vol: 500.000 mL

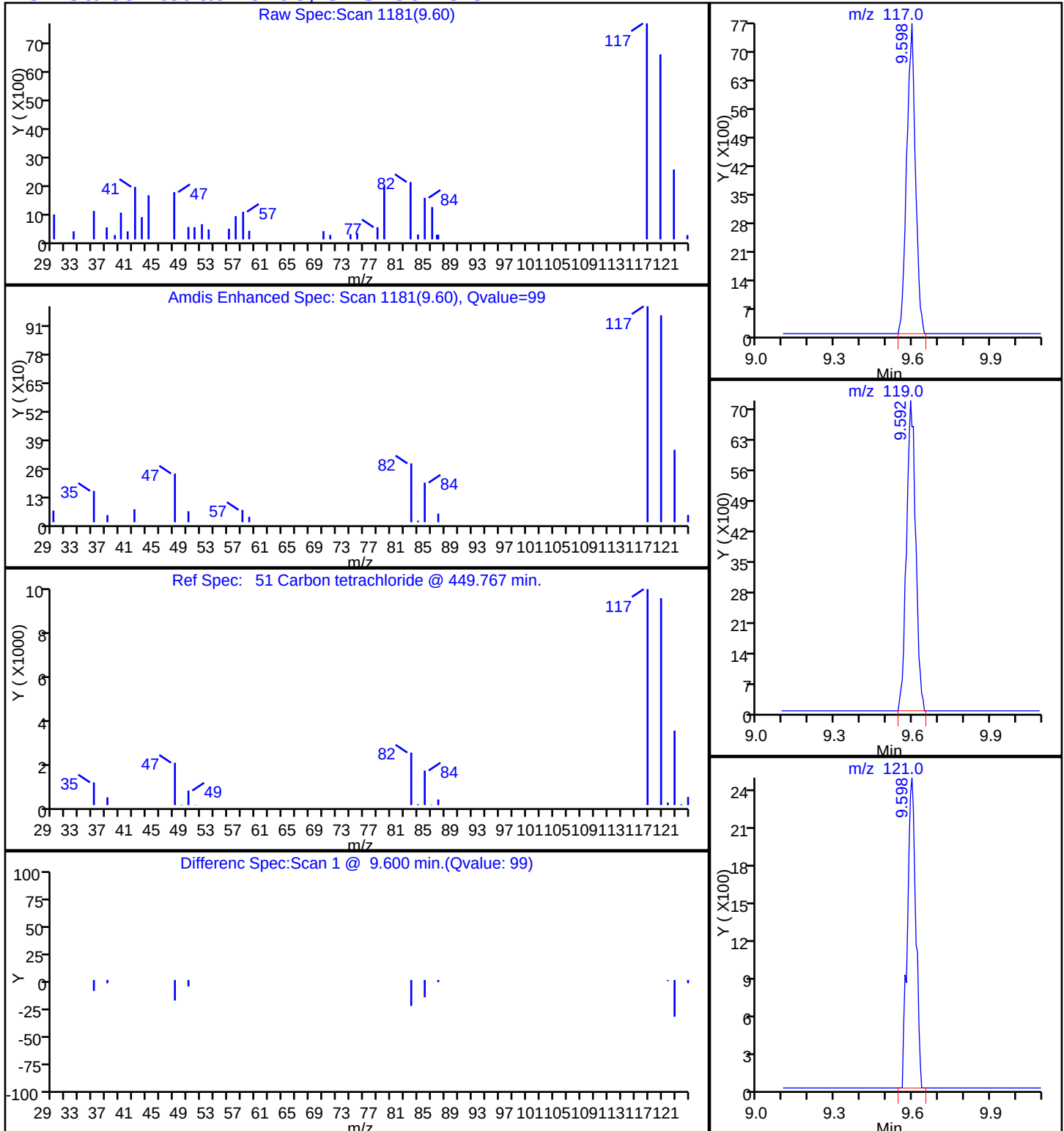
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P114R.D

Injection Date: 06-Apr-2017 09:45:30

Instrument ID: MG

Lims ID: 140-7698-A-1

Lab Sample ID: 140-7698-1

Client ID: H-37-BA

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 25

Purge Vol: 500.000 mL

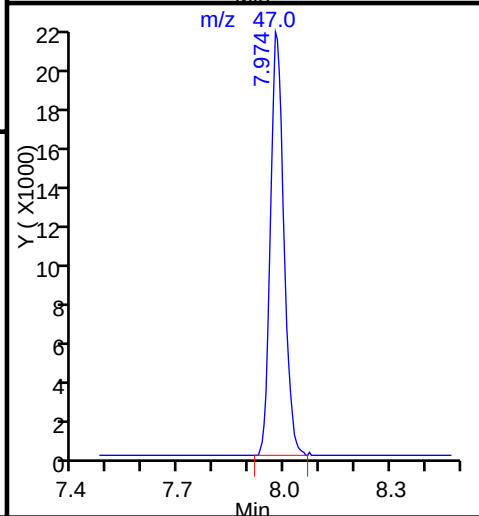
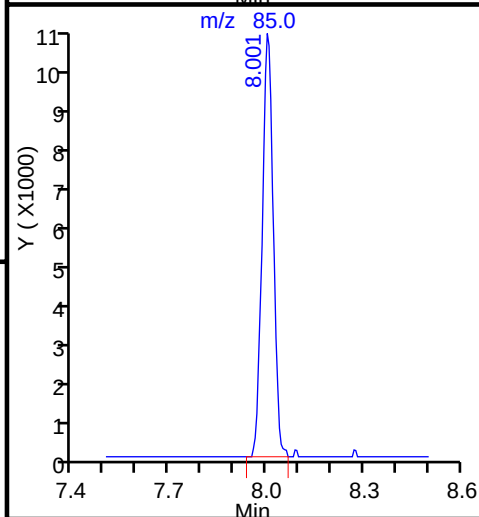
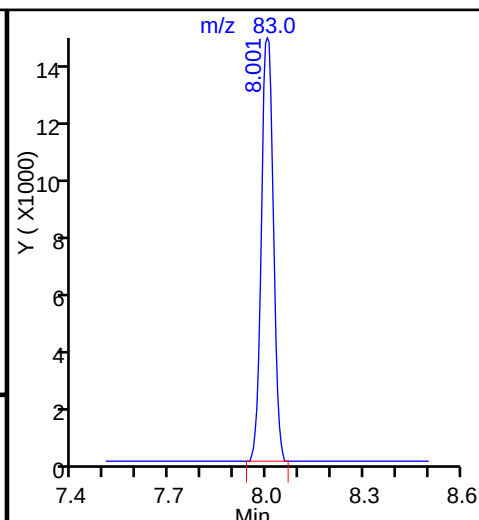
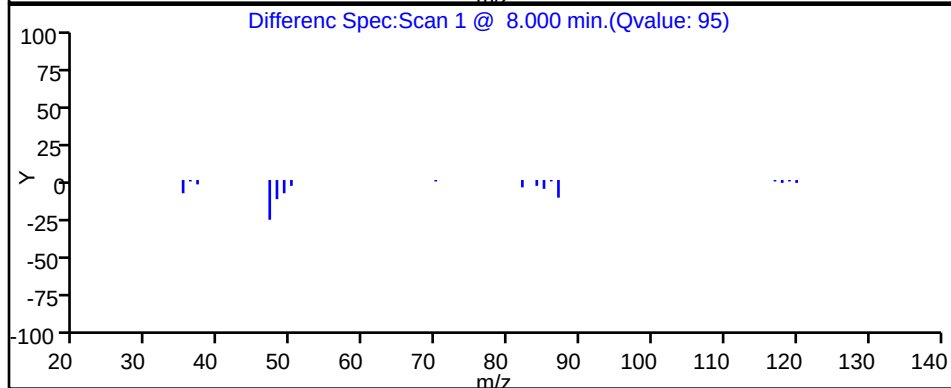
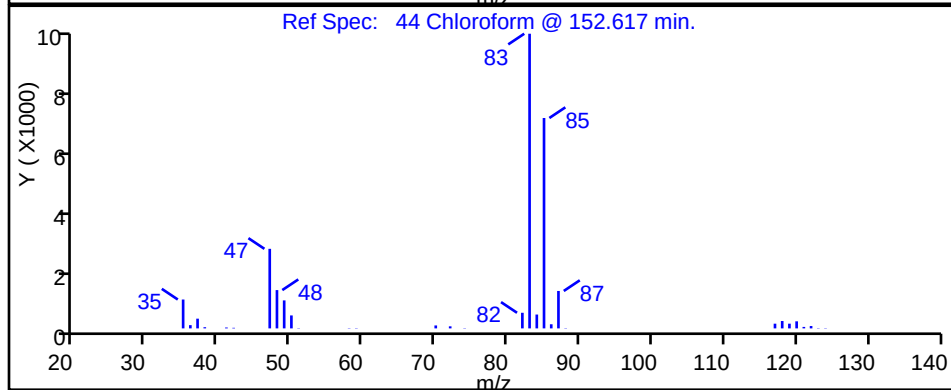
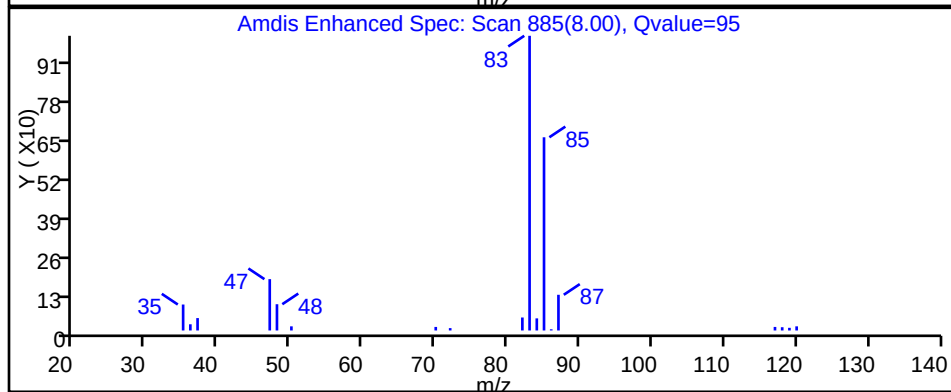
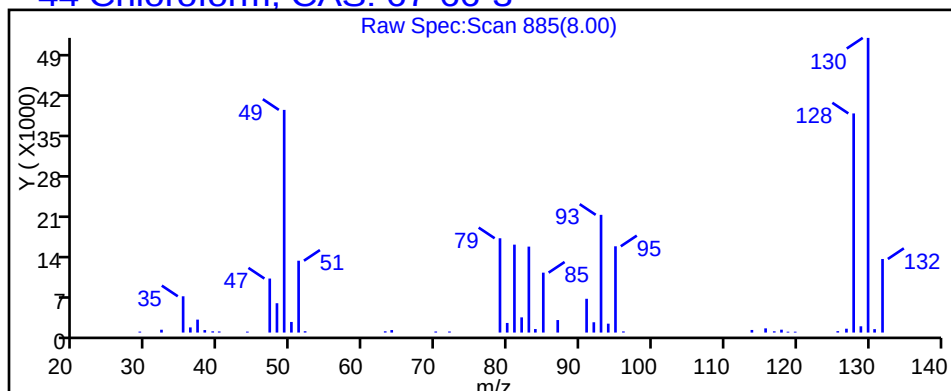
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

44 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P114R.D

Injection Date: 06-Apr-2017 09:45:30

Instrument ID: MG

Lims ID: 140-7698-A-1

Lab Sample ID: 140-7698-1

Client ID: H-37-BA

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 25

Purge Vol: 500.000 mL

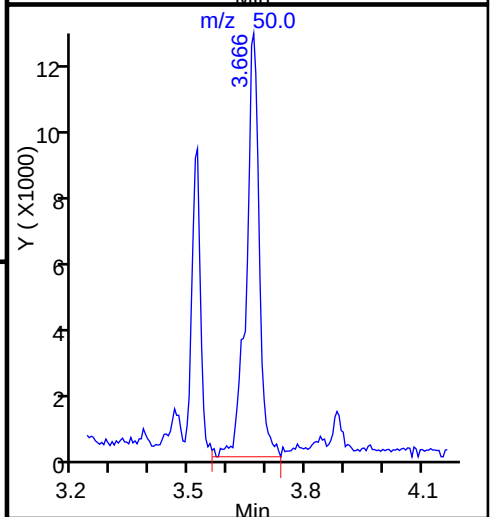
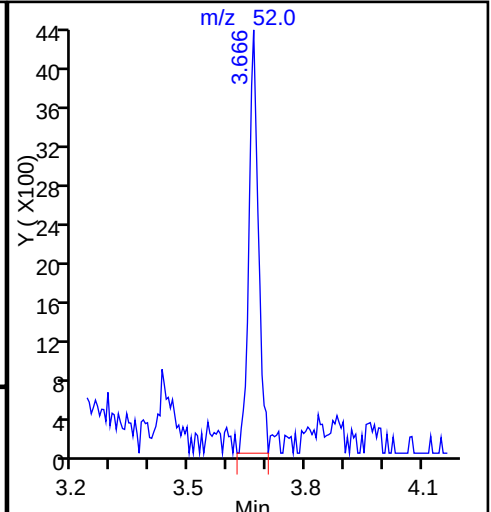
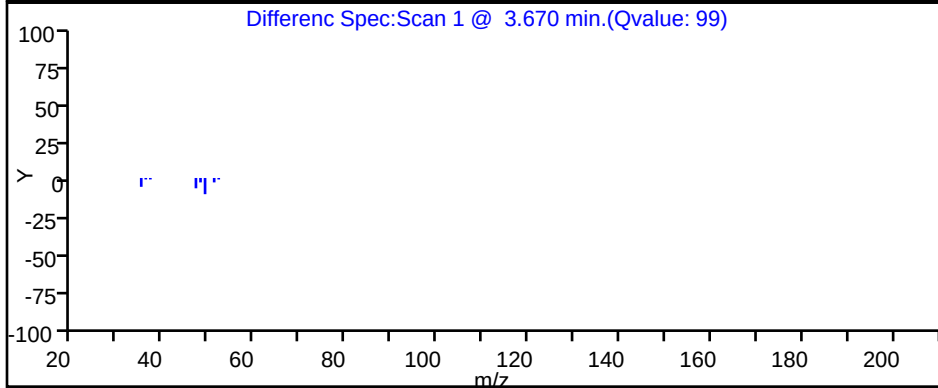
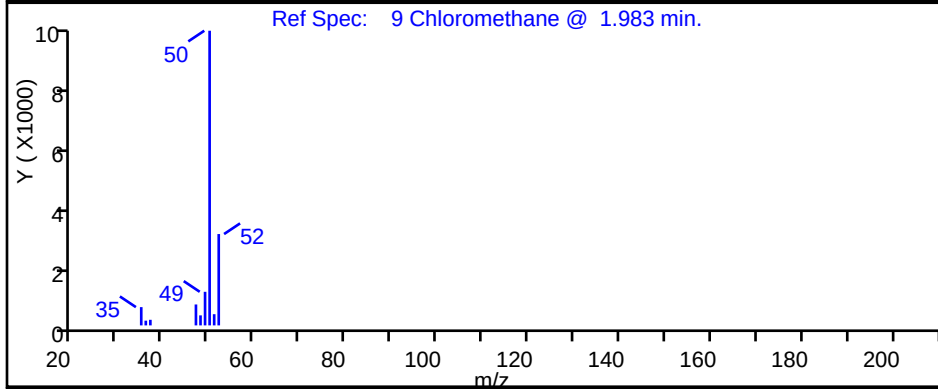
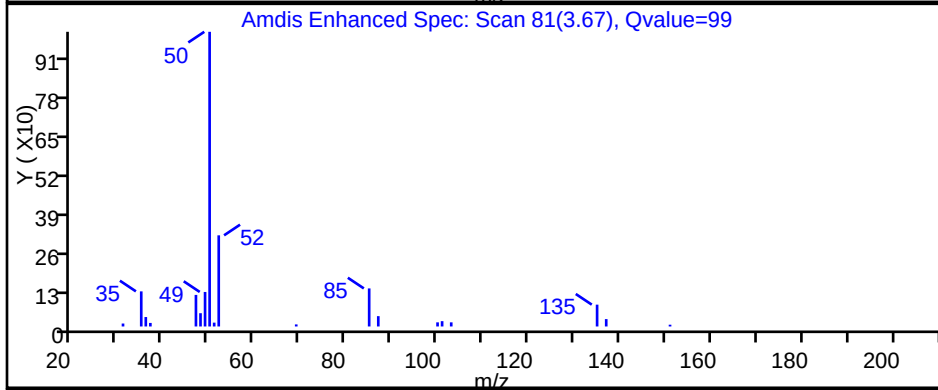
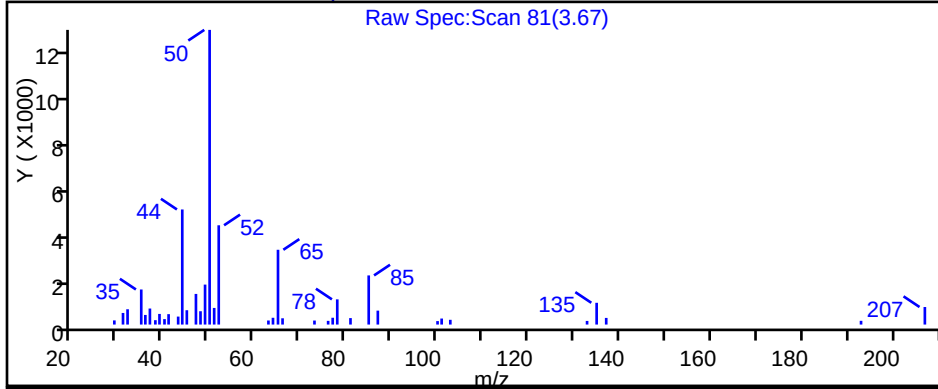
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P114R.D

Injection Date: 06-Apr-2017 09:45:30

Instrument ID: MG

Lims ID: 140-7698-A-1

Lab Sample ID: 140-7698-1

Client ID: H-37-BA

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 25

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

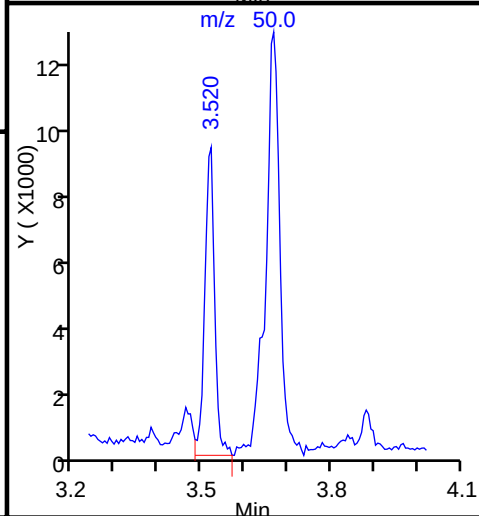
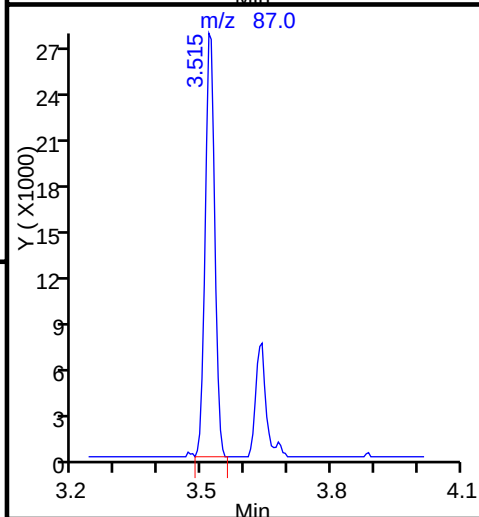
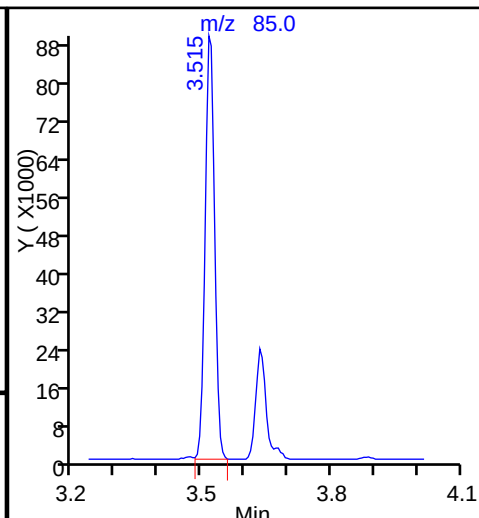
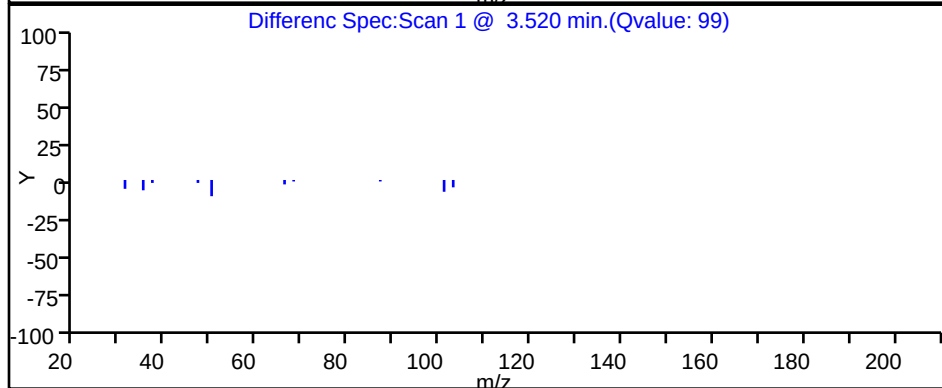
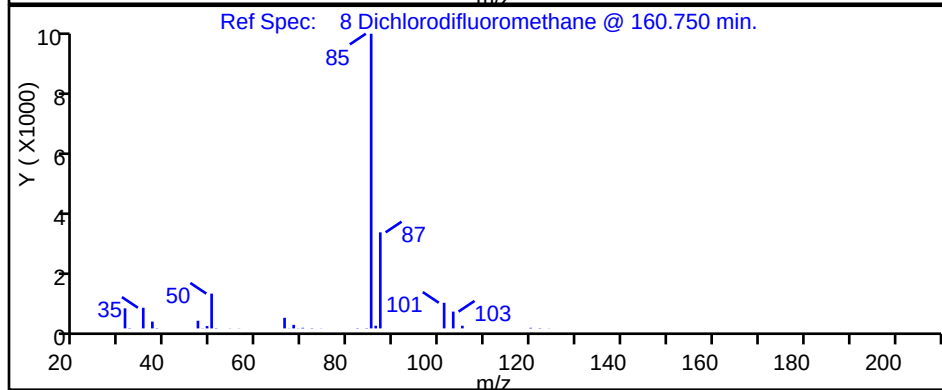
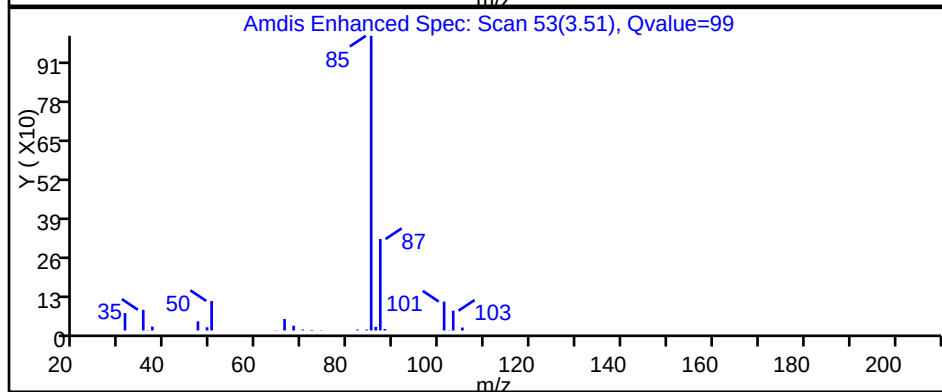
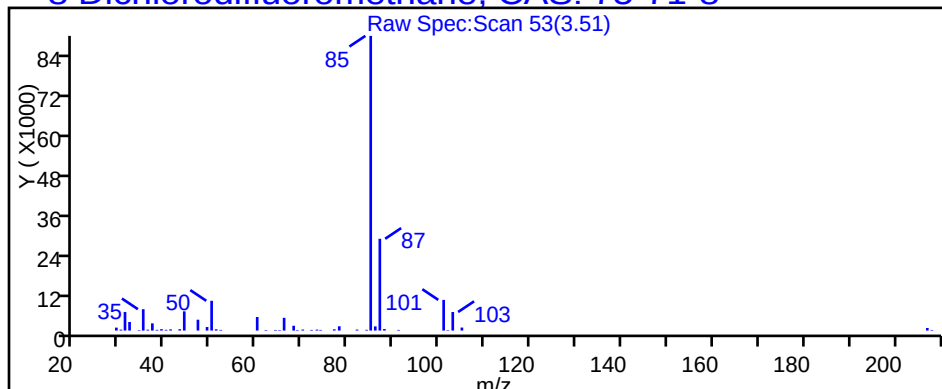
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P114R.D

Injection Date: 06-Apr-2017 09:45:30

Instrument ID: MG

Lims ID: 140-7698-A-1

Lab Sample ID: 140-7698-1

Client ID: H-37-BA

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 25

Purge Vol: 500.000 mL

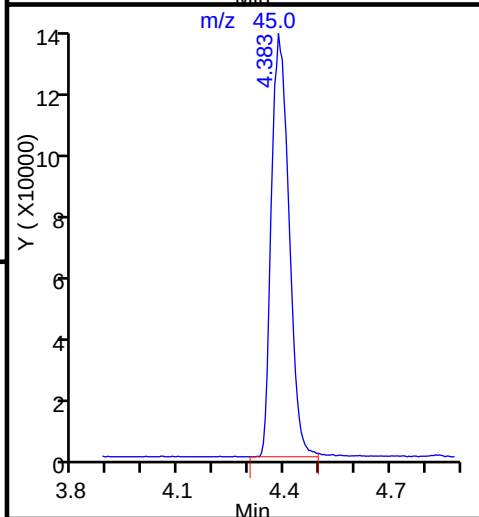
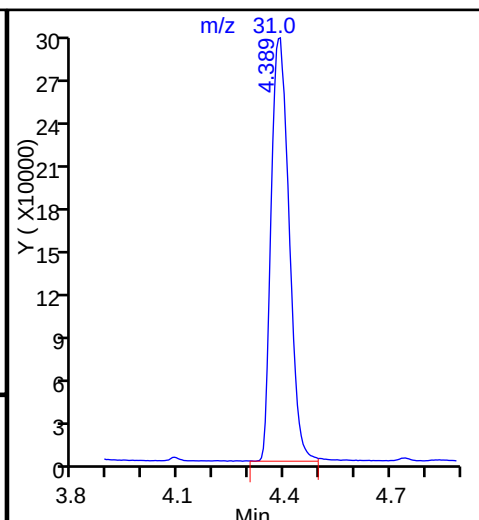
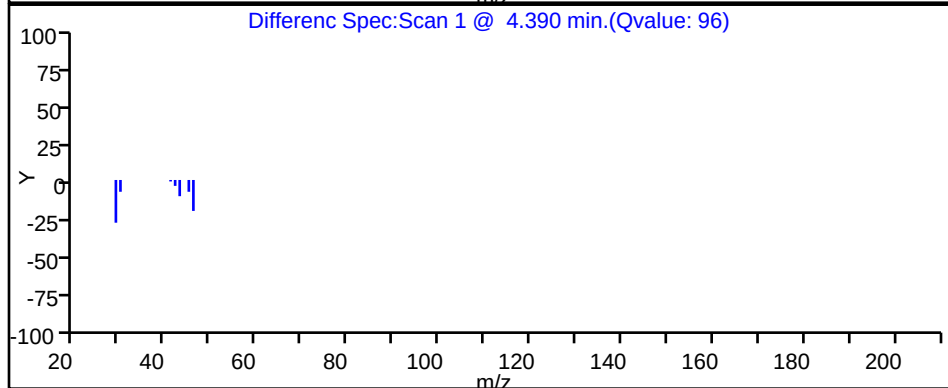
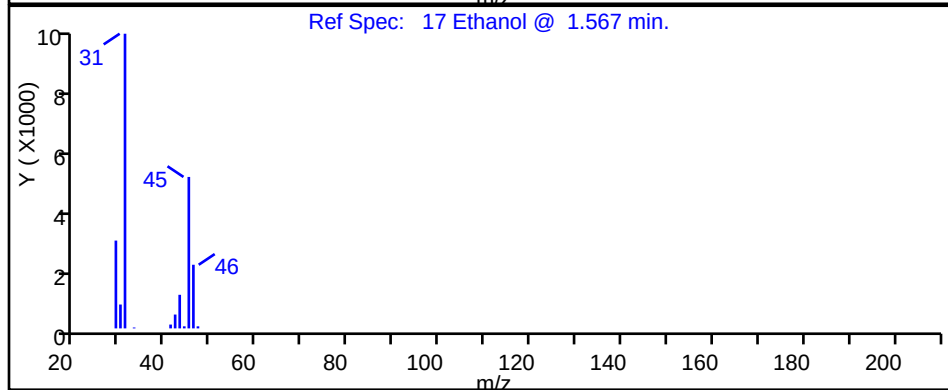
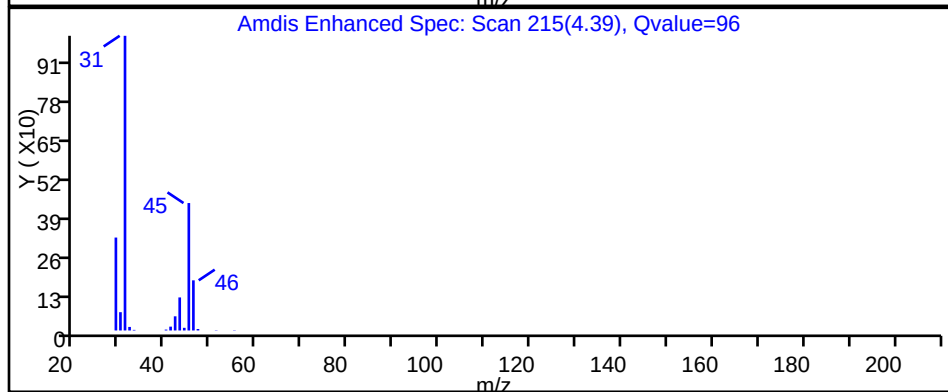
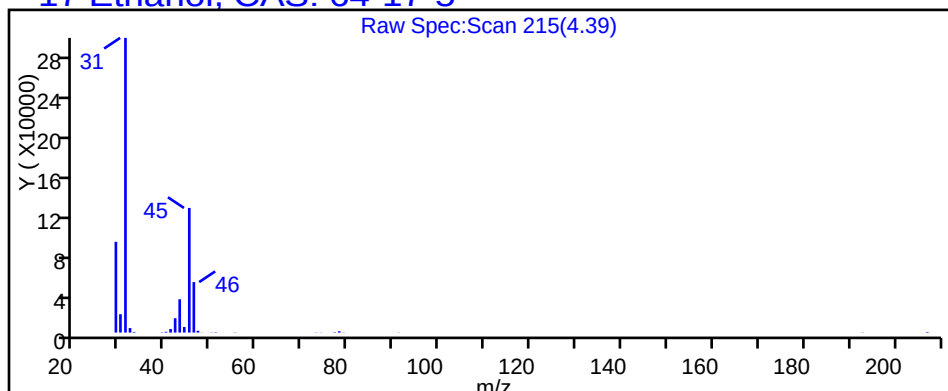
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P114R.D

Injection Date: 06-Apr-2017 09:45:30

Instrument ID: MG

Lims ID: 140-7698-A-1

Lab Sample ID: 140-7698-1

Client ID: H-37-BA

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 25

Purge Vol: 500.000 mL

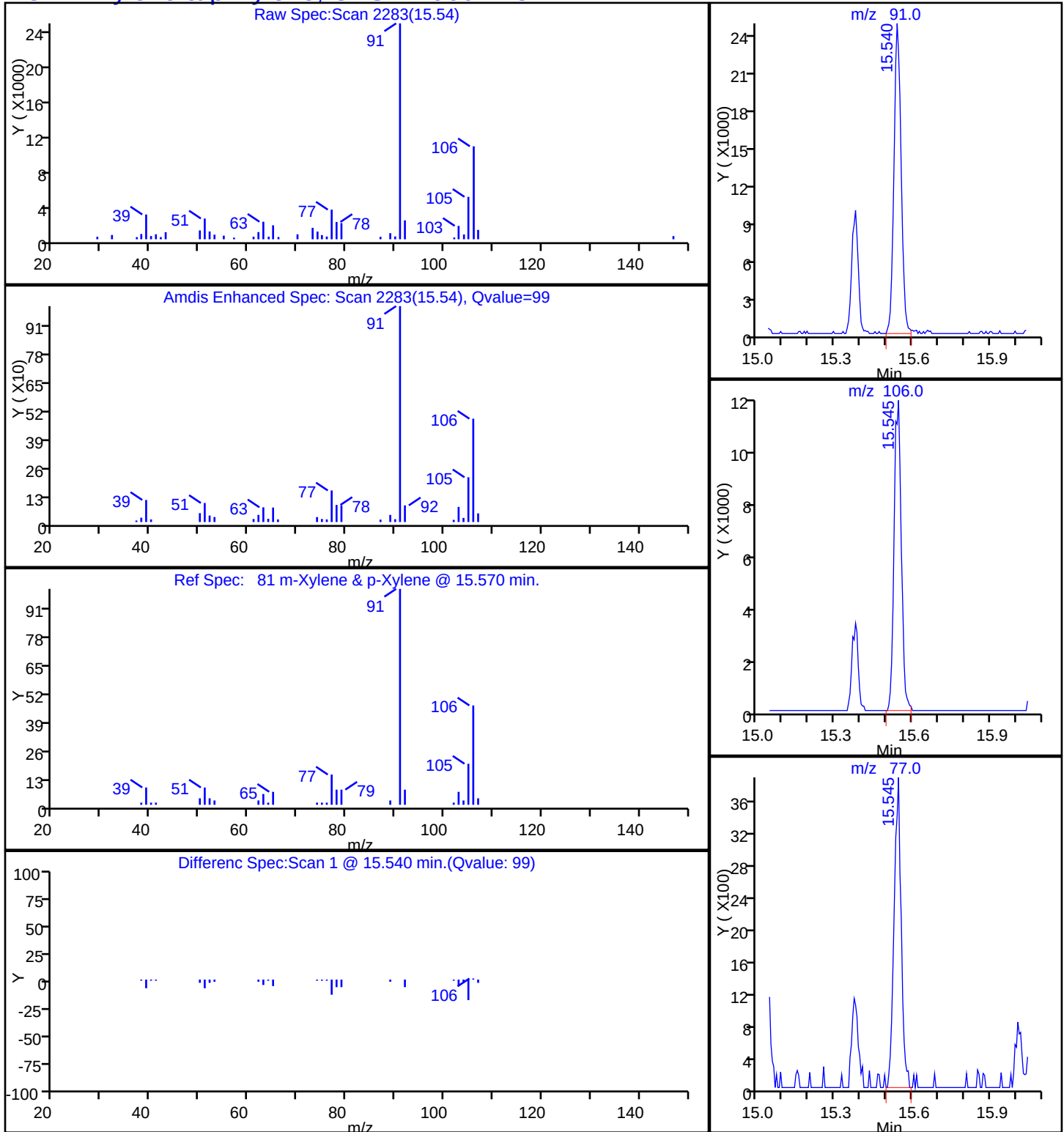
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P114R.D

Injection Date: 06-Apr-2017 09:45:30

Instrument ID: MG

Lims ID: 140-7698-A-1

Lab Sample ID: 140-7698-1

Client ID: H-37-BA

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 25

Purge Vol: 500.000 mL

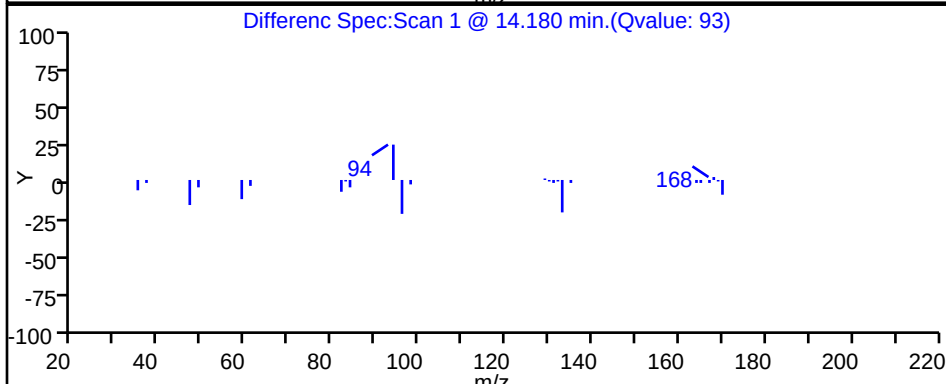
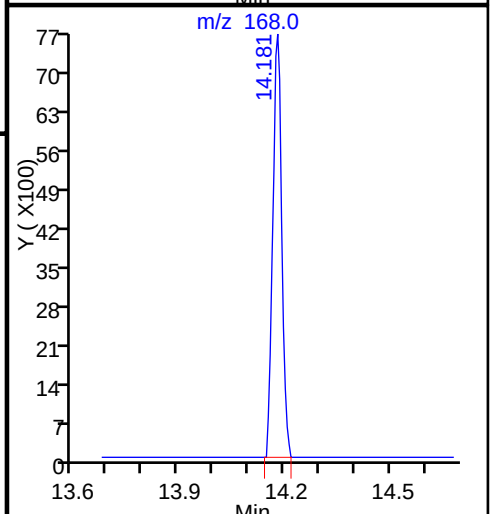
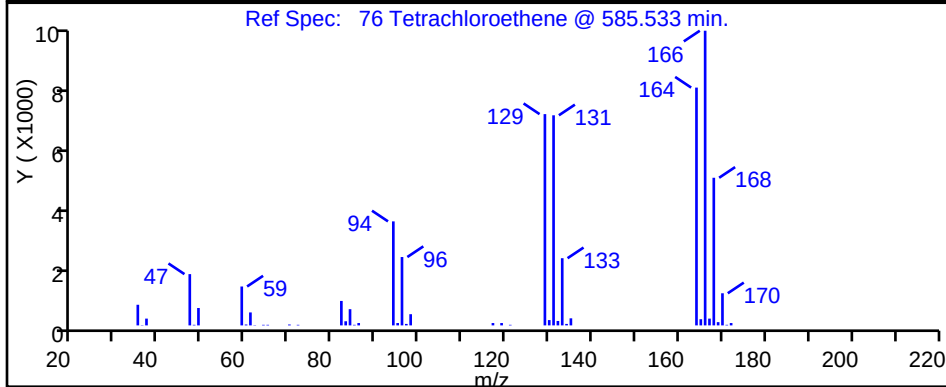
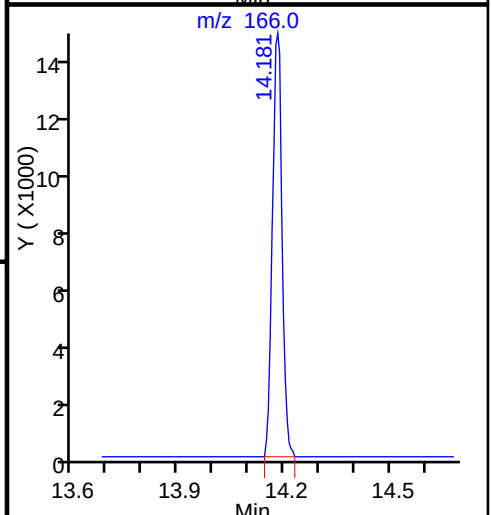
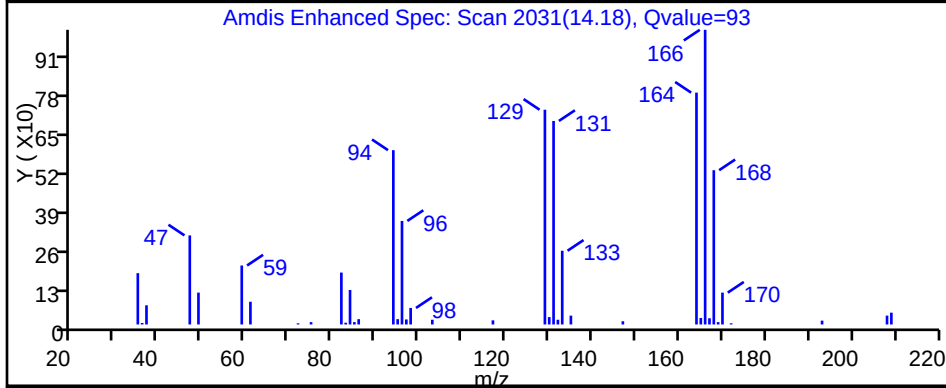
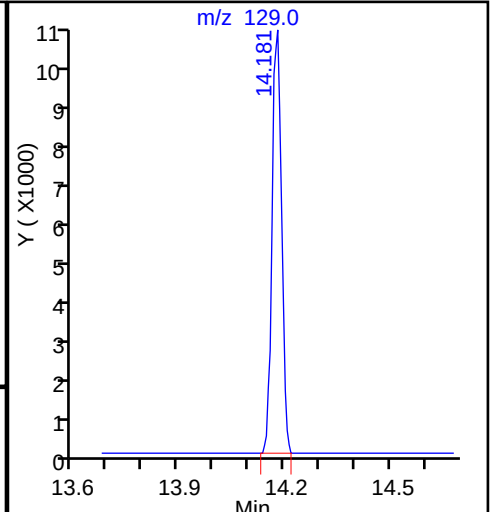
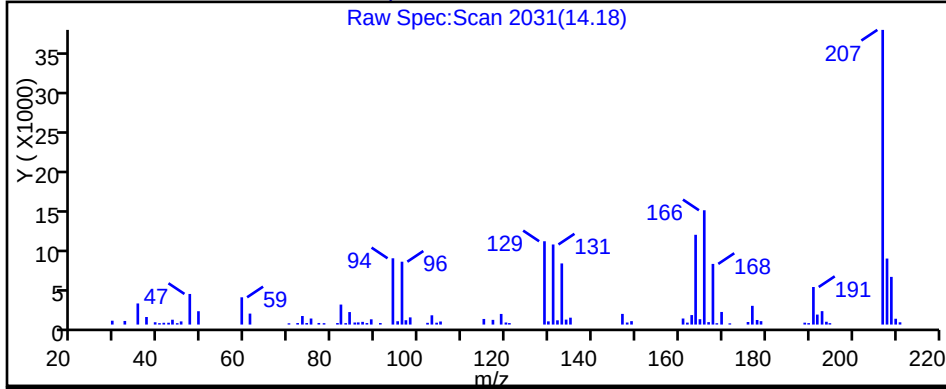
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

76 Tetrachloroethene, CAS: 127-18-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P114R.D

Injection Date: 06-Apr-2017 09:45:30

Instrument ID: MG

Lims ID: 140-7698-A-1

Lab Sample ID: 140-7698-1

Client ID: H-37-BA

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 25

Purge Vol: 500.000 mL

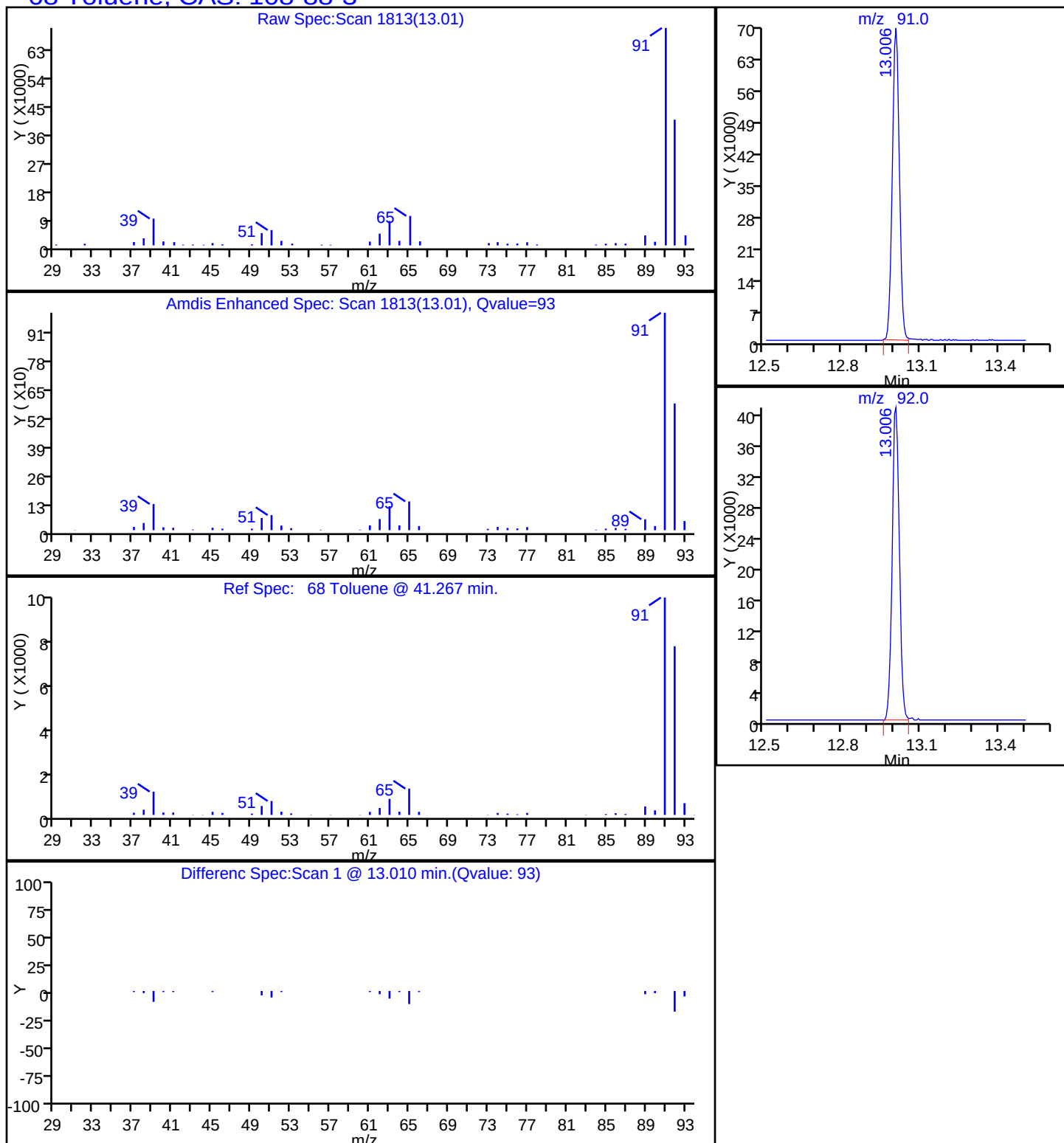
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P114R.D

Injection Date: 06-Apr-2017 09:45:30

Instrument ID: MG

Lims ID: 140-7698-A-1

Lab Sample ID: 140-7698-1

Client ID: H-37-BA

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 25

Purge Vol: 500.000 mL

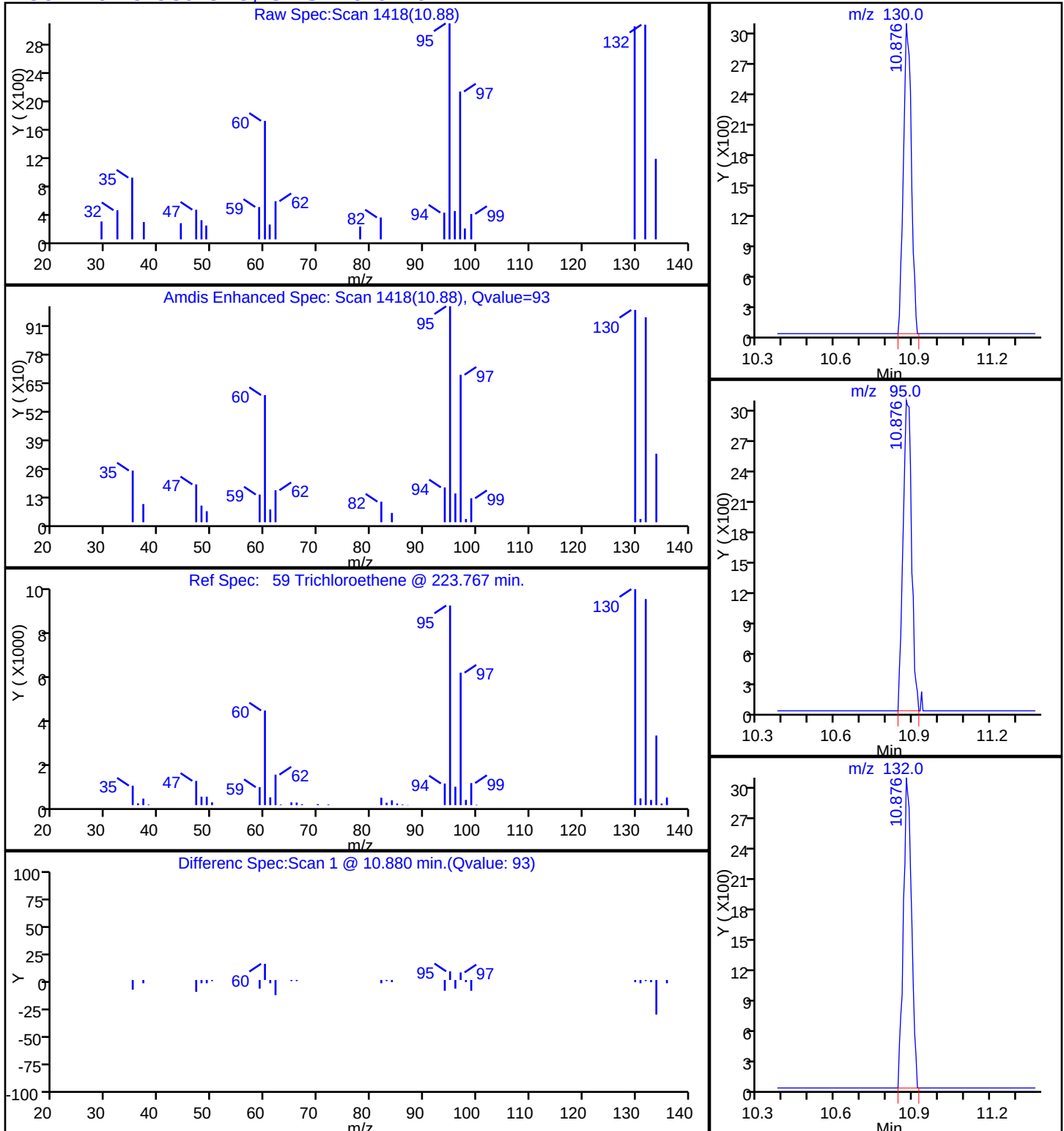
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

59 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P114R.D

Injection Date: 06-Apr-2017 09:45:30

Instrument ID: MG

Lims ID: 140-7698-A-1

Lab Sample ID: 140-7698-1

Client ID: H-37-BA

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 25

Purge Vol: 500.000 mL

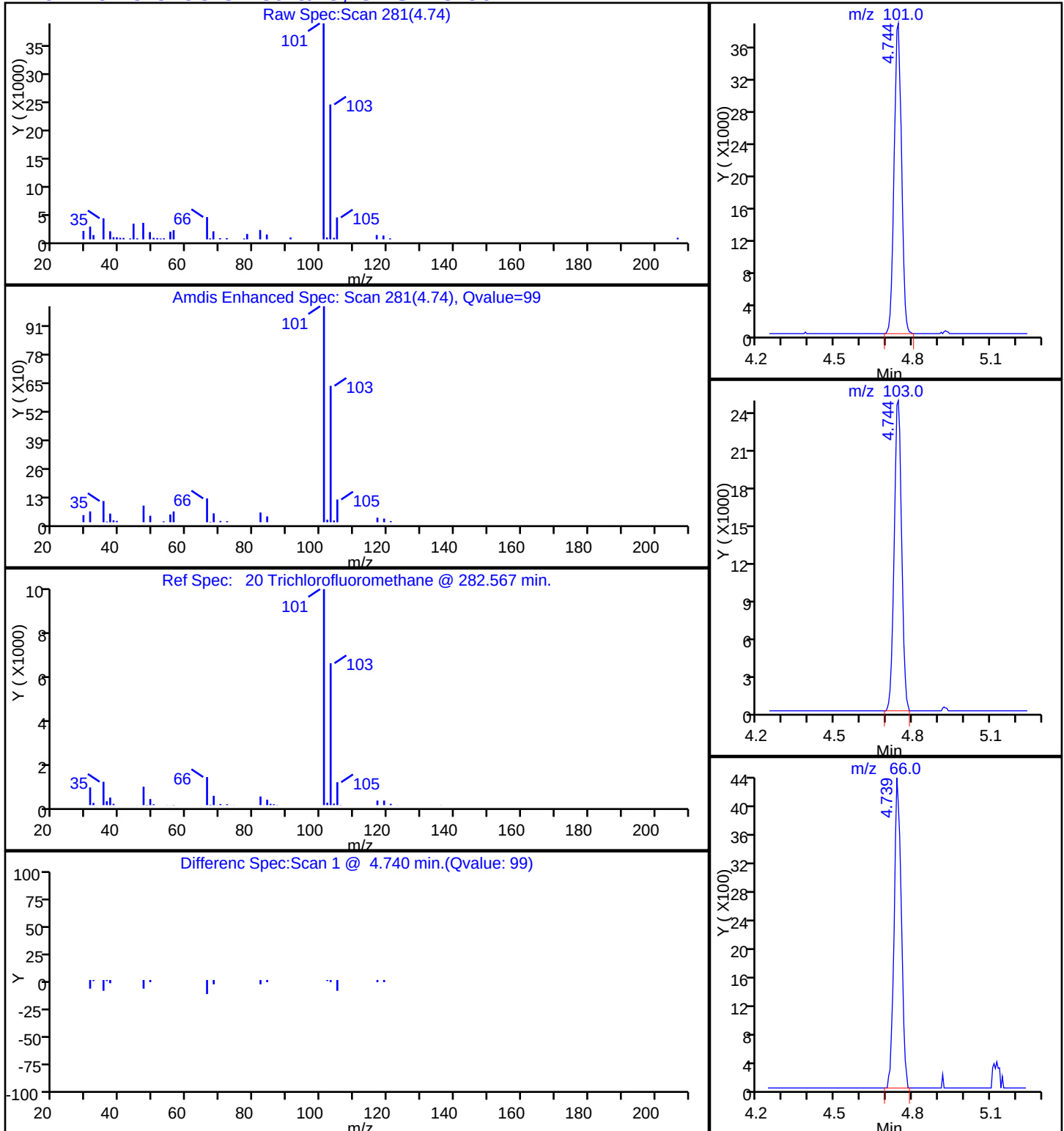
Dil. Factor: 1.0000

Method: MG_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.: 140-7698-1
 SDG No.: _____
 Client Sample ID: H-37-FF Lab Sample ID: 140-7698-2
 Matrix: Air Lab File ID: GD05P115.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 16:30
 Sample wt/vol: 500 (mL) Date Analyzed: 04/06/2017 01:38
 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.: 10156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	0.085		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	0.77		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		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	0.082		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	0.34		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.: 140-7698-1
 SDG No.: _____
 Client Sample ID: H-37-FF Lab Sample ID: 140-7698-2
 Matrix: Air Lab File ID: GD05P115.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 16:30
 Sample wt/vol: 500 (mL) Date Analyzed: 04/06/2017 01:38
 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.: 10156 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	<i>Ethanol</i>	46.07	220	<i>E</i>	2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	ND		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	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	0.12		0.080	
108-88-3	Toluene	92.14	0.63		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	0.043		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.29		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

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.: 140-7698-1
 SDG No.: _____
 Client Sample ID: H-37-FF Lab Sample ID: 140-7698-2
 Matrix: Air Lab File ID: GD05P115.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 16:30
 Sample wt/vol: 500 (mL) Date Analyzed: 04/06/2017 01:38
 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.: 10156 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	0.47		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	2.3		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.69		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	0.51		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	1.6		0.39	
74-87-3	Chloromethane	50.49	0.81		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.: 140-7698-1
 SDG No.: _____
 Client Sample ID: H-37-FF Lab Sample ID: 140-7698-2
 Matrix: Air Lab File ID: GD05P115.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 16:30
 Sample wt/vol: 500 (mL) Date Analyzed: 04/06/2017 01:38
 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.: 10156 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	<i>Ethanol</i>	<i>46.07</i>	<i>410</i>	<i>E</i>	<i>3.8</i>	
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	0.70		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	0.79		0.54	
108-88-3	Toluene	92.14	2.4		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	0.23		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.6		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P115.D
 Lims ID: 140-7698-A-2
 Client ID: H-37-FF
 Sample Type: Client
 Inject. Date: 06-Apr-2017 01:38:30 ALS Bottle#: 15 Worklist Smp#: 21
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004509-021
 Misc. Info.: 140-7698-a-2
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 06-Apr-2017 09:57:45 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: tajh

Date: 06-Apr-2017 09:25:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.980	7.980	0.000	72	255279	4.00	
* 2 1,4-Difluorobenzene	114	10.148	10.148	0.000	94	1281085	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.017	15.017	0.000	88	1300680	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.689	16.689	0.000	94	1062770	4.13	
8 Dichlorodifluoromethane	85	3.520	3.515	0.005	99	131297	0.4860	
9 Chloromethane	52	3.666	3.666	0.000	98	7107	0.3910	
17 Ethanol	31	4.432	4.356	0.076	97	5581491	217.3	E
20 Trichlorofluoromethane	101	4.745	4.744	0.001	100	79022	0.2937	
29 2-Methyl-2-propanol	59	5.570	5.456	0.114	82	5893	0.0569	
30 1,1,2-Trichloro-1,2,2-trif	101	5.521	5.516	0.005	93	10634	0.0678	
31 Methylene Chloride	84	5.656	5.650	0.006	84	11651	0.1898	
39 2-Butanone (MEK)	72	7.274	7.268	0.006	97	22423	0.7719	
40 Hexane	56	7.322	7.327	-0.005	77	4306	0.0854	
44 Chloroform	83	8.007	8.007	0.000	95	60082	0.3355	
47 1,1,1-Trichloroethane	97	8.988	8.983	0.005	94	17693	0.0854	
48 1,2-Dichloroethane	62	9.075	9.075	0.000	95	5333	0.0412	
49 Benzene	78	9.565	9.565	0.000	97	46816	0.2151	
50 Cyclohexane	69	9.576	9.576	0.000	43	1349	0.0368	
51 Carbon tetrachloride	117	9.598	9.598	0.000	98	18595	0.0818	
56 Isooctane	57	10.396	10.396	0.000	38	8701	0.0269	
59 Trichloroethene	130	10.881	10.881	0.000	93	5119	0.0434	
61 Dichlorobromomethane	83	11.113	11.107	0.006	89	3638	0.0193	
65 4-Methyl-2-pentanone (MIBK	43	12.132	12.116	0.016	93	13533	0.1083	
68 Toluene	91	13.006	13.006	0.000	93	164507	0.6349	
76 Tetrachloroethene	129	14.176	14.181	-0.005	90	13798	0.1164	
79 Ethylbenzene	91	15.373	15.378	-0.005	98	19191	0.0530	
81 m-Xylene & p-Xylene	91	15.540	15.545	-0.005	99	47074	0.1610	
83 Styrene	104	16.015	16.009	0.006	82	7466	0.0387	
85 o-Xylene	91	16.069	16.074	-0.005	82	19842	0.0664	
96 1,2,4-Trimethylbenzene	105	17.940	17.940	0.000	98	26519	0.0722	

[QC Flag Legend](#)

Processing Flags

E - Exceeded Maximum Amount

[Reagents:](#)

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P115.D

Injection Date: 06-Apr-2017 01:38:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7698-A-2

Lab Sample ID: 140-7698-2

Worklist Smp#: 21

Client ID: H-37-FF

Purge Vol: 500.000 mL

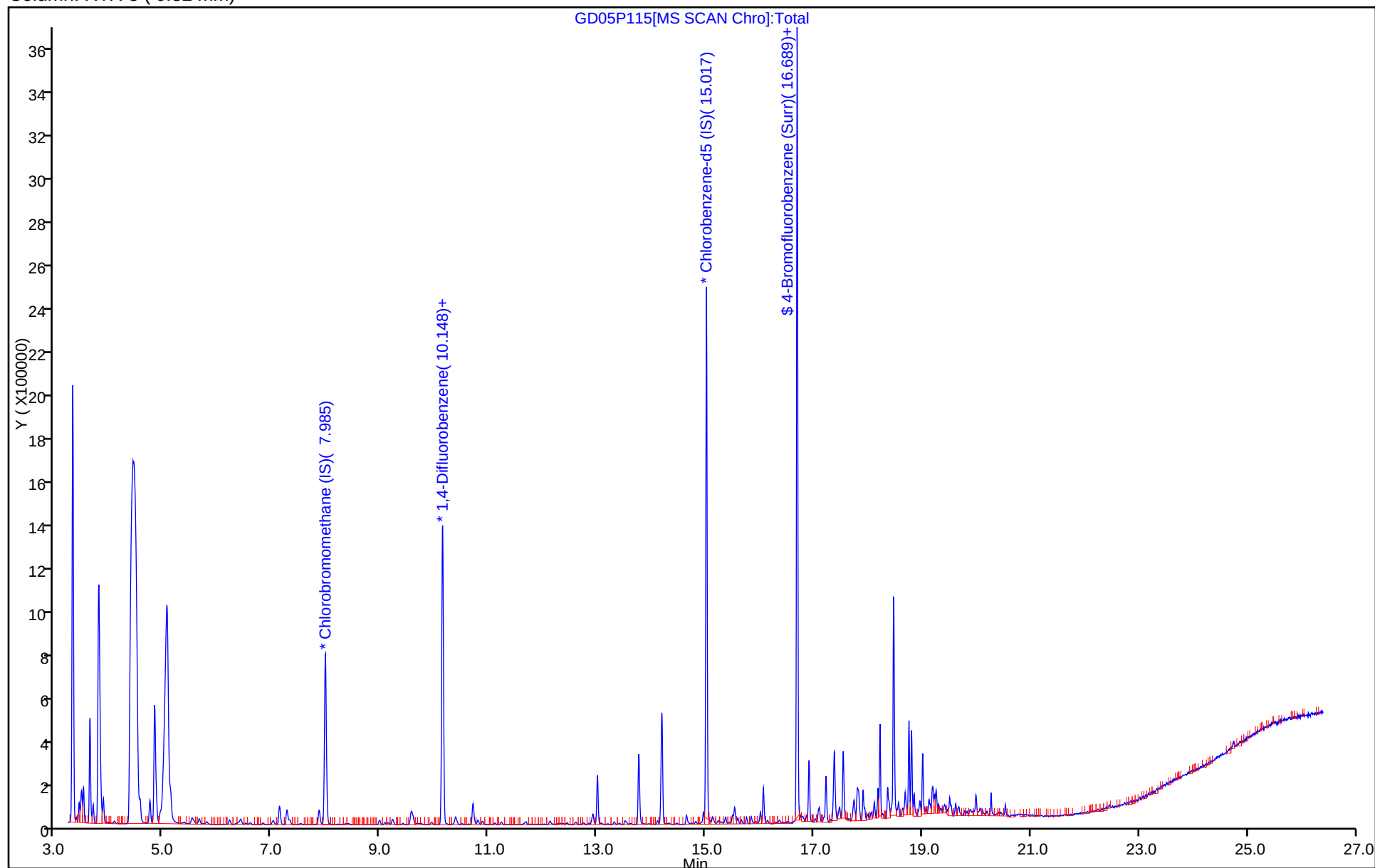
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P115.D
Lims ID: 140-7698-A-2
Client ID: H-37-FF
Sample Type: Client
Inject. Date: 06-Apr-2017 01:38:30 ALS Bottle#: 15 Worklist Smp#: 21
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004509-021
Misc. Info.: 140-7698-a-2
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Apr-2017 09:57:45 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: tajh

Date: 06-Apr-2017 09:25:42

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.13	103.37

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P115.D

Injection Date: 06-Apr-2017 01:38:30

Instrument ID: MG

Lims ID: 140-7698-A-2

Lab Sample ID: 140-7698-2

Client ID: H-37-FF

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 21

Purge Vol: 500.000 mL

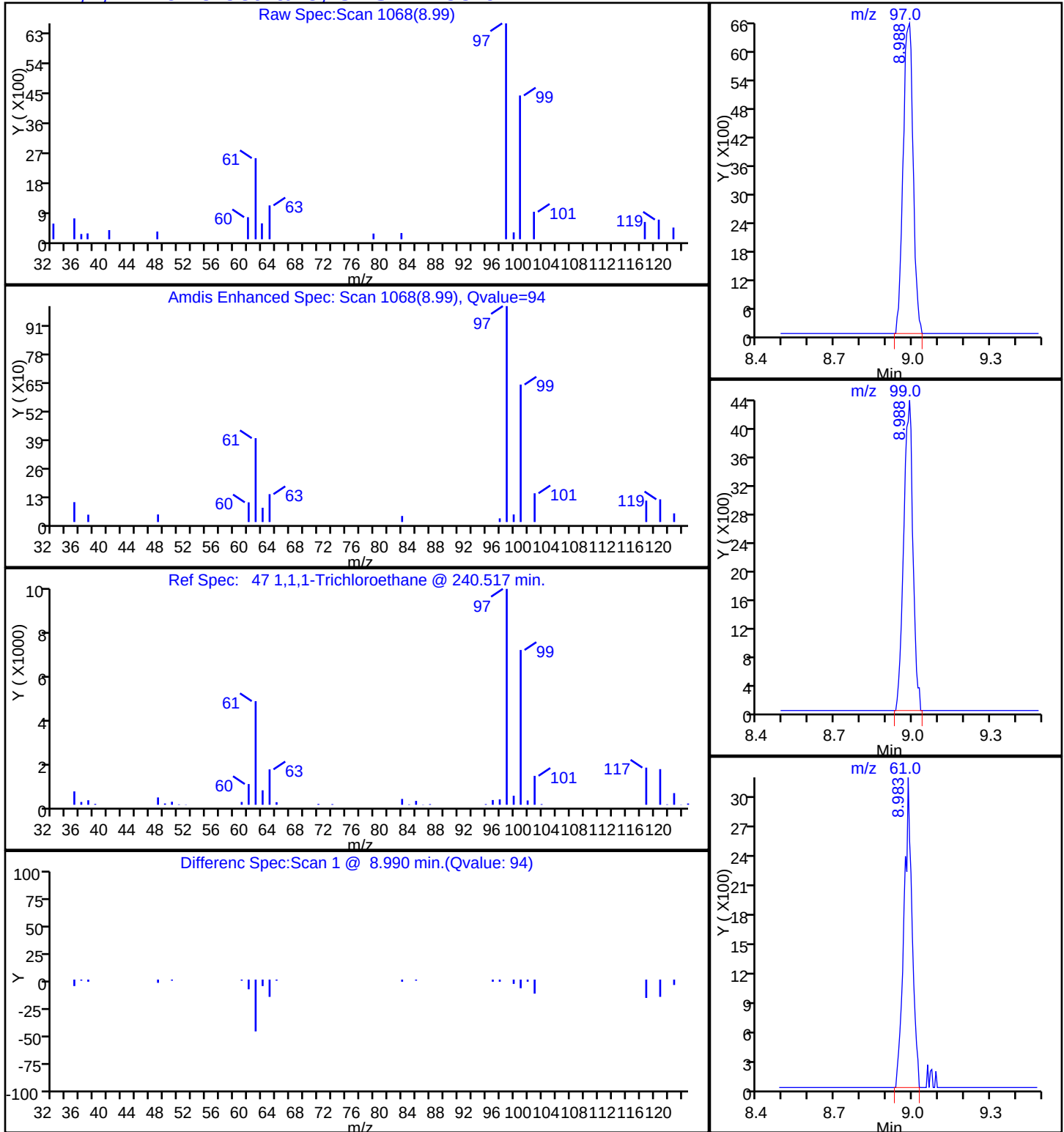
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

47 1,1,1-Trichloroethane, CAS: 71-55-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P115.D

Injection Date: 06-Apr-2017 01:38:30

Instrument ID: MG

Lims ID: 140-7698-A-2

Lab Sample ID: 140-7698-2

Client ID: H-37-FF

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 21

Purge Vol: 500.000 mL

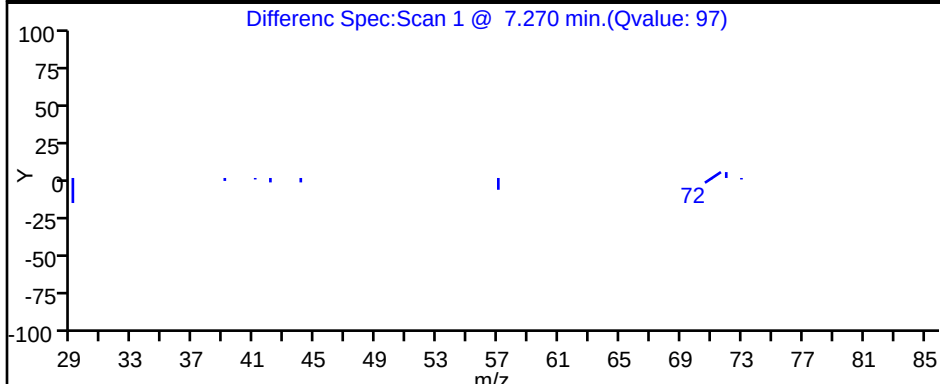
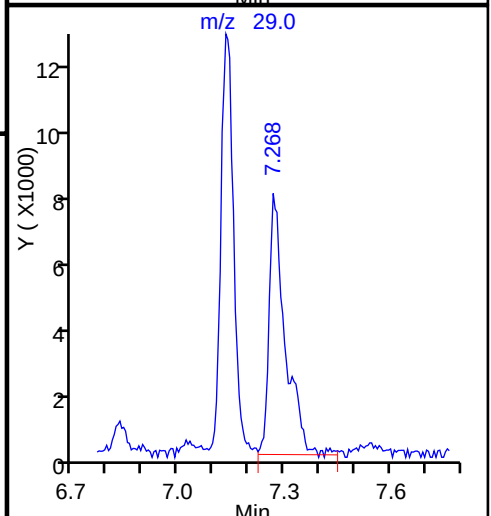
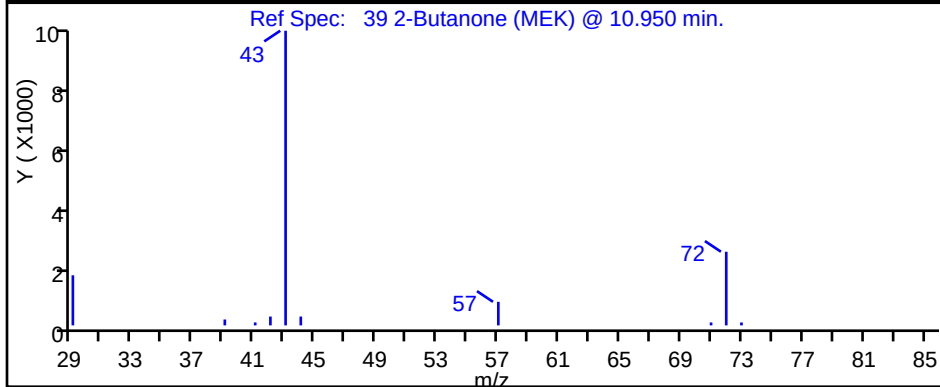
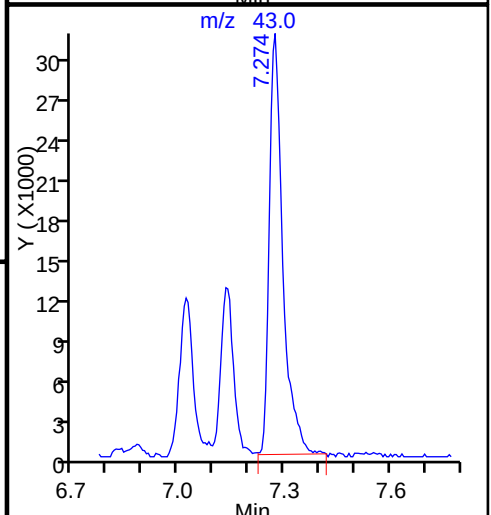
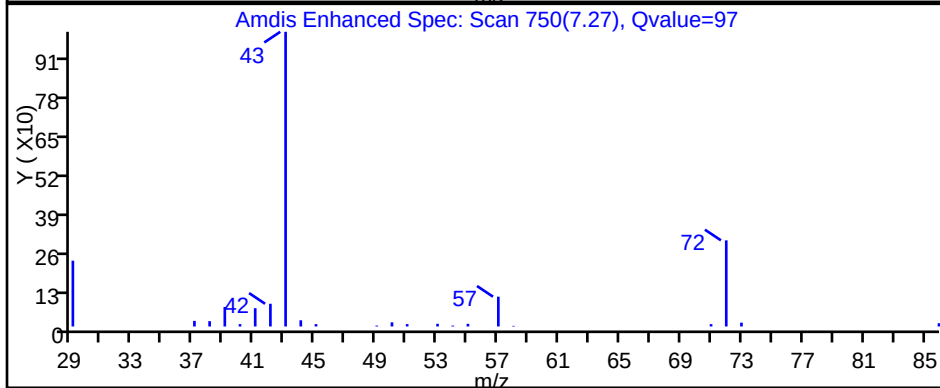
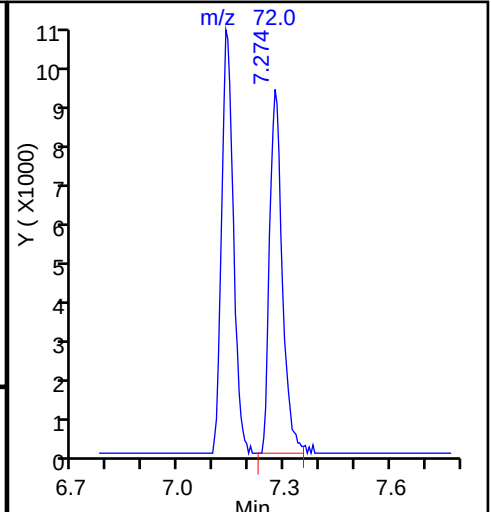
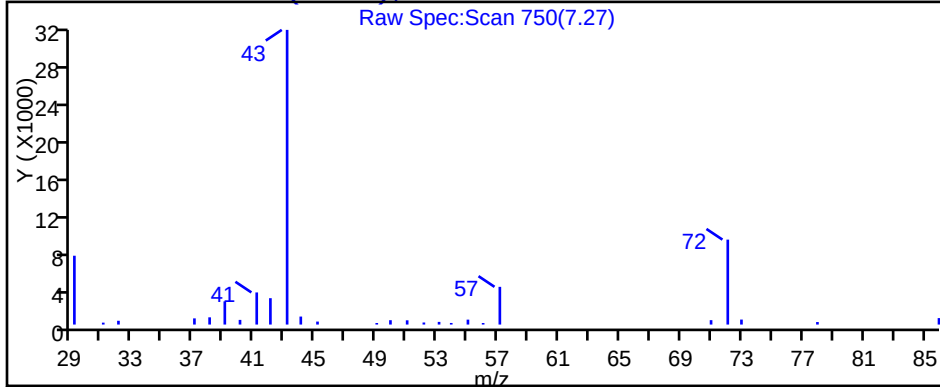
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P115.D

Injection Date: 06-Apr-2017 01:38:30

Instrument ID: MG

Lims ID: 140-7698-A-2

Lab Sample ID: 140-7698-2

Client ID: H-37-FF

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 21

Purge Vol: 500.000 mL

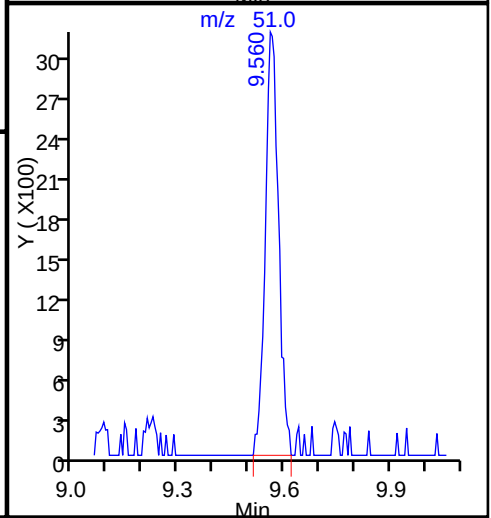
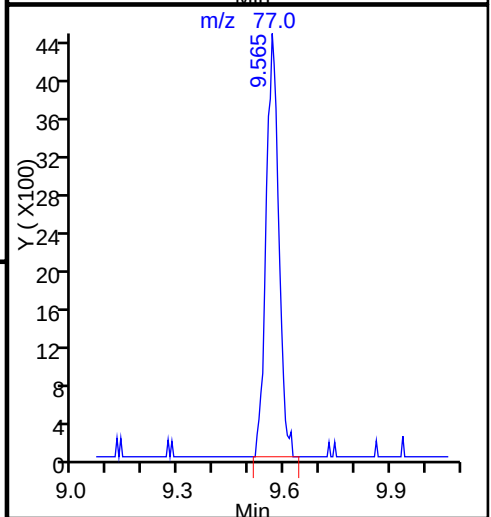
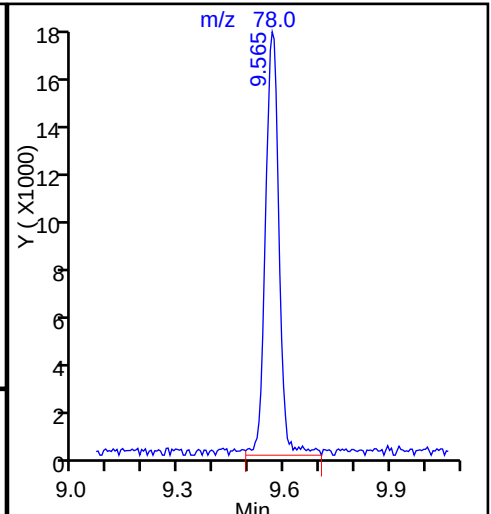
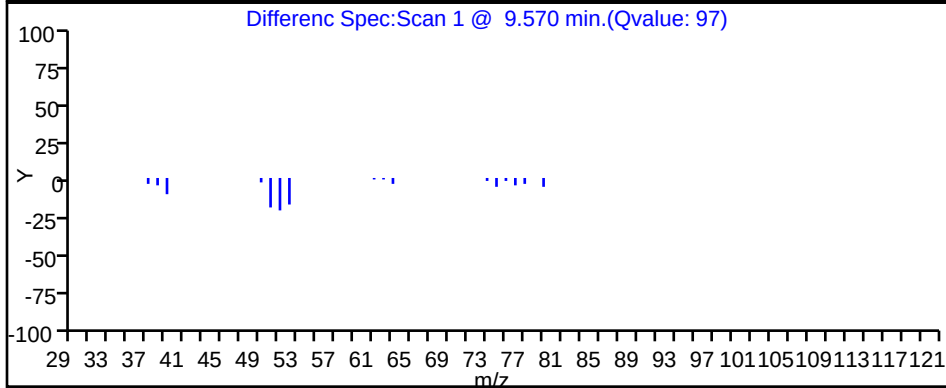
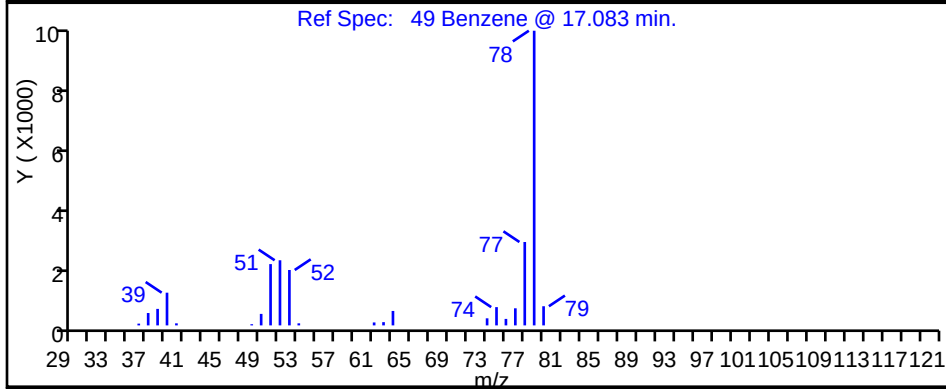
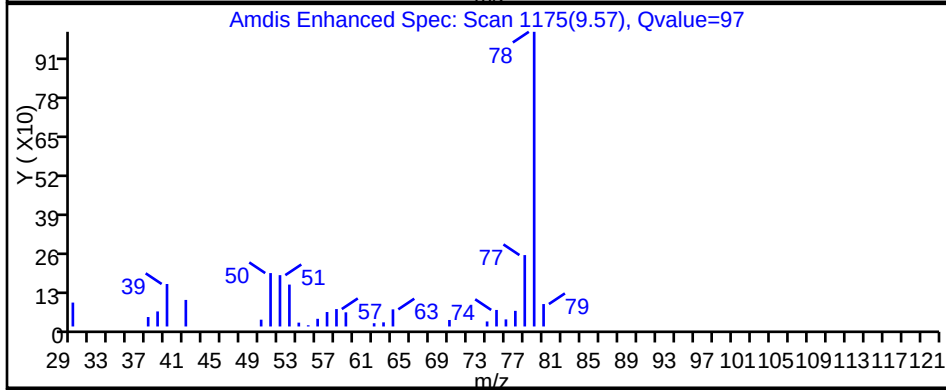
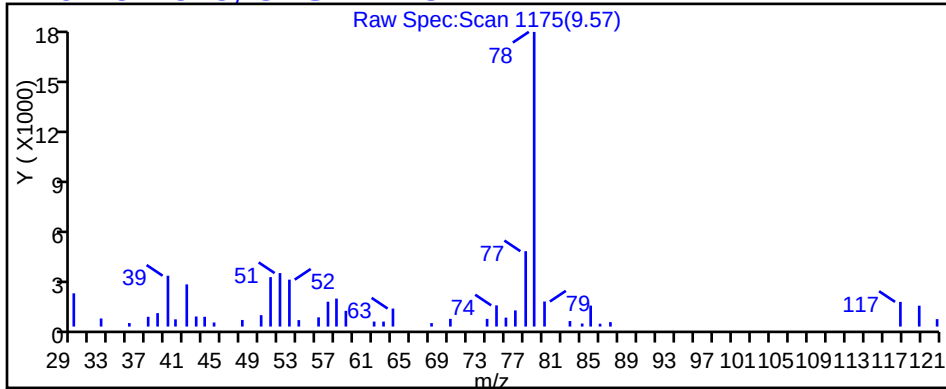
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P115.D

Injection Date: 06-Apr-2017 01:38:30

Instrument ID: MG

Lims ID: 140-7698-A-2

Lab Sample ID: 140-7698-2

Client ID: H-37-FF

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 21

Purge Vol: 500.000 mL

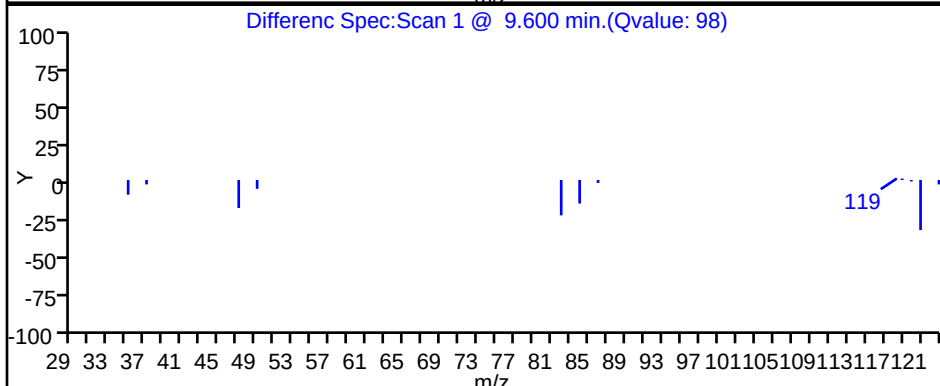
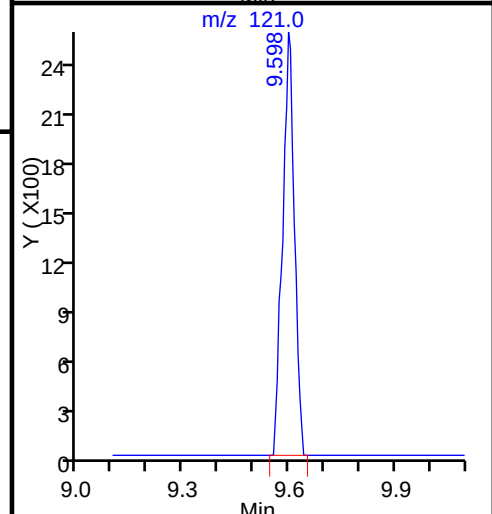
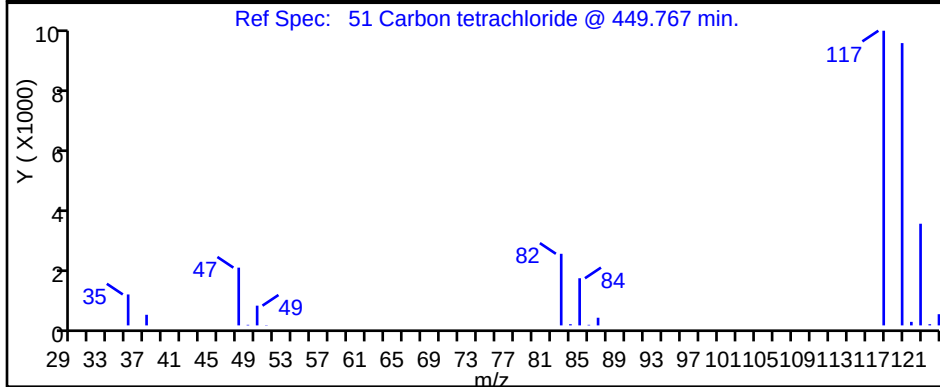
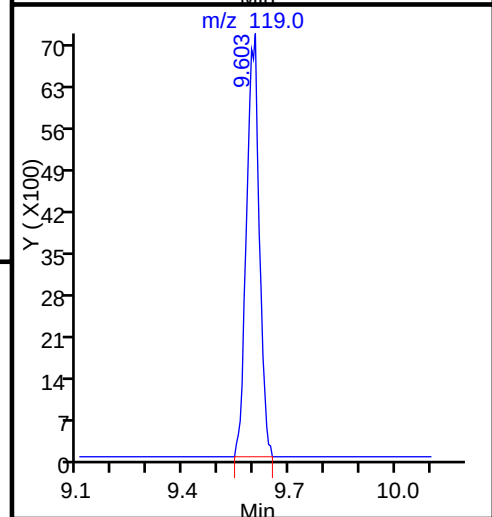
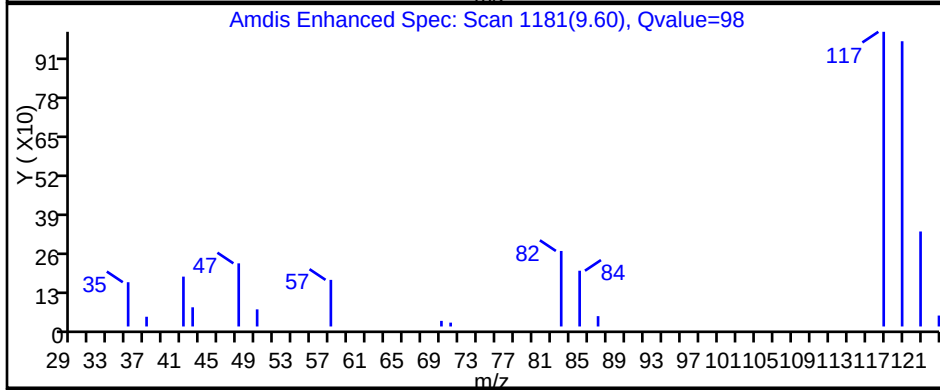
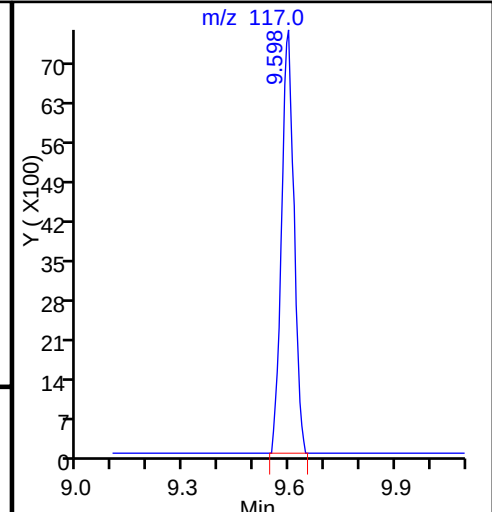
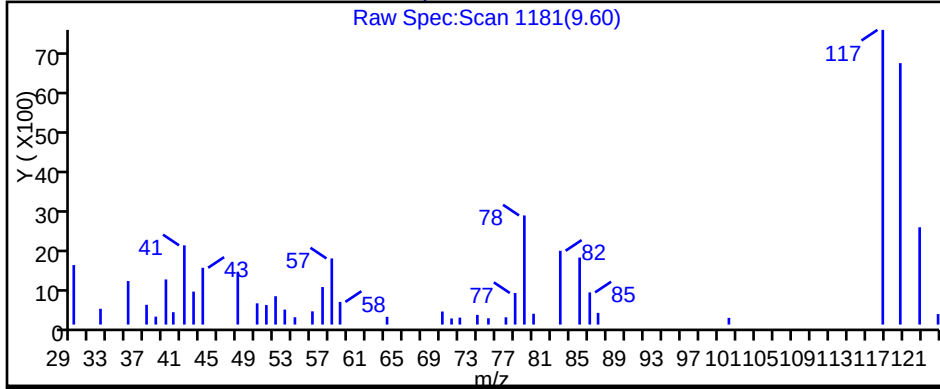
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P115.D

Injection Date: 06-Apr-2017 01:38:30

Instrument ID: MG

Lims ID: 140-7698-A-2

Lab Sample ID: 140-7698-2

Client ID: H-37-FF

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 21

Purge Vol: 500.000 mL

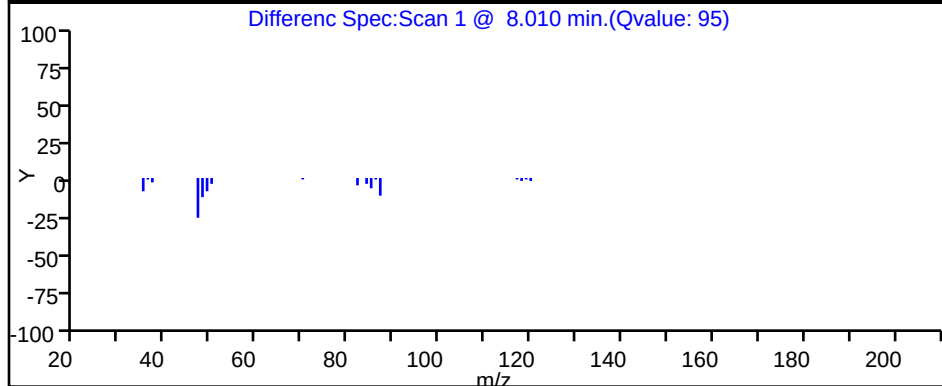
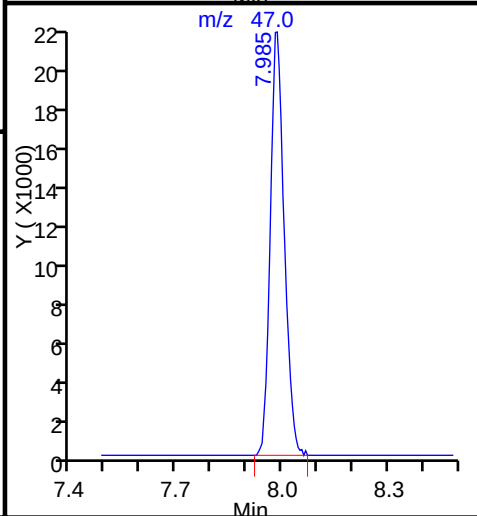
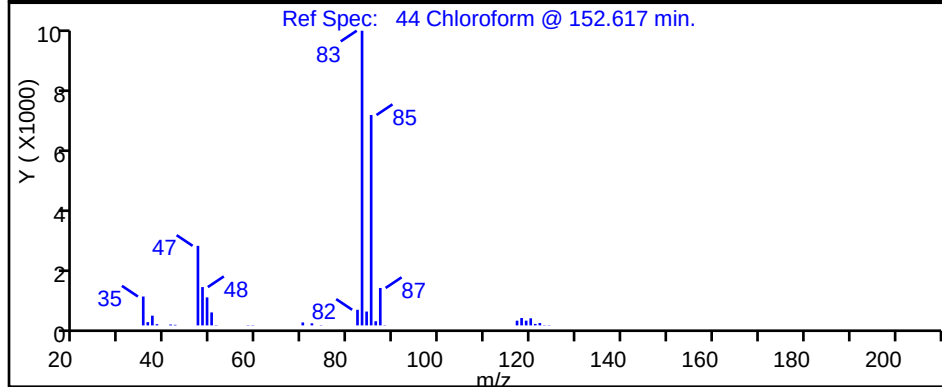
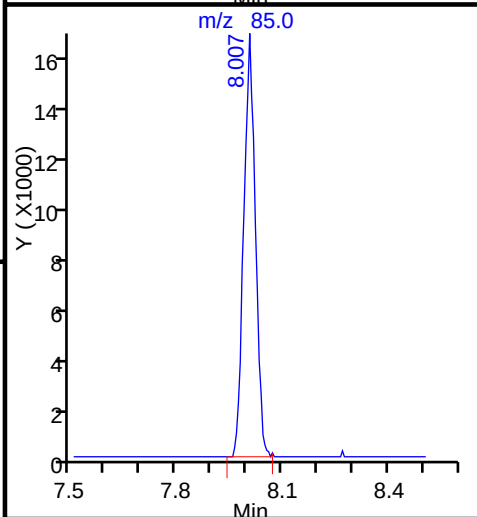
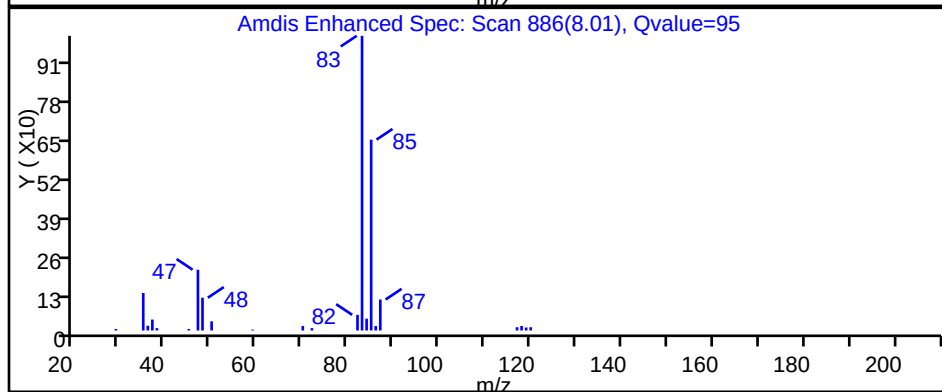
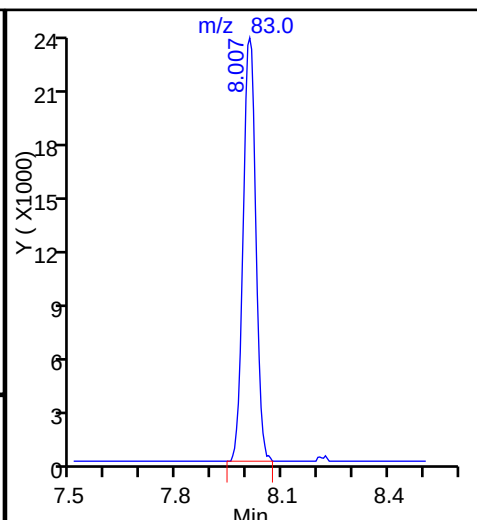
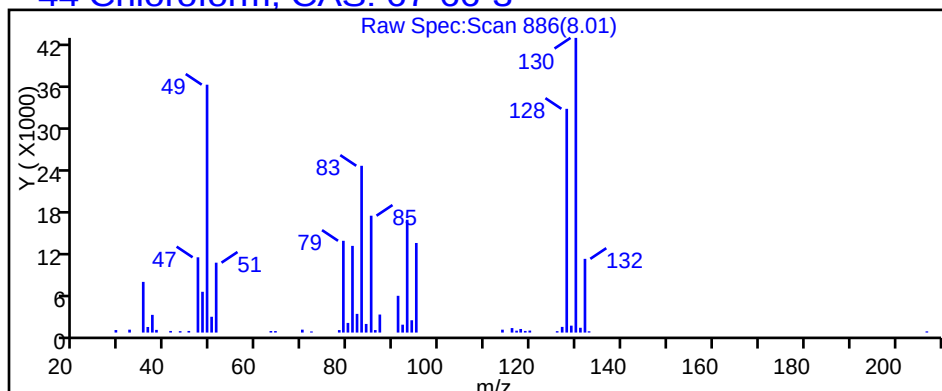
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

44 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\ChromNA\\Knoxville\\ChromData\\MG\\20170402-4509.b\\GD05P115.D

Injection Date: 06-Apr-2017 01:38:30

Instrument ID: MG

Lims ID: 140-7698-A-2

Lab Sample ID: 140-7698-2

Client ID: H-37-FF

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 21

Purge Vol: 500.000 mL

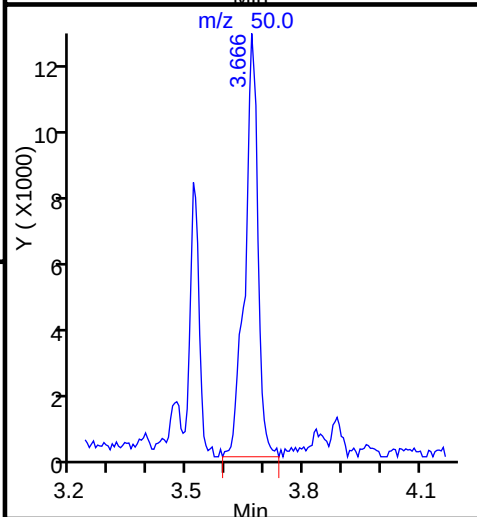
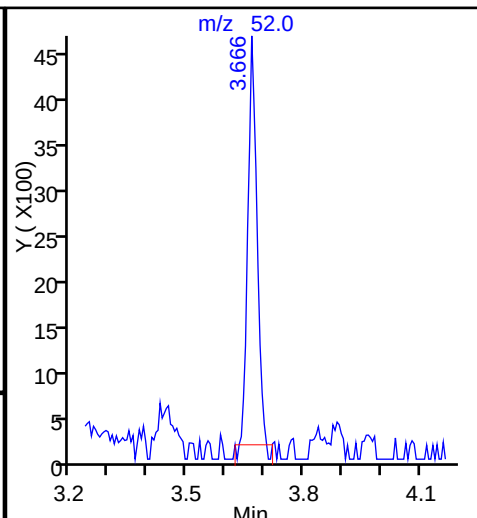
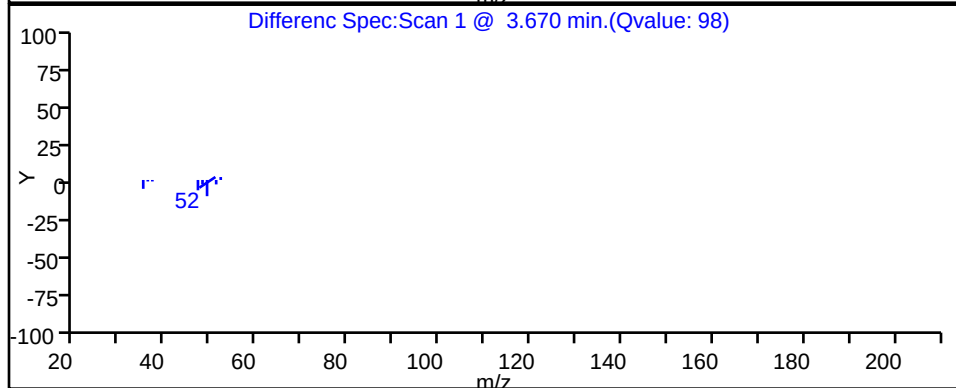
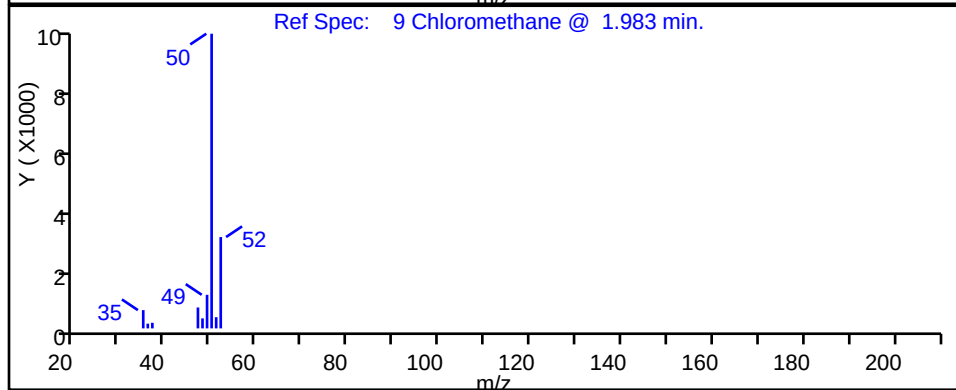
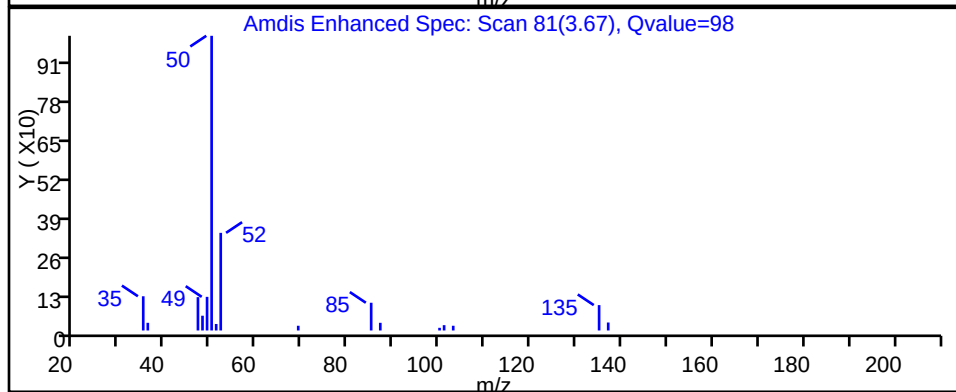
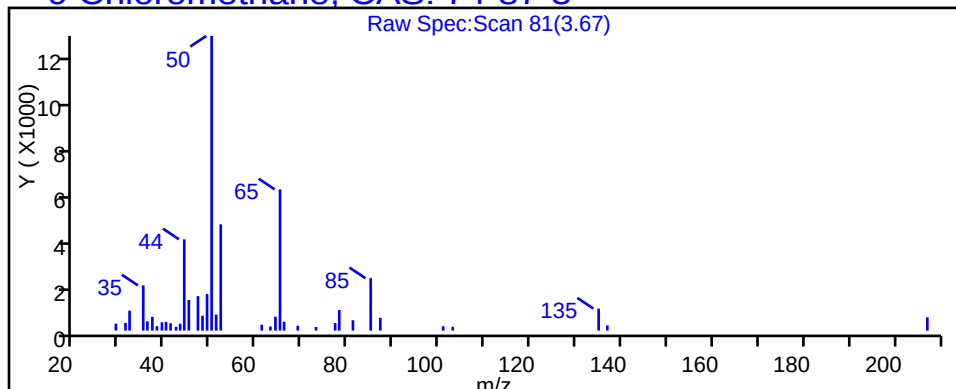
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P115.D

Injection Date: 06-Apr-2017 01:38:30

Instrument ID: MG

Lims ID: 140-7698-A-2

Lab Sample ID: 140-7698-2

Client ID: H-37-FF

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 21

Purge Vol: 500.000 mL

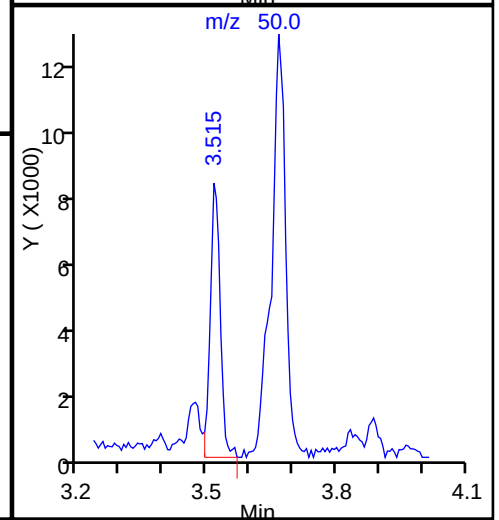
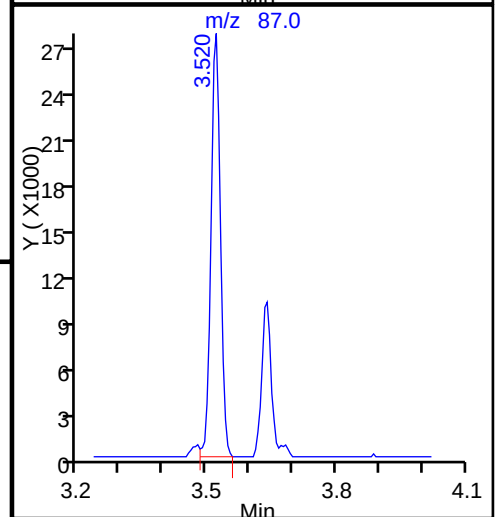
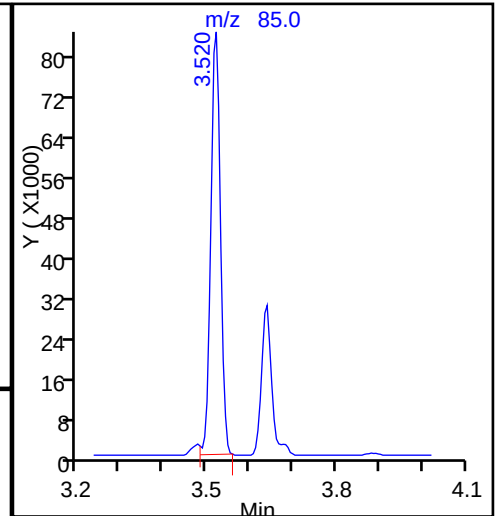
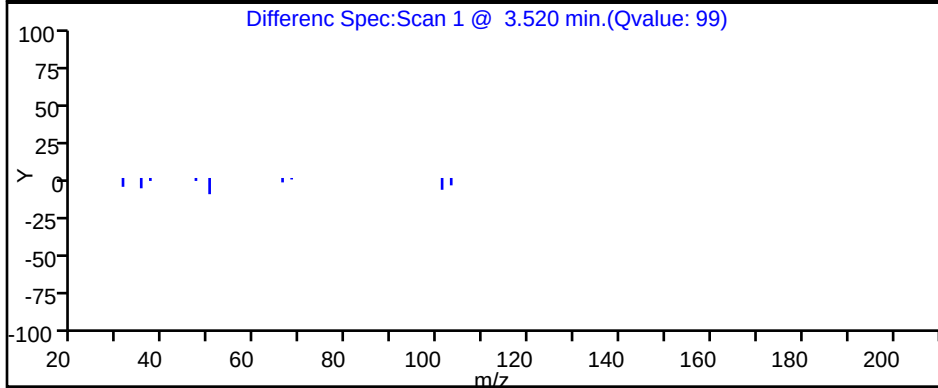
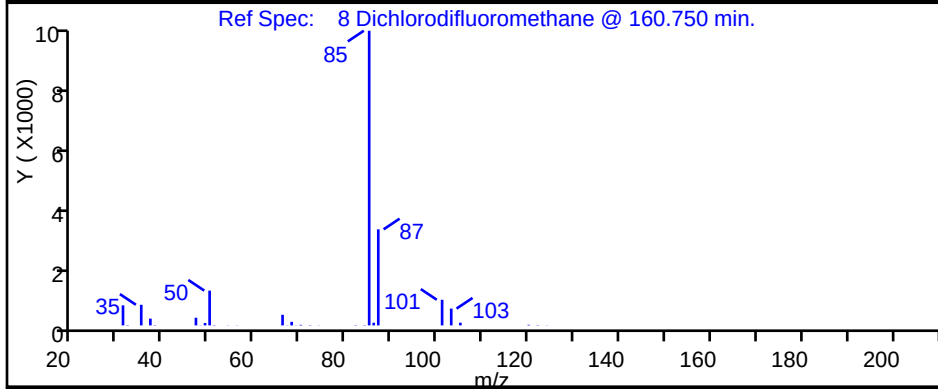
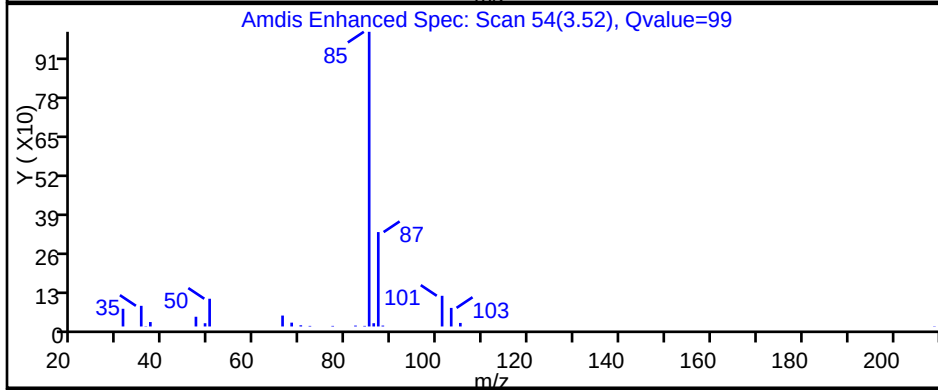
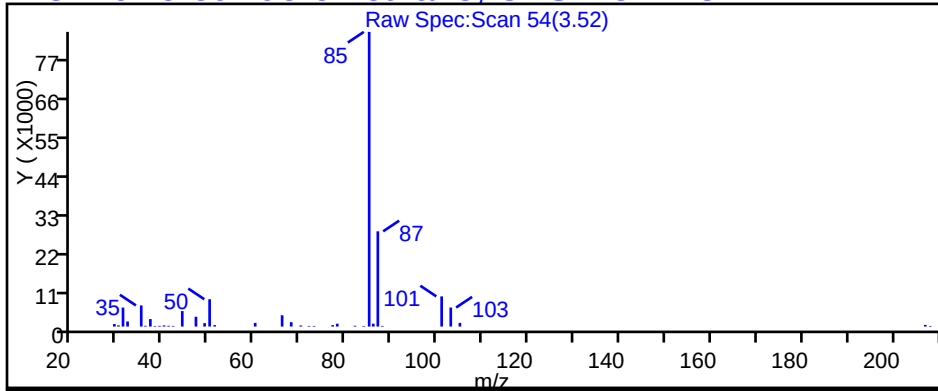
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P115.D

Injection Date: 06-Apr-2017 01:38:30

Instrument ID: MG

Lims ID: 140-7698-A-2

Lab Sample ID: 140-7698-2

Client ID: H-37-FF

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 21

Purge Vol: 500.000 mL

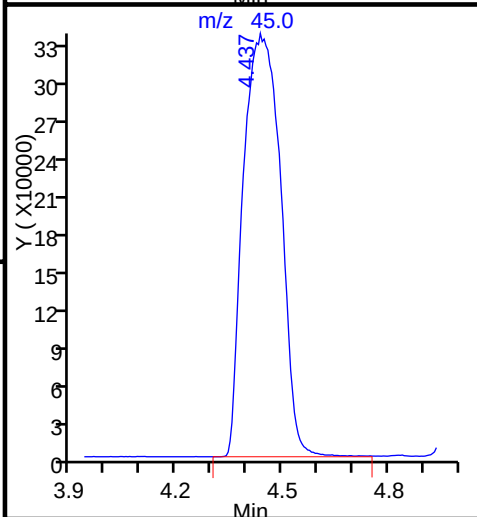
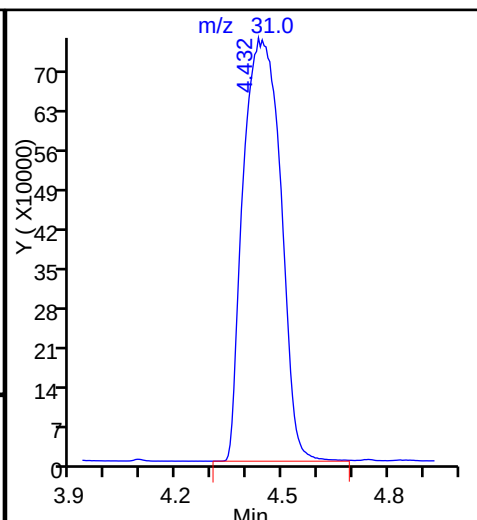
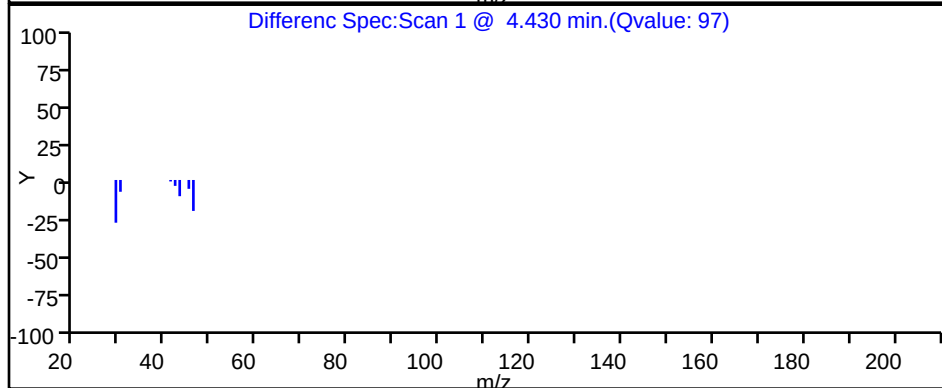
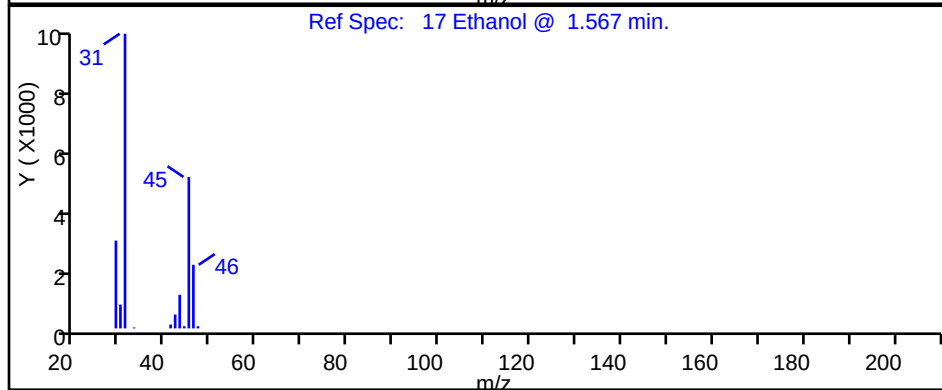
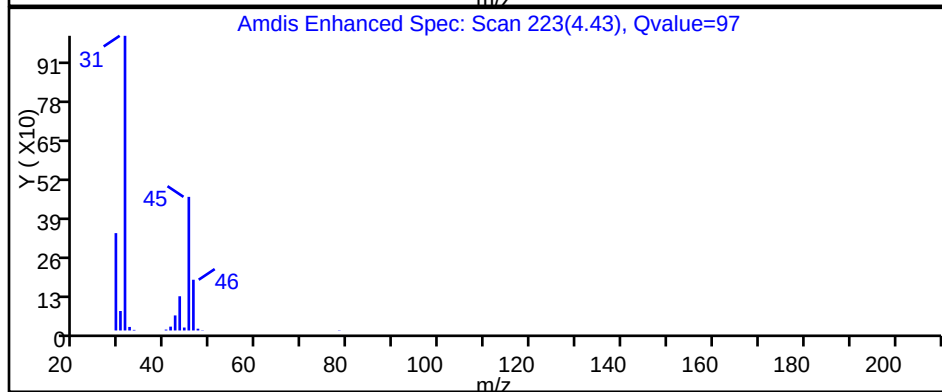
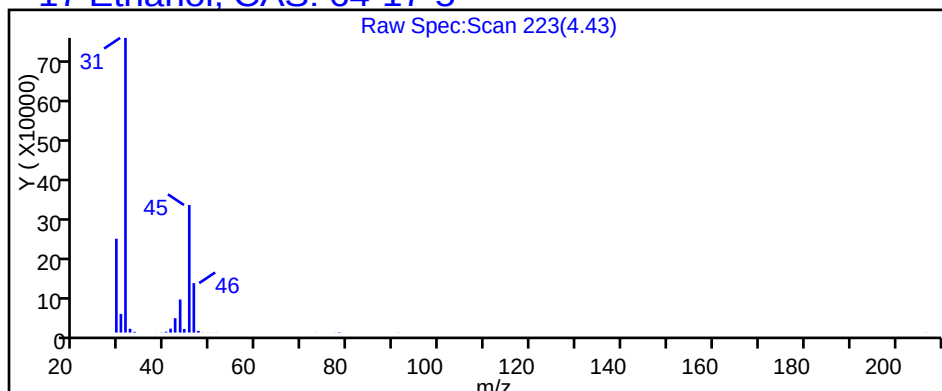
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P115.D

Injection Date: 06-Apr-2017 01:38:30

Instrument ID: MG

Lims ID: 140-7698-A-2

Lab Sample ID: 140-7698-2

Client ID: H-37-FF

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 21

Purge Vol: 500.000 mL

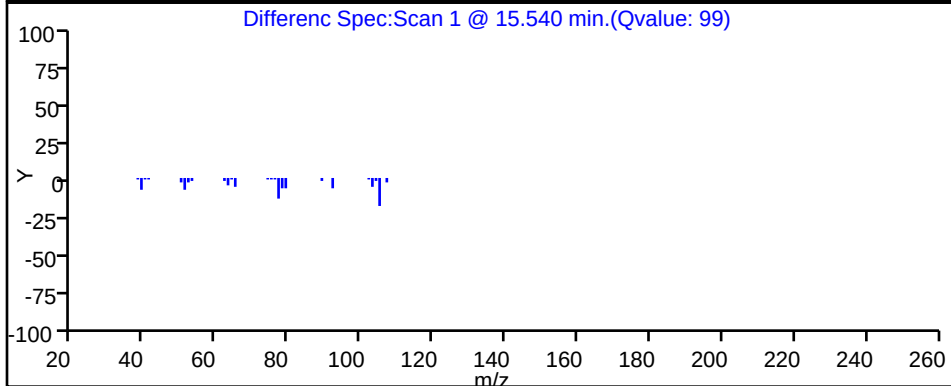
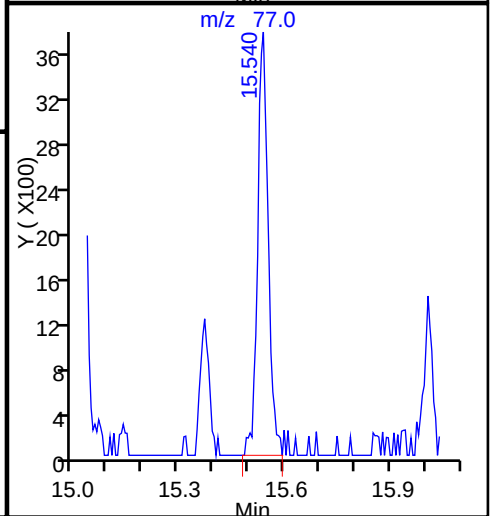
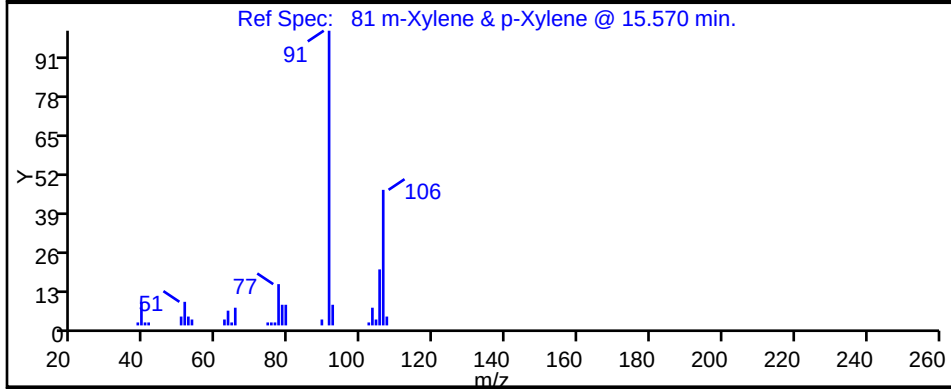
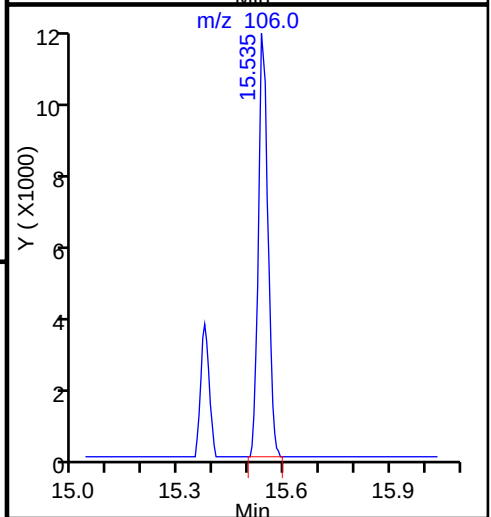
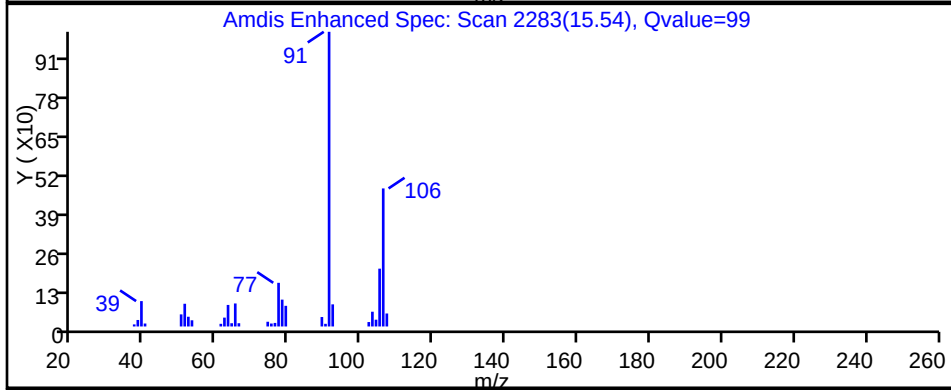
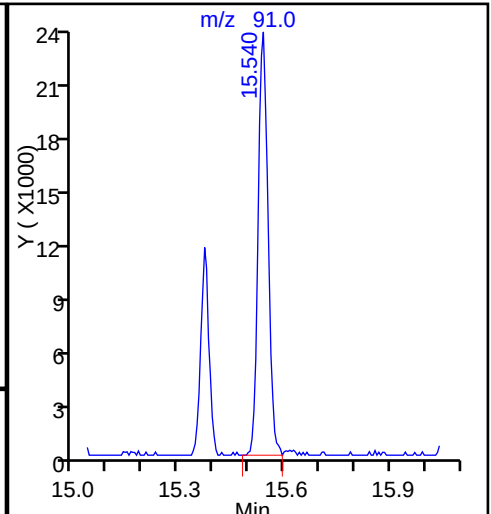
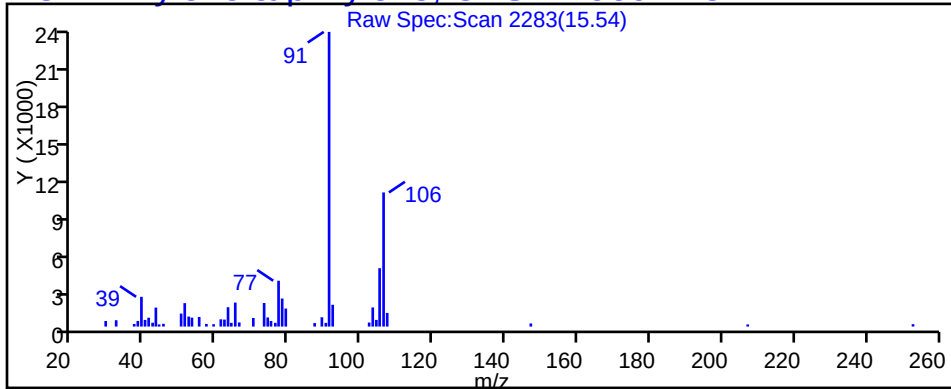
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P115.D

Injection Date: 06-Apr-2017 01:38:30

Instrument ID: MG

Lims ID: 140-7698-A-2

Lab Sample ID: 140-7698-2

Client ID: H-37-FF

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 21

Purge Vol: 500.000 mL

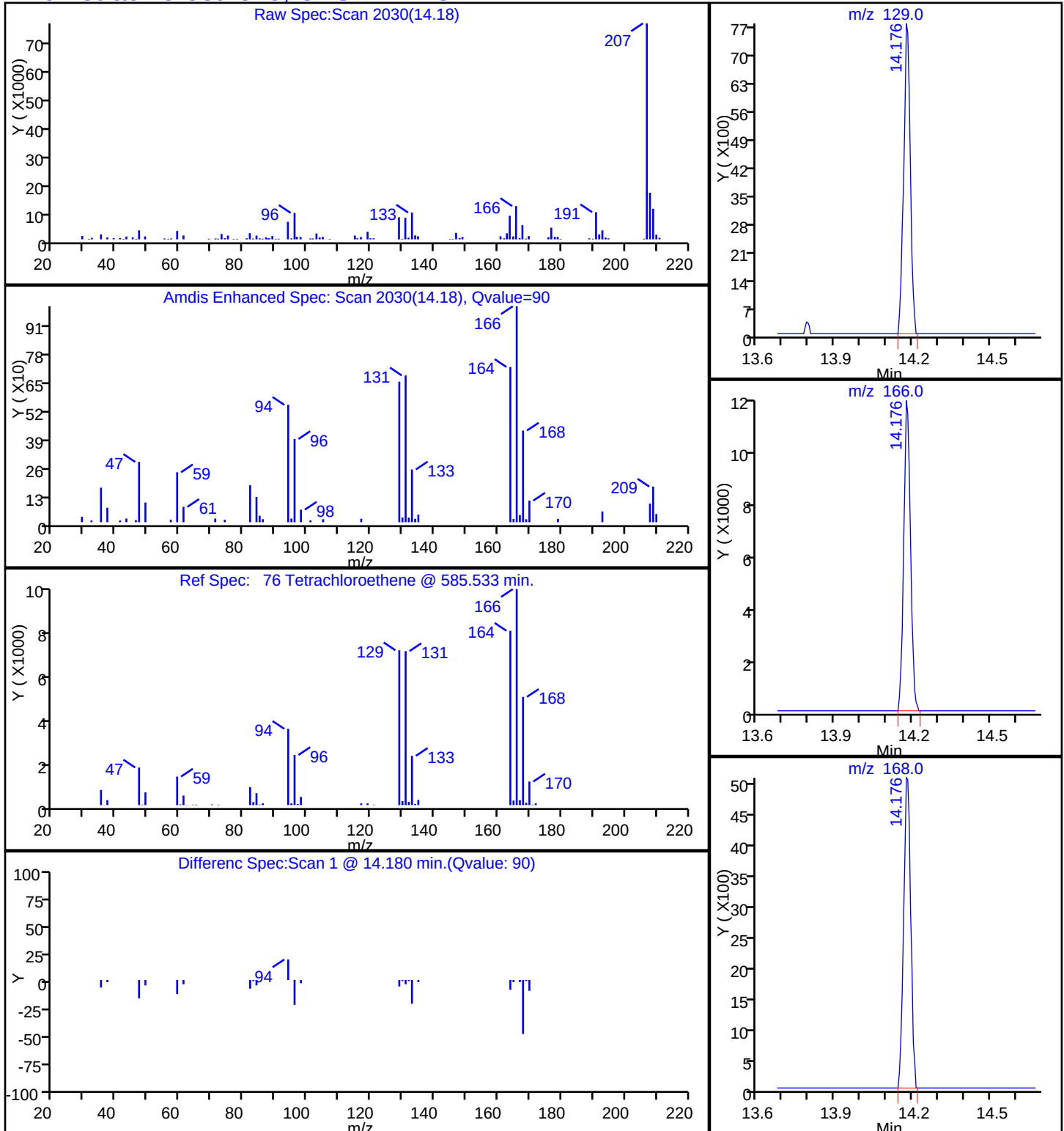
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

76 Tetrachloroethene, CAS: 127-18-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P115.D

Injection Date: 06-Apr-2017 01:38:30

Instrument ID: MG

Lims ID: 140-7698-A-2

Lab Sample ID: 140-7698-2

Client ID: H-37-FF

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 21

Purge Vol: 500.000 mL

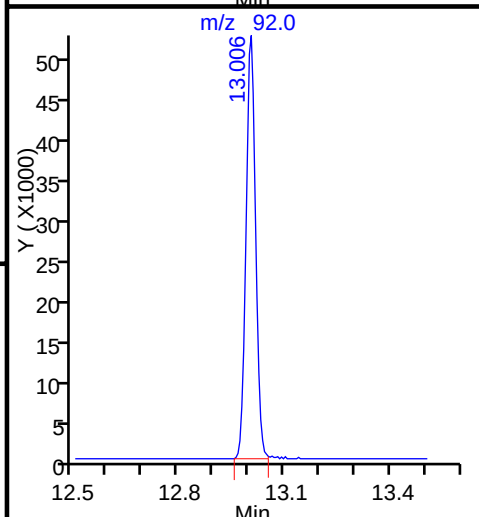
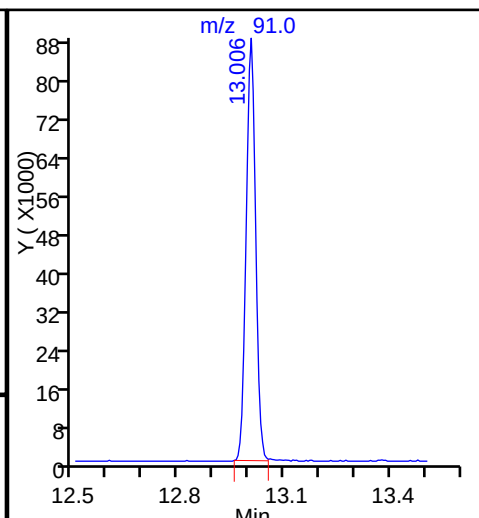
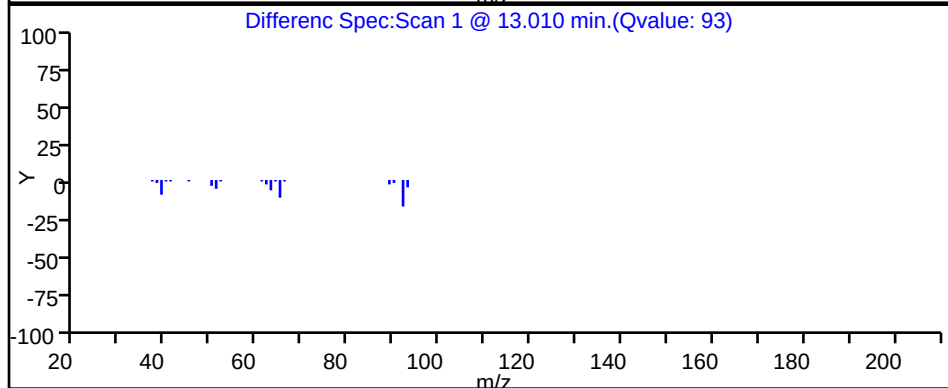
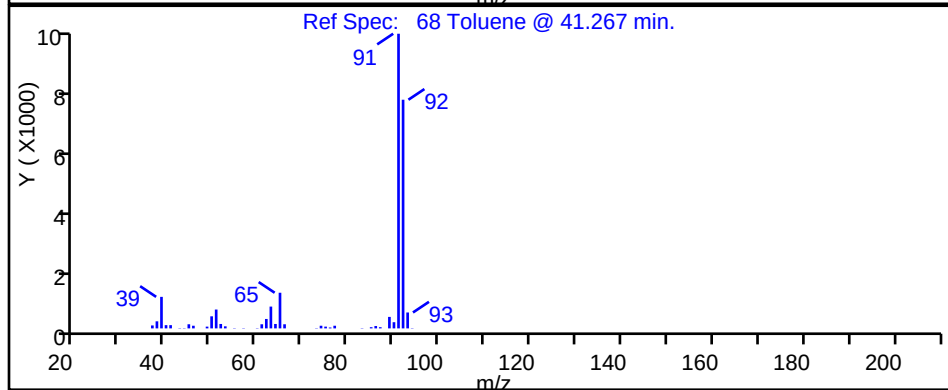
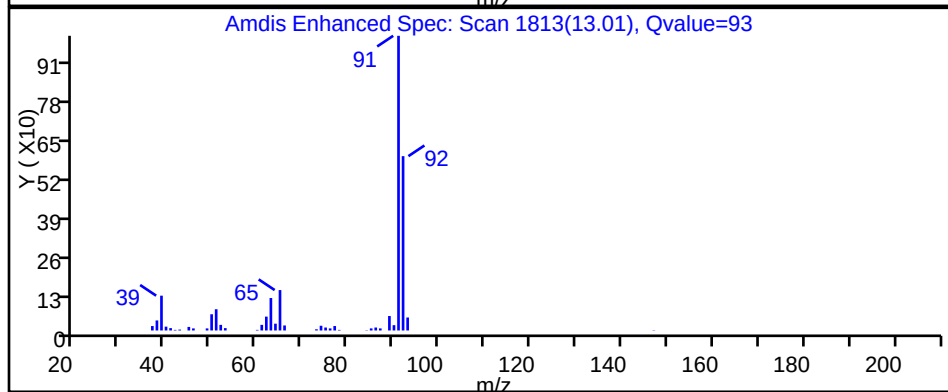
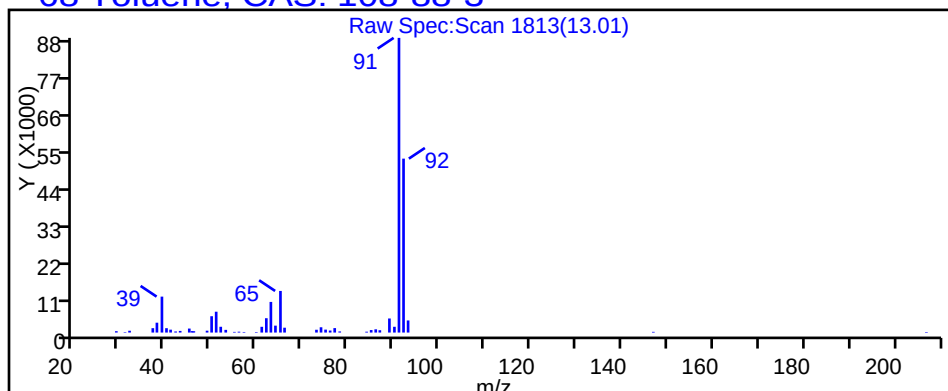
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P115.D

Injection Date: 06-Apr-2017 01:38:30

Instrument ID: MG

Lims ID: 140-7698-A-2

Lab Sample ID: 140-7698-2

Client ID: H-37-FF

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 21

Purge Vol: 500.000 mL

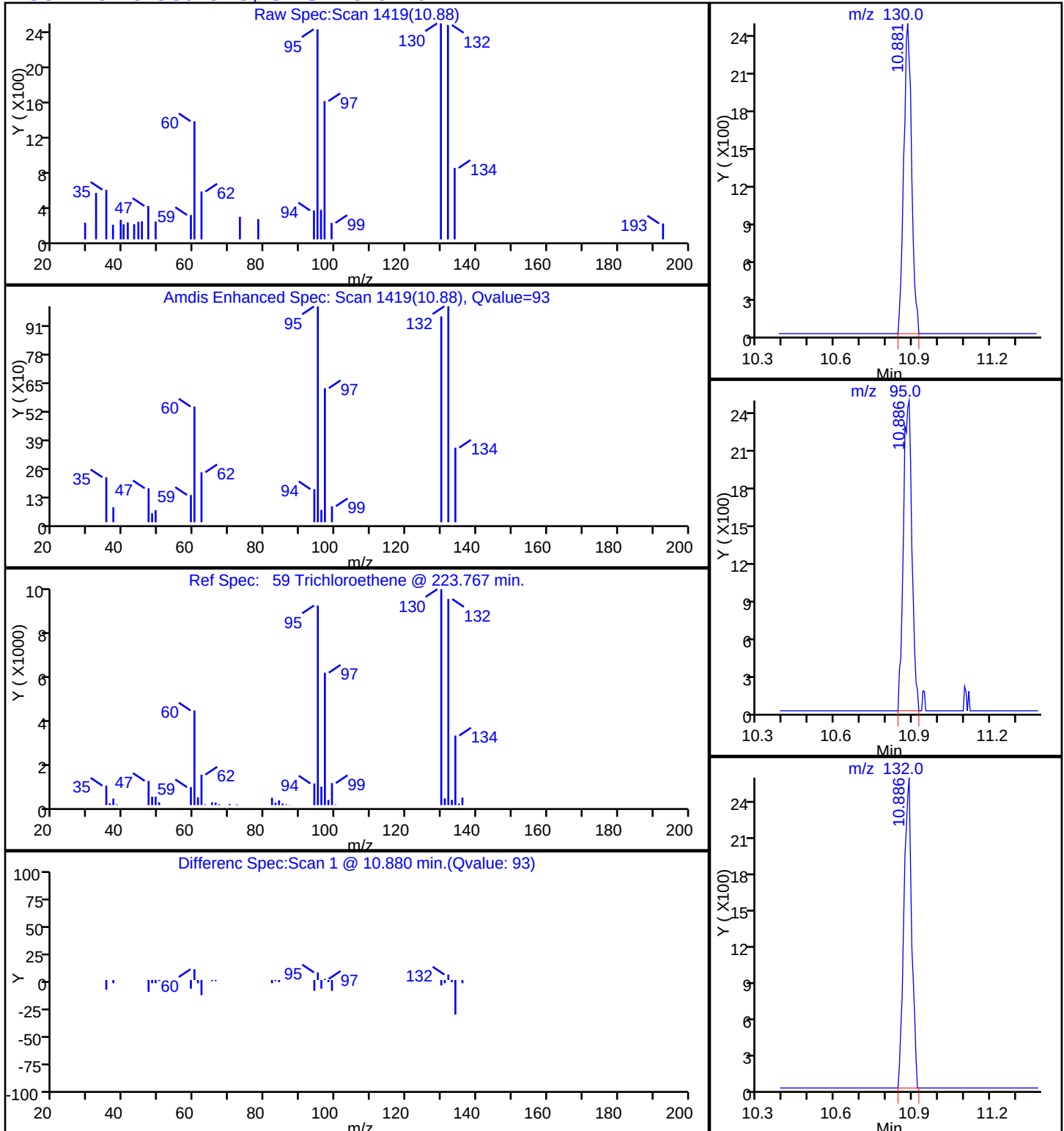
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

59 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P115.D

Injection Date: 06-Apr-2017 01:38:30

Instrument ID: MG

Lims ID: 140-7698-A-2

Lab Sample ID: 140-7698-2

Client ID: H-37-FF

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 21

Purge Vol: 500.000 mL

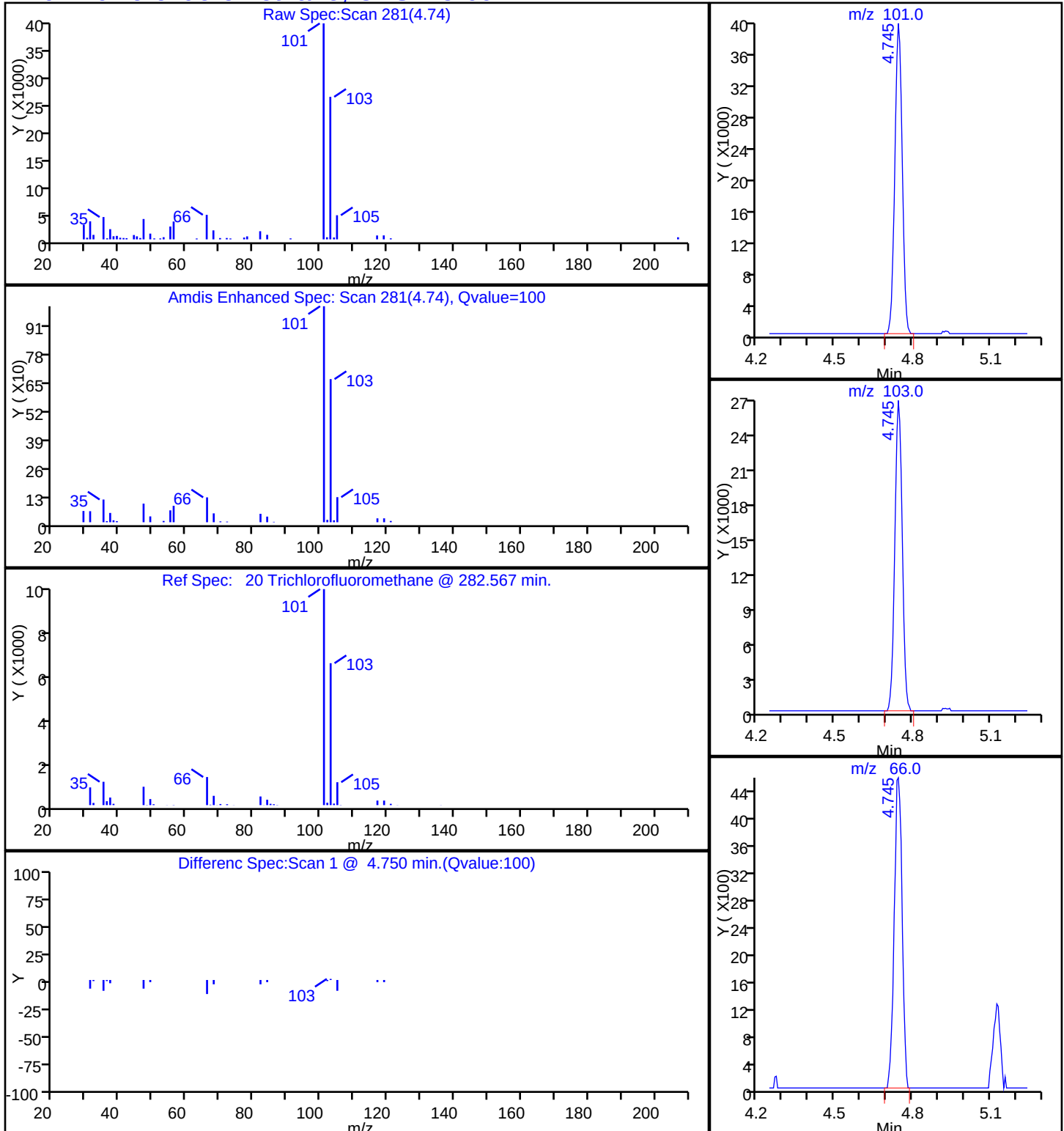
Dil. Factor: 1.0000

Method: MG_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.: 140-7698-1
 SDG No.: _____
 Client Sample ID: H-37-FF DL Lab Sample ID: 140-7698-2 DL
 Matrix: Air Lab File ID: GD05P115DL.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 16:30
 Sample wt/vol: 50 (mL) Date Analyzed: 04/06/2017 10:29
 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.: 10156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
64-17-5	Ethanol	46.07	160	D	20	

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.: 140-7698-1
 SDG No.: _____
 Client Sample ID: H-37-FF DL Lab Sample ID: 140-7698-2 DL
 Matrix: Air Lab File ID: GD05P115DL.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 16:30
 Sample wt/vol: 50 (mL) Date Analyzed: 04/06/2017 10:29
 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.: 10156 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
64-17-5	Ethanol	46.07	300	D	38	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P115DL.D
 Lims ID: 140-7698-A-2
 Client ID: H-37-FF
 Sample Type: Client
 Inject. Date: 06-Apr-2017 10:29:30 ALS Bottle#: 15 Worklist Smp#: 26
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004509-026
 Misc. Info.: 140-7698-a-2
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 06-Apr-2017 11:08:26 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: tajh

Date: 06-Apr-2017 11:08:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.975	7.980	-0.005	71	245184	4.00	
* 2 1,4-Difluorobenzene	114	10.142	10.148	-0.006	95	1150430	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.017	15.017	0.000	88	1140361	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.689	16.689	0.000	94	893614	3.97	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	13548	0.0522	
9 Chloromethane	52	3.661	3.666	-0.005	66	1332	0.0763	
17 Ethanol	31	4.356	4.356	0.000	96	389170	15.8	
20 Trichlorofluoromethane	101	4.745	4.744	0.001	98	7886	0.0305	
31 Methylene Chloride	84	5.645	5.650	-0.005	85	5900	0.1001	
44 Chloroform	83	7.991	8.007	-0.016	73	5132	0.0298	
49 Benzene	78	9.565	9.565	0.000	41	4416	0.0226	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P115DL.D

Injection Date: 06-Apr-2017 10:29:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7698-A-2

Lab Sample ID: 140-7698-2

Worklist Smp#: 26

Client ID: H-37-FF

Purge Vol: 500.000 mL

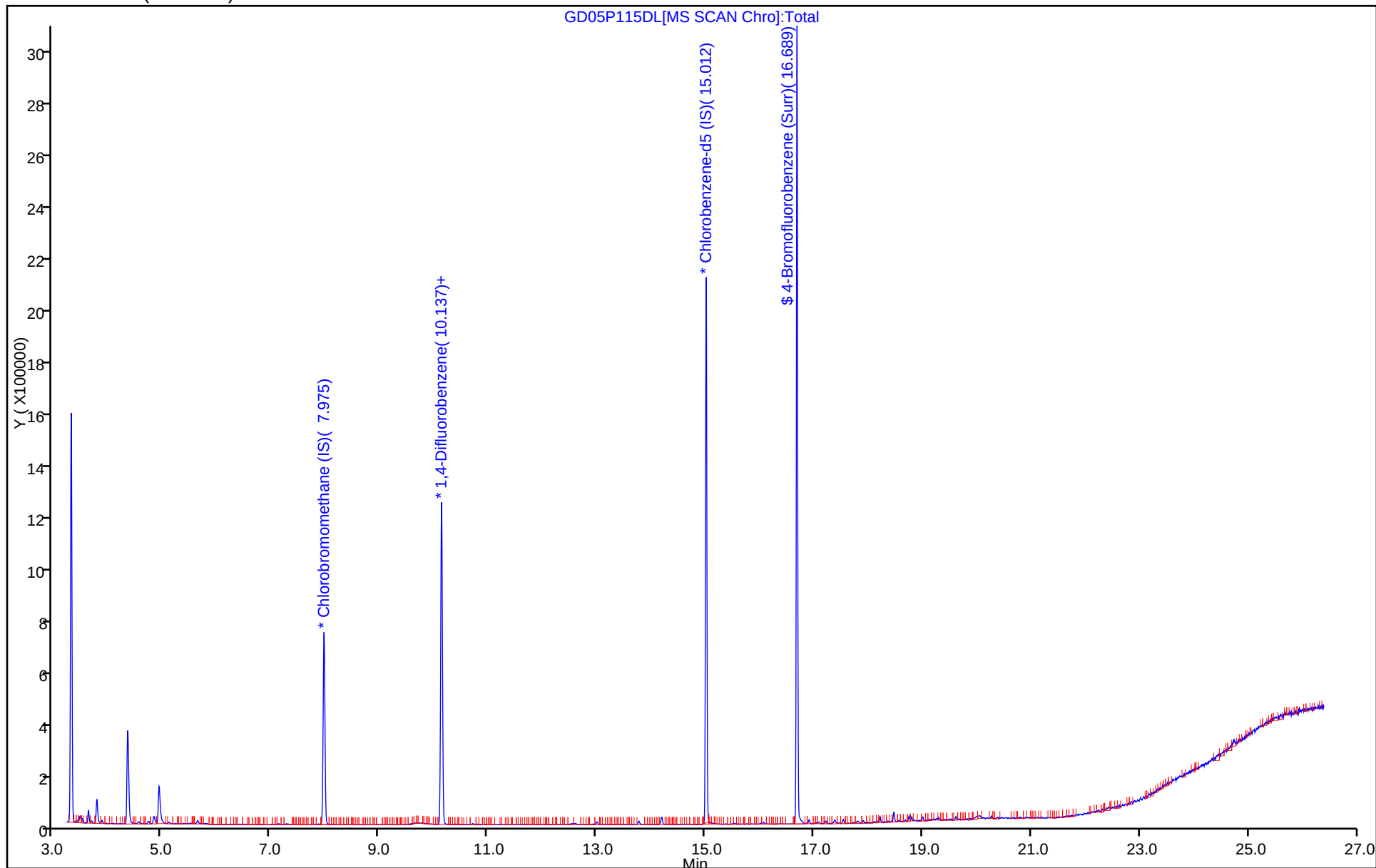
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P115DL.D
Lims ID: 140-7698-A-2
Client ID: H-37-FF
Sample Type: Client
Inject. Date: 06-Apr-2017 10:29:30 ALS Bottle#: 15 Worklist Smp#: 26
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004509-026
Misc. Info.: 140-7698-a-2
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Apr-2017 11:08:26 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: tajh

Date: 06-Apr-2017 11:08:26

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	3.97	99.13

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P115DL.D

Injection Date: 06-Apr-2017 10:29:30

Instrument ID: MG

Lims ID: 140-7698-A-2

Lab Sample ID: 140-7698-2

Client ID: H-37-FF

Operator ID: 7126

ALS Bottle#: 15

Worklist Smp#: 26

Purge Vol: 500.000 mL

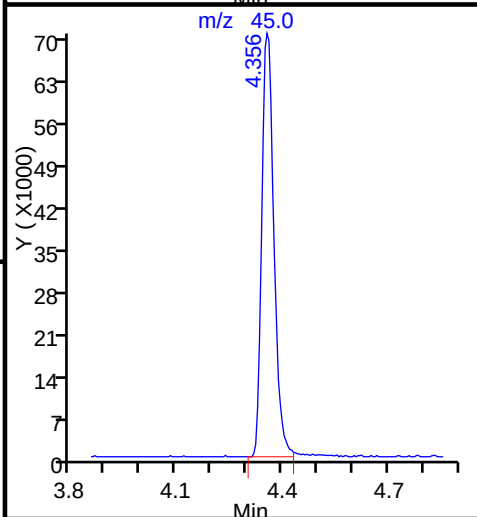
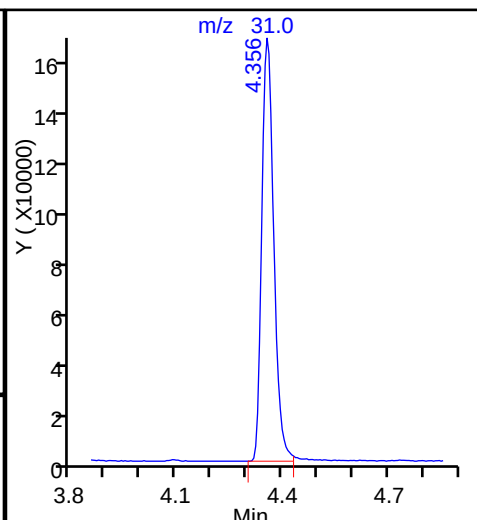
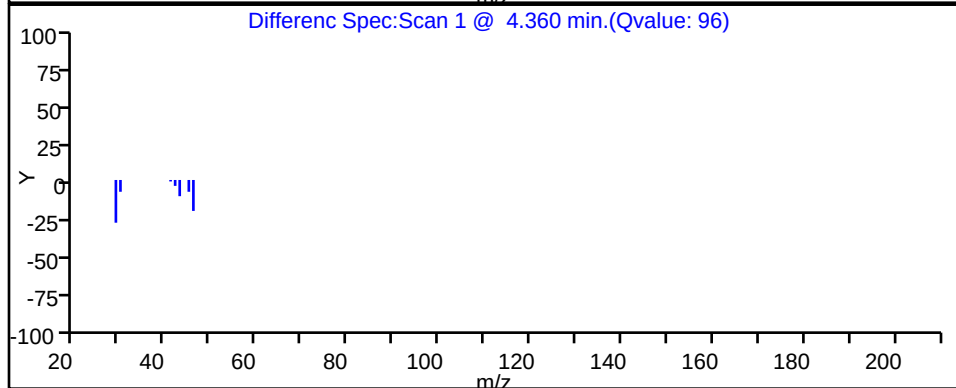
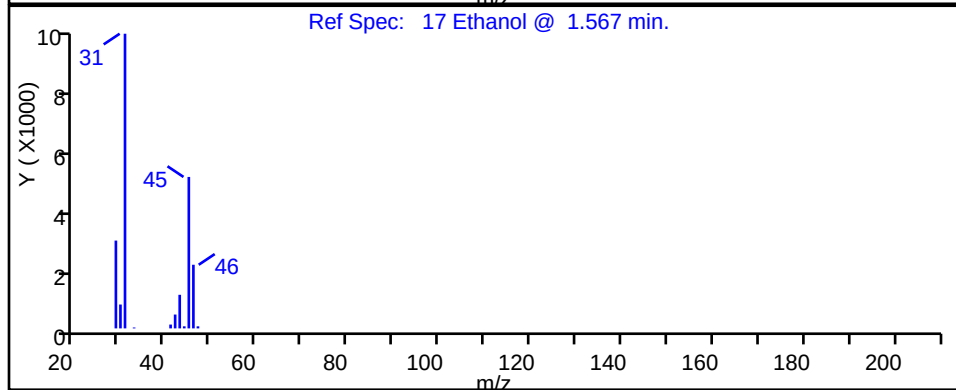
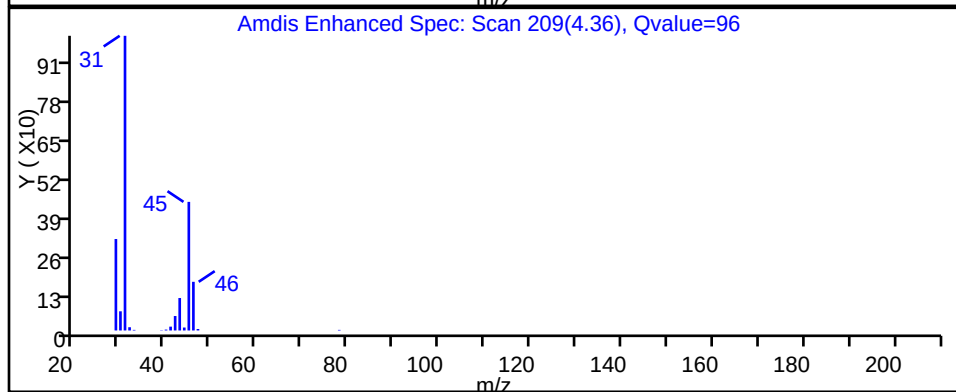
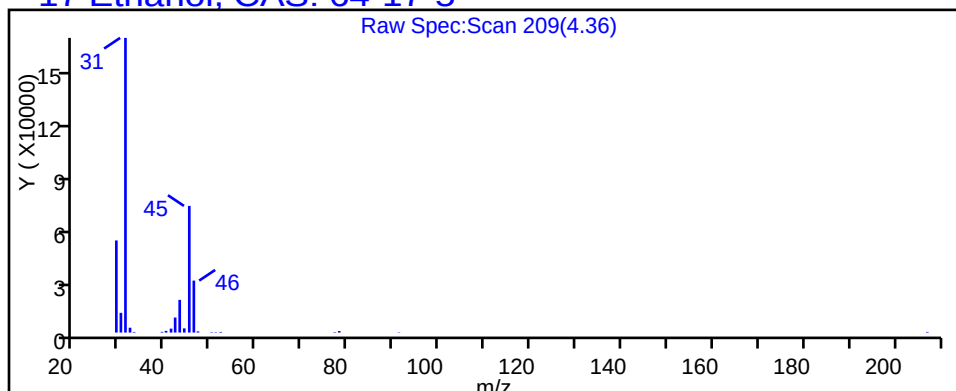
Dil. Factor: 1.0000

Method: MG_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.: 140-7698-1
 SDG No.: _____
 Client Sample ID: H-37-SS Lab Sample ID: 140-7698-3
 Matrix: Air Lab File ID: GD05P116.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 16:32
 Sample wt/vol: 500 (mL) Date Analyzed: 04/06/2017 02:24
 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.: 10156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	1.1		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	0.40		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	0.15		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	0.44		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	33	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	0.26		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1
 SDG No.: _____
 Client Sample ID: H-37-SS Lab Sample ID: 140-7698-3
 Matrix: Air Lab File ID: GD05P116.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 16:32
 Sample wt/vol: 500 (mL) Date Analyzed: 04/06/2017 02:24
 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.: 10156 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	2.0		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	0.61		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	0.35		0.080	
95-47-6	o-Xylene	106.17	0.095		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	3.5		0.080	
108-88-3	Toluene	92.14	0.61		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	0.27		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1
 SDG No.: _____
 Client Sample ID: H-37-SS Lab Sample ID: 140-7698-3
 Matrix: Air Lab File ID: GD05P116.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 16:32
 Sample wt/vol: 500 (mL) Date Analyzed: 04/06/2017 02:24
 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.: 10156 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	6.0		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	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	0.75		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	1.0		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	2.7		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	160	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	0.89		0.69	

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1
 SDG No.: _____
 Client Sample ID: H-37-SS Lab Sample ID: 140-7698-3
 Matrix: Air Lab File ID: GD05P116.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 16:32
 Sample wt/vol: 500 (mL) Date Analyzed: 04/06/2017 02:24
 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.: 10156 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	3.8		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	2.1		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	1.5		0.35	
95-47-6	o-Xylene	106.17	0.41		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	24		0.54	
108-88-3	Toluene	92.14	2.3		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	64		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.5		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116.D
 Lims ID: 140-7698-A-3
 Client ID: H-37-SS
 Sample Type: Client
 Inject. Date: 06-Apr-2017 02:24:30 ALS Bottle#: 16 Worklist Smp#: 22
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004509-022
 Misc. Info.: 140-7698-a-3
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 06-Apr-2017 09:57:45 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: tajh

Date: 06-Apr-2017 09:26:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.985	7.980	0.005	92	289997	4.00	
* 2 1,4-Difluorobenzene	114	10.147	10.148	-0.001	95	1202953	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.017	15.017	0.000	88	1260606	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.688	16.689	-0.001	94	1039466	4.17	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	148900	0.4851	
9 Chloromethane	52	3.666	3.666	0.000	85	2256	0.1093	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.677	3.671	0.006	80	2552	0.0140	
15 Bromomethane	94	4.140	4.141	0.000	92	2333	0.0278	
17 Ethanol	31	4.361	4.356	0.005	97	58072	1.99	
20 Trichlorofluoromethane	101	4.744	4.744	0.000	99	81268	0.2659	
30 1,1,2-Trichloro-1,2,2-trif	101	5.515	5.516	-0.001	91	10678	0.0599	
31 Methylene Chloride	84	5.650	5.650	0.000	87	10614	0.1522	
34 trans-1,2-Dichloroethene	96	6.378	6.384	-0.006	94	1817	0.0240	
37 1,1-Dichloroethane	63	6.761	6.761	0.000	40	2773	0.0188	
39 2-Butanone (MEK)	72	7.279	7.268	0.011	97	13234	0.4010	
40 Hexane	56	7.327	7.327	0.000	83	34846	0.6085	
44 Chloroform	83	8.001	8.007	-0.006	96	6641514	32.6	E
47 1,1,1-Trichloroethane	97	8.983	8.983	0.000	94	260233	1.11	
49 Benzene	78	9.570	9.565	0.005	97	47800	0.2339	
50 Cyclohexane	69	9.576	9.576	0.000	65	8910	0.2590	
51 Carbon tetrachloride	117	9.597	9.598	-0.001	98	93344	0.4371	
56 Isooctane	57	10.396	10.396	0.000	55	6998	0.0231	
59 Trichloroethene	130	10.881	10.881	0.000	96	1317668	11.9	
61 Dichlorobromomethane	83	11.113	11.107	0.006	97	26690	0.1507	
62 1,4-Dioxane	88	11.145	11.124	0.021	11	887	0.0321	
68 Toluene	91	13.005	13.006	-0.001	93	152472	0.6071	
76 Tetrachloroethene	129	14.181	14.181	0.000	94	400922	3.49	
79 Ethylbenzene	91	15.373	15.378	-0.005	99	17786	0.0507	
81 m-Xylene & p-Xylene	91	15.540	15.545	-0.005	100	100365	0.3542	
85 o-Xylene	91	16.074	16.074	0.000	96	27466	0.0948	
92 1,3,5-Trimethylbenzene	120	17.470	17.476	-0.006	91	8080	0.0435	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
96 1,2,4-Trimethylbenzene	105	17.939	17.940	-0.001	98	25348	0.0712	
100 1,4-Dichlorobenzene	146	18.301	18.301	0.000	93	12292	0.0468	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116.D

Injection Date: 06-Apr-2017 02:24:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7698-A-3

Lab Sample ID: 140-7698-3

Worklist Smp#: 22

Client ID: H-37-SS

Purge Vol: 500.000 mL

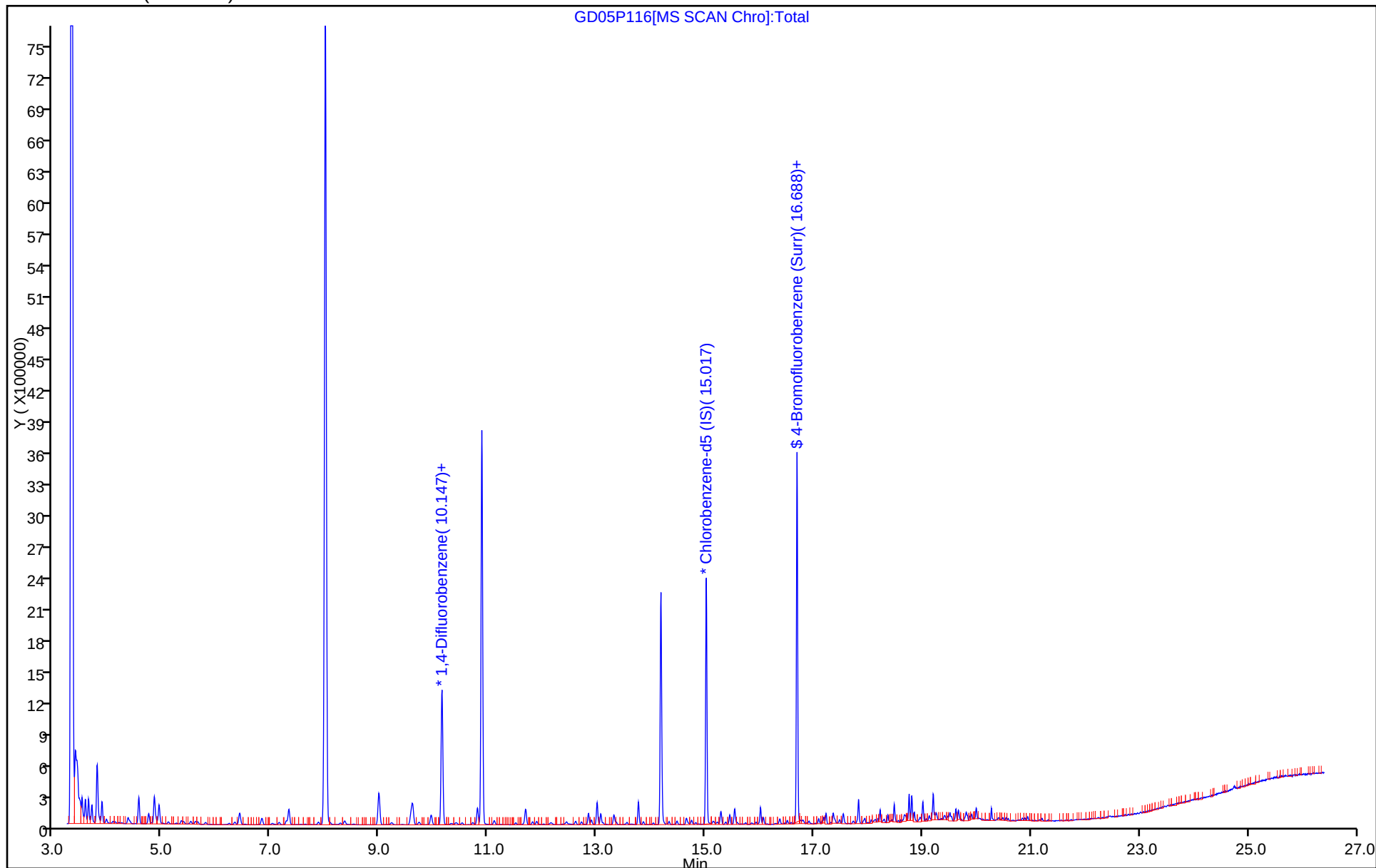
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116.D
Lims ID: 140-7698-A-3
Client ID: H-37-SS
Sample Type: Client
Inject. Date: 06-Apr-2017 02:24:30 ALS Bottle#: 16 Worklist Smp#: 22
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004509-022
Misc. Info.: 140-7698-a-3
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Apr-2017 09:57:45 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: tajh

Date: 06-Apr-2017 09:26:49

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.17	104.31

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116.D

Injection Date: 06-Apr-2017 02:24:30

Instrument ID: MG

Lims ID: 140-7698-A-3

Lab Sample ID: 140-7698-3

Client ID: H-37-SS

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 22

Purge Vol: 500.000 mL

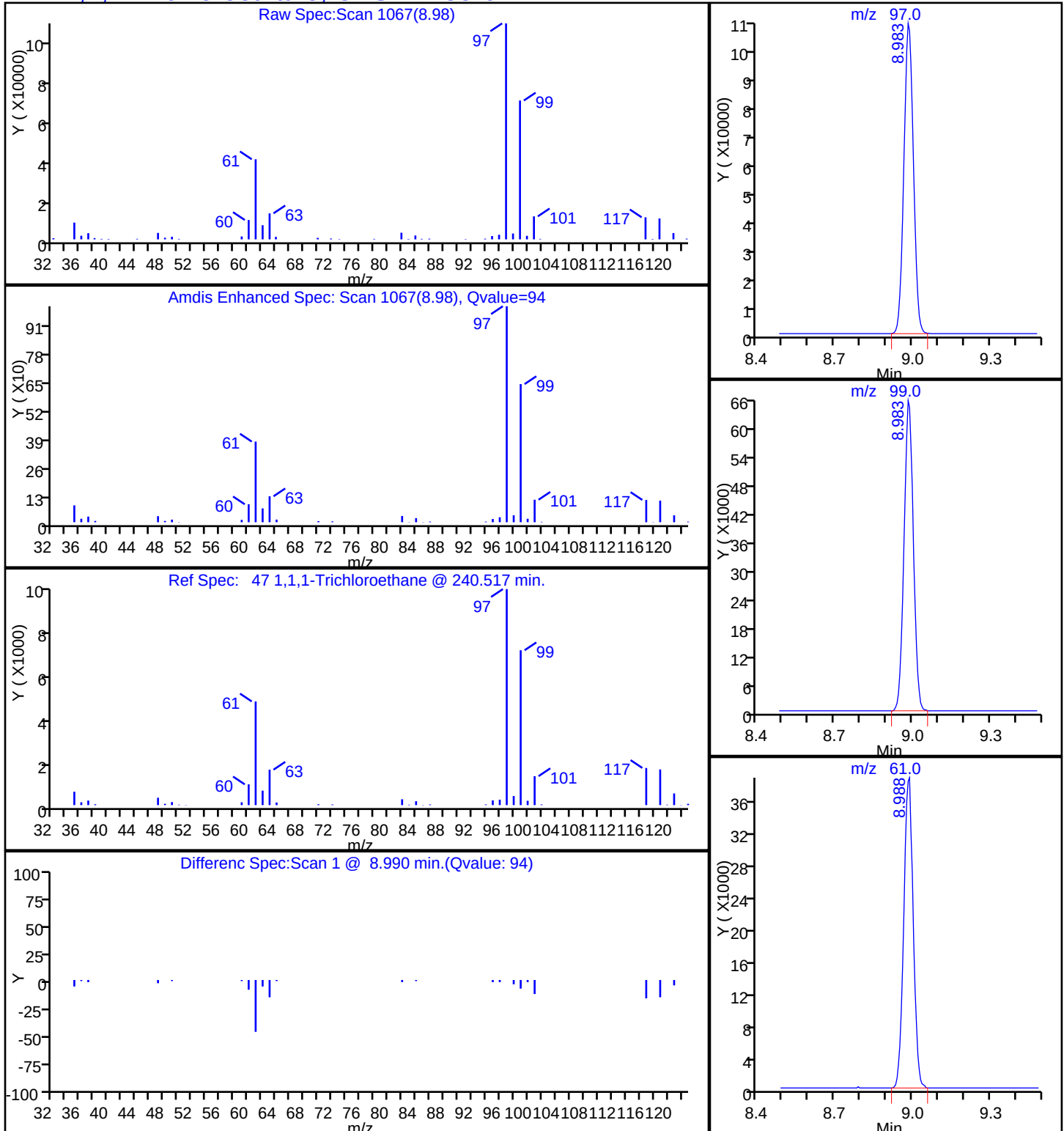
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

47 1,1,1-Trichloroethane, CAS: 71-55-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116.D

Injection Date: 06-Apr-2017 02:24:30

Instrument ID: MG

Lims ID: 140-7698-A-3

Lab Sample ID: 140-7698-3

Client ID: H-37-SS

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 22

Purge Vol: 500.000 mL

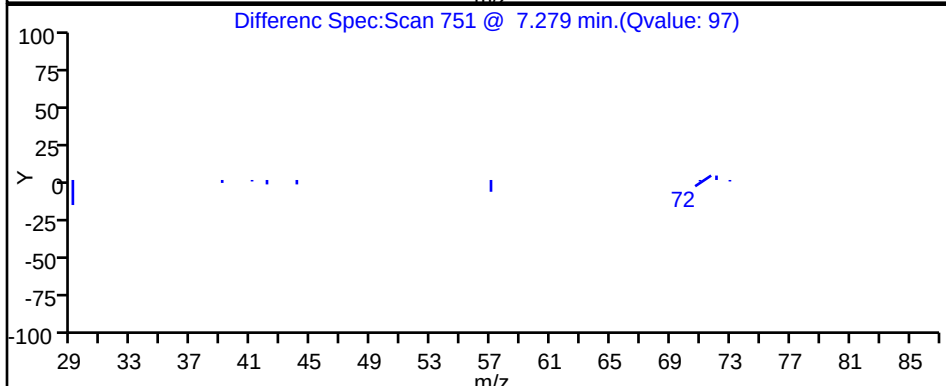
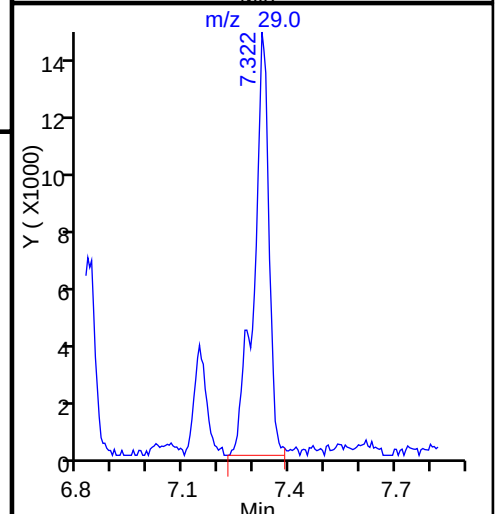
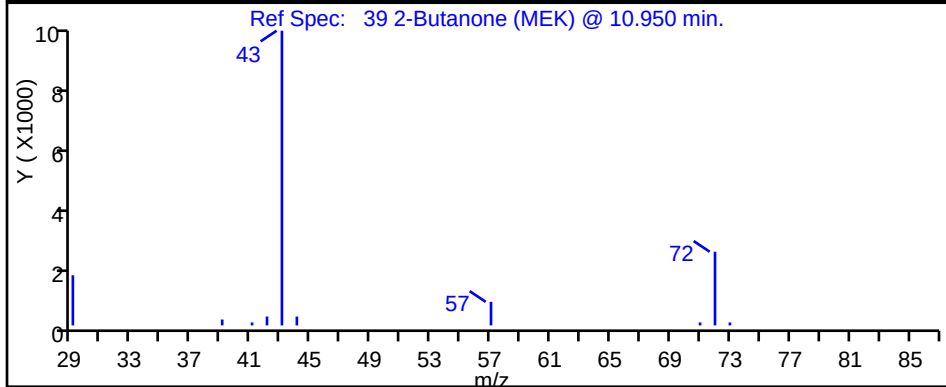
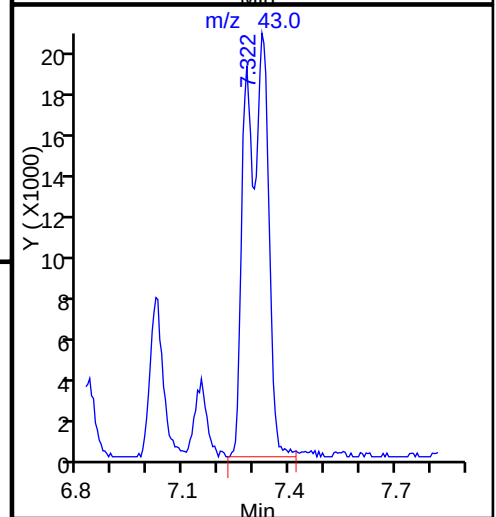
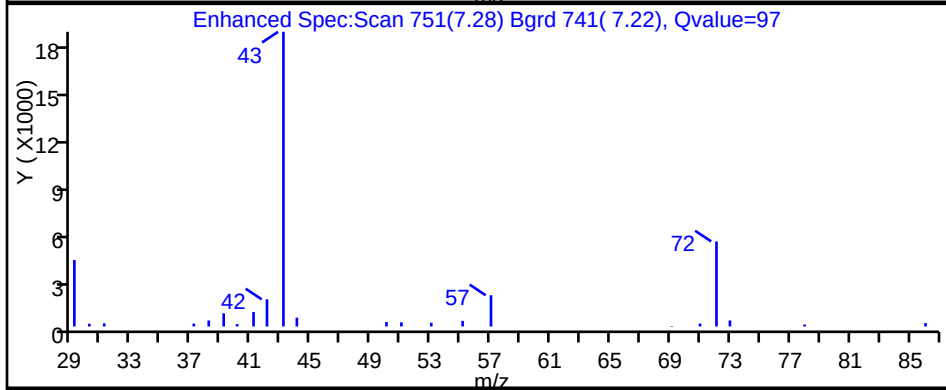
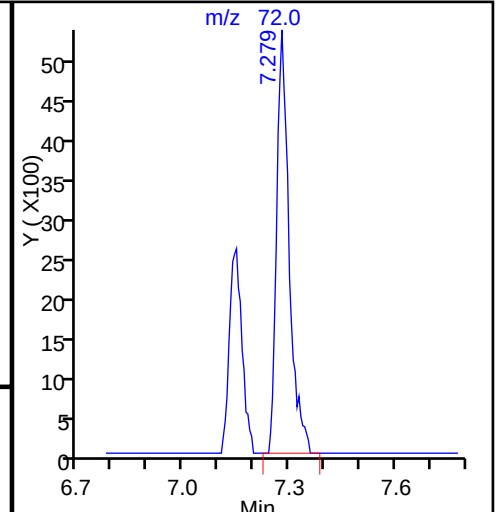
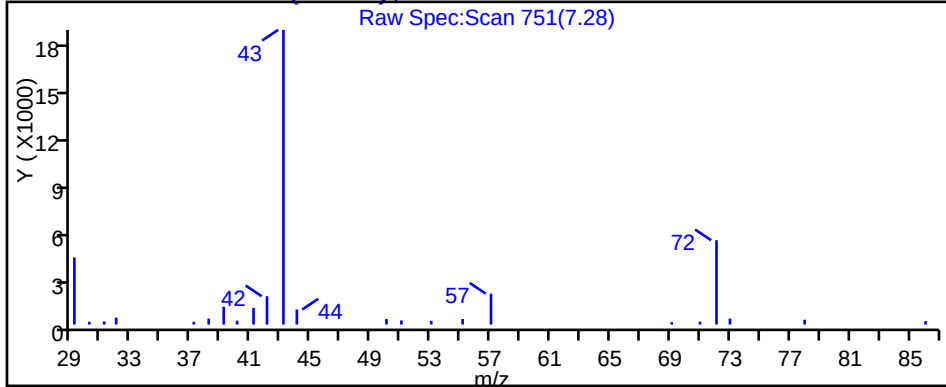
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116.D

Injection Date: 06-Apr-2017 02:24:30

Instrument ID: MG

Lims ID: 140-7698-A-3

Lab Sample ID: 140-7698-3

Client ID: H-37-SS

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 22

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

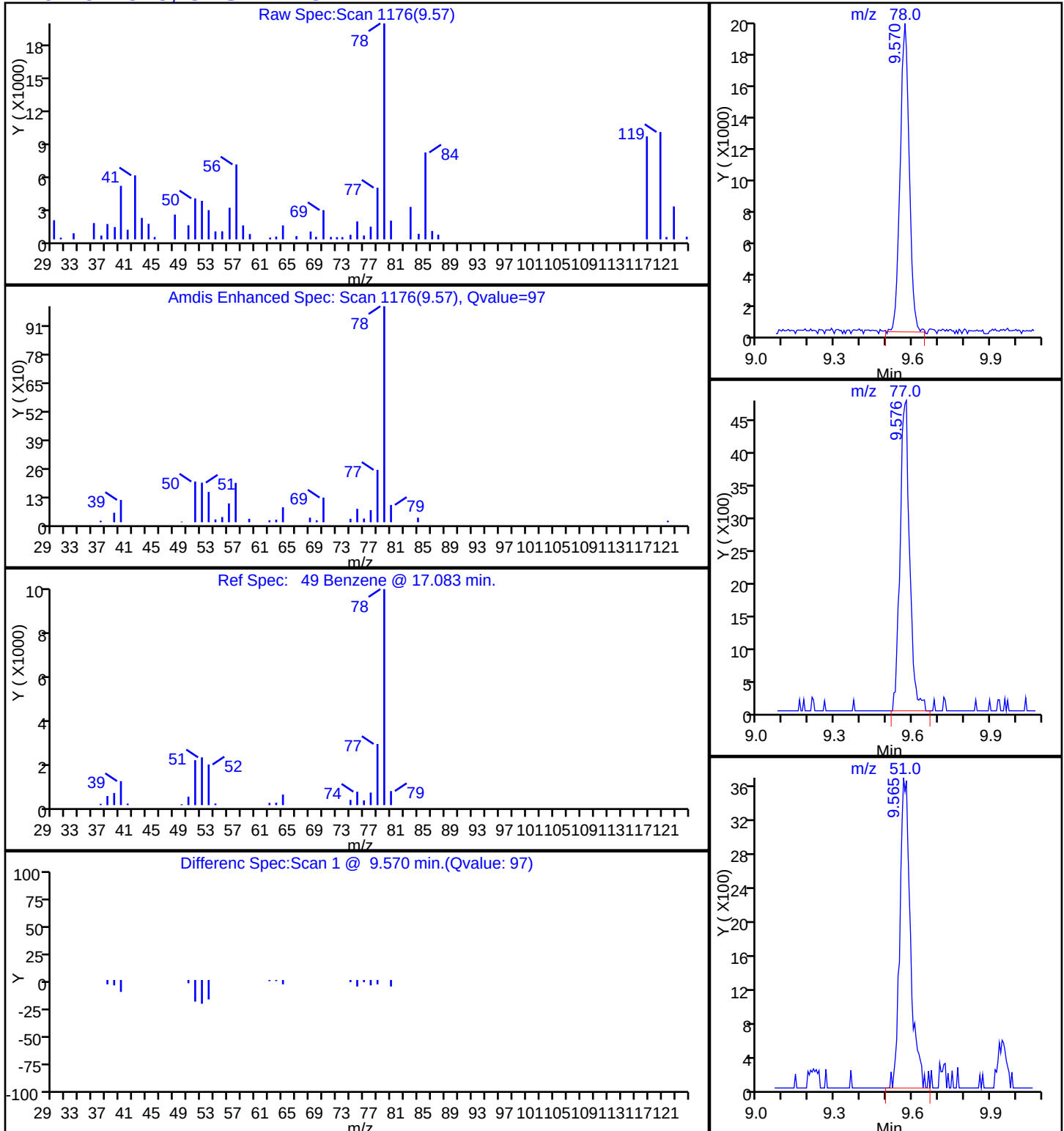
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\ChromNA\\Knoxville\\ChromData\\MG\\20170402-4509.b\\GD05P116.D

Injection Date: 06-Apr-2017 02:24:30

Instrument ID: MG

Lims ID: 140-7698-A-3

Lab Sample ID: 140-7698-3

Client ID: H-37-SS

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 22

Purge Vol: 500.000 mL

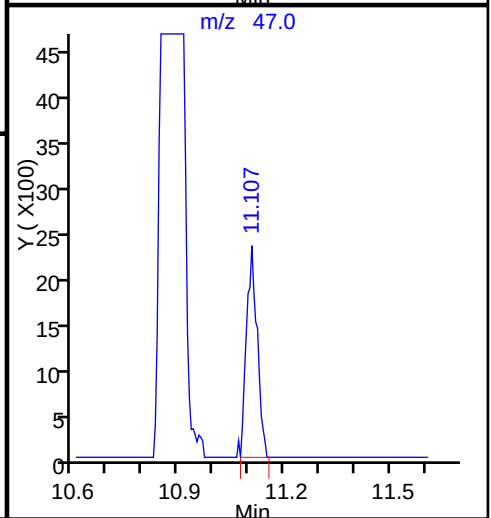
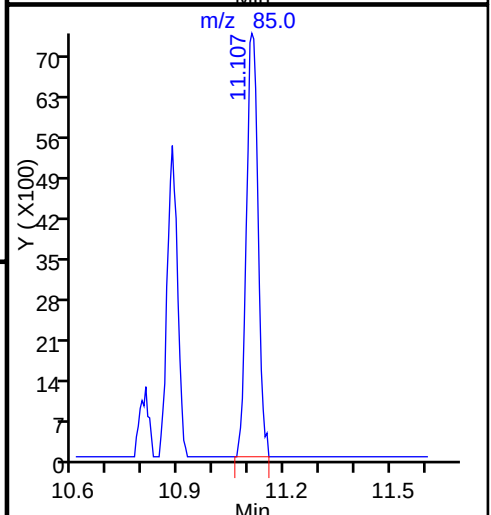
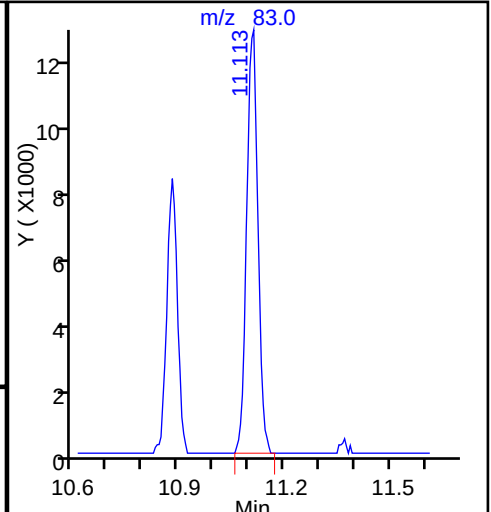
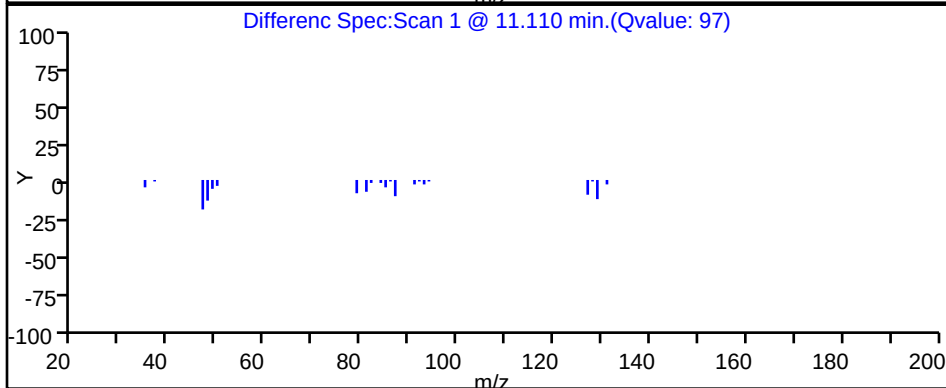
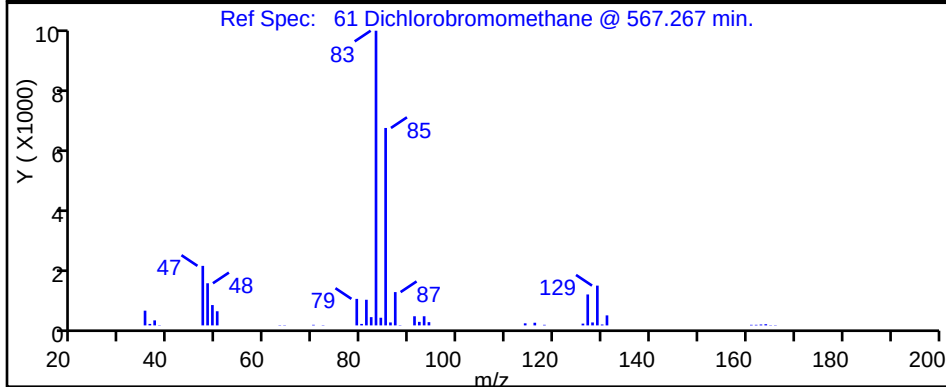
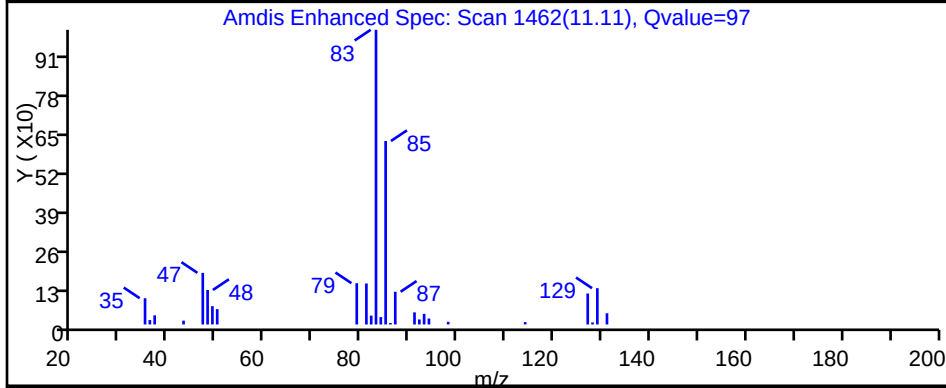
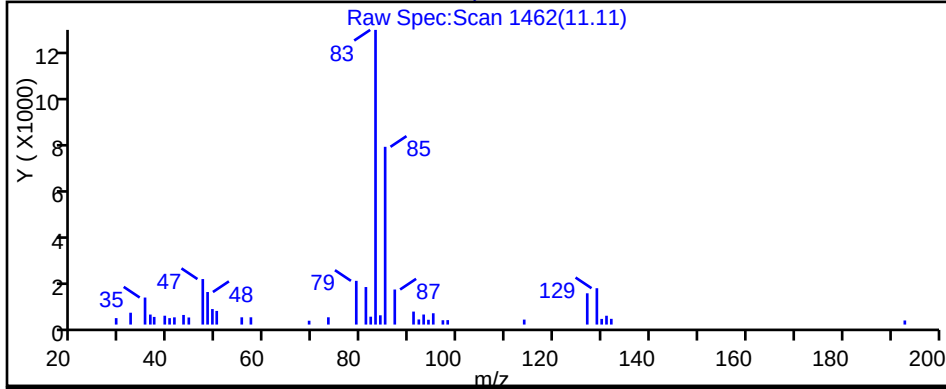
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

61 Dichlorobromomethane, CAS: 75-27-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116.D

Injection Date: 06-Apr-2017 02:24:30

Instrument ID: MG

Lims ID: 140-7698-A-3

Lab Sample ID: 140-7698-3

Client ID: H-37-SS

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 22

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

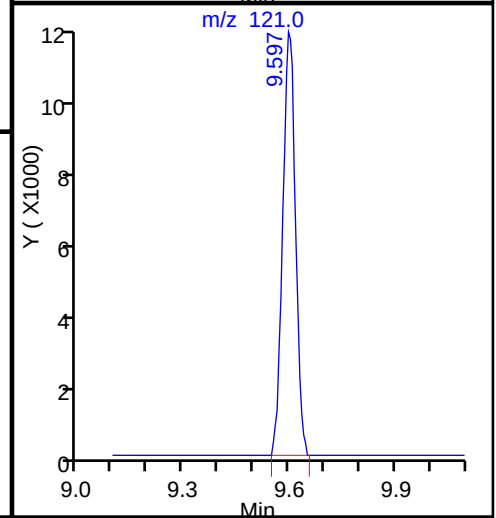
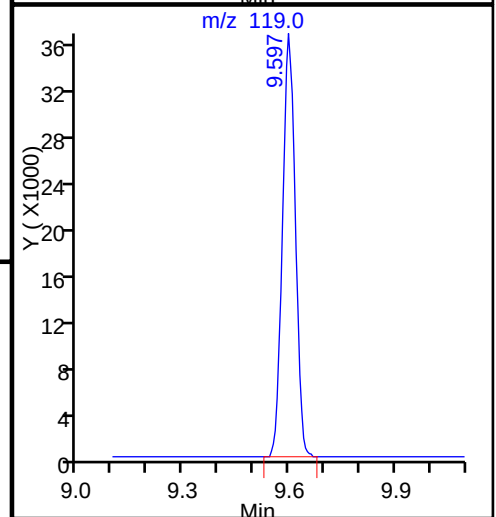
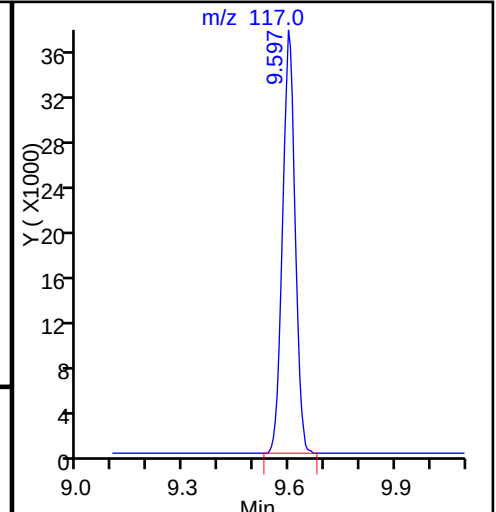
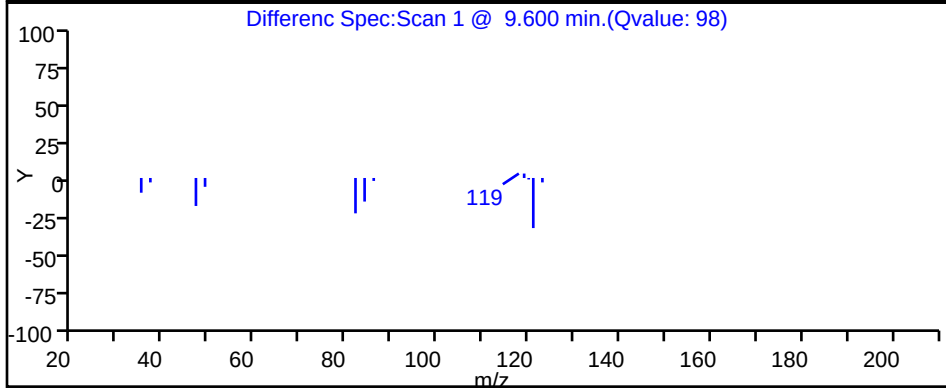
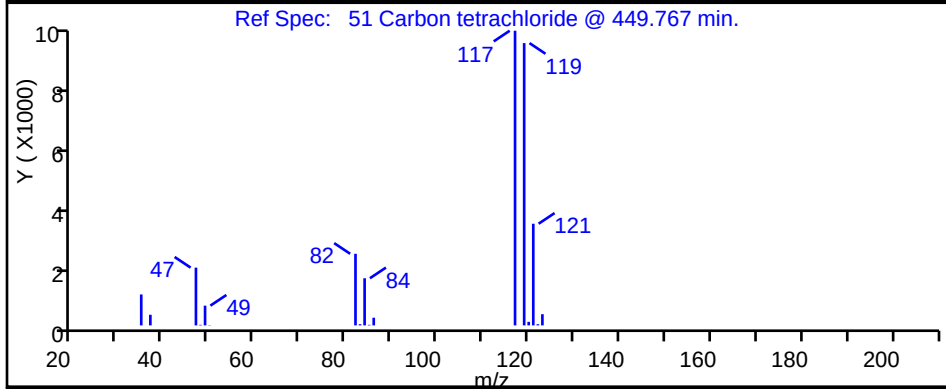
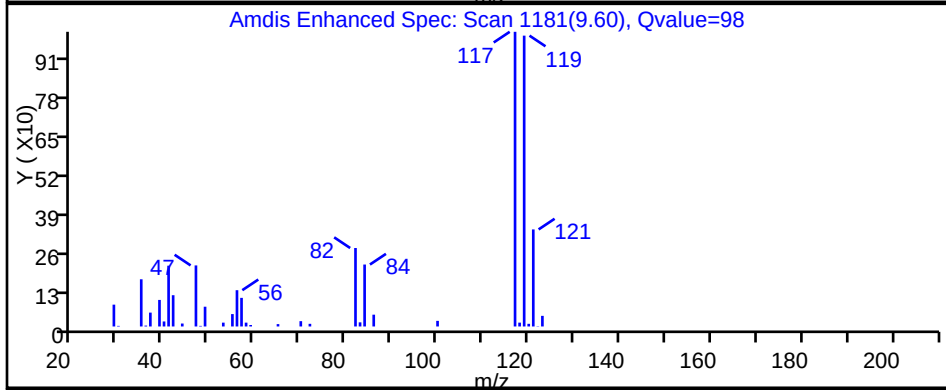
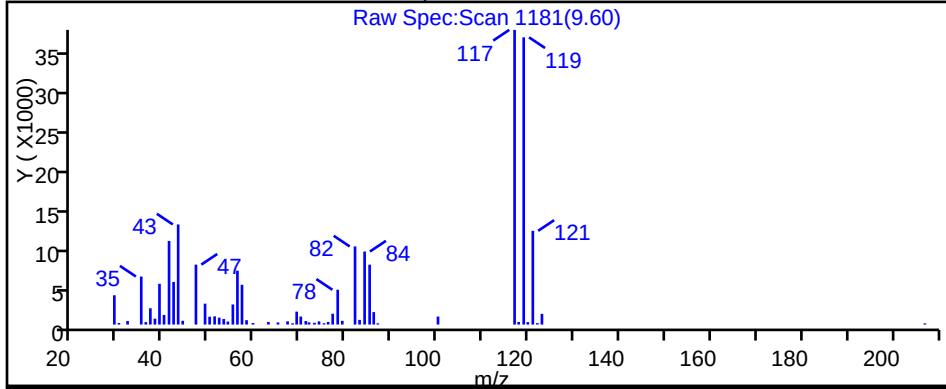
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116.D

Injection Date: 06-Apr-2017 02:24:30

Instrument ID: MG

Lims ID: 140-7698-A-3

Lab Sample ID: 140-7698-3

Client ID: H-37-SS

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 22

Purge Vol: 500.000 mL

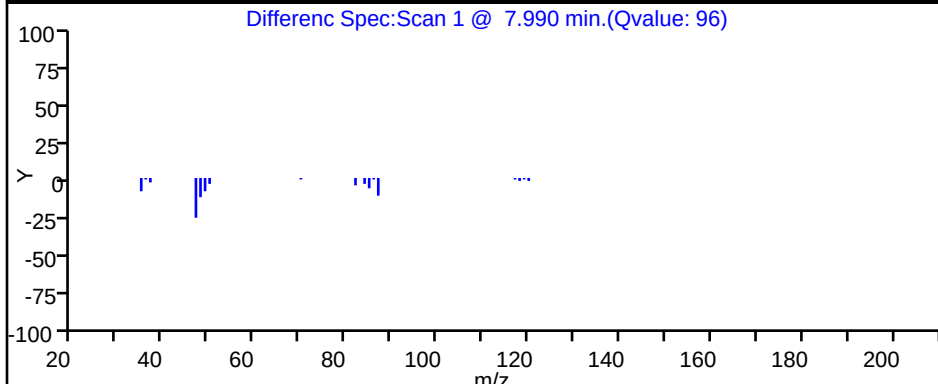
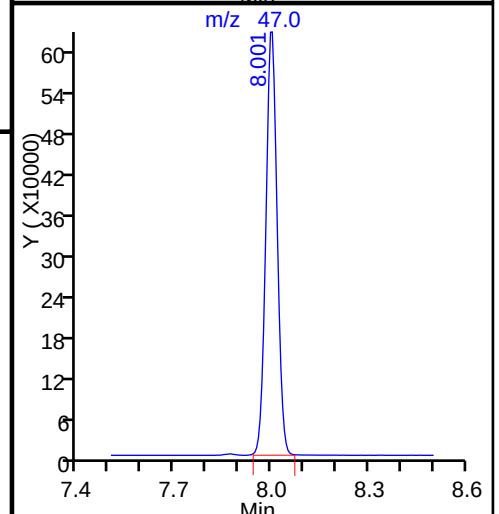
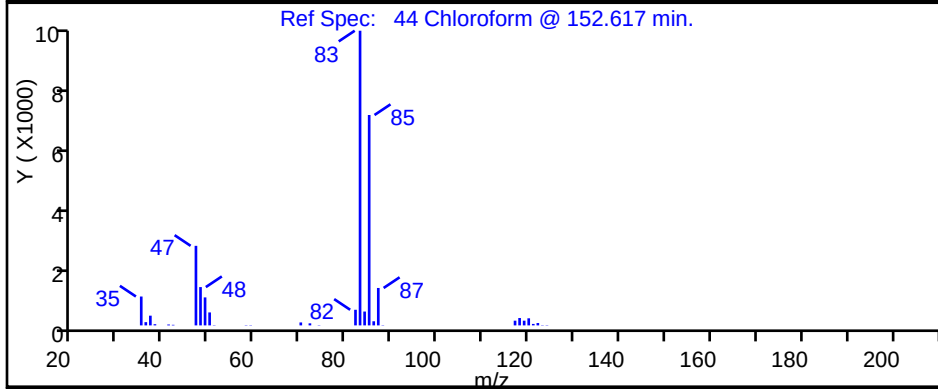
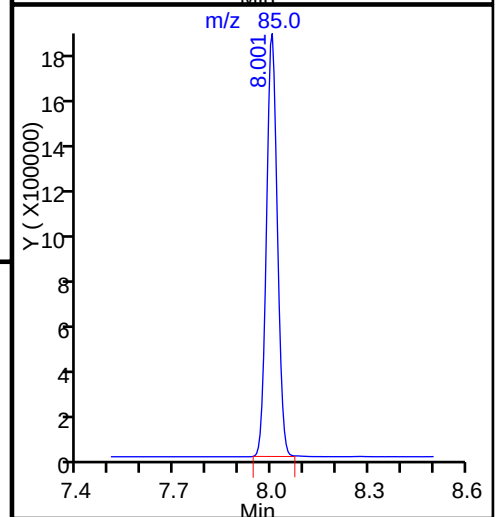
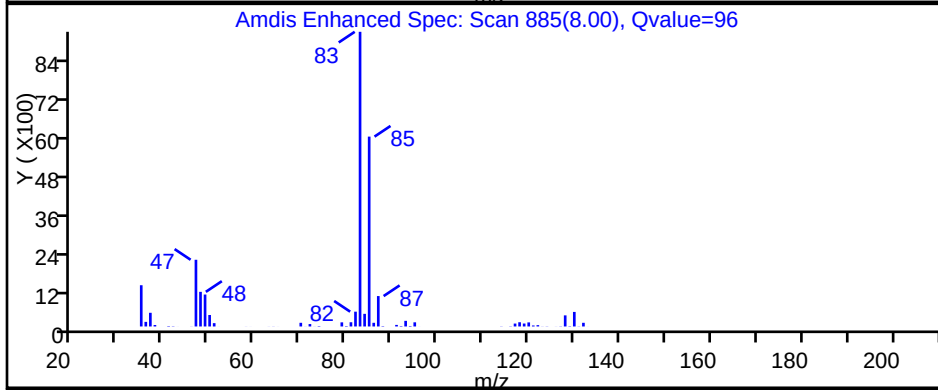
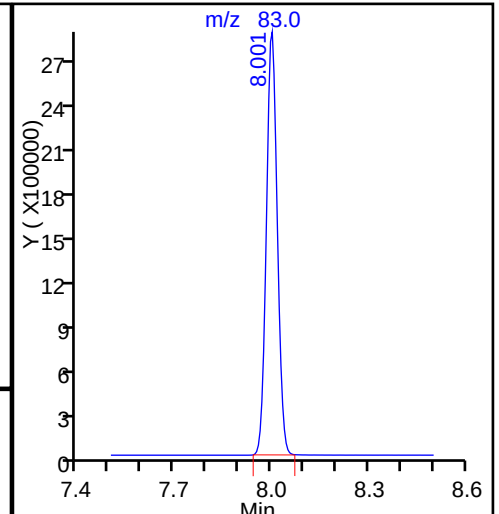
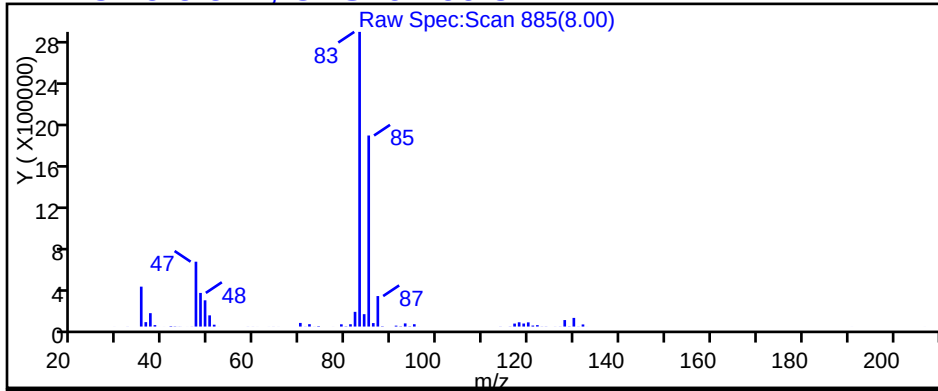
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

44 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116.D

Injection Date: 06-Apr-2017 02:24:30

Instrument ID: MG

Lims ID: 140-7698-A-3

Lab Sample ID: 140-7698-3

Client ID: H-37-SS

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 22

Purge Vol: 500.000 mL

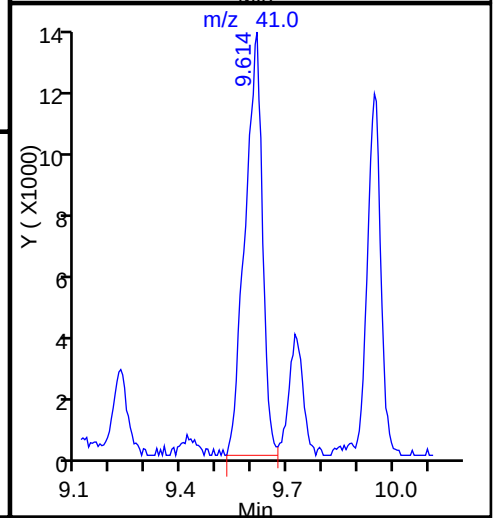
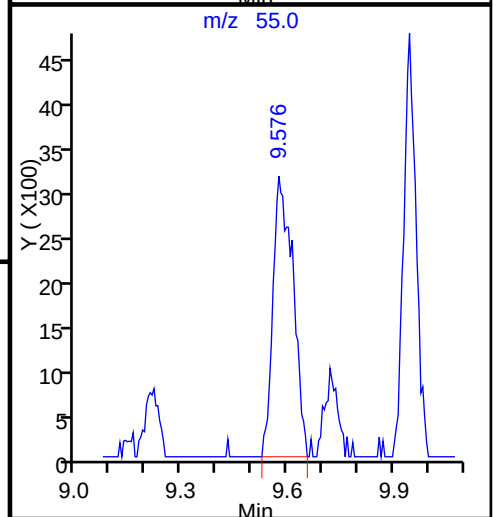
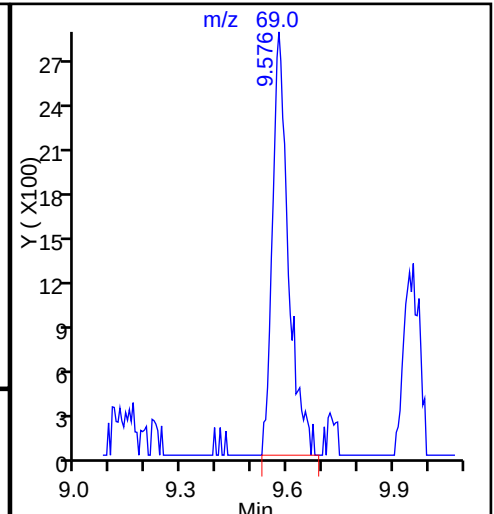
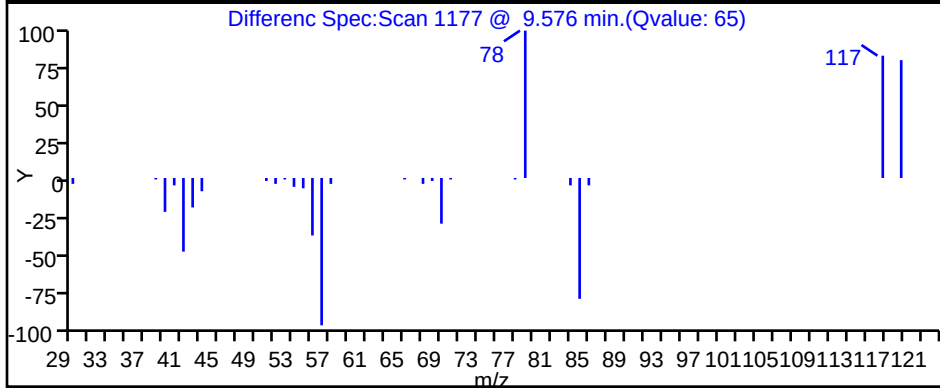
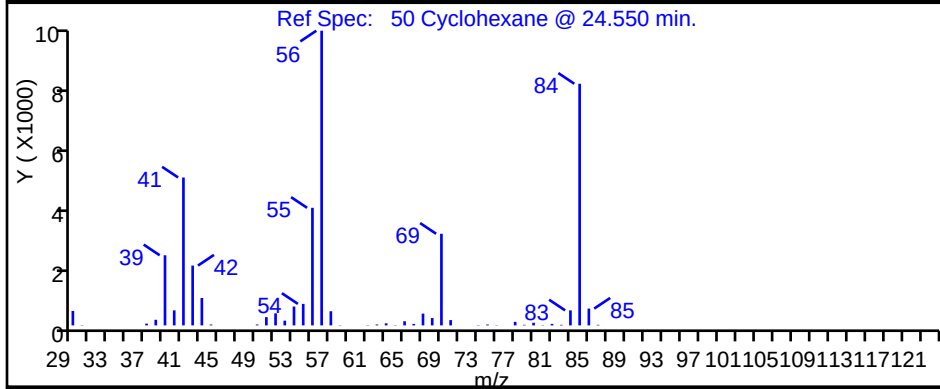
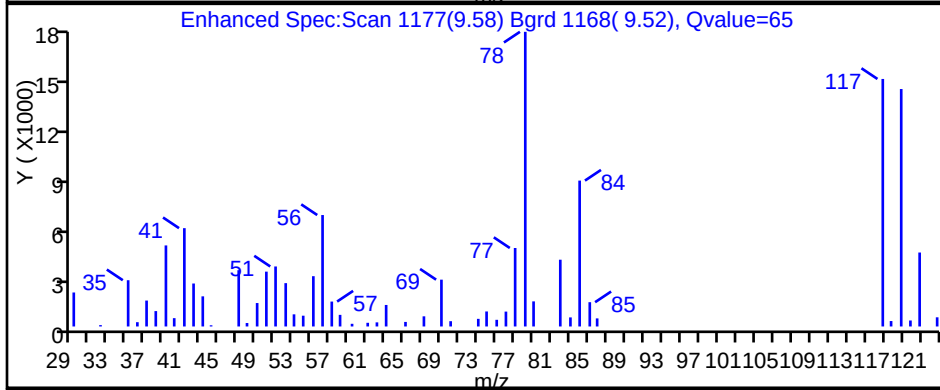
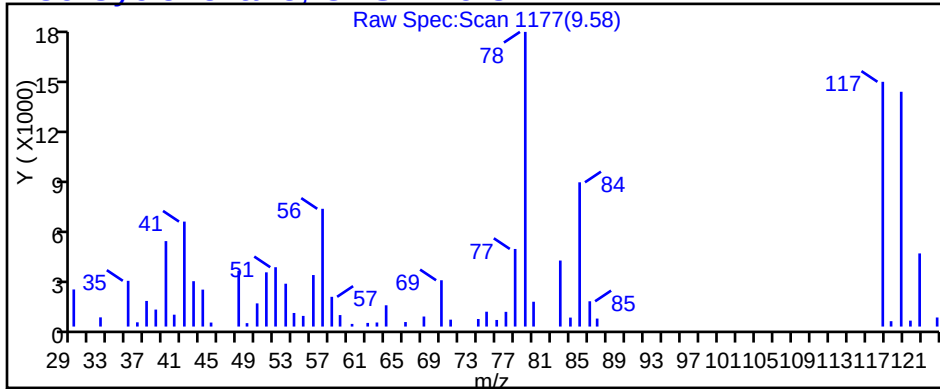
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Cyclohexane, CAS: 110-82-7

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116.D

Injection Date: 06-Apr-2017 02:24:30

Instrument ID: MG

Lims ID: 140-7698-A-3

Lab Sample ID: 140-7698-3

Client ID: H-37-SS

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 22

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

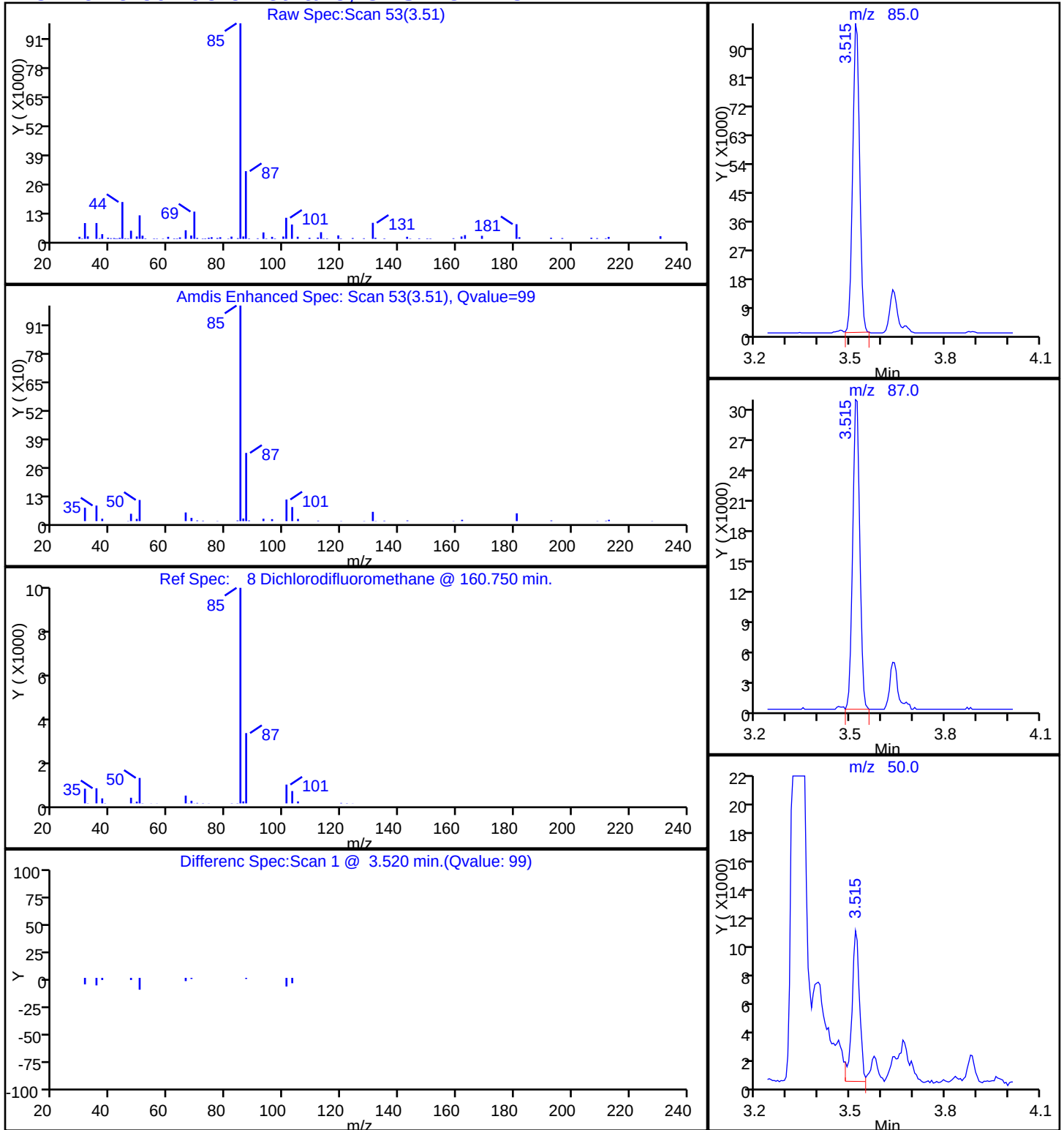
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116.D

Injection Date: 06-Apr-2017 02:24:30

Instrument ID: MG

Lims ID: 140-7698-A-3

Lab Sample ID: 140-7698-3

Client ID: H-37-SS

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 22

Purge Vol: 500.000 mL

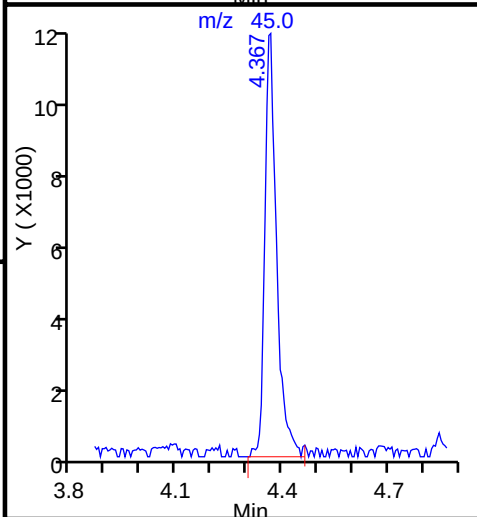
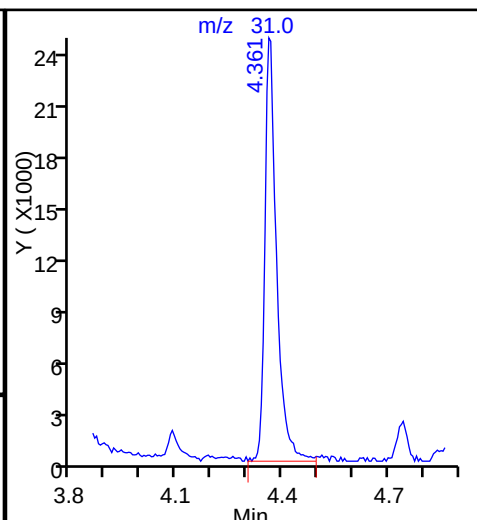
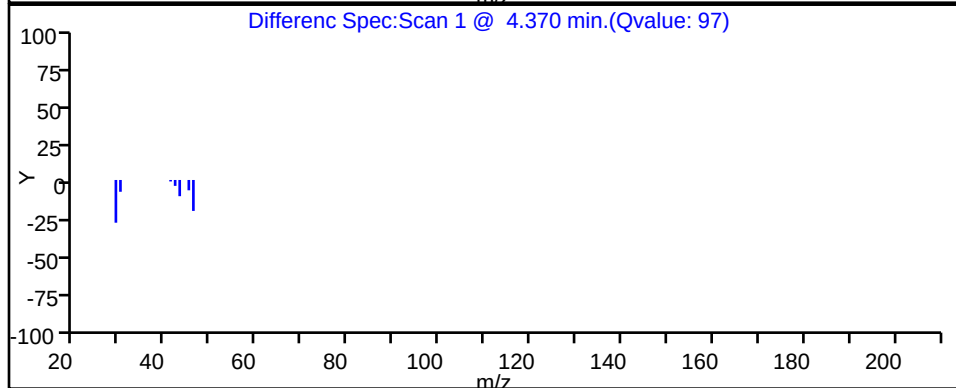
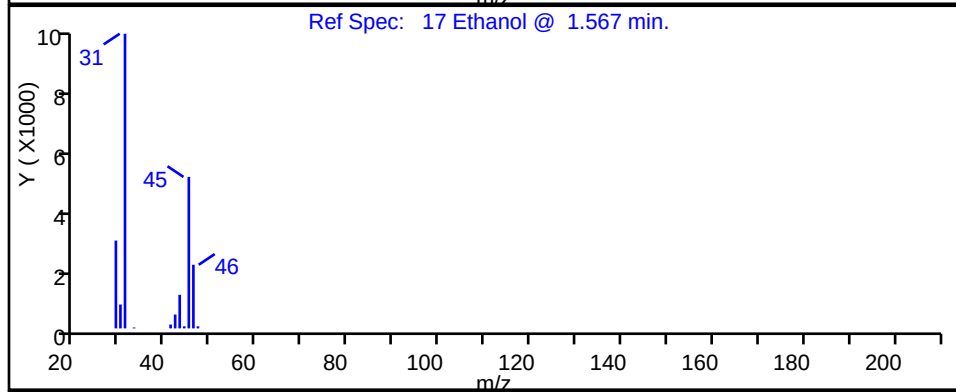
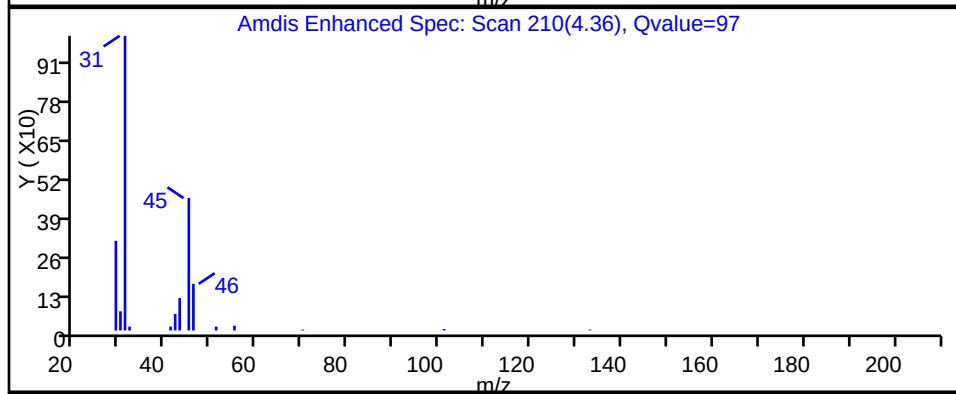
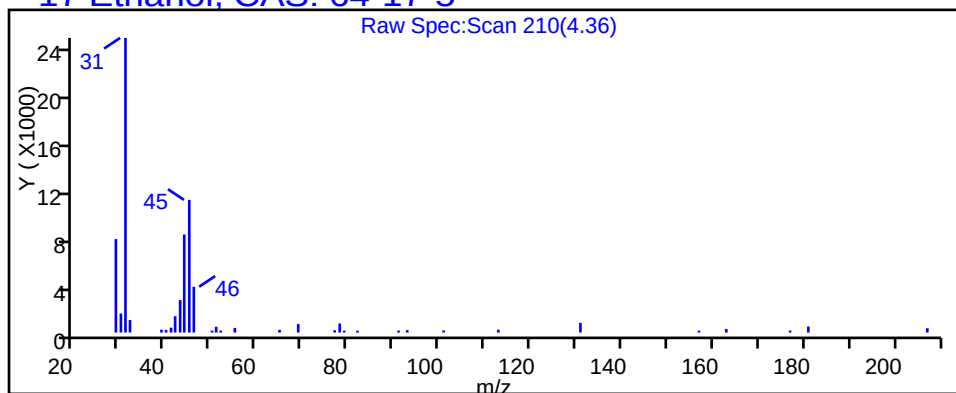
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116.D

Injection Date: 06-Apr-2017 02:24:30

Instrument ID: MG

Lims ID: 140-7698-A-3

Lab Sample ID: 140-7698-3

Client ID: H-37-SS

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 22

Purge Vol: 500.000 mL

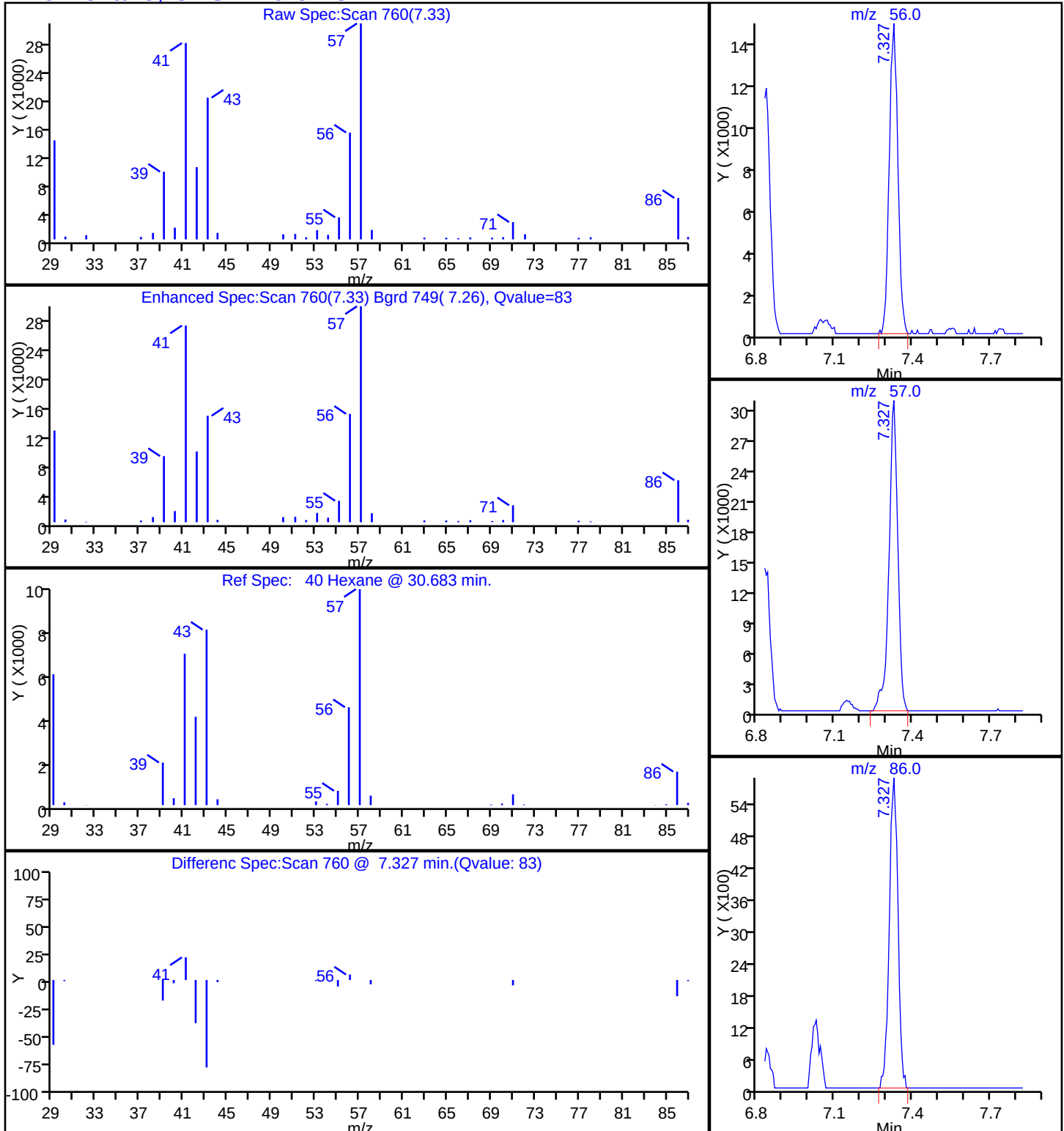
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116.D

Injection Date: 06-Apr-2017 02:24:30

Instrument ID: MG

Lims ID: 140-7698-A-3

Lab Sample ID: 140-7698-3

Client ID: H-37-SS

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 22

Purge Vol: 500.000 mL

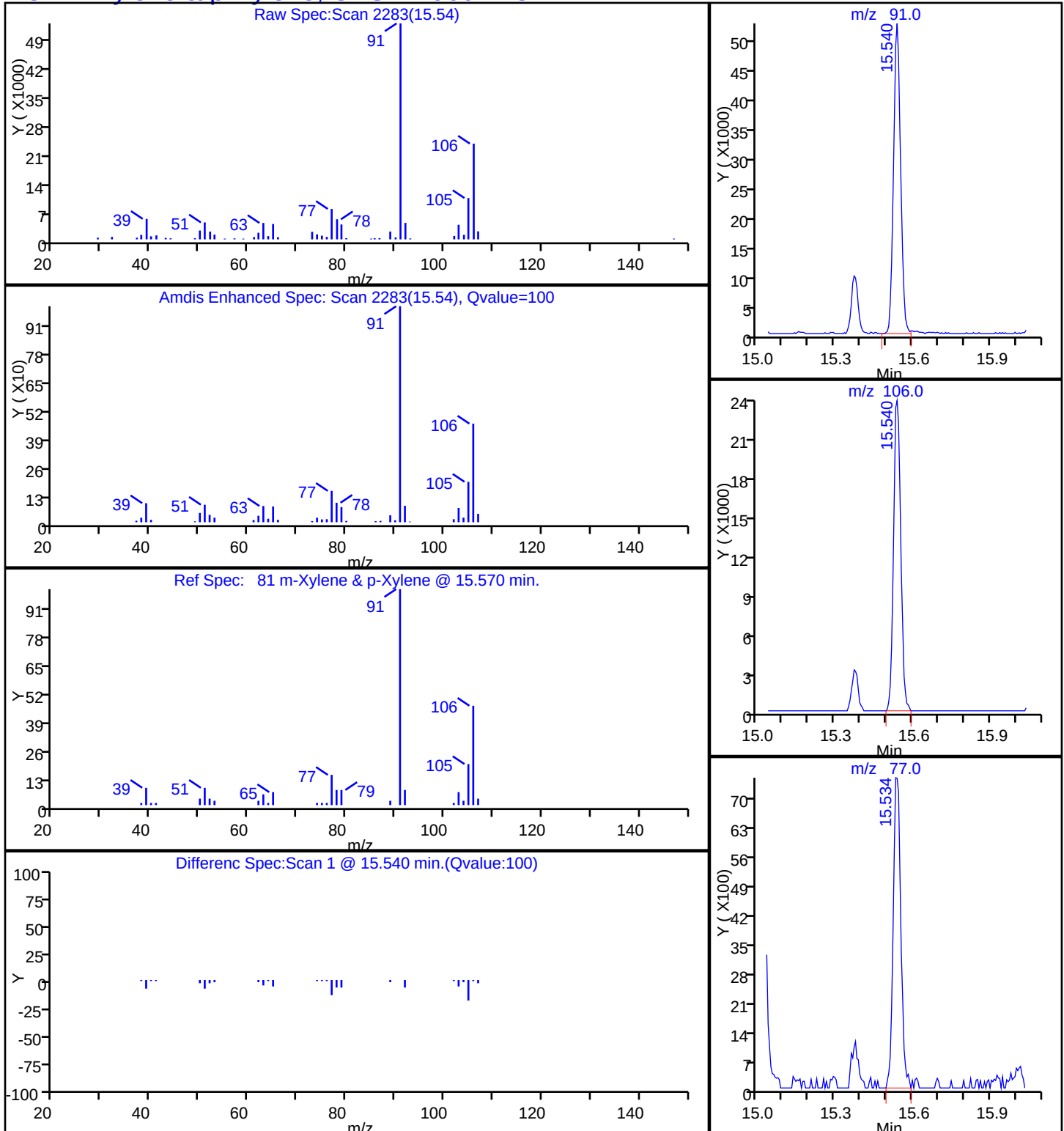
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116.D

Injection Date: 06-Apr-2017 02:24:30

Instrument ID: MG

Lims ID: 140-7698-A-3

Lab Sample ID: 140-7698-3

Client ID: H-37-SS

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 22

Purge Vol: 500.000 mL

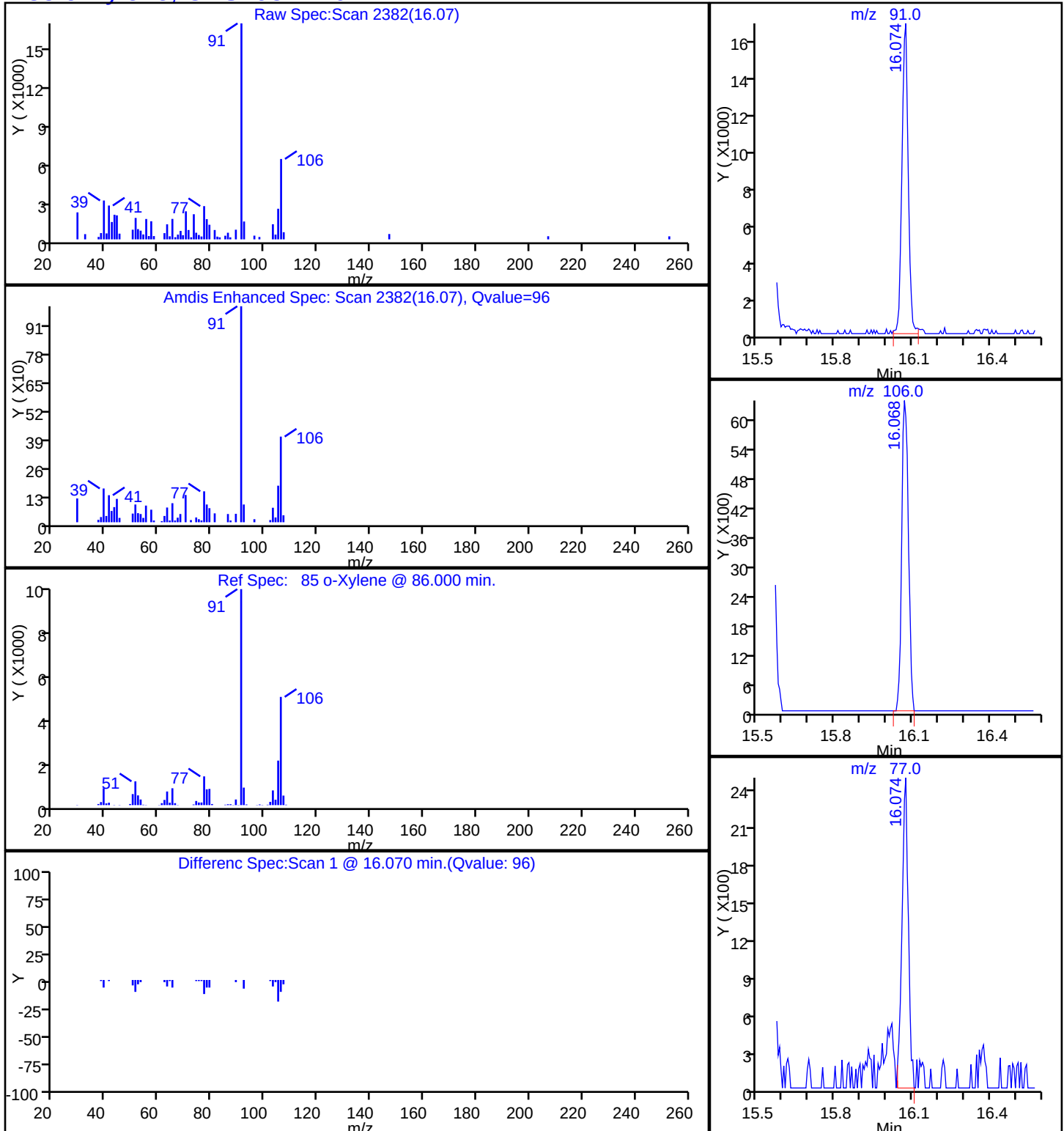
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116.D

Injection Date: 06-Apr-2017 02:24:30

Instrument ID: MG

Lims ID: 140-7698-A-3

Lab Sample ID: 140-7698-3

Client ID: H-37-SS

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 22

Purge Vol: 500.000 mL

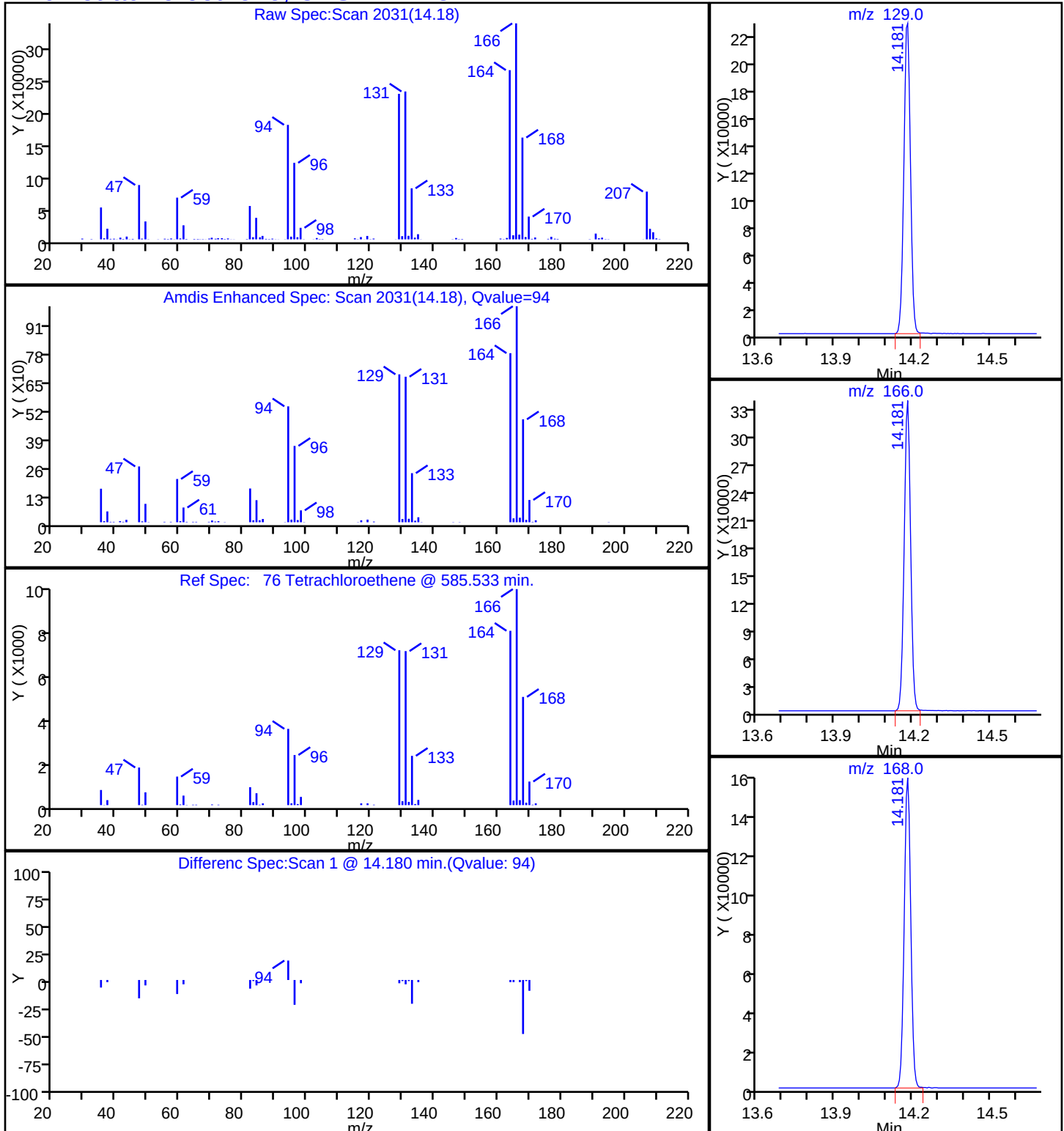
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

76 Tetrachloroethene, CAS: 127-18-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116.D

Injection Date: 06-Apr-2017 02:24:30

Instrument ID: MG

Lims ID: 140-7698-A-3

Lab Sample ID: 140-7698-3

Client ID: H-37-SS

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 22

Purge Vol: 500.000 mL

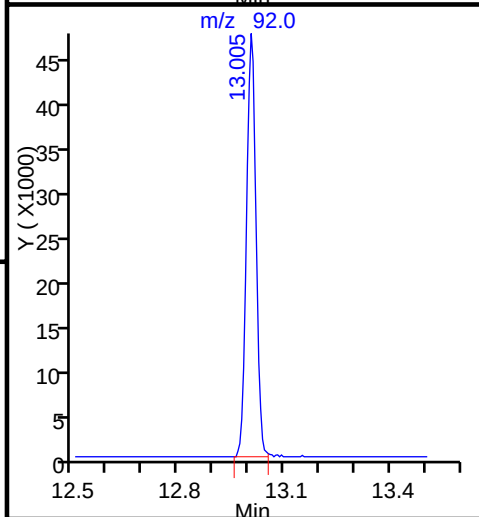
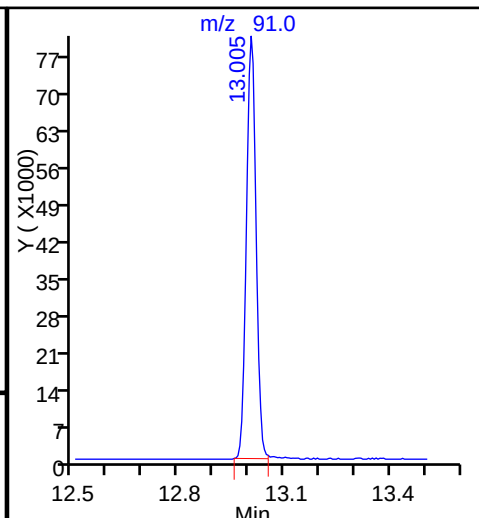
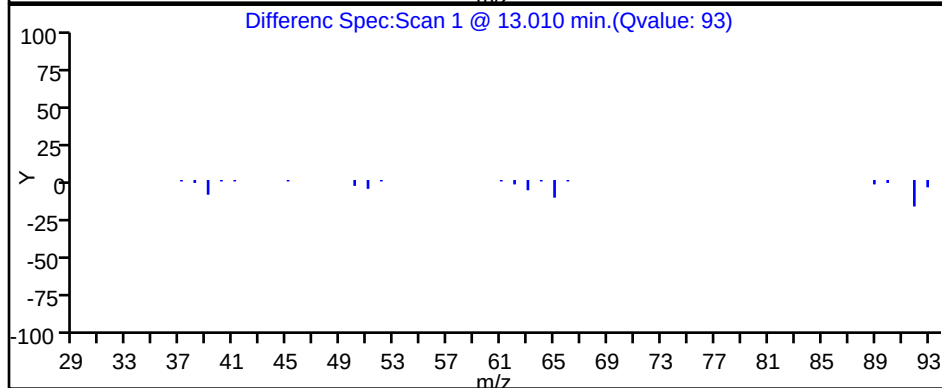
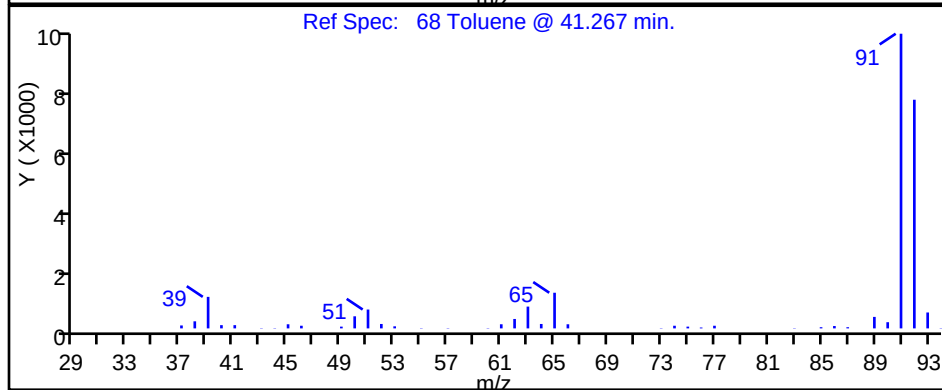
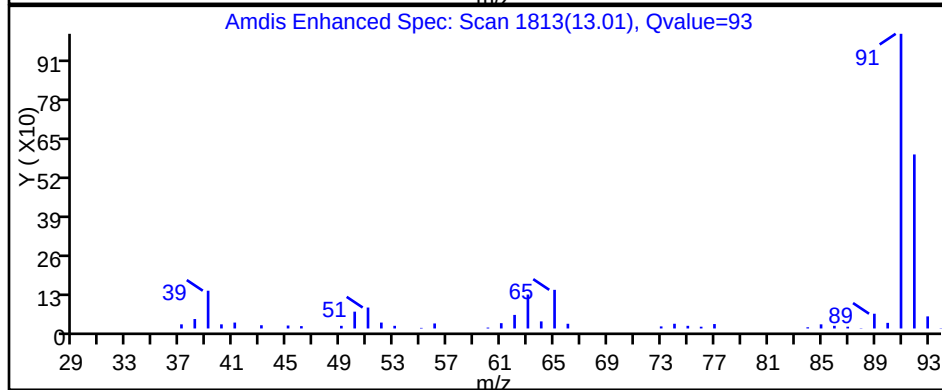
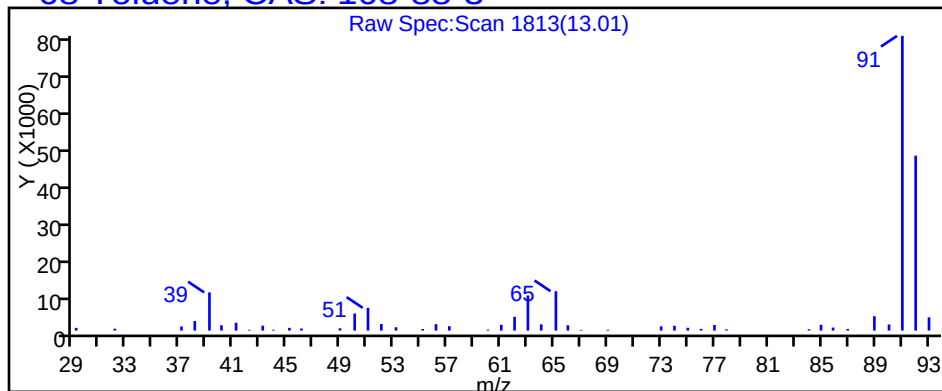
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116.D

Injection Date: 06-Apr-2017 02:24:30

Instrument ID: MG

Lims ID: 140-7698-A-3

Lab Sample ID: 140-7698-3

Client ID: H-37-SS

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 22

Purge Vol: 500.000 mL

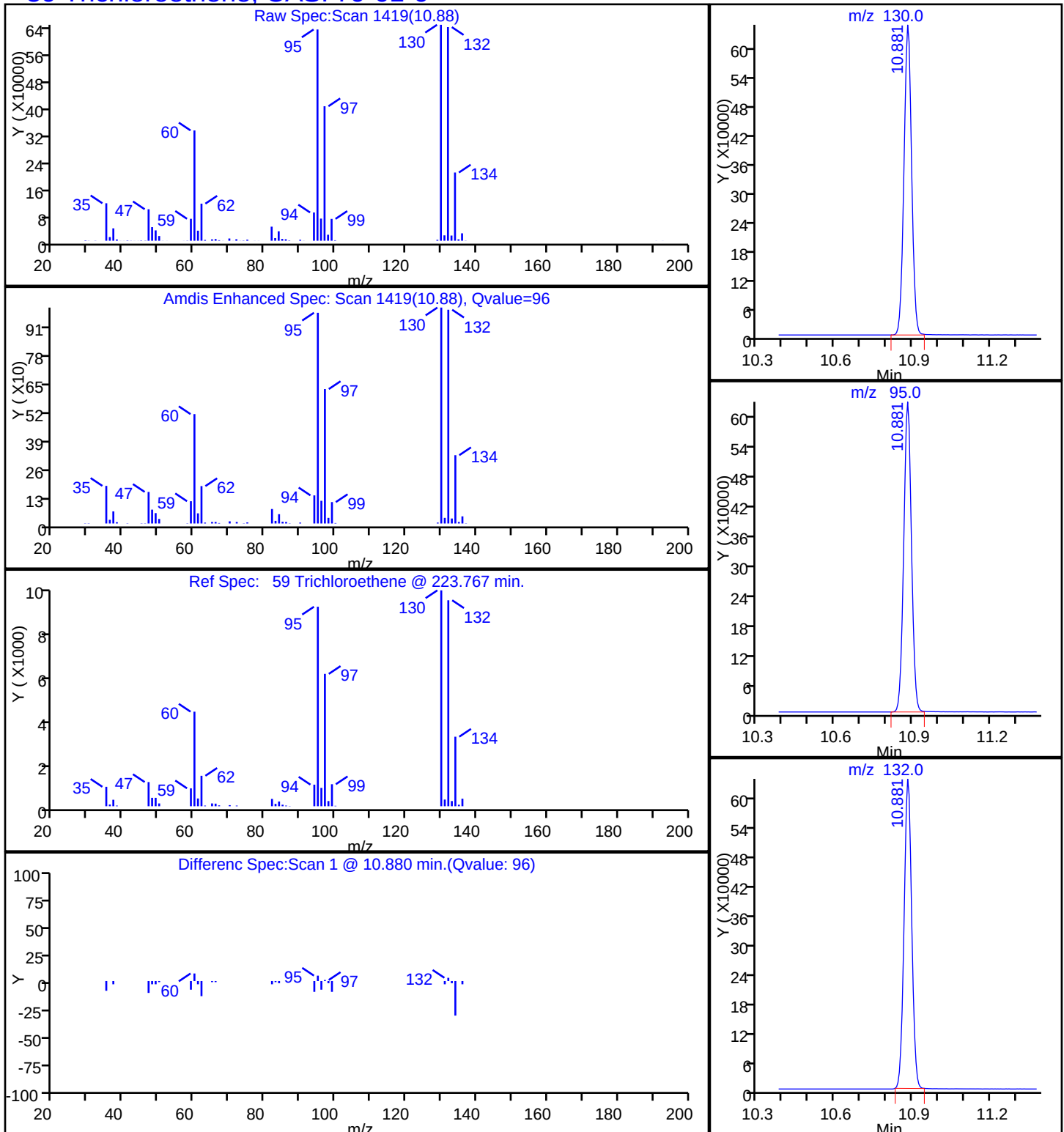
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

59 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116.D

Injection Date: 06-Apr-2017 02:24:30

Instrument ID: MG

Lims ID: 140-7698-A-3

Lab Sample ID: 140-7698-3

Client ID: H-37-SS

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 22

Purge Vol: 500.000 mL

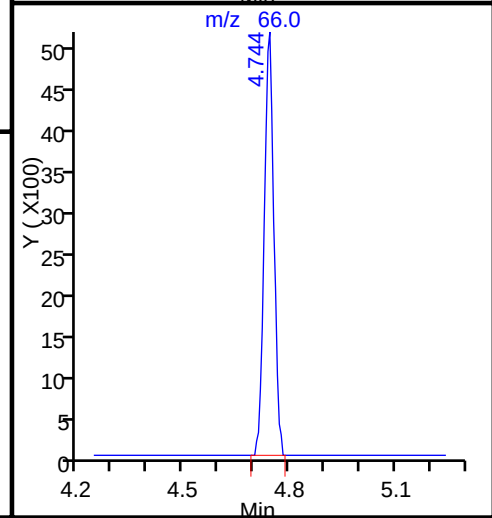
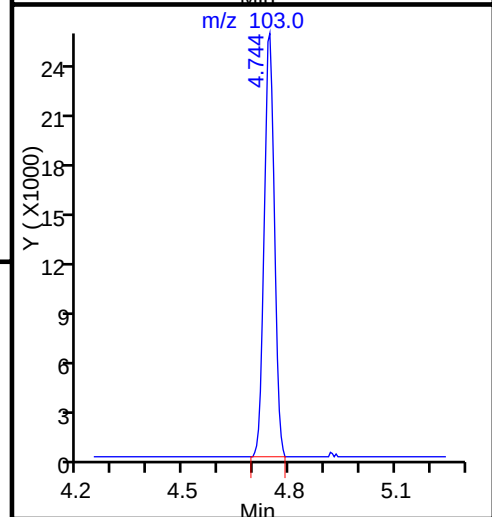
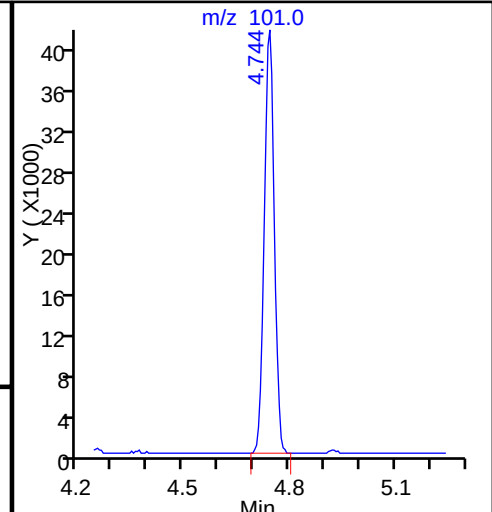
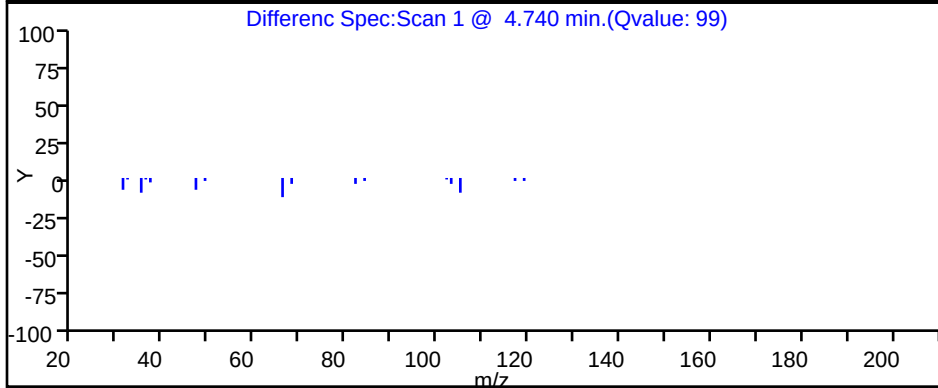
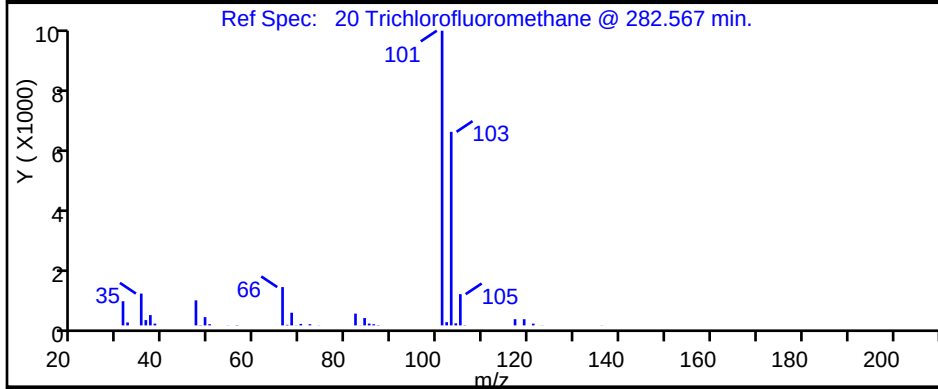
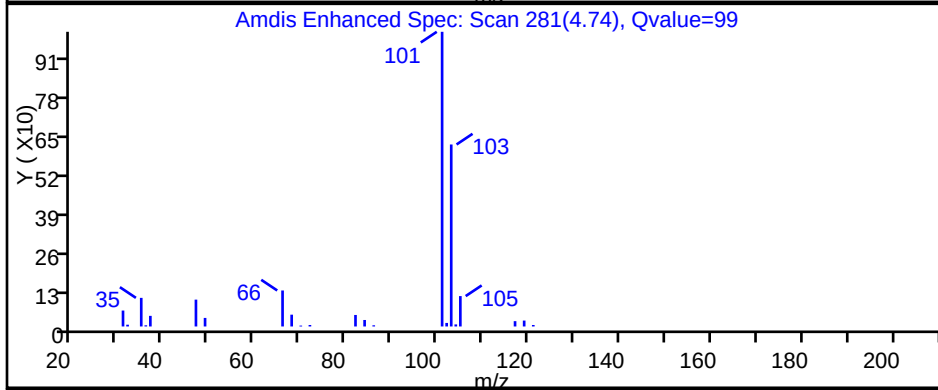
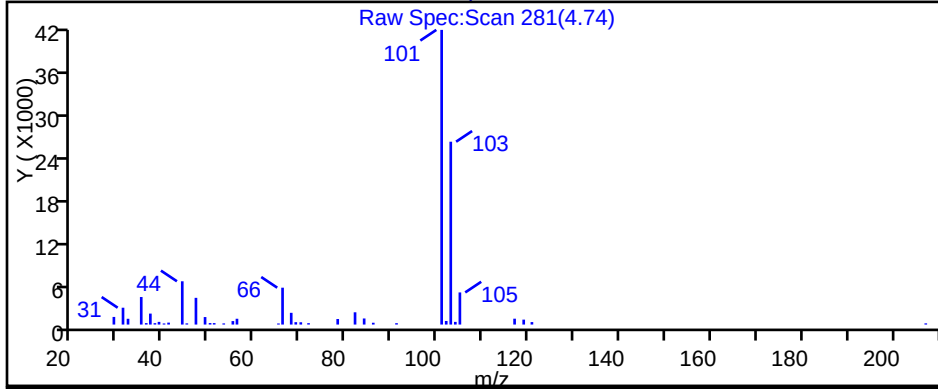
Dil. Factor: 1.0000

Method: MG_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.: 140-7698-1
SDG No.: _____
Client Sample ID: H-37-SS DL Lab Sample ID: 140-7698-3 DL
Matrix: Air Lab File ID: GD05P116DL.D
Analysis Method: TO 15 LL Date Collected: 03/28/2017 16:32
Sample wt/vol: 100 (mL) Date Analyzed: 04/06/2017 11:12
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.: 10156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
67-66-3	Chloroform	119.38	32	D	0.40	

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.: 140-7698-1
 SDG No.: _____
 Client Sample ID: H-37-SS DL Lab Sample ID: 140-7698-3 DL
 Matrix: Air Lab File ID: GD05P116DL.D
 Analysis Method: TO 15 LL Date Collected: 03/28/2017 16:32
 Sample wt/vol: 100 (mL) Date Analyzed: 04/06/2017 11:12
 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.: 10156 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
67-66-3	Chloroform	119.38	160	D	2.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116DL.D
 Lims ID: 140-7698-A-3
 Client ID: H-37-SS
 Sample Type: Client
 Inject. Date: 06-Apr-2017 11:12:30 ALS Bottle#: 16 Worklist Smp#: 27
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004509-027
 Misc. Info.: 140-7698-a-3
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 06-Apr-2017 11:48:43 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: tajh

Date: 06-Apr-2017 11:48:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.002	7.980	0.022	75	247103	4.00	
* 2 1,4-Difluorobenzene	114	10.158	10.148	0.010	95	1171811	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.022	15.017	0.005	90	1174724	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.689	16.689	0.000	93	948105	4.08	
8 Dichlorodifluoromethane	85	3.537	3.515	0.022	99	29500	0.1128	
20 Trichlorofluoromethane	101	4.766	4.744	0.022	98	16184	0.0621	
29 2-Methyl-2-propanol	59	5.607	5.456	0.151	87	3052	0.0304	
30 1,1,2-Trichloro-1,2,2-trif	101	5.548	5.516	0.032	82	2025	0.0133	
31 Methylene Chloride	84	5.677	5.650	0.027	86	6575	0.1106	
40 Hexane	56	7.349	7.327	0.022	92	6424	0.1317	
44 Chloroform	83	8.018	8.007	0.011	96	1114242	6.43	
47 1,1,1-Trichloroethane	97	8.999	8.983	0.016	94	46150	0.2302	
48 1,2-Dichloroethane	62	8.994	9.075	-0.081	42	3006	0.0254	
49 Benzene	78	9.581	9.565	0.016	96	9548	0.0480	
50 Cyclohexane	69	9.581	9.576	0.005	48	1244	0.0371	
51 Carbon tetrachloride	117	9.614	9.598	0.016	98	34863	0.1676	
59 Trichloroethene	130	10.892	10.881	0.011	95	213922	1.98	
61 Dichlorobromomethane	83	11.124	11.107	0.017	97	4683	0.0271	
68 Toluene	91	13.011	13.006	0.005	94	23762	0.1015	
76 Tetrachloroethene	129	14.187	14.181	0.006	94	68223	0.6373	
79 Ethylbenzene	91	15.540	15.378	0.162	94	14128	0.0432	
81 m-Xylene & p-Xylene	91	15.540	15.545	-0.005	99	14129	0.0535	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116DL.D

Injection Date: 06-Apr-2017 11:12:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7698-A-3

Lab Sample ID: 140-7698-3

Worklist Smp#: 27

Client ID: H-37-SS

Purge Vol: 500.000 mL

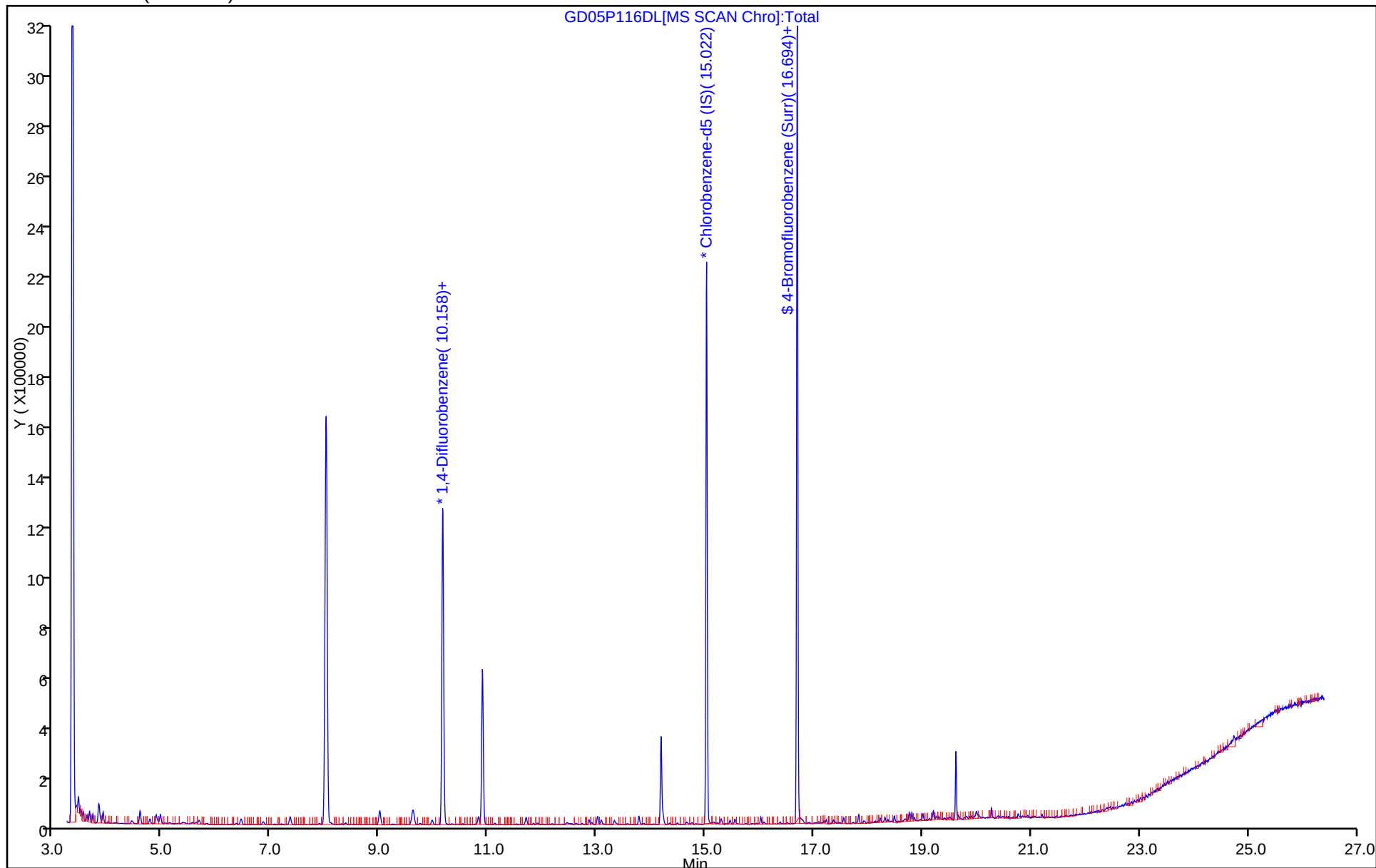
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116DL.D
Lims ID: 140-7698-A-3
Client ID: H-37-SS
Sample Type: Client
Inject. Date: 06-Apr-2017 11:12:30 ALS Bottle#: 16 Worklist Smp#: 27
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004509-027
Misc. Info.: 140-7698-a-3
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Apr-2017 11:48:43 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: tajh

Date: 06-Apr-2017 11:48:43

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.08	102.10

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05P116DL.D

Injection Date: 06-Apr-2017 11:12:30

Instrument ID: MG

Lims ID: 140-7698-A-3

Lab Sample ID: 140-7698-3

Client ID: H-37-SS

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 27

Purge Vol: 500.000 mL

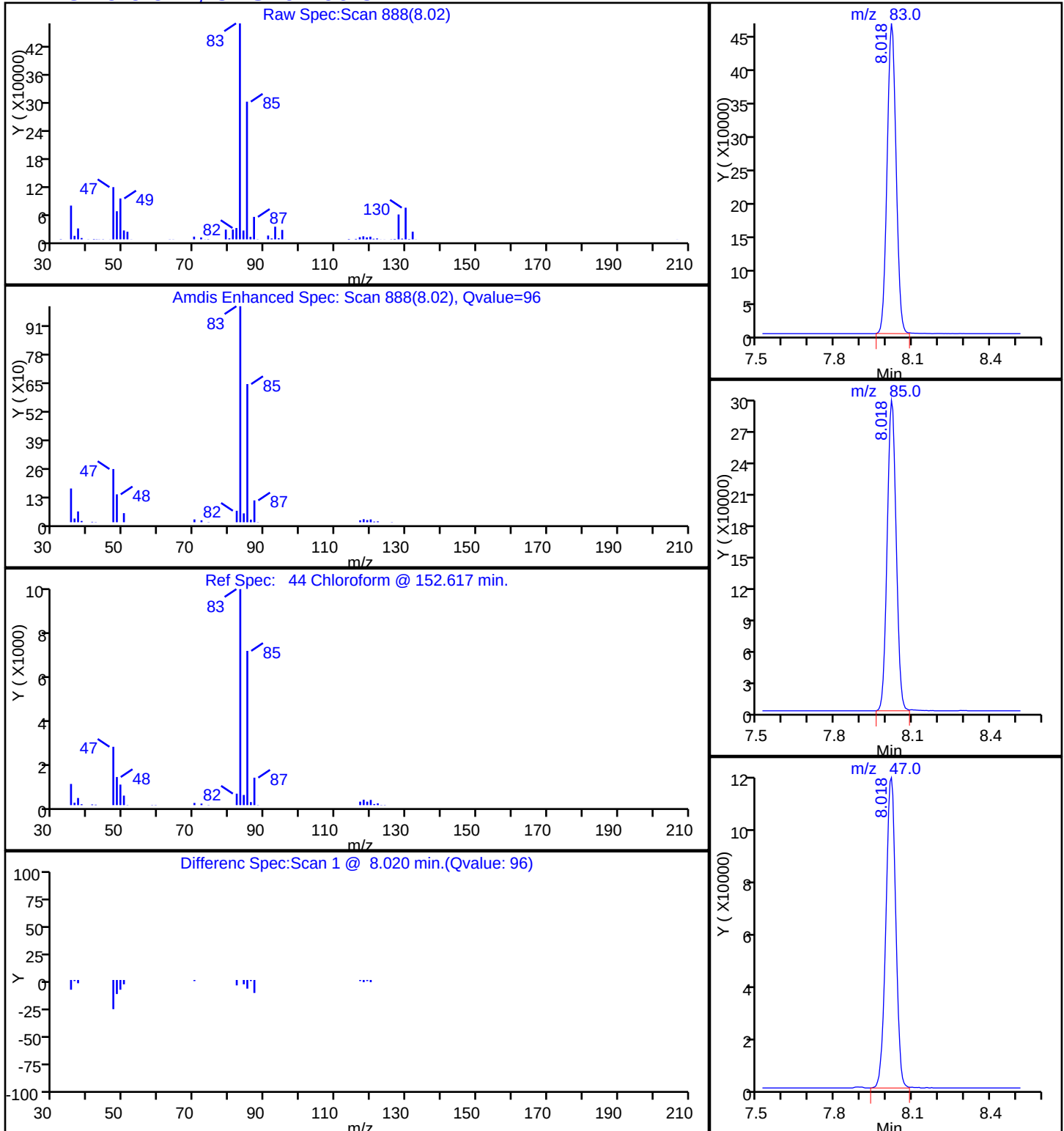
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

44 Chloroform, CAS: 67-66-3

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1 Analy Batch No.: 9482

SDG No.: _____

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

Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-9482/3	GC15IC01.D
Level 2	IC 140-9482/4	GC15IC02.D
Level 3	IC 140-9482/5	GC15IC03.D
Level 4	IC 140-9482/6	GC15IC04.D
Level 5	IC 140-9482/7	GC15IC05.D
Level 6	ICIS 140-9482/8	GC15IC06.D
Level 7	IC 140-9482/9	GC15IC07.D
Level 8	IC 140-9482/10	GC15IC08.D
Level 9	IC 140-9482/11	GC15IC09.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	+++++ 0.4492	0.5243 0.4243	0.4768 0.3958	0.4692 0.3664	0.4517	Ave		0.4447				11.1		30.0			
Propene	1.2559 1.0478	1.2382 0.9657	1.1468 0.8917	1.1084 0.7546	1.1130	Ave		1.0580				15.4		30.0			
Dichlorodifluoromethane	4.8320 4.2127	4.6343 3.9990	4.3917 3.8216	4.2891 3.5675	4.3531	Ave		4.2334				9.3		30.0			
Chloromethane	+++++ 0.2919	+++++ 0.2699	0.3511 0.2437	0.3157 0.2157	0.3055	Ave		0.2848				16.0		30.0			
1,2-Dichlorotetrafluoroethane	2.6647 2.4528	2.7171 2.4377	2.5660 2.4240	2.4867 2.4540	2.4764	Ave		2.5199				4.2		30.0			
Acetaldehyde	+++++ 0.3520	+++++ 0.3138	+++++ 0.2823	0.4204 0.2466	0.3916	Ave		0.3344				19.8		30.0			
Vinyl chloride	1.3581 1.1850	1.3052 1.0914	1.2835 1.0073	1.2092 0.8963	1.1952	Ave		1.1701				12.7		30.0			
1,3-Butadiene	0.8307 0.8039	0.8697 0.7476	0.8308 0.6849	0.8235 0.6065	0.8156	Ave		0.7793				10.8		30.0			
Butane	2.0474 1.6504	1.8888 1.5358	1.8200 1.3619	1.7380 1.1943	1.6862	Ave		1.6581				15.9		30.0			
Bromomethane	1.2729 1.1473	1.2685 1.1211	1.1982 1.0600	1.1615 1.0020	1.1747	Ave		1.1562				7.7		30.0			
Chloroethane	0.6202 0.5523	0.6462 0.5375	0.5992 0.5102	0.5796 0.4698	0.5813	Ave		0.5663				9.7		30.0			
Ethanol	0.4667 0.3882	0.4764 0.3730	0.4356 0.3514	0.4071 0.3093	0.4143	Ave		0.4025				13.4		30.0			
Vinyl bromide	1.1369 1.0936	1.2219 1.0624	1.1482 1.0193	1.1018 0.9772	1.1008	Ave		1.0958				6.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1 Analy Batch No.: 9482

SDG No.: _____

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

Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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	1.2979 1.1019	1.3019 1.0531	1.1814 0.9805	1.1311 0.9018	1.1319	Ave		1.1202				11.8		30.0			
Acrolein	++++ 0.1689	++++ 0.1838	0.1515 0.1664	0.1415 0.1869	0.1478	Ave		0.1638				10.8		30.0			
Trichlorofluoromethane	4.8982 4.1780	4.5033 4.0365	4.2099 3.8886	4.2004 3.7805	4.2513	Ave		4.2163				7.9		30.0			
Acetonitrile	++++ 0.3455	++++ 0.3253	++++ 0.3091	0.3670 0.2962	0.3713	Ave		0.3357				9.2		30.0			
Acetone	++++ 0.3988	++++ 0.3747	++++ 0.3572	0.4582 0.3327	0.4350	Ave		0.3928				12.1		30.0			
Pentane	++++ 0.2081	0.2306 0.1963	0.2111 0.1889	0.2019 0.1831	0.2097	Ave		0.2037				7.3		30.0			
Isopropyl alcohol	++++ 1.3318	++++ 1.2860	1.4634 1.2076	1.5818 1.2506	1.3883	Ave		1.3585				9.6		30.0			
Ethyl ether	0.9382 0.9126	1.0226 0.8738	0.9338 0.8382	0.9342 0.8824	0.9813	Ave		0.9241				6.1		30.0			
1,1-Dichloroethene	1.1997 1.0521	1.1238 1.0202	1.0793 0.9944	1.0590 1.0026	1.0636	Ave		1.0661				6.0		30.0			
Acrylonitrile	++++ 0.4755	0.5548 0.4637	0.5320 0.4448	0.4820 0.4378	0.4985	Ave		0.4861				8.4		30.0			
t-Butyl alcohol	1.7335 1.5954	1.6954 1.6067	1.7782 1.5471	1.6014 1.4137	1.6439	Ave		1.6239				6.6		30.0			
1,1,2-Trichlorotrifluoroethane	2.7462 2.4294	2.5716 2.3469	2.4578 2.3134	2.4601 2.3195	2.4878	Ave		2.4592				5.6		30.0			
Methylene Chloride	++++ 0.8898	++++ 0.8426	1.3997 0.8059	1.0494 0.7857	0.9603	Ave		0.9619				22.2		30.0			
3-Chloropropene	1.3230 1.0002	1.1895 0.9454	1.0528 0.8875	1.0053 0.8637	1.0378	Ave		1.0339				14.0		30.0			
Carbon disulfide	3.1830 2.6914	2.9030 2.5798	2.7447 2.4737	2.6742 2.4755	2.7200	Ave		2.7161				8.1		30.0			
trans-1,2-Dichloroethene	1.1520 1.0243	1.0869 1.0160	1.0319 1.0020	1.0004 1.0168	1.0512	Ave		1.0424				4.7		30.0			
2-Methylpentane	2.4442 2.0107	2.2935 1.8810	2.1617 1.7802	2.0757 1.6497	2.1100	Ave		2.0452				12.2		30.0			
Methyl tert-butyl ether	3.2716 3.0742	3.3148 2.9891	3.1854 2.8934	3.0695 2.8251	3.2425	Ave		3.0962				5.5		30.0			
1,1-Dichloroethane	2.4649 1.9932	2.1933 1.9091	2.0960 1.8234	2.0124 1.7705	2.0509	Ave		2.0349				10.2		30.0			
Vinyl acetate	2.3537 2.3986	2.4371 2.3555	2.3018 2.2353	2.3117 2.1757	2.4624	Ave		2.3369				4.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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	++++ 0.4477	0.5290 0.4398	0.4791 0.4291	0.4391 0.4150	0.4626	Ave		0.4552				7.8		30.0			
Hexane	0.9272 0.7802	0.8897 0.7413	0.8149 0.6991	0.8020 0.6548	0.7995	Ave		0.7899				10.8		30.0			
C6 Range	++++ 1.5533	++++ 1.4918	++++ 1.4753	1.5507 ++++	1.5868	Ave		1.5316				3.0		30.0			
Isopropyl ether	2.9696 2.9568	3.0846 2.8425	3.0439 2.6777	2.9405 2.5359	3.1080	Ave		2.9066				6.6		30.0			
cis-1,2-Dichloroethene	1.1807 1.1054	1.2051 1.0733	1.1183 1.0545	1.0720 1.0570	1.0986	Ave		1.1072				4.8		30.0			
Ethyl acetate	1.9826 1.9470	2.0492 1.8805	1.9970 1.8074	1.9306 1.7180	2.0347	Ave		1.9274				5.7		30.0			
Chloroform	3.1680 2.7810	3.0658 2.6656	2.7927 2.5757	2.7886 2.5332	2.8816	Ave		2.8058				7.5		30.0			
Tert-butyl ethyl ether	3.1533 2.9551	3.0716 2.8268	2.9525 2.7461	2.8883 2.6238	3.0788	Ave		2.9218				5.8		30.0			
Tetrahydrofuran	1.1323 0.9962	1.1580 0.9617	1.0365 0.9258	1.0347 0.8837	1.0616	Ave		1.0212				8.8		30.0			
1,1,1-Trichloroethane	3.6366 3.1948	3.4605 3.1195	3.2415 3.0594	3.1658 3.0511	3.2818	Ave		3.2457				5.9		30.0			
1,2-Dichloroethane	0.4453 0.4146	0.4341 0.3909	0.4133 0.3759	0.3926 0.3665	0.4014	Ave		0.4038				6.4		30.0			
Benzene	0.8565 0.6763	0.7234 0.6426	0.6692 0.6290	0.6431 0.6244	0.6512	Ave		0.6795				10.7		30.0			
Cyclohexane	0.1266 0.1179	0.1269 0.1115	0.1114 0.1058	0.1140 0.1025	0.1128	Ave		0.1144				7.3		30.0			
1-Butanol	++++ 0.0749	++++ 0.0748	0.0782 0.0711	0.0719 0.0702	0.0681	Ave		0.0727				4.7		30.0			
Carbon tetrachloride	0.7406 0.7383	0.6978 0.7281	0.6474 0.7266	0.6648 0.7560	0.6919	Ave		0.7102				5.2		30.0			
2,3-Dimethylpentane	0.1613 0.1609	0.1727 0.1546	0.1548 0.1480	0.1546 0.1433	0.1578	Ave		0.1564				5.4		30.0			
Thiophene	0.3984 0.3926	0.3997 0.3758	0.3824 0.3643	0.3701 0.3561	0.3777	Ave		0.3797				4.0		30.0			
Tert-amyl methyl ether	++++ 0.6573	0.6040 0.6339	0.5913 0.6224	0.6275 0.6000	0.6476	Ave		0.6230				3.7		30.0			
2,2,4-Trimethylpentane	1.1319 1.0337	1.0910 0.9745	1.0171 0.9296	1.0057 0.8832	1.0118	Ave		1.0087				7.5		30.0			
Heptane	0.2793 0.2604	0.2754 0.2466	0.2504 0.2381	0.2394 0.2297	0.2480	Ave		0.2519				6.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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	0.2369 0.2379	0.2592 0.2239	0.2423 0.2138	0.2307 0.2044	0.2282	Ave		0.2308				7.0		30.0			
Trichloroethene	0.3913 0.3732	0.3778 0.3641	0.3535 0.3793	0.3420 0.3811	0.3505	Ave		0.3681				4.5		30.0			
Dibromomethane	0.3543 0.3167	0.3067 0.3050	0.2852 0.3044	0.2873 0.3024	0.2986	Ave		0.3067				6.6		30.0			
Bromodichloromethane	0.6086 0.6261	0.5498 0.6149	0.5387 0.6089	0.5577 0.6031	0.5917	Ave		0.5888				5.4		30.0			
1,4-Dioxane	0.0864 0.0991	0.0977 0.0939	0.0920 0.0920	0.0895 0.0845	0.0928	Ave		0.0920				5.2		30.0			
Methyl methacrylate	0.2506 0.2719	0.2669 0.2669	0.2455 0.2567	0.2369 0.2462	0.2534	Ave		0.2550				4.6		30.0			
Methylcyclohexane	0.5429 0.5509	0.5520 0.5254	0.5273 0.5144	0.5134 0.5090	0.5296	Ave		0.5294				3.0		30.0			
4-Methyl-2-pentanone (MIBK)	0.3776 0.4117	0.3958 0.4017	0.3967 0.3926	0.3789 0.3610	0.3969	Ave		0.3903				3.9		30.0			
cis-1,3-Dichloropropene	0.4475 0.4489	0.4392 0.4328	0.4056 0.4255	0.4041 0.4132	0.4296	Ave		0.4274				3.9		30.0			
trans-1,3-Dichloropropene	0.4385 0.4472	0.4225 0.4317	0.4283 0.4230	0.4164 0.4211	0.4273	Ave		0.4284				2.2		30.0			
Toluene Range	++++ 2.0153	++++ 1.9295	++++ 1.8763	1.8534 1.8846	1.9262	Ave		1.9142				3.0		30.0			
Toluene	0.8395 0.8093	0.8491 0.7770	0.7936 0.7642	0.7738 0.7773	0.7881	Ave		0.7969				3.8		30.0			
1,1,2-Trichloroethane	0.2473 0.2468	0.2582 0.2332	0.2411 0.2289	0.2313 0.2284	0.2347	Ave		0.2389				4.3		30.0			
2-Methylthiophene	0.6786 0.6945	0.6915 0.6634	0.6567 0.6465	0.6589 0.6593	0.6702	Ave		0.6689				2.4		30.0			
3-Methylthiophene	0.6861 0.6844	0.6815 0.6575	0.6391 0.6481	0.6408 0.6536	0.6684	Ave		0.6622				2.8		30.0			
2-Hexanone	0.1705 0.2083	0.1899 0.2042	0.1871 0.1978	0.1825 0.1879	0.1884	Ave		0.1907				6.0		30.0			
Octane	0.3046 0.2983	0.2938 0.2856	0.2875 0.2800	0.2759 0.2759	0.2901	Ave		0.2880				3.4		30.0			
Dibromochloromethane	0.5147 0.6391	0.4976 0.6658	0.5002 0.6985	0.5208 0.7314	0.5960	Ave		0.5960				15.3		30.0			
1,2-Dibromoethane	0.4514 0.4987	0.4414 0.4873	0.4271 0.4908	0.4418 0.4998	0.4725	Ave		0.4679				6.0		30.0			
Tetrachloroethene	0.3686 0.3715	0.3773 0.3614	0.3461 0.3710	0.3339 0.3954	0.3554	Ave		0.3645				4.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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								
Chlorobenzene	0.6950 0.6883	0.6894 0.6657	0.6599 0.6734	0.6471 0.6950	0.6559	Ave		0.6744				2.7		30.0			
2,3-Dimethylheptane	0.7899 0.6914	0.7827 0.6350	0.7170 0.5879	0.6997 0.5398	0.6966	Ave		0.6822				12.1		30.0			
Ethylbenzene	1.1434 1.1417	1.1377 1.1050	1.1069 1.0902	1.0700 1.1099	1.1134	Ave		1.1131				2.2		30.0			
2-Ethylthiophene	0.8499 0.9248	0.8830 0.8941	0.8364 0.8781	0.8529 0.8854	0.8866	Ave		0.8768				3.1		30.0			
m-Xylene & p-Xylene	0.9244 0.9307	0.9041 0.8929	0.8801 0.8889	0.8676 0.9026	0.8999	Ave		0.8990				2.2		30.0			
Bromoform	0.4414 0.6021	0.4305 0.7122	0.4383 0.7997	0.4732 +++++	0.5776	Ave		0.5594				24.9		30.0			
Styrene	0.4659 0.6631	0.4995 0.6610	0.5075 0.6798	0.5351 0.7078	0.6183	Ave		0.5931				15.4		30.0			
Nonane	0.5320 0.5077	0.5212 0.4643	0.5212 0.4376	0.4918 0.4085	0.5133	Ave		0.4886				8.7		30.0			
o-Xylene	0.9666 0.9452	0.9743 0.9037	0.9096 0.8874	0.8846 0.8870	0.9138	Ave		0.9191				3.8		30.0			
1,1,2,2-Tetrachloroethane	0.5455 0.6248	0.5869 0.6002	0.5295 0.5769	0.5547 0.5835	0.6125	Ave		0.5794				5.4		30.0			
1,2,3-Trichloropropane	0.2174 0.2205	0.2166 0.2110	0.2058 0.2107	0.2000 0.2121	0.2139	Ave		0.2120				2.9		30.0			
Isopropylbenzene	1.4295 1.3572	1.3734 1.3141	1.3130 1.3091	1.2638 1.3243	1.3304	Ave		1.3350				3.5		30.0			
Propylbenzene	0.3206 0.3696	0.3283 0.3614	0.3301 0.3700	0.3300 0.3908	0.3507	Ave		0.3502				6.9		30.0			
2-Chlorotoluene	+++++ 0.3340	0.3335 0.3298	0.3098 0.3343	0.3015 0.3477	0.3231	Ave		0.3267				4.5		30.0			
4-Ethyltoluene	1.1970 1.3224	1.2319 1.2896	1.1897 1.3003	1.1796 1.3269	1.2762	Ave		1.2571				4.6		30.0			
1,3,5-Trimethylbenzene	0.5469 0.6243	0.5674 0.6109	0.5327 0.6231	0.5477 0.6499	0.6024	Ave		0.5895				7.1		30.0			
Alpha Methyl Styrene	+++++ 0.5207	0.3639 0.5401	0.3656 0.5610	0.3863 0.5861	0.4774	Ave		0.4751				19.2		30.0			
Decane	0.5864 0.6383	0.6469 0.5959	0.6103 0.5500	0.6147 0.5048	0.6447	Ave		0.5991				7.9		30.0			
tert-Butylbenzene	1.1155 1.3026	1.2200 1.2873	1.1544 1.3340	1.1382 1.3748	1.2508	Ave		1.2420				7.4		30.0			
1,2,4-Trimethylbenzene	1.0567 1.1887	1.0858 1.1674	1.0572 1.1857	1.0569 1.2179	1.1475	Ave		1.1293				5.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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								
sec-Butylbenzene	1.4575 1.6940	1.5550 1.6784	1.4797 1.7510	1.4842 +++++	1.6224	Ave		1.5903				7.0		30.0			
1,3-Dichlorobenzene	0.7839 0.8746	0.7680 0.9113	0.7371 1.0012	0.7327 1.0431	0.8146	Ave		0.8518				13.3		30.0			
Benzyl chloride	0.9913 1.1502	0.9509 1.1420	0.9751 1.1585	0.9861 1.1519	1.0824	Ave		1.0654				8.3		30.0			
1,4-Dichlorobenzene	0.7832 0.8555	0.7728 0.8624	0.7394 0.9397	0.7367 0.9958	0.8073	Ave		0.8325				10.7		30.0			
4-Isopropyltoluene	1.2787 1.5072	1.3728 1.4704	1.3354 1.5104	1.3072 +++++	1.4520	Ave		1.4043				6.6		30.0			
1,2,3-Trimethylbenzene	0.7980 0.8970	0.8575 0.8524	0.8145 0.8449	0.7986 0.8469	0.8775	Ave		0.8430				4.0		30.0			
Butylcyclohexane	0.8269 0.8735	0.8430 0.8279	0.8368 0.8147	0.8222 0.7686	0.8741	Ave		0.8320				3.8		30.0			
1,2-Dichlorobenzene	0.7339 0.8390	0.7467 0.8639	0.7024 0.9401	0.7046 0.9877	0.7869	Ave		0.8117				12.7		30.0			
Indane	0.8988 1.0874	0.9453 1.0871	0.9346 1.1500	0.9155 1.2030	1.0376	Ave		1.0288				10.7		30.0			
Indene	+++++ 0.8020	0.6602 0.8044	0.6375 0.8255	0.6603 0.8617	0.7619	Ave		0.7517				11.5		30.0			
Butylbenzene	1.3043 1.3941	1.2970 1.3165	1.2882 1.3191	1.2631 1.2590	1.3725	Ave		1.3127				3.5		30.0			
Undecane	0.7087 0.7450	0.7870 0.6698	0.7061 0.6436	0.7148 0.5617	0.7894	Ave		0.7029				10.2		30.0			
1,2-Dimethyl-4-Ethylbenzene	+++++ 1.1145	0.9799 1.0683	0.9582 1.1101	0.9631 1.0986	1.0937	Ave		1.0483				6.6		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.3626	0.2848 0.3888	0.2556 0.4208	0.2832 0.4321	0.3569	Ave		0.3481				19.1		30.0			
1,2,4,5-Tetramethylbenzene	1.1280 1.3892	1.1793 1.3109	1.1313 1.4313	1.1592 +++++	1.3455	Ave		1.2593				9.8		30.0			
1,2,3,5-Tetramethylbenzene	0.7014 0.8228	0.7621 0.7627	0.6772 0.8072	0.6958 0.7761	0.8138	Ave		0.7577				7.2		30.0			
1,2,3,4-Tetramethylbenzene	0.9370 1.1438	0.9768 1.0541	0.9292 1.1581	0.9384 1.0472	1.1276	Ave		1.0347				9.0		30.0			
Dodecane	0.6092 0.6657	0.7288 0.5555	0.6338 0.6382	0.6127 0.3833	0.7850	Ave		0.6236				18.1		30.0			
1,2,4-Trichlorobenzene	0.6272 0.8005	0.6639 0.7430	0.5713 0.9298	0.5791 0.7414	0.7733	Ave		0.7144				16.2		30.0			
Naphthalene	1.3527 1.6696	1.4676 1.5877	1.2582 1.7071	1.2708 +++++	1.6598	Ave		1.4967				12.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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													
Benzo(b)thiophene	0.7926 0.9824	0.8643 0.9431	0.7434 0.9932	0.7548 0.7832	0.9779	Ave		0.8706				12.0		30.0			
Hexachlorobutadiene	0.6444 0.7667	0.6789 0.7046	0.6040 0.8911	0.6006 0.6659	0.7840	Ave		0.7045				13.4		30.0			
1,2,3-Trichlorobenzene	0.6779 0.7664	0.7017 0.6913	0.5616 0.8404	0.5574 0.5093	0.7607	Ave		0.6741				16.4		30.0			
2-Methylnaphthalene	++++ 0.3374	0.2697 0.3653	0.2434 0.4468	0.2127 ++++	0.3001	Ave		0.3108				25.7		50.0			
1-Methylnaphthalene	++++ 0.3303	0.2976 0.3653	0.2352 0.4362	0.2020 ++++	0.2997	Ave		0.3095				25.3		50.0			
4-Bromofluorobenzene (Surr)	0.7862 0.7838	0.7836 0.7899	0.7710 0.8014	0.7914 0.8000	0.8071	Ave		0.7905				1.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1 Analy Batch No.: 9482

SDG No.: _____

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

Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-9482/3	GC15IC01.D
Level 2	IC 140-9482/4	GC15IC02.D
Level 3	IC 140-9482/5	GC15IC03.D
Level 4	IC 140-9482/6	GC15IC04.D
Level 5	IC 140-9482/7	GC15IC05.D
Level 6	ICIS 140-9482/8	GC15IC06.D
Level 7	IC 140-9482/9	GC15IC07.D
Level 8	IC 140-9482/10	GC15IC08.D
Level 9	IC 140-9482/11	GC15IC09.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	+++++ 79923	3314 161083	6330 317499	16118 648102	38106	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Propene	CBM	Ave	3760 186431	7827 366636	15226 715294	38073 1334692	93889	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Dichlorodifluoromethane	CBM	Ave	14467 749517	29295 1518249	58308 3065573	147329 6309639	367220	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Chloromethane	CBM	Ave	+++++ 51943	+++++ 102473	4662 195522	10845 381523	25770	+++++ 2.00	+++++ 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dichlorotetrafluoroethane	CBM	Ave	7978 436402	17176 925480	34069 1944481	85416 4340354	208904	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Acetaldehyde	CBM	Ave	+++++ 313096	+++++ 595674	+++++ 1132144	72210 2180620	165163	+++++ 9.99	+++++ 20.0	+++++ 40.0	2.00 80.0	5.01
Vinyl chloride	CBM	Ave	4066 210834	8251 414360	17041 808059	41537 1585259	100829	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,3-Butadiene	CBM	Ave	2487 143038	5498 283835	11030 549398	28287 1072769	68804	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Butane	CBM	Ave	6130 293638	11940 583059	24164 1092508	59701 2112304	142250	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Bromomethane	CBM	Ave	3811 204127	8019 425627	15909 850291	39896 1772157	99093	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Chloroethane	CBM	Ave	1857 98257	4085 204064	7956 409306	19908 830849	49038	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Ethanol	CBM	Ave	6987 345378	15059 707984	28920 1409489	69923 2735400	174754	0.196 9.99	0.392 20.0	0.794 40.0	2.00 80.0	5.01
Vinyl bromide	CBM	Ave	3404 194576	7724 403357	15245 817628	37848 1728343	92859	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Methylbutane	CBM	Ave	3886 196053	8230 399830	15685 786537	38853 1595022	95489	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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
Acrolein	CBM	Ave	+++++ 30056	+++++ 69764	2011 133516	4862 330540	12471	+++++ 2.00	+++++ 4.00	0.159 8.00	0.400 16.0	1.00
Trichlorofluoromethane	CBM	Ave	14665 743344	28467 1532462	55895 3119354	144284 6686372	358635	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Acetonitrile	CBM	Ave	+++++ 61466	+++++ 123503	+++++ 247919	12605 523809	31325	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0	1.00
Acetone	CBM	Ave	+++++ 208378	+++++ 417742	+++++ 841477	46214 1728119	107750	+++++ 5.87	+++++ 11.7	+++++ 23.5	1.17 47.0	2.94
Pentane	CBM	Ave	+++++ 37027	1458 74522	2803 151563	6934 323924	17688	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Isopropyl alcohol	CBM	Ave	+++++ 695832	+++++ 1433726	57055 2844607	159557 6495368	343901	+++++ 5.87	+++++ 11.7	0.466 23.5	1.17 47.0	2.94
Ethyl ether	CBM	Ave	2809 162376	6464 331731	12398 672373	32090 1560739	82779	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1-Dichloroethene	CBM	Ave	3592 187192	7104 387339	14330 797692	36376 1773303	89728	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Acrylonitrile	CBM	Ave	+++++ 84597	3507 176062	7063 356803	16558 774315	42053	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
t-Butyl alcohol	CBM	Ave	5190 283850	10717 610004	23609 1241041	55009 2500383	138675	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1,2-Trichlorotrifluoroethane	CBM	Ave	8222 432242	16256 891000	32632 1855781	84505 4102363	209870	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Methylene Chloride	CBM	Ave	+++++ 158311	+++++ 319885	18584 646443	36046 1389569	81013	+++++ 2.00	+++++ 4.00	0.159 8.00	0.400 16.0	1.00
3-Chloropropene	CBM	Ave	3961 177955	7519 358922	13978 711970	34533 1527575	87550	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Carbon disulfide	CBM	Ave	9530 478845	18351 979418	36441 1984338	91859 4378380	229458	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
trans-1,2-Dichloroethene	CBM	Ave	3449 182249	6871 385716	13700 803766	34363 1798426	88680	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Methylpentane	CBM	Ave	7318 357751	14498 714141	28701 1428051	71301 2917758	177996	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Methyl tert-butyl ether	CBM	Ave	9795 546952	20954 1134810	42292 2321003	105435 4996692	273536	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1-Dichloroethane	CBM	Ave	7380 354630	13865 724800	27828 1462691	69127 3131504	173008	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Vinyl acetate	CBM	Ave	7047 426758	15406 894260	30561 1793080	79405 3848118	207726	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Butanone	CBM	Ave	+++++ 79660	3344 166968	6361 344230	15082 734059	39027	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Hexane	CBM	Ave	2776 138819	5624 281421	10820 560820	27547 1158063	67446	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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	DFBZ	Ave	+++++ 1313930	+++++ 2723811	+++++ 5679805	265311 +++++	680124	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++	1.00
Isopropyl ether	CBM	Ave	8891 526080	19499 1079183	40414 2148000	101005 4485105	262185	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
cis-1,2-Dichloroethene	CBM	Ave	3535 196676	7618 407485	14847 845905	36823 1869513	92674	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Ethyl acetate	CBM	Ave	5936 346406	12954 713928	26514 1449886	66315 3038641	171642	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Chloroform	CBM	Ave	9485 494799	19380 1012011	37079 2066202	95787 4480470	243090	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Tert-butyl ethyl ether	CBM	Ave	9441 525778	19417 1073194	39200 2202848	99212 4640558	259723	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Tetrahydrofuran	CBM	Ave	3390 177245	7320 365105	13762 742637	35542 1562956	89552	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1,1-Trichloroethane	CBM	Ave	10888 568413	21875 1184348	43037 2454172	108746 5396460	276845	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dichloroethane	DFBZ	Ave	6535 350677	13373 713806	27277 1447194	67175 3085614	172041	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Benzene	DFBZ	Ave	12569 572098	22286 1173319	44171 2421461	110029 5257486	279122	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Cyclohexane	DFBZ	Ave	1858 99763	3909 203651	7351 407285	19497 863041	48328	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1-Butanol	DFBZ	Ave	+++++ 63344	+++++ 136613	5160 273762	12296 591245	29171	+++++ 2.00	+++++ 4.00	0.159 8.00	0.400 16.0	1.00
Carbon tetrachloride	DFBZ	Ave	10868 624502	21497 1329349	42733 2797102	113747 6365119	296576	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2,3-Dimethylpentane	DFBZ	Ave	2367 136123	5321 282206	10219 569652	26444 1206293	67650	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Thiophene	DFBZ	Ave	5847 332092	12315 686171	25238 1402526	63320 2998594	161878	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Tert-amyl methyl ether	DFBZ	Ave	+++++ 556050	18607 1157370	39025 2396229	107357 5052003	277565	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2,2,4-Trimethylpentane	DFBZ	Ave	16611 874389	33610 1779183	67131 3578687	172066 7435991	433667	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Heptane	DFBZ	Ave	4099 220272	8485 450272	16529 916791	40968 1934212	106290	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dichloropropane	DFBZ	Ave	3477 201269	7985 408812	15995 823056	39466 1721134	97796	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Trichloroethene	DFBZ	Ave	5743 315722	11638 664844	23332 1460218	58508 3208650	150217	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Dibromomethane	DFBZ	Ave	5200 267885	9448 556851	18824 1171750	49152 2546424	127996	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1 Analy Batch No.: 9482

SDG No.: _____

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

Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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	DFBZ	Ave	8931 529608	16938 1122661	35557 2343991	95415 5078012	253630	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,4-Dioxane	DFBZ	Ave	1268 83850	3011 171415	6069 354151	15307 711143	39782	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Methyl methacrylate	DFBZ	Ave	3677 229984	8221 487379	16201 988227	40539 2072888	108599	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Methylcyclohexane	DFBZ	Ave	7968 465979	17005 959276	34804 1980430	87846 4285973	227011	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	5542 348265	12195 733481	26186 1511574	64835 3039224	170118	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
cis-1,3-Dichloropropene	DFBZ	Ave	6567 379694	13530 790238	26770 1637962	69133 3479031	184126	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
trans-1,3-Dichloropropene	CBZd 5	Ave	6192 373664	12488 789307	26814 1645268	68241 3558024	178625	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Toluene Range	DFBZ	Ave	++++ 1704710	++++ 3522873	++++ 7223375	317115 15867496	825588	++++ 2.00	++++ 4.00	++++ 8.00	0.400 16.0	1.00
Toluene	CBZd 5	Ave	11856 676247	25094 1420544	49691 2972164	126815 6568341	329471	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1,2-Trichloroethane	CBZd 5	Ave	3493 206257	7631 426290	15096 890354	37911 1930179	98117	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Methylthiophene	CBZd 5	Ave	9584 580302	20438 1212899	41117 2514496	107989 5571008	280205	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
3-Methylthiophene	CBZd 5	Ave	9689 571930	20142 1202168	40017 2520669	105015 5522937	279432	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Hexanone	CBZd 5	Ave	2408 174060	5612 373275	11715 769096	29914 1588026	78752	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Octane	CBZd 5	Ave	4302 249240	8683 522104	18002 1089002	45217 2331636	121262	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Dibromochloromethane	CBZd 5	Ave	7269 534023	14707 1217195	31316 2716554	85348 6180157	249183	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dibromoethane	CBZd 5	Ave	6375 416730	13045 890944	26740 1908708	72403 4223710	197523	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Tetrachloroethene	CBZd 5	Ave	5206 310406	11152 660677	21668 1442699	54718 3341461	148601	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Chlorobenzene	CBZd 5	Ave	9815 575122	20374 1217110	41319 2618941	106057 5872788	274196	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2,3-Dimethylheptane	CBZd 5	Ave	11155 577752	23134 1160951	44892 2286470	114675 4561552	291234	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Ethylbenzene	CBZd 5	Ave	16148 954045	33624 2020166	69301 4239909	175356 9378439	465478	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Ethylthiophene	CBZd 5	Ave	12002 772778	26097 1634721	52367 3415104	139782 7482070	370649	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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
m-Xylene & p-Xylene	CBZd 5	Ave	26110 1555433	53439 3265060	110203 6914176	284366 15254685	752459	0.0784 4.00	0.157 8.00	0.317 16.0	0.800 32.0	2.00
Bromoform	CBZd 5	Ave	6234 503085	12722 1302027	27441 3110131	77559 +++++	241462	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 +++++	1.00
Styrene	CBZd 5	Ave	6579 554081	14764 1208558	31773 2643863	87701 5980940	258497	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Nonane	CBZd 5	Ave	7513 424281	15404 848900	32630 1702072	80602 3451826	214597	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
o-Xylene	CBZd 5	Ave	13651 789853	28796 1652204	56948 3451230	144970 7495466	382052	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	7704 522069	17347 1097235	33152 2243454	90906 4930342	256086	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,3-Trichloropropane	CBZd 5	Ave	3070 184265	6401 385852	12888 819612	32782 1792574	89439	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Isopropylbenzene	CBZd 5	Ave	20188 1134088	40591 2402575	82210 5091349	207127 11190142	556209	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Propylbenzene	CBZd 5	Ave	4528 308856	9702 660707	20666 1438960	54076 3302547	146598	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Chlorotoluene	CBZd 5	Ave	+++++ 279105	9858 602879	19395 1300045	49412 2937732	135063	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
4-Ethyltoluene	CBZd 5	Ave	16904 1105029	36409 2357742	74487 5056909	193325 11212261	533550	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,3,5-Trimethylbenzene	CBZd 5	Ave	7724 521704	16770 1116920	33353 2423508	89762 5491943	251859	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 435119	10756 987378	22891 2181723	63304 4952983	199600	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Decane	CBZd 5	Ave	8281 533364	19120 1089510	38214 2139210	100736 4265576	269524	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
tert-Butylbenzene	CBZd 5	Ave	15754 1088441	36058 2353545	72279 5188127	186533 11616984	522916	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,4-Trimethylbenzene	CBZd 5	Ave	14923 993298	32090 2134348	66195 4611406	173218 10291549	479730	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
sec-Butylbenzene	CBZd 5	Ave	20583 1415485	45958 3068495	92643 6810067	243244 +++++	678287	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 +++++	1.00
1,3-Dichlorobenzene	CBZd 5	Ave	11070 730798	22698 1666142	46148 3893907	120087 8814211	340580	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Benzyl chloride	CBZd 5	Ave	14000 961111	28105 2087808	61054 4505667	161617 9733935	452529	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,4-Dichlorobenzene	CBZd 5	Ave	11061 714901	22839 1576716	46292 3654606	120739 8414582	337505	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
4-Isopropyltoluene	CBZd 5	Ave	18058 1259395	40574 2688329	83608 5874319	214236 +++++	607035	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 +++++	1.00

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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
1,2,3-Trimethylbenzene	CBZd 5	Ave	11269 749546	25342 1558491	50998 3285785	130876 7156186	366844	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Butylcyclohexane	CBZd 5	Ave	11678 729918	24915 1513686	52392 3168620	134750 6495136	365451	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dichlorobenzene	CBZd 5	Ave	10364 701112	22069 1579523	43975 3656010	115468 8346220	328983	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Indane	CBZd 5	Ave	12693 908631	27938 1987507	58519 4472405	150042 10165330	433789	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Indene	CBZd 5	Ave	++++ 670154	19511 1470712	39915 3210332	108215 7281318	318543	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Butylbenzene	CBZd 5	Ave	18420 1164905	38334 2406878	80658 5130283	207014 10638853	573821	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Undecane	CBZd 5	Ave	10009 622503	23261 1224656	44209 2502915	117141 4746027	330016	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dimethyl-4-Ethylbenzene	CBZd 5	Ave	++++ 931315	28961 1953205	59995 4317337	157840 9283464	457261	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dibromo-3-Chloropropane	CBZd 5	Ave	++++ 302962	8417 710910	16001 1636568	46413 3651422	149226	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,4,5-Tetramethylbenzene	CBZd 5	Ave	15930 1160795	34855 2396674	70829 5566375	189973 ++++	562520	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 ++++	1.00
1,2,3,5-Tetramethylbenzene	CBZd 5	Ave	9905 687501	22523 1394400	42400 3139429	114039 6557823	340236	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,3,4-Tetramethylbenzene	CBZd 5	Ave	13233 955751	28869 1927205	58175 4503997	153792 8848915	471400	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Dodecane	CBZd 5	Ave	8604 556303	21541 1015546	39684 2482191	100417 3238859	328197	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,4-Trichlorobenzene	CBZd 5	Ave	8857 668939	19622 1358330	35767 3616219	94904 6264846	323309	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Naphthalene	CBZd 5	Ave	19103 1395111	43374 2902807	78779 6639288	208260 ++++	693914	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 ++++	1.00
Benzo(b)thiophene	CBZd 5	Ave	11193 820908	25544 1724284	46547 3862788	123697 6618484	408835	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Hexachlorobutadiene	CBZd 5	Ave	9101 640650	20064 1288187	37819 3465632	98425 5626941	327761	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,3-Trichlorobenzene	CBZd 5	Ave	9574 640410	20740 1263910	35163 3268537	91350 4303288	318023	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Methylnaphthalene	CBZd 5	Ave	++++ 852913	24114 2020346	46113 5256646	105461 ++++	379553	++++ 6.04	0.237 12.1	0.480 24.2	1.21 ++++	3.03
1-Methylnaphthalene	CBZd 5	Ave	++++ 834902	26609 2020334	44542 5132440	100155 ++++	379039	++++ 6.04	0.237 12.1	0.480 24.2	1.21 ++++	3.03
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	1132701 1311298	1181326 1443792	1216766 1558022	1296737 1689695	1347272	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00	4.00

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

Lab Name: <u>TestAmerica Knoxville</u>	Job No.: <u>140-7698-1</u>	Analy Batch No.: <u>9482</u>
SDG No.: _____		
Instrument ID: <u>MG</u>	GC Column: <u>RTX-5</u> ID: <u>0.32 (mm)</u>	Heated Purge: (Y/N) <u>N</u>
Calibration Start Date: <u>03/15/2017 14:36</u>	Calibration End Date: <u>03/15/2017 20:21</u>	Calibration ID: <u>962</u>

Curve Type Legend:

Ave = Average ISTD

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC01.D
 Lims ID: IC L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 15-Mar-2017 14:36:30 ALS Bottle#: 1 Worklist Smp#: 3
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-003
 Misc. Info.: 083683
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 11-Apr-2017 10:07:11 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK028

First Level Reviewer: tajh

Date: 15-Mar-2017 15:37:22

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	7.985	7.993	-0.008	81	305443	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.153	10.161	-0.008	95	1497178	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.028	15.034	-0.006	88	1440748	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.699	16.705	-0.006	92	1132701	4.00	3.98	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	96	1904	0.0392	0.0561	
7 Propene	41	3.466	3.466	0.000	81	3760	0.0392	0.0465	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	14467	0.0392	0.0448	
9 Chloromethane	52	3.655	3.659	-0.004	55	1551	0.0392	0.0713	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.666	3.669	-0.003	89	7978	0.0392	0.0415	
11 Acetaldehyde	44	3.785	3.786	-0.001	84	13227	0.1960	0.5179	
12 Vinyl chloride	62	3.801	3.803	-0.002	98	4066	0.0392	0.0455	
13 Butadiene	54	3.876	3.876	0.000	70	2487	0.0392	0.0418	
14 Butane	43	3.876	3.879	-0.003	85	6130	0.0392	0.0484	
15 Bromomethane	94	4.135	4.141	-0.006	96	3811	0.0392	0.0432	
16 Chloroethane	64	4.259	4.258	0.001	91	1857	0.0392	0.0429	
17 Ethanol	31	4.356	4.357	-0.001	96	6987	0.1960	0.2273	
18 Vinyl bromide	106	4.507	4.511	-0.004	97	3404	0.0392	0.0407	
19 2-Methylbutane	43	4.556	4.560	-0.004	89	3886	0.0392	0.0454	
21 Acrolein	56	4.750	4.742	0.008	27	513	0.0392	0.0410	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	100	14665	0.0392	0.0455	
22 Acetonitrile	40	4.793	4.793	0.000	89	1363	0.0392	0.0532	
23 Acetone	58	4.841	4.835	0.006	99	5677	0.1151	0.1893	
25 Pentane	72	4.933	4.937	-0.004	80	741	0.0392	0.0476	
24 Isopropyl alcohol	45	4.933	4.939	-0.006	77	12981	0.1151	0.1251	
26 Ethyl ether	31	5.084	5.075	0.009	86	2809	0.0392	0.0398	
27 1,1-Dichloroethene	96	5.348	5.354	-0.006	96	3592	0.0392	0.0441	
28 Acrylonitrile	53	5.429	5.435	-0.006	96	1959	0.0392	0.0528	
29 2-Methyl-2-propanol	59	5.467	5.467	0.000	94	5190	0.0392	0.0419	
30 1,1,2-Trichloro-1,2,2-trif	101	5.516	5.521	-0.005	92	8222	0.0392	0.0438	
31 Methylene Chloride	84	5.650	5.656	-0.006	86	9041	0.0392	0.1231	

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	5.667	5.673	-0.006	89	3961	0.0392	0.0502	
33 Carbon disulfide	76	5.791	5.797	-0.006	99	9530	0.0392	0.0459	
34 trans-1,2-Dichloroethene	96	6.395	6.393	0.001	95	3449	0.0392	0.0433	
35 2-Methylpentane	43	6.421	6.426	-0.005	91	7318	0.0392	0.0469	
36 Methyl tert-butyl ether	73	6.524	6.513	0.011	95	9795	0.0392	0.0414	
37 1,1-Dichloroethane	63	6.756	6.771	-0.015	98	7380	0.0392	0.0475	
38 Vinyl acetate	43	6.880	6.881	-0.001	99	7047	0.0392	0.0395	
39 2-Butanone (MEK)	72	7.295	7.283	0.012	99	1469	0.0392	0.0423	
40 Hexane	56	7.333	7.336	-0.003	90	2776	0.0392	0.0460	
41 Isopropyl ether	45	7.489	7.483	0.006	91	8891	0.0392	0.0401	
42 cis-1,2-Dichloroethene	96	7.683	7.691	-0.008	95	3535	0.0392	0.0418	
43 Ethyl acetate	43	7.888	7.880	0.008	97	5936	0.0392	0.0403	
44 Chloroform	83	8.012	8.019	-0.007	89	9485	0.0392	0.0443	
45 Tert-butyl ethyl ether	59	8.131	8.122	0.009	96	9441	0.0392	0.0423	
46 Tetrahydrofuran	42	8.406	8.387	0.019	83	3390	0.0392	0.0435	
47 1,1,1-Trichloroethane	97	8.988	8.997	-0.009	95	10888	0.0392	0.0439	
48 1,2-Dichloroethane	62	9.080	9.087	-0.007	98	6535	0.0392	0.0432	
49 Benzene	78	9.576	9.582	-0.006	95	12569	0.0392	0.0494	
50 Cyclohexane	69	9.587	9.590	-0.003	82	1858	0.0392	0.0434	
51 Carbon tetrachloride	117	9.603	9.611	-0.008	96	10868	0.0392	0.0409	
53 2,3-Dimethylpentane	71	9.732	9.740	-0.008	88	2367	0.0392	0.0404	
54 Thiophene	84	9.851	9.855	-0.004	95	5847	0.0392	0.0411	
55 Tert-amyl methyl ether	73	10.104	10.100	0.004	40	7626	0.0392	0.0327	
56 Isooctane	57	10.412	10.414	-0.002	95	16611	0.0392	0.0440	
57 n-Heptane	71	10.816	10.816	0.000	83	4099	0.0392	0.0435	
58 1,2-Dichloropropane	63	10.838	10.846	-0.008	57	3477	0.0392	0.0402	
59 Trichloroethene	130	10.886	10.897	-0.011	93	5743	0.0392	0.0417	
60 Dibromomethane	93	10.951	10.961	-0.010	92	5200	0.0392	0.0453	
61 Dichlorobromomethane	83	11.118	11.126	-0.008	97	8931	0.0392	0.0405	
62 1,4-Dioxane	88	11.172	11.152	0.020	69	1268	0.0392	0.0368	
63 Methyl methacrylate	41	11.258	11.260	-0.002	86	3677	0.0392	0.0385	
64 Methylcyclohexane	83	11.706	11.704	0.002	93	7968	0.0392	0.0402	
65 4-Methyl-2-pentanone (MIBK)	43	12.143	12.133	0.010	94	5542	0.0392	0.0379	
66 cis-1,3-Dichloropropene	75	12.170	12.174	-0.004	96	6567	0.0392	0.0411	
67 trans-1,3-Dichloropropene	75	12.887	12.897	-0.010	96	6192	0.0392	0.0401	
68 Toluene	91	13.016	13.021	-0.005	93	11856	0.0392	0.0413	
69 1,1,2-Trichloroethane	83	13.086	13.091	-0.005	95	3493	0.0392	0.0406	
70 2-Methylthiophene	97	13.167	13.173	-0.006	98	9584	0.0392	0.0398	
71 3-Methylthiophene	97	13.378	13.381	-0.003	98	9689	0.0392	0.0406	
72 2-Hexanone	58	13.529	13.519	0.010	95	2408	0.0392	0.0351	
73 n-Octane	85	13.777	13.780	-0.003	86	4302	0.0392	0.0415	
74 Chlorodibromomethane	129	13.798	13.803	-0.005	95	7269	0.0392	0.0339	
75 Ethylene Dibromide	107	14.079	14.092	-0.013	98	6375	0.0392	0.0378	
76 Tetrachloroethene	129	14.192	14.195	-0.003	90	5206	0.0392	0.0397	
77 Chlorobenzene	112	15.082	15.082	0.000	92	9815	0.0392	0.0404	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	90	11155	0.0392	0.0454	
79 Ethylbenzene	91	15.389	15.393	-0.004	98	16148	0.0392	0.0403	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	12002	0.0392	0.0380	
81 m-Xylene & p-Xylene	91	15.551	15.559	-0.008	99	26110	0.0784	0.0806	
82 Bromoform	173	15.971	15.979	-0.008	93	6234	0.0392	0.0309	
83 Styrene	104	16.025	16.027	-0.002	81	6579	0.0392	0.0308	
84 n-Nonane	57	16.025	16.029	-0.004	88	7513	0.0392	0.0427	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 o-Xylene	91	16.085	16.088	-0.003	97	13651	0.0392	0.0412	
86 1,1,2,2-Tetrachloroethane	83	16.408	16.411	-0.003	95	7704	0.0392	0.0369	
87 1,2,3-Trichloropropane	110	16.554	16.565	-0.011	93	3070	0.0392	0.0402	
88 Isopropylbenzene	105	16.683	16.692	-0.009	91	20188	0.0392	0.0420	
89 N-Propylbenzene	120	17.239	17.246	-0.007	98	4528	0.0392	0.0359	
91 4-Ethyltoluene	105	17.406	17.409	-0.003	97	16904	0.0392	0.0373	
92 1,3,5-Trimethylbenzene	120	17.487	17.490	-0.003	91	7724	0.0392	0.0364	
93 Alpha Methyl Styrene	118	17.729	17.734	-0.005	87	4705	0.0392	0.0275	
94 n-Decane	57	17.832	17.837	-0.005	94	8281	0.0392	0.0384	
95 tert-Butylbenzene	119	17.934	17.939	-0.005	91	15754	0.0392	0.0352	
96 1,2,4-Trimethylbenzene	105	17.945	17.953	-0.008	96	14923	0.0392	0.0367	
97 1,3-Dichlorobenzene	146	18.220	18.223	-0.003	94	11070	0.0392	0.0361	
98 sec-Butylbenzene	105	18.220	18.225	-0.005	96	20583	0.0392	0.0359	
99 Benzyl chloride	91	18.295	18.303	-0.008	96	14000	0.0392	0.0365	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	93	11061	0.0392	0.0369	
101 4-Isopropyltoluene	119	18.398	18.402	-0.004	96	18058	0.0392	0.0357	
102 1,2,3-Trimethylbenzene	105	18.441	18.445	-0.004	97	11269	0.0392	0.0371	
103 Butylcyclohexane	83	18.517	18.520	-0.003	93	11678	0.0392	0.0390	
104 1,2-Dichlorobenzene	146	18.684	18.689	-0.005	90	10364	0.0392	0.0354	
105 2,3-Dihydroindene	117	18.689	18.693	-0.004	92	12693	0.0392	0.0343	
106 Indene	116	18.824	18.827	-0.003	92	8277	0.0392	0.0306	
107 n-Butylbenzene	91	18.851	18.854	-0.003	97	18420	0.0392	0.0390	
108 Undecane	57	19.207	19.209	-0.002	94	10009	0.0392	0.0395	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.234	19.239	-0.005	96	13104	0.0392	0.0347	
110 1,2-Dibromo-3-Chloropropan	157	19.304	19.308	-0.004	85	3309	0.0392	0.0264	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.635	-0.002	95	15930	0.0392	0.0351	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	94	9905	0.0392	0.0363	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	95	13233	0.0392	0.0355	
114 Dodecane	57	20.280	20.280	0.000	92	8604	0.0392	0.0383	
115 1,2,4-Trichlorobenzene	180	20.415	20.418	-0.003	92	8857	0.0392	0.0344	
116 Naphthalene	128	20.544	20.546	-0.002	98	19103	0.0392	0.0354	
117 Benzo(b)thiophene	134	20.647	20.645	0.002	98	11193	0.0392	0.0357	
118 Hexachlorobutadiene	225	20.771	20.776	-0.005	91	9101	0.0392	0.0359	
119 1,2,3-Trichlorobenzene	180	20.824	20.825	-0.001	94	9574	0.0392	0.0394	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	96	12576	0.1186	0.1124	
121 1-Methylnaphthalene	142	21.801	21.801	-0.001	97	14522	0.1186	0.1303	
A 122 C6 Range	1	7.343	(7.303-7.383)		0	36327	0.0392	0.0634	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	30770	0.0392	0.0429	
S 126 Xylenes, Total	100				0		0.1176	0.1219	
S 127 1,2-Dichloroethene, Total	1				0		0.0784	0.0851	

Reagents:

40L12DNP_00010

Amount Added: 100.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC01.D

Injection Date: 15-Mar-2017 14:36:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L1

Worklist Smp#: 3

Client ID:

Purge Vol: 500.000 mL

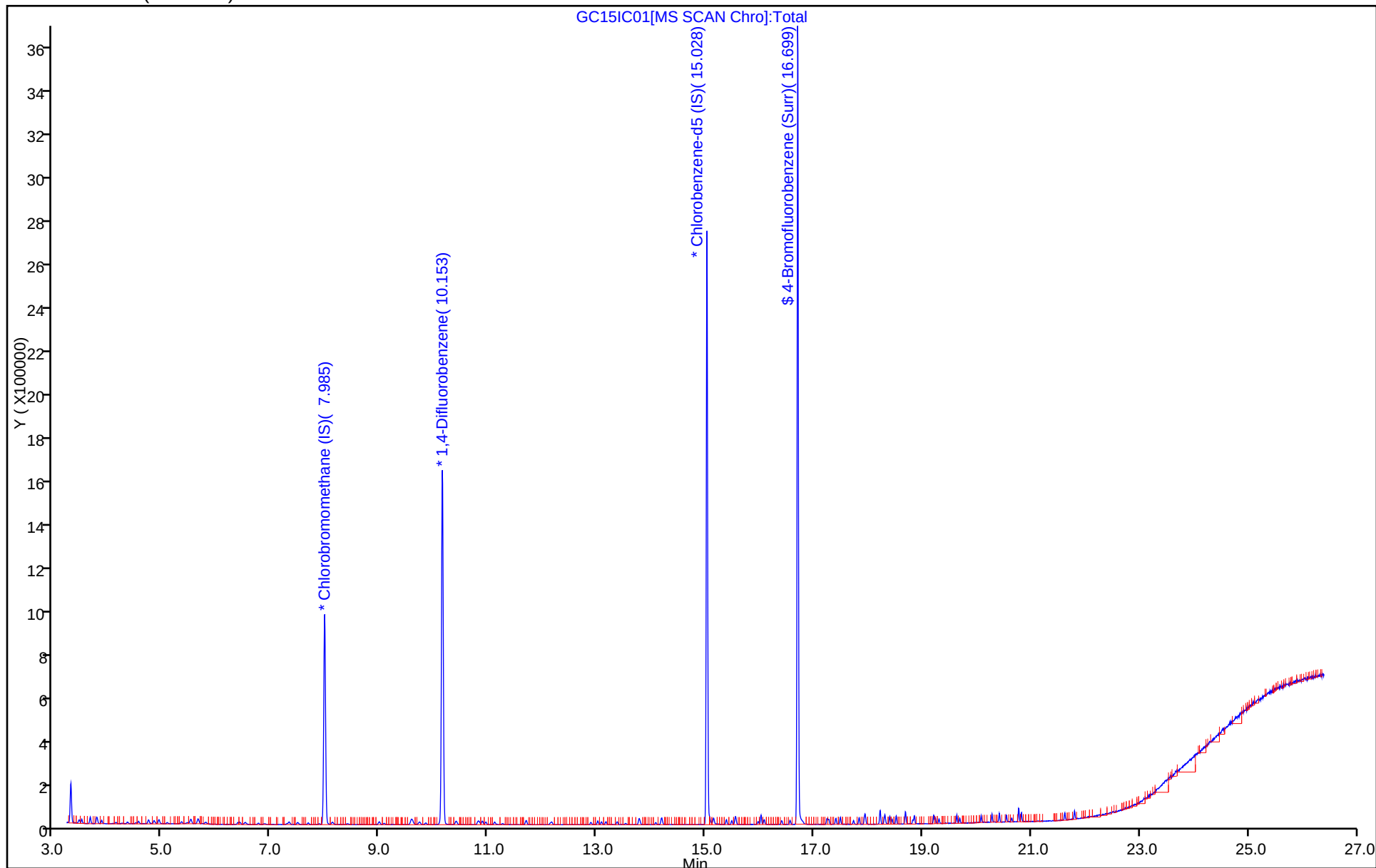
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC01.D

Injection Date: 15-Mar-2017 14:36:30

Instrument ID: MG

Lims ID: IC L1

Client ID:

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 3

Purge Vol: 500.000 mL

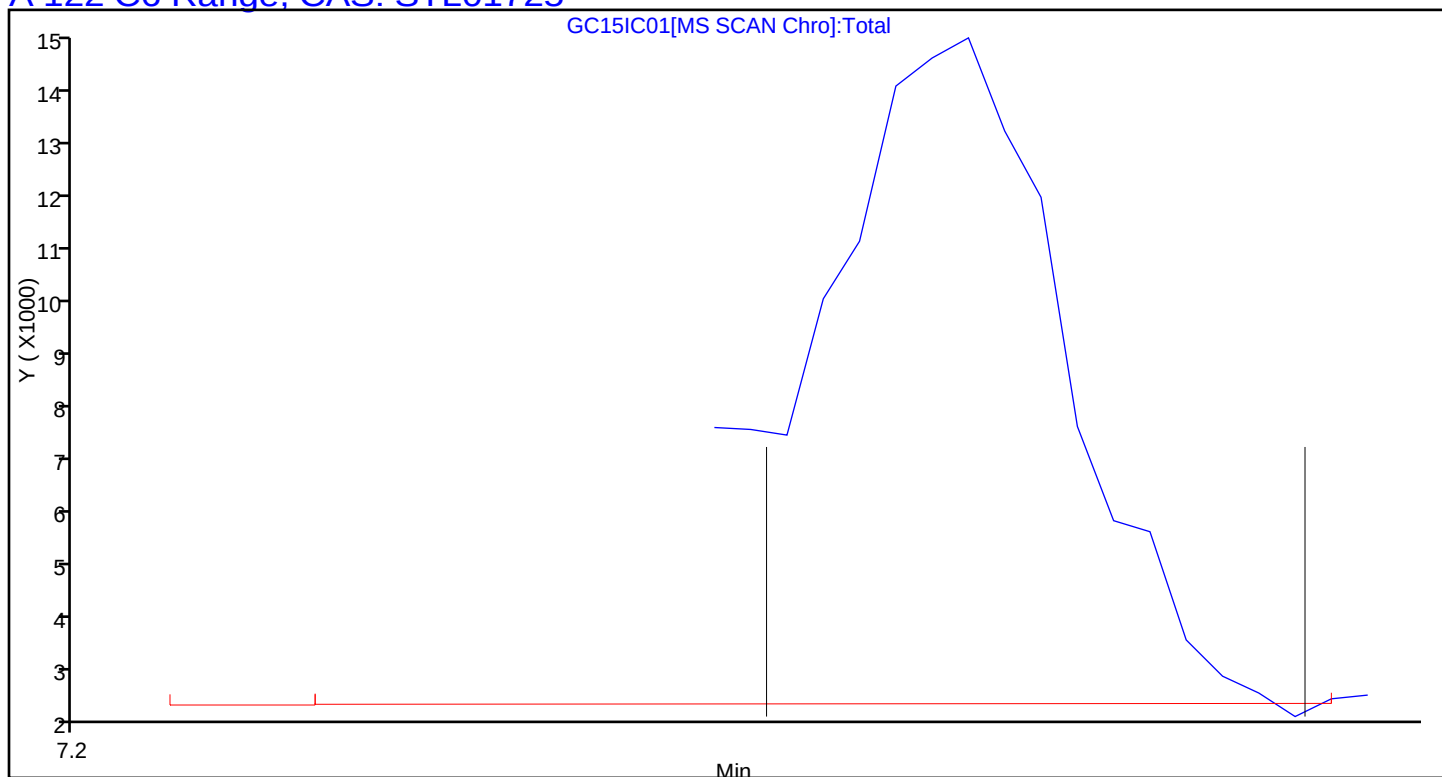
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC01.D

Injection Date: 15-Mar-2017 14:36:30

Instrument ID: MG

Lims ID: IC L1

Client ID:

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 3

Purge Vol: 500.000 mL

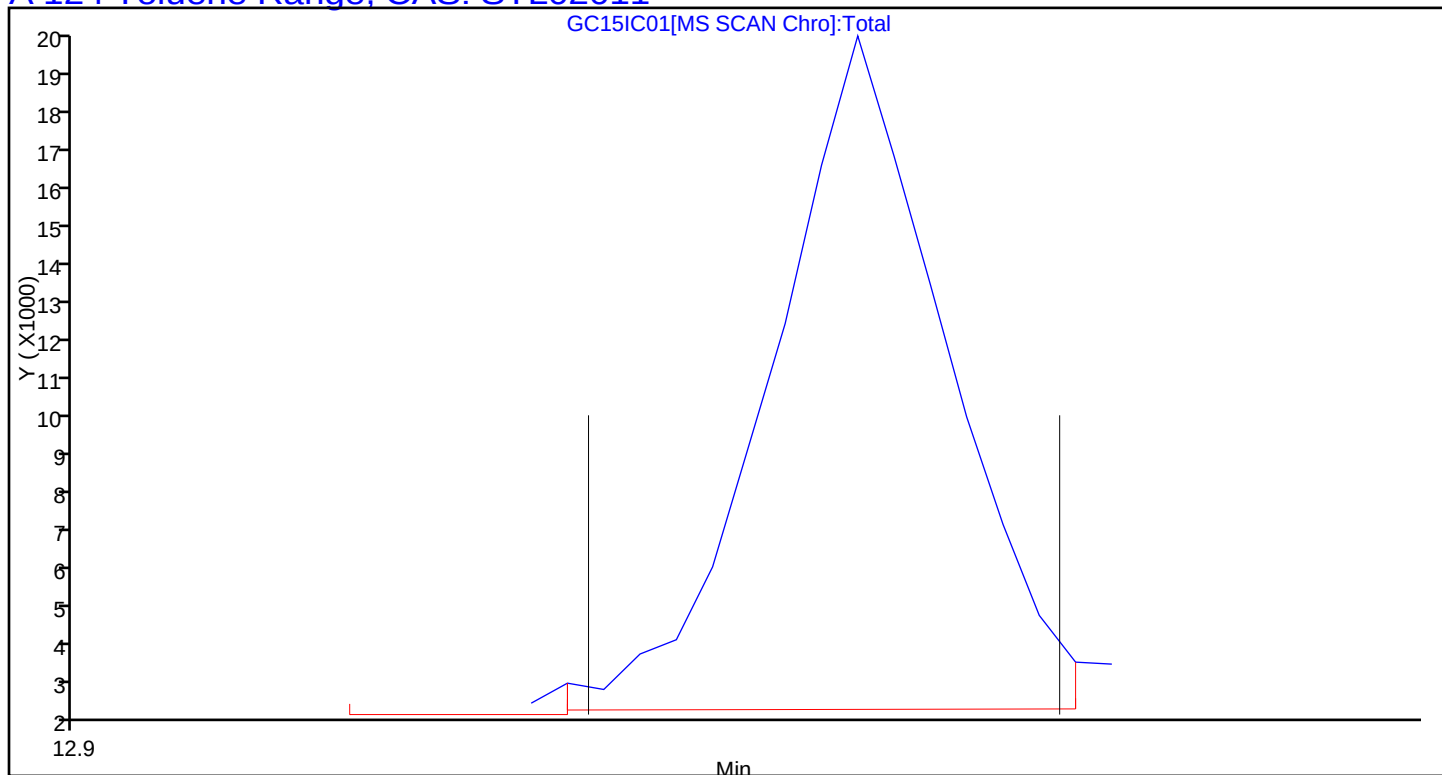
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

A 124 Toluene Range, CAS: STL02011

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC02.D
 Lims ID: IC L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 15-Mar-2017 15:20:30 ALS Bottle#: 1 Worklist Smp#: 4
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-004
 Misc. Info.: 083683
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:08:32 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: barlozhetskayaa

Date: 15-Mar-2017 16:12:16

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	7.985	7.993	-0.008	82	322451	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.153	10.161	-0.008	95	1571472	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.028	15.034	-0.006	88	1507586	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.699	16.705	-0.006	93	1181326	4.00	3.97	
6 Chlorodifluoromethane	67	3.461	3.457	0.004	97	3314	0.0784	0.0924	
7 Propene	41	3.461	3.466	-0.005	96	7827	0.0784	0.0918	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	29295	0.0784	0.0858	
9 Chloromethane	52	3.655	3.659	-0.004	60	2797	0.0784	0.1218	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.666	3.669	-0.003	92	17176	0.0784	0.0846	
11 Acetaldehyde	44	3.785	3.786	-0.001	86	22772	0.3921	0.8447	
12 Vinyl chloride	62	3.795	3.803	-0.008	99	8251	0.0784	0.0875	
13 Butadiene	54	3.876	3.876	0.000	68	5498	0.0784	0.0875	
14 Butane	43	3.876	3.879	-0.003	85	11940	0.0784	0.0893	
15 Bromomethane	94	4.140	4.141	-0.001	95	8019	0.0784	0.0860	
16 Chloroethane	64	4.254	4.258	-0.004	91	4085	0.0784	0.0895	
17 Ethanol	31	4.345	4.357	-0.012	97	15059	0.3921	0.4642	
18 Vinyl bromide	106	4.507	4.511	-0.004	96	7724	0.0784	0.0874	
19 2-Methylbutane	43	4.561	4.560	0.001	94	8230	0.0784	0.0911	
21 Acrolein	56	4.744	4.742	0.002	28	965	0.0784	0.0731	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	99	28467	0.0784	0.0838	
22 Acetonitrile	40	4.788	4.793	-0.005	89	2730	0.0784	0.0973	
23 Acetone	58	4.836	4.835	0.001	99	12083	0.2303	0.3816	
25 Pentane	72	4.933	4.937	-0.004	87	1458	0.0784	0.0888	
24 Isopropyl alcohol	45	4.917	4.939	-0.022	92	27125	0.2303	0.2477	
26 Ethyl ether	31	5.079	5.075	0.004	90	6464	0.0784	0.0868	
27 1,1-Dichloroethene	96	5.348	5.354	-0.006	96	7104	0.0784	0.0827	
28 Acrylonitrile	53	5.429	5.435	-0.006	93	3507	0.0784	0.0895	
29 2-Methyl-2-propanol	59	5.456	5.467	-0.011	95	10717	0.0784	0.0819	
30 1,1,2-Trichloro-1,2,2-trif	101	5.515	5.521	-0.006	91	16256	0.0784	0.0820	
31 Methylene Chloride	84	5.650	5.656	-0.006	89	12473	0.0784	0.1609	

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	5.666	5.673	-0.007	91	7519	0.0784	0.0902	
33 Carbon disulfide	76	5.790	5.797	-0.007	99	18351	0.0784	0.0838	
34 trans-1,2-Dichloroethene	96	6.384	6.393	-0.009	95	6871	0.0784	0.0818	
35 2-Methylpentane	43	6.427	6.426	0.001	92	14498	0.0784	0.0879	
36 Methyl tert-butyl ether	73	6.518	6.513	0.005	95	20954	0.0784	0.0840	
37 1,1-Dichloroethane	63	6.761	6.771	-0.010	99	13865	0.0784	0.0845	
38 Vinyl acetate	43	6.880	6.881	-0.001	100	15406	0.0784	0.0818	
39 2-Butanone (MEK)	72	7.279	7.283	-0.004	97	3344	0.0784	0.0911	
40 Hexane	56	7.327	7.336	-0.009	80	5624	0.0784	0.0883	
41 Isopropyl ether	45	7.484	7.483	0.001	92	19499	0.0784	0.0832	
42 cis-1,2-Dichloroethene	96	7.678	7.691	-0.013	96	7618	0.0784	0.0854	
43 Ethyl acetate	43	7.877	7.880	-0.003	98	12954	0.0784	0.0834	
44 Chloroform	83	8.007	8.019	-0.012	92	19380	0.0784	0.0857	
45 Tert-butyl ethyl ether	59	8.120	8.122	-0.002	95	19417	0.0784	0.0824	
46 Tetrahydrofuran	42	8.395	8.387	0.008	87	7320	0.0784	0.0889	
47 1,1,1-Trichloroethane	97	8.994	8.997	-0.003	95	21875	0.0784	0.0836	
48 1,2-Dichloroethane	62	9.074	9.087	-0.013	99	13373	0.0784	0.0843	
49 Benzene	78	9.571	9.582	-0.011	96	22286	0.0784	0.0835	
50 Cyclohexane	69	9.592	9.590	0.002	78	3909	0.0784	0.0870	
52 n-Butanol	31	9.619	9.606	0.013	47	2238	0.0784	0.0783	
51 Carbon tetrachloride	117	9.603	9.611	-0.008	97	21497	0.0784	0.0771	
53 2,3-Dimethylpentane	71	9.738	9.740	-0.002	89	5321	0.0784	0.0866	
54 Thiophene	84	9.846	9.855	-0.009	94	12315	0.0784	0.0826	
55 Tert-amyl methyl ether	73	10.104	10.100	0.004	96	18607	0.0784	0.0760	
56 Isooctane	57	10.412	10.414	-0.002	96	33610	0.0784	0.0848	
57 n-Heptane	71	10.805	10.816	-0.011	90	8485	0.0784	0.0857	
58 1,2-Dichloropropane	63	10.838	10.846	-0.008	87	7985	0.0784	0.0881	
59 Trichloroethene	130	10.892	10.897	-0.005	94	11638	0.0784	0.0805	
60 Dibromomethane	93	10.951	10.961	-0.010	94	9448	0.0784	0.0784	
61 Dichlorobromomethane	83	11.113	11.126	-0.013	98	16938	0.0784	0.0732	
62 1,4-Dioxane	88	11.156	11.152	0.004	73	3011	0.0784	0.0833	
63 Methyl methacrylate	41	11.258	11.260	-0.002	93	8221	0.0784	0.0821	
64 Methylcyclohexane	83	11.701	11.704	-0.003	95	17005	0.0784	0.0818	
65 4-Methyl-2-pentanone (MIBK)	43	12.132	12.133	-0.001	96	12195	0.0784	0.0795	
66 cis-1,3-Dichloropropene	75	12.164	12.174	-0.010	97	13530	0.0784	0.0806	
67 trans-1,3-Dichloropropene	75	12.892	12.897	-0.005	97	12488	0.0784	0.0773	
68 Toluene	91	13.016	13.021	-0.005	93	25094	0.0784	0.0836	
69 1,1,2-Trichloroethane	83	13.081	13.091	-0.010	96	7631	0.0784	0.0848	
70 2-Methylthiophene	97	13.167	13.173	-0.006	97	20438	0.0784	0.0811	
71 3-Methylthiophene	97	13.372	13.381	-0.009	99	20142	0.0784	0.0807	
72 2-Hexanone	58	13.523	13.519	0.004	94	5612	0.0784	0.0781	
73 n-Octane	85	13.777	13.780	-0.003	89	8683	0.0784	0.0800	
74 Chlorodibromomethane	129	13.793	13.803	-0.010	96	14707	0.0784	0.0655	
75 Ethylene Dibromide	107	14.084	14.092	-0.008	98	13045	0.0784	0.0740	
76 Tetrachloroethene	129	14.192	14.195	-0.003	92	11152	0.0784	0.0812	
77 Chlorobenzene	112	15.076	15.082	-0.006	91	20374	0.0784	0.0802	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	92	23134	0.0784	0.0900	
79 Ethylbenzene	91	15.389	15.393	-0.004	99	33624	0.0784	0.0801	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	26097	0.0784	0.0790	
81 m-Xylene & p-Xylene	91	15.556	15.559	-0.003	99	53439	0.1568	0.1577	
82 Bromoform	173	15.977	15.979	-0.002	92	12722	0.0784	0.0566	
83 Styrene	104	16.020	16.027	-0.007	96	14764	0.0784	0.0660	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.025	16.029	-0.004	87	15404	0.0784	0.0836	
85 o-Xylene	91	16.079	16.088	-0.009	97	28796	0.0784	0.0831	
86 1,1,2,2-Tetrachloroethane	83	16.403	16.411	-0.008	96	17347	0.0784	0.0794	
87 1,2,3-Trichloropropane	110	16.559	16.565	-0.006	96	6401	0.0784	0.0801	
88 Isopropylbenzene	105	16.688	16.692	-0.004	95	40591	0.0784	0.0807	
89 N-Propylbenzene	120	17.238	17.246	-0.008	99	9702	0.0784	0.0735	
90 2-Chlorotoluene	126	17.271	17.278	-0.007	94	9858	0.0784	0.0801	
91 4-Ethyltoluene	105	17.400	17.409	-0.009	98	36409	0.0784	0.0768	
92 1,3,5-Trimethylbenzene	120	17.481	17.490	-0.009	91	16770	0.0784	0.0755	
93 Alpha Methyl Styrene	118	17.729	17.734	-0.005	85	10756	0.0784	0.0621	
94 n-Decane	57	17.832	17.837	-0.005	94	19120	0.0784	0.0847	
95 tert-Butylbenzene	119	17.934	17.939	-0.005	91	36058	0.0784	0.0770	
96 1,2,4-Trimethylbenzene	105	17.950	17.953	-0.003	96	32090	0.0784	0.0754	
98 sec-Butylbenzene	105	18.220	18.223	-0.003	97	45958	0.0784	0.0767	
97 1,3-Dichlorobenzene	146	18.220	18.223	-0.003	95	22698	0.0784	0.0707	
99 Benzyl chloride	91	18.295	18.303	-0.008	97	28105	0.0784	0.0700	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	92	22839	0.0784	0.0728	
101 4-Isopropyltoluene	119	18.398	18.400	-0.002	96	40574	0.0784	0.0767	
102 1,2,3-Trimethylbenzene	105	18.441	18.445	-0.004	98	25342	0.0784	0.0798	
103 Butylcyclohexane	83	18.516	18.520	-0.004	92	24915	0.0784	0.0795	
104 1,2-Dichlorobenzene	146	18.684	18.689	-0.005	90	22069	0.0784	0.0721	
105 2,3-Dihydroindene	117	18.689	18.693	-0.004	92	27938	0.0784	0.0721	
106 Indene	116	18.824	18.827	-0.003	90	19511	0.0784	0.0689	
107 n-Butylbenzene	91	18.851	18.854	-0.003	98	38334	0.0784	0.0775	
108 Undecane	57	19.207	19.209	-0.002	95	23261	0.0784	0.0878	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.234	19.239	-0.005	96	28961	0.0784	0.0733	
110 1,2-Dibromo-3-Chloropropan	157	19.304	19.308	-0.004	88	8417	0.0784	0.0642	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.634	-0.001	96	34855	0.0784	0.0734	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	93	22523	0.0784	0.0789	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	96	28869	0.0784	0.0740	
114 Dodecane	57	20.280	20.280	0.000	93	21541	0.0784	0.0917	
115 1,2,4-Trichlorobenzene	180	20.420	20.418	0.002	93	19622	0.0784	0.0729	
116 Naphthalene	128	20.544	20.545	-0.001	98	43374	0.0784	0.0769	
117 Benzo(b)thiophene	134	20.641	20.645	-0.004	99	25544	0.0784	0.0779	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	91	20064	0.0784	0.0756	
119 1,2,3-Trichlorobenzene	180	20.824	20.825	-0.001	94	20740	0.0784	0.0816	
120 2-Methylnaphthalene	142	21.622	21.623	-0.001	98	24114	0.2372	0.2059	
121 1-Methylnaphthalene	142	21.800	21.801	-0.001	98	26609	0.2372	0.2281	
A 122 C6 Range	1	7.337	(7.297-7.377)		0	78271	0.0784	0.1259	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	63520	0.0784	0.0846	
S 126 Xylenes, Total	100				0		0.2353	0.2408	
S 127 1,2-Dichloroethene, Total	1				0		0.1568	0.1671	

Reagents:

40L12DNP_00010

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC02.D

Injection Date: 15-Mar-2017 15:20:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L2

Worklist Smp#: 4

Client ID:

Purge Vol: 500.000 mL

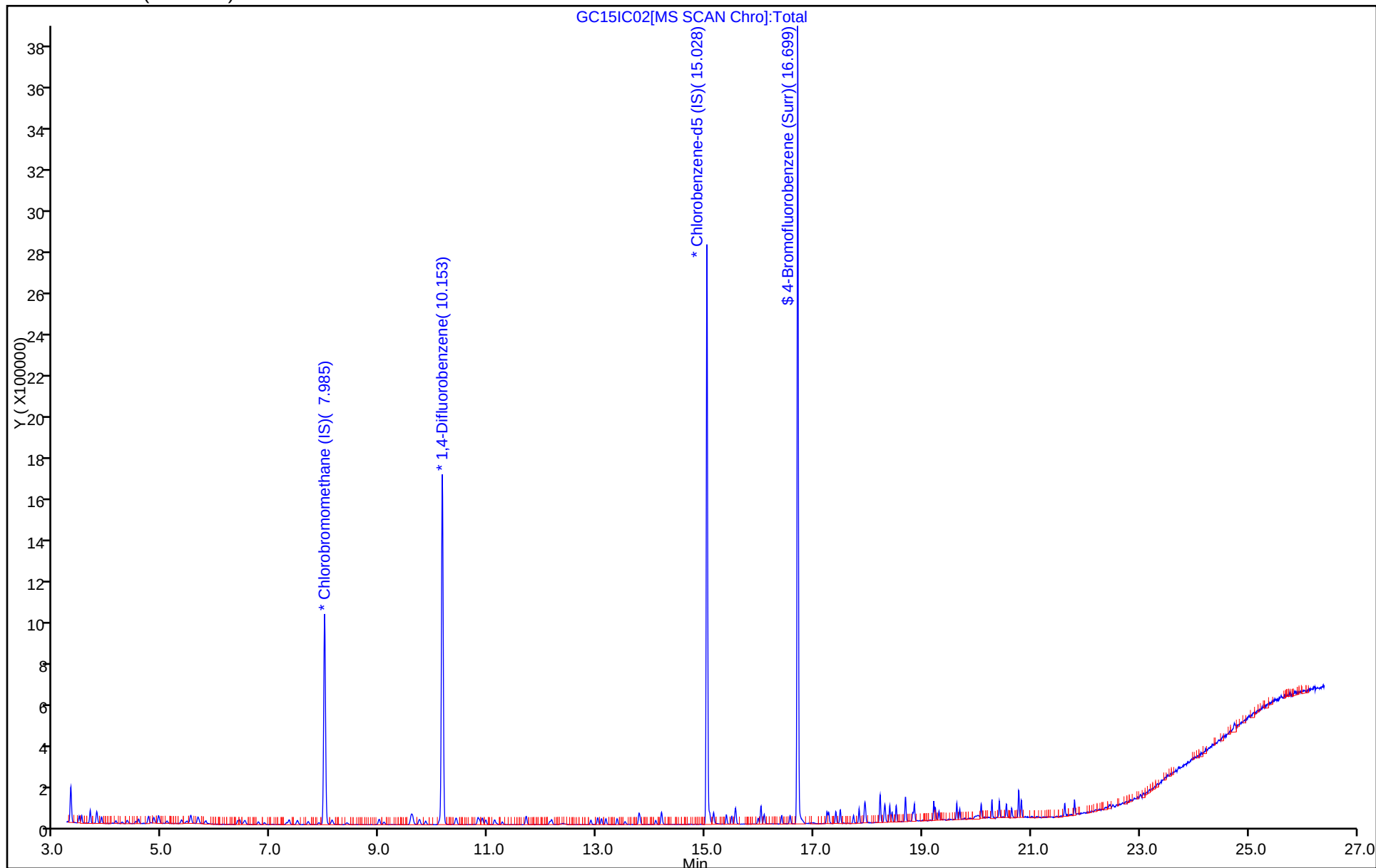
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC02.D

Injection Date: 15-Mar-2017 15:20:30

Instrument ID: MG

Lims ID: IC L2

Client ID:

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 4

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

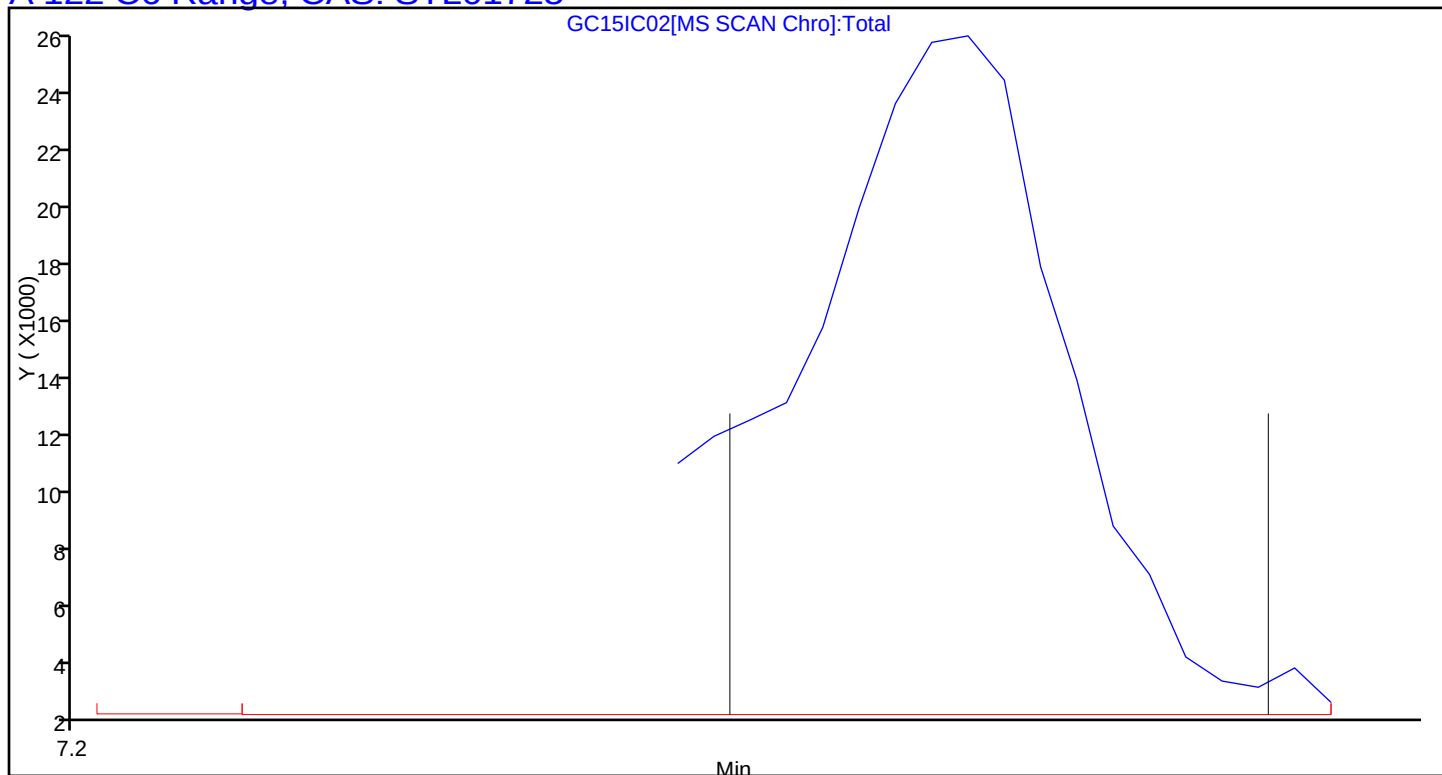
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC02.D

Injection Date: 15-Mar-2017 15:20:30

Instrument ID: MG

Lims ID: IC L2

Client ID:

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 4

Purge Vol: 500.000 mL

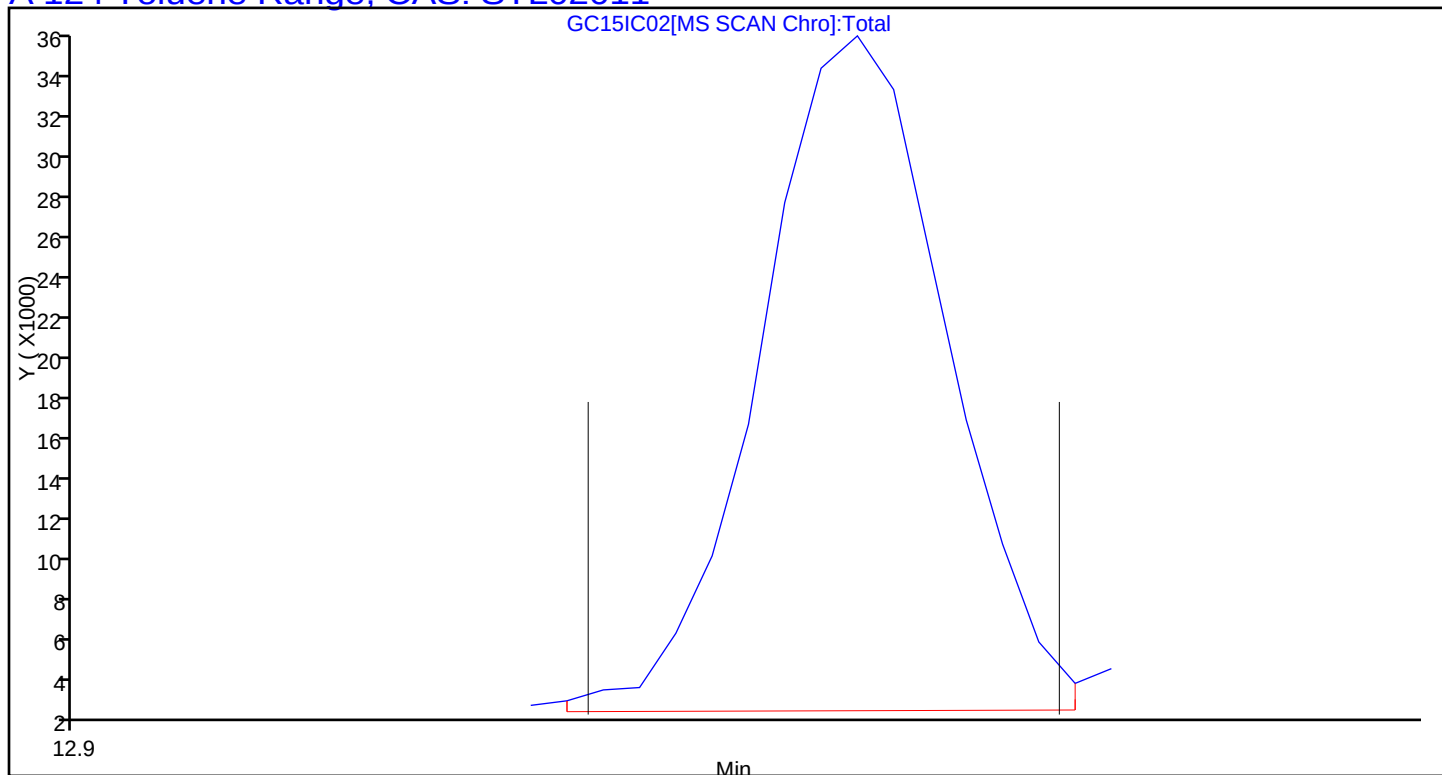
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC03.D
 Lims ID: IC L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 15-Mar-2017 16:02:30 ALS Bottle#: 2 Worklist Smp#: 5
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-005
 Misc. Info.: 083682
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:10:00 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: barlozhetskayaa

Date: 15-Mar-2017 17:05:43

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	7.985	7.993	-0.008	83	334641	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.153	10.161	-0.008	95	1663587	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.028	15.034	-0.006	88	1578082	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.699	16.705	-0.006	93	1216766	4.00	3.90	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	97	6330	0.1587	0.1701	
7 Propene	41	3.466	3.466	0.000	97	15226	0.1587	0.1720	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	58308	0.1587	0.1646	
9 Chloromethane	52	3.661	3.659	0.002	52	4662	0.1587	0.1957	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.669	0.002	91	34069	0.1587	0.1616	
11 Acetaldehyde	44	3.785	3.786	-0.001	86	38119	0.7935	1.36	
12 Vinyl chloride	62	3.801	3.803	-0.002	100	17041	0.1587	0.1741	
13 Butadiene	54	3.876	3.876	0.000	67	11030	0.1587	0.1692	
14 Butane	43	3.876	3.879	-0.003	85	24164	0.1587	0.1742	
15 Bromomethane	94	4.140	4.141	-0.001	97	15909	0.1587	0.1645	
16 Chloroethane	64	4.254	4.258	-0.004	89	7956	0.1587	0.1679	
17 Ethanol	31	4.345	4.357	-0.012	99	28920	0.7935	0.8589	
18 Vinyl bromide	106	4.507	4.511	-0.004	97	15245	0.1587	0.1663	
19 2-Methylbutane	43	4.561	4.560	0.001	89	15685	0.1587	0.1674	
21 Acrolein	56	4.739	4.742	-0.003	28	2011	0.1587	0.1467	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	100	55895	0.1587	0.1585	
22 Acetonitrile	40	4.788	4.793	-0.005	97	5595	0.1587	0.1992	
23 Acetone	58	4.836	4.835	0.001	100	21667	0.4660	0.6594	
25 Pentane	72	4.939	4.937	0.002	94	2803	0.1587	0.1645	
24 Isopropyl alcohol	45	4.917	4.939	-0.022	95	57055	0.4660	0.5020	
26 Ethyl ether	31	5.079	5.075	0.004	92	12398	0.1587	0.1604	
27 1,1-Dichloroethene	96	5.348	5.354	-0.006	97	14330	0.1587	0.1607	
28 Acrylonitrile	53	5.435	5.435	0.000	94	7063	0.1587	0.1737	
29 2-Methyl-2-propanol	59	5.445	5.467	-0.022	94	23609	0.1587	0.1738	
30 1,1,2-Trichloro-1,2,2-trif	101	5.516	5.521	-0.005	94	32632	0.1587	0.1586	
31 Methylene Chloride	84	5.650	5.656	-0.006	87	18584	0.1587	0.2309	

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	5.667	5.673	-0.006	91	13978	0.1587	0.1616	
33 Carbon disulfide	76	5.791	5.797	-0.006	100	36441	0.1587	0.1604	
34 trans-1,2-Dichloroethene	96	6.384	6.393	-0.009	95	13700	0.1587	0.1571	
35 2-Methylpentane	43	6.421	6.426	-0.005	93	28701	0.1587	0.1677	
36 Methyl tert-butyl ether	73	6.519	6.513	0.005	96	42292	0.1587	0.1633	
37 1,1-Dichloroethane	63	6.767	6.771	-0.004	100	27828	0.1587	0.1635	
38 Vinyl acetate	43	6.880	6.881	-0.001	99	30561	0.1587	0.1563	
39 2-Butanone (MEK)	72	7.279	7.283	-0.004	98	6361	0.1587	0.1670	
40 Hexane	56	7.333	7.336	-0.003	81	10820	0.1587	0.1637	
41 Isopropyl ether	45	7.484	7.483	0.001	93	40414	0.1587	0.1662	
42 cis-1,2-Dichloroethene	96	7.689	7.691	-0.002	95	14847	0.1587	0.1603	
43 Ethyl acetate	43	7.872	7.880	-0.008	98	26514	0.1587	0.1644	
44 Chloroform	83	8.012	8.019	-0.007	95	37079	0.1587	0.1580	
45 Tert-butyl ethyl ether	59	8.120	8.122	-0.002	96	39200	0.1587	0.1604	
46 Tetrahydrofuran	42	8.390	8.387	0.003	86	13762	0.1587	0.1611	
47 1,1,1-Trichloroethane	97	8.988	8.997	-0.009	94	43037	0.1587	0.1585	
48 1,2-Dichloroethane	62	9.074	9.087	-0.013	99	27277	0.1587	0.1624	
49 Benzene	78	9.576	9.582	-0.006	97	44171	0.1587	0.1563	
50 Cyclohexane	69	9.587	9.590	-0.003	95	7351	0.1587	0.1545	
52 n-Butanol	31	9.603	9.606	-0.003	62	5160	0.1587	0.1706	
51 Carbon tetrachloride	117	9.603	9.611	-0.008	96	42733	0.1587	0.1447	
53 2,3-Dimethylpentane	71	9.738	9.740	-0.002	89	10219	0.1587	0.1571	
54 Thiophene	84	9.846	9.855	-0.009	94	25238	0.1587	0.1598	
55 Tert-amyl methyl ether	73	10.099	10.100	-0.001	97	39025	0.1587	0.1506	
56 Isooctane	57	10.412	10.414	-0.002	96	67131	0.1587	0.1600	
57 n-Heptane	71	10.811	10.816	-0.005	90	16529	0.1587	0.1577	
58 1,2-Dichloropropane	63	10.838	10.846	-0.008	82	15995	0.1587	0.1666	
59 Trichloroethene	130	10.892	10.897	-0.005	93	23332	0.1587	0.1524	
60 Dibromomethane	93	10.956	10.961	-0.005	95	18824	0.1587	0.1476	
61 Dichlorobromomethane	83	11.118	11.126	-0.008	98	35557	0.1587	0.1452	
62 1,4-Dioxane	88	11.151	11.152	-0.001	96	6069	0.1587	0.1586	
63 Methyl methacrylate	41	11.258	11.260	-0.002	93	16201	0.1587	0.1528	
64 Methylcyclohexane	83	11.695	11.704	-0.009	95	34804	0.1587	0.1581	
65 4-Methyl-2-pentanone (MIBK)	43	12.132	12.133	-0.001	95	26186	0.1587	0.1613	
66 cis-1,3-Dichloropropene	75	12.170	12.174	-0.004	96	26770	0.1587	0.1506	
67 trans-1,3-Dichloropropene	75	12.892	12.897	-0.005	97	26814	0.1587	0.1586	
68 Toluene	91	13.016	13.021	-0.005	93	49691	0.1587	0.1581	
69 1,1,2-Trichloroethane	83	13.081	13.091	-0.010	95	15096	0.1587	0.1602	
70 2-Methylthiophene	97	13.167	13.173	-0.006	97	41117	0.1587	0.1558	
71 3-Methylthiophene	97	13.378	13.381	-0.003	99	40017	0.1587	0.1532	
72 2-Hexanone	58	13.518	13.519	-0.001	94	11715	0.1587	0.1557	
73 n-Octane	85	13.777	13.780	-0.003	89	18002	0.1587	0.1585	
74 Chlorodibromomethane	129	13.798	13.803	-0.005	97	31316	0.1587	0.1332	
75 Ethylene Dibromide	107	14.089	14.092	-0.003	98	26740	0.1587	0.1449	
76 Tetrachloroethene	129	14.192	14.195	-0.003	91	21668	0.1587	0.1507	
77 Chlorobenzene	112	15.076	15.082	-0.006	92	41319	0.1587	0.1553	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	91	44892	0.1587	0.1668	
79 Ethylbenzene	91	15.389	15.393	-0.004	99	69301	0.1587	0.1578	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	52367	0.1587	0.1514	
81 m-Xylene & p-Xylene	91	15.556	15.559	-0.003	100	110203	0.3174	0.3107	
82 Bromoform	173	15.971	15.979	-0.008	93	27441	0.1587	0.1166	
83 Styrene	104	16.025	16.027	-0.002	93	31773	0.1587	0.1358	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.025	16.029	-0.004	89	32630	0.1587	0.1693	
85 o-Xylene	91	16.085	16.088	-0.003	97	56948	0.1587	0.1570	
86 1,1,2,2-Tetrachloroethane	83	16.403	16.411	-0.008	98	33152	0.1587	0.1450	
87 1,2,3-Trichloropropane	110	16.559	16.565	-0.006	96	12888	0.1587	0.1541	
88 Isopropylbenzene	105	16.689	16.692	-0.003	96	82210	0.1587	0.1561	
89 N-Propylbenzene	120	17.244	17.246	-0.002	98	20666	0.1587	0.1496	
90 2-Chlorotoluene	126	17.276	17.278	-0.002	97	19395	0.1587	0.1505	
91 4-Ethyltoluene	105	17.406	17.409	-0.003	98	74487	0.1587	0.1502	
92 1,3,5-Trimethylbenzene	120	17.487	17.490	-0.003	91	33353	0.1587	0.1434	
93 Alpha Methyl Styrene	118	17.729	17.734	-0.005	88	22891	0.1587	0.1263	
94 n-Decane	57	17.832	17.837	-0.005	93	38214	0.1587	0.1617	
95 tert-Butylbenzene	119	17.934	17.939	-0.005	91	72279	0.1587	0.1475	
96 1,2,4-Trimethylbenzene	105	17.945	17.953	-0.008	96	66195	0.1587	0.1486	
98 sec-Butylbenzene	105	18.220	18.223	-0.003	98	92643	0.1587	0.1477	
97 1,3-Dichlorobenzene	146	18.220	18.223	-0.003	96	46148	0.1587	0.1373	
99 Benzyl chloride	91	18.295	18.303	-0.008	97	61054	0.1587	0.1453	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	93	46292	0.1587	0.1409	
101 4-Isopropyltoluene	119	18.398	18.400	-0.002	97	83608	0.1587	0.1509	
102 1,2,3-Trimethylbenzene	105	18.441	18.445	-0.004	98	50998	0.1587	0.1533	
103 Butylcyclohexane	83	18.517	18.520	-0.003	94	52392	0.1587	0.1596	
104 1,2-Dichlorobenzene	146	18.684	18.689	-0.005	91	43975	0.1587	0.1373	
105 2,3-Dihydroindene	117	18.689	18.693	-0.004	93	58519	0.1587	0.1442	
106 Indene	116	18.824	18.827	-0.003	92	39915	0.1587	0.1346	
107 n-Butylbenzene	91	18.851	18.854	-0.003	97	80658	0.1587	0.1557	
108 Undecane	57	19.207	19.209	-0.002	93	44209	0.1587	0.1594	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.234	19.239	-0.005	96	59995	0.1587	0.1451	
110 1,2-Dibromo-3-Chloropropan	157	19.304	19.308	-0.004	88	16001	0.1587	0.1165	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.634	-0.001	96	70829	0.1587	0.1426	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	94	42400	0.1587	0.1418	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	96	58175	0.1587	0.1425	
114 Dodecane	57	20.280	20.280	0.000	93	39684	0.1587	0.1613	
115 1,2,4-Trichlorobenzene	180	20.415	20.418	-0.003	94	35767	0.1587	0.1269	
116 Naphthalene	128	20.544	20.545	-0.001	98	78779	0.1587	0.1334	
117 Benzo(b)thiophene	134	20.641	20.645	-0.004	98	46547	0.1587	0.1355	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	92	37819	0.1587	0.1361	
119 1,2,3-Trichlorobenzene	180	20.824	20.825	-0.001	94	35163	0.1587	0.1322	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	99	46113	0.4801	0.3761	
121 1-Methylnaphthalene	142	21.800	21.801	-0.001	98	44542	0.4801	0.3648	
A 122 C6 Range	1	7.334	(7.303-7.383)		0	107367	0.1587	0.1640	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	124912	0.1587	0.1569	
S 126 Xylenes, Total	100				0		0.4761	0.4678	
S 127 1,2-Dichloroethene, Total	1				0		0.3174	0.3174	

Reagents:

40L3DNP_00011

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC03.D

Injection Date: 15-Mar-2017 16:02:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L3

Worklist Smp#: 5

Client ID:

Purge Vol: 500.000 mL

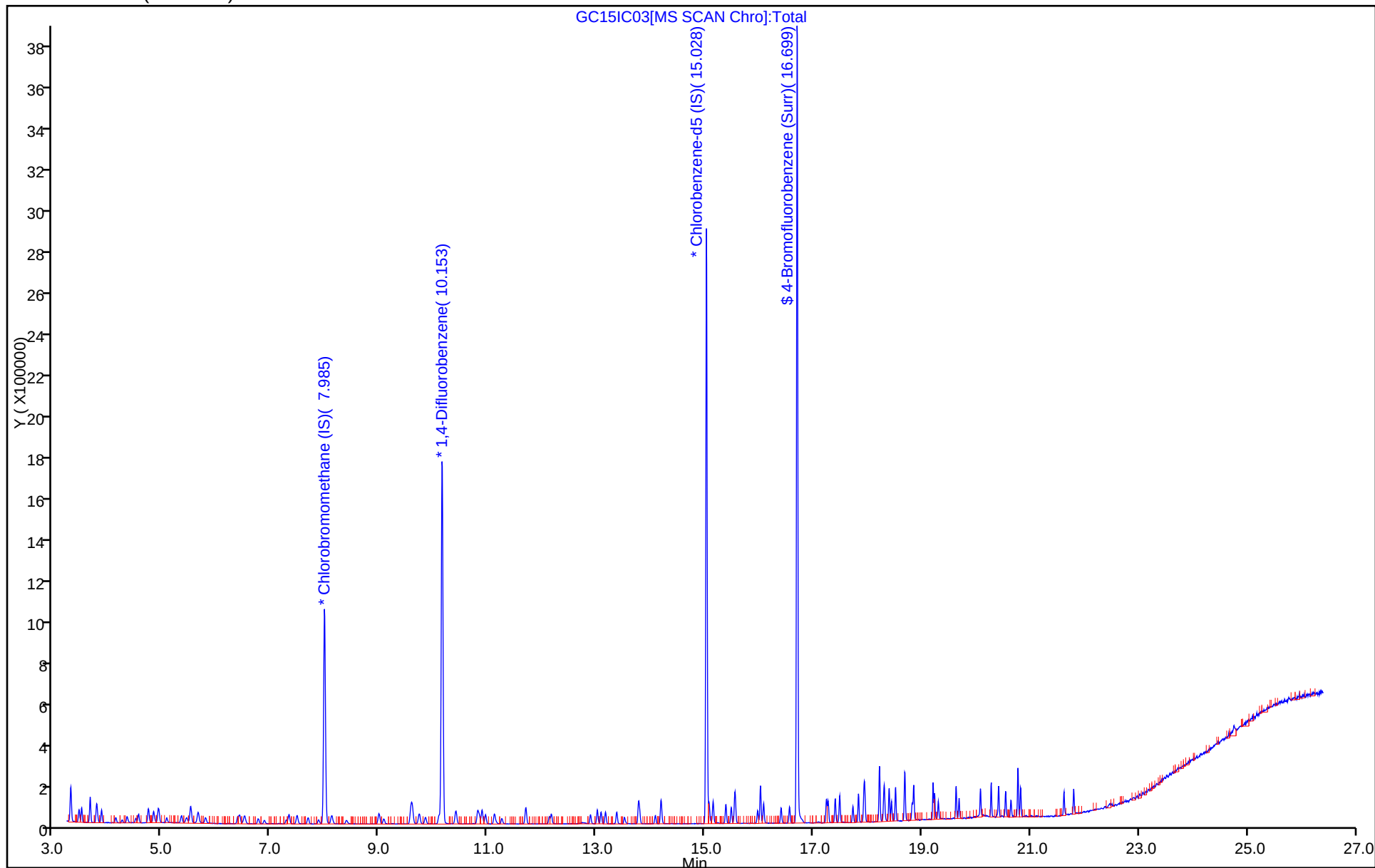
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC03.D

Injection Date: 15-Mar-2017 16:02:30

Instrument ID: MG

Lims ID: IC L3

Client ID:

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 5

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

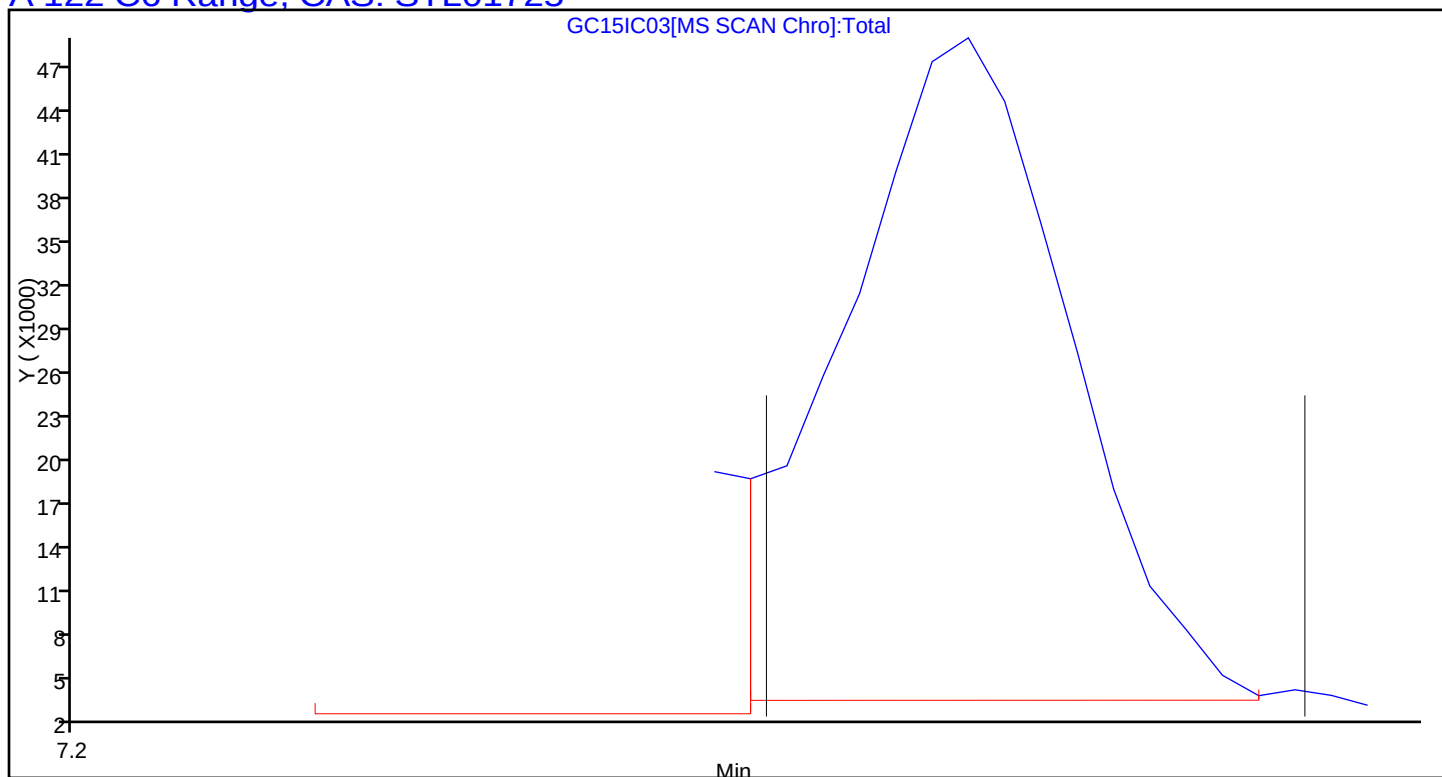
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC03.D

Injection Date: 15-Mar-2017 16:02:30

Instrument ID: MG

Lims ID: IC L3

Client ID:

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 5

Purge Vol: 500.000 mL

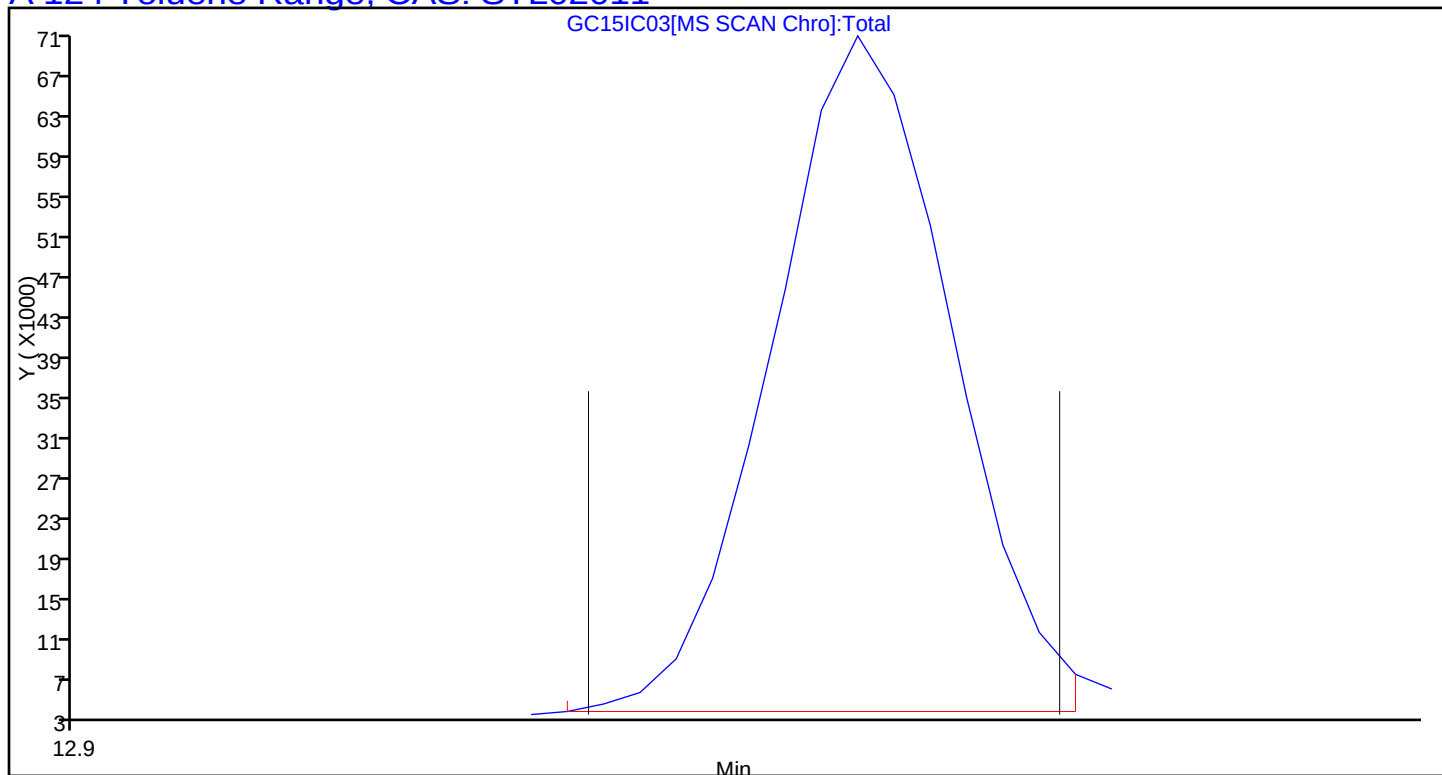
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC04.D
 Lims ID: IC L4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 15-Mar-2017 16:45:30 ALS Bottle#: 3 Worklist Smp#: 6
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-006
 Misc. Info.: 083681
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:11:31 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: barlozhetskayaa

Date: 15-Mar-2017 17:56:08

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	7.985	7.993	-0.008	82	343423	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.153	10.161	-0.008	95	1710584	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.028	15.034	-0.006	88	1638521	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.699	16.705	-0.006	94	1296737	4.00	4.00	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	97	16118	0.4001	0.4221	
7 Propene	41	3.466	3.466	0.000	98	38073	0.4001	0.4191	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	147329	0.4001	0.4053	
9 Chloromethane	52	3.661	3.659	0.002	98	10845	0.4001	0.4435	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.666	3.669	-0.003	92	85416	0.4001	0.3948	
11 Acetaldehyde	44	3.785	3.786	-0.001	88	72210	2.00	2.51	
12 Vinyl chloride	62	3.801	3.803	-0.002	99	41537	0.4001	0.4135	
13 Butadiene	54	3.871	3.876	-0.005	68	28287	0.4001	0.4228	
14 Butane	43	3.876	3.879	-0.003	86	59701	0.4001	0.4194	
15 Bromomethane	94	4.141	4.141	0.000	97	39896	0.4001	0.4019	
16 Chloroethane	64	4.254	4.258	-0.004	92	19908	0.4001	0.4095	
17 Ethanol	31	4.345	4.357	-0.012	98	69923	2.00	2.02	
18 Vinyl bromide	106	4.507	4.511	-0.004	97	37848	0.4001	0.4023	
19 2-Methylbutane	43	4.556	4.560	-0.004	88	38853	0.4001	0.4040	
21 Acrolein	56	4.734	4.742	-0.008	28	4862	0.4001	0.3456	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	99	144284	0.4001	0.3986	
22 Acetonitrile	40	4.788	4.793	-0.005	94	12605	0.4001	0.4373	
23 Acetone	58	4.831	4.835	-0.004	99	46214	1.17	1.37	
25 Pentane	72	4.933	4.937	-0.004	96	6934	0.4001	0.3964	
24 Isopropyl alcohol	45	4.917	4.939	-0.022	93	159557	1.17	1.37	
26 Ethyl ether	31	5.068	5.075	-0.007	92	32090	0.4001	0.4045	
27 1,1-Dichloroethene	96	5.348	5.354	-0.006	98	36376	0.4001	0.3974	
28 Acrylonitrile	53	5.429	5.435	-0.006	97	16558	0.4001	0.3967	
29 2-Methyl-2-propanol	59	5.451	5.467	-0.016	95	55009	0.4001	0.3945	
30 1,1,2-Trichloro-1,2,2-trif	101	5.516	5.521	-0.005	94	84505	0.4001	0.4002	
31 Methylene Chloride	84	5.645	5.656	-0.011	89	36046	0.4001	0.4365	

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	5.667	5.673	-0.006	93	34533	0.4001	0.3890	
33 Carbon disulfide	76	5.791	5.797	-0.006	99	91859	0.4001	0.3939	
34 trans-1,2-Dichloroethene	96	6.384	6.393	-0.009	95	34363	0.4001	0.3840	
35 2-Methylpentane	43	6.422	6.426	-0.004	92	71301	0.4001	0.4061	
36 Methyl tert-butyl ether	73	6.508	6.513	-0.005	95	105435	0.4001	0.3966	
37 1,1-Dichloroethane	63	6.767	6.771	-0.004	100	69127	0.4001	0.3957	
38 Vinyl acetate	43	6.874	6.881	-0.007	99	79405	0.4001	0.3958	
39 2-Butanone (MEK)	72	7.273	7.283	-0.010	99	15082	0.4001	0.3859	
40 Hexane	56	7.333	7.336	-0.003	84	27547	0.4001	0.4062	
41 Isopropyl ether	45	7.473	7.483	-0.010	93	101005	0.4001	0.4047	
42 cis-1,2-Dichloroethene	96	7.683	7.691	-0.008	95	36823	0.4001	0.3874	
43 Ethyl acetate	43	7.872	7.880	-0.008	98	66315	0.4001	0.4007	
44 Chloroform	83	8.007	8.019	-0.012	95	95787	0.4001	0.3976	
45 Tert-butyl ethyl ether	59	8.115	8.122	-0.007	95	99212	0.4001	0.3955	
46 Tetrahydrofuran	42	8.379	8.387	-0.008	92	35542	0.4001	0.4054	
47 1,1,1-Trichloroethane	97	8.994	8.997	-0.003	94	108746	0.4001	0.3902	
48 1,2-Dichloroethane	62	9.080	9.087	-0.007	99	67175	0.4001	0.3890	
49 Benzene	78	9.576	9.582	-0.006	97	110029	0.4001	0.3786	
50 Cyclohexane	69	9.587	9.590	-0.003	89	19497	0.4001	0.3986	
52 n-Butanol	31	9.598	9.606	-0.008	66	12296	0.4001	0.3953	
51 Carbon tetrachloride	117	9.608	9.611	-0.003	98	113747	0.4001	0.3745	
53 2,3-Dimethylpentane	71	9.738	9.740	-0.002	89	26444	0.4001	0.3953	
54 Thiophene	84	9.851	9.855	-0.004	95	63320	0.4001	0.3900	
55 Tert-amyl methyl ether	73	10.094	10.100	-0.006	98	107357	0.4001	0.4030	
56 Isooctane	57	10.406	10.414	-0.008	97	172066	0.4001	0.3989	
57 n-Heptane	71	10.811	10.816	-0.005	91	40968	0.4001	0.3802	
58 1,2-Dichloropropane	63	10.838	10.846	-0.008	84	39466	0.4001	0.3998	
59 Trichloroethene	130	10.892	10.897	-0.005	94	58508	0.4001	0.3717	
60 Dibromomethane	93	10.956	10.961	-0.005	94	49152	0.4001	0.3747	
61 Dichlorobromomethane	83	11.118	11.126	-0.008	98	95415	0.4001	0.3789	
62 1,4-Dioxane	88	11.151	11.152	-0.001	94	15307	0.4001	0.3891	
63 Methyl methacrylate	41	11.253	11.260	-0.007	93	40539	0.4001	0.3718	
64 Methylcyclohexane	83	11.701	11.704	-0.003	95	87846	0.4001	0.3880	
65 4-Methyl-2-pentanone (MIBK)	43	12.121	12.133	-0.012	97	64835	0.4001	0.3884	
66 cis-1,3-Dichloropropene	75	12.170	12.174	-0.004	95	69133	0.4001	0.3783	
67 trans-1,3-Dichloropropene	75	12.892	12.897	-0.005	97	68241	0.4001	0.3888	
68 Toluene	91	13.016	13.021	-0.005	93	126815	0.4001	0.3885	
69 1,1,2-Trichloroethane	83	13.086	13.091	-0.005	97	37911	0.4001	0.3874	
70 2-Methylthiophene	97	13.167	13.173	-0.006	98	107989	0.4001	0.3941	
71 3-Methylthiophene	97	13.372	13.381	-0.009	99	105015	0.4001	0.3872	
72 2-Hexanone	58	13.512	13.519	-0.007	93	29914	0.4001	0.3829	
73 n-Octane	85	13.777	13.780	-0.003	90	45217	0.4001	0.3833	
74 Chlorodibromomethane	129	13.798	13.803	-0.005	97	85348	0.4001	0.3496	
75 Ethylene Dibromide	107	14.084	14.092	-0.008	96	72403	0.4001	0.3778	
76 Tetrachloroethene	129	14.192	14.195	-0.003	94	54718	0.4001	0.3665	
77 Chlorobenzene	112	15.076	15.082	-0.006	92	106057	0.4001	0.3839	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	91	114675	0.4001	0.4103	
79 Ethylbenzene	91	15.389	15.393	-0.004	99	175356	0.4001	0.3846	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	139782	0.4001	0.3892	
81 m-Xylene & p-Xylene	91	15.551	15.559	-0.008	100	284366	0.8002	0.7722	
82 Bromoform	173	15.971	15.979	-0.008	94	77559	0.4001	0.3174	
83 Styrene	104	16.020	16.027	-0.007	97	87701	0.4001	0.3610	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.025	16.029	-0.004	88	80602	0.4001	0.4027	
85 o-Xylene	91	16.085	16.088	-0.003	98	144970	0.4001	0.3850	
86 1,1,2,2-Tetrachloroethane	83	16.403	16.411	-0.008	98	90906	0.4001	0.3830	
87 1,2,3-Trichloropropane	110	16.559	16.565	-0.006	96	32782	0.4001	0.3774	
88 Isopropylbenzene	105	16.689	16.692	-0.003	98	207127	0.4001	0.3788	
89 N-Propylbenzene	120	17.244	17.246	-0.002	99	54076	0.4001	0.3770	
90 2-Chlorotoluene	126	17.271	17.278	-0.007	97	49412	0.4001	0.3692	
91 4-Ethyltoluene	105	17.406	17.409	-0.003	98	193325	0.4001	0.3754	
92 1,3,5-Trimethylbenzene	120	17.487	17.490	-0.003	92	89762	0.4001	0.3717	
93 Alpha Methyl Styrene	118	17.729	17.734	-0.005	86	63304	0.4001	0.3364	
94 n-Decane	57	17.832	17.837	-0.005	93	100736	0.4001	0.4105	
95 tert-Butylbenzene	119	17.934	17.939	-0.005	90	186533	0.4001	0.3667	
96 1,2,4-Trimethylbenzene	105	17.950	17.953	-0.003	96	173218	0.4001	0.3744	
98 sec-Butylbenzene	105	18.220	18.223	-0.003	98	243244	0.4001	0.3734	
97 1,3-Dichlorobenzene	146	18.215	18.223	-0.008	96	120087	0.4001	0.3442	
99 Benzyl chloride	91	18.295	18.303	-0.008	97	161617	0.4001	0.3703	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	94	120739	0.4001	0.3540	
101 4-Isopropyltoluene	119	18.398	18.400	-0.002	97	214236	0.4001	0.3724	
102 1,2,3-Trimethylbenzene	105	18.441	18.445	-0.004	98	130876	0.4001	0.3790	
103 Butylcyclohexane	83	18.517	18.520	-0.003	94	134750	0.4001	0.3954	
104 1,2-Dichlorobenzene	146	18.684	18.689	-0.005	92	115468	0.4001	0.3473	
105 2,3-Dihydroindene	117	18.689	18.693	-0.004	93	150042	0.4001	0.3560	
106 Indene	116	18.824	18.827	-0.003	91	108215	0.4001	0.3514	
107 n-Butylbenzene	91	18.851	18.854	-0.003	98	207014	0.4001	0.3850	
108 Undecane	57	19.207	19.209	-0.002	94	117141	0.4001	0.4068	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.239	19.239	0.000	97	157840	0.4001	0.3676	
110 1,2-Dibromo-3-Chloropropan	157	19.304	19.308	-0.004	92	46413	0.4001	0.3255	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.634	-0.001	96	189973	0.4001	0.3683	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	94	114039	0.4001	0.3674	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	96	153792	0.4001	0.3629	
114 Dodecane	57	20.280	20.280	0.000	93	100417	0.4001	0.3931	
115 1,2,4-Trichlorobenzene	180	20.415	20.418	-0.003	93	94904	0.4001	0.3243	
116 Naphthalene	128	20.544	20.545	-0.001	99	208260	0.4001	0.3397	
117 Benzo(b)thiophene	134	20.641	20.645	-0.004	99	123697	0.4001	0.3469	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	93	98425	0.4001	0.3411	
119 1,2,3-Trichlorobenzene	180	20.819	20.825	-0.006	94	91350	0.4001	0.3308	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	99	105461	1.21	0.8284	
121 1-Methylnaphthalene	142	21.801	21.801	0.000	100	100155	1.21	0.7901	
A 122 C6 Range	1	7.343	(7.303-7.383)		0	265311	0.4001	0.3940	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	317115	0.4001	0.3874	
S 126 Xylenes, Total	100				0		1.20	1.16	
S 127 1,2-Dichloroethene, Total	1				0		0.8002	0.7713	

Reagents:

40L4DNP_00010

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC04.D

Injection Date: 15-Mar-2017 16:45:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L4

Worklist Smp#: 6

Client ID:

Purge Vol: 500.000 mL

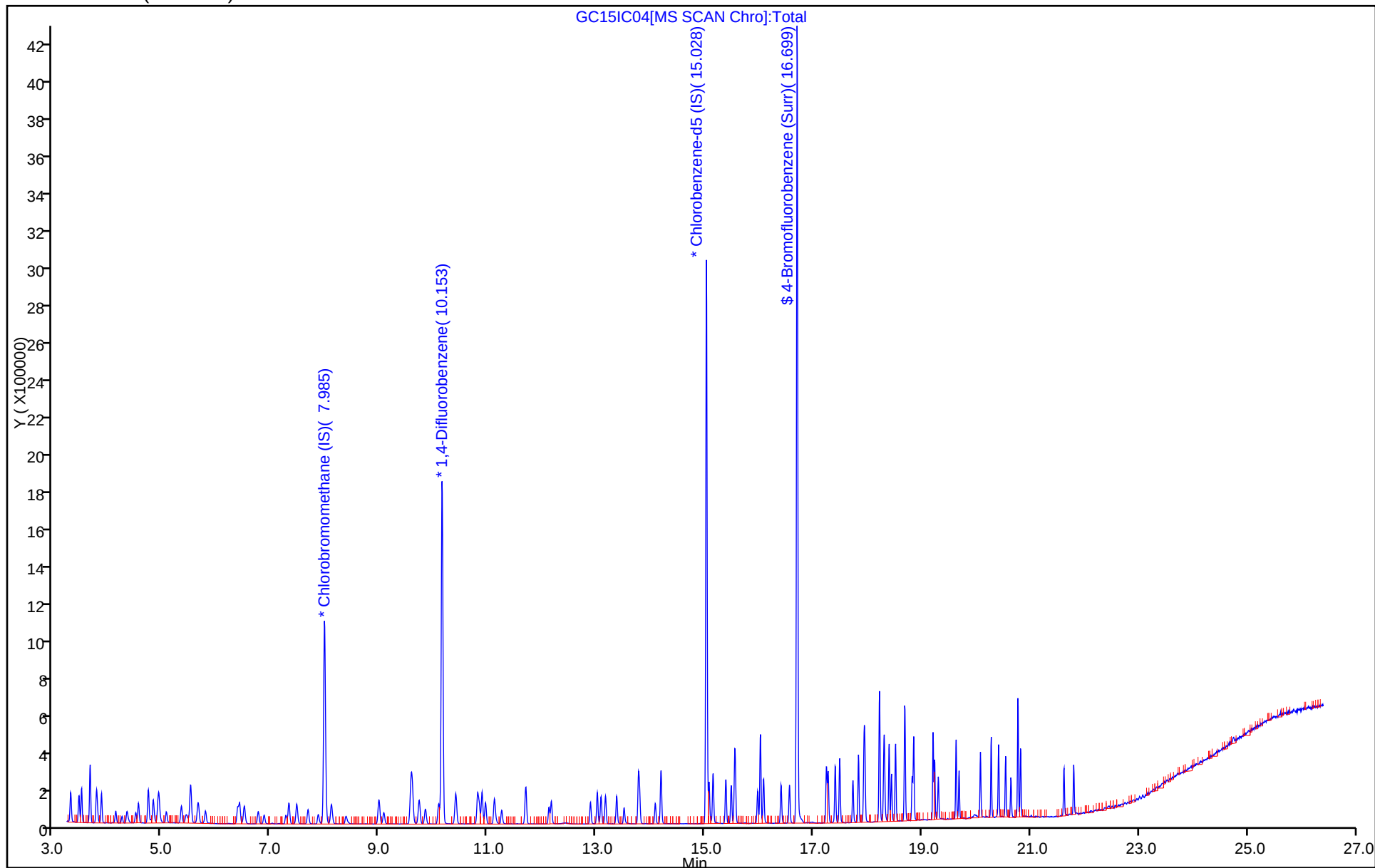
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC04.D

Injection Date: 15-Mar-2017 16:45:30

Instrument ID: MG

Lims ID: IC L4

Client ID:

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 6

Purge Vol: 500.000 mL

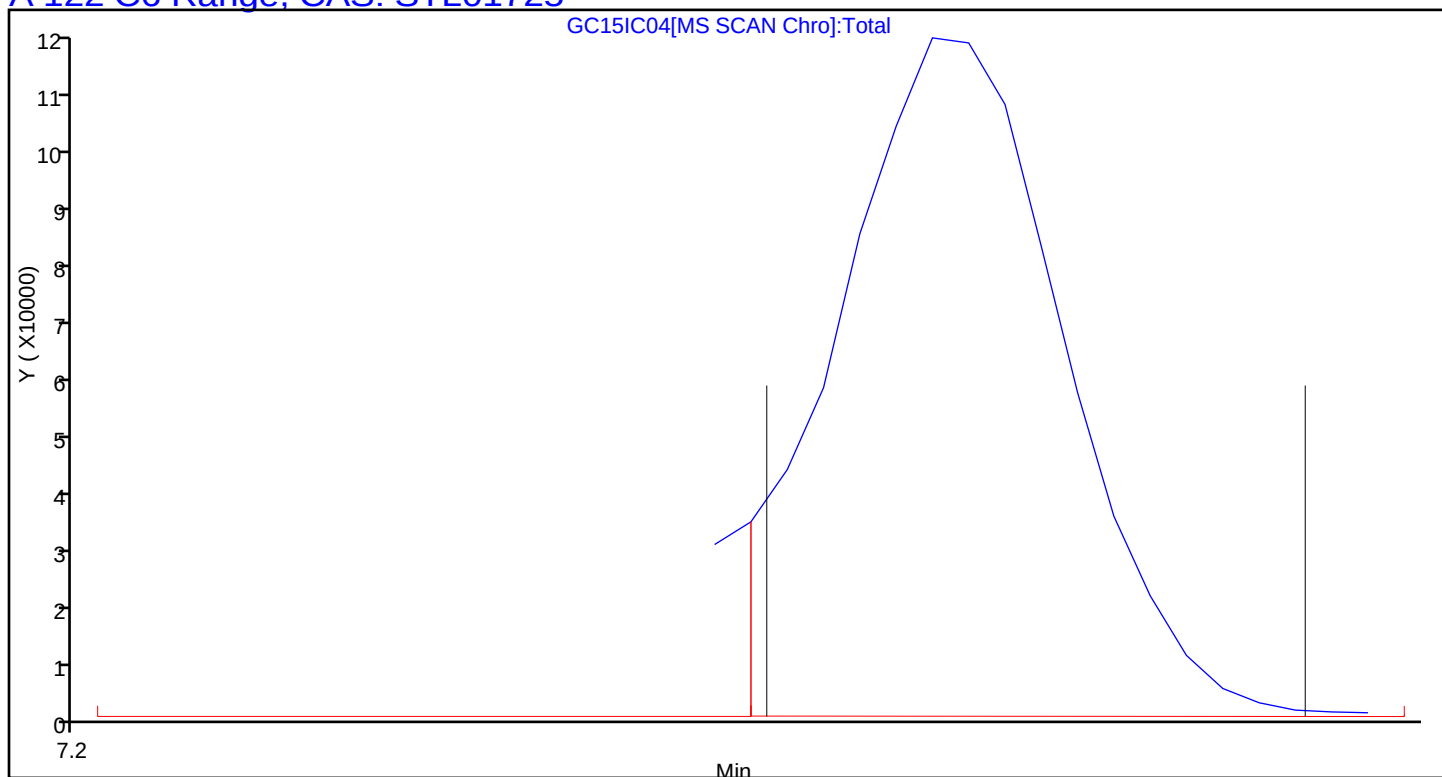
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC04.D

Injection Date: 15-Mar-2017 16:45:30

Instrument ID: MG

Lims ID: IC L4

Client ID:

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 6

Purge Vol: 500.000 mL

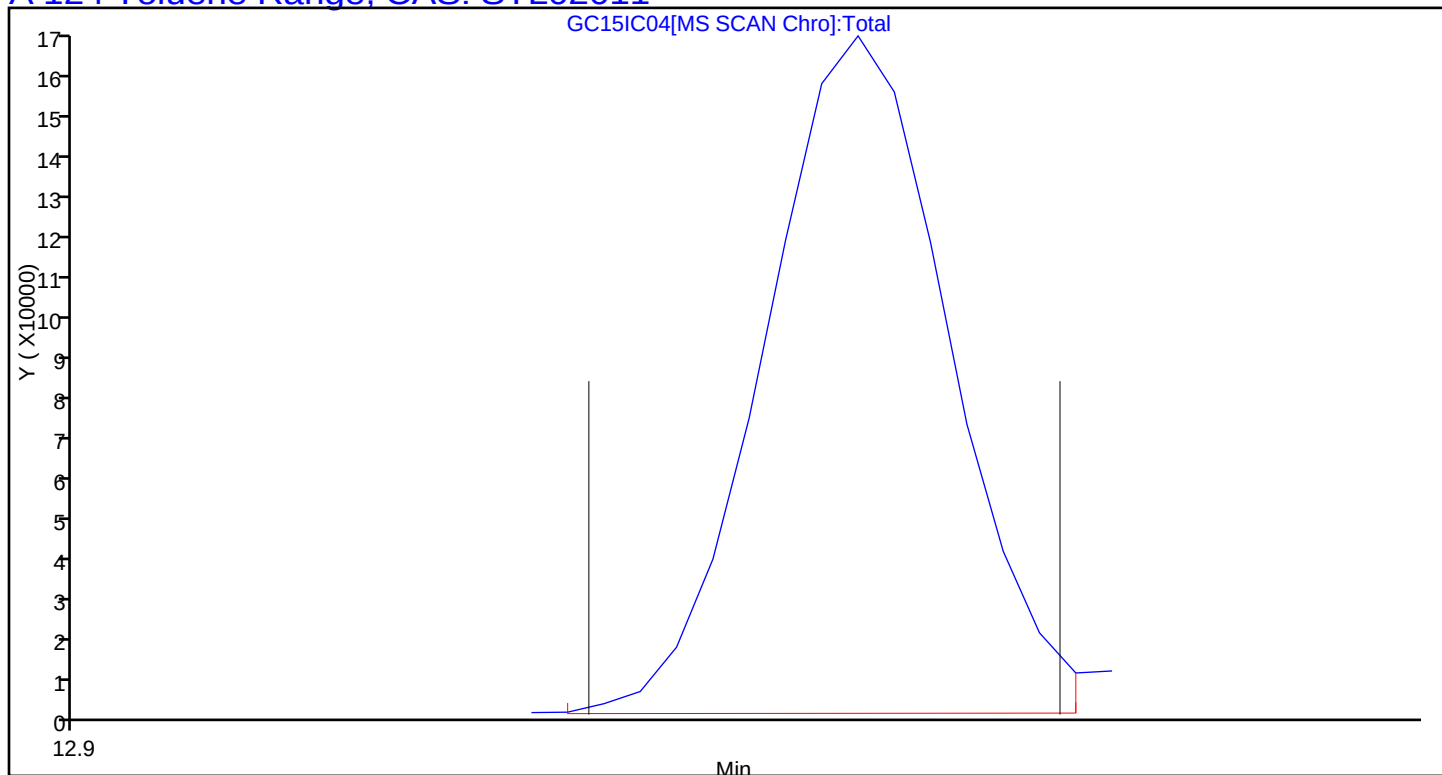
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC05.D
 Lims ID: IC L5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 15-Mar-2017 17:29:30 ALS Bottle#: 4 Worklist Smp#: 7
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-007
 Misc. Info.: 083680
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:12:36 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: barlozhetskayaa

Date: 16-Mar-2017 09:26:11

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	7.985	7.993	-0.008	82	336824	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.158	10.161	-0.003	95	1711373	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.028	15.034	-0.006	88	1669250	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.705	16.705	0.000	95	1347272	4.00	4.08	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	97	38106	1.00	1.02	
7 Propene	41	3.466	3.466	0.000	97	93889	1.00	1.05	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	367220	1.00	1.03	
9 Chloromethane	52	3.661	3.659	0.002	97	25770	1.00	1.07	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.666	3.669	-0.003	92	208904	1.00	0.9845	
11 Acetaldehyde	44	3.779	3.786	-0.007	88	165163	5.01	5.86	
12 Vinyl chloride	62	3.801	3.803	-0.002	99	100829	1.00	1.02	
13 Butadiene	54	3.871	3.876	-0.005	70	68804	1.00	1.05	
14 Butane	43	3.876	3.879	-0.003	85	142250	1.00	1.02	
15 Bromomethane	94	4.135	4.141	-0.006	98	99093	1.00	1.02	
16 Chloroethane	64	4.254	4.258	-0.004	93	49038	1.00	1.03	
17 Ethanol	31	4.340	4.357	-0.017	97	174754	5.01	5.16	
18 Vinyl bromide	106	4.507	4.511	-0.004	97	92859	1.00	1.01	
19 2-Methylbutane	43	4.556	4.560	-0.004	89	95489	1.00	1.01	
21 Acrolein	56	4.734	4.742	-0.008	28	12471	1.00	0.9040	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	99	358635	1.00	1.01	
22 Acetonitrile	40	4.782	4.793	-0.011	96	31325	1.00	1.11	
23 Acetone	58	4.825	4.835	-0.010	99	107750	2.94	3.26	
25 Pentane	72	4.933	4.937	-0.004	98	17688	1.00	1.03	
24 Isopropyl alcohol	45	4.912	4.939	-0.027	98	343901	2.94	3.01	
26 Ethyl ether	31	5.063	5.075	-0.012	92	82779	1.00	1.06	
27 1,1-Dichloroethene	96	5.348	5.354	-0.006	97	89728	1.00	1.00	
28 Acrylonitrile	53	5.424	5.435	-0.011	95	42053	1.00	1.03	
29 2-Methyl-2-propanol	59	5.435	5.467	-0.032	95	138675	1.00	1.01	
30 1,1,2-Trichloro-1,2,2-trif	101	5.516	5.521	-0.005	93	209870	1.00	1.01	
31 Methylene Chloride	84	5.650	5.656	-0.006	89	81013	1.00	1.00	

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	5.667	5.673	-0.006	93	87550	1.00	1.01	
33 Carbon disulfide	76	5.791	5.797	-0.006	100	229458	1.00	1.00	
34 trans-1,2-Dichloroethene	96	6.389	6.393	-0.004	97	88680	1.00	1.01	
35 2-Methylpentane	43	6.421	6.426	-0.005	93	177996	1.00	1.03	
36 Methyl tert-butyl ether	73	6.502	6.513	-0.011	95	273536	1.00	1.05	
37 1,1-Dichloroethane	63	6.767	6.771	-0.004	100	173008	1.00	1.01	
38 Vinyl acetate	43	6.869	6.881	-0.012	99	207726	1.00	1.06	
39 2-Butanone (MEK)	72	7.268	7.283	-0.015	99	39027	1.00	1.02	
40 Hexane	56	7.333	7.336	-0.003	85	67446	1.00	1.01	
41 Isopropyl ether	45	7.468	7.483	-0.015	94	262185	1.00	1.07	
42 cis-1,2-Dichloroethene	96	7.683	7.691	-0.008	96	92674	1.00	0.99	
43 Ethyl acetate	43	7.867	7.880	-0.013	98	171642	1.00	1.06	
44 Chloroform	83	8.012	8.019	-0.007	96	243090	1.00	1.03	
45 Tert-butyl ethyl ether	59	8.109	8.122	-0.013	95	259723	1.00	1.06	
46 Tetrahydrofuran	42	8.374	8.387	-0.013	89	89552	1.00	1.04	
47 1,1,1-Trichloroethane	97	8.988	8.997	-0.009	94	276845	1.00	1.01	
48 1,2-Dichloroethane	62	9.080	9.087	-0.007	99	172041	1.00	1.00	
49 Benzene	78	9.576	9.582	-0.006	96	279122	1.00	0.9601	
50 Cyclohexane	69	9.581	9.590	-0.009	92	48328	1.00	0.9876	
52 n-Butanol	31	9.587	9.606	-0.019	66	29171	1.00	0.9374	
51 Carbon tetrachloride	117	9.608	9.611	-0.003	97	296576	1.00	0.9761	
53 2,3-Dimethylpentane	71	9.732	9.740	-0.008	90	67650	1.00	1.01	
54 Thiophene	84	9.851	9.855	-0.004	95	161878	1.00	1.00	
55 Tert-amyl methyl ether	73	10.088	10.100	-0.012	98	277565	1.00	1.04	
56 Isooctane	57	10.406	10.414	-0.008	97	433667	1.00	1.00	
57 n-Heptane	71	10.811	10.816	-0.005	91	106290	1.00	0.9861	
58 1,2-Dichloropropane	63	10.843	10.846	-0.003	83	97796	1.00	0.99	
59 Trichloroethene	130	10.892	10.897	-0.005	95	150217	1.00	0.9539	
60 Dibromomethane	93	10.956	10.961	-0.005	95	127996	1.00	0.9753	
61 Dichlorobromomethane	83	11.124	11.126	-0.002	98	253630	1.00	1.01	
62 1,4-Dioxane	88	11.134	11.152	-0.018	94	39782	1.00	1.01	
63 Methyl methacrylate	41	11.248	11.260	-0.012	93	108599	1.00	1.00	
64 Methylcyclohexane	83	11.701	11.704	-0.003	95	227011	1.00	1.00	
65 4-Methyl-2-pentanone (MIBK)	43	12.121	12.133	-0.012	97	170118	1.00	1.02	
66 cis-1,3-Dichloropropene	75	12.170	12.174	-0.004	96	184126	1.00	1.01	
67 trans-1,3-Dichloropropene	75	12.892	12.897	-0.005	97	178625	1.00	1.00	
68 Toluene	91	13.016	13.021	-0.005	94	329471	1.00	0.99	
69 1,1,2-Trichloroethane	83	13.086	13.091	-0.005	98	98117	1.00	0.9842	
70 2-Methylthiophene	97	13.167	13.173	-0.006	98	280205	1.00	1.00	
71 3-Methylthiophene	97	13.378	13.381	-0.003	99	279432	1.00	1.01	
72 2-Hexanone	58	13.507	13.519	-0.012	93	78752	1.00	0.9894	
73 n-Octane	85	13.777	13.780	-0.003	89	121262	1.00	1.01	
74 Chlorodibromomethane	129	13.798	13.803	-0.005	97	249183	1.00	1.00	
75 Ethylene Dibromide	107	14.089	14.092	-0.003	97	197523	1.00	1.01	
76 Tetrachloroethene	129	14.192	14.195	-0.003	95	148601	1.00	0.9769	
77 Chlorobenzene	112	15.076	15.082	-0.006	92	274196	1.00	0.9743	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	91	291234	1.00	1.02	
79 Ethylbenzene	91	15.389	15.393	-0.004	99	465478	1.00	1.00	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	370649	1.00	1.01	
81 m-Xylene & p-Xylene	91	15.556	15.559	-0.003	100	752459	2.00	2.01	
82 Bromoform	173	15.977	15.979	-0.002	95	241462	1.00	0.9699	
83 Styrene	104	16.020	16.027	-0.007	97	258497	1.00	1.04	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.025	16.029	-0.004	89	214597	1.00	1.05	
85 o-Xylene	91	16.085	16.088	-0.003	98	382052	1.00	1.00	
86 1,1,2,2-Tetrachloroethane	83	16.408	16.411	-0.003	98	256086	1.00	1.06	
87 1,2,3-Trichloropropane	110	16.559	16.565	-0.006	96	89439	1.00	1.01	
88 Isopropylbenzene	105	16.689	16.692	-0.003	98	556209	1.00	1.00	
89 N-Propylbenzene	120	17.244	17.246	-0.002	99	146598	1.00	1.00	
90 2-Chlorotoluene	126	17.271	17.278	-0.007	96	135063	1.00	0.99	
91 4-Ethyltoluene	105	17.406	17.409	-0.003	98	533550	1.00	1.02	
92 1,3,5-Trimethylbenzene	120	17.487	17.490	-0.003	92	251859	1.00	1.02	
93 Alpha Methyl Styrene	118	17.729	17.734	-0.005	87	199600	1.00	1.04	
94 n-Decane	57	17.832	17.837	-0.005	93	269524	1.00	1.08	
95 tert-Butylbenzene	119	17.934	17.939	-0.005	90	522916	1.00	1.01	
96 1,2,4-Trimethylbenzene	105	17.950	17.953	-0.003	96	479730	1.00	1.02	
98 sec-Butylbenzene	105	18.220	18.223	-0.003	97	678287	1.00	1.02	
97 1,3-Dichlorobenzene	146	18.220	18.223	-0.003	97	340580	1.00	0.9581	
99 Benzyl chloride	91	18.301	18.303	-0.002	98	452529	1.00	1.02	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	95	337505	1.00	0.9714	
101 4-Isopropyltoluene	119	18.398	18.400	-0.002	97	607035	1.00	1.04	
102 1,2,3-Trimethylbenzene	105	18.441	18.445	-0.004	98	366844	1.00	1.04	
103 Butylcyclohexane	83	18.517	18.520	-0.003	95	365451	1.00	1.05	
104 1,2-Dichlorobenzene	146	18.684	18.689	-0.005	95	328983	1.00	0.9712	
105 2,3-Dihydroindene	117	18.689	18.693	-0.004	93	433789	1.00	1.01	
106 Indene	116	18.824	18.827	-0.003	91	318543	1.00	1.02	
107 n-Butylbenzene	91	18.851	18.854	-0.003	98	573821	1.00	1.05	
108 Undecane	57	19.207	19.209	-0.002	93	330016	1.00	1.13	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.239	19.239	0.000	97	457261	1.00	1.05	
110 1,2-Dibromo-3-Chloropropan	157	19.304	19.308	-0.004	94	149226	1.00	1.03	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.634	-0.001	96	562520	1.00	1.07	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	94	340236	1.00	1.08	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	96	471400	1.00	1.09	
114 Dodecane	57	20.280	20.280	0.000	93	328197	1.00	1.26	
115 1,2,4-Trichlorobenzene	180	20.415	20.418	-0.003	94	323309	1.00	1.08	
116 Naphthalene	128	20.544	20.545	-0.001	99	693914	1.00	1.11	
117 Benzo(b)thiophene	134	20.647	20.645	0.002	99	408835	1.00	1.13	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	94	327761	1.00	1.11	
119 1,2,3-Trichlorobenzene	180	20.824	20.825	-0.001	94	318023	1.00	1.13	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	100	379553	3.03	2.93	
121 1-Methylnaphthalene	142	21.801	21.801	-0.001	99	379039	3.03	2.94	
A 122 C6 Range	1	7.343	(7.303-7.383)		0	680124	1.00	1.01	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	825588	1.00	1.01	
S 126 Xylenes, Total	100				0		3.01	3.00	
S 127 1,2-Dichloroethene, Total	1				0		2.00	2.00	

Reagents:

40L5DNP_00010

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC05.D

Injection Date: 15-Mar-2017 17:29:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L5

Worklist Smp#: 7

Client ID:

Purge Vol: 500.000 mL

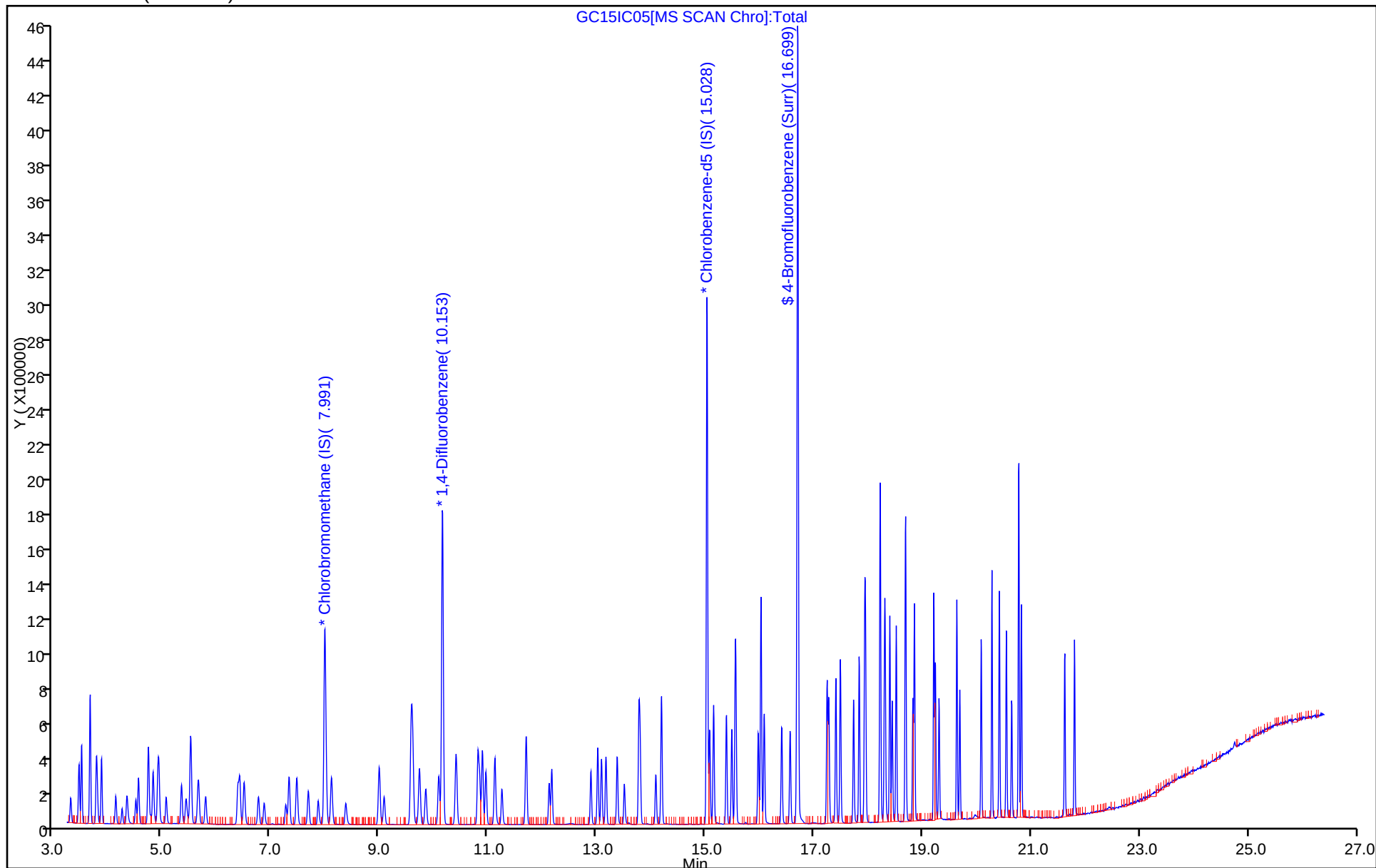
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC05.D

Injection Date: 15-Mar-2017 17:29:30

Instrument ID: MG

Lims ID: IC L5

Client ID:

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 7

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

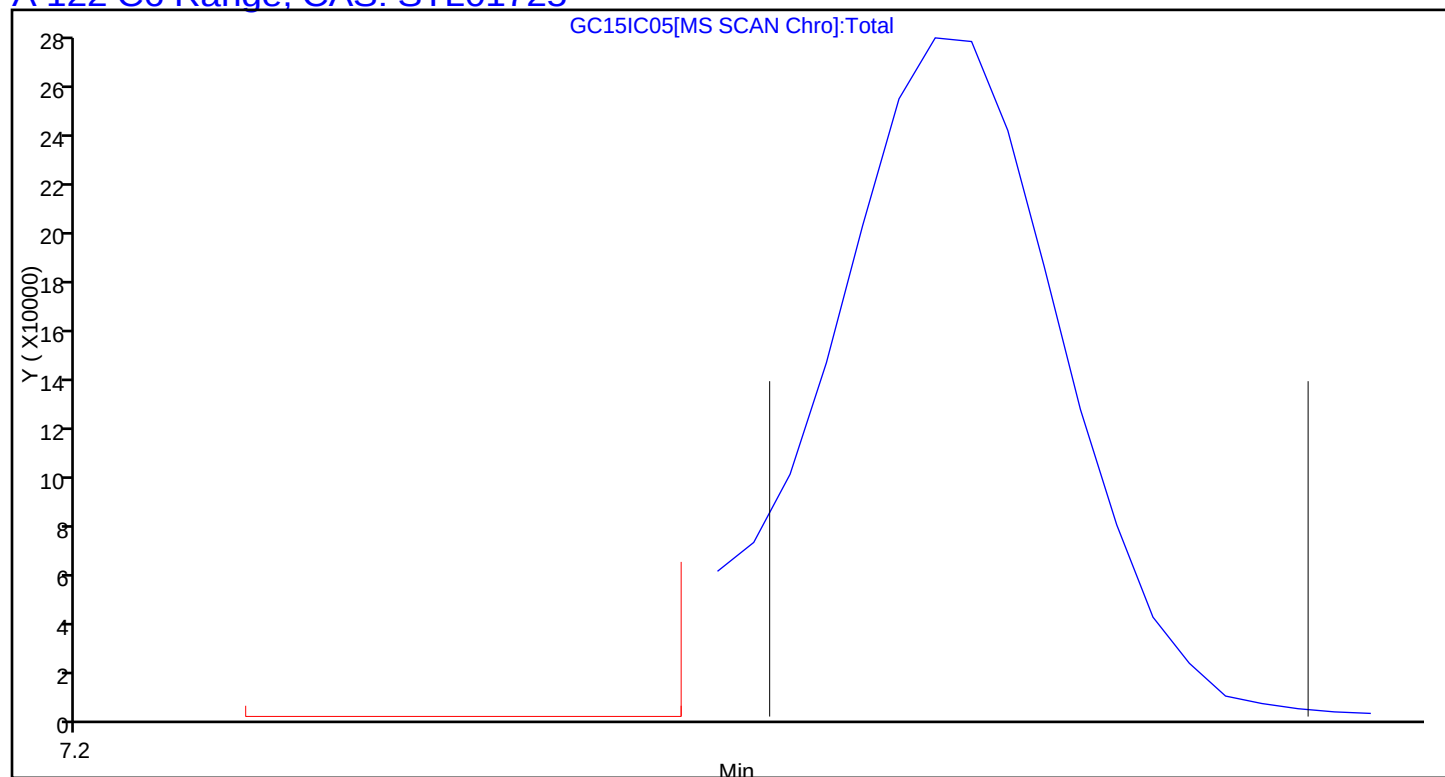
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC05.D

Injection Date: 15-Mar-2017 17:29:30

Instrument ID: MG

Lims ID: IC L5

Client ID:

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 7

Purge Vol: 500.000 mL

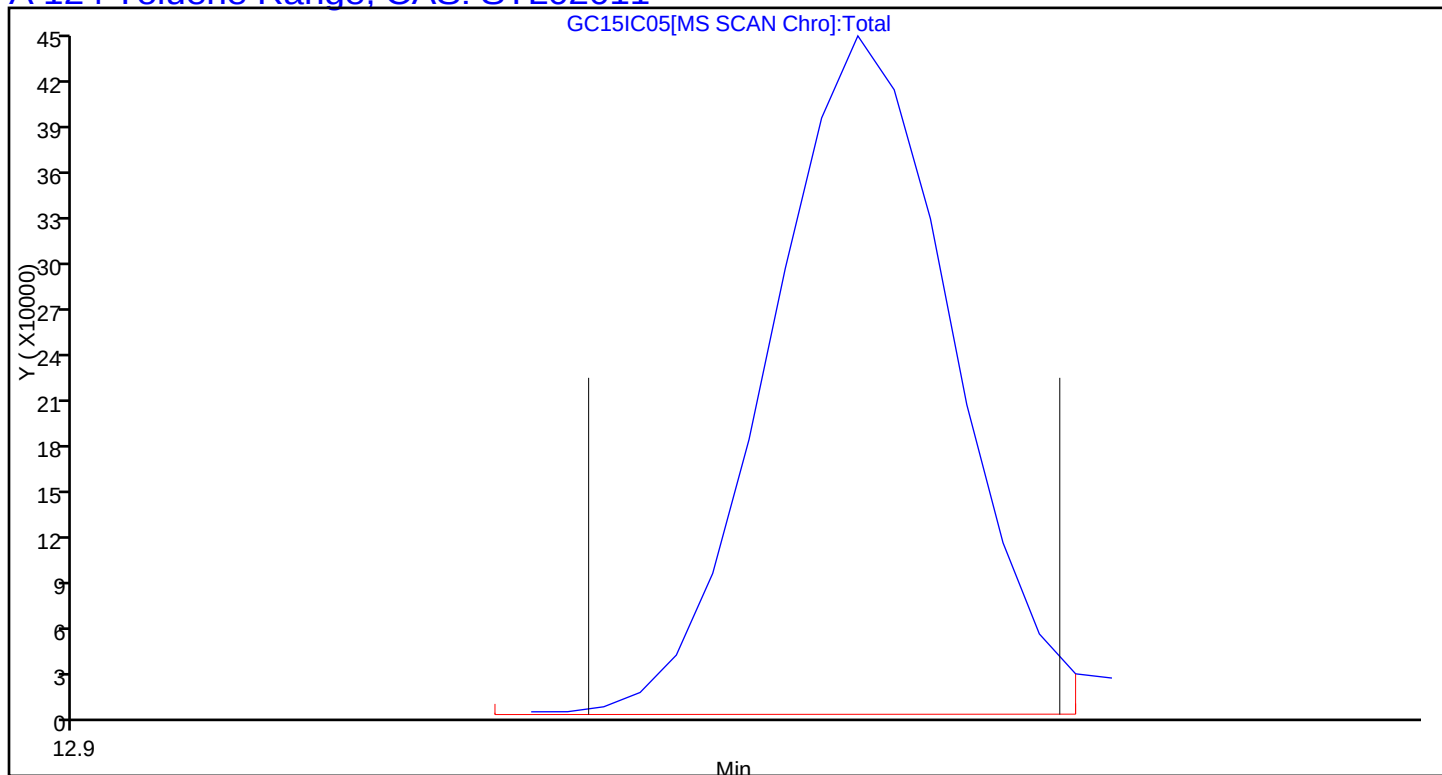
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC06.D
 Lims ID: ICIS L6
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 15-Mar-2017 18:13:30 ALS Bottle#: 5 Worklist Smp#: 8
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-008
 Misc. Info.: 083679
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:38:36 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: barlozhetskayaa

Date: 16-Mar-2017 14:38:36

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	7.991	7.993	-0.002	82	356237	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.158	10.161	-0.003	95	1693700	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.033	15.034	-0.001	88	1673092	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.705	16.705	0.000	96	1311298	4.00	3.97	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	96	79923	2.00	2.02	
7 Propene	41	3.466	3.466	0.000	97	186431	2.00	1.98	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	749517	2.00	1.99	
9 Chloromethane	52	3.655	3.659	-0.004	97	51943	2.00	2.05	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.666	3.669	-0.003	91	436402	2.00	1.94	
11 Acetaldehyde	44	3.785	3.786	-0.001	89	313096	9.99	10.5	
12 Vinyl chloride	62	3.801	3.803	-0.002	99	210834	2.00	2.02	
13 Butadiene	54	3.876	3.876	0.000	85	143038	2.00	2.06	
14 Butane	43	3.876	3.879	-0.003	94	293638	2.00	1.99	
15 Bromomethane	94	4.141	4.141	-0.001	98	204127	2.00	1.98	
16 Chloroethane	64	4.254	4.258	-0.004	91	98257	2.00	1.95	
17 Ethanol	31	4.345	4.357	-0.012	97	345378	9.99	9.64	
18 Vinyl bromide	106	4.507	4.511	-0.004	97	194576	2.00	1.99	
19 2-Methylbutane	43	4.556	4.560	-0.004	89	196053	2.00	1.97	
21 Acrolein	56	4.739	4.742	-0.003	28	30056	2.00	2.06	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	99	743344	2.00	1.98	
22 Acetonitrile	40	4.788	4.793	-0.005	98	61466	2.00	2.06	
23 Acetone	58	4.825	4.835	-0.010	99	208378	5.87	5.96	
25 Pentane	72	4.933	4.937	-0.004	98	37027	2.00	2.04	
24 Isopropyl alcohol	45	4.922	4.939	-0.017	98	695832	5.87	5.75	
26 Ethyl ether	31	5.068	5.075	-0.007	92	162376	2.00	1.97	
27 1,1-Dichloroethene	96	5.354	5.354	0.000	98	187192	2.00	1.97	
28 Acrylonitrile	53	5.429	5.435	-0.006	95	84597	2.00	1.95	
29 2-Methyl-2-propanol	59	5.445	5.467	-0.022	95	283850	2.00	1.96	
30 1,1,2-Trichloro-1,2,2-trif	101	5.521	5.521	0.000	94	432242	2.00	1.97	
31 Methylene Chloride	84	5.656	5.656	0.000	89	158311	2.00	1.85	

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	5.672	5.673	-0.001	93	177955	2.00	1.93	
33 Carbon disulfide	76	5.796	5.797	-0.001	100	478845	2.00	1.98	
34 trans-1,2-Dichloroethene	96	6.389	6.393	-0.004	97	182249	2.00	1.96	
35 2-Methylpentane	43	6.421	6.426	-0.005	92	357751	2.00	1.96	
36 Methyl tert-butyl ether	73	6.502	6.513	-0.011	95	546952	2.00	1.98	
37 1,1-Dichloroethane	63	6.772	6.771	0.001	100	354630	2.00	1.96	
38 Vinyl acetate	43	6.874	6.881	-0.007	99	426758	2.00	2.05	
39 2-Butanone (MEK)	72	7.273	7.283	-0.010	99	79660	2.00	1.97	
40 Hexane	56	7.333	7.336	-0.003	85	138819	2.00	1.97	
41 Isopropyl ether	45	7.473	7.483	-0.010	94	526080	2.00	2.03	
42 cis-1,2-Dichloroethene	96	7.689	7.691	-0.002	95	196676	2.00	1.99	
43 Ethyl acetate	43	7.872	7.880	-0.008	98	346406	2.00	2.02	
44 Chloroform	83	8.018	8.019	-0.001	96	494799	2.00	1.98	
45 Tert-butyl ethyl ether	59	8.115	8.122	-0.007	95	525778	2.00	2.02	
46 Tetrahydrofuran	42	8.374	8.387	-0.013	88	177245	2.00	1.95	
47 1,1,1-Trichloroethane	97	8.994	8.997	-0.003	94	568413	2.00	1.97	
48 1,2-Dichloroethane	62	9.085	9.087	-0.002	99	350677	2.00	2.05	
49 Benzene	78	9.581	9.582	-0.001	96	572098	2.00	1.99	
50 Cyclohexane	69	9.587	9.590	-0.003	93	99763	2.00	2.06	
52 n-Butanol	31	9.576	9.606	-0.030	70	63344	2.00	2.06	
51 Carbon tetrachloride	117	9.608	9.611	-0.003	97	624502	2.00	2.08	
53 2,3-Dimethylpentane	71	9.738	9.740	-0.002	89	136123	2.00	2.06	
54 Thiophene	84	9.851	9.855	-0.004	95	332092	2.00	2.07	
55 Tert-amyl methyl ether	73	10.088	10.100	-0.012	98	556050	2.00	2.11	
56 Isooctane	57	10.412	10.414	-0.002	97	874389	2.00	2.05	
57 n-Heptane	71	10.811	10.816	-0.005	91	220272	2.00	2.06	
58 1,2-Dichloropropane	63	10.843	10.846	-0.003	84	201269	2.00	2.06	
59 Trichloroethene	130	10.897	10.897	0.000	95	315722	2.00	2.03	
60 Dibromomethane	93	10.956	10.961	-0.005	94	267885	2.00	2.06	
61 Dichlorobromomethane	83	11.124	11.126	-0.002	98	529608	2.00	2.12	
62 1,4-Dioxane	88	11.134	11.152	-0.018	90	83850	2.00	2.15	
63 Methyl methacrylate	41	11.253	11.260	-0.007	93	229984	2.00	2.13	
64 Methylcyclohexane	83	11.701	11.704	-0.003	95	465979	2.00	2.08	
65 4-Methyl-2-pentanone (MIBK)	43	12.121	12.133	-0.012	97	348265	2.00	2.11	
66 cis-1,3-Dichloropropene	75	12.170	12.174	-0.004	95	379694	2.00	2.10	
67 trans-1,3-Dichloropropene	75	12.892	12.897	-0.005	97	373664	2.00	2.09	
68 Toluene	91	13.016	13.021	-0.005	93	676247	2.00	2.03	
69 1,1,2-Trichloroethane	83	13.092	13.091	0.001	98	206257	2.00	2.06	
70 2-Methylthiophene	97	13.173	13.173	0.000	97	580302	2.00	2.07	
71 3-Methylthiophene	97	13.378	13.381	-0.003	99	571930	2.00	2.06	
72 2-Hexanone	58	13.507	13.519	-0.012	94	174060	2.00	2.18	
73 n-Octane	85	13.777	13.780	-0.003	88	249240	2.00	2.07	
74 Chlorodibromomethane	129	13.798	13.803	-0.005	97	534023	2.00	2.14	
75 Ethylene Dibromide	107	14.089	14.092	-0.003	98	416730	2.00	2.13	
76 Tetrachloroethene	129	14.192	14.195	-0.003	95	310406	2.00	2.04	
77 Chlorobenzene	112	15.082	15.082	0.000	93	575122	2.00	2.04	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	90	577752	2.00	2.02	
79 Ethylbenzene	91	15.389	15.393	-0.004	99	954045	2.00	2.05	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	772778	2.00	2.11	
81 m-Xylene & p-Xylene	91	15.556	15.559	-0.003	99	1555433	4.00	4.14	
82 Bromoform	173	15.977	15.979	-0.002	96	503085	2.00	2.15	
83 Styrene	104	16.025	16.027	-0.002	97	554081	2.00	2.23	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.025	16.029	-0.004	89	424281	2.00	2.08	
85 o-Xylene	91	16.085	16.088	-0.003	98	789853	2.00	2.05	
86 1,1,2,2-Tetrachloroethane	83	16.408	16.411	-0.003	98	522069	2.00	2.15	
87 1,2,3-Trichloropropane	110	16.565	16.565	0.000	96	184265	2.00	2.08	
88 Isopropylbenzene	105	16.689	16.692	-0.003	97	1134088	2.00	2.03	
89 N-Propylbenzene	120	17.244	17.246	-0.002	99	308856	2.00	2.11	
90 2-Chlorotoluene	126	17.276	17.278	-0.002	97	279105	2.00	2.04	
91 4-Ethyltoluene	105	17.406	17.409	-0.003	98	1105029	2.00	2.10	
92 1,3,5-Trimethylbenzene	120	17.487	17.490	-0.003	92	521704	2.00	2.12	
93 Alpha Methyl Styrene	118	17.735	17.734	0.001	87	435119	2.00	2.19	
94 n-Decane	57	17.837	17.837	0.000	93	533364	2.00	2.13	
95 tert-Butylbenzene	119	17.940	17.939	0.001	92	1088441	2.00	2.10	
96 1,2,4-Trimethylbenzene	105	17.950	17.953	-0.003	96	993298	2.00	2.10	
97 1,3-Dichlorobenzene	146	18.220	18.223	-0.003	97	730798	2.00	2.05	
98 sec-Butylbenzene	105	18.225	18.225	0.000	98	1415485	2.00	2.13	
99 Benzyl chloride	91	18.301	18.303	-0.002	98	961111	2.00	2.16	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	94	714901	2.00	2.05	
101 4-Isopropyltoluene	119	18.398	18.402	-0.004	97	1259395	2.00	2.14	
102 1,2,3-Trimethylbenzene	105	18.441	18.445	-0.004	98	749546	2.00	2.13	
103 Butylcyclohexane	83	18.517	18.520	-0.003	95	729918	2.00	2.10	
104 1,2-Dichlorobenzene	146	18.689	18.689	0.000	94	701112	2.00	2.07	
105 2,3-Dihydroindene	117	18.689	18.693	-0.004	93	908631	2.00	2.11	
106 Indene	116	18.824	18.827	-0.003	91	670154	2.00	2.13	
107 n-Butylbenzene	91	18.851	18.854	-0.003	98	1164905	2.00	2.12	
108 Undecane	57	19.207	19.209	-0.002	92	622503	2.00	2.12	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.239	19.239	0.000	97	931315	2.00	2.12	
110 1,2-Dibromo-3-Chloropropan	157	19.309	19.308	0.001	99	302962	2.00	2.08	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.635	-0.002	96	1160795	2.00	2.20	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	94	687501	2.00	2.17	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	96	955751	2.00	2.21	
114 Dodecane	57	20.280	20.280	0.000	93	556303	2.00	2.13	
115 1,2,4-Trichlorobenzene	180	20.420	20.418	0.002	94	668939	2.00	2.24	
116 Naphthalene	128	20.544	20.546	-0.002	99	1395111	2.00	2.23	
117 Benzo(b)thiophene	134	20.647	20.645	0.002	99	820908	2.00	2.25	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	95	640650	2.00	2.17	
119 1,2,3-Trichlorobenzene	180	20.825	20.825	-0.001	95	640410	2.00	2.27	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	99	852913	6.04	6.56	
121 1-Methylnaphthalene	142	21.801	21.801	0.000	100	834902	6.04	6.45	
A 122 C6 Range	1	7.343	(7.303-7.383)		0	1313930	2.00	2.03	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	1704710	2.00	2.10	
S 126 Xylenes, Total	100				0		5.99	6.19	
S 127 1,2-Dichloroethene, Total	1				0		4.00	3.96	

Reagents:

40L6DNP_00011

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC06.D

Injection Date: 15-Mar-2017 18:13:30

Instrument ID: MG

Operator ID: 7126

Lims ID: ICIS L6

Worklist Smp#: 8

Client ID:

Purge Vol: 500.000 mL

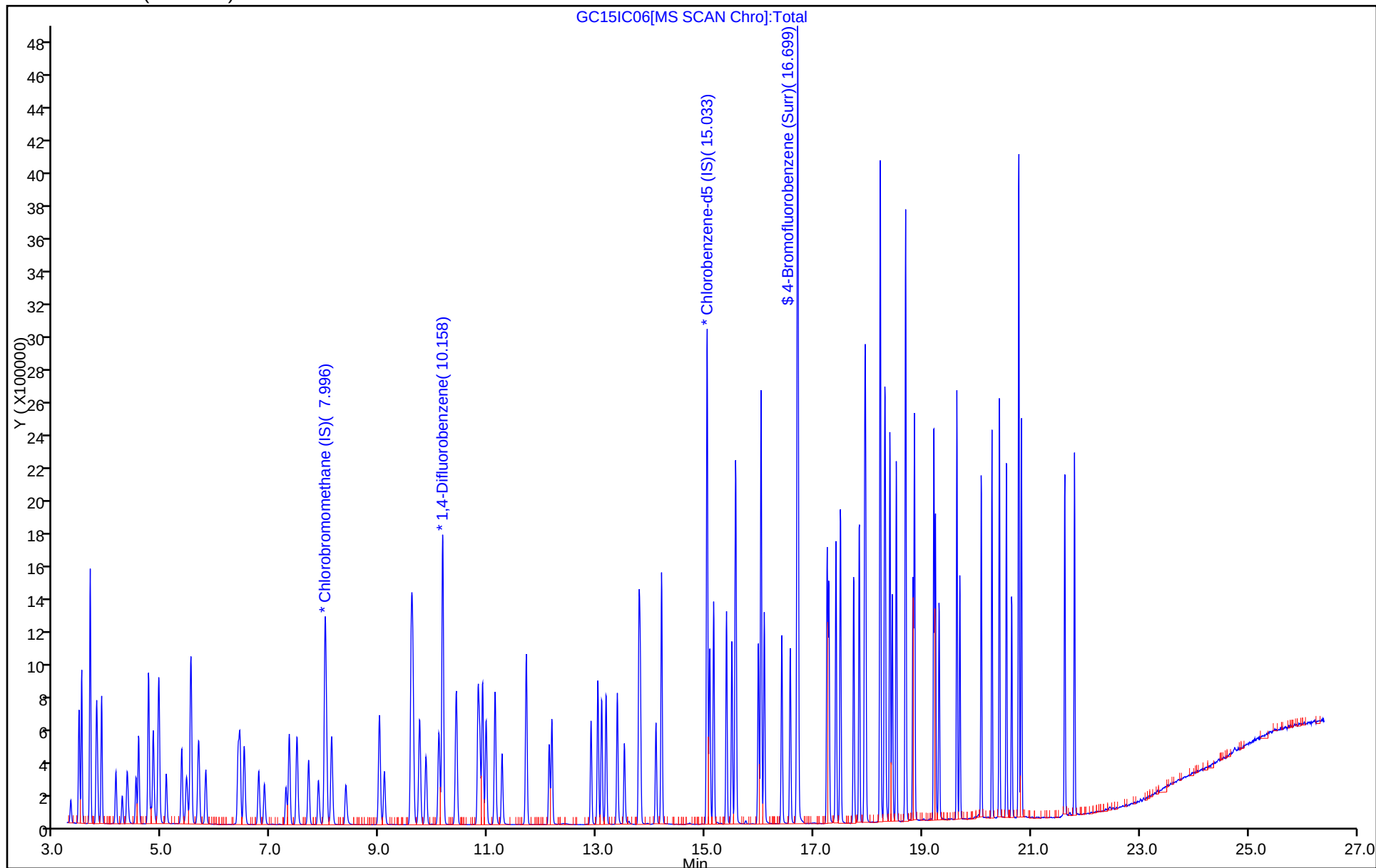
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC06.D

Injection Date: 15-Mar-2017 18:13:30

Instrument ID: MG

Lims ID: ICIS L6

Client ID:

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 8

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

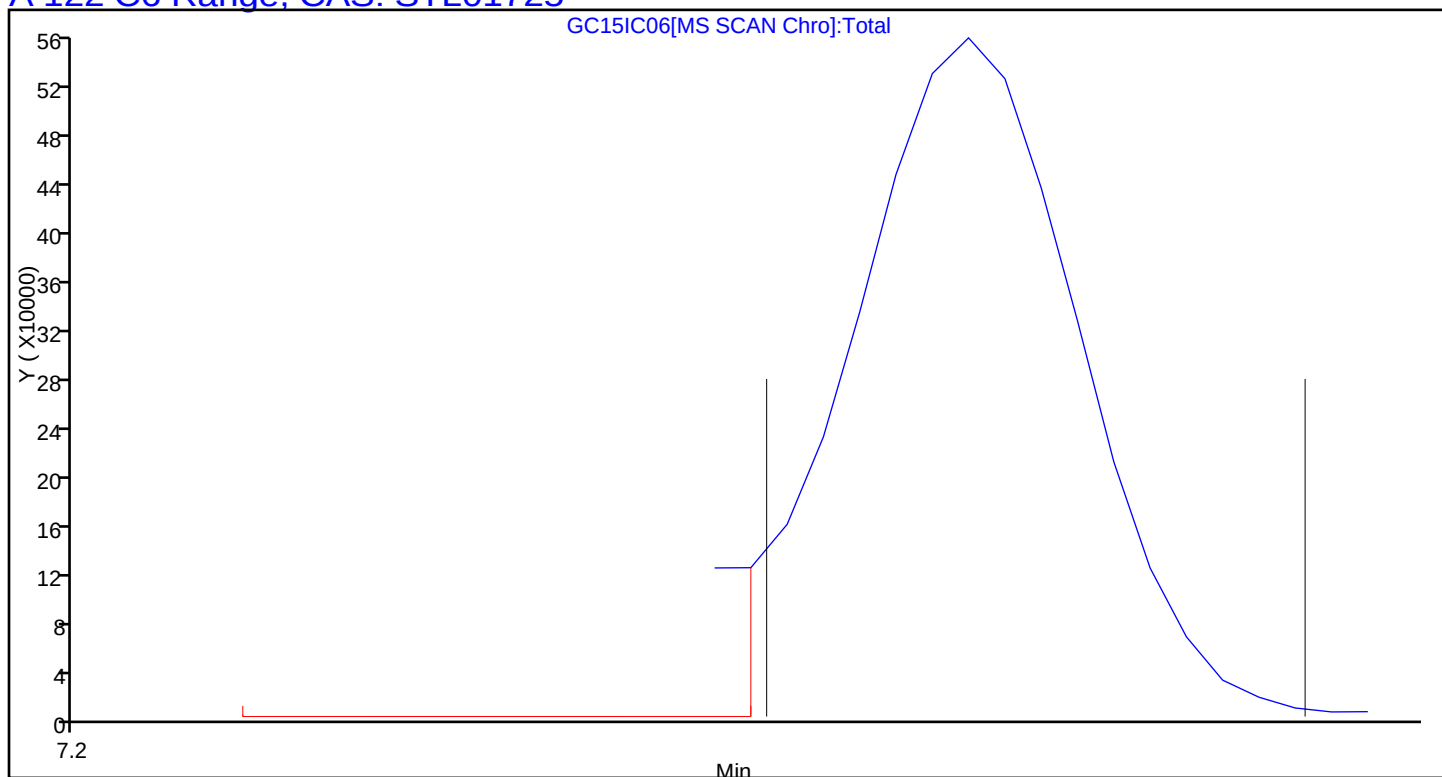
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC06.D

Injection Date: 15-Mar-2017 18:13:30

Instrument ID: MG

Lims ID: ICIS L6

Client ID:

Operator ID: 7126

ALS Bottle#:

5

Worklist Smp#: 8

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MG_TO15

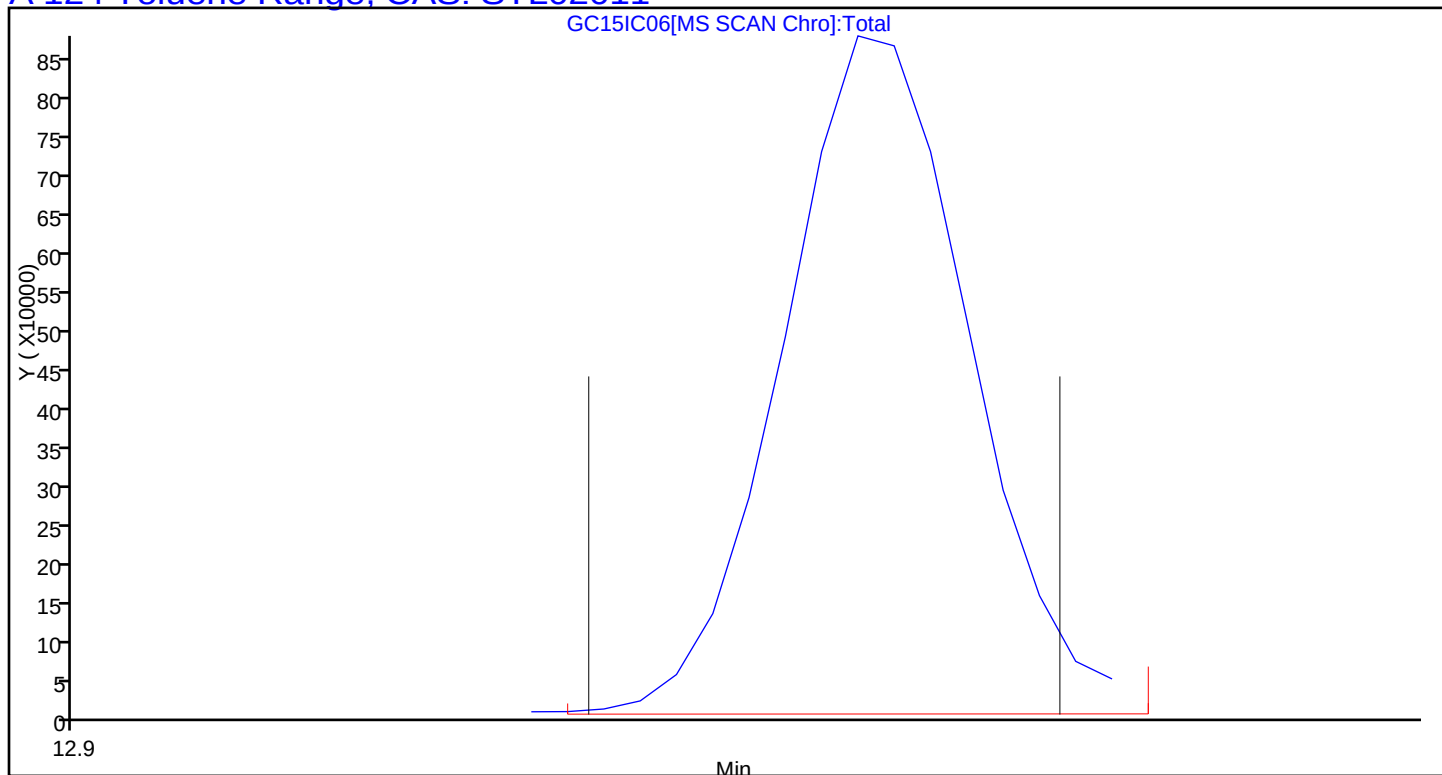
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC07.D
 Lims ID: IC L7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 15-Mar-2017 18:56:30 ALS Bottle#: 6 Worklist Smp#: 9
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-009
 Misc. Info.: 083678
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:22:47 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: tajh

Date: 16-Mar-2017 11:56:48

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	7.996	7.993	0.003	84	379572	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.164	10.161	0.003	94	1825436	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.039	15.034	0.005	87	1827873	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.710	16.705	0.005	95	1443792	4.00	4.00	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	96	161083	4.00	3.82	
7 Propene	41	3.466	3.466	0.000	97	366636	4.00	3.65	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	1518249	4.00	3.78	
9 Chloromethane	52	3.661	3.659	0.002	97	102473	4.00	3.79	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.669	0.002	91	925480	4.00	3.87	
11 Acetaldehyde	44	3.785	3.786	-0.001	89	595674	20.0	18.8	
12 Vinyl chloride	62	3.806	3.803	0.003	99	414360	4.00	3.73	
13 Butadiene	54	3.876	3.876	0.000	70	283835	4.00	3.84	
14 Butane	43	3.882	3.879	0.003	85	583059	4.00	3.71	
15 Bromomethane	94	4.141	4.141	0.000	98	425627	4.00	3.88	
16 Chloroethane	64	4.259	4.258	0.001	92	204064	4.00	3.80	
17 Ethanol	31	4.356	4.357	-0.001	98	707984	20.0	18.5	
18 Vinyl bromide	106	4.513	4.511	0.002	96	403357	4.00	3.88	
19 2-Methylbutane	43	4.561	4.560	0.001	89	399830	4.00	3.76	
21 Acrolein	56	4.739	4.742	-0.003	96	69764	4.00	4.49	
20 Trichlorofluoromethane	101	4.744	4.743	0.001	99	1532462	4.00	3.83	
22 Acetonitrile	40	4.793	4.793	0.000	98	123503	4.00	3.88	
23 Acetone	58	4.831	4.835	-0.004	99	417742	11.7	11.2	
25 Pentane	72	4.939	4.937	0.002	95	74522	4.00	3.85	
24 Isopropyl alcohol	45	4.939	4.939	0.000	93	1433726	11.7	11.1	
26 Ethyl ether	31	5.068	5.075	-0.007	92	331731	4.00	3.78	
27 1,1-Dichloroethene	96	5.354	5.354	0.000	98	387339	4.00	3.83	
28 Acrylonitrile	53	5.435	5.435	0.000	95	176062	4.00	3.82	
29 2-Methyl-2-propanol	59	5.462	5.467	-0.005	95	610004	4.00	3.96	
30 1,1,2-Trichloro-1,2,2-trif	101	5.521	5.521	0.000	94	891000	4.00	3.82	
31 Methylene Chloride	84	5.661	5.656	0.005	88	319885	4.00	3.50	

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	5.677	5.673	0.004	93	358922	4.00	3.66	
33 Carbon disulfide	76	5.801	5.797	0.004	100	979418	4.00	3.80	
34 trans-1,2-Dichloroethene	96	6.395	6.393	0.002	98	385716	4.00	3.90	
35 2-Methylpentane	43	6.427	6.426	0.001	92	714141	4.00	3.68	
36 Methyl tert-butyl ether	73	6.508	6.513	-0.005	95	1134810	4.00	3.86	
37 1,1-Dichloroethane	63	6.777	6.771	0.006	100	724800	4.00	3.75	
38 Vinyl acetate	43	6.880	6.881	-0.001	99	894260	4.00	4.03	
39 2-Butanone (MEK)	72	7.279	7.283	-0.004	99	166968	4.00	3.87	
40 Hexane	56	7.338	7.336	0.002	85	281421	4.00	3.75	
41 Isopropyl ether	45	7.478	7.483	-0.005	93	1079183	4.00	3.91	
42 cis-1,2-Dichloroethene	96	7.694	7.691	0.003	96	407485	4.00	3.88	
43 Ethyl acetate	43	7.877	7.880	-0.003	98	713928	4.00	3.90	
44 Chloroform	83	8.023	8.019	0.004	96	1012011	4.00	3.80	
45 Tert-butyl ethyl ether	59	8.120	8.122	-0.002	94	1073194	4.00	3.87	
46 Tetrahydrofuran	42	8.379	8.387	-0.008	89	365105	4.00	3.77	
47 1,1,1-Trichloroethane	97	8.999	8.997	0.002	94	1184348	4.00	3.85	
48 1,2-Dichloroethane	62	9.091	9.087	0.004	99	713806	4.00	3.87	
49 Benzene	78	9.581	9.582	-0.001	96	1173319	4.00	3.78	
50 Cyclohexane	69	9.592	9.590	0.002	93	203651	4.00	3.90	
52 n-Butanol	31	9.587	9.606	-0.019	70	136613	4.00	4.12	
51 Carbon tetrachloride	117	9.614	9.611	0.003	98	1329349	4.00	4.10	
53 2,3-Dimethylpentane	71	9.738	9.740	-0.002	89	282206	4.00	3.95	
54 Thiophene	84	9.856	9.855	0.001	95	686171	4.00	3.96	
55 Tert-amyl methyl ether	73	10.094	10.100	-0.006	98	1157370	4.00	4.07	
56 Isooctane	57	10.412	10.414	-0.002	97	1779183	4.00	3.87	
57 n-Heptane	71	10.816	10.816	0.000	90	450272	4.00	3.92	
58 1,2-Dichloropropane	63	10.849	10.846	0.003	87	408812	4.00	3.88	
59 Trichloroethene	130	10.897	10.897	0.000	95	664844	4.00	3.96	
60 Dibromomethane	93	10.962	10.961	0.001	93	556851	4.00	3.98	
61 Dichlorobromomethane	83	11.129	11.126	0.003	98	1122661	4.00	4.18	
62 1,4-Dioxane	88	11.145	11.152	-0.007	89	171415	4.00	4.08	
63 Methyl methacrylate	41	11.258	11.260	-0.002	93	487379	4.00	4.19	
64 Methylcyclohexane	83	11.706	11.704	0.002	94	959276	4.00	3.97	
65 4-Methyl-2-pentanone (MIBK)	43	12.127	12.133	-0.006	97	733481	4.00	4.12	
66 cis-1,3-Dichloropropene	75	12.175	12.174	0.001	95	790238	4.00	4.05	
67 trans-1,3-Dichloropropene	75	12.898	12.897	0.001	97	789307	4.00	4.03	
68 Toluene	91	13.022	13.021	0.001	94	1420544	4.00	3.90	
69 1,1,2-Trichloroethane	83	13.092	13.091	0.001	98	426290	4.00	3.90	
70 2-Methylthiophene	97	13.173	13.173	0.000	97	1212899	4.00	3.97	
71 3-Methylthiophene	97	13.383	13.381	0.002	99	1202168	4.00	3.97	
72 2-Hexanone	58	13.512	13.519	-0.007	94	373275	4.00	4.28	
73 n-Octane	85	13.782	13.780	0.002	87	522104	4.00	3.97	
74 Chlorodibromomethane	129	13.804	13.803	0.001	97	1217195	4.00	4.47	
75 Ethylene Dibromide	107	14.095	14.092	0.003	97	890944	4.00	4.17	
76 Tetrachloroethene	129	14.197	14.195	0.002	95	660677	4.00	3.97	
77 Chlorobenzene	112	15.082	15.082	0.000	93	1217110	4.00	3.95	
78 2,3-Dimethylheptane	43	15.157	15.155	0.002	88	1160951	4.00	3.72	
79 Ethylbenzene	91	15.394	15.393	0.001	98	2020166	4.00	3.97	
80 2-Ethylthiophene	97	15.491	15.491	0.000	98	1634721	4.00	4.08	
81 m-Xylene & p-Xylene	91	15.562	15.559	0.003	99	3265060	8.00	7.95	
82 Bromoform	173	15.982	15.979	0.003	97	1302027	4.00	4.78	
83 Styrene	104	16.031	16.027	0.004	97	1208558	4.00	4.46	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.031	16.029	0.002	88	848900	4.00	3.80	
85 o-Xylene	91	16.090	16.088	0.002	98	1652204	4.00	3.93	
86 1,1,2,2-Tetrachloroethane	83	16.414	16.411	0.003	99	1097235	4.00	4.14	
87 1,2,3-Trichloropropane	110	16.570	16.565	0.005	96	385852	4.00	3.98	
88 Isopropylbenzene	105	16.694	16.692	0.002	97	2402575	4.00	3.94	
89 N-Propylbenzene	120	17.249	17.246	0.003	99	660707	4.00	4.13	
90 2-Chlorotoluene	126	17.282	17.278	0.004	96	602879	4.00	4.04	
91 4-Ethyltoluene	105	17.411	17.409	0.002	98	2357742	4.00	4.10	
92 1,3,5-Trimethylbenzene	120	17.492	17.490	0.002	92	1116920	4.00	4.15	
93 Alpha Methyl Styrene	118	17.735	17.734	0.001	88	987378	4.00	4.70	
94 n-Decane	57	17.837	17.837	0.000	94	1089510	4.00	3.98	
95 tert-Butylbenzene	119	17.940	17.939	0.001	93	2353545	4.00	4.15	
96 1,2,4-Trimethylbenzene	105	17.956	17.953	0.003	95	2134348	4.00	4.14	
98 sec-Butylbenzene	105	18.225	18.223	0.002	97	3068495	4.00	4.22	
97 1,3-Dichlorobenzene	146	18.225	18.223	0.002	98	1666142	4.00	4.28	
99 Benzyl chloride	91	18.306	18.303	0.003	98	2087808	4.00	4.29	
100 1,4-Dichlorobenzene	146	18.317	18.316	0.001	97	1576716	4.00	4.14	
101 4-Isopropyltoluene	119	18.403	18.400	0.003	97	2688329	4.00	4.19	
102 1,2,3-Trimethylbenzene	105	18.447	18.445	0.001	97	1558491	4.00	4.05	
103 Butylcyclohexane	83	18.522	18.520	0.002	96	1513686	4.00	3.98	
104 1,2-Dichlorobenzene	146	18.689	18.689	0.000	95	1579523	4.00	4.26	
105 2,3-Dihydroindene	117	18.695	18.693	0.002	94	1987507	4.00	4.23	
106 Indene	116	18.829	18.827	0.002	92	1470712	4.00	4.28	
107 n-Butylbenzene	91	18.856	18.854	0.002	97	2406878	4.00	4.01	
108 Undecane	57	19.212	19.209	0.003	91	1224656	4.00	3.81	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.239	19.239	0.000	97	1953205	4.00	4.08	
110 1,2-Dibromo-3-Chloropropan	157	19.309	19.308	0.001	99	710910	4.00	4.47	
111 1,2,4,5-Tetramethylbenzene	119	19.638	19.634	0.004	96	2396674	4.00	4.16	
112 1,2,3,5-Tetramethylbenzene	119	19.692	19.689	0.003	95	1394400	4.00	4.03	
113 1,2,3,4-Tetramethylbenzene	119	20.086	20.083	0.003	96	1927205	4.00	4.08	
114 Dodecane	57	20.280	20.280	0.000	93	1015546	4.00	3.56	
115 1,2,4-Trichlorobenzene	180	20.420	20.418	0.002	94	1358330	4.00	4.16	
116 Naphthalene	128	20.550	20.545	0.005	99	2902807	4.00	4.24	
117 Benzo(b)thiophene	134	20.647	20.645	0.002	99	1724284	4.00	4.33	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	96	1288187	4.00	4.00	
119 1,2,3-Trichlorobenzene	180	20.825	20.825	0.000	95	1263910	4.00	4.10	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	100	2020346	12.1	14.2	
121 1-Methylnaphthalene	142	21.801	21.801	0.000	100	2020334	12.1	14.3	
A 122 C6 Range	1	7.348	(7.308-7.388)		0	2723811	4.00	3.79	
A 124 Toluene Range	1	13.017	(12.982-13.052)		0	3522873	4.00	4.03	
S 126 Xylenes, Total	100				0		12.0	11.9	
S 127 1,2-Dichloroethene, Total	1				0		8.00	7.78	

Reagents:

40L7DNP_00010

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC07.D

Injection Date: 15-Mar-2017 18:56:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L7

Worklist Smp#: 9

Client ID:

Purge Vol: 500.000 mL

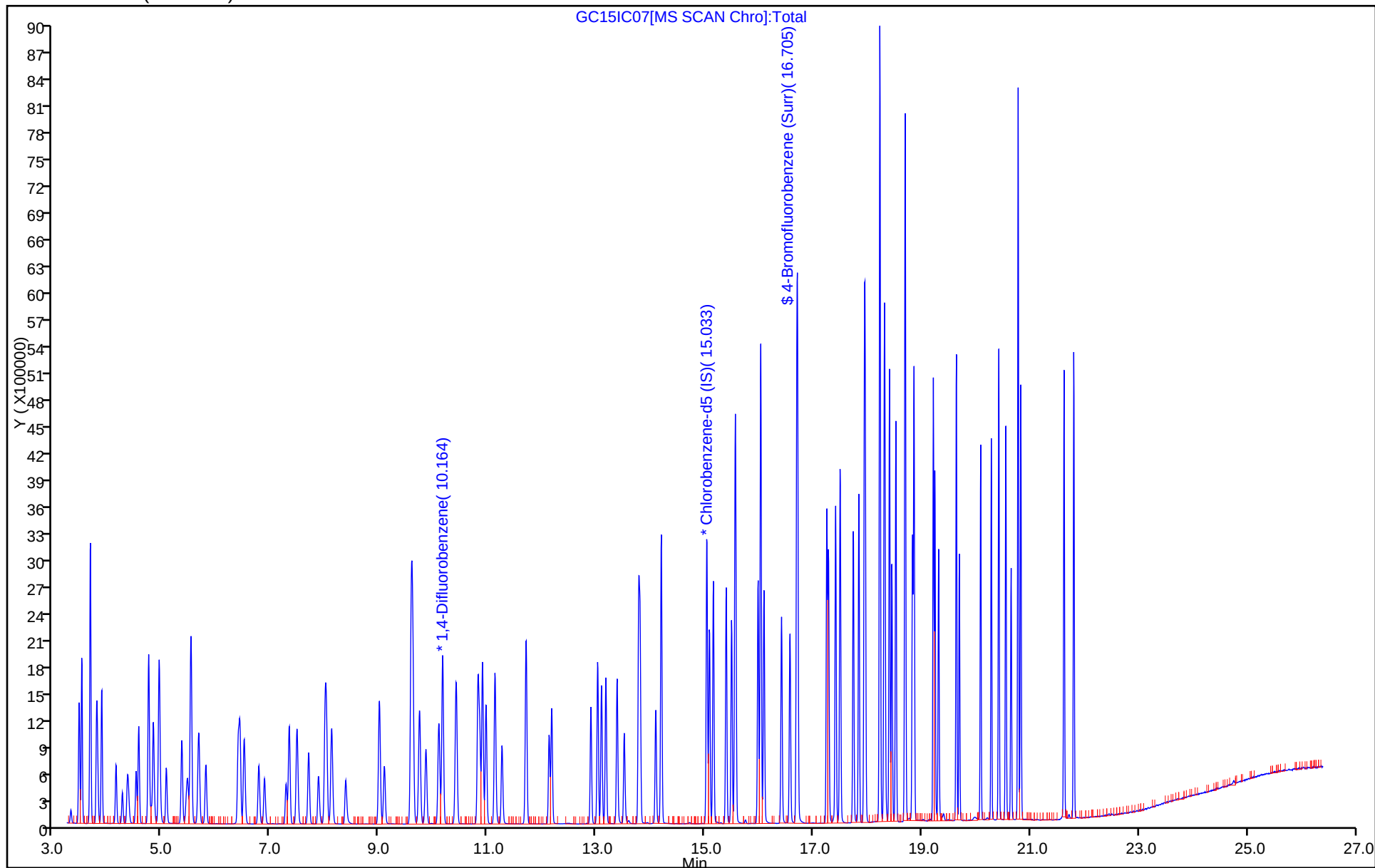
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC07.D

Injection Date: 15-Mar-2017 18:56:30

Instrument ID: MG

Lims ID: IC L7

Client ID:

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 9

Purge Vol: 500.000 mL

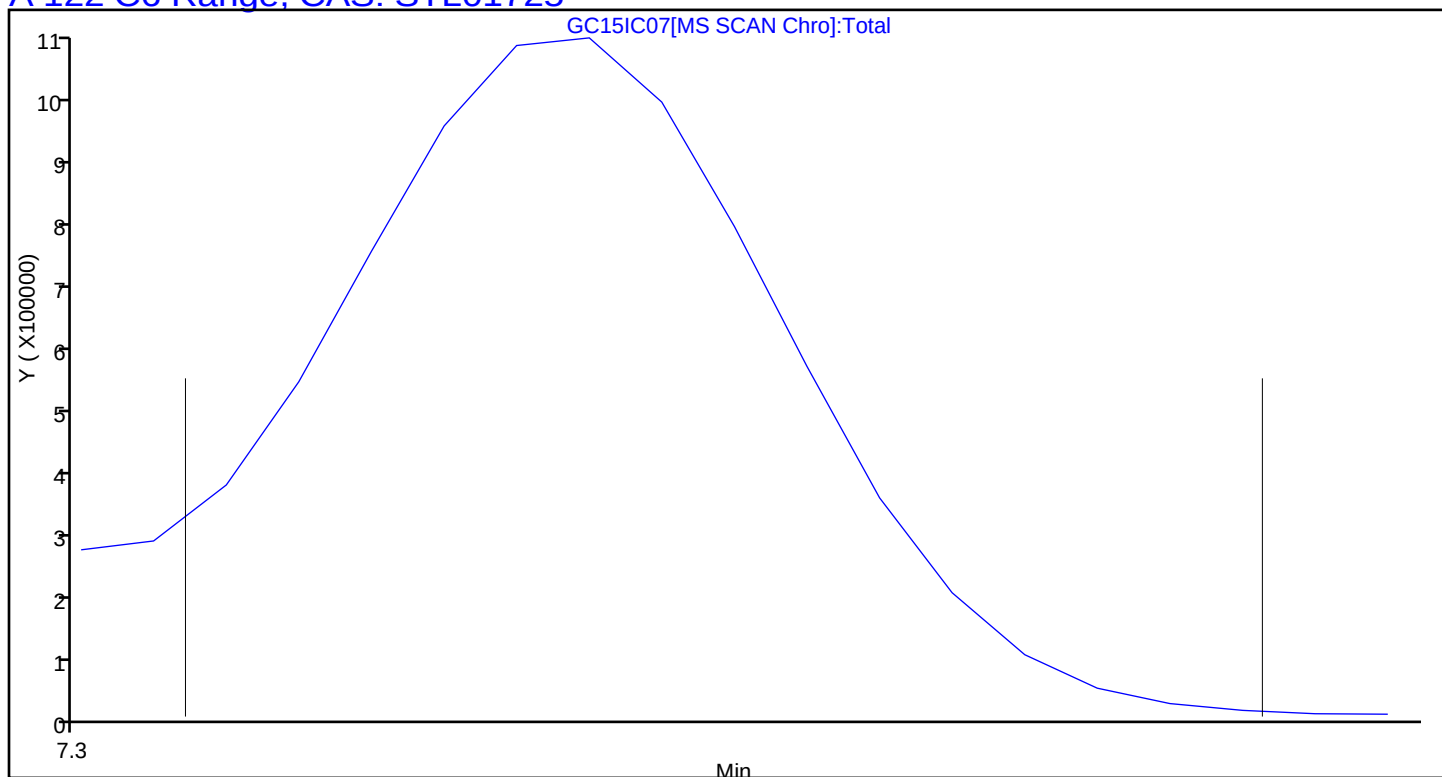
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC07.D

Injection Date: 15-Mar-2017 18:56:30

Instrument ID: MG

Lims ID: IC L7

Client ID:

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 9

Purge Vol: 500.000 mL

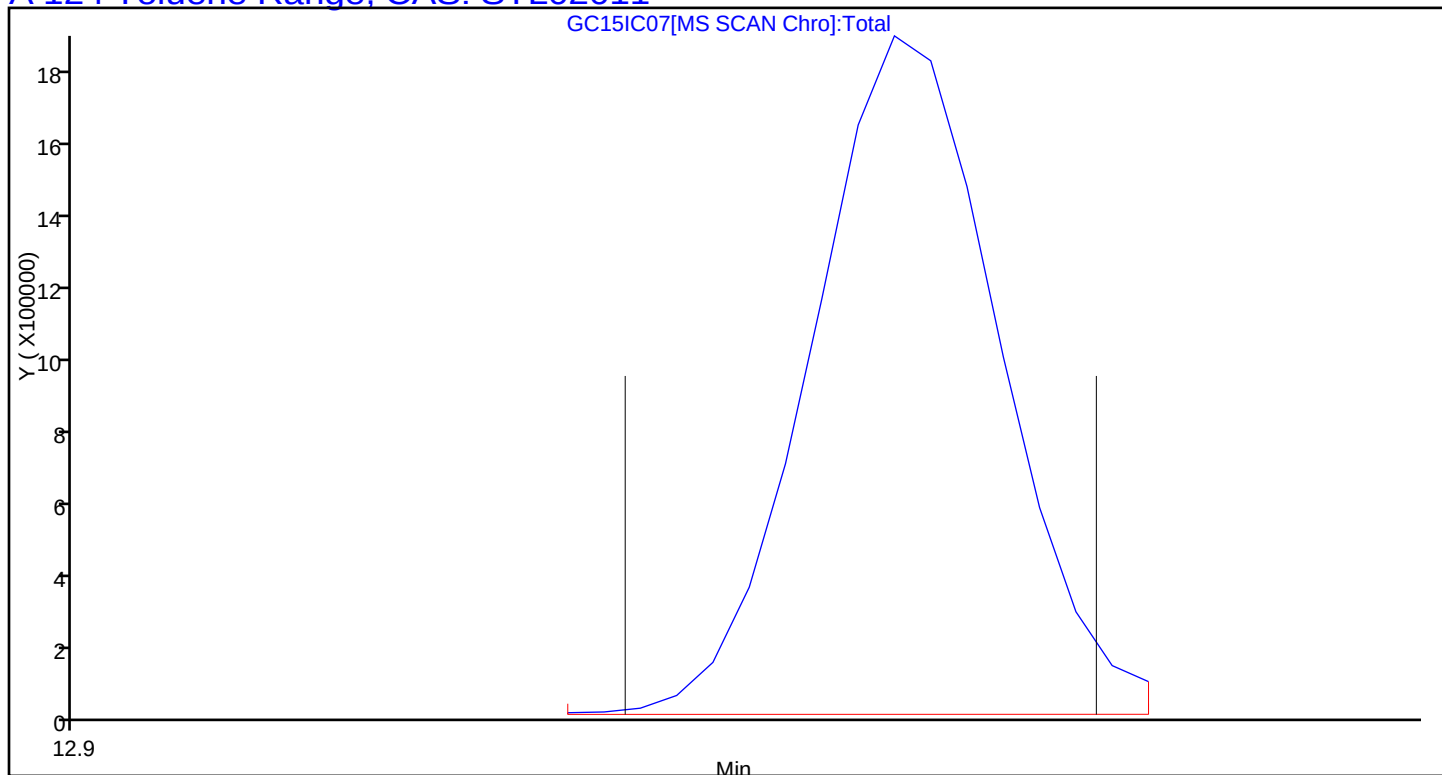
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC08.D
 Lims ID: IC L8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 15-Mar-2017 19:39:30 ALS Bottle#: 7 Worklist Smp#: 10
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-010
 Misc. Info.: 083677
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:24:45 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: tajh

Date: 16-Mar-2017 08:39:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.002	7.993	0.009	82	401002	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.169	10.161	0.008	94	1924493	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.039	15.034	0.005	87	1944152	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.710	16.705	0.005	95	1558022	4.00	4.06	
6 Chlorodifluoromethane	67	3.461	3.457	0.004	96	317499	8.00	7.12	
7 Propene	41	3.467	3.466	0.001	97	715294	8.00	6.74	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	3065573	8.00	7.22	
9 Chloromethane	52	3.661	3.659	0.002	100	195522	8.00	6.85	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.669	0.002	89	1944481	8.00	7.70	
11 Acetaldehyde	44	3.785	3.786	-0.001	90	1132144	40.0	33.8	
12 Vinyl chloride	62	3.806	3.803	0.003	99	808059	8.00	6.89	
13 Butadiene	54	3.876	3.876	0.000	71	549398	8.00	7.03	
14 Butane	43	3.882	3.879	0.003	84	1092508	8.00	6.57	
15 Bromomethane	94	4.141	4.141	0.000	98	850291	8.00	7.34	
16 Chloroethane	64	4.259	4.258	0.001	93	409306	8.00	7.21	
17 Ethanol	31	4.372	4.357	0.015	98	1409489	40.0	34.9	
18 Vinyl bromide	106	4.518	4.511	0.007	96	817628	8.00	7.44	
19 2-Methylbutane	43	4.561	4.560	0.001	89	786537	8.00	7.00	
21 Acrolein	56	4.739	4.742	-0.003	99	133516	8.00	8.13	
20 Trichlorofluoromethane	101	4.745	4.743	0.001	99	3119354	8.00	7.38	
22 Acetonitrile	40	4.798	4.793	0.005	98	247919	8.00	7.37	
23 Acetone	58	4.836	4.835	0.001	99	841477	23.5	21.4	
25 Pentane	72	4.939	4.937	0.002	96	151563	8.00	7.42	
24 Isopropyl alcohol	45	4.960	4.939	0.021	97	2844607	23.5	20.9	
26 Ethyl ether	31	5.073	5.075	-0.002	92	672373	8.00	7.26	
27 1,1-Dichloroethene	96	5.359	5.354	0.005	99	797692	8.00	7.46	
28 Acrylonitrile	53	5.440	5.435	0.005	95	356803	8.00	7.32	
29 2-Methyl-2-propanol	59	5.483	5.467	0.016	95	1241041	8.00	7.62	
30 1,1,2-Trichloro-1,2,2-trif	101	5.526	5.521	0.005	92	1855781	8.00	7.53	
31 Methylene Chloride	84	5.661	5.656	0.005	87	646443	8.00	6.70	

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	5.677	5.673	0.004	92	711970	8.00	6.87	
33 Carbon disulfide	76	5.801	5.797	0.004	100	1984338	8.00	7.29	
34 trans-1,2-Dichloroethene	96	6.400	6.393	0.007	98	803766	8.00	7.69	
35 2-Methylpentane	43	6.427	6.426	0.001	91	1428051	8.00	6.96	
36 Methyl tert-butyl ether	73	6.508	6.513	-0.005	95	2321003	8.00	7.48	
37 1,1-Dichloroethane	63	6.777	6.771	0.006	100	1462691	8.00	7.17	
38 Vinyl acetate	43	6.885	6.881	0.004	99	1793080	8.00	7.65	
39 2-Butanone (MEK)	72	7.284	7.283	0.001	99	344230	8.00	7.54	
40 Hexane	56	7.338	7.336	0.002	84	560820	8.00	7.08	
41 Isopropyl ether	45	7.484	7.483	0.001	93	2148000	8.00	7.37	
42 cis-1,2-Dichloroethene	96	7.700	7.691	0.009	95	845905	8.00	7.62	
43 Ethyl acetate	43	7.883	7.880	0.003	98	1449886	8.00	7.50	
44 Chloroform	83	8.028	8.019	0.009	96	2066202	8.00	7.35	
45 Tert-butyl ethyl ether	59	8.126	8.122	0.004	94	2202848	8.00	7.52	
46 Tetrahydrofuran	42	8.384	8.387	-0.003	88	742637	8.00	7.25	
47 1,1,1-Trichloroethane	97	9.004	8.997	0.007	94	2454172	8.00	7.54	
48 1,2-Dichloroethane	62	9.096	9.087	0.009	99	1447194	8.00	7.45	
49 Benzene	78	9.592	9.582	0.010	96	2421461	8.00	7.41	
50 Cyclohexane	69	9.592	9.590	0.002	95	407285	8.00	7.40	
52 n-Butanol	31	9.608	9.606	0.002	70	273762	8.00	7.82	
51 Carbon tetrachloride	117	9.619	9.611	0.008	98	2797102	8.00	8.19	
53 2,3-Dimethylpentane	71	9.743	9.740	0.003	88	569652	8.00	7.57	
54 Thiophene	84	9.862	9.855	0.007	94	1402526	8.00	7.68	
55 Tert-amyl methyl ether	73	10.099	10.100	-0.001	98	2396229	8.00	7.99	
56 Isooctane	57	10.417	10.414	0.003	97	3578687	8.00	7.37	
57 n-Heptane	71	10.822	10.816	0.006	88	916791	8.00	7.56	
58 1,2-Dichloropropane	63	10.854	10.846	0.008	83	823056	8.00	7.41	
59 Trichloroethene	130	10.903	10.897	0.006	97	1460218	8.00	8.25	
60 Dibromomethane	93	10.973	10.961	0.012	91	1171750	8.00	7.94	
61 Dichlorobromomethane	83	11.134	11.126	0.008	98	2343991	8.00	8.27	
62 1,4-Dioxane	88	11.151	11.152	-0.001	89	354151	8.00	8.00	
63 Methyl methacrylate	41	11.264	11.260	0.004	94	988227	8.00	8.06	
64 Methylcyclohexane	83	11.706	11.704	0.002	94	1980430	8.00	7.77	
65 4-Methyl-2-pentanone (MIBK)	43	12.137	12.133	0.004	96	1511574	8.00	8.05	
66 cis-1,3-Dichloropropene	75	12.181	12.174	0.007	94	1637962	8.00	7.97	
67 trans-1,3-Dichloropropene	75	12.903	12.897	0.006	97	1645268	8.00	7.90	
68 Toluene	91	13.027	13.021	0.006	94	2972164	8.00	7.67	
69 1,1,2-Trichloroethane	83	13.097	13.091	0.006	98	890354	8.00	7.67	
70 2-Methylthiophene	97	13.178	13.173	0.005	97	2514496	8.00	7.73	
71 3-Methylthiophene	97	13.388	13.381	0.007	99	2520669	8.00	7.83	
72 2-Hexanone	58	13.518	13.519	-0.001	94	769096	8.00	8.30	
73 n-Octane	85	13.782	13.780	0.002	85	1089002	8.00	7.78	
74 Chlorodibromomethane	129	13.809	13.803	0.006	97	2716554	8.00	9.38	
75 Ethylene Dibromide	107	14.100	14.092	0.008	98	1908708	8.00	8.39	
76 Tetrachloroethene	129	14.197	14.195	0.002	95	1442699	8.00	8.14	
77 Chlorobenzene	112	15.087	15.082	0.005	94	2618941	8.00	7.99	
78 2,3-Dimethylheptane	43	15.157	15.155	0.002	86	2286470	8.00	6.90	
79 Ethylbenzene	91	15.400	15.393	0.007	98	4239909	8.00	7.84	
80 2-Ethylthiophene	97	15.497	15.491	0.006	97	3415104	8.00	8.01	
81 m-Xylene & p-Xylene	91	15.567	15.559	0.008	99	6914176	16.0	15.8	
82 Bromoform	173	15.988	15.979	0.009	98	3110131	8.00	10.7	
83 Styrene	104	16.031	16.027	0.004	97	2643863	8.00	9.17	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.036	16.029	0.007	85	1702072	8.00	7.17	
85 o-Xylene	91	16.095	16.088	0.007	98	3451230	8.00	7.73	
86 1,1,2,2-Tetrachloroethane	83	16.419	16.411	0.008	99	2243454	8.00	7.97	
87 1,2,3-Trichloropropane	110	16.575	16.565	0.010	96	819612	8.00	7.95	
88 Isopropylbenzene	105	16.699	16.692	0.007	96	5091349	8.00	7.85	
89 N-Propylbenzene	120	17.249	17.246	0.003	100	1438960	8.00	8.46	
90 2-Chlorotoluene	126	17.282	17.278	0.004	97	1300045	8.00	8.19	
91 4-Ethyltoluene	105	17.417	17.409	0.008	98	5056909	8.00	8.28	
92 1,3,5-Trimethylbenzene	120	17.497	17.490	0.007	93	2423508	8.00	8.46	
93 Alpha Methyl Styrene	118	17.740	17.734	0.006	89	2181723	8.00	9.77	
94 n-Decane	57	17.843	17.837	0.006	94	2139210	8.00	7.35	
95 tert-Butylbenzene	119	17.945	17.939	0.006	92	5188127	8.00	8.59	
96 1,2,4-Trimethylbenzene	105	17.961	17.953	0.008	95	4611406	8.00	8.40	
98 sec-Butylbenzene	105	18.231	18.223	0.008	98	6810067	8.00	8.81	
97 1,3-Dichlorobenzene	146	18.231	18.223	0.008	97	3893907	8.00	9.41	
99 Benzyl chloride	91	18.312	18.303	0.009	99	4505667	8.00	8.70	
100 1,4-Dichlorobenzene	146	18.322	18.316	0.006	96	3654606	8.00	9.03	
101 4-Isopropyltoluene	119	18.409	18.400	0.009	97	5874319	8.00	8.61	
102 1,2,3-Trimethylbenzene	105	18.452	18.445	0.007	97	3285785	8.00	8.02	
103 Butylcyclohexane	83	18.522	18.520	0.002	96	3168620	8.00	7.84	
104 1,2-Dichlorobenzene	146	18.695	18.689	0.006	96	3656010	8.00	9.27	
105 2,3-Dihydroindene	117	18.700	18.693	0.007	93	4472405	8.00	8.94	
106 Indene	116	18.829	18.827	0.002	92	3210332	8.00	8.79	
107 n-Butylbenzene	91	18.856	18.854	0.002	97	5130283	8.00	8.04	
108 Undecane	57	19.212	19.209	0.003	90	2502915	8.00	7.33	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.245	19.239	0.006	97	4317337	8.00	8.47	
110 1,2-Dibromo-3-Chloropropan	157	19.315	19.308	0.007	97	1636568	8.00	9.67	
111 1,2,4,5-Tetramethylbenzene	119	19.638	19.634	0.004	96	5566375	8.00	9.09	
112 1,2,3,5-Tetramethylbenzene	119	19.692	19.689	0.003	95	3139429	8.00	8.53	
113 1,2,3,4-Tetramethylbenzene	119	20.086	20.083	0.003	97	4503997	8.00	8.96	
114 Dodecane	57	20.280	20.280	0.000	92	2482191	8.00	8.19	
115 1,2,4-Trichlorobenzene	180	20.420	20.418	0.002	93	3616219	8.00	10.4	
116 Naphthalene	128	20.550	20.545	0.005	99	6639288	8.00	9.13	
117 Benzo(b)thiophene	134	20.647	20.645	0.002	99	3862788	8.00	9.13	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	96	3465632	8.00	10.1	
119 1,2,3-Trichlorobenzene	180	20.825	20.825	0.000	96	3268537	8.00	9.98	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	99	5256646	24.2	34.8	
121 1-Methylnaphthalene	142	21.806	21.801	0.005	99	5132440	24.2	34.1	
A 122 C6 Range	1	7.348	(7.308-7.388)		0	5679805	8.00	7.50	
A 124 Toluene Range	1	13.022	(12.987-13.057)		0	7223375	8.00	7.84	
S 126 Xylenes, Total	100				0		24.0	23.5	
S 127 1,2-Dichloroethene, Total	1				0		16.0	15.3	

Reagents:

40L8DNP_00010

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC08.D

Injection Date: 15-Mar-2017 19:39:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L8

Worklist Smp#: 10

Client ID:

Purge Vol: 500.000 mL

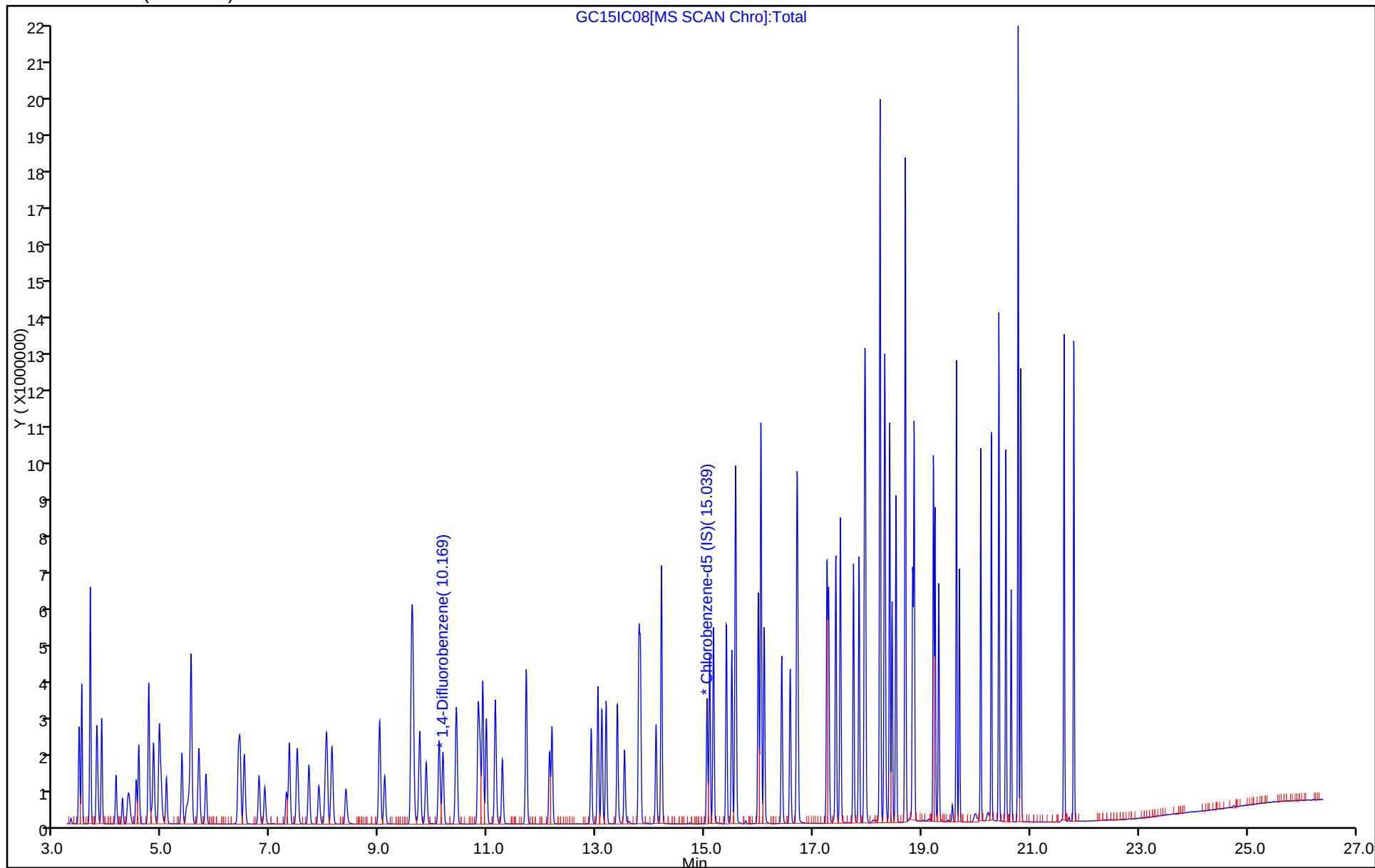
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC08.D

Injection Date: 15-Mar-2017 19:39:30

Instrument ID: MG

Lims ID: IC L8

Client ID:

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 10

Purge Vol: 500.000 mL

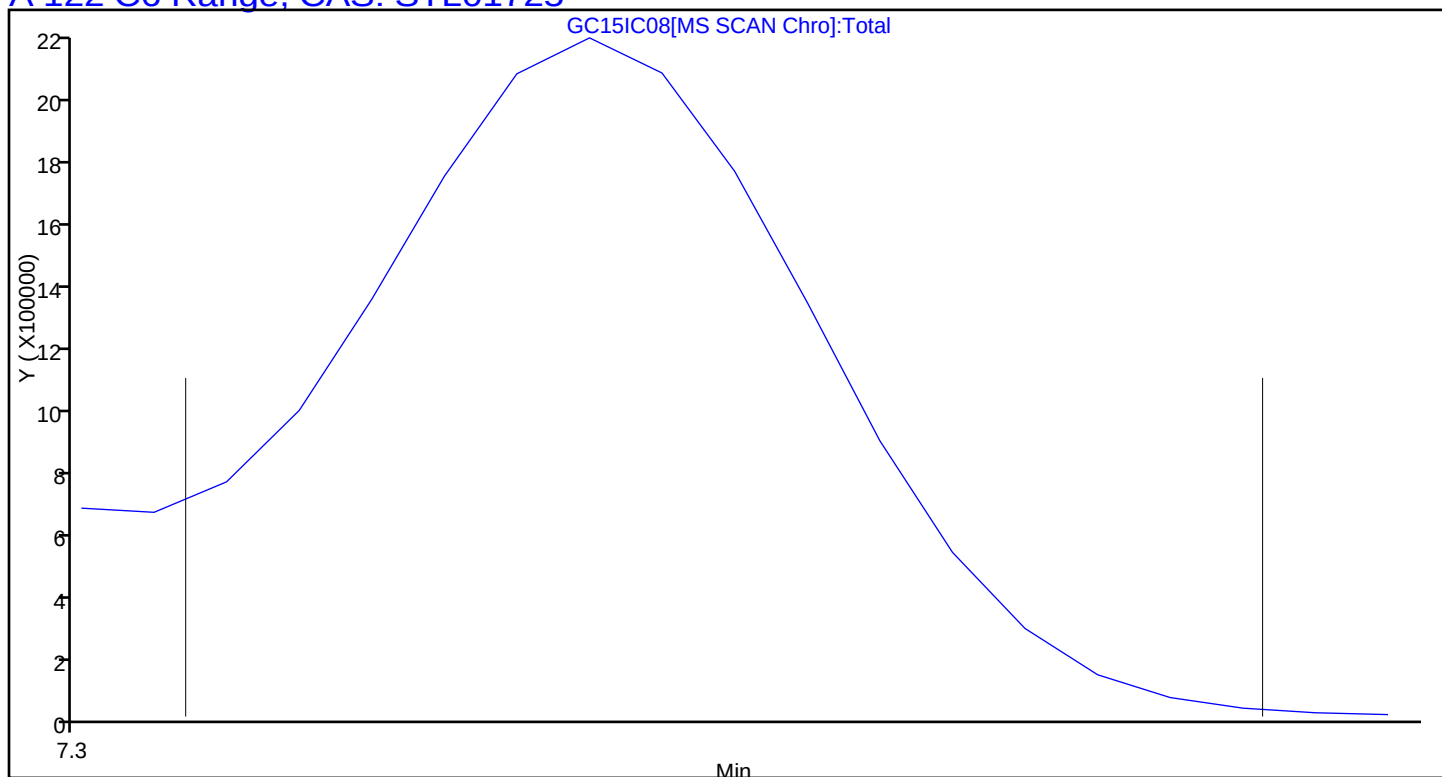
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC08.D

Injection Date: 15-Mar-2017 19:39:30

Instrument ID: MG

Lims ID: IC L8

Client ID:

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 10

Purge Vol: 500.000 mL

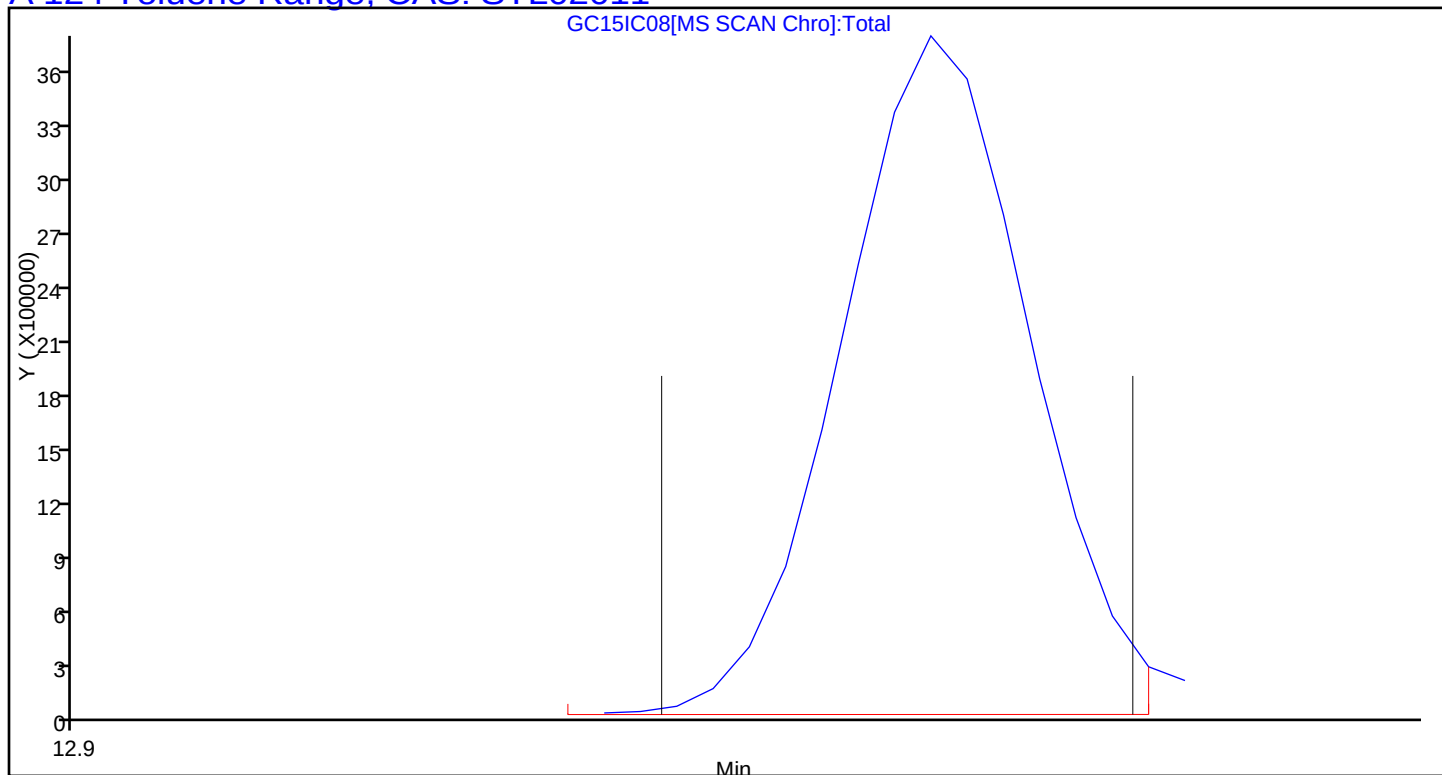
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Lims ID: IC L9
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 15-Mar-2017 20:21:30 ALS Bottle#: 8 Worklist Smp#: 11
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-011
 Misc. Info.: 083675
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 11-Apr-2017 10:07:15 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK028

First Level Reviewer: barlozhetskayaa

Date: 16-Mar-2017 14:32:37

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	8.023	7.993	0.030	87	442071	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.191	10.161	0.030	94	2104470	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.055	15.034	0.021	88	2112068	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.721	16.705	0.016	95	1689695	4.00	4.05	
6 Chlorodifluoromethane	67	3.461	3.457	0.004	96	648102	16.0	13.2	
7 Propene	41	3.472	3.466	0.006	97	1334692	16.0	11.4	
8 Dichlorodifluoromethane	85	3.515	3.510	0.005	99	6309639	16.0	13.5	
9 Chloromethane	52	3.666	3.659	0.007	97	381523	16.0	12.1	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.677	3.669	0.008	88	4340354	16.0	15.6	
11 Acetaldehyde	44	3.801	3.786	0.015	90	2180620	80.0	59.0	
12 Vinyl chloride	62	3.812	3.803	0.009	99	1585259	16.0	12.3	
13 Butadiene	54	3.887	3.876	0.011	71	1072769	16.0	12.5	
14 Butane	43	3.887	3.879	0.008	83	2112304	16.0	11.5	
15 Bromomethane	94	4.151	4.141	0.010	98	1772157	16.0	13.9	
16 Chloroethane	64	4.275	4.258	0.017	93	830849	16.0	13.3	
17 Ethanol	31	4.410	4.357	0.053	98	2735400	80.0	61.5	
18 Vinyl bromide	106	4.529	4.511	0.018	96	1728343	16.0	14.3	
19 2-Methylbutane	43	4.572	4.560	0.012	88	1595022	16.0	12.9	
21 Acrolein	56	4.761	4.742	0.019	82	330540	16.0	18.3	
20 Trichlorofluoromethane	101	4.761	4.743	0.018	99	6686372	16.0	14.3	
22 Acetonitrile	40	4.820	4.793	0.027	98	523809	16.0	14.1	
23 Acetone	58	4.852	4.835	0.017	99	1728119	47.0	39.8	
25 Pentane	72	4.955	4.937	0.018	97	323924	16.0	14.4	
24 Isopropyl alcohol	45	5.036	4.939	0.097	98	6495368	47.0	43.3	
26 Ethyl ether	31	5.090	5.075	0.015	85	1560739	16.0	15.3	
27 1,1-Dichloroethene	96	5.375	5.354	0.021	100	1773303	16.0	15.1	
28 Acrylonitrile	53	5.467	5.435	0.032	95	774315	16.0	14.4	
29 2-Methyl-2-propanol	59	5.559	5.467	0.092	95	2500383	16.0	13.9	
30 1,1,2-Trichloro-1,2,2-trif	101	5.543	5.521	0.022	91	4102363	16.0	15.1	
31 Methylene Chloride	84	5.683	5.656	0.027	86	1389569	16.0	13.1	

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	5.694	5.673	0.021	95	1527575	16.0	13.4	
33 Carbon disulfide	76	5.818	5.797	0.021	100	4378380	16.0	14.6	
34 trans-1,2-Dichloroethene	96	6.416	6.393	0.023	97	1798426	16.0	15.6	
35 2-Methylpentane	43	6.443	6.426	0.017	91	2917758	16.0	12.9	
36 Methyl tert-butyl ether	73	6.524	6.513	0.011	93	4996692	16.0	14.6	
37 1,1-Dichloroethane	63	6.799	6.771	0.028	100	3131504	16.0	13.9	
38 Vinyl acetate	43	6.907	6.881	0.026	99	3848118	16.0	14.9	
39 2-Butanone (MEK)	72	7.317	7.283	0.034	98	734059	16.0	14.6	
40 Hexane	56	7.354	7.336	0.018	92	1158063	16.0	13.3	
41 Isopropyl ether	45	7.511	7.483	0.028	93	4485105	16.0	14.0	
42 cis-1,2-Dichloroethene	96	7.721	7.691	0.030	93	1869513	16.0	15.3	
43 Ethyl acetate	43	7.910	7.880	0.030	98	3038641	16.0	14.3	
44 Chloroform	83	8.050	8.019	0.031	95	4480470	16.0	14.4	
45 Tert-butyl ethyl ether	59	8.147	8.122	0.025	94	4640558	16.0	14.4	
46 Tetrahydrofuran	42	8.401	8.387	0.014	89	1562956	16.0	13.8	
47 1,1,1-Trichloroethane	97	9.021	8.997	0.024	93	5396460	16.0	15.0	
48 1,2-Dichloroethane	62	9.118	9.087	0.031	99	3085614	16.0	14.5	
49 Benzene	78	9.608	9.582	0.026	95	5257486	16.0	14.7	
50 Cyclohexane	69	9.608	9.590	0.018	75	863041	16.0	14.3	
52 n-Butanol	31	9.673	9.606	0.067	84	591245	16.0	15.5	
51 Carbon tetrachloride	117	9.635	9.611	0.024	98	6365119	16.0	17.0	
53 2,3-Dimethylpentane	71	9.759	9.740	0.019	88	1206293	16.0	14.7	
54 Thiophene	84	9.884	9.855	0.029	93	2998594	16.0	15.0	
55 Tert-amyl methyl ether	73	10.126	10.100	0.026	98	5052003	16.0	15.4	
56 Isooctane	57	10.434	10.414	0.020	97	7435991	16.0	14.0	
57 n-Heptane	71	10.838	10.816	0.022	87	1934212	16.0	14.6	
58 1,2-Dichloropropane	63	10.876	10.846	0.030	82	1721134	16.0	14.2	
59 Trichloroethene	130	10.924	10.897	0.027	98	3208650	16.0	16.6	
60 Dibromomethane	93	10.989	10.961	0.028	89	2546424	16.0	15.8	
61 Dichlorobromomethane	83	11.156	11.126	0.030	97	5078012	16.0	16.4	
62 1,4-Dioxane	88	11.178	11.152	0.026	88	711143	16.0	14.7	
63 Methyl methacrylate	41	11.291	11.260	0.031	95	2072888	16.0	15.5	
64 Methylcyclohexane	83	11.722	11.704	0.018	92	4285973	16.0	15.4	
65 4-Methyl-2-pentanone (MIBK)	43	12.164	12.133	0.031	95	3039224	16.0	14.8	
66 cis-1,3-Dichloropropene	75	12.197	12.174	0.023	97	3479031	16.0	15.5	
67 trans-1,3-Dichloropropene	75	12.925	12.897	0.028	97	3558024	16.0	15.7	
68 Toluene	91	13.043	13.021	0.022	94	6568341	16.0	15.6	
69 1,1,2-Trichloroethane	83	13.119	13.091	0.028	97	1930179	16.0	15.3	
70 2-Methylthiophene	97	13.194	13.173	0.021	97	5571008	16.0	15.8	
71 3-Methylthiophene	97	13.405	13.381	0.024	99	5522937	16.0	15.8	
72 2-Hexanone	58	13.545	13.519	0.026	95	1588026	16.0	15.8	
73 n-Octane	85	13.798	13.780	0.018	83	2331636	16.0	15.3	
74 Chlorodibromomethane	129	13.831	13.803	0.028	97	6180157	16.0	19.6	
75 Ethylene Dibromide	107	14.117	14.092	0.024	98	4223710	16.0	17.1	
76 Tetrachloroethene	129	14.214	14.195	0.019	96	3341461	16.0	17.4	
77 Chlorobenzene	112	15.103	15.082	0.021	95	5872788	16.0	16.5	
78 2,3-Dimethylheptane	43	15.168	15.155	0.013	84	4561552	16.0	12.7	
79 Ethylbenzene	91	15.411	15.393	0.018	98	9378439	16.0	16.0	
80 2-Ethylthiophene	97	15.513	15.491	0.022	97	7482070	16.0	16.2	
81 m-Xylene & p-Xylene	91	15.578	15.559	0.019	98	15254685	32.0	32.1	
82 Bromoform	173	15.998	15.979	0.019	98	7554567	16.0	25.6	
83 Styrene	104	16.047	16.027	0.020	96	5980940	16.0	19.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.047	16.029	0.018	83	3451826	16.0	13.4	
85 o-Xylene	91	16.106	16.088	0.018	98	7495466	16.0	15.4	
86 1,1,2,2-Tetrachloroethane	83	16.430	16.411	0.019	98	4930342	16.0	16.1	
87 1,2,3-Trichloropropane	110	16.586	16.565	0.021	95	1792574	16.0	16.0	
88 Isopropylbenzene	105	16.710	16.692	0.018	96	11190142	16.0	15.9	
89 N-Propylbenzene	120	17.266	17.246	0.020	100	3302547	16.0	17.9	
90 2-Chlorotoluene	126	17.293	17.278	0.015	96	2937732	16.0	17.0	
91 4-Ethyltoluene	105	17.427	17.409	0.018	98	11212261	16.0	16.9	
92 1,3,5-Trimethylbenzene	120	17.508	17.490	0.018	93	5491943	16.0	17.6	
93 Alpha Methyl Styrene	118	17.751	17.734	0.017	90	4952983	16.0	19.7	
94 n-Decane	57	17.853	17.837	0.016	94	4265576	16.0	13.5	
95 tert-Butylbenzene	119	17.956	17.939	0.017	94	11616984	16.0	17.7	
96 1,2,4-Trimethylbenzene	105	17.972	17.953	0.019	95	10291549	16.0	17.3	
97 1,3-Dichlorobenzene	146	18.236	18.223	0.013	97	8814211	16.0	19.6	
99 Benzyl chloride	91	18.323	18.303	0.020	99	9733935	16.0	17.3	
100 1,4-Dichlorobenzene	146	18.333	18.316	0.017	97	8414582	16.0	19.1	
102 1,2,3-Trimethylbenzene	105	18.463	18.445	0.018	98	7156186	16.0	16.1	
103 Butylcyclohexane	83	18.533	18.520	0.013	96	6495136	16.0	14.8	
104 1,2-Dichlorobenzene	146	18.705	18.689	0.016	97	8346220	16.0	19.5	
105 2,3-Dihydroindene	117	18.705	18.693	0.012	94	10165330	16.0	18.7	
106 Indene	116	18.840	18.827	0.013	92	7281318	16.0	18.3	
107 n-Butylbenzene	91	18.867	18.854	0.013	97	10638853	16.0	15.3	
108 Undecane	57	19.218	19.209	0.009	89	4746027	16.0	12.8	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.250	19.239	0.011	97	9283464	16.0	16.8	
110 1,2-Dibromo-3-Chloropropan	157	19.320	19.308	0.012	94	3651422	16.0	19.9	
112 1,2,3,5-Tetramethylbenzene	119	19.698	19.689	0.009	95	6557823	16.0	16.4	
113 1,2,3,4-Tetramethylbenzene	119	20.091	20.083	0.008	97	8848915	16.0	16.2	
114 Dodecane	57	20.285	20.280	0.005	92	3238859	16.0	9.84	
115 1,2,4-Trichlorobenzene	180	20.426	20.418	0.008	93	6264846	16.0	16.6	
117 Benzo(b)thiophene	134	20.652	20.645	0.007	99	6618484	16.0	14.4	
118 Hexachlorobutadiene	225	20.781	20.776	0.005	93	5626941	16.0	15.1	
119 1,2,3-Trichlorobenzene	180	20.830	20.825	0.005	96	4303288	16.0	12.1	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	100	932756	48.4	5.68	
121 1-Methylnaphthalene	142	21.801	21.801	0.000	100	649010	48.4	3.97	
A 122 C6 Range	1	7.364	(7.324-7.404)		0	15062569	16.0	18.7	
A 124 Toluene Range	1	13.038	(13.003-13.073)		0	15867496	16.0	15.8	
S 126 Xylenes, Total	100				0		48.0	47.6	
S 127 1,2-Dichloroethene, Total	1				0		32.0	30.9	

Reagents:

40L9DNP_00013

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D

Injection Date: 15-Mar-2017 20:21:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L9

Worklist Smp#: 11

Client ID:

Purge Vol: 500.000 mL

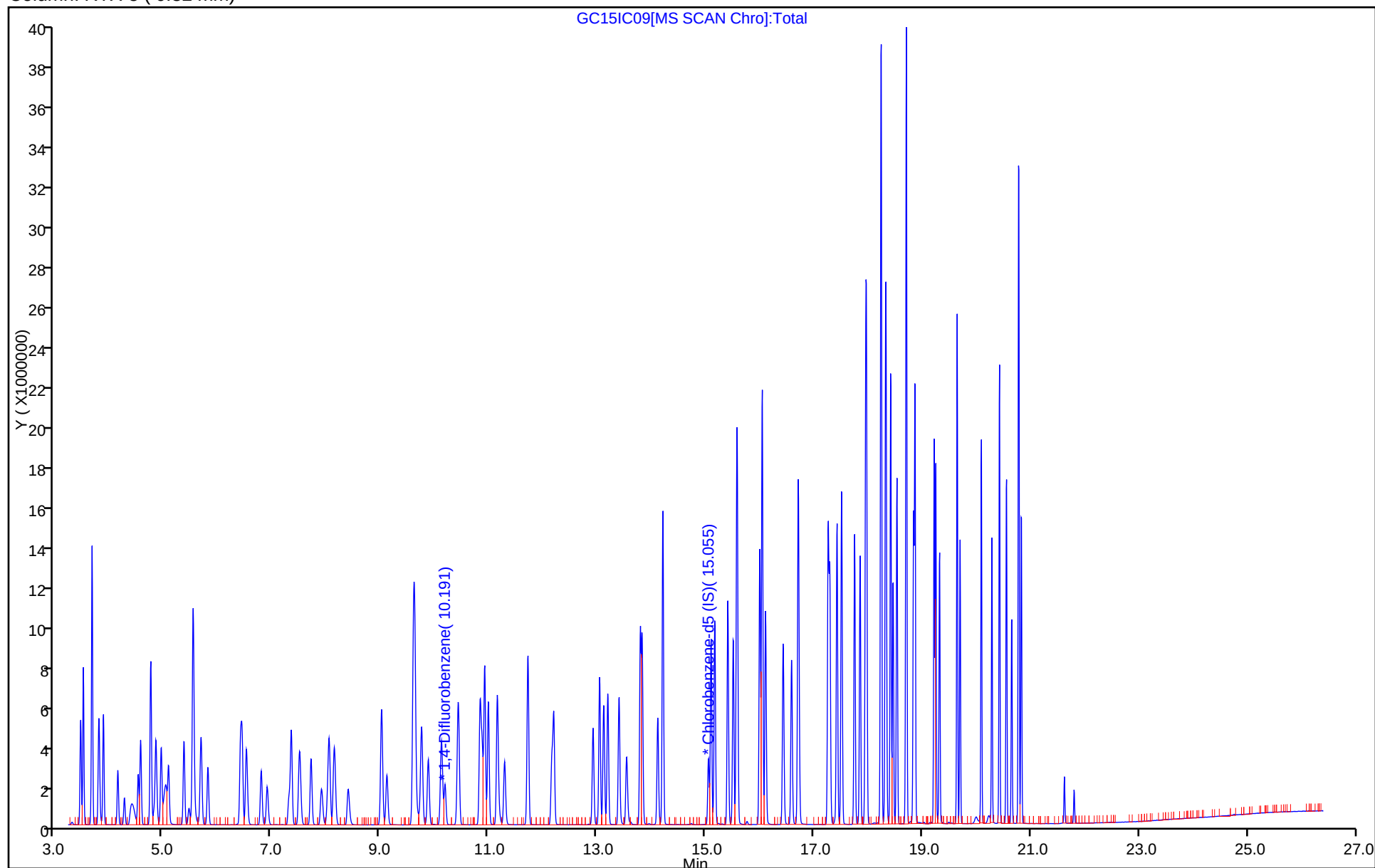
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D

Injection Date: 15-Mar-2017 20:21:30

Instrument ID: MG

Lims ID: IC L9

Client ID:

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 11

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

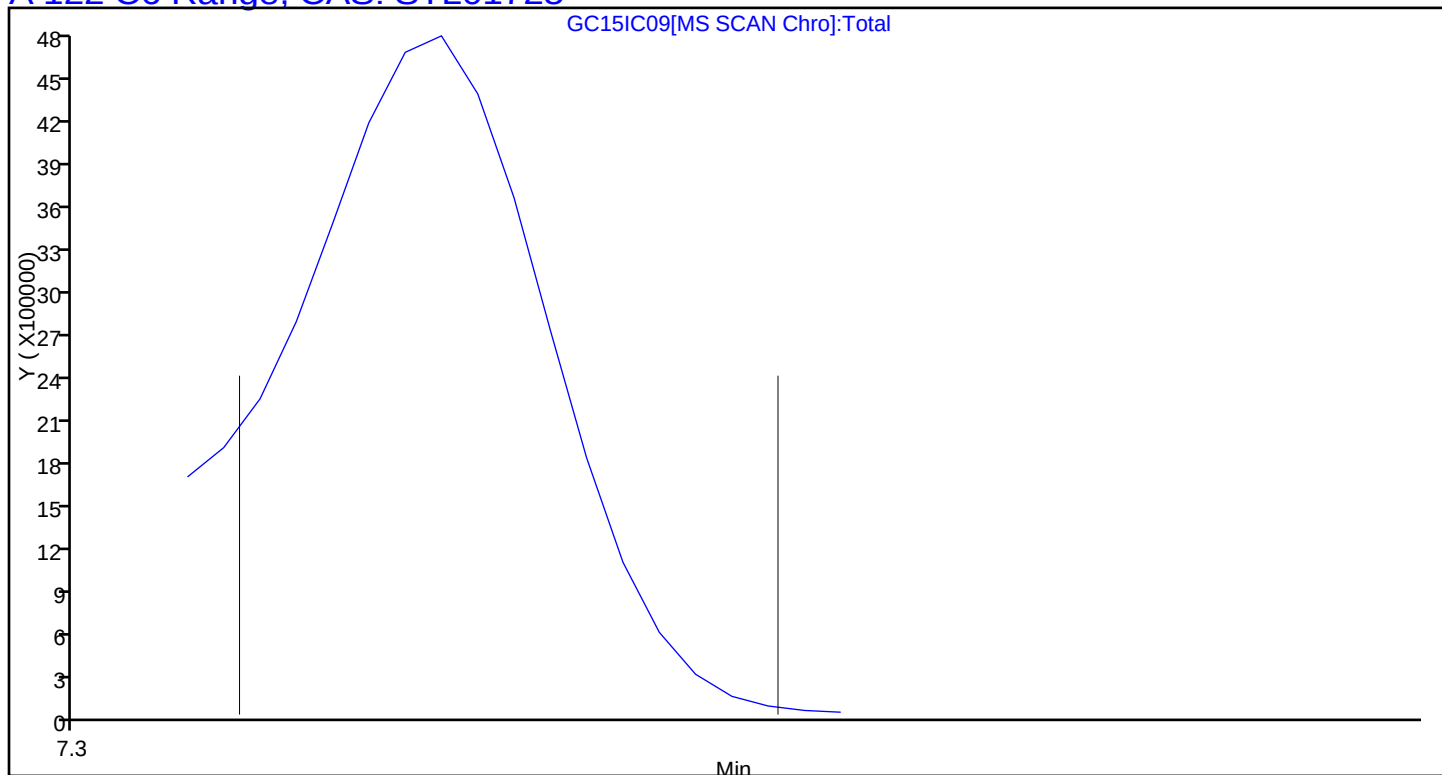
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D

Injection Date: 15-Mar-2017 20:21:30

Instrument ID: MG

Lims ID: IC L9

Client ID:

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 11

Purge Vol: 500.000 mL

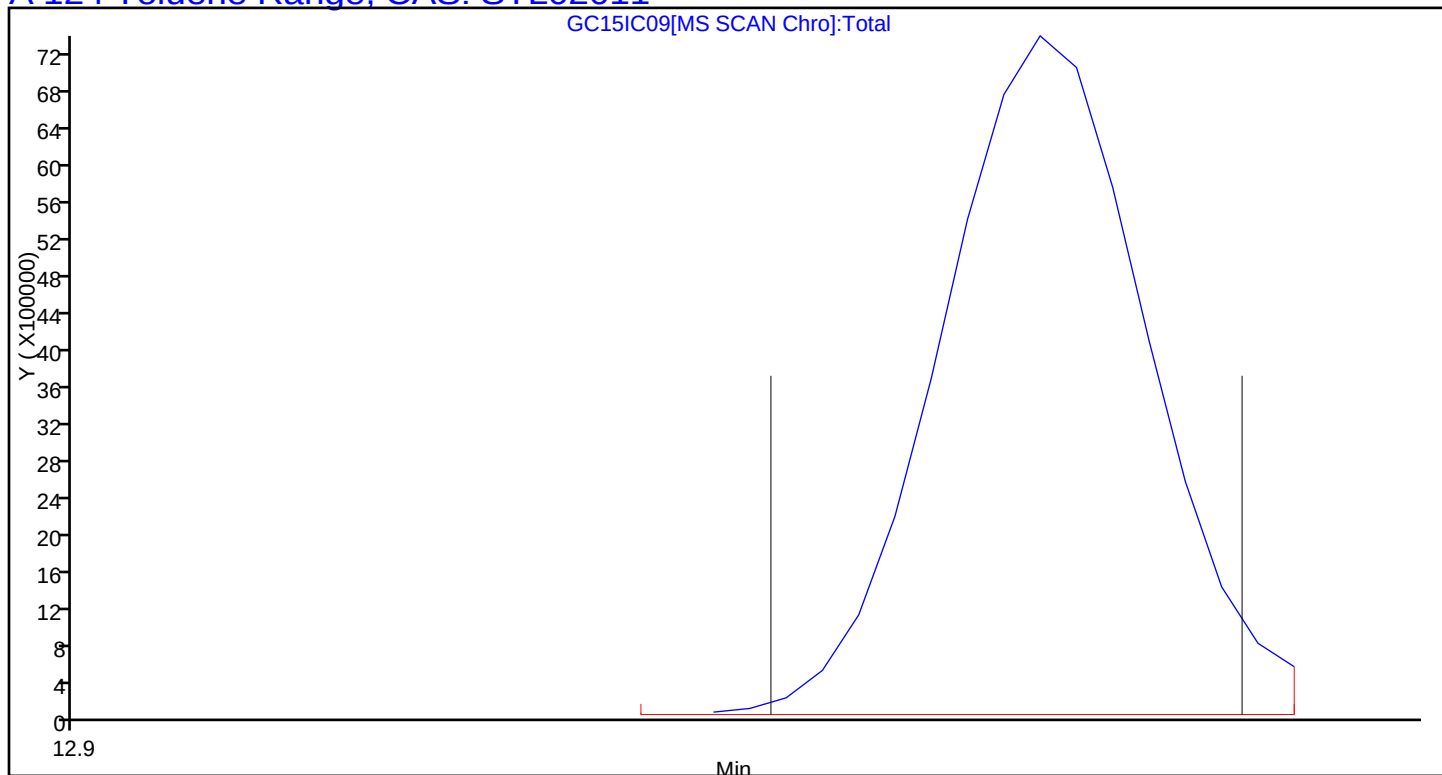
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 124 Toluene Range, CAS: STL02011

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1
 SDG No.: _____
 Lab Sample ID: ICV 140-9482/13 Calibration Date: 03/15/2017 21:46
 Instrument ID: MG Calib Start Date: 03/15/2017 14:36
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/15/2017 20:21
 Lab File ID: GICVC15.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	0.4447	0.4195		1.89	2.00	-5.7	35.0
Propene	Ave	1.058	0.9888		1.87	2.00	-6.5	35.0
Dichlorodifluoromethane	Ave	4.233	4.005		1.89	2.00	-5.4	35.0
Chloromethane	Ave	0.2848	0.2718		1.91	2.00	-4.6	35.0
1,2-Dichlorotetrafluoroethane	Ave	2.520	2.459		1.95	2.00	-2.4	35.0
Acetaldehyde	Ave	0.3344	0.2828		8.46	10.0	-15.4	35.0
Vinyl chloride	Ave	1.170	1.152		1.97	2.00	-1.6	35.0
1,3-Butadiene	Ave	0.7793	0.7583		1.95	2.00	-2.7	35.0
Butane	Ave	1.658	1.586		1.91	2.00	-4.3	35.0
Bromomethane	Ave	1.156	1.113		1.92	2.00	-3.8	35.0
Chloroethane	Ave	0.5663	0.5570		1.97	2.00	-1.6	35.0
Ethanol	Ave	0.4025	0.3613		8.98	10.0	-10.2	35.0
Vinyl bromide	Ave	1.096	1.145		2.09	2.00	4.5	35.0
2-Methylbutane	Ave	1.120	1.090		1.95	2.00	-2.7	35.0
Acrolein	Ave	0.1638	0.1720		2.10	2.00	5.0	35.0
Trichlorofluoromethane	Ave	4.216	3.908		1.85	2.00	-7.3	35.0
Acetonitrile	Ave	0.3357	0.2765		1.65	2.00	-17.6	35.0
Acetone	Ave	0.3928	0.2866		4.38	6.00	-27.0	35.0
Isopropyl alcohol	Ave	1.359	0.9130		4.03	6.00	-32.8	35.0
Pentane	Ave	0.2037	0.2013		1.98	2.00	-1.2	35.0
Ethyl ether	Ave	0.9241	0.7238		1.57	2.00	-21.7	35.0
1,1-Dichloroethene	Ave	1.066	1.018		1.91	2.00	-4.5	35.0
Acrylonitrile	Ave	0.4861	0.4093		1.68	2.00	-15.8	35.0
t-Butyl alcohol	Ave	1.624	1.441		1.77	2.00	-11.3	35.0
1,1,2-Trichlorotrifluoroethane	Ave	2.459	2.373		1.93	2.00	-3.5	35.0
Methylene Chloride	Ave	0.9619	0.8705		1.81	2.00	-9.5	35.0
3-Chloropropene	Ave	1.034	0.9533		1.84	2.00	-7.8	35.0
Carbon disulfide	Ave	2.716	2.579		1.90	2.00	-5.1	35.0
trans-1,2-Dichloroethene	Ave	1.042	1.038		1.99	2.00	-0.4	35.0
2-Methylpentane	Ave	2.045	2.174		2.13	2.00	6.3	35.0
Methyl tert-butyl ether	Ave	3.096	2.652		1.71	2.00	-14.3	35.0
1,1-Dichloroethane	Ave	2.035	1.947		1.91	2.00	-4.3	35.0
Vinyl acetate	Ave	2.337	2.078		1.78	2.00	-11.1	35.0
2-Butanone	Ave	0.4552	0.3871		1.70	2.00	-15.0	35.0
Hexane	Ave	0.7899	0.7696		1.95	2.00	-2.6	35.0
Isopropyl ether	Ave	2.907	2.543		1.75	2.00	-12.5	35.0
cis-1,2-Dichloroethene	Ave	1.107	1.110		2.00	2.00	0.2	35.0
Ethyl acetate	Ave	1.927	1.556		1.61	2.00	-19.3	35.0
Chloroform	Ave	2.806	2.675		1.91	2.00	-4.7	35.0
Tert-butyl ethyl ether	Ave	2.922	2.660		1.82	2.00	-9.0	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1
 SDG No.: _____
 Lab Sample ID: ICV 140-9482/13 Calibration Date: 03/15/2017 21:46
 Instrument ID: MG Calib Start Date: 03/15/2017 14:36
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/15/2017 20:21
 Lab File ID: GICVC15.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	1.021	0.8506		1.67	2.00	-16.7	35.0
1,1,1-Trichloroethane	Ave	3.246	3.062		1.89	2.00	-5.7	35.0
1,2-Dichloroethane	Ave	0.4038	0.3835		1.90	2.00	-5.0	35.0
Benzene	Ave	0.6795	0.6694		1.97	2.00	-1.5	35.0
1-Butanol	Ave	0.0727	0.0709		1.95	2.00	-2.5	35.0
Cyclohexane	Ave	0.1144	0.1156		2.02	2.00	1.0	35.0
Carbon tetrachloride	Ave	0.7102	0.6979		1.97	2.00	-1.7	35.0
2,3-Dimethylpentane	Ave	0.1564	0.1474		1.88	2.00	-5.8	35.0
Thiophene	Ave	0.3797	0.4001		2.11	2.00	5.4	35.0
Tert-amyl methyl ether	Ave	0.6230	0.5616		1.80	2.00	-9.9	35.0
2,2,4-Trimethylpentane	Ave	1.009	1.009		2.00	2.00	0.0	35.0
Heptane	Ave	0.2519	0.2479		1.97	2.00	-1.6	35.0
1,2-Dichloropropane	Ave	0.2308	0.2192		1.90	2.00	-5.0	35.0
Trichloroethene	Ave	0.3681	0.3977		2.16	2.00	8.0	35.0
Dibromomethane	Ave	0.3067	0.3038		1.98	2.00	-1.0	35.0
Bromodichloromethane	Ave	0.5888	0.5946		2.02	2.00	1.0	35.0
1,4-Dioxane	Ave	0.0920	0.0826		1.80	2.00	-10.2	35.0
Methyl methacrylate	Ave	0.2550	0.2190		1.72	2.00	-14.1	35.0
Methylcyclohexane	Ave	0.5294	0.4319		1.63	2.00	-18.4	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3903	0.3266		1.67	2.00	-16.3	35.0
cis-1,3-Dichloropropene	Ave	0.4274	0.4321		2.02	2.00	1.1	35.0
trans-1,3-Dichloropropene	Ave	0.4284	0.4207		1.96	2.00	-1.8	35.0
Toluene	Ave	0.7969	0.7662		1.92	2.00	-3.9	35.0
1,1,2-Trichloroethane	Ave	0.2389	0.2248		1.88	2.00	-5.9	35.0
2-Methylthiophene	Ave	0.6689	0.6855		2.05	2.00	2.5	35.0
3-Methylthiophene	Ave	0.6622	0.7015		2.12	2.00	5.9	35.0
2-Hexanone	Ave	0.1907	0.1692		1.77	2.00	-11.3	35.0
Octane	Ave	0.2880	0.2951		2.05	2.00	2.5	35.0
Dibromochloromethane	Ave	0.5960	0.6258		2.10	2.00	5.0	35.0
1,2-Dibromoethane	Ave	0.4679	0.4673		2.00	2.00	-0.1	35.0
Tetrachloroethene	Ave	0.3645	0.3606		1.98	2.00	-1.1	35.0
Chlorobenzene	Ave	0.6744	0.6601		1.96	2.00	-2.1	35.0
2,3-Dimethylheptane	Ave	0.6822	0.6877		2.02	2.00	0.8	35.0
Ethylbenzene	Ave	1.113	0.9942		1.79	2.00	-10.7	35.0
2-Ethylthiophene	Ave	0.8768	0.8035		1.83	2.00	-8.4	35.0
m-Xylene & p-Xylene	Ave	0.8990	0.8022		3.57	4.00	-10.8	35.0
Bromoform	Ave	0.5594	0.6080		2.17	2.00	8.7	35.0
Nonane	Ave	0.4886	0.4940		2.02	2.00	1.1	35.0
Styrene	Ave	0.5931	0.5871		1.98	2.00	-1.0	35.0
o-Xylene	Ave	0.9191	0.8040		1.75	2.00	-12.5	35.0
1,1,2,2-Tetrachloroethane	Ave	0.5794	0.5324		1.84	2.00	-8.1	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1
 SDG No.: _____
 Lab Sample ID: ICV 140-9482/13 Calibration Date: 03/15/2017 21:46
 Instrument ID: MG Calib Start Date: 03/15/2017 14:36
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/15/2017 20:21
 Lab File ID: GICVC15.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	0.2120	0.1848		1.74	2.00	-12.9	35.0
Isopropylbenzene	Ave	1.335	1.181		1.77	2.00	-11.6	35.0
Propylbenzene	Ave	0.3502	0.3227		1.84	2.00	-7.8	35.0
2-Chlorotoluene	Ave	0.3267	0.3097		1.90	2.00	-5.2	35.0
4-Ethyltoluene	Ave	1.257	1.076		1.71	2.00	-14.4	35.0
1,3,5-Trimethylbenzene	Ave	0.5895	0.5364		1.82	2.00	-9.0	35.0
Alpha Methyl Styrene	Ave	0.4751	0.4525		1.90	2.00	-4.8	35.0
Decane	Ave	0.5991	0.5941		1.98	2.00	-0.8	35.0
tert-Butylbenzene	Ave	1.242	1.099		1.77	2.00	-11.5	35.0
1,2,4-Trimethylbenzene	Ave	1.129	1.005		1.78	2.00	-11.0	35.0
1,3-Dichlorobenzene	Ave	0.8518	0.7863		1.85	2.00	-7.7	35.0
sec-Butylbenzene	Ave	1.590	1.436		1.81	2.00	-9.7	35.0
Benzyl chloride	Ave	1.065	0.9701		1.82	2.00	-8.9	35.0
1,4-Dichlorobenzene	Ave	0.8325	0.7695		1.85	2.00	-7.6	35.0
4-Isopropyltoluene	Ave	1.404	1.253		1.78	2.00	-10.8	35.0
1,2,3-Trimethylbenzene	Ave	0.8430	0.8126		1.93	2.00	-3.6	35.0
Butylcyclohexane	Ave	0.8320	0.7981		1.92	2.00	-4.1	35.0
1,2-Dichlorobenzene	Ave	0.8117	0.7324		1.80	2.00	-9.8	35.0
Indane	Ave	1.029	0.8707		1.69	2.00	-15.4	35.0
Indene	Ave	0.7517	0.8606		2.29	2.00	14.5	35.0
Butylbenzene	Ave	1.313	1.174		1.79	2.00	-10.6	35.0
Undecane	Ave	0.7029	0.6633		1.89	2.00	-5.6	35.0
1,2-Dimethyl-4-Ethylbenzene	Ave	1.048	1.175		2.24	2.00	12.1	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.3481	0.2673		1.54	2.00	-23.2	35.0
1,2,4,5-Tetramethylbenzene	Ave	1.259	1.269		2.02	2.00	0.8	35.0
1,2,3,5-Tetramethylbenzene	Ave	0.7577	0.7776		2.05	2.00	2.6	35.0
1,2,3,4-Tetramethylbenzene	Ave	1.035	1.033		2.00	2.00	-0.2	35.0
Dodecane	Ave	0.6236	0.5937		1.90	2.00	-4.8	35.0
1,2,4-Trichlorobenzene	Ave	0.7144	0.7323		2.05	2.00	2.5	35.0
Naphthalene	Ave	1.497	1.474		1.97	2.00	-1.5	35.0
Benzo (b) thiophene	Ave	0.8706	0.9324		2.14	2.00	7.1	35.0
Hexachlorobutadiene	Ave	0.7045	0.6788		1.93	2.00	-3.6	35.0
1,2,3-Trichlorobenzene	Ave	0.6741	0.7177		2.13	2.00	6.5	35.0
2-Methylnaphthalene	Ave	0.3108	0.2469		4.97	6.25	-20.6	50.0
1-Methylnaphthalene	Ave	0.3095	0.2503		5.06	6.25	-19.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7905	0.7720		3.91	4.00	-2.3	35.0

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GICVC15.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 15-Mar-2017 21:46:30 ALS Bottle#: 9 Worklist Smp#: 13
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-013
 Misc. Info.: 083671
 Operator ID: 7126 Instrument ID: MG
 Sublist:

Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:43:35 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D

Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: barlozhetskayaa

Date: 16-Mar-2017 14:45:52

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	7.991	7.993	-0.002	81	414852	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.158	10.161	-0.003	94	2002906	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.033	15.034	-0.001	87	1960813	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.705	16.705	0.000	95	1513670	4.00	3.91	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	96	87006	2.00	1.89	
7 Propene	41	3.466	3.466	0.000	98	205110	2.00	1.87	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	99	830764	2.00	1.89	
9 Chloromethane	52	3.660	3.659	0.001	97	56384	2.00	1.91	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.666	3.669	-0.003	91	510128	2.00	1.95	
11 Acetaldehyde	44	3.785	3.786	-0.001	88	293266	10.0	8.46	
12 Vinyl chloride	62	3.801	3.803	-0.002	99	238858	2.00	1.97	
13 Butadiene	54	3.876	3.876	0.000	85	157294	2.00	1.95	
14 Butane	43	3.876	3.879	-0.003	94	328986	2.00	1.91	
15 Bromomethane	94	4.140	4.141	-0.001	98	230800	2.00	1.92	
16 Chloroethane	64	4.254	4.258	-0.004	93	115537	2.00	1.97	
17 Ethanol	31	4.345	4.357	-0.012	98	374711	10.0	8.98	
18 Vinyl bromide	106	4.507	4.511	-0.004	97	237558	2.00	2.09	
19 2-Methylbutane	43	4.556	4.560	-0.004	88	226177	2.00	1.95	
21 Acrolein	56	4.734	4.742	-0.008	29	35670	2.00	2.10	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	99	810646	2.00	1.85	
22 Acetonitrile	40	4.788	4.793	-0.005	98	57349	2.00	1.65	
23 Acetone	58	4.825	4.835	-0.010	99	178365	6.00	4.38	
25 Pentane	72	4.933	4.937	-0.004	95	41761	2.00	1.98	
24 Isopropyl alcohol	45	4.922	4.939	-0.017	94	568170	6.00	4.03	
26 Ethyl ether	31	5.068	5.075	-0.007	92	150139	2.00	1.57	
27 1,1-Dichloroethene	96	5.354	5.354	0.000	98	211079	2.00	1.91	
28 Acrylonitrile	53	5.429	5.435	-0.006	94	84890	2.00	1.68	
29 2-Methyl-2-propanol	59	5.445	5.467	-0.022	94	298931	2.00	1.77	
30 1,1,2-Trichloro-1,2,2-trif	101	5.521	5.521	0.000	93	492319	2.00	1.93	
31 Methylene Chloride	84	5.656	5.656	0.000	87	180559	2.00	1.81	

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	5.666	5.673	-0.007	93	197747	2.00	1.84	
33 Carbon disulfide	76	5.796	5.797	-0.001	100	534876	2.00	1.90	
34 trans-1,2-Dichloroethene	96	6.389	6.393	-0.004	98	215378	2.00	1.99	
35 2-Methylpentane	43	6.421	6.426	-0.005	93	450992	2.00	2.13	
36 Methyl tert-butyl ether	73	6.502	6.513	-0.011	95	550186	2.00	1.71	
37 1,1-Dichloroethane	63	6.772	6.771	0.001	100	403782	2.00	1.91	
38 Vinyl acetate	43	6.874	6.881	-0.007	99	431077	2.00	1.78	
39 2-Butanone (MEK)	72	7.273	7.283	-0.010	99	80291	2.00	1.70	
40 Hexane	56	7.333	7.336	-0.003	87	159634	2.00	1.95	
41 Isopropyl ether	45	7.478	7.483	-0.005	94	527483	2.00	1.75	
42 cis-1,2-Dichloroethene	96	7.689	7.691	-0.002	95	230210	2.00	2.00	
43 Ethyl acetate	43	7.872	7.880	-0.008	98	322802	2.00	1.61	
44 Chloroform	83	8.018	8.019	-0.001	97	554919	2.00	1.91	
45 Tert-butyl ethyl ether	59	8.115	8.122	-0.007	94	551783	2.00	1.82	
46 Tetrahydrofuran	42	8.373	8.387	-0.014	90	176435	2.00	1.67	
47 1,1,1-Trichloroethane	97	8.994	8.997	-0.003	94	635165	2.00	1.89	
48 1,2-Dichloroethane	62	9.085	9.087	-0.002	99	384058	2.00	1.90	
49 Benzene	78	9.576	9.582	-0.006	96	670379	2.00	1.97	
50 Cyclohexane	69	9.592	9.590	0.002	94	115721	2.00	2.02	
52 n-Butanol	31	9.581	9.606	-0.025	61	70993	2.00	1.95	
51 Carbon tetrachloride	117	9.614	9.611	0.003	97	698916	2.00	1.97	
53 2,3-Dimethylpentane	71	9.732	9.740	-0.008	89	147657	2.00	1.88	
54 Thiophene	84	9.851	9.855	-0.004	95	400715	2.00	2.11	
55 Tert-amyl methyl ether	73	10.094	10.100	-0.006	98	562460	2.00	1.80	
56 Isooctane	57	10.412	10.414	-0.002	97	1010798	2.00	2.00	
57 n-Heptane	71	10.816	10.816	0.000	90	248245	2.00	1.97	
58 1,2-Dichloropropane	63	10.843	10.846	-0.003	84	219508	2.00	1.90	
59 Trichloroethene	130	10.897	10.897	0.000	97	398239	2.00	2.16	
60 Dibromomethane	93	10.962	10.961	0.001	94	304219	2.00	1.98	
61 Dichlorobromomethane	83	11.124	11.126	-0.002	98	595437	2.00	2.02	
62 1,4-Dioxane	88	11.140	11.152	-0.012	90	82734	2.00	1.80	
63 Methyl methacrylate	41	11.253	11.260	-0.007	94	219347	2.00	1.72	
64 Methylcyclohexane	83	11.701	11.704	-0.003	95	432488	2.00	1.63	
65 4-Methyl-2-pentanone (MIBK)	43	12.121	12.133	-0.012	96	327042	2.00	1.67	
66 cis-1,3-Dichloropropene	75	12.175	12.174	0.001	95	432682	2.00	2.02	
67 trans-1,3-Dichloropropene	75	12.892	12.897	-0.005	97	412484	2.00	1.96	
68 Toluene	91	13.022	13.021	0.001	94	751169	2.00	1.92	
69 1,1,2-Trichloroethane	83	13.092	13.091	0.001	99	220432	2.00	1.88	
70 2-Methylthiophene	97	13.173	13.173	0.000	97	672059	2.00	2.05	
71 3-Methylthiophene	97	13.378	13.381	-0.003	99	687752	2.00	2.12	
72 2-Hexanone	58	13.507	13.519	-0.012	94	165901	2.00	1.77	
73 n-Octane	85	13.777	13.780	-0.003	89	289336	2.00	2.05	
74 Chlorodibromomethane	129	13.798	13.803	-0.005	97	613573	2.00	2.10	
75 Ethylene Dibromide	107	14.089	14.092	-0.003	98	458135	2.00	2.00	
76 Tetrachloroethene	129	14.192	14.195	-0.003	95	353576	2.00	1.98	
77 Chlorobenzene	112	15.082	15.082	0.000	93	647192	2.00	1.96	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	89	674189	2.00	2.02	
79 Ethylbenzene	91	15.389	15.393	-0.004	99	974667	2.00	1.79	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	787782	2.00	1.83	
81 m-Xylene & p-Xylene	91	15.556	15.559	-0.003	99	1572879	4.00	3.57	
82 Bromoform	173	15.977	15.979	-0.002	96	596040	2.00	2.17	
83 Styrene	104	16.025	16.027	-0.002	98	575572	2.00	1.98	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.025	16.029	-0.004	88	484291	2.00	2.02	
85 o-Xylene	91	16.085	16.088	-0.003	98	788290	2.00	1.75	
86 1,1,2,2-Tetrachloroethane	83	16.408	16.411	-0.003	99	521988	2.00	1.84	
87 1,2,3-Trichloropropane	110	16.564	16.565	-0.001	97	181130	2.00	1.74	
88 Isopropylbenzene	105	16.688	16.692	-0.004	96	1157421	2.00	1.77	
89 N-Propylbenzene	120	17.244	17.246	-0.002	99	316400	2.00	1.84	
90 2-Chlorotoluene	126	17.276	17.278	-0.002	97	303603	2.00	1.90	
91 4-Ethyltoluene	105	17.406	17.409	-0.003	98	1054948	2.00	1.71	
92 1,3,5-Trimethylbenzene	120	17.487	17.490	-0.003	92	525880	2.00	1.82	
93 Alpha Methyl Styrene	118	17.735	17.734	0.001	88	443671	2.00	1.90	
94 n-Decane	57	17.837	17.837	0.000	93	582480	2.00	1.98	
95 tert-Butylbenzene	119	17.939	17.939	0.000	94	1077330	2.00	1.77	
96 1,2,4-Trimethylbenzene	105	17.950	17.953	-0.003	96	985498	2.00	1.78	
97 1,3-Dichlorobenzene	146	18.220	18.223	-0.003	98	770930	2.00	1.85	
98 sec-Butylbenzene	105	18.225	18.225	0.000	98	1407422	2.00	1.81	
99 Benzyl chloride	91	18.301	18.303	-0.002	98	951071	2.00	1.82	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	95	754441	2.00	1.85	
101 4-Isopropyltoluene	119	18.398	18.402	-0.004	97	1228683	2.00	1.78	
102 1,2,3-Trimethylbenzene	105	18.446	18.445	0.001	98	796705	2.00	1.93	
103 Butylcyclohexane	83	18.516	18.520	-0.004	96	782474	2.00	1.92	
104 1,2-Dichlorobenzene	146	18.689	18.689	0.000	95	718038	2.00	1.80	
105 2,3-Dihydroindene	117	18.694	18.693	0.001	93	853643	2.00	1.69	
106 Indene	116	18.824	18.827	-0.003	95	843748	2.00	2.29	
107 n-Butylbenzene	91	18.851	18.854	-0.003	98	1150538	2.00	1.79	
108 Undecane	57	19.212	19.209	0.003	92	650345	2.00	1.89	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.239	19.239	0.000	97	1152241	2.00	2.24	
110 1,2-Dibromo-3-Chloropropan	157	19.309	19.308	0.001	97	262104	2.00	1.54	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.635	-0.002	96	1244340	2.00	2.02	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	95	762366	2.00	2.05	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	96	1012561	2.00	2.00	
114 Dodecane	57	20.280	20.280	0.000	94	582064	2.00	1.90	
115 1,2,4-Trichlorobenzene	180	20.420	20.418	0.002	94	717902	2.00	2.05	
116 Naphthalene	128	20.544	20.546	-0.002	99	1444732	2.00	1.97	
117 Benzo(b)thiophene	134	20.646	20.645	0.001	99	914096	2.00	2.14	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	95	665473	2.00	1.93	
119 1,2,3-Trichlorobenzene	180	20.824	20.825	-0.001	95	703642	2.00	2.13	
120 2-Methylnaphthalene	142	21.622	21.623	-0.001	100	756538	6.25	4.97	
121 1-Methylnaphthalene	142	21.800	21.801	-0.001	100	767056	6.25	5.06	
A 122 C6 Range	1	7.343	(7.303-7.383)		0	1488733	2.00	1.94	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	1863072	2.00	1.94	
S 126 Xylenes, Total	100				0		6.00	5.32	
S 127 1,2-Dichloroethene, Total	1				0		4.00	4.00	

Reagents:

40CV101S_00036

Amount Added: 100.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GICVC15.D

Injection Date: 15-Mar-2017 21:46:30

Instrument ID: MG

Operator ID: 7126

Lims ID: ICV

Worklist Smp#: 13

Client ID:

Purge Vol: 500.000 mL

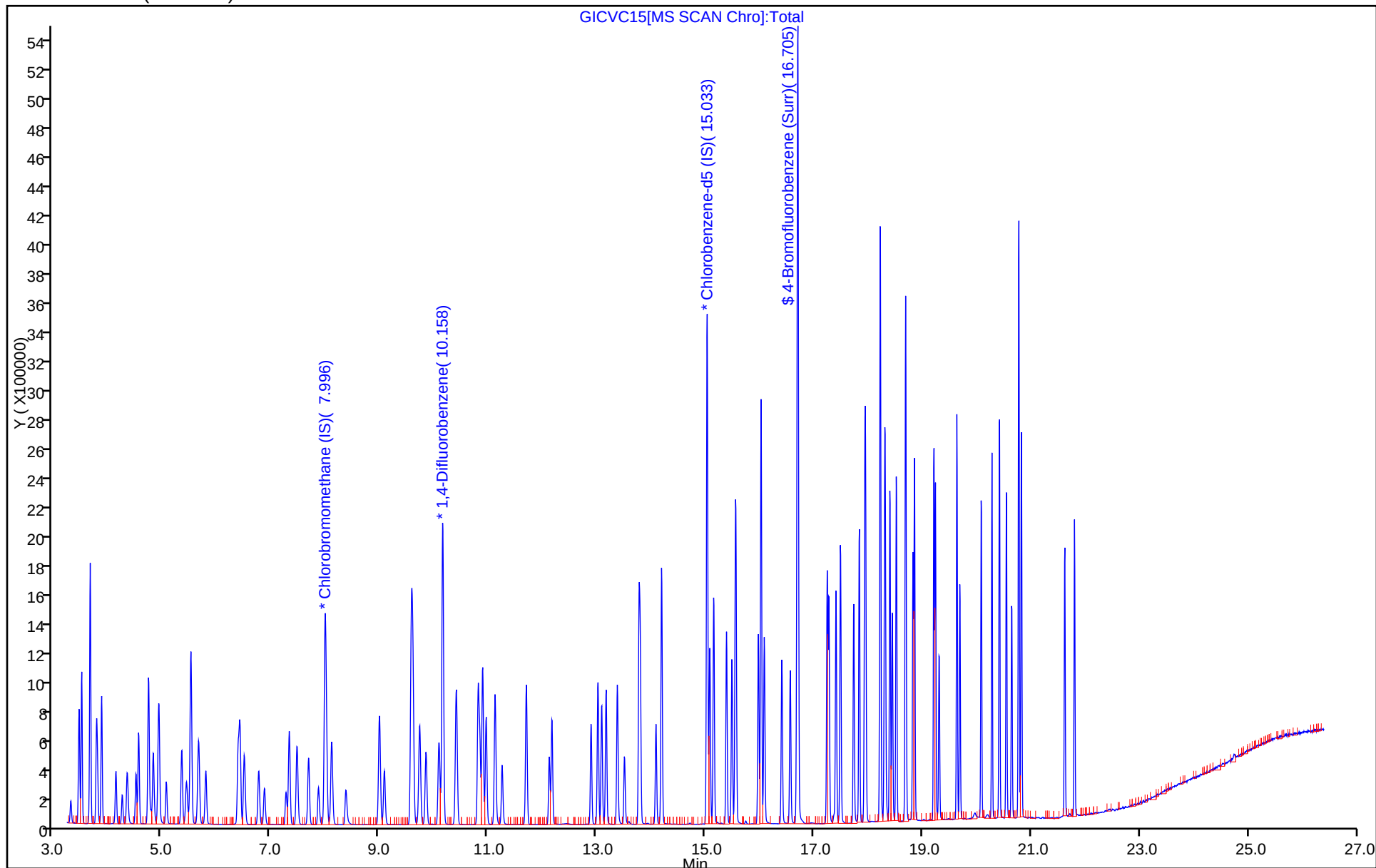
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MG_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.: 140-7698-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-10156/2 Calibration Date: 04/05/2017 12:12
 Instrument ID: MG Calib Start Date: 03/15/2017 14:36
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/15/2017 20:21
 Lab File ID: GCCVD04.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	0.4447	0.5590		2.52	2.00	25.7	30.0
Propene	Ave	1.058	0.8411		1.59	2.00	-20.5	30.0
Dichlorodifluoromethane	Ave	4.233	5.236		2.47	2.00	23.7	30.0
Chloromethane	Ave	0.2848	0.2355		1.65	2.00	-17.3	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.520	3.077		2.44	2.00	22.1	30.0
Acetaldehyde	Ave	0.3344	0.2239		6.70	10.0	-33.0*	30.0
Vinyl chloride	Ave	1.170	1.111		1.90	2.00	-5.0	30.0
1,3-Butadiene	Ave	0.7793	0.6587		1.69	2.00	-15.5	30.0
Butane	Ave	1.658	1.428		1.72	2.00	-13.9	30.0
Bromomethane	Ave	1.156	1.208		2.09	2.00	4.5	30.0
Chloroethane	Ave	0.5663	0.5065		1.79	2.00	-10.6	30.0
Ethanol	Ave	0.4025	0.3182		7.91	10.0	-20.9	30.0
Vinyl bromide	Ave	1.096	1.242		2.27	2.00	13.4	30.0
2-Methylbutane	Ave	1.120	1.018		1.82	2.00	-9.1	30.0
Acrolein	Ave	0.1638	0.1438		1.76	2.00	-12.2	30.0
Trichlorofluoromethane	Ave	4.216	5.578		2.65	2.00	32.3*	30.0
Acetonitrile	Ave	0.3357	0.2471		1.47	2.00	-26.4	30.0
Acetone	Ave	0.3928	0.2619		4.00	6.00	-33.3*	30.0
Isopropyl alcohol	Ave	1.359	0.9099		4.02	6.00	-33.0*	30.0
Pentane	Ave	0.2037	0.2196		2.16	2.00	7.8	30.0
Ethyl ether	Ave	0.9241	0.7926		1.72	2.00	-14.2	30.0
1,1-Dichloroethene	Ave	1.066	1.151		2.16	2.00	7.9	30.0
Acrylonitrile	Ave	0.4861	0.3891		1.60	2.00	-20.0	30.0
t-Butyl alcohol	Ave	1.624	1.516		1.87	2.00	-6.6	30.0
1,1,2-Trichlorotrifluoroethane	Ave	2.459	2.879		2.34	2.00	17.1	30.0
Methylene Chloride	Ave	0.9619	0.9627		2.00	2.00	0.0	30.0
3-Chloropropene	Ave	1.034	1.157		2.24	2.00	11.9	30.0
Carbon disulfide	Ave	2.716	2.939		2.17	2.00	8.2	30.0
trans-1,2-Dichloroethene	Ave	1.042	1.016		1.95	2.00	-2.5	30.0
2-Methylpentane	Ave	2.045	1.833		1.79	2.00	-10.4	30.0
Methyl tert-butyl ether	Ave	3.096	2.704		1.75	2.00	-12.7	30.0
1,1-Dichloroethane	Ave	2.035	1.880		1.85	2.00	-7.6	30.0
Vinyl acetate	Ave	2.337	1.774		1.52	2.00	-24.1	30.0
2-Butanone	Ave	0.4552	0.3489		1.53	2.00	-23.4	30.0
Hexane	Ave	0.7899	0.6688		1.69	2.00	-15.3	30.0
Isopropyl ether	Ave	2.907	2.087		1.44	2.00	-28.2	30.0
cis-1,2-Dichloroethene	Ave	1.107	1.110		2.01	2.00	0.2	30.0
Ethyl acetate	Ave	1.927	1.352		1.40	2.00	-29.8	30.0
Chloroform	Ave	2.806	3.129		2.23	2.00	11.5	30.0
Tert-butyl ethyl ether	Ave	2.922	2.498		1.71	2.00	-14.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-10156/2 Calibration Date: 04/05/2017 12:12
 Instrument ID: MG Calib Start Date: 03/15/2017 14:36
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/15/2017 20:21
 Lab File ID: GCCVD04.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	1.021	0.7190		1.41	2.00	-29.6	30.0
1,1,1-Trichloroethane	Ave	3.246	3.922		2.42	2.00	20.8	30.0
1,2-Dichloroethane	Ave	0.4038	0.4693		2.33	2.00	16.2	30.0
Benzene	Ave	0.6795	0.6636		1.95	2.00	-2.3	30.0
1-Butanol	Ave	0.0727	0.0651		1.79	2.00	-10.5	30.0
Cyclohexane	Ave	0.1144	0.1143		2.00	2.00	-0.1	30.0
Carbon tetrachloride	Ave	0.7102	0.9215		2.60	2.00	29.8	30.0
2,3-Dimethylpentane	Ave	0.1564	0.1407		1.80	2.00	-10.1	30.0
Thiophene	Ave	0.3797	0.3899		2.06	2.00	2.7	30.0
Tert-amyl methyl ether	Ave	0.6230	0.5765		1.85	2.00	-7.5	30.0
2,2,4-Trimethylpentane	Ave	1.009	0.9202		1.83	2.00	-8.8	30.0
Heptane	Ave	0.2519	0.2450		1.95	2.00	-2.8	30.0
1,2-Dichloropropane	Ave	0.2308	0.2084		1.81	2.00	-9.7	30.0
Trichloroethene	Ave	0.3681	0.4258		2.31	2.00	15.7	30.0
Dibromomethane	Ave	0.3067	0.3507		2.29	2.00	14.3	30.0
Bromodichloromethane	Ave	0.5888	0.7182		2.44	2.00	22.0	30.0
1,4-Dioxane	Ave	0.0920	0.0782		1.70	2.00	-14.9	30.0
Methyl methacrylate	Ave	0.2550	0.2081		1.63	2.00	-18.4	30.0
Methylcyclohexane	Ave	0.5294	0.4361		1.65	2.00	-17.6	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3903	0.2942		1.51	2.00	-24.6	30.0
cis-1,3-Dichloropropene	Ave	0.4274	0.4605		2.16	2.00	7.8	30.0
trans-1,3-Dichloropropene	Ave	0.4284	0.4530		2.12	2.00	5.7	30.0
Toluene	Ave	0.7969	0.7683		1.93	2.00	-3.6	30.0
1,1,2-Trichloroethane	Ave	0.2389	0.2267		1.90	2.00	-5.1	30.0
2-Methylthiophene	Ave	0.6689	0.7031		2.10	2.00	5.1	30.0
3-Methylthiophene	Ave	0.6622	0.7195		2.17	2.00	8.7	30.0
2-Hexanone	Ave	0.1907	0.1354		1.42	2.00	-29.0	30.0
Octane	Ave	0.2880	0.2899		2.01	2.00	0.7	30.0
Dibromochloromethane	Ave	0.5960	0.7678		2.58	2.00	28.8	30.0
1,2-Dibromoethane	Ave	0.4679	0.5042		2.16	2.00	7.8	30.0
Tetrachloroethene	Ave	0.3645	0.4084		2.24	2.00	12.0	30.0
Chlorobenzene	Ave	0.6744	0.6858		2.03	2.00	1.7	30.0
2,3-Dimethylheptane	Ave	0.6822	0.6313		1.85	2.00	-7.5	30.0
Ethylbenzene	Ave	1.113	1.031		1.85	2.00	-7.3	30.0
2-Ethylthiophene	Ave	0.8768	0.8833		2.02	2.00	0.7	30.0
m-Xylene & p-Xylene	Ave	0.8990	0.8523		3.79	4.00	-5.2	30.0
Bromoform	Ave	0.5594	0.7740		2.77	2.00	38.4*	30.0
Styrene	Ave	0.5931	0.6014		2.03	2.00	1.4	30.0
Nonane	Ave	0.4886	0.4607		1.89	2.00	-5.7	30.0
o-Xylene	Ave	0.9191	0.8429		1.84	2.00	-8.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5794	0.5245		1.81	2.00	-9.5	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-10156/2 Calibration Date: 04/05/2017 12:12
 Instrument ID: MG Calib Start Date: 03/15/2017 14:36
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/15/2017 20:21
 Lab File ID: GCCVD04.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	0.2120	0.2035		1.92	2.00	-4.0	30.0
Isopropylbenzene	Ave	1.335	1.285		1.93	2.00	-3.7	30.0
Propylbenzene	Ave	0.3502	0.3278		1.87	2.00	-6.4	30.0
2-Chlorotoluene	Ave	0.3267	0.3295		2.02	2.00	0.9	30.0
4-Ethyltoluene	Ave	1.257	1.102		1.75	2.00	-12.3	30.0
1,3,5-Trimethylbenzene	Ave	0.5895	0.5491		1.86	2.00	-6.9	30.0
Alpha Methyl Styrene	Ave	0.4751	0.4550		1.92	2.00	-4.2	30.0
Decane	Ave	0.5991	0.5410		1.81	2.00	-9.7	30.0
tert-Butylbenzene	Ave	1.242	1.204		1.94	2.00	-3.0	30.0
1,2,4-Trimethylbenzene	Ave	1.129	1.073		1.90	2.00	-5.0	30.0
1,3-Dichlorobenzene	Ave	0.8518	0.8711		2.05	2.00	2.3	30.0
sec-Butylbenzene	Ave	1.590	1.528		1.92	2.00	-3.9	30.0
Benzyl chloride	Ave	1.065	1.036		1.95	2.00	-2.7	30.0
1,4-Dichlorobenzene	Ave	0.8325	0.8468		2.04	2.00	1.7	30.0
4-Isopropyltoluene	Ave	1.404	1.361		1.94	2.00	-3.1	30.0
1,2,3-Trimethylbenzene	Ave	0.8430	0.8572		2.03	2.00	1.7	30.0
Butylcyclohexane	Ave	0.8320	0.8126		1.95	2.00	-2.3	30.0
1,2-Dichlorobenzene	Ave	0.8117	0.8050		1.98	2.00	-0.8	30.0
Indane	Ave	1.029	0.9062		1.76	2.00	-11.9	30.0
Indene	Ave	0.7517	0.8824		2.35	2.00	17.4	30.0
Butylbenzene	Ave	1.313	1.240		1.89	2.00	-5.5	30.0
Undecane	Ave	0.7029	0.5917		1.68	2.00	-15.8	30.0
1,2-Dimethyl-4-Ethylbenzene	Ave	1.048	1.260		2.41	2.00	20.2	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.3481	0.2962		1.70	2.00	-14.9	30.0
1,2,4,5-Tetramethylbenzene	Ave	1.259	1.375		2.19	2.00	9.2	30.0
1,2,3,5-Tetramethylbenzene	Ave	0.7577	0.8365		2.21	2.00	10.4	30.0
1,2,3,4-Tetramethylbenzene	Ave	1.035	1.086		2.10	2.00	4.9	30.0
Dodecane	Ave	0.6236	0.4573		1.47	2.00	-26.7	30.0
1,2,4-Trichlorobenzene	Ave	0.7144	0.7626		2.14	2.00	6.8	30.0
Naphthalene	Ave	1.497	1.432		1.91	2.00	-4.3	30.0
Benzo (b) thiophene	Ave	0.8706	0.8874		2.04	2.00	1.9	30.0
Hexachlorobutadiene	Ave	0.7045	0.7859		2.23	2.00	11.6	30.0
1,2,3-Trichlorobenzene	Ave	0.6741	0.7154		2.12	2.00	6.1	30.0
2-Methylnaphthalene	Ave	0.3108	0.1722		3.47	6.25	-44.6	50.0
1-Methylnaphthalene	Ave	0.3095	0.1697		3.43	6.25	-45.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7905	0.8634		4.37	4.00	9.2	30.0

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GCCVD04.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 05-Apr-2017 12:12:30 ALS Bottle#: 16 Worklist Smp#: 2
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004509-002
 Misc. Info.: S34
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 06-Apr-2017 09:57:45 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: tajh

Date: 05-Apr-2017 13:05:41

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	7.980	7.980	0.000	72	229652	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.148	10.148	0.000	95	1132685	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.017	15.017	0.000	89	1159488	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.689	16.689	0.000	93	1001103	4.00	4.37	
6 Chlorodifluoromethane	67	3.461	3.461	0.000	96	64224	2.00	2.52	
7 Propene	41	3.472	3.472	0.000	95	96633	2.00	1.59	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	100	601502	2.00	2.47	
9 Chloromethane	52	3.666	3.666	0.000	48	27060	2.00	1.65	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.671	0.000	88	353493	2.00	2.44	
11 Acetaldehyde	44	3.790	3.790	0.000	83	128631	10.0	6.70	
12 Vinyl chloride	62	3.806	3.806	0.000	100	127695	2.00	1.90	
14 Butane	43	3.882	3.882	0.000	93	164058	2.00	1.72	
13 Butadiene	54	3.882	3.882	0.000	80	75677	2.00	1.69	
15 Bromomethane	94	4.141	4.141	0.000	96	138805	2.00	2.09	
16 Chloroethane	64	4.259	4.259	0.000	86	58188	2.00	1.79	
17 Ethanol	31	4.356	4.356	0.000	96	182766	10.0	7.91	
18 Vinyl bromide	106	4.513	4.513	0.000	95	142708	2.00	2.27	
19 2-Methylbutane	43	4.561	4.561	0.000	87	116966	2.00	1.82	
21 Acrolein	56	4.739	4.739	0.000	28	16520	2.00	1.76	
20 Trichlorofluoromethane	101	4.744	4.744	0.000	99	640834	2.00	2.65	
22 Acetonitrile	40	4.793	4.793	0.000	97	28393	2.00	1.47	
23 Acetone	58	4.831	4.831	0.000	100	90273	6.00	4.00	
24 Isopropyl alcohol	45	4.933	4.933	0.000	93	313626	6.00	4.02	
25 Pentane	72	4.939	4.939	0.000	91	25223	2.00	2.16	
26 Ethyl ether	31	5.068	5.068	0.000	89	91057	2.00	1.72	
27 1,1-Dichloroethene	96	5.348	5.348	0.000	97	132184	2.00	2.16	
28 Acrylonitrile	53	5.424	5.424	0.000	94	44699	2.00	1.60	
29 2-Methyl-2-propanol	59	5.456	5.456	0.000	95	174209	2.00	1.87	
30 1,1,2-Trichloro-1,2,2-trif	101	5.516	5.516	0.000	92	330751	2.00	2.34	
31 Methylene Chloride	84	5.650	5.650	0.000	87	110606	2.00	2.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.667	5.667	0.000	87	132923	2.00	2.24	
33 Carbon disulfide	76	5.791	5.791	0.000	98	337642	2.00	2.17	
34 trans-1,2-Dichloroethene	96	6.384	6.384	0.000	96	116747	2.00	1.95	
35 2-Methylpentane	43	6.416	6.416	0.000	88	210613	2.00	1.79	
36 Methyl tert-butyl ether	73	6.502	6.502	0.000	94	310668	2.00	1.75	
37 1,1-Dichloroethane	63	6.761	6.761	0.000	99	216010	2.00	1.85	
38 Vinyl acetate	43	6.869	6.869	0.000	99	203782	2.00	1.52	
39 2-Butanone (MEK)	72	7.268	7.268	0.000	98	40080	2.00	1.53	
40 Hexane	56	7.327	7.327	0.000	83	76834	2.00	1.69	
41 Isopropyl ether	45	7.473	7.473	0.000	89	239789	2.00	1.44	
42 cis-1,2-Dichloroethene	96	7.683	7.683	0.000	96	127489	2.00	2.01	
43 Ethyl acetate	43	7.867	7.867	0.000	97	155368	2.00	1.40	
44 Chloroform	83	8.007	8.007	0.000	96	359480	2.00	2.23	
45 Tert-butyl ethyl ether	59	8.109	8.109	0.000	94	287017	2.00	1.71	
46 Tetrahydrofuran	42	8.368	8.368	0.000	85	82600	2.00	1.41	
47 1,1,1-Trichloroethane	97	8.983	8.983	0.000	94	450587	2.00	2.42	
48 1,2-Dichloroethane	62	9.075	9.075	0.000	98	265951	2.00	2.33	
49 Benzene	78	9.565	9.565	0.000	96	376021	2.00	1.95	
50 Cyclohexane	69	9.576	9.576	0.000	79	64745	2.00	2.00	
52 n-Butanol	31	9.576	9.576	0.000	73	36873	2.00	1.79	
51 Carbon tetrachloride	117	9.598	9.598	0.000	97	522165	2.00	2.60	
53 2,3-Dimethylpentane	71	9.722	9.722	0.000	85	79706	2.00	1.80	
54 Thiophene	84	9.840	9.840	0.000	95	220950	2.00	2.06	
55 Tert-amyl methyl ether	73	10.078	10.078	0.000	97	326689	2.00	1.85	
56 Isooctane	57	10.396	10.396	0.000	94	521441	2.00	1.83	
57 n-Heptane	71	10.800	10.800	0.000	89	138800	2.00	1.95	
58 1,2-Dichloropropane	63	10.832	10.832	0.000	77	118092	2.00	1.81	
59 Trichloroethene	130	10.881	10.881	0.000	95	241259	2.00	2.31	
60 Dibromomethane	93	10.946	10.946	0.000	91	198698	2.00	2.29	
61 Dichlorobromomethane	83	11.107	11.107	0.000	97	406986	2.00	2.44	
62 1,4-Dioxane	88	11.124	11.124	0.000	92	44332	2.00	1.70	
63 Methyl methacrylate	41	11.242	11.242	0.000	91	117934	2.00	1.63	
64 Methylcyclohexane	83	11.690	11.690	0.000	93	247139	2.00	1.65	
65 4-Methyl-2-pentanone (MIBK)	43	12.116	12.116	0.000	95	166680	2.00	1.51	
66 cis-1,3-Dichloropropene	75	12.159	12.159	0.000	97	260951	2.00	2.16	
67 trans-1,3-Dichloropropene	75	12.882	12.882	0.000	96	262779	2.00	2.12	
68 Toluene	91	13.006	13.006	0.000	93	445633	2.00	1.93	
69 1,1,2-Trichloroethane	83	13.076	13.076	0.000	95	131502	2.00	1.90	
70 2-Methylthiophene	97	13.157	13.157	0.000	97	407849	2.00	2.10	
71 3-Methylthiophene	97	13.361	13.361	0.000	99	417323	2.00	2.17	
72 2-Hexanone	58	13.502	13.502	0.000	94	78509	2.00	1.42	
73 n-Octane	85	13.766	13.766	0.000	82	168128	2.00	2.01	
74 Chlorodibromomethane	129	13.787	13.787	0.000	96	445334	2.00	2.58	
75 Ethylene Dibromide	107	14.073	14.073	0.000	97	292453	2.00	2.16	
76 Tetrachloroethene	129	14.181	14.181	0.000	93	236902	2.00	2.24	
77 Chlorobenzene	112	15.065	15.065	0.000	92	397790	2.00	2.03	
78 2,3-Dimethylheptane	43	15.141	15.141	0.000	86	366199	2.00	1.85	
79 Ethylbenzene	91	15.378	15.378	0.000	99	598267	2.00	1.85	
80 2-Ethylthiophene	97	15.475	15.475	0.000	98	512353	2.00	2.02	
81 m-Xylene & p-Xylene	91	15.545	15.545	0.000	100	988780	4.00	3.79	
82 Bromoform	173	15.961	15.961	0.000	95	448966	2.00	2.77	
83 Styrene	104	16.009	16.009	0.000	96	348856	2.00	2.03	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.015	16.015	0.000	85	267254	2.00	1.89	
85 o-Xylene	91	16.074	16.074	0.000	97	488921	2.00	1.84	
86 1,1,2,2-Tetrachloroethane	83	16.392	16.392	0.000	96	304242	2.00	1.81	
87 1,2,3-Trichloropropane	110	16.548	16.548	0.000	94	118038	2.00	1.92	
88 Isopropylbenzene	105	16.678	16.678	0.000	98	745332	2.00	1.93	
89 N-Propylbenzene	120	17.233	17.233	0.000	99	190152	2.00	1.87	
90 2-Chlorotoluene	126	17.260	17.260	0.000	97	191139	2.00	2.02	
91 4-Ethyltoluene	105	17.390	17.390	0.000	98	639311	2.00	1.75	
92 1,3,5-Trimethylbenzene	120	17.476	17.476	0.000	92	318507	2.00	1.86	
93 Alpha Methyl Styrene	118	17.718	17.718	0.000	86	263897	2.00	1.92	
94 n-Decane	57	17.821	17.821	0.000	94	313797	2.00	1.81	
95 tert-Butylbenzene	119	17.923	17.923	0.000	90	698451	2.00	1.94	
96 1,2,4-Trimethylbenzene	105	17.940	17.940	0.000	96	622412	2.00	1.90	
97 1,3-Dichlorobenzene	146	18.209	18.209	0.000	97	505283	2.00	2.05	
98 sec-Butylbenzene	105	18.209	18.209	0.000	97	886461	2.00	1.92	
99 Benzyl chloride	91	18.290	18.290	0.000	97	601171	2.00	1.95	
100 1,4-Dichlorobenzene	146	18.301	18.301	0.000	94	491180	2.00	2.04	
101 4-Isopropyltoluene	119	18.387	18.387	0.000	96	789440	2.00	1.94	
102 1,2,3-Trimethylbenzene	105	18.430	18.430	0.000	98	497222	2.00	2.03	
103 Butylcyclohexane	83	18.506	18.506	0.000	95	471346	2.00	1.95	
104 1,2-Dichlorobenzene	146	18.673	18.673	0.000	95	466937	2.00	1.98	
105 2,3-Dihydroindene	117	18.678	18.678	0.000	93	525629	2.00	1.76	
106 Indene	116	18.813	18.813	0.000	90	511836	2.00	2.35	
107 n-Butylbenzene	91	18.840	18.840	0.000	97	719387	2.00	1.89	
108 Undecane	57	19.201	19.201	0.000	89	343238	2.00	1.68	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.228	19.228	0.000	96	731134	2.00	2.41	
110 1,2-Dibromo-3-Chloropropan	157	19.293	19.293	0.000	95	171817	2.00	1.70	
111 1,2,4,5-Tetramethylbenzene	119	19.622	19.622	0.000	95	797640	2.00	2.19	
112 1,2,3,5-Tetramethylbenzene	119	19.676	19.676	0.000	94	485221	2.00	2.21	
113 1,2,3,4-Tetramethylbenzene	119	20.070	20.070	0.000	96	629876	2.00	2.10	
114 Dodecane	57	20.269	20.269	0.000	89	265245	2.00	1.47	
115 1,2,4-Trichlorobenzene	180	20.404	20.404	0.000	94	442365	2.00	2.14	
116 Naphthalene	128	20.533	20.533	0.000	98	830671	2.00	1.91	
117 Benzo(b)thiophene	134	20.630	20.630	0.000	99	514711	2.00	2.04	
118 Hexachlorobutadiene	225	20.765	20.765	0.000	94	455844	2.00	2.23	
119 1,2,3-Trichlorobenzene	180	20.808	20.808	0.000	94	414951	2.00	2.12	
120 2-Methylnaphthalene	142	21.612	21.612	0.000	99	312194	6.25	3.47	
121 1-Methylnaphthalene	142	21.790	21.790	0.000	99	307571	6.25	3.43	
A 122 C6 Range	1	7.337	(7.297-7.377)		0	802962	2.00	1.85	
A 124 Toluene Range	1	13.001	(12.966-13.036)		0	1133515	2.00	2.09	
S 126 Xylenes, Total	100				0		6.00	5.63	
S 127 1,2-Dichloroethene, Total	1				0		4.00	3.96	

Reagents:

40CV101S_00034

Amount Added: 100.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GCCVD04.D

Injection Date: 05-Apr-2017 12:12:30

Instrument ID: MG

Operator ID: 7126

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 500.000 mL

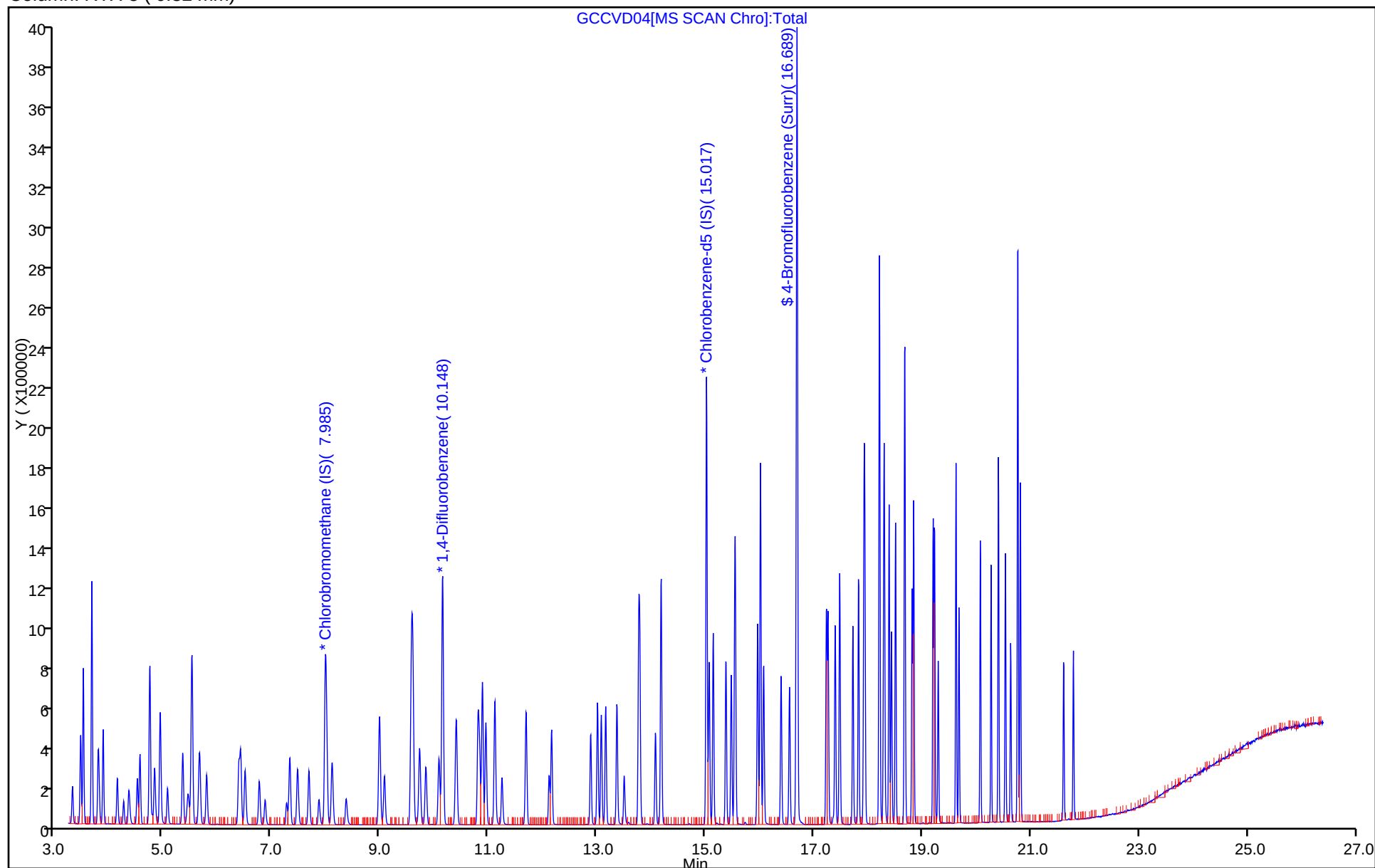
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GBFBC15.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 15-Mar-2017 14:04:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0004323-001
Misc. Info.: BFB
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Mar-2017 12:19:31 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: tajh

Date: 16-Mar-2017 12:19:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags

\$ 5 BFB	95	4.717	4.717	0.000	0	1116686	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

40MXSUR_00001

Amount Added: 40.00

Units: mL

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GBFBC15.D

Injection Date: 15-Mar-2017 14:04:30

Instrument ID: MG

Lims ID: BFB

Client ID:

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 1

Injection Vol: 500.0 mL

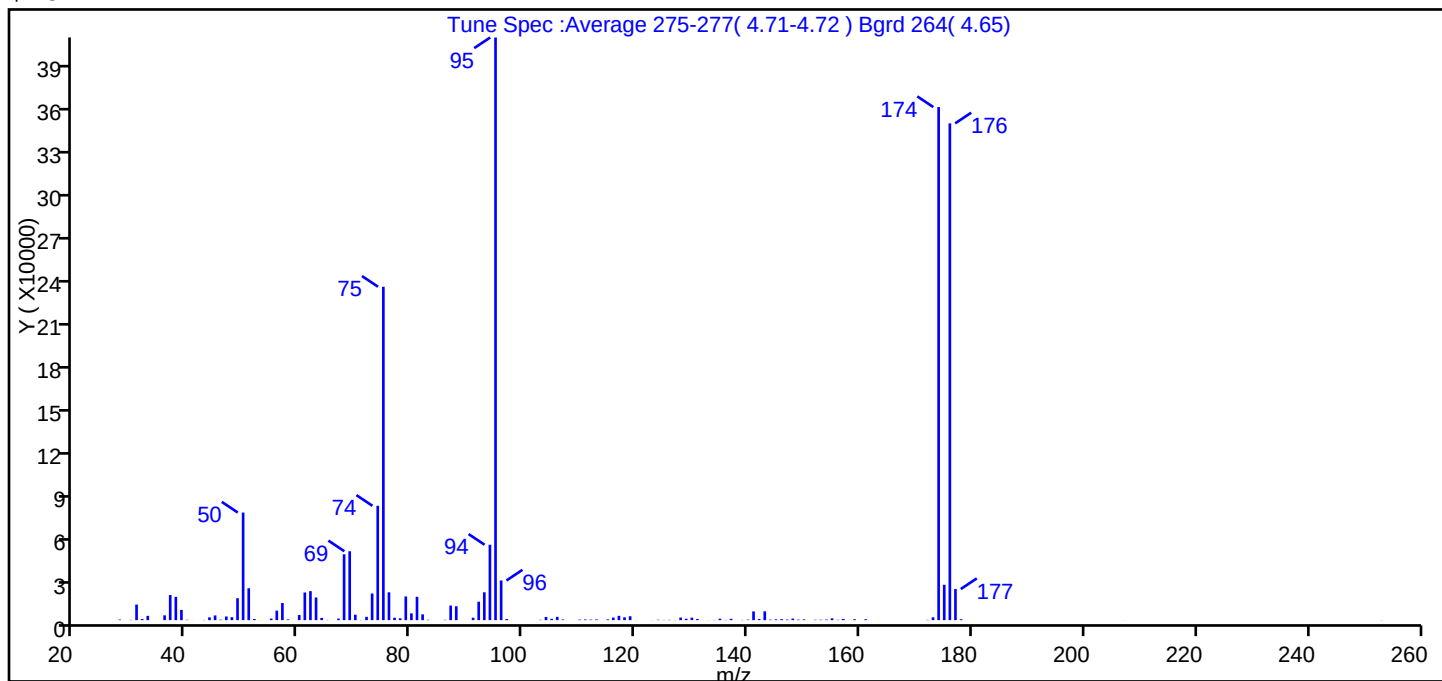
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Tune Method: BFB Method 8260

\$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.5
75	30 to 60% of m/z 95	57.2
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.5 (0.6)
174	50 to 120% of m/z 95	88.1
175	5 to 9% of m/z 174	6.1 (6.9)
176	Greater than 95% but less than 101% of m/z 174	85.3 (96.8)
177	5 to 9% of m/z 176	5.3 (6.3)

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GBFBC15.D\MG_TO15.rslt\spectra.d
Injection Date: 15-Mar-2017 14:04:30
Spectrum: Tune Spec :Average 275-277(4.71-4.72) Bgrd 264(4.65)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 117

m/z	Y	m/z	Y	m/z	Y	m/z	Y
28.00	409	64.00	1536	104.00	2199	141.00	6035
30.00	188	65.00	166	105.00	907	142.00	723
31.00	10758	67.00	1069	106.00	2285	143.00	6088
32.00	766	68.00	45464	107.00	469	144.00	319
33.00	2961	69.00	47584	110.00	375	145.00	537
36.00	3330	70.00	3735	111.00	475	146.00	686
37.00	17360	71.00	120	112.00	373	147.00	417
38.00	16084	72.00	2290	113.00	485	148.00	1105
39.00	7056	73.00	18408	115.00	536	149.00	367
40.00	266	74.00	78984	116.00	1763	150.00	513
41.00	40	75.00	230272	117.00	2969	152.00	258
43.00	124	76.00	19224	118.00	1965	153.00	307
44.00	1942	77.00	1681	119.00	2695	154.00	401
45.00	3252	78.00	1293	120.00	60	155.00	1247
46.00	314	79.00	16348	123.00	52	156.00	242
47.00	2522	80.00	4690	124.00	273	157.00	846
48.00	2030	81.00	16127	125.00	134	159.00	624
49.00	15149	82.00	3989	126.00	226	161.00	624
50.00	74312	83.00	279	127.00	86	172.00	178
51.00	22024	86.00	248	128.00	1782	173.00	1987
52.00	791	87.00	10097	129.00	968	174.00	354368
53.00	50	88.00	9600	130.00	1708	175.00	24432
55.00	1070	91.00	1693	131.00	775	176.00	343104
56.00	6545	92.00	12747	133.00	52	177.00	21480
57.00	11828	93.00	19232	134.00	131	178.00	635
58.00	499	94.00	52072	135.00	989	207.00	46
60.00	3534	95.00	402432	136.00	138	253.00	102
61.00	19104	96.00	27384	137.00	918		
62.00	20032	97.00	791	139.00	127		
63.00	15625	103.00	237	140.00	350		

Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GBFBC15.D

Injection Date: 15-Mar-2017 14:04:30

Instrument ID: MG

Operator ID: 7126

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 500.0 mL

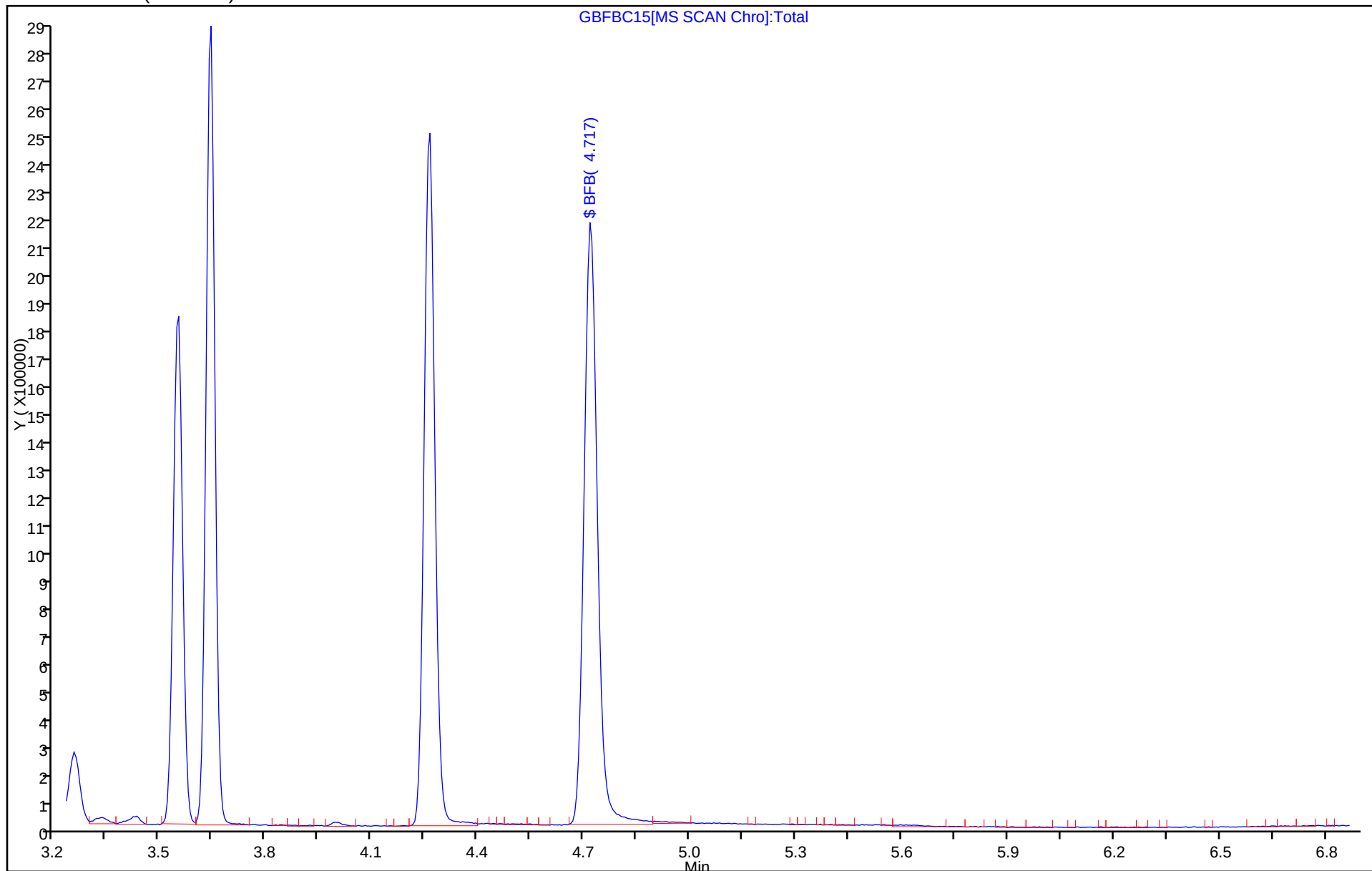
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GBFBD05.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 05-Apr-2017 11:39:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0004509-001
Misc. Info.: BFB
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Apr-2017 09:57:44 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: wilestd

Date: 05-Apr-2017 17:17:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags

\$ 5 BFB	95	4.728	4.728	0.000	0	1053935	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

40MXSUR_00001

Amount Added: 40.00

Units: mL

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GBFBD05.D

Injection Date: 05-Apr-2017 11:39:30

Instrument ID: MG

Lims ID: BFB

Client ID:

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 1

Injection Vol: 500.0 mL

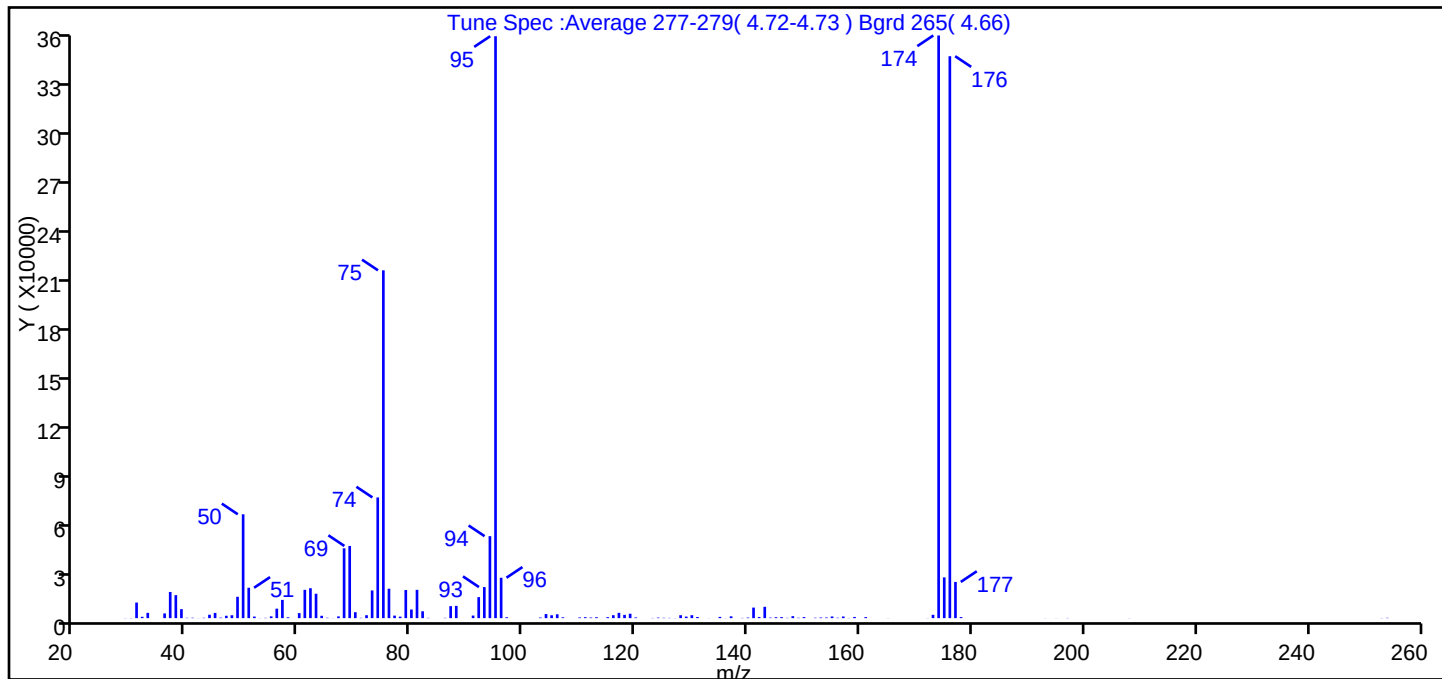
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Tune Method: BFB Method 8260

\$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.8
75	30 to 60% of m/z 95	59.8
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.6 (0.6)
174	50 to 120% of m/z 95	100.1
175	5 to 9% of m/z 174	7.0 (7.0)
176	Greater than 95% but less than 101% of m/z 174	96.6 (96.4)
177	5 to 9% of m/z 176	6.2 (6.4)

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GBFBD05.D\MG_TO15.rslt\spectra.d
Injection Date: 05-Apr-2017 11:39:30
Spectrum: Tune Spec :Average 277-279(4.72-4.73) Bgrd 265(4.66)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 125

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	82	64.00	1436	105.00	1754	145.00	553
30.00	102	65.00	230	106.00	2353	146.00	616
31.00	9474	66.00	54	107.00	494	147.00	167
32.00	817	67.00	1060	110.00	421	148.00	1202
33.00	3218	68.00	42440	111.00	570	149.00	224
36.00	2877	69.00	43888	112.00	362	150.00	630
37.00	15915	70.00	3610	113.00	552	152.00	259
38.00	13983	71.00	178	115.00	587	153.00	389
39.00	5465	72.00	1795	116.00	1798	154.00	392
40.00	196	73.00	16832	117.00	3227	155.00	1006
41.00	252	74.00	73384	118.00	1993	156.00	249
42.00	58	75.00	211456	119.00	2684	157.00	998
43.00	214	76.00	17896	120.00	429	158.00	64
44.00	2078	77.00	1548	123.00	117	159.00	713
45.00	3170	78.00	909	124.00	349	161.00	628
46.00	308	79.00	17096	125.00	216	165.00	50
47.00	1445	80.00	5250	126.00	149	172.00	66
48.00	1761	81.00	17208	127.00	75	173.00	2040
49.00	12983	82.00	4169	128.00	1791	174.00	354240
50.00	63144	83.00	172	129.00	948	175.00	24784
51.00	18472	86.00	182	130.00	1801	176.00	341632
52.00	961	87.00	7296	131.00	686	177.00	22016
53.00	64	88.00	7455	133.00	55	178.00	635
54.00	176	91.00	1576	135.00	756	193.00	56
55.00	1083	92.00	12767	136.00	57	195.00	54
56.00	5766	93.00	18888	137.00	1103	197.00	109
57.00	11090	94.00	49848	139.00	139	208.00	66
58.00	502	95.00	353792	140.00	340	253.00	98
60.00	3053	96.00	24568	141.00	6420	254.00	204
61.00	17216	97.00	540	142.00	671		
62.00	18200	103.00	372	143.00	6892		
63.00	14833	104.00	2487	144.00	311		

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GBFBD05.D

Injection Date: 05-Apr-2017 11:39:30

Instrument ID: MG

Operator ID: 7126

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 500.0 mL

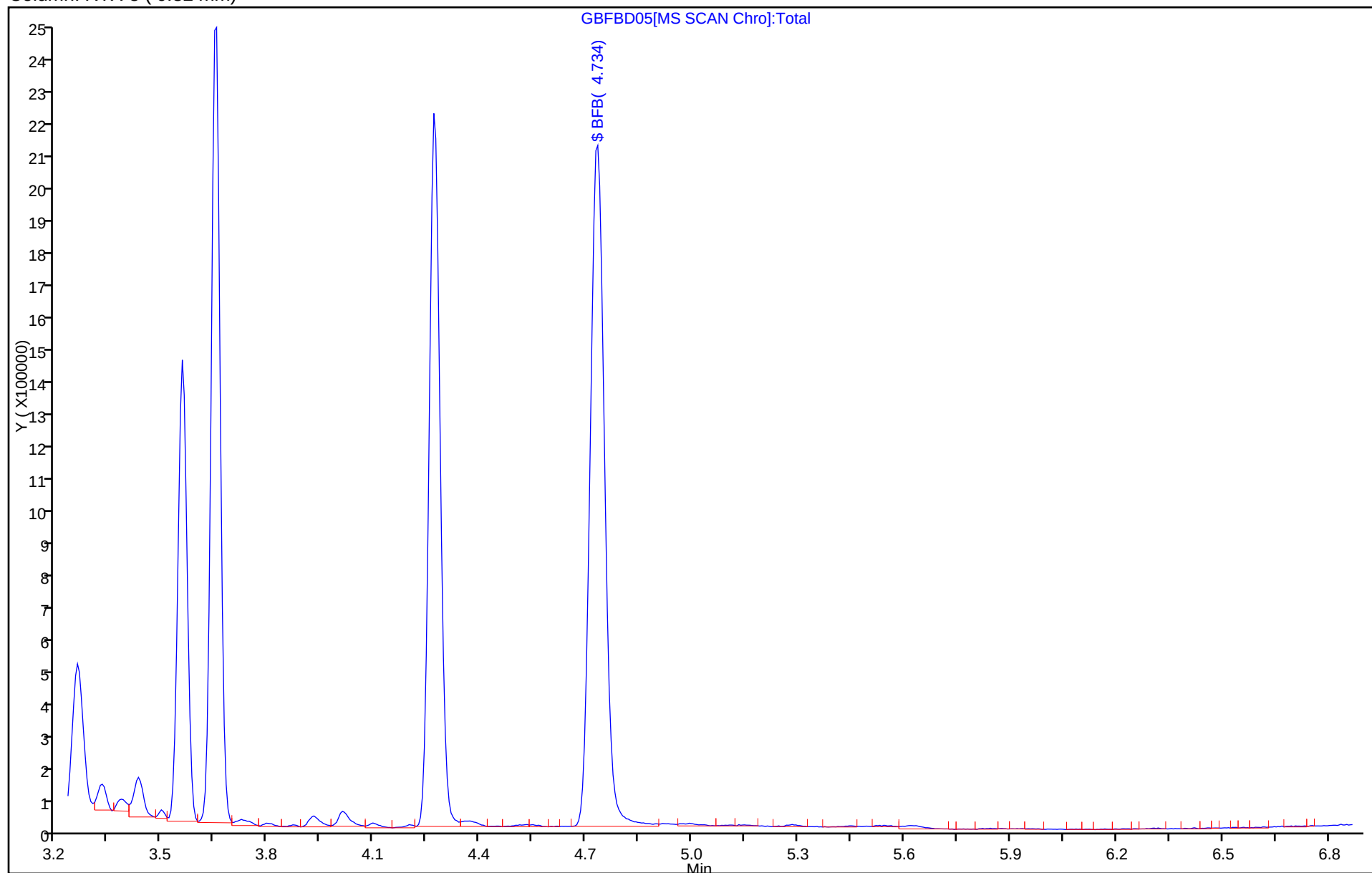
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MG_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.: 140-7698-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-10156/18
 Matrix: Air Lab File ID: GD05BLK5.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/05/2017 14:19
 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.: 10156 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.: 140-7698-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-10156/18
 Matrix: Air Lab File ID: GD05BLK5.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/05/2017 14:19
 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.: 10156 Units: ppb v/v

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-10156/18
 Matrix: Air Lab File ID: GD05BLK5.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/05/2017 14:19
 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.: 10156 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.: 140-7698-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-10156/18
 Matrix: Air Lab File ID: GD05BLK5.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/05/2017 14:19
 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.: 10156 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	
64-17-5	Ethanol	46.07	ND		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	ND		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.21	
75-69-4	Trichlorofluoromethane	137.37	ND		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05BLK5.D
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 05-Apr-2017 14:19:30 ALS Bottle#: 1 Worklist Smp#: 18
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004509-004
 Misc. Info.: 10045
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 06-Apr-2017 09:57:45 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: tajh

Date: 05-Apr-2017 15:22:04

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	7.969	7.980	-0.011	72	227001	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.137	10.148	-0.011	95	1048207	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.017	15.017	0.000	89	1069858	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.688	16.689	-0.001	93	876446	4.00	4.15	
14 Butane	43	3.876	3.882	-0.006	93	10850		0.1153	
19 2-Methylbutane	43	4.561	4.561	0.000	84	4236		0.0666	
25 Pentane	72	4.933	4.939	-0.006	93	382		0.0330	
31 Methylene Chloride	84	5.645	5.650	-0.005	84	6385		0.1170	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05BLK5.D

Injection Date: 05-Apr-2017 14:19:30

Instrument ID: MG

Operator ID: 7126

Lims ID: mb

Worklist Smp#: 18

Client ID:

Purge Vol: 500.000 mL

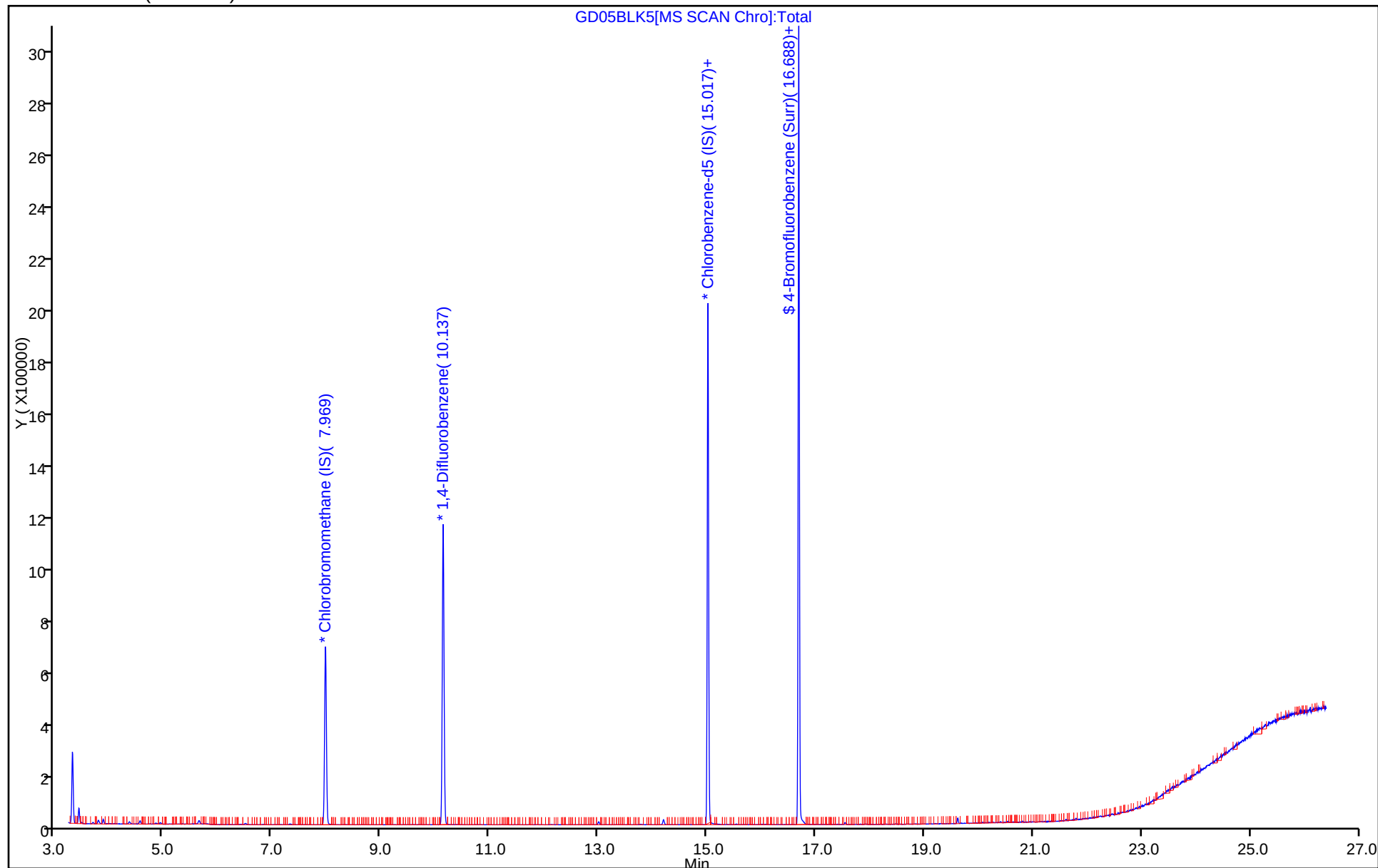
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GD05BLK5.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 05-Apr-2017 14:19:30 ALS Bottle#: 1 Worklist Smp#: 18
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004509-004
Misc. Info.: 10045
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Apr-2017 09:57:45 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: tajh

Date: 05-Apr-2017 15:22:04

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.15	103.63

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

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 140-10156/1002
 Matrix: Air Lab File ID: GCCVD04-LCS.d
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/05/2017 12:12
 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.: 10156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	2.42		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.81		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	1.90		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	2.34		0.080	
75-34-3	1,1-Dichloroethane	98.96	1.85		0.080	
75-35-4	1,1-Dichloroethene	96.94	2.16		0.080	
120-82-1	1,2,4-Trichlorobenzene	181.45	2.14		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	1.90		0.080	
106-93-4	1,2-Dibromoethane	187.87	2.16		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	1.98		0.080	
107-06-2	1,2-Dichloroethane	98.96	2.33		0.080	
78-87-5	1,2-Dichloropropane	112.99	1.81		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.44		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	1.86		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	2.05		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	2.04		0.080	
123-91-1	1,4-Dioxane	88.11	1.70		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	1.83		0.20	
78-93-3	2-Butanone	72.11	1.53		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.51		0.20	
71-43-2	Benzene	78.11	1.95		0.080	
100-44-7	Benzyl chloride	126.58	1.95		0.16	
75-27-4	Bromodichloromethane	163.83	2.44		0.080	
75-25-2	Bromoform	252.75	2.77		0.080	
74-83-9	Bromomethane	94.94	2.09		0.080	
56-23-5	Carbon tetrachloride	153.81	2.60		0.040	
108-90-7	Chlorobenzene	112.56	2.03		0.080	
75-00-3	Chloroethane	64.52	1.79		0.080	
67-66-3	Chloroform	119.38	2.23		0.080	
74-87-3	Chloromethane	50.49	1.65		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	2.01		0.080	
10061-01-5	cis-1,3-Dichloropropene	110.97	2.16		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.: 140-7698-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 140-10156/1002
 Matrix: Air Lab File ID: GCCVD04-LCS.d
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/05/2017 12:12
 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.: 10156 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	2.58		0.080	
75-71-8	Dichlorodifluoromethane	120.91	2.47		0.080	
64-17-5	Ethanol	46.07	7.91		2.0	
100-41-4	Ethylbenzene	106.17	1.85		0.080	
87-68-3	Hexachlorobutadiene	260.76	2.23		0.080	
110-54-3	Hexane	86.17	1.69		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	1.75		0.16	
75-09-2	Methylene Chloride	84.93	2.00		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	3.79		0.080	
95-47-6	o-Xylene	106.17	1.84		0.080	
100-42-5	Styrene	104.15	2.03		0.080	
75-65-0	t-Butyl alcohol	74.12	1.87		0.32	
127-18-4	Tetrachloroethene	165.83	2.24		0.080	
108-88-3	Toluene	92.14	1.93		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	1.95		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	2.12		0.080	
79-01-6	Trichloroethene	131.39	2.31		0.040	
75-69-4	Trichlorofluoromethane	137.37	2.65		0.080	
75-01-4	Vinyl chloride	62.50	1.90		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	109		60-140

TestAmerica Laboratories
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GCCVD04-LCS.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 05-Apr-2017 12:12:30 ALS Bottle#: 16 Worklist Smp#: 1002
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004509-002
 Misc. Info.: S34
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 06-Apr-2017 09:57:45 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: tajh

Date: 05-Apr-2017 13:05:41

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	7.980	7.980	0.000	72	229652	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.148	10.148	0.000	95	1132685	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.017	15.017	0.000	89	1159488	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.689	16.689	0.000	93	1001103	4.00	4.37	
6 Chlorodifluoromethane	67	3.461	3.461	0.000	96	64224	2.00	2.52	
7 Propene	41	3.472	3.472	0.000	95	96633	2.00	1.59	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	100	601502	2.00	2.47	
9 Chloromethane	52	3.666	3.666	0.000	48	27060	2.00	1.65	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.671	0.000	88	353493	2.00	2.44	
11 Acetaldehyde	44	3.790	3.790	0.000	83	128631	10.0	6.70	
12 Vinyl chloride	62	3.806	3.806	0.000	100	127695	2.00	1.90	
14 Butane	43	3.882	3.882	0.000	93	164058	2.00	1.72	
13 Butadiene	54	3.882	3.882	0.000	80	75677	2.00	1.69	
15 Bromomethane	94	4.141	4.141	0.000	96	138805	2.00	2.09	
16 Chloroethane	64	4.259	4.259	0.000	86	58188	2.00	1.79	
17 Ethanol	31	4.356	4.356	0.000	96	182766	10.0	7.91	
18 Vinyl bromide	106	4.513	4.513	0.000	95	142708	2.00	2.27	
19 2-Methylbutane	43	4.561	4.561	0.000	87	116966	2.00	1.82	
21 Acrolein	56	4.739	4.739	0.000	28	16520	2.00	1.76	
20 Trichlorofluoromethane	101	4.744	4.744	0.000	99	640834	2.00	2.65	
22 Acetonitrile	40	4.793	4.793	0.000	97	28393	2.00	1.47	
23 Acetone	58	4.831	4.831	0.000	100	90273	6.00	4.00	
24 Isopropyl alcohol	45	4.933	4.933	0.000	93	313626	6.00	4.02	
25 Pentane	72	4.939	4.939	0.000	91	25223	2.00	2.16	
26 Ethyl ether	31	5.068	5.068	0.000	89	91057	2.00	1.72	
27 1,1-Dichloroethene	96	5.348	5.348	0.000	97	132184	2.00	2.16	
28 Acrylonitrile	53	5.424	5.424	0.000	94	44699	2.00	1.60	
29 2-Methyl-2-propanol	59	5.456	5.456	0.000	95	174209	2.00	1.87	
30 1,1,2-Trichloro-1,2,2-trif	101	5.516	5.516	0.000	92	330751	2.00	2.34	
31 Methylene Chloride	84	5.650	5.650	0.000	87	110606	2.00	2.00	
32 3-Chloro-1-propene	39	5.667	5.667	0.000	87	132923	2.00	2.24	

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	5.791	5.791	0.000	98	337642	2.00	2.17	
34 trans-1,2-Dichloroethene	96	6.384	6.384	0.000	96	116747	2.00	1.95	
35 2-Methylpentane	43	6.416	6.416	0.000	88	210613	2.00	1.79	
36 Methyl tert-butyl ether	73	6.502	6.502	0.000	94	310668	2.00	1.75	
37 1,1-Dichloroethane	63	6.761	6.761	0.000	99	216010	2.00	1.85	
38 Vinyl acetate	43	6.869	6.869	0.000	99	203782	2.00	1.52	
39 2-Butanone (MEK)	72	7.268	7.268	0.000	98	40080	2.00	1.53	
40 Hexane	56	7.327	7.327	0.000	83	76834	2.00	1.69	
41 Isopropyl ether	45	7.473	7.473	0.000	89	239789	2.00	1.44	
42 cis-1,2-Dichloroethene	96	7.683	7.683	0.000	96	127489	2.00	2.01	
43 Ethyl acetate	43	7.867	7.867	0.000	97	155368	2.00	1.40	
44 Chloroform	83	8.007	8.007	0.000	96	359480	2.00	2.23	
45 Tert-butyl ethyl ether	59	8.109	8.109	0.000	94	287017	2.00	1.71	
46 Tetrahydrofuran	42	8.368	8.368	0.000	85	82600	2.00	1.41	
47 1,1,1-Trichloroethane	97	8.983	8.983	0.000	94	450587	2.00	2.42	
48 1,2-Dichloroethane	62	9.075	9.075	0.000	98	265951	2.00	2.33	
49 Benzene	78	9.565	9.565	0.000	96	376021	2.00	1.95	
50 Cyclohexane	69	9.576	9.576	0.000	79	64745	2.00	2.00	
52 n-Butanol	31	9.576	9.576	0.000	73	36873	2.00	1.79	
51 Carbon tetrachloride	117	9.598	9.598	0.000	97	522165	2.00	2.60	
53 2,3-Dimethylpentane	71	9.722	9.722	0.000	85	79706	2.00	1.80	
54 Thiophene	84	9.840	9.840	0.000	95	220950	2.00	2.06	
55 Tert-amyl methyl ether	73	10.078	10.078	0.000	97	326689	2.00	1.85	
56 Isooctane	57	10.396	10.396	0.000	94	521441	2.00	1.83	
57 n-Heptane	71	10.800	10.800	0.000	89	138800	2.00	1.95	
58 1,2-Dichloropropane	63	10.832	10.832	0.000	77	118092	2.00	1.81	
59 Trichloroethene	130	10.881	10.881	0.000	95	241259	2.00	2.31	
60 Dibromomethane	93	10.946	10.946	0.000	91	198698	2.00	2.29	
61 Dichlorobromomethane	83	11.107	11.107	0.000	97	406986	2.00	2.44	
62 1,4-Dioxane	88	11.124	11.124	0.000	92	44332	2.00	1.70	
63 Methyl methacrylate	41	11.242	11.242	0.000	91	117934	2.00	1.63	
64 Methylcyclohexane	83	11.690	11.690	0.000	93	247139	2.00	1.65	
65 4-Methyl-2-pentanone (MIBK)	43	12.116	12.116	0.000	95	166680	2.00	1.51	
66 cis-1,3-Dichloropropene	75	12.159	12.159	0.000	97	260951	2.00	2.16	
67 trans-1,3-Dichloropropene	75	12.882	12.882	0.000	96	262779	2.00	2.12	
68 Toluene	91	13.006	13.006	0.000	93	445633	2.00	1.93	
69 1,1,2-Trichloroethane	83	13.076	13.076	0.000	95	131502	2.00	1.90	
70 2-Methylthiophene	97	13.157	13.157	0.000	97	407849	2.00	2.10	
71 3-Methylthiophene	97	13.361	13.361	0.000	99	417323	2.00	2.17	
72 2-Hexanone	58	13.502	13.502	0.000	94	78509	2.00	1.42	
73 n-Octane	85	13.766	13.766	0.000	82	168128	2.00	2.01	
74 Chlorodibromomethane	129	13.787	13.787	0.000	96	445334	2.00	2.58	
75 Ethylene Dibromide	107	14.073	14.073	0.000	97	292453	2.00	2.16	
76 Tetrachloroethene	129	14.181	14.181	0.000	93	236902	2.00	2.24	
77 Chlorobenzene	112	15.065	15.065	0.000	92	397790	2.00	2.03	
78 2,3-Dimethylheptane	43	15.141	15.141	0.000	86	366199	2.00	1.85	
79 Ethylbenzene	91	15.378	15.378	0.000	99	598267	2.00	1.85	
80 2-Ethylthiophene	97	15.475	15.475	0.000	98	512353	2.00	2.02	
81 m-Xylene & p-Xylene	91	15.545	15.545	0.000	100	988780	4.00	3.79	
82 Bromoform	173	15.961	15.961	0.000	95	448966	2.00	2.77	
83 Styrene	104	16.009	16.009	0.000	96	348856	2.00	2.03	
84 n-Nonane	57	16.015	16.015	0.000	85	267254	2.00	1.89	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 o-Xylene	91	16.074	16.074	0.000	97	488921	2.00	1.84	
86 1,1,2,2-Tetrachloroethane	83	16.392	16.392	0.000	96	304242	2.00	1.81	
87 1,2,3-Trichloropropane	110	16.548	16.548	0.000	94	118038	2.00	1.92	
88 Isopropylbenzene	105	16.678	16.678	0.000	98	745332	2.00	1.93	
89 N-Propylbenzene	120	17.233	17.233	0.000	99	190152	2.00	1.87	
90 2-Chlorotoluene	126	17.260	17.260	0.000	97	191139	2.00	2.02	
91 4-Ethyltoluene	105	17.390	17.390	0.000	98	639311	2.00	1.75	
92 1,3,5-Trimethylbenzene	120	17.476	17.476	0.000	92	318507	2.00	1.86	
93 Alpha Methyl Styrene	118	17.718	17.718	0.000	86	263897	2.00	1.92	
94 n-Decane	57	17.821	17.821	0.000	94	313797	2.00	1.81	
95 tert-Butylbenzene	119	17.923	17.923	0.000	90	698451	2.00	1.94	
96 1,2,4-Trimethylbenzene	105	17.940	17.940	0.000	96	622412	2.00	1.90	
97 1,3-Dichlorobenzene	146	18.209	18.209	0.000	97	505283	2.00	2.05	
98 sec-Butylbenzene	105	18.209	18.209	0.000	97	886461	2.00	1.92	
99 Benzyl chloride	91	18.290	18.290	0.000	97	601171	2.00	1.95	
100 1,4-Dichlorobenzene	146	18.301	18.301	0.000	94	491180	2.00	2.04	
101 4-Isopropyltoluene	119	18.387	18.387	0.000	96	789440	2.00	1.94	
102 1,2,3-Trimethylbenzene	105	18.430	18.430	0.000	98	497222	2.00	2.03	
103 Butylcyclohexane	83	18.506	18.506	0.000	95	471346	2.00	1.95	
104 1,2-Dichlorobenzene	146	18.673	18.673	0.000	95	466937	2.00	1.98	
105 2,3-Dihydroindene	117	18.678	18.678	0.000	93	525629	2.00	1.76	
106 Indene	116	18.813	18.813	0.000	90	511836	2.00	2.35	
107 n-Butylbenzene	91	18.840	18.840	0.000	97	719387	2.00	1.89	
108 Undecane	57	19.201	19.201	0.000	89	343238	2.00	1.68	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.228	19.228	0.000	96	731134	2.00	2.41	
110 1,2-Dibromo-3-Chloropropan	157	19.293	19.293	0.000	95	171817	2.00	1.70	
111 1,2,4,5-Tetramethylbenzene	119	19.622	19.622	0.000	95	797640	2.00	2.19	
112 1,2,3,5-Tetramethylbenzene	119	19.676	19.676	0.000	94	485221	2.00	2.21	
113 1,2,3,4-Tetramethylbenzene	119	20.070	20.070	0.000	96	629876	2.00	2.10	
114 Dodecane	57	20.269	20.269	0.000	89	265245	2.00	1.47	
115 1,2,4-Trichlorobenzene	180	20.404	20.404	0.000	94	442365	2.00	2.14	
116 Naphthalene	128	20.533	20.533	0.000	98	830671	2.00	1.91	
117 Benzo(b)thiophene	134	20.630	20.630	0.000	99	514711	2.00	2.04	
118 Hexachlorobutadiene	225	20.765	20.765	0.000	94	455844	2.00	2.23	
119 1,2,3-Trichlorobenzene	180	20.808	20.808	0.000	94	414951	2.00	2.12	
120 2-Methylnaphthalene	142	21.612	21.612	0.000	99	312194	6.25	3.47	
121 1-Methylnaphthalene	142	21.790	21.790	0.000	99	307571	6.25	3.43	
A 122 C6 Range	1	7.337	(7.297-7.377)		0	802962	2.00	1.85	
A 124 Toluene Range	1	13.001	(12.966-13.036)		0	1133515	2.00	2.09	
S 126 Xylenes, Total	100				0		6.00	5.63	
S 127 1,2-Dichloroethene, Total	1				0		4.00	3.96	

Reagents:

40CV101S_00034

Amount Added: 100.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Laboratories

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GCCVD04-LCS.d

Injection Date: 05-Apr-2017 12:12:30

Instrument ID: MG

Operator ID: 7126

Lims ID: LCS

Worklist Smp#: 1002

Client ID:

Purge Vol: 500.000 mL

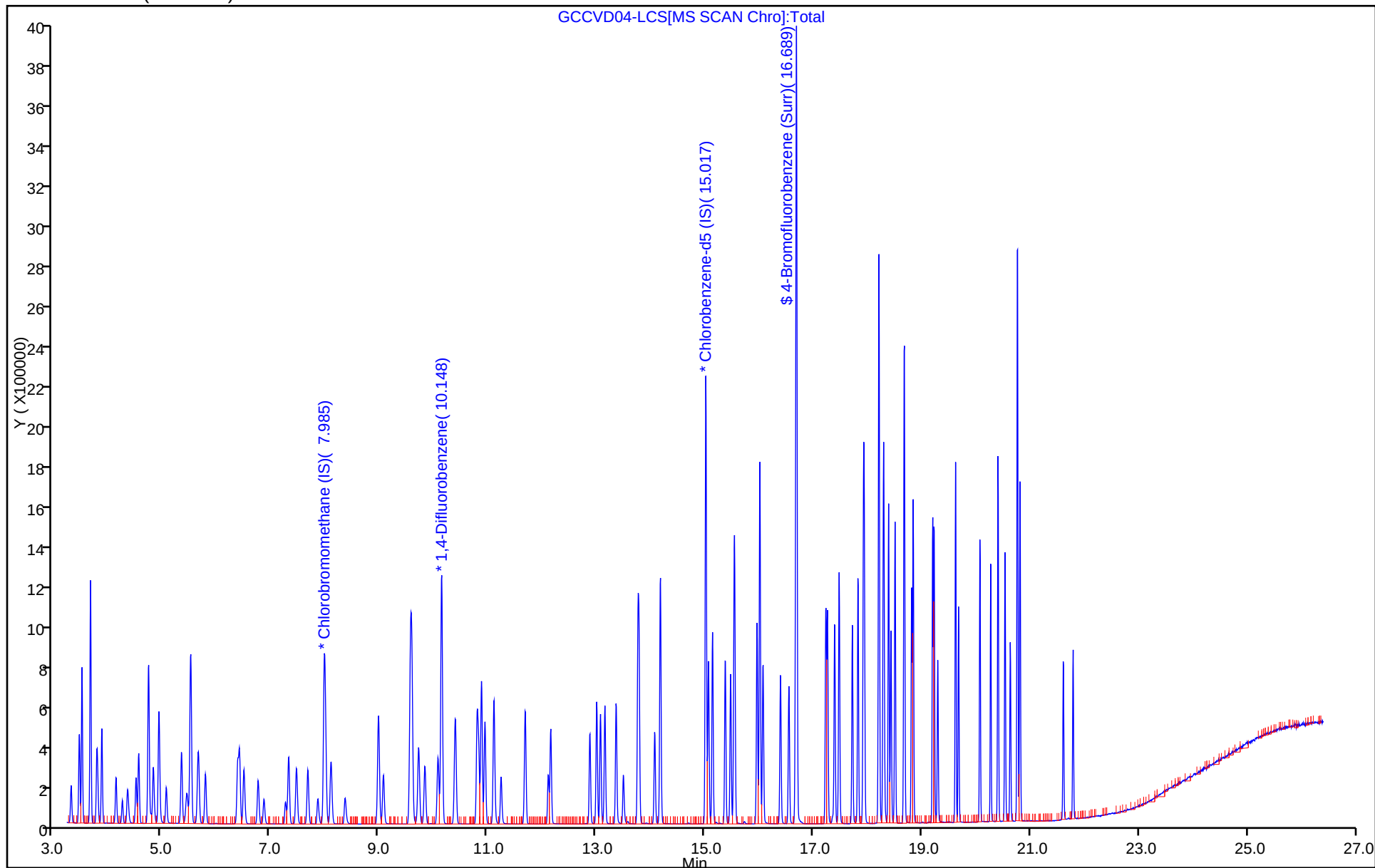
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Laboratories
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\GCCVD04-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 05-Apr-2017 12:12:30 ALS Bottle#: 16 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004509-002
Misc. Info.: S34
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Apr-2017 09:57:45 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: tajh

Date: 05-Apr-2017 13:05:41

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.37	109.22

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1

SDG No.: _____

Instrument ID: MG Start Date: 03/15/2017 14:04Analysis Batch Number: 9482 End Date: 03/15/2017 21:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-9482/1		03/15/2017 14:04	1	GBFBC15.D	RTX-5 0.32 (mm)
IC 140-9482/3		03/15/2017 14:36	1	GC15IC01.D	RTX-5 0.32 (mm)
IC 140-9482/4		03/15/2017 15:20	1	GC15IC02.D	RTX-5 0.32 (mm)
IC 140-9482/5		03/15/2017 16:02	1	GC15IC03.D	RTX-5 0.32 (mm)
IC 140-9482/6		03/15/2017 16:45	1	GC15IC04.D	RTX-5 0.32 (mm)
IC 140-9482/7		03/15/2017 17:29	1	GC15IC05.D	RTX-5 0.32 (mm)
ICIS 140-9482/8		03/15/2017 18:13	1	GC15IC06.D	RTX-5 0.32 (mm)
IC 140-9482/9		03/15/2017 18:56	1	GC15IC07.D	RTX-5 0.32 (mm)
IC 140-9482/10		03/15/2017 19:39	1	GC15IC08.D	RTX-5 0.32 (mm)
IC 140-9482/11		03/15/2017 20:21	1	GC15IC09.D	RTX-5 0.32 (mm)
ICV 140-9482/13		03/15/2017 21:46	1	GICVC15.D	RTX-5 0.32 (mm)

170315.ZZZ

TA-Knoxville
TO-14 Autosampler Log

Sample	Position/Volume	psia	Date	Time
BFB	16 - 101 mL	34.3	3/15/2017	2:04:08 PM
ICAL01	1 - 101 mL	35.6	3/15/2017	2:36:45 PM
ICAL02	1 - 201 mL	35.4	3/15/2017	3:20:37 PM
ICAL03	2 - 201 mL	34.7	3/15/2017	4:02:35 PM
ICAL04	3 - 201 mL	34.9	3/15/2017	4:45:20 PM
ICAL05	4 - 201 mL	35	3/15/2017	5:29:49 PM
ICAL06	5 - 201 mL	34.9	3/15/2017	6:13:24 PM
ICAL07	6 - 201 mL	33.2	3/15/2017	6:56:24 PM
ICAL08	7 - 201 mL	31.1	3/15/2017	7:39:21 PM
ICAL09	8 - 201 mL	34.7	3/15/2017	8:21:54 PM
PRIME	9 - 51 mL	33.8	3/15/2017	9:03:56 PM
ICV	9 - 101 mL	33.1	3/15/2017	9:45:59 PM
PRIME	15 - 52 mL	33.8	3/15/2017	10:28:06 PM
LCS	15 - 101 mL	33.5	3/15/2017	11:10:25 PM
MB	16 - 500 mL	33.6	3/15/2017	11:56:20 PM
MB	16 - 500 mL	32.9	3/16/2017	12:42:02 AM
MDL	1 - 50 mL	35.4	3/16/2017	1:24:20 AM

MG WL 4323

TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 17 & KNOX-MS-0023, Rev 2

Analysis Date: 3/15/17	Instrument: HG	Chrom WL #: 4323	TALS Batch & Event #	TO14/15: 9482 962	AFCEE: 9503 / 965
				DOD: 9502 / 964	OHIO: 9501 / 963
Chrom/Worklist Review			1 st	Comments	
1. Re-read each Limit Group [method editor-limit groups]			/		
2. Verify LODV in Chrom [method editor -> edit -> LODV]			/		
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]			/	#98, #101, #111, #116	
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]			/	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?			/	C6, to 1, (no C8)	
MLG Review			TO-	AFC	DOD
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% [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 - icv]			/	/	IPA 621
22. Analyst/Date: 3/15/17			2nd Level Reviewer/Date: 3/16/17		
Comments:					
TALS Review			TO-	AFC	DOD
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 issue>			/	/	/
30. Checklist & Entech report scanned, attached & assigned properly?			/	/	/
Analyst: URB (S) Se-butylbenz., 4 FPHD.			2nd Level Reviewer: 3/16/17		
Comments: 1MSTHBE, NAPH.					

MS017r41, 5/25/2016

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Knoxville Job No.: 140-7698-1

SDG No.: _____

Instrument ID: MG Start Date: 04/05/2017 11:39Analysis Batch Number: 10156 End Date: 04/06/2017 11:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-10156/1		04/05/2017 11:39	1	GBFBD05.D	RTX-5 0.32 (mm)
CCVIS 140-10156/2		04/05/2017 12:12	1	GCCVD04.D	RTX-5 0.32 (mm)
LCS 140-10156/1002		04/05/2017 12:12	1	GCCVD04-LCS.d	RTX-5 0.32 (mm)
ZZZZZ		04/05/2017 14:19	1		RTX-5 0.32 (mm)
MB 140-10156/18		04/05/2017 14:19	1	GD05BLK5.D	RTX-5 0.32 (mm)
ZZZZZ		04/05/2017 15:09	1		RTX-5 0.32 (mm)
ZZZZZ		04/05/2017 15:52	1		RTX-5 0.32 (mm)
ZZZZZ		04/05/2017 15:52	1		RTX-5 0.32 (mm)
140-7698-2		04/06/2017 01:38	1	GD05P115.D	RTX-5 0.32 (mm)
140-7698-3		04/06/2017 02:24	1	GD05P116.D	RTX-5 0.32 (mm)
ZZZZZ		04/06/2017 03:06	1		RTX-5 0.32 (mm)
ZZZZZ		04/06/2017 03:48	1200		RTX-5 0.32 (mm)
140-7698-1		04/06/2017 09:45	1	GD05P114R.D	RTX-5 0.32 (mm)
140-7698-2 DL		04/06/2017 10:29	1	GD05P115DL.D	RTX-5 0.32 (mm)
140-7698-3 DL		04/06/2017 11:12	1	GD05P116DL.D	RTX-5 0.32 (mm)

170405.ZZZ

TA-Knoxville
TO-14 Autosampler Log

Sample	Position/Volume	psia	Date	Time
BFB	16 - 101 mL	32.3	4/5/2017	11:39:03 AM
CCVIS	15 - 101 mL	23.7	4/5/2017	12:12:33 PM
DNULEAK	16 - 21 mL	32.3	4/5/2017	1:43:18 PM
LOT7689	1 - 501 mL	19	4/5/2017	2:19:43 PM
LOT7690	2 - 501 mL	22.2	4/5/2017	3:09:34 PM
LOT7693	3 - 202 mL	26.3	4/5/2017	3:52:10 PM
7697-01	4 - 500 mL	7.2	4/5/2017	4:37:32 PM
7697-02	5 - 501 mL	4	4/5/2017	5:22:57 PM
7697-03	6 - 500 mL	6.4	4/5/2017	6:08:40 PM
7697-04	7 - 500 mL	7.2	4/5/2017	6:55:03 PM
7697-05	8 - 500 mL	9.3	4/5/2017	7:40:36 PM
7697-06	9 - 502 mL	7	4/5/2017	8:24:37 PM
7697-07	10 - 500 mL	6.6	4/5/2017	9:10:12 PM
7697-08	11 - 500 mL	7.2	4/5/2017	9:55:01 PM
7697-09	12 - 500 mL	7.1	4/5/2017	10:40:03 PM
7697-10	13 - 500 mL	7.3	4/5/2017	11:25:53 PM
7697-10	13 - 500 mL	6.3	4/6/2017	12:10:38 AM
7698-01	14 - 180 mL	9.2	4/6/2017	12:52:18 AM
7698-02	15 - 501 mL	5.6	4/6/2017	1:38:06 AM
7698-03	16 - 501 mL	4.6	4/6/2017	2:24:41 AM
136056-01	1 - 11 mL	12.2	4/6/2017	3:06:41 AM
136056-02	2 - 85 mL	11.2	4/6/2017	3:48:21 AM
7698-01	14 - 500 mL	6.1	4/6/2017	9:45:03 AM
7698-02	15 - 50 mL	7.7	4/6/2017	10:29:29 AM
7698-03	16 - 100 mL	6.5	4/6/2017	11:12:18 AM

MG WL 4509

TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 17 & KNOX-MS-0023, Rev 2

Page 1 of 2

Instrument/Date	MG 4/5/17		Routine	AFCEE	DOD	OHIO
CCAL Chrom WL #	4509	CCAL Batch #	10156	X	X	10247
ICAL Chrom WL #	4323	ICAL Batch # / Event #	9482 / 962			9501 / 963

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] [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	TCM Brown	☒ CCV - %D - LCS criteria met (NCM# 7196) ☐ 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: 4/6/17	2nd Level Reviewer: <i>[Signature]</i>	Date: 04/07/17
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		☐ ICAL - Range Exceeded; Minimum Dilution	/
15. Samples outside calibration range scheduled for 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?	/		/
18. Obvious non-TPH peaks excluded?	/		/

TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 17 & KNOX-MS-0023, Rev 2

Page 2 of 2

19. Individual TPH peak area < octane high point area?	✓		✓														
TALS Review	1 st	If No, why is data reportable?	2 nd														
20. Graphics uploaded? [Sample List Tab]	✓		✓														
21. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	✓		✓														
22. Sample special instructions verified?	✓		✓														
23. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	✓	☐ Marginal Exceedances - Within ME Limits and Random; Report (NCM# ____) ☒ LCS/LCSD - %R High (NCM# ____) <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Number of target analytes in LCS</th> <th># marginal exceedances of LCS control limits allowed</th> </tr> </thead> <tbody> <tr><td>>90</td><td>5</td></tr> <tr><td>71 - 90</td><td>4</td></tr> <tr><td>51 - 70</td><td>3</td></tr> <tr><td>31 - 50</td><td>2</td></tr> <tr><td>11 - 30</td><td>1</td></tr> <tr><td><11</td><td>0</td></tr> </tbody> </table>	Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed	>90	5	71 - 90	4	51 - 70	3	31 - 50	2	11 - 30	1	<11	0	✓
Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed																
>90	5																
71 - 90	4																
51 - 70	3																
31 - 50	2																
11 - 30	1																
<11	0																
24. Suffixes assigned properly (DL/RE)? [Sample List Tab]	✓		✓														
25. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	✓		✓														
26. Analytes over calibration range set to secondary [Conditions Review Tab]	✓		✓														
27. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	✓		✓														
28. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) (If DUP not reported - set to 'Acceptable' for each job)	✓		✓														
29. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	✓	500 mL blank ID: 18 200 mL blank ID: 19	✓														
30. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	✓		✓														
31. Correct ICV linked to each MB? [QC Links]	✓		✓														
32. If criteria were not met, was a MCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	✓		✓														
33. Runs set to 1 st level review?	✓	Runs set to 2 nd level review?	✓														
34. QC checker run and items addressed?	✓		✓														
35. Checklist & Entech report scanned, attached & assigned properly?	✓		✓														

Analyst: <i>CH</i>	Date: 4/6/17	2nd Level Reviewer: <i>W</i>	Date: 040717
Comments:	Comments:		
Example Calculation: 136056 - 2 CCLy On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF 3.152 x 85mL x 100 = 28249.41			

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

Lab Name: TestAmerica Knoxville Job No.: 140-7529-1
 SDG No.: _____
 Client Sample ID: 11155 Lab Sample ID: 140-7529-2
 Matrix: Air Lab File ID: LOT7529.D
 Analysis Method: TO 15 LL Date Collected: 03/19/2017 12:20
 Sample wt/vol: 500 (mL) Date Analyzed: 03/22/2017 04:55
 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.: 9530 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: <u>TestAmerica Knoxville</u>	Job No.: <u>140-7529-1</u>
SDG No.: _____	
Client Sample ID: <u>11155</u>	Lab Sample ID: <u>140-7529-2</u>
Matrix: <u>Air</u>	Lab File ID: <u>LOT7529.D</u>
Analysis Method: <u>TO 15 LL</u>	Date Collected: <u>03/19/2017 12:20</u>
Sample wt/vol: <u>500 (mL)</u>	Date Analyzed: <u>03/22/2017 04:55</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>9530</u>	Units: <u>ppb v/v</u>

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		2.0	
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: <u>TestAmerica Knoxville</u>	Job No.: <u>140-7529-1</u>
SDG No.: _____	
Client Sample ID: <u>11155</u>	Lab Sample ID: <u>140-7529-2</u>
Matrix: <u>Air</u>	Lab File ID: <u>LOT7529.D</u>
Analysis Method: <u>TO 15 LL</u>	Date Collected: <u>03/19/2017 12:20</u>
Sample wt/vol: <u>500 (mL)</u>	Date Analyzed: <u>03/22/2017 04:55</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>9530</u>	Units: <u>ppb v/v</u>

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.: 140-7529-1
SDG No.: _____
Client Sample ID: 11155 Lab Sample ID: 140-7529-2
Matrix: Air Lab File ID: LOT7529.D
Analysis Method: TO 15 LL Date Collected: 03/19/2017 12:20
Sample wt/vol: 500 (mL) Date Analyzed: 03/22/2017 04:55
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.: 9530 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: \\ChromNA\Knoxville\ChromData\MG\20170316-4340.b\LOT7529.D
 Lims ID: 140-7529-A-2
 Client ID: 11155
 Sample Type: Client
 Inject. Date: 22-Mar-2017 04:55:30 ALS Bottle#: 2 Worklist Smp#: 29
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004340-029
 Misc. Info.: 11155
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170316-4340.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 22-Mar-2017 09:58:01 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK015

First Level Reviewer: tajh

Date: 22-Mar-2017 09:41:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.991	7.991	0.000	78	294410	4.00	
* 2 1,4-Difluorobenzene	114	10.153	10.158	-0.005	95	1487644	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.028	15.033	-0.005	88	1444225	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.699	16.705	-0.006	93	1160297	4.07	
31 Methylene Chloride	84	5.661	5.656	0.005	88	6103	0.0862	
47 1,1,1-Trichloroethane	97	8.999	8.994	0.005	95	11505	0.0482	

Reagents:

40MXISSURP_00001 Amount Added: 40.00 Units: mL Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170316-4340.b\LOT7529.D

Injection Date: 22-Mar-2017 04:55:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7529-A-2

Lab Sample ID: 140-7529-2

Worklist Smp#: 29

Client ID: 11155

Purge Vol: 500.000 mL

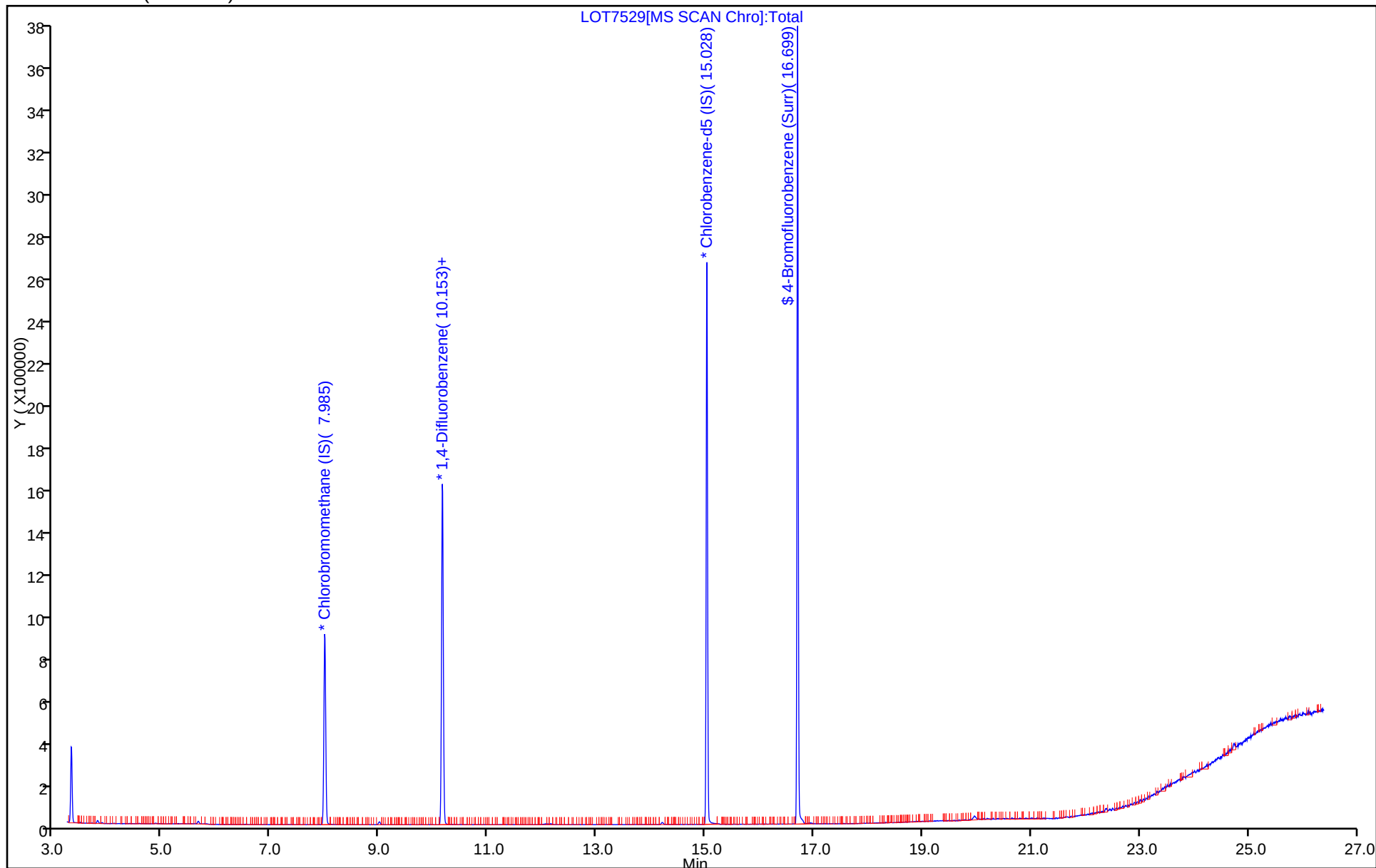
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MG_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.: 140-7547-1
 SDG No.: _____
 Client Sample ID: 11566 Lab Sample ID: 140-7547-16
 Matrix: Air Lab File ID: LOT7547.D
 Analysis Method: TO 15 LL Date Collected: 03/21/2017 10:45
 Sample wt/vol: 500 (mL) Date Analyzed: 03/23/2017 02:16
 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.: 9672 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: <u>TestAmerica Knoxville</u>	Job No.: <u>140-7547-1</u>
SDG No.: _____	
Client Sample ID: <u>11566</u>	Lab Sample ID: <u>140-7547-16</u>
Matrix: <u>Air</u>	Lab File ID: <u>LOT7547.D</u>
Analysis Method: <u>TO 15 LL</u>	Date Collected: <u>03/21/2017 10:45</u>
Sample wt/vol: <u>500 (mL)</u>	Date Analyzed: <u>03/23/2017 02:16</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>9672</u>	Units: <u>ppb v/v</u>

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		2.0	
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: <u>TestAmerica Knoxville</u>	Job No.: <u>140-7547-1</u>
SDG No.: _____	
Client Sample ID: <u>11566</u>	Lab Sample ID: <u>140-7547-16</u>
Matrix: <u>Air</u>	Lab File ID: <u>LOT7547.D</u>
Analysis Method: <u>TO 15 LL</u>	Date Collected: <u>03/21/2017 10:45</u>
Sample wt/vol: <u>500 (mL)</u>	Date Analyzed: <u>03/23/2017 02:16</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>9672</u>	Units: <u>ppb v/v</u>

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.: 140-7547-1
SDG No.: _____
Client Sample ID: 11566 Lab Sample ID: 140-7547-16
Matrix: Air Lab File ID: LOT7547.D
Analysis Method: TO 15 LL Date Collected: 03/21/2017 10:45
Sample wt/vol: 500 (mL) Date Analyzed: 03/23/2017 02:16
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.: 9672 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: \\ChromNA\Knoxville\ChromData\MG\20170321-4369.b\LOT7547.D
 Lims ID: 140-7547-A-16
 Client ID: 11566
 Sample Type: Client
 Inject. Date: 23-Mar-2017 02:16:30 ALS Bottle#: 16 Worklist Smp#: 26
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004369-026
 Misc. Info.: 11566
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170321-4369.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 23-Mar-2017 08:46:11 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK019

First Level Reviewer: tajh

Date: 23-Mar-2017 08:46:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.001	7.996	0.005	78	297515	4.00	
* 2 1,4-Difluorobenzene	114	10.164	10.164	0.000	95	1498417	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.028	15.028	0.000	88	1441446	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.699	16.699	0.000	93	1125348	3.95	
31 Methylene Chloride	84	5.677	5.661	0.016	81	6366	0.0890	
47 1,1,1-Trichloroethane	97	9.004	8.999	0.005	95	11890	0.0493	

Reagents:

40MXISSURP_00001 Amount Added: 40.00 Units: mL Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170321-4369.b\LOT7547.D

Injection Date: 23-Mar-2017 02:16:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7547-A-16

Lab Sample ID: 140-7547-16

Worklist Smp#: 26

Client ID: 11566

Purge Vol: 500.000 mL

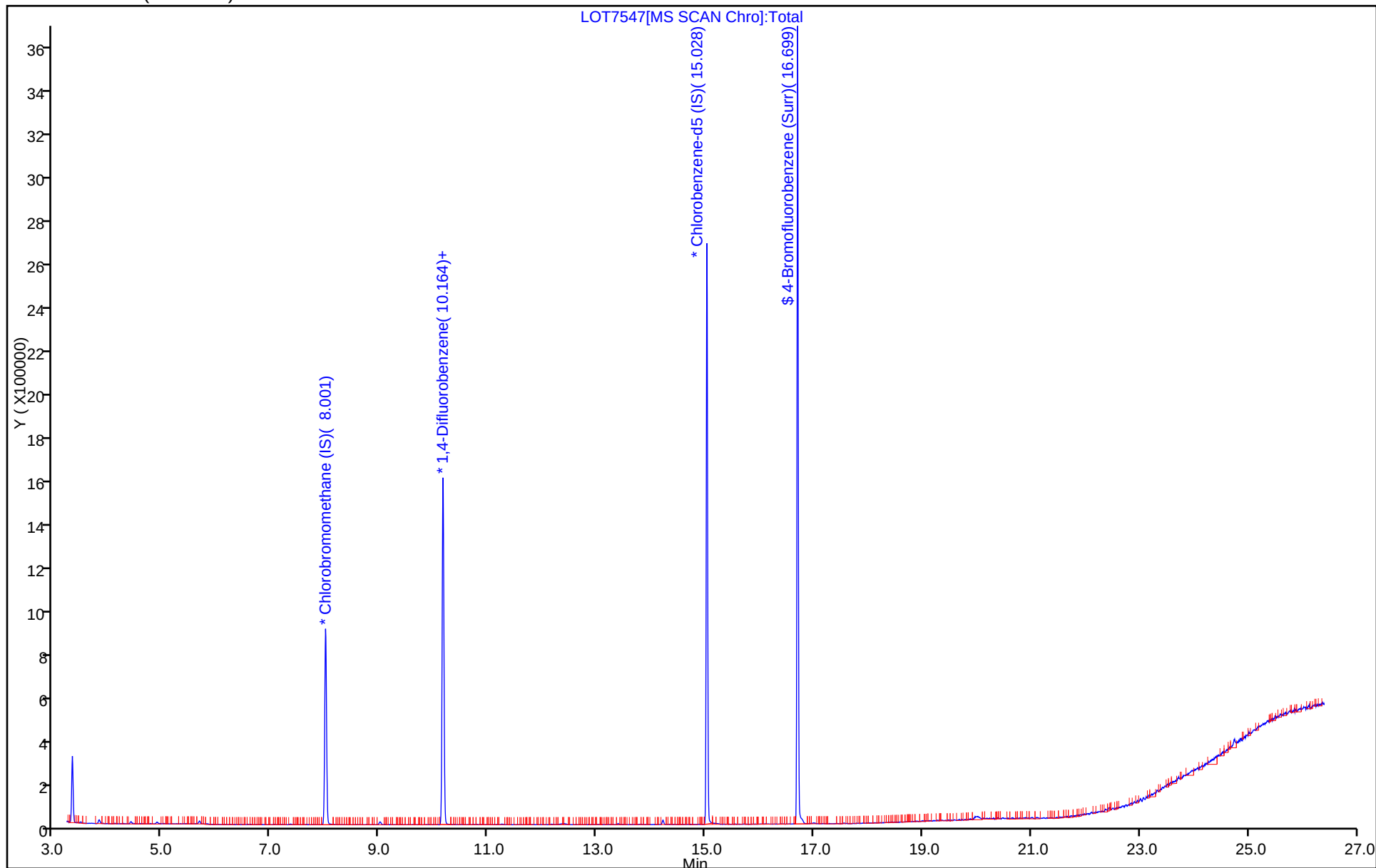
Dil. Factor: 1.0000

ALS Bottle#: 16

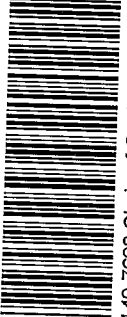
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Shipping and Receiving Documents

Client Contact Information Company: <u>NYSDEC</u> Address: <u>1679 Route 11</u> City/State/Zip: <u>Kirkwood, NY 13795</u> Phone: <u>(607) 775-2545 x116</u> FAX: _____		Project Manager: <u>Gary Priscille</u> Phone: <u>(607) 775-2545 x116</u> Site Contact: <u>TAL Contact: gary.priscille@dec.ny.gov</u>		Sampled By: <u>GB / GWP</u>		1 of 1 COCs													
Project Name: <u>Fmr Ithaca Gun Off-site</u> Site/location: <u>C755019A</u> PO # Callout: <u>121941</u>		Analysis Turnaround Time X Standard (Specify) <u>30 Days</u> Rush (Specify) _____		 140-7698 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)
H-37-BA		3/28/17	16:48	16:33	-30	-6	7414	10262	X						X				
H-37-FF		3/28/17	16:51	16:30	-29	-5	8661	11011	X						X				
H-37-SS		3/28/17	16:47	16:32	-30	-9	8609	09531	X										
Sampled by: <u>GB - Aztech</u> <u>GWP - NYSDEC</u>		Temperature (Fahrenheit) Interior _____ Ambient _____ Start <u>~43°</u> Stop <u>~35°</u>		Pressure (inches of Hg) Interior _____ Ambient _____ Start <u>29.9</u> Stop <u>30.2</u>		Received @ ambient, 1 box Fedex G, truck # 7860 9/25/2745 No custody per 4/4/17													
Special Instructions/QC Requirements & Comments: SS - Sub-slab Vapor BA - Basement air CS - Crawlspace air FF - First floor air OA - Outdoor air																			
Canisters Shipped by: <u>Gary Priscille</u>		Date/Time: <u>3/31/17 10:30</u>		Caristers Received by: <u>LA</u>		Date/Time: <u>4/4/17 1420</u>		3 cans 1 T 3 CC 3 FL...											
Samples Relinquished by: _____		Date/Time: _____		Received by: _____		_____													
Relinquished by: _____		Date/Time: _____		Received by: _____		_____													

Log In Number:

TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Are the shipping containers intact?	/			☐ Containers, Broken	
2. Were ambient air containers received intact?			/	☒ Checked in lab	
3. The coolers/containers custody seal if present, is it intact?			/	☐ Yes ☐ NA	
4. Is the cooler temperature within limits? (> freezing temp. of water to 6°C, VOST: 10°C) Thermometer ID: _____ Correction factor: _____			/	☐ Cooler Out of Temp, Client Contacted, Proceed/Cancel ☐ Cooler Out of Temp, Same Day Receipt	
5. Were all of the sample containers received intact?	/			☐ Containers, Broken	
6. Were samples received in appropriate containers?	/			☐ Containers, Improper; Client Contacted; Proceed/Cancel	
7. Do sample container labels match COC? (IDs, Dates, Times)	/			☐ COC & Samples Do Not Match ☐ COC Incorrect/Incomplete ☐ COC Not Received	
8. Were all of the samples listed on the COC received?	/			☐ Sample Received, Not on COC ☐ Sample on COC, Not Received	
9. Is the date/time of sample collection noted?	/			☐ COC; No Date/Time; Client Contacted	
10. Was the sampler identified on the COC?	/			☐ Sampler Not Listed on COC	
11. Is the client and project name/# identified?	/			☐ COC Incorrect/Incomplete	
12. Are tests/parameters listed for each sample?	/			☐ COC No tests on COC	
13. Is the matrix of the samples noted?	/			☐ COC Incorrect/Incomplete	
14. Was COC relinquished? (Signed/Dated/Timed)	/			☐ COC Incorrect/Incomplete	
15. Were samples received within holding time?	/			☐ Holding Time - Receipt	
16. Were samples received with correct chemical preservative (excluding Encore)?			/	☐ pH Adjusted, pH Included (See box 16A) ☐ Incorrect Preservative	
17. Were VOA samples received without headspace?			/	☐ Headspace (VOA only)	
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number: _____			/	☐ Residual Chlorine	
19. For 1613B water samples is pH<9?			/	☐ If no, lab will adjust	
20. For rad samples was sample activity info. Provided?			/	☐ Project missing info	
Project #: 19002411 PM Instructions: _____					

Box 16A: pH Preservation Box 18A: Residual Chlorine

Preservative: _____

Lot Number: _____

Exp Date: _____

Analyst: _____

Date: _____

Time: _____

QA026R30.doc, 080916

Date: 4/4/17

Sample Receiving Associate: *[Signature]*

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5
Date: 4/5/2017

[illegible]

ANALYTICAL REPORT

Job Number: 140-7831-1

Job Description: Former Ithaca Gun Factory # C755019A

Contract Number: C008010

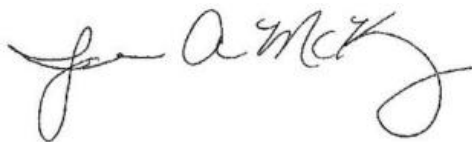
For:

New York State D.E.C.

1679 Rte. 11

Kirkwood, NY 13795

Attention: Gary Priscott



Approved for release.
Jamie A McKinney
Senior Project Manager
4/25/2017 1:08 PM

Jamie A McKinney, Senior Project Manager
5815 Middlebrook Pike, Knoxville, TN, 37921
(865)291-3000
jamie.mckinney@testamericainc.com
04/25/2017

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	14
Default Detection Limits	48
Surrogate Summary	50
QC Sample Results	51
QC Association	56
Chronicle	57
Certification Summary	60
Method Summary	61
Sample Summary	62
Organic Sample Data	63
Air - GC/MS VOA	63
Method TO15 Low Level	63
Method TO15 Low Level QC Summary	64
Method TO15 Low Level Sample Data	72
Standards Data	335
Method TO15 Low Level ICAL Data	335
Method TO15 Low Level CCAL Data	403
Raw QC Data	417
Method TO15 Low Level Tune Data	417
Method TO15 Low Level Blank Data	425
Method TO15 Low Level LCS/LCSD Data	432

Table of Contents

Method TO15 Low Level Run Logs	439
Clean Canister Certification	446
Clean Canister Data	446
Shipping and Receiving Documents	470
Client Chain of Custody	471
Sample Receipt Checklist	474

Definitions/Glossary

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

TestAmerica Job ID: 140-7831-1

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
140-7831-1

Comments

No additional comments.

Receipt

The samples were received on 4/17/2017 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air - GC/MS VOA

Method(s) TO 15 LL, TO-15: Can Certification Comments:

Due to the large number of analytes in the CCV, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for several analytes to recover outside criteria for this method when analyzing for a full list. The CCV associated with the can cleaning batches had analytes outside control limits. These results have been reported and qualified.

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

Method(s) TO 15 LL, TO-15: The continuing calibration verification (CCV) associated with batch 140-10584 exhibited % difference of > 30% for the following analyte(s) Chloromethane, Ethanol, tetrahydrofuran and/or Hexachlorobutadiene; 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.

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: 140-7831-1

Client Sample ID: H40-SS

Lab Sample ID: 140-7831-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.095		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.33		0.32		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.057		0.040		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.48		0.080		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.22		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	0.22		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.47		0.39		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	0.98		0.94		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.36		0.25		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.3		0.40		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.95		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	0.57		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.2		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H40-BA

Lab Sample ID: 140-7831-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	0.50		0.32		ppb v/v	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	0.80		0.20		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.080		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.36		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	20		2.0		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.27		0.20		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.14		0.12		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
2-Butanone	1.5		0.94		ug/m3	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	3.3		0.82		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.50		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.74		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.5		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	38		3.8		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	0.93		0.69		ug/m3	1		TO 15 LL	Total/NA
Toluene	0.52		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: H41A-SS

Lab Sample ID: 140-7831-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	8.1		1.6		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	5.0		0.80		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	41		1.6		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	76		0.80		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	44		8.7		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	31		5.0		ug/m3	1		TO 15 LL	Total/NA
Chloroform	200		7.8		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: 140-7831-1

Client Sample ID: H41A-SS (Continued)

Lab Sample ID: 140-7831-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	410		4.3		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H41A-BA

Lab Sample ID: 140-7831-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	0.79		0.32		ppb v/v	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	0.44		0.20		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.081		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.097		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.45		0.080		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.39		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.51		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	47		2.0		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.28		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	0.18		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.61		0.040		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.26		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	2.3		0.94		ug/m3	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	1.8		0.82		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.26		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.61		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	2.2		0.39		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.81		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.5		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	89		3.8		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	0.96		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	0.68		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	3.3		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.5		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H42-SS

Lab Sample ID: 140-7831-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.22		0.080		ppb v/v	1		TO 15 LL	Total/NA
1,1,2-Trichlorotrifluoroethane	0.080		0.080		ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.24		0.080		ppb v/v	1		TO 15 LL	Total/NA
1,4-Dioxane	0.47		0.20		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.82		0.32		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.52		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.052		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.31		0.080		ppb v/v	1		TO 15 LL	Total/NA
Cyclohexane	0.48		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.55		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	3.8		2.0		ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.18		0.080		ppb v/v	1		TO 15 LL	Total/NA
Hexane	1.2		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.87		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: 140-7831-1

Client Sample ID: H42-SS (Continued)

Lab Sample ID: 140-7831-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Xylene	0.24		0.080		ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.083		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.1		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	1.0		0.040		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.33		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	1.2		0.44		ug/m3	1		TO 15 LL	Total/NA
1,1,2-Trichlorotrifluoroethane	0.62		0.61		ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	1.2		0.39		ug/m3	1		TO 15 LL	Total/NA
1,4-Dioxane	1.7		0.72		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	2.4		0.94		ug/m3	1		TO 15 LL	Total/NA
Benzene	1.7		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.33		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	1.5		0.39		ug/m3	1		TO 15 LL	Total/NA
Cyclohexane	1.6		0.69		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.7		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	7.2		3.8		ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.78		0.35		ug/m3	1		TO 15 LL	Total/NA
Hexane	4.3		0.70		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	3.8		0.35		ug/m3	1		TO 15 LL	Total/NA
o-Xylene	1.0		0.35		ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	0.56		0.54		ug/m3	1		TO 15 LL	Total/NA
Toluene	4.2		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	5.5		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.9		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H42-BA

Lab Sample ID: 140-7831-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	0.86		0.32		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.082		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.33		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	17		2.0		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.26		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	2.5		0.94		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.52		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.68		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.6		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	32		3.8		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.5		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H43-SS-1018

Lab Sample ID: 140-7831-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.14		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	1.3		0.32		ppb v/v	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	0.26		0.20		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.11		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: 140-7831-1

Client Sample ID: H43-SS-1018 (Continued)

Lab Sample ID: 140-7831-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.080		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.35		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	6.9		2.0		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	0.25		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
1,1,1-Trichloroethane	0.75		0.44		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	3.8		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	0.36		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.51		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.73		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.4		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	13		3.8		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.88		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	0.95		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.3		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H43-BA-1018

Lab Sample ID: 140-7831-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone	0.60		0.32		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.080		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	0.53		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	6.0		2.0		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.84		0.20		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	0.17		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.31		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	1.8		0.94		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.50		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.80		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.6		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	11		3.8		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	2.9		0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.53		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	0.63		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.7		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H43-OA-1

Lab Sample ID: 140-7831-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon tetrachloride	0.077		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	0.52		0.080		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.45		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: 140-7831-1

Client Sample ID: H43-OA-1 (Continued)

Lab Sample ID: 140-7831-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.12		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.26		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	0.48		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	1.1		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.6		0.40		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	1.6		0.69		ug/m3	1		TO 15 LL	Total/NA
Toluene	0.47		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.5		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H43-SS-1020

Lab Sample ID: 140-7831-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.52		0.080		ppb v/v	1		TO 15 LL	Total/NA
1,1,2-Trichlorotrifluoroethane	0.080		0.080		ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.17		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.60		0.32		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.048		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	1.4		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
Ethylbenzene	0.082		0.080		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.40		0.080		ppb v/v	1		TO 15 LL	Total/NA
o-Xylene	0.13		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.34		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.062		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	2.9		0.44		ug/m3	1		TO 15 LL	Total/NA
1,1,2-Trichlorotrifluoroethane	0.61		0.61		ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.86		0.39		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	1.8		0.94		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.30		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	7.0		0.39		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.3		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.36		0.35		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	1.7		0.35		ug/m3	1		TO 15 LL	Total/NA
o-Xylene	0.56		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	1.3		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	0.34		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.4		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H43-BA-1020

Lab Sample ID: 140-7831-11

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	0.086		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.081		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	0.49		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	17		2.0		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: 140-7831-1

Client Sample ID: H43-BA-1020 (Continued)

Lab Sample ID: 140-7831-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.21		0.20		ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.28		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	0.24		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	0.28		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.51		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.88		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.4		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	32		3.8		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	0.71		0.69		ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	1.9		0.54		ug/m3	1		TO 15 LL	Total/NA
Toluene	0.44		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: H44-SS

Lab Sample ID: 140-7831-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.91		0.080		ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.26		0.080		ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.11		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.76		0.32		ppb v/v	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	0.27		0.20		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	0.33		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.11		0.080		ppb v/v	1		TO 15 LL	Total/NA
Cyclohexane	0.52		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
Ethylbenzene	0.13		0.080		ppb v/v	1		TO 15 LL	Total/NA
Hexane	1.0		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.75		0.080		ppb v/v	1		TO 15 LL	Total/NA
o-Xylene	0.25		0.080		ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.31		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.73		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.10		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
1,1,1-Trichloroethane	5.0		0.44		ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	1.3		0.39		ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.56		0.39		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	2.2		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	0.84		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	2.1		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.55		0.39		ug/m3	1		TO 15 LL	Total/NA
Cyclohexane	1.8		0.69		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.4		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.55		0.35		ug/m3	1		TO 15 LL	Total/NA
Hexane	3.6		0.70		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: 140-7831-1

Client Sample ID: H44-SS (Continued)

Lab Sample ID: 140-7831-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
m-Xylene & p-Xylene	3.3		0.35		ug/m3	1		TO 15 LL	Total/NA
o-Xylene	1.1		0.35		ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	2.1		0.54		ug/m3	1		TO 15 LL	Total/NA
Toluene	2.7		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	0.54		0.21		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.4		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: H44-BA

Lab Sample ID: 140-7831-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.47		0.080		ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.22		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	1.0		0.32		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.099		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.092		0.040		ppb v/v	1		TO 15 LL	Total/NA
Chloroform	0.14		0.080		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.46		0.20		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.52		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	61		2.0		ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.10		0.080		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.24		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.34		0.080		ppb v/v	1		TO 15 LL	Total/NA
o-Xylene	0.14		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.77		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.27		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	2.6		0.44		ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	1.1		0.39		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	3.1		0.94		ug/m3	1		TO 15 LL	Total/NA
Benzene	0.32		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.58		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.67		0.39		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.95		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.6		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	120		3.8		ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.44		0.35		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	0.82		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	0.61		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	2.9		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.5		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: FIELD DUP-1

Lab Sample ID: 140-7831-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.5		0.080		ppb v/v	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.12		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.32		0.32		ppb v/v	1		TO 15 LL	Total/NA
4-Methyl-2-pentanone (MIBK)	0.27		0.20		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.077		0.040		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: 140-7831-1

Client Sample ID: FIELD DUP-1 (Continued)

Lab Sample ID: 140-7831-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.093		0.080		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.24		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
Methylene Chloride	0.26		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	0.094		0.080		ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	0.92		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.35		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	0.15		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
1,1,1-Trichloroethane	8.3		0.44		ug/m3	1		TO 15 LL	Total/NA
1,2,4-Trimethylbenzene	0.57		0.39		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	0.93		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
Carbon tetrachloride	0.49		0.25		ug/m3	1		TO 15 LL	Total/NA
Chloroform	0.45		0.39		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.49		0.41		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	2.4		0.40		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	0.92		0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	1.3		0.35		ug/m3	1		TO 15 LL	Total/NA
o-Xylene	0.41		0.35		ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	6.3		0.54		ug/m3	1		TO 15 LL	Total/NA
Toluene	1.3		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	0.83		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: 140-7831-1

Client Sample ID: H40-SS

Date Collected: 04/12/17 07:58

Date Received: 04/17/17 10:15

Sample Container: Summa Canister 6L

Lab Sample ID: 140-7831-1

Matrix: Air

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			04/20/17 12:58	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/20/17 12:58	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/20/17 12:58	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/20/17 12:58	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/20/17 12:58	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/20/17 12:58	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/20/17 12:58	1
1,2,4-Trimethylbenzene	0.095		0.080		ppb v/v			04/20/17 12:58	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/20/17 12:58	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 12:58	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/20/17 12:58	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/20/17 12:58	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/20/17 12:58	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 12:58	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 12:58	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 12:58	1
1,4-Dioxane	ND		0.20		ppb v/v			04/20/17 12:58	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/20/17 12:58	1
2-Butanone	0.33		0.32		ppb v/v			04/20/17 12:58	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/20/17 12:58	1
Benzene	ND		0.080		ppb v/v			04/20/17 12:58	1
Benzyl chloride	ND		0.16		ppb v/v			04/20/17 12:58	1
Bromodichloromethane	ND		0.080		ppb v/v			04/20/17 12:58	1
Bromoform	ND		0.080		ppb v/v			04/20/17 12:58	1
Bromomethane	ND		0.080		ppb v/v			04/20/17 12:58	1
Carbon tetrachloride	0.057		0.040		ppb v/v			04/20/17 12:58	1
Chlorobenzene	ND		0.080		ppb v/v			04/20/17 12:58	1
Chloroethane	ND		0.080		ppb v/v			04/20/17 12:58	1
Chloroform	ND		0.080		ppb v/v			04/20/17 12:58	1
Chloromethane	ND		0.20		ppb v/v			04/20/17 12:58	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 12:58	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 12:58	1
Cyclohexane	ND		0.20		ppb v/v			04/20/17 12:58	1
Dibromochloromethane	ND		0.080		ppb v/v			04/20/17 12:58	1
Dichlorodifluoromethane	0.48		0.080		ppb v/v			04/20/17 12:58	1
Ethanol	ND		2.0		ppb v/v			04/20/17 12:58	1
Ethylbenzene	ND		0.080		ppb v/v			04/20/17 12:58	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/20/17 12:58	1
Hexane	ND		0.20		ppb v/v			04/20/17 12:58	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/20/17 12:58	1
Methylene Chloride	ND		0.20		ppb v/v			04/20/17 12:58	1
m-Xylene & p-Xylene	0.22		0.080		ppb v/v			04/20/17 12:58	1
o-Xylene	ND		0.080		ppb v/v			04/20/17 12:58	1
Styrene	ND		0.080		ppb v/v			04/20/17 12:58	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/20/17 12:58	1
Tetrachloroethene	ND		0.080		ppb v/v			04/20/17 12:58	1
Toluene	0.15		0.12		ppb v/v			04/20/17 12:58	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 12:58	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H40-SS

Lab Sample ID: 140-7831-1

Date Collected: 04/12/17 07:58

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 12:58	1
Trichloroethene	ND		0.040		ppb v/v			04/20/17 12:58	1
Trichlorofluoromethane	0.22		0.080		ppb v/v			04/20/17 12:58	1
Vinyl chloride	ND		0.040		ppb v/v			04/20/17 12:58	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/20/17 12:58	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/20/17 12:58	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/20/17 12:58	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/20/17 12:58	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/20/17 12:58	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/20/17 12:58	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/20/17 12:58	1
1,2,4-Trimethylbenzene	0.47		0.39		ug/m3			04/20/17 12:58	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/20/17 12:58	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 12:58	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/20/17 12:58	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/20/17 12:58	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/20/17 12:58	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/20/17 12:58	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 12:58	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 12:58	1
1,4-Dioxane	ND		0.72		ug/m3			04/20/17 12:58	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/20/17 12:58	1
2-Butanone	0.98		0.94		ug/m3			04/20/17 12:58	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/20/17 12:58	1
Benzene	ND		0.26		ug/m3			04/20/17 12:58	1
Benzyl chloride	ND		0.83		ug/m3			04/20/17 12:58	1
Bromodichloromethane	ND		0.54		ug/m3			04/20/17 12:58	1
Bromoform	ND		0.83		ug/m3			04/20/17 12:58	1
Bromomethane	ND		0.31		ug/m3			04/20/17 12:58	1
Carbon tetrachloride	0.36		0.25		ug/m3			04/20/17 12:58	1
Chlorobenzene	ND		0.37		ug/m3			04/20/17 12:58	1
Chloroethane	ND		0.21		ug/m3			04/20/17 12:58	1
Chloroform	ND		0.39		ug/m3			04/20/17 12:58	1
Chloromethane	ND		0.41		ug/m3			04/20/17 12:58	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 12:58	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 12:58	1
Cyclohexane	ND		0.69		ug/m3			04/20/17 12:58	1
Dibromochloromethane	ND		0.68		ug/m3			04/20/17 12:58	1
Dichlorodifluoromethane	2.3		0.40		ug/m3			04/20/17 12:58	1
Ethanol	ND		3.8		ug/m3			04/20/17 12:58	1
Ethylbenzene	ND		0.35		ug/m3			04/20/17 12:58	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/20/17 12:58	1
Hexane	ND		0.70		ug/m3			04/20/17 12:58	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/20/17 12:58	1
Methylene Chloride	ND		0.69		ug/m3			04/20/17 12:58	1
m-Xylene & p-Xylene	0.95		0.35		ug/m3			04/20/17 12:58	1
o-Xylene	ND		0.35		ug/m3			04/20/17 12:58	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H40-SS

Date Collected: 04/12/17 07:58

Date Received: 04/17/17 10:15

Sample Container: Summa Canister 6L

Lab Sample ID: 140-7831-1

Matrix: Air

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			04/20/17 12:58	1
t-Butyl alcohol	ND		0.97		ug/m3			04/20/17 12:58	1
Tetrachloroethene	ND		0.54		ug/m3			04/20/17 12:58	1
Toluene	0.57		0.45		ug/m3			04/20/17 12:58	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 12:58	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 12:58	1
Trichloroethene	ND		0.21		ug/m3			04/20/17 12:58	1
Trichlorofluoromethane	1.2		0.45		ug/m3			04/20/17 12:58	1
Vinyl chloride	ND		0.10		ug/m3			04/20/17 12:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		60 - 140					04/20/17 12:58	1

Client Sample ID: H40-BA

Date Collected: 04/12/17 07:58

Date Received: 04/17/17 10:15

Sample Container: Summa Canister 6L

Lab Sample ID: 140-7831-2

Matrix: Air

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			04/20/17 15:17	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/20/17 15:17	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/20/17 15:17	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/20/17 15:17	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/20/17 15:17	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/20/17 15:17	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/20/17 15:17	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 15:17	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/20/17 15:17	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 15:17	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/20/17 15:17	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/20/17 15:17	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/20/17 15:17	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 15:17	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 15:17	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 15:17	1
1,4-Dioxane	ND		0.20		ppb v/v			04/20/17 15:17	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/20/17 15:17	1
2-Butanone	0.50		0.32		ppb v/v			04/20/17 15:17	1
4-Methyl-2-pentanone (MIBK)	0.80		0.20		ppb v/v			04/20/17 15:17	1
Benzene	ND		0.080		ppb v/v			04/20/17 15:17	1
Benzyl chloride	ND		0.16		ppb v/v			04/20/17 15:17	1
Bromodichloromethane	ND		0.080		ppb v/v			04/20/17 15:17	1
Bromoform	ND		0.080		ppb v/v			04/20/17 15:17	1
Bromomethane	ND		0.080		ppb v/v			04/20/17 15:17	1
Carbon tetrachloride	0.080		0.040		ppb v/v			04/20/17 15:17	1
Chlorobenzene	ND		0.080		ppb v/v			04/20/17 15:17	1
Chloroethane	ND		0.080		ppb v/v			04/20/17 15:17	1
Chloroform	ND		0.080		ppb v/v			04/20/17 15:17	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H40-BA

Lab Sample ID: 140-7831-2

Date Collected: 04/12/17 07:58

Matrix: Air

Date Received: 04/17/17 10:15

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	0.36		0.20		ppb v/v			04/20/17 15:17	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 15:17	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 15:17	1
Cyclohexane	ND		0.20		ppb v/v			04/20/17 15:17	1
Dibromochloromethane	ND		0.080		ppb v/v			04/20/17 15:17	1
Dichlorodifluoromethane	0.51		0.080		ppb v/v			04/20/17 15:17	1
Ethanol	20		2.0		ppb v/v			04/20/17 15:17	1
Ethylbenzene	ND		0.080		ppb v/v			04/20/17 15:17	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/20/17 15:17	1
Hexane	ND		0.20		ppb v/v			04/20/17 15:17	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/20/17 15:17	1
Methylene Chloride	0.27		0.20		ppb v/v			04/20/17 15:17	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			04/20/17 15:17	1
o-Xylene	ND		0.080		ppb v/v			04/20/17 15:17	1
Styrene	ND		0.080		ppb v/v			04/20/17 15:17	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/20/17 15:17	1
Tetrachloroethene	ND		0.080		ppb v/v			04/20/17 15:17	1
Toluene	0.14		0.12		ppb v/v			04/20/17 15:17	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 15:17	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 15:17	1
Trichloroethene	ND		0.040		ppb v/v			04/20/17 15:17	1
Trichlorofluoromethane	0.25		0.080		ppb v/v			04/20/17 15:17	1
Vinyl chloride	ND		0.040		ppb v/v			04/20/17 15:17	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/20/17 15:17	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/20/17 15:17	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/20/17 15:17	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/20/17 15:17	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/20/17 15:17	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/20/17 15:17	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/20/17 15:17	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			04/20/17 15:17	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/20/17 15:17	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 15:17	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/20/17 15:17	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/20/17 15:17	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/20/17 15:17	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/20/17 15:17	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 15:17	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 15:17	1
1,4-Dioxane	ND		0.72		ug/m3			04/20/17 15:17	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/20/17 15:17	1
2-Butanone	1.5		0.94		ug/m3			04/20/17 15:17	1
4-Methyl-2-pentanone (MIBK)	3.3		0.82		ug/m3			04/20/17 15:17	1
Benzene	ND		0.26		ug/m3			04/20/17 15:17	1
Benzyl chloride	ND		0.83		ug/m3			04/20/17 15:17	1
Bromodichloromethane	ND		0.54		ug/m3			04/20/17 15:17	1
Bromoform	ND		0.83		ug/m3			04/20/17 15:17	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H40-BA

Lab Sample ID: 140-7831-2

Date Collected: 04/12/17 07:58

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 15:17	1
Carbon tetrachloride	0.50		0.25		ug/m3			04/20/17 15:17	1
Chlorobenzene	ND		0.37		ug/m3			04/20/17 15:17	1
Chloroethane	ND		0.21		ug/m3			04/20/17 15:17	1
Chloroform	ND		0.39		ug/m3			04/20/17 15:17	1
Chloromethane	0.74		0.41		ug/m3			04/20/17 15:17	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 15:17	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 15:17	1
Cyclohexane	ND		0.69		ug/m3			04/20/17 15:17	1
Dibromochloromethane	ND		0.68		ug/m3			04/20/17 15:17	1
Dichlorodifluoromethane	2.5		0.40		ug/m3			04/20/17 15:17	1
Ethanol	38		3.8		ug/m3			04/20/17 15:17	1
Ethylbenzene	ND		0.35		ug/m3			04/20/17 15:17	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/20/17 15:17	1
Hexane	ND		0.70		ug/m3			04/20/17 15:17	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/20/17 15:17	1
Methylene Chloride	0.93		0.69		ug/m3			04/20/17 15:17	1
m-Xylene & p-Xylene	ND		0.35		ug/m3			04/20/17 15:17	1
o-Xylene	ND		0.35		ug/m3			04/20/17 15:17	1
Styrene	ND		0.34		ug/m3			04/20/17 15:17	1
t-Butyl alcohol	ND		0.97		ug/m3			04/20/17 15:17	1
Tetrachloroethene	ND		0.54		ug/m3			04/20/17 15:17	1
Toluene	0.52		0.45		ug/m3			04/20/17 15:17	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 15:17	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 15:17	1
Trichloroethene	ND		0.21		ug/m3			04/20/17 15:17	1
Trichlorofluoromethane	1.4		0.45		ug/m3			04/20/17 15:17	1
Vinyl chloride	ND		0.10		ug/m3			04/20/17 15:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		60 - 140		04/20/17 15:17	1

Client Sample ID: H41A-SS

Lab Sample ID: 140-7831-3

Date Collected: 04/12/17 09:02

Matrix: Air

Date Received: 04/17/17 10:15

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	8.1		1.6		ppb v/v			04/20/17 16:04	1
1,1,2,2-Tetrachloroethane	ND		1.6		ppb v/v			04/20/17 16:04	1
1,1,2-Trichloroethane	ND		1.6		ppb v/v			04/20/17 16:04	1
1,1,2-Trichlorotrifluoroethane	ND		1.6		ppb v/v			04/20/17 16:04	1
1,1-Dichloroethane	ND		1.6		ppb v/v			04/20/17 16:04	1
1,1-Dichloroethene	ND		1.6		ppb v/v			04/20/17 16:04	1
1,2,4-Trichlorobenzene	ND		1.6		ppb v/v			04/20/17 16:04	1
1,2,4-Trimethylbenzene	ND		1.6		ppb v/v			04/20/17 16:04	1
1,2-Dibromoethane	ND		1.6		ppb v/v			04/20/17 16:04	1
1,2-Dichlorobenzene	ND		1.6		ppb v/v			04/20/17 16:04	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H41A-SS

Lab Sample ID: 140-7831-3

Date Collected: 04/12/17 09:02

Matrix: Air

Date Received: 04/17/17 10:15

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		1.6		ppb v/v			04/20/17 16:04	1
1,2-Dichloropropane	ND		1.6		ppb v/v			04/20/17 16:04	1
1,2-Dichlorotetrafluoroethane	ND		1.6		ppb v/v			04/20/17 16:04	1
1,3,5-Trimethylbenzene	ND		1.6		ppb v/v			04/20/17 16:04	1
1,3-Dichlorobenzene	ND		1.6		ppb v/v			04/20/17 16:04	1
1,4-Dichlorobenzene	ND		1.6		ppb v/v			04/20/17 16:04	1
1,4-Dioxane	ND		4.0		ppb v/v			04/20/17 16:04	1
2,2,4-Trimethylpentane	ND		4.0		ppb v/v			04/20/17 16:04	1
2-Butanone	ND		6.4		ppb v/v			04/20/17 16:04	1
4-Methyl-2-pentanone (MIBK)	ND		4.0		ppb v/v			04/20/17 16:04	1
Benzene	ND		1.6		ppb v/v			04/20/17 16:04	1
Benzyl chloride	ND		3.2		ppb v/v			04/20/17 16:04	1
Bromodichloromethane	ND		1.6		ppb v/v			04/20/17 16:04	1
Bromoform	ND		1.6		ppb v/v			04/20/17 16:04	1
Bromomethane	ND		1.6		ppb v/v			04/20/17 16:04	1
Carbon tetrachloride	5.0		0.80		ppb v/v			04/20/17 16:04	1
Chlorobenzene	ND		1.6		ppb v/v			04/20/17 16:04	1
Chloroethane	ND		1.6		ppb v/v			04/20/17 16:04	1
Chloroform	41		1.6		ppb v/v			04/20/17 16:04	1
Chloromethane	ND		4.0		ppb v/v			04/20/17 16:04	1
cis-1,2-Dichloroethene	ND		1.6		ppb v/v			04/20/17 16:04	1
cis-1,3-Dichloropropene	ND		1.6		ppb v/v			04/20/17 16:04	1
Cyclohexane	ND		4.0		ppb v/v			04/20/17 16:04	1
Dibromochloromethane	ND		1.6		ppb v/v			04/20/17 16:04	1
Dichlorodifluoromethane	ND		1.6		ppb v/v			04/20/17 16:04	1
Ethanol	ND		40		ppb v/v			04/20/17 16:04	1
Ethylbenzene	ND		1.6		ppb v/v			04/20/17 16:04	1
Hexachlorobutadiene	ND		1.6		ppb v/v			04/20/17 16:04	1
Hexane	ND		4.0		ppb v/v			04/20/17 16:04	1
Methyl tert-butyl ether	ND		3.2		ppb v/v			04/20/17 16:04	1
Methylene Chloride	ND		4.0		ppb v/v			04/20/17 16:04	1
m-Xylene & p-Xylene	ND		1.6		ppb v/v			04/20/17 16:04	1
o-Xylene	ND		1.6		ppb v/v			04/20/17 16:04	1
Styrene	ND		1.6		ppb v/v			04/20/17 16:04	1
t-Butyl alcohol	ND		6.4		ppb v/v			04/20/17 16:04	1
Tetrachloroethene	ND		1.6		ppb v/v			04/20/17 16:04	1
Toluene	ND		2.4		ppb v/v			04/20/17 16:04	1
trans-1,2-Dichloroethene	ND		1.6		ppb v/v			04/20/17 16:04	1
trans-1,3-Dichloropropene	ND		1.6		ppb v/v			04/20/17 16:04	1
Trichloroethene	76		0.80		ppb v/v			04/20/17 16:04	1
Trichlorofluoromethane	ND		1.6		ppb v/v			04/20/17 16:04	1
Vinyl chloride	ND		0.80		ppb v/v			04/20/17 16:04	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	44		8.7		ug/m3			04/20/17 16:04	1
1,1,2,2-Tetrachloroethane	ND		11		ug/m3			04/20/17 16:04	1
1,1,2-Trichloroethane	ND		8.7		ug/m3			04/20/17 16:04	1
1,1,2-Trichlorotrifluoroethane	ND		12		ug/m3			04/20/17 16:04	1
1,1-Dichloroethane	ND		6.5		ug/m3			04/20/17 16:04	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H41A-SS

Lab Sample ID: 140-7831-3

Date Collected: 04/12/17 09:02

Matrix: Air

Date Received: 04/17/17 10:15

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		6.3		ug/m3			04/20/17 16:04	1
1,2,4-Trichlorobenzene	ND		12		ug/m3			04/20/17 16:04	1
1,2,4-Trimethylbenzene	ND		7.9		ug/m3			04/20/17 16:04	1
1,2-Dibromoethane	ND		12		ug/m3			04/20/17 16:04	1
1,2-Dichlorobenzene	ND		9.6		ug/m3			04/20/17 16:04	1
1,2-Dichloroethane	ND		6.5		ug/m3			04/20/17 16:04	1
1,2-Dichloropropane	ND		7.4		ug/m3			04/20/17 16:04	1
1,2-Dichlorotetrafluoroethane	ND		11		ug/m3			04/20/17 16:04	1
1,3,5-Trimethylbenzene	ND		7.9		ug/m3			04/20/17 16:04	1
1,3-Dichlorobenzene	ND		9.6		ug/m3			04/20/17 16:04	1
1,4-Dichlorobenzene	ND		9.6		ug/m3			04/20/17 16:04	1
1,4-Dioxane	ND		14		ug/m3			04/20/17 16:04	1
2,2,4-Trimethylpentane	ND		19		ug/m3			04/20/17 16:04	1
2-Butanone	ND		19		ug/m3			04/20/17 16:04	1
4-Methyl-2-pentanone (MIBK)	ND		16		ug/m3			04/20/17 16:04	1
Benzene	ND		5.1		ug/m3			04/20/17 16:04	1
Benzyl chloride	ND		17		ug/m3			04/20/17 16:04	1
Bromodichloromethane	ND		11		ug/m3			04/20/17 16:04	1
Bromoform	ND		17		ug/m3			04/20/17 16:04	1
Bromomethane	ND		6.2		ug/m3			04/20/17 16:04	1
Carbon tetrachloride	31		5.0		ug/m3			04/20/17 16:04	1
Chlorobenzene	ND		7.4		ug/m3			04/20/17 16:04	1
Chloroethane	ND		4.2		ug/m3			04/20/17 16:04	1
Chloroform	200		7.8		ug/m3			04/20/17 16:04	1
Chloromethane	ND		8.3		ug/m3			04/20/17 16:04	1
cis-1,2-Dichloroethene	ND		6.3		ug/m3			04/20/17 16:04	1
cis-1,3-Dichloropropene	ND		7.3		ug/m3			04/20/17 16:04	1
Cyclohexane	ND		14		ug/m3			04/20/17 16:04	1
Dibromochloromethane	ND		14		ug/m3			04/20/17 16:04	1
Dichlorodifluoromethane	ND		7.9		ug/m3			04/20/17 16:04	1
Ethanol	ND		75		ug/m3			04/20/17 16:04	1
Ethylbenzene	ND		6.9		ug/m3			04/20/17 16:04	1
Hexachlorobutadiene	ND		17		ug/m3			04/20/17 16:04	1
Hexane	ND		14		ug/m3			04/20/17 16:04	1
Methyl tert-butyl ether	ND		12		ug/m3			04/20/17 16:04	1
Methylene Chloride	ND		14		ug/m3			04/20/17 16:04	1
m-Xylene & p-Xylene	ND		6.9		ug/m3			04/20/17 16:04	1
o-Xylene	ND		6.9		ug/m3			04/20/17 16:04	1
Styrene	ND		6.8		ug/m3			04/20/17 16:04	1
t-Butyl alcohol	ND		19		ug/m3			04/20/17 16:04	1
Tetrachloroethene	ND		11		ug/m3			04/20/17 16:04	1
Toluene	ND		9.0		ug/m3			04/20/17 16:04	1
trans-1,2-Dichloroethene	ND		6.3		ug/m3			04/20/17 16:04	1
trans-1,3-Dichloropropene	ND		7.3		ug/m3			04/20/17 16:04	1
Trichloroethene	410		4.3		ug/m3			04/20/17 16:04	1
Trichlorofluoromethane	ND		9.0		ug/m3			04/20/17 16:04	1
Vinyl chloride	ND		2.0		ug/m3			04/20/17 16:04	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H41A-SS

Date Collected: 04/12/17 09:02

Date Received: 04/17/17 10:15

Sample Container: Summa Canister 6L

Lab Sample ID: 140-7831-3

Matrix: Air

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		60 - 140		04/20/17 16:04	1

Client Sample ID: H41A-BA

Date Collected: 04/12/17 09:03

Date Received: 04/17/17 10:15

Sample Container: Summa Canister 6L

Lab Sample ID: 140-7831-4

Matrix: Air

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			04/20/17 16:51	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/20/17 16:51	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/20/17 16:51	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/20/17 16:51	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/20/17 16:51	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/20/17 16:51	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/20/17 16:51	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 16:51	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/20/17 16:51	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 16:51	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/20/17 16:51	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/20/17 16:51	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/20/17 16:51	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 16:51	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 16:51	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 16:51	1
1,4-Dioxane	ND		0.20		ppb v/v			04/20/17 16:51	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/20/17 16:51	1
2-Butanone	0.79		0.32		ppb v/v			04/20/17 16:51	1
4-Methyl-2-pentanone (MIBK)	0.44		0.20		ppb v/v			04/20/17 16:51	1
Benzene	0.081		0.080		ppb v/v			04/20/17 16:51	1
Benzyl chloride	ND		0.16		ppb v/v			04/20/17 16:51	1
Bromodichloromethane	ND		0.080		ppb v/v			04/20/17 16:51	1
Bromoform	ND		0.080		ppb v/v			04/20/17 16:51	1
Bromomethane	ND		0.080		ppb v/v			04/20/17 16:51	1
Carbon tetrachloride	0.097		0.040		ppb v/v			04/20/17 16:51	1
Chlorobenzene	ND		0.080		ppb v/v			04/20/17 16:51	1
Chloroethane	ND		0.080		ppb v/v			04/20/17 16:51	1
Chloroform	0.45		0.080		ppb v/v			04/20/17 16:51	1
Chloromethane	0.39		0.20		ppb v/v			04/20/17 16:51	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 16:51	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 16:51	1
Cyclohexane	ND		0.20		ppb v/v			04/20/17 16:51	1
Dibromochloromethane	ND		0.080		ppb v/v			04/20/17 16:51	1
Dichlorodifluoromethane	0.51		0.080		ppb v/v			04/20/17 16:51	1
Ethanol	47		2.0		ppb v/v			04/20/17 16:51	1
Ethylbenzene	ND		0.080		ppb v/v			04/20/17 16:51	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/20/17 16:51	1
Hexane	ND		0.20		ppb v/v			04/20/17 16:51	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/20/17 16:51	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H41A-BA

Lab Sample ID: 140-7831-4

Date Collected: 04/12/17 09:03

Matrix: Air

Date Received: 04/17/17 10:15

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	0.28		0.20		ppb v/v			04/20/17 16:51	1
m-Xylene & p-Xylene	0.10		0.080		ppb v/v			04/20/17 16:51	1
o-Xylene	ND		0.080		ppb v/v			04/20/17 16:51	1
Styrene	ND		0.080		ppb v/v			04/20/17 16:51	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/20/17 16:51	1
Tetrachloroethene	ND		0.080		ppb v/v			04/20/17 16:51	1
Toluene	0.18		0.12		ppb v/v			04/20/17 16:51	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 16:51	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 16:51	1
Trichloroethene	0.61		0.040		ppb v/v			04/20/17 16:51	1
Trichlorofluoromethane	0.26		0.080		ppb v/v			04/20/17 16:51	1
Vinyl chloride	ND		0.040		ppb v/v			04/20/17 16:51	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/20/17 16:51	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/20/17 16:51	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/20/17 16:51	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/20/17 16:51	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/20/17 16:51	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/20/17 16:51	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/20/17 16:51	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			04/20/17 16:51	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/20/17 16:51	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 16:51	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/20/17 16:51	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/20/17 16:51	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/20/17 16:51	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/20/17 16:51	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 16:51	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 16:51	1
1,4-Dioxane	ND		0.72		ug/m3			04/20/17 16:51	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/20/17 16:51	1
2-Butanone	2.3		0.94		ug/m3			04/20/17 16:51	1
4-Methyl-2-pentanone (MIBK)	1.8		0.82		ug/m3			04/20/17 16:51	1
Benzene	0.26		0.26		ug/m3			04/20/17 16:51	1
Benzyl chloride	ND		0.83		ug/m3			04/20/17 16:51	1
Bromodichloromethane	ND		0.54		ug/m3			04/20/17 16:51	1
Bromoform	ND		0.83		ug/m3			04/20/17 16:51	1
Bromomethane	ND		0.31		ug/m3			04/20/17 16:51	1
Carbon tetrachloride	0.61		0.25		ug/m3			04/20/17 16:51	1
Chlorobenzene	ND		0.37		ug/m3			04/20/17 16:51	1
Chloroethane	ND		0.21		ug/m3			04/20/17 16:51	1
Chloroform	2.2		0.39		ug/m3			04/20/17 16:51	1
Chloromethane	0.81		0.41		ug/m3			04/20/17 16:51	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 16:51	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 16:51	1
Cyclohexane	ND		0.69		ug/m3			04/20/17 16:51	1
Dibromochloromethane	ND		0.68		ug/m3			04/20/17 16:51	1
Dichlorodifluoromethane	2.5		0.40		ug/m3			04/20/17 16:51	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H41A-BA

Lab Sample ID: 140-7831-4

Date Collected: 04/12/17 09:03

Matrix: Air

Date Received: 04/17/17 10:15

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		3.8		ug/m3			04/20/17 16:51	1
Ethylbenzene	ND		0.35		ug/m3			04/20/17 16:51	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/20/17 16:51	1
Hexane	ND		0.70		ug/m3			04/20/17 16:51	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/20/17 16:51	1
Methylene Chloride	0.96		0.69		ug/m3			04/20/17 16:51	1
m-Xylene & p-Xylene	0.44		0.35		ug/m3			04/20/17 16:51	1
o-Xylene	ND		0.35		ug/m3			04/20/17 16:51	1
Styrene	ND		0.34		ug/m3			04/20/17 16:51	1
t-Butyl alcohol	ND		0.97		ug/m3			04/20/17 16:51	1
Tetrachloroethene	ND		0.54		ug/m3			04/20/17 16:51	1
Toluene	0.68		0.45		ug/m3			04/20/17 16:51	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 16:51	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 16:51	1
Trichloroethene	3.3		0.21		ug/m3			04/20/17 16:51	1
Trichlorofluoromethane	1.5		0.45		ug/m3			04/20/17 16:51	1
Vinyl chloride	ND		0.10		ug/m3			04/20/17 16:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		60 - 140					04/20/17 16:51	1

Client Sample ID: H42-SS

Lab Sample ID: 140-7831-5

Date Collected: 04/12/17 10:02

Matrix: Air

Date Received: 04/17/17 10:15

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	0.22		0.080		ppb v/v			04/20/17 17:40	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/20/17 17:40	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/20/17 17:40	1
1,1,2-Trichlorotrifluoroethane	0.080		0.080		ppb v/v			04/20/17 17:40	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/20/17 17:40	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/20/17 17:40	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/20/17 17:40	1
1,2,4-Trimethylbenzene	0.24		0.080		ppb v/v			04/20/17 17:40	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/20/17 17:40	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 17:40	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/20/17 17:40	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/20/17 17:40	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/20/17 17:40	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 17:40	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 17:40	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 17:40	1
1,4-Dioxane	0.47		0.20		ppb v/v			04/20/17 17:40	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/20/17 17:40	1
2-Butanone	0.82		0.32		ppb v/v			04/20/17 17:40	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/20/17 17:40	1
Benzene	0.52		0.080		ppb v/v			04/20/17 17:40	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H42-SS

Lab Sample ID: 140-7831-5

Date Collected: 04/12/17 10:02

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 17:40	1
Bromodichloromethane	ND		0.080		ppb v/v			04/20/17 17:40	1
Bromoform	ND		0.080		ppb v/v			04/20/17 17:40	1
Bromomethane	ND		0.080		ppb v/v			04/20/17 17:40	1
Carbon tetrachloride	0.052		0.040		ppb v/v			04/20/17 17:40	1
Chlorobenzene	ND		0.080		ppb v/v			04/20/17 17:40	1
Chloroethane	ND		0.080		ppb v/v			04/20/17 17:40	1
Chloroform	0.31		0.080		ppb v/v			04/20/17 17:40	1
Chloromethane	ND		0.20		ppb v/v			04/20/17 17:40	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 17:40	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 17:40	1
Cyclohexane	0.48		0.20		ppb v/v			04/20/17 17:40	1
Dibromochloromethane	ND		0.080		ppb v/v			04/20/17 17:40	1
Dichlorodifluoromethane	0.55		0.080		ppb v/v			04/20/17 17:40	1
Ethanol	3.8		2.0		ppb v/v			04/20/17 17:40	1
Ethylbenzene	0.18		0.080		ppb v/v			04/20/17 17:40	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/20/17 17:40	1
Hexane	1.2		0.20		ppb v/v			04/20/17 17:40	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/20/17 17:40	1
Methylene Chloride	ND		0.20		ppb v/v			04/20/17 17:40	1
m-Xylene & p-Xylene	0.87		0.080		ppb v/v			04/20/17 17:40	1
o-Xylene	0.24		0.080		ppb v/v			04/20/17 17:40	1
Styrene	ND		0.080		ppb v/v			04/20/17 17:40	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/20/17 17:40	1
Tetrachloroethene	0.083		0.080		ppb v/v			04/20/17 17:40	1
Toluene	1.1		0.12		ppb v/v			04/20/17 17:40	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 17:40	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 17:40	1
Trichloroethene	1.0		0.040		ppb v/v			04/20/17 17:40	1
Trichlorofluoromethane	0.33		0.080		ppb v/v			04/20/17 17:40	1
Vinyl chloride	ND		0.040		ppb v/v			04/20/17 17:40	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.2		0.44		ug/m3			04/20/17 17:40	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/20/17 17:40	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/20/17 17:40	1
1,1,2-Trichlorotrifluoroethane	0.62		0.61		ug/m3			04/20/17 17:40	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/20/17 17:40	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/20/17 17:40	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/20/17 17:40	1
1,2,4-Trimethylbenzene	1.2		0.39		ug/m3			04/20/17 17:40	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/20/17 17:40	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 17:40	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/20/17 17:40	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/20/17 17:40	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/20/17 17:40	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/20/17 17:40	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 17:40	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 17:40	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H42-SS

Lab Sample ID: 140-7831-5

Date Collected: 04/12/17 10:02

Matrix: Air

Date Received: 04/17/17 10:15

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	1.7		0.72		ug/m3			04/20/17 17:40	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/20/17 17:40	1
2-Butanone	2.4		0.94		ug/m3			04/20/17 17:40	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/20/17 17:40	1
Benzene	1.7		0.26		ug/m3			04/20/17 17:40	1
Benzyl chloride	ND		0.83		ug/m3			04/20/17 17:40	1
Bromodichloromethane	ND		0.54		ug/m3			04/20/17 17:40	1
Bromoform	ND		0.83		ug/m3			04/20/17 17:40	1
Bromomethane	ND		0.31		ug/m3			04/20/17 17:40	1
Carbon tetrachloride	0.33		0.25		ug/m3			04/20/17 17:40	1
Chlorobenzene	ND		0.37		ug/m3			04/20/17 17:40	1
Chloroethane	ND		0.21		ug/m3			04/20/17 17:40	1
Chloroform	1.5		0.39		ug/m3			04/20/17 17:40	1
Chloromethane	ND		0.41		ug/m3			04/20/17 17:40	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 17:40	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 17:40	1
Cyclohexane	1.6		0.69		ug/m3			04/20/17 17:40	1
Dibromochloromethane	ND		0.68		ug/m3			04/20/17 17:40	1
Dichlorodifluoromethane	2.7		0.40		ug/m3			04/20/17 17:40	1
Ethanol	7.2		3.8		ug/m3			04/20/17 17:40	1
Ethylbenzene	0.78		0.35		ug/m3			04/20/17 17:40	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/20/17 17:40	1
Hexane	4.3		0.70		ug/m3			04/20/17 17:40	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/20/17 17:40	1
Methylene Chloride	ND		0.69		ug/m3			04/20/17 17:40	1
m-Xylene & p-Xylene	3.8		0.35		ug/m3			04/20/17 17:40	1
o-Xylene	1.0		0.35		ug/m3			04/20/17 17:40	1
Styrene	ND		0.34		ug/m3			04/20/17 17:40	1
t-Butyl alcohol	ND		0.97		ug/m3			04/20/17 17:40	1
Tetrachloroethene	0.56		0.54		ug/m3			04/20/17 17:40	1
Toluene	4.2		0.45		ug/m3			04/20/17 17:40	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 17:40	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 17:40	1
Trichloroethene	5.5		0.21		ug/m3			04/20/17 17:40	1
Trichlorofluoromethane	1.9		0.45		ug/m3			04/20/17 17:40	1
Vinyl chloride	ND		0.10		ug/m3			04/20/17 17:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		60 - 140					04/20/17 17:40	1

Client Sample ID: H42-BA

Lab Sample ID: 140-7831-6

Date Collected: 04/12/17 10:03

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 18:27	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/20/17 18:27	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H42-BA

Lab Sample ID: 140-7831-6

Date Collected: 04/12/17 10:03

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 18:27	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/20/17 18:27	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/20/17 18:27	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/20/17 18:27	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/20/17 18:27	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 18:27	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/20/17 18:27	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 18:27	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/20/17 18:27	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/20/17 18:27	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/20/17 18:27	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 18:27	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 18:27	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 18:27	1
1,4-Dioxane	ND		0.20		ppb v/v			04/20/17 18:27	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/20/17 18:27	1
2-Butanone	0.86		0.32		ppb v/v			04/20/17 18:27	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/20/17 18:27	1
Benzene	ND		0.080		ppb v/v			04/20/17 18:27	1
Benzyl chloride	ND		0.16		ppb v/v			04/20/17 18:27	1
Bromodichloromethane	ND		0.080		ppb v/v			04/20/17 18:27	1
Bromoform	ND		0.080		ppb v/v			04/20/17 18:27	1
Bromomethane	ND		0.080		ppb v/v			04/20/17 18:27	1
Carbon tetrachloride	0.082		0.040		ppb v/v			04/20/17 18:27	1
Chlorobenzene	ND		0.080		ppb v/v			04/20/17 18:27	1
Chloroethane	ND		0.080		ppb v/v			04/20/17 18:27	1
Chloroform	ND		0.080		ppb v/v			04/20/17 18:27	1
Chloromethane	0.33		0.20		ppb v/v			04/20/17 18:27	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 18:27	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 18:27	1
Cyclohexane	ND		0.20		ppb v/v			04/20/17 18:27	1
Dibromochloromethane	ND		0.080		ppb v/v			04/20/17 18:27	1
Dichlorodifluoromethane	0.53		0.080		ppb v/v			04/20/17 18:27	1
Ethanol	17		2.0		ppb v/v			04/20/17 18:27	1
Ethylbenzene	ND		0.080		ppb v/v			04/20/17 18:27	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/20/17 18:27	1
Hexane	ND		0.20		ppb v/v			04/20/17 18:27	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/20/17 18:27	1
Methylene Chloride	ND		0.20		ppb v/v			04/20/17 18:27	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			04/20/17 18:27	1
o-Xylene	ND		0.080		ppb v/v			04/20/17 18:27	1
Styrene	ND		0.080		ppb v/v			04/20/17 18:27	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/20/17 18:27	1
Tetrachloroethene	ND		0.080		ppb v/v			04/20/17 18:27	1
Toluene	ND		0.12		ppb v/v			04/20/17 18:27	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 18:27	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 18:27	1
Trichloroethene	ND		0.040		ppb v/v			04/20/17 18:27	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H42-BA

Lab Sample ID: 140-7831-6

Date Collected: 04/12/17 10:03

Matrix: Air

Date Received: 04/17/17 10:15

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	0.26		0.080		ppb v/v			04/20/17 18:27	1
Vinyl chloride	ND		0.040		ppb v/v			04/20/17 18:27	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/20/17 18:27	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/20/17 18:27	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/20/17 18:27	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/20/17 18:27	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/20/17 18:27	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/20/17 18:27	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/20/17 18:27	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			04/20/17 18:27	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/20/17 18:27	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 18:27	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/20/17 18:27	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/20/17 18:27	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/20/17 18:27	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/20/17 18:27	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 18:27	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 18:27	1
1,4-Dioxane	ND		0.72		ug/m3			04/20/17 18:27	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/20/17 18:27	1
2-Butanone	2.5		0.94		ug/m3			04/20/17 18:27	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/20/17 18:27	1
Benzene	ND		0.26		ug/m3			04/20/17 18:27	1
Benzyl chloride	ND		0.83		ug/m3			04/20/17 18:27	1
Bromodichloromethane	ND		0.54		ug/m3			04/20/17 18:27	1
Bromoform	ND		0.83		ug/m3			04/20/17 18:27	1
Bromomethane	ND		0.31		ug/m3			04/20/17 18:27	1
Carbon tetrachloride	0.52		0.25		ug/m3			04/20/17 18:27	1
Chlorobenzene	ND		0.37		ug/m3			04/20/17 18:27	1
Chloroethane	ND		0.21		ug/m3			04/20/17 18:27	1
Chloroform	ND		0.39		ug/m3			04/20/17 18:27	1
Chloromethane	0.68		0.41		ug/m3			04/20/17 18:27	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 18:27	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 18:27	1
Cyclohexane	ND		0.69		ug/m3			04/20/17 18:27	1
Dibromochloromethane	ND		0.68		ug/m3			04/20/17 18:27	1
Dichlorodifluoromethane	2.6		0.40		ug/m3			04/20/17 18:27	1
Ethanol	32		3.8		ug/m3			04/20/17 18:27	1
Ethylbenzene	ND		0.35		ug/m3			04/20/17 18:27	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/20/17 18:27	1
Hexane	ND		0.70		ug/m3			04/20/17 18:27	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/20/17 18:27	1
Methylene Chloride	ND		0.69		ug/m3			04/20/17 18:27	1
m-Xylene & p-Xylene	ND		0.35		ug/m3			04/20/17 18:27	1
o-Xylene	ND		0.35		ug/m3			04/20/17 18:27	1
Styrene	ND		0.34		ug/m3			04/20/17 18:27	1
t-Butyl alcohol	ND		0.97		ug/m3			04/20/17 18:27	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H42-BA

Lab Sample ID: 140-7831-6

Date Collected: 04/12/17 10:03

Matrix: Air

Date Received: 04/17/17 10:15

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	ND		0.54		ug/m3			04/20/17 18:27	1
Toluene	ND		0.45		ug/m3			04/20/17 18:27	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 18:27	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 18:27	1
Trichloroethene	ND		0.21		ug/m3			04/20/17 18:27	1
Trichlorofluoromethane	1.5		0.45		ug/m3			04/20/17 18:27	1
Vinyl chloride	ND		0.10		ug/m3			04/20/17 18:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		60 - 140		04/20/17 18:27	1

Client Sample ID: H43-SS-1018

Lab Sample ID: 140-7831-7

Date Collected: 04/12/17 13:09

Matrix: Air

Date Received: 04/17/17 10:15

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	0.14		0.080		ppb v/v			04/20/17 19:15	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/20/17 19:15	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/20/17 19:15	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/20/17 19:15	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/20/17 19:15	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/20/17 19:15	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/20/17 19:15	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 19:15	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/20/17 19:15	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 19:15	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/20/17 19:15	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/20/17 19:15	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/20/17 19:15	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 19:15	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 19:15	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 19:15	1
1,4-Dioxane	ND		0.20		ppb v/v			04/20/17 19:15	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/20/17 19:15	1
2-Butanone	1.3		0.32		ppb v/v			04/20/17 19:15	1
4-Methyl-2-pentanone (MIBK)	0.26		0.20		ppb v/v			04/20/17 19:15	1
Benzene	0.11		0.080		ppb v/v			04/20/17 19:15	1
Benzyl chloride	ND		0.16		ppb v/v			04/20/17 19:15	1
Bromodichloromethane	ND		0.080		ppb v/v			04/20/17 19:15	1
Bromoform	ND		0.080		ppb v/v			04/20/17 19:15	1
Bromomethane	ND		0.080		ppb v/v			04/20/17 19:15	1
Carbon tetrachloride	0.080		0.040		ppb v/v			04/20/17 19:15	1
Chlorobenzene	ND		0.080		ppb v/v			04/20/17 19:15	1
Chloroethane	ND		0.080		ppb v/v			04/20/17 19:15	1
Chloroform	ND		0.080		ppb v/v			04/20/17 19:15	1
Chloromethane	0.35		0.20		ppb v/v			04/20/17 19:15	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 19:15	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H43-SS-1018

Lab Sample ID: 140-7831-7

Date Collected: 04/12/17 13:09

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 19:15	1
Cyclohexane	ND		0.20		ppb v/v			04/20/17 19:15	1
Dibromochloromethane	ND		0.080		ppb v/v			04/20/17 19:15	1
Dichlorodifluoromethane	0.49		0.080		ppb v/v			04/20/17 19:15	1
Ethanol	6.9		2.0		ppb v/v			04/20/17 19:15	1
Ethylbenzene	ND		0.080		ppb v/v			04/20/17 19:15	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/20/17 19:15	1
Hexane	ND		0.20		ppb v/v			04/20/17 19:15	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/20/17 19:15	1
Methylene Chloride	ND		0.20		ppb v/v			04/20/17 19:15	1
m-Xylene & p-Xylene	0.20		0.080		ppb v/v			04/20/17 19:15	1
o-Xylene	ND		0.080		ppb v/v			04/20/17 19:15	1
Styrene	ND		0.080		ppb v/v			04/20/17 19:15	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/20/17 19:15	1
Tetrachloroethene	ND		0.080		ppb v/v			04/20/17 19:15	1
Toluene	0.25		0.12		ppb v/v			04/20/17 19:15	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 19:15	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 19:15	1
Trichloroethene	ND		0.040		ppb v/v			04/20/17 19:15	1
Trichlorofluoromethane	0.24		0.080		ppb v/v			04/20/17 19:15	1
Vinyl chloride	ND		0.040		ppb v/v			04/20/17 19:15	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.75		0.44		ug/m3			04/20/17 19:15	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/20/17 19:15	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/20/17 19:15	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/20/17 19:15	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/20/17 19:15	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/20/17 19:15	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/20/17 19:15	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			04/20/17 19:15	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/20/17 19:15	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 19:15	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/20/17 19:15	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/20/17 19:15	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/20/17 19:15	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/20/17 19:15	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 19:15	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 19:15	1
1,4-Dioxane	ND		0.72		ug/m3			04/20/17 19:15	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/20/17 19:15	1
2-Butanone	3.8		0.94		ug/m3			04/20/17 19:15	1
4-Methyl-2-pentanone (MIBK)	1.1		0.82		ug/m3			04/20/17 19:15	1
Benzene	0.36		0.26		ug/m3			04/20/17 19:15	1
Benzyl chloride	ND		0.83		ug/m3			04/20/17 19:15	1
Bromodichloromethane	ND		0.54		ug/m3			04/20/17 19:15	1
Bromoform	ND		0.83		ug/m3			04/20/17 19:15	1
Bromomethane	ND		0.31		ug/m3			04/20/17 19:15	1
Carbon tetrachloride	0.51		0.25		ug/m3			04/20/17 19:15	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H43-SS-1018

Lab Sample ID: 140-7831-7

Date Collected: 04/12/17 13:09

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 19:15	1
Chloroethane	ND		0.21		ug/m3			04/20/17 19:15	1
Chloroform	ND		0.39		ug/m3			04/20/17 19:15	1
Chloromethane	0.73		0.41		ug/m3			04/20/17 19:15	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 19:15	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 19:15	1
Cyclohexane	ND		0.69		ug/m3			04/20/17 19:15	1
Dibromochloromethane	ND		0.68		ug/m3			04/20/17 19:15	1
Dichlorodifluoromethane	2.4		0.40		ug/m3			04/20/17 19:15	1
Ethanol	13		3.8		ug/m3			04/20/17 19:15	1
Ethylbenzene	ND		0.35		ug/m3			04/20/17 19:15	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/20/17 19:15	1
Hexane	ND		0.70		ug/m3			04/20/17 19:15	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/20/17 19:15	1
Methylene Chloride	ND		0.69		ug/m3			04/20/17 19:15	1
m-Xylene & p-Xylene	0.88		0.35		ug/m3			04/20/17 19:15	1
o-Xylene	ND		0.35		ug/m3			04/20/17 19:15	1
Styrene	ND		0.34		ug/m3			04/20/17 19:15	1
t-Butyl alcohol	ND		0.97		ug/m3			04/20/17 19:15	1
Tetrachloroethene	ND		0.54		ug/m3			04/20/17 19:15	1
Toluene	0.95		0.45		ug/m3			04/20/17 19:15	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 19:15	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 19:15	1
Trichloroethene	ND		0.21		ug/m3			04/20/17 19:15	1
Trichlorofluoromethane	1.3		0.45		ug/m3			04/20/17 19:15	1
Vinyl chloride	ND		0.10		ug/m3			04/20/17 19:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		60 - 140		04/20/17 19:15	1

Client Sample ID: H43-BA-1018

Lab Sample ID: 140-7831-8

Date Collected: 04/12/17 13:08

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 20:02	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/20/17 20:02	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/20/17 20:02	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/20/17 20:02	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/20/17 20:02	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/20/17 20:02	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/20/17 20:02	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 20:02	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/20/17 20:02	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 20:02	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/20/17 20:02	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/20/17 20:02	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H43-BA-1018

Lab Sample ID: 140-7831-8

Date Collected: 04/12/17 13:08

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 20:02	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 20:02	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 20:02	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 20:02	1
1,4-Dioxane	ND		0.20		ppb v/v			04/20/17 20:02	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/20/17 20:02	1
2-Butanone	0.60		0.32		ppb v/v			04/20/17 20:02	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/20/17 20:02	1
Benzene	ND		0.080		ppb v/v			04/20/17 20:02	1
Benzyl chloride	ND		0.16		ppb v/v			04/20/17 20:02	1
Bromodichloromethane	ND		0.080		ppb v/v			04/20/17 20:02	1
Bromoform	ND		0.080		ppb v/v			04/20/17 20:02	1
Bromomethane	ND		0.080		ppb v/v			04/20/17 20:02	1
Carbon tetrachloride	0.080		0.040		ppb v/v			04/20/17 20:02	1
Chlorobenzene	ND		0.080		ppb v/v			04/20/17 20:02	1
Chloroethane	ND		0.080		ppb v/v			04/20/17 20:02	1
Chloroform	ND		0.080		ppb v/v			04/20/17 20:02	1
Chloromethane	0.39		0.20		ppb v/v			04/20/17 20:02	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 20:02	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 20:02	1
Cyclohexane	ND		0.20		ppb v/v			04/20/17 20:02	1
Dibromochloromethane	ND		0.080		ppb v/v			04/20/17 20:02	1
Dichlorodifluoromethane	0.53		0.080		ppb v/v			04/20/17 20:02	1
Ethanol	6.0		2.0		ppb v/v			04/20/17 20:02	1
Ethylbenzene	ND		0.080		ppb v/v			04/20/17 20:02	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/20/17 20:02	1
Hexane	ND		0.20		ppb v/v			04/20/17 20:02	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/20/17 20:02	1
Methylene Chloride	0.84		0.20		ppb v/v			04/20/17 20:02	1
m-Xylene & p-Xylene	0.12		0.080		ppb v/v			04/20/17 20:02	1
o-Xylene	ND		0.080		ppb v/v			04/20/17 20:02	1
Styrene	ND		0.080		ppb v/v			04/20/17 20:02	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/20/17 20:02	1
Tetrachloroethene	ND		0.080		ppb v/v			04/20/17 20:02	1
Toluene	0.17		0.12		ppb v/v			04/20/17 20:02	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 20:02	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 20:02	1
Trichloroethene	ND		0.040		ppb v/v			04/20/17 20:02	1
Trichlorofluoromethane	0.31		0.080		ppb v/v			04/20/17 20:02	1
Vinyl chloride	ND		0.040		ppb v/v			04/20/17 20:02	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/20/17 20:02	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/20/17 20:02	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/20/17 20:02	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/20/17 20:02	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/20/17 20:02	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/20/17 20:02	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/20/17 20:02	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H43-BA-1018

Lab Sample ID: 140-7831-8

Date Collected: 04/12/17 13:08

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 20:02	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/20/17 20:02	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 20:02	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/20/17 20:02	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/20/17 20:02	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/20/17 20:02	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/20/17 20:02	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 20:02	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 20:02	1
1,4-Dioxane	ND		0.72		ug/m3			04/20/17 20:02	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/20/17 20:02	1
2-Butanone	1.8		0.94		ug/m3			04/20/17 20:02	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/20/17 20:02	1
Benzene	ND		0.26		ug/m3			04/20/17 20:02	1
Benzyl chloride	ND		0.83		ug/m3			04/20/17 20:02	1
Bromodichloromethane	ND		0.54		ug/m3			04/20/17 20:02	1
Bromoform	ND		0.83		ug/m3			04/20/17 20:02	1
Bromomethane	ND		0.31		ug/m3			04/20/17 20:02	1
Carbon tetrachloride	0.50		0.25		ug/m3			04/20/17 20:02	1
Chlorobenzene	ND		0.37		ug/m3			04/20/17 20:02	1
Chloroethane	ND		0.21		ug/m3			04/20/17 20:02	1
Chloroform	ND		0.39		ug/m3			04/20/17 20:02	1
Chloromethane	0.80		0.41		ug/m3			04/20/17 20:02	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 20:02	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 20:02	1
Cyclohexane	ND		0.69		ug/m3			04/20/17 20:02	1
Dibromochloromethane	ND		0.68		ug/m3			04/20/17 20:02	1
Dichlorodifluoromethane	2.6		0.40		ug/m3			04/20/17 20:02	1
Ethanol	11		3.8		ug/m3			04/20/17 20:02	1
Ethylbenzene	ND		0.35		ug/m3			04/20/17 20:02	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/20/17 20:02	1
Hexane	ND		0.70		ug/m3			04/20/17 20:02	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/20/17 20:02	1
Methylene Chloride	2.9		0.69		ug/m3			04/20/17 20:02	1
m-Xylene & p-Xylene	0.53		0.35		ug/m3			04/20/17 20:02	1
o-Xylene	ND		0.35		ug/m3			04/20/17 20:02	1
Styrene	ND		0.34		ug/m3			04/20/17 20:02	1
t-Butyl alcohol	ND		0.97		ug/m3			04/20/17 20:02	1
Tetrachloroethene	ND		0.54		ug/m3			04/20/17 20:02	1
Toluene	0.63		0.45		ug/m3			04/20/17 20:02	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 20:02	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 20:02	1
Trichloroethene	ND		0.21		ug/m3			04/20/17 20:02	1
Trichlorofluoromethane	1.7		0.45		ug/m3			04/20/17 20:02	1
Vinyl chloride	ND		0.10		ug/m3			04/20/17 20:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		60 - 140		04/20/17 20:02	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H43-OA-1

Lab Sample ID: 140-7831-9

Date Collected: 04/12/17 13:06

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 20:48	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/20/17 20:48	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/20/17 20:48	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/20/17 20:48	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/20/17 20:48	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/20/17 20:48	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/20/17 20:48	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 20:48	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/20/17 20:48	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 20:48	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/20/17 20:48	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/20/17 20:48	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/20/17 20:48	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 20:48	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 20:48	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 20:48	1
1,4-Dioxane	ND		0.20		ppb v/v			04/20/17 20:48	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/20/17 20:48	1
2-Butanone	ND		0.32		ppb v/v			04/20/17 20:48	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/20/17 20:48	1
Benzene	ND		0.080		ppb v/v			04/20/17 20:48	1
Benzyl chloride	ND		0.16		ppb v/v			04/20/17 20:48	1
Bromodichloromethane	ND		0.080		ppb v/v			04/20/17 20:48	1
Bromoform	ND		0.080		ppb v/v			04/20/17 20:48	1
Bromomethane	ND		0.080		ppb v/v			04/20/17 20:48	1
Carbon tetrachloride	0.077		0.040		ppb v/v			04/20/17 20:48	1
Chlorobenzene	ND		0.080		ppb v/v			04/20/17 20:48	1
Chloroethane	ND		0.080		ppb v/v			04/20/17 20:48	1
Chloroform	ND		0.080		ppb v/v			04/20/17 20:48	1
Chloromethane	0.53		0.20		ppb v/v			04/20/17 20:48	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 20:48	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 20:48	1
Cyclohexane	ND		0.20		ppb v/v			04/20/17 20:48	1
Dibromochloromethane	ND		0.080		ppb v/v			04/20/17 20:48	1
Dichlorodifluoromethane	0.52		0.080		ppb v/v			04/20/17 20:48	1
Ethanol	ND		2.0		ppb v/v			04/20/17 20:48	1
Ethylbenzene	ND		0.080		ppb v/v			04/20/17 20:48	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/20/17 20:48	1
Hexane	ND		0.20		ppb v/v			04/20/17 20:48	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/20/17 20:48	1
Methylene Chloride	0.45		0.20		ppb v/v			04/20/17 20:48	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			04/20/17 20:48	1
o-Xylene	ND		0.080		ppb v/v			04/20/17 20:48	1
Styrene	ND		0.080		ppb v/v			04/20/17 20:48	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/20/17 20:48	1
Tetrachloroethene	ND		0.080		ppb v/v			04/20/17 20:48	1
Toluene	0.12		0.12		ppb v/v			04/20/17 20:48	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 20:48	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H43-OA-1

Lab Sample ID: 140-7831-9

Date Collected: 04/12/17 13:06

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 20:48	1
Trichloroethene	ND		0.040		ppb v/v			04/20/17 20:48	1
Trichlorofluoromethane	0.26		0.080		ppb v/v			04/20/17 20:48	1
Vinyl chloride	ND		0.040		ppb v/v			04/20/17 20:48	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/20/17 20:48	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/20/17 20:48	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/20/17 20:48	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/20/17 20:48	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/20/17 20:48	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/20/17 20:48	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/20/17 20:48	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			04/20/17 20:48	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/20/17 20:48	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 20:48	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/20/17 20:48	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/20/17 20:48	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/20/17 20:48	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/20/17 20:48	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 20:48	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 20:48	1
1,4-Dioxane	ND		0.72		ug/m3			04/20/17 20:48	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/20/17 20:48	1
2-Butanone	ND		0.94		ug/m3			04/20/17 20:48	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/20/17 20:48	1
Benzene	ND		0.26		ug/m3			04/20/17 20:48	1
Benzyl chloride	ND		0.83		ug/m3			04/20/17 20:48	1
Bromodichloromethane	ND		0.54		ug/m3			04/20/17 20:48	1
Bromoform	ND		0.83		ug/m3			04/20/17 20:48	1
Bromomethane	ND		0.31		ug/m3			04/20/17 20:48	1
Carbon tetrachloride	0.48		0.25		ug/m3			04/20/17 20:48	1
Chlorobenzene	ND		0.37		ug/m3			04/20/17 20:48	1
Chloroethane	ND		0.21		ug/m3			04/20/17 20:48	1
Chloroform	ND		0.39		ug/m3			04/20/17 20:48	1
Chloromethane	1.1		0.41		ug/m3			04/20/17 20:48	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 20:48	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 20:48	1
Cyclohexane	ND		0.69		ug/m3			04/20/17 20:48	1
Dibromochloromethane	ND		0.68		ug/m3			04/20/17 20:48	1
Dichlorodifluoromethane	2.6		0.40		ug/m3			04/20/17 20:48	1
Ethanol	ND		3.8		ug/m3			04/20/17 20:48	1
Ethylbenzene	ND		0.35		ug/m3			04/20/17 20:48	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/20/17 20:48	1
Hexane	ND		0.70		ug/m3			04/20/17 20:48	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/20/17 20:48	1
Methylene Chloride	1.6		0.69		ug/m3			04/20/17 20:48	1
m-Xylene & p-Xylene	ND		0.35		ug/m3			04/20/17 20:48	1
o-Xylene	ND		0.35		ug/m3			04/20/17 20:48	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H43-OA-1

Lab Sample ID: 140-7831-9

Date Collected: 04/12/17 13:06

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 20:48	1
t-Butyl alcohol	ND		0.97		ug/m3			04/20/17 20:48	1
Tetrachloroethene	ND		0.54		ug/m3			04/20/17 20:48	1
Toluene	0.47		0.45		ug/m3			04/20/17 20:48	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 20:48	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 20:48	1
Trichloroethene	ND		0.21		ug/m3			04/20/17 20:48	1
Trichlorofluoromethane	1.5		0.45		ug/m3			04/20/17 20:48	1
Vinyl chloride	ND		0.10		ug/m3			04/20/17 20:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		60 - 140					04/20/17 20:48	1

Client Sample ID: H43-SS-1020

Lab Sample ID: 140-7831-10

Date Collected: 04/12/17 13:13

Matrix: Air

Date Received: 04/17/17 10:15

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	0.52		0.080		ppb v/v			04/20/17 21:36	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/20/17 21:36	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/20/17 21:36	1
1,1,2-Trichlorotrifluoroethane	0.080		0.080		ppb v/v			04/20/17 21:36	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/20/17 21:36	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/20/17 21:36	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/20/17 21:36	1
1,2,4-Trimethylbenzene	0.17		0.080		ppb v/v			04/20/17 21:36	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/20/17 21:36	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 21:36	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/20/17 21:36	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/20/17 21:36	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/20/17 21:36	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 21:36	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 21:36	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 21:36	1
1,4-Dioxane	ND		0.20		ppb v/v			04/20/17 21:36	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/20/17 21:36	1
2-Butanone	0.60		0.32		ppb v/v			04/20/17 21:36	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/20/17 21:36	1
Benzene	ND		0.080		ppb v/v			04/20/17 21:36	1
Benzyl chloride	ND		0.16		ppb v/v			04/20/17 21:36	1
Bromodichloromethane	ND		0.080		ppb v/v			04/20/17 21:36	1
Bromoform	ND		0.080		ppb v/v			04/20/17 21:36	1
Bromomethane	ND		0.080		ppb v/v			04/20/17 21:36	1
Carbon tetrachloride	0.048		0.040		ppb v/v			04/20/17 21:36	1
Chlorobenzene	ND		0.080		ppb v/v			04/20/17 21:36	1
Chloroethane	ND		0.080		ppb v/v			04/20/17 21:36	1
Chloroform	1.4		0.080		ppb v/v			04/20/17 21:36	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H43-SS-1020

Lab Sample ID: 140-7831-10

Date Collected: 04/12/17 13:13

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 21:36	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 21:36	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 21:36	1
Cyclohexane	ND		0.20		ppb v/v			04/20/17 21:36	1
Dibromochloromethane	ND		0.080		ppb v/v			04/20/17 21:36	1
Dichlorodifluoromethane	0.46		0.080		ppb v/v			04/20/17 21:36	1
Ethanol	ND		2.0		ppb v/v			04/20/17 21:36	1
Ethylbenzene	0.082		0.080		ppb v/v			04/20/17 21:36	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/20/17 21:36	1
Hexane	ND		0.20		ppb v/v			04/20/17 21:36	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/20/17 21:36	1
Methylene Chloride	ND		0.20		ppb v/v			04/20/17 21:36	1
m-Xylene & p-Xylene	0.40		0.080		ppb v/v			04/20/17 21:36	1
o-Xylene	0.13		0.080		ppb v/v			04/20/17 21:36	1
Styrene	ND		0.080		ppb v/v			04/20/17 21:36	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/20/17 21:36	1
Tetrachloroethene	ND		0.080		ppb v/v			04/20/17 21:36	1
Toluene	0.34		0.12		ppb v/v			04/20/17 21:36	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 21:36	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 21:36	1
Trichloroethene	0.062		0.040		ppb v/v			04/20/17 21:36	1
Trichlorofluoromethane	0.24		0.080		ppb v/v			04/20/17 21:36	1
Vinyl chloride	ND		0.040		ppb v/v			04/20/17 21:36	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	2.9		0.44		ug/m3			04/20/17 21:36	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/20/17 21:36	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/20/17 21:36	1
1,1,2-Trichlorotrifluoroethane	0.61		0.61		ug/m3			04/20/17 21:36	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/20/17 21:36	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/20/17 21:36	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/20/17 21:36	1
1,2,4-Trimethylbenzene	0.86		0.39		ug/m3			04/20/17 21:36	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/20/17 21:36	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 21:36	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/20/17 21:36	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/20/17 21:36	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/20/17 21:36	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/20/17 21:36	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 21:36	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 21:36	1
1,4-Dioxane	ND		0.72		ug/m3			04/20/17 21:36	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/20/17 21:36	1
2-Butanone	1.8		0.94		ug/m3			04/20/17 21:36	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/20/17 21:36	1
Benzene	ND		0.26		ug/m3			04/20/17 21:36	1
Benzyl chloride	ND		0.83		ug/m3			04/20/17 21:36	1
Bromodichloromethane	ND		0.54		ug/m3			04/20/17 21:36	1
Bromoform	ND		0.83		ug/m3			04/20/17 21:36	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H43-SS-1020

Lab Sample ID: 140-7831-10

Date Collected: 04/12/17 13:13

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 21:36	1
Carbon tetrachloride	0.30		0.25		ug/m3			04/20/17 21:36	1
Chlorobenzene	ND		0.37		ug/m3			04/20/17 21:36	1
Chloroethane	ND		0.21		ug/m3			04/20/17 21:36	1
Chloroform	7.0		0.39		ug/m3			04/20/17 21:36	1
Chloromethane	ND		0.41		ug/m3			04/20/17 21:36	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 21:36	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 21:36	1
Cyclohexane	ND		0.69		ug/m3			04/20/17 21:36	1
Dibromochloromethane	ND		0.68		ug/m3			04/20/17 21:36	1
Dichlorodifluoromethane	2.3		0.40		ug/m3			04/20/17 21:36	1
Ethanol	ND		3.8		ug/m3			04/20/17 21:36	1
Ethylbenzene	0.36		0.35		ug/m3			04/20/17 21:36	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/20/17 21:36	1
Hexane	ND		0.70		ug/m3			04/20/17 21:36	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/20/17 21:36	1
Methylene Chloride	ND		0.69		ug/m3			04/20/17 21:36	1
m-Xylene & p-Xylene	1.7		0.35		ug/m3			04/20/17 21:36	1
o-Xylene	0.56		0.35		ug/m3			04/20/17 21:36	1
Styrene	ND		0.34		ug/m3			04/20/17 21:36	1
t-Butyl alcohol	ND		0.97		ug/m3			04/20/17 21:36	1
Tetrachloroethene	ND		0.54		ug/m3			04/20/17 21:36	1
Toluene	1.3		0.45		ug/m3			04/20/17 21:36	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 21:36	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 21:36	1
Trichloroethene	0.34		0.21		ug/m3			04/20/17 21:36	1
Trichlorofluoromethane	1.4		0.45		ug/m3			04/20/17 21:36	1
Vinyl chloride	ND		0.10		ug/m3			04/20/17 21:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		60 - 140		04/20/17 21:36	1

Client Sample ID: H43-BA-1020

Lab Sample ID: 140-7831-11

Date Collected: 04/12/17 13:14

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 22:23	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/20/17 22:23	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/20/17 22:23	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/20/17 22:23	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/20/17 22:23	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/20/17 22:23	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/20/17 22:23	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 22:23	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/20/17 22:23	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 22:23	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H43-BA-1020

Lab Sample ID: 140-7831-11

Date Collected: 04/12/17 13:14

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 22:23	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/20/17 22:23	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/20/17 22:23	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 22:23	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 22:23	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 22:23	1
1,4-Dioxane	ND		0.20		ppb v/v			04/20/17 22:23	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/20/17 22:23	1
2-Butanone	0.44		0.32		ppb v/v			04/20/17 22:23	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/20/17 22:23	1
Benzene	0.086		0.080		ppb v/v			04/20/17 22:23	1
Benzyl chloride	ND		0.16		ppb v/v			04/20/17 22:23	1
Bromodichloromethane	ND		0.080		ppb v/v			04/20/17 22:23	1
Bromoform	ND		0.080		ppb v/v			04/20/17 22:23	1
Bromomethane	ND		0.080		ppb v/v			04/20/17 22:23	1
Carbon tetrachloride	0.081		0.040		ppb v/v			04/20/17 22:23	1
Chlorobenzene	ND		0.080		ppb v/v			04/20/17 22:23	1
Chloroethane	ND		0.080		ppb v/v			04/20/17 22:23	1
Chloroform	ND		0.080		ppb v/v			04/20/17 22:23	1
Chloromethane	0.43		0.20		ppb v/v			04/20/17 22:23	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 22:23	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 22:23	1
Cyclohexane	ND		0.20		ppb v/v			04/20/17 22:23	1
Dibromochloromethane	ND		0.080		ppb v/v			04/20/17 22:23	1
Dichlorodifluoromethane	0.49		0.080		ppb v/v			04/20/17 22:23	1
Ethanol	17		2.0		ppb v/v			04/20/17 22:23	1
Ethylbenzene	ND		0.080		ppb v/v			04/20/17 22:23	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/20/17 22:23	1
Hexane	ND		0.20		ppb v/v			04/20/17 22:23	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/20/17 22:23	1
Methylene Chloride	0.21		0.20		ppb v/v			04/20/17 22:23	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			04/20/17 22:23	1
o-Xylene	ND		0.080		ppb v/v			04/20/17 22:23	1
Styrene	ND		0.080		ppb v/v			04/20/17 22:23	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/20/17 22:23	1
Tetrachloroethene	0.28		0.080		ppb v/v			04/20/17 22:23	1
Toluene	0.12		0.12		ppb v/v			04/20/17 22:23	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 22:23	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 22:23	1
Trichloroethene	ND		0.040		ppb v/v			04/20/17 22:23	1
Trichlorofluoromethane	0.24		0.080		ppb v/v			04/20/17 22:23	1
Vinyl chloride	ND		0.040		ppb v/v			04/20/17 22:23	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/20/17 22:23	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/20/17 22:23	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/20/17 22:23	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/20/17 22:23	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/20/17 22:23	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H43-BA-1020

Lab Sample ID: 140-7831-11

Date Collected: 04/12/17 13:14

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 22:23	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/20/17 22:23	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			04/20/17 22:23	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/20/17 22:23	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 22:23	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/20/17 22:23	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/20/17 22:23	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/20/17 22:23	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/20/17 22:23	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 22:23	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 22:23	1
1,4-Dioxane	ND		0.72		ug/m3			04/20/17 22:23	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/20/17 22:23	1
2-Butanone	1.3		0.94		ug/m3			04/20/17 22:23	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/20/17 22:23	1
Benzene	0.28		0.26		ug/m3			04/20/17 22:23	1
Benzyl chloride	ND		0.83		ug/m3			04/20/17 22:23	1
Bromodichloromethane	ND		0.54		ug/m3			04/20/17 22:23	1
Bromoform	ND		0.83		ug/m3			04/20/17 22:23	1
Bromomethane	ND		0.31		ug/m3			04/20/17 22:23	1
Carbon tetrachloride	0.51		0.25		ug/m3			04/20/17 22:23	1
Chlorobenzene	ND		0.37		ug/m3			04/20/17 22:23	1
Chloroethane	ND		0.21		ug/m3			04/20/17 22:23	1
Chloroform	ND		0.39		ug/m3			04/20/17 22:23	1
Chloromethane	0.88		0.41		ug/m3			04/20/17 22:23	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 22:23	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 22:23	1
Cyclohexane	ND		0.69		ug/m3			04/20/17 22:23	1
Dibromochloromethane	ND		0.68		ug/m3			04/20/17 22:23	1
Dichlorodifluoromethane	2.4		0.40		ug/m3			04/20/17 22:23	1
Ethanol	32		3.8		ug/m3			04/20/17 22:23	1
Ethylbenzene	ND		0.35		ug/m3			04/20/17 22:23	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/20/17 22:23	1
Hexane	ND		0.70		ug/m3			04/20/17 22:23	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/20/17 22:23	1
Methylene Chloride	0.71		0.69		ug/m3			04/20/17 22:23	1
m-Xylene & p-Xylene	ND		0.35		ug/m3			04/20/17 22:23	1
o-Xylene	ND		0.35		ug/m3			04/20/17 22:23	1
Styrene	ND		0.34		ug/m3			04/20/17 22:23	1
t-Butyl alcohol	ND		0.97		ug/m3			04/20/17 22:23	1
Tetrachloroethene	1.9		0.54		ug/m3			04/20/17 22:23	1
Toluene	0.44		0.45		ug/m3			04/20/17 22:23	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 22:23	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 22:23	1
Trichloroethene	ND		0.21		ug/m3			04/20/17 22:23	1
Trichlorofluoromethane	1.4		0.45		ug/m3			04/20/17 22:23	1
Vinyl chloride	ND		0.10		ug/m3			04/20/17 22:23	1

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H43-BA-1020

Date Collected: 04/12/17 13:14

Date Received: 04/17/17 10:15

Sample Container: Summa Canister 6L

Lab Sample ID: 140-7831-11

Matrix: Air

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		60 - 140		04/20/17 22:23	1

Client Sample ID: H44-SS

Date Collected: 04/12/17 14:48

Date Received: 04/17/17 10:15

Sample Container: Summa Canister 6L

Lab Sample ID: 140-7831-12

Matrix: Air

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	0.91		0.080		ppb v/v			04/20/17 23:09	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/20/17 23:09	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/20/17 23:09	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/20/17 23:09	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/20/17 23:09	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/20/17 23:09	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/20/17 23:09	1
1,2,4-Trimethylbenzene	0.26		0.080		ppb v/v			04/20/17 23:09	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/20/17 23:09	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 23:09	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/20/17 23:09	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/20/17 23:09	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/20/17 23:09	1
1,3,5-Trimethylbenzene	0.11		0.080		ppb v/v			04/20/17 23:09	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 23:09	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 23:09	1
1,4-Dioxane	ND		0.20		ppb v/v			04/20/17 23:09	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/20/17 23:09	1
2-Butanone	0.76		0.32		ppb v/v			04/20/17 23:09	1
4-Methyl-2-pentanone (MIBK)	0.27		0.20		ppb v/v			04/20/17 23:09	1
Benzene	0.26		0.080		ppb v/v			04/20/17 23:09	1
Benzyl chloride	ND		0.16		ppb v/v			04/20/17 23:09	1
Bromodichloromethane	ND		0.080		ppb v/v			04/20/17 23:09	1
Bromoform	ND		0.080		ppb v/v			04/20/17 23:09	1
Bromomethane	ND		0.080		ppb v/v			04/20/17 23:09	1
Carbon tetrachloride	0.33		0.040		ppb v/v			04/20/17 23:09	1
Chlorobenzene	ND		0.080		ppb v/v			04/20/17 23:09	1
Chloroethane	ND		0.080		ppb v/v			04/20/17 23:09	1
Chloroform	0.11		0.080		ppb v/v			04/20/17 23:09	1
Chloromethane	ND		0.20		ppb v/v			04/20/17 23:09	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 23:09	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 23:09	1
Cyclohexane	0.52		0.20		ppb v/v			04/20/17 23:09	1
Dibromochloromethane	ND		0.080		ppb v/v			04/20/17 23:09	1
Dichlorodifluoromethane	0.49		0.080		ppb v/v			04/20/17 23:09	1
Ethanol	ND		2.0		ppb v/v			04/20/17 23:09	1
Ethylbenzene	0.13		0.080		ppb v/v			04/20/17 23:09	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/20/17 23:09	1
Hexane	1.0		0.20		ppb v/v			04/20/17 23:09	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/20/17 23:09	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H44-SS

Lab Sample ID: 140-7831-12

Date Collected: 04/12/17 14:48

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 23:09	1
m-Xylene & p-Xylene	0.75		0.080		ppb v/v			04/20/17 23:09	1
o-Xylene	0.25		0.080		ppb v/v			04/20/17 23:09	1
Styrene	ND		0.080		ppb v/v			04/20/17 23:09	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/20/17 23:09	1
Tetrachloroethene	0.31		0.080		ppb v/v			04/20/17 23:09	1
Toluene	0.73		0.12		ppb v/v			04/20/17 23:09	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 23:09	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 23:09	1
Trichloroethene	0.10		0.040		ppb v/v			04/20/17 23:09	1
Trichlorofluoromethane	0.25		0.080		ppb v/v			04/20/17 23:09	1
Vinyl chloride	ND		0.040		ppb v/v			04/20/17 23:09	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	5.0		0.44		ug/m3			04/20/17 23:09	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/20/17 23:09	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/20/17 23:09	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/20/17 23:09	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/20/17 23:09	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/20/17 23:09	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/20/17 23:09	1
1,2,4-Trimethylbenzene	1.3		0.39		ug/m3			04/20/17 23:09	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/20/17 23:09	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 23:09	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/20/17 23:09	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/20/17 23:09	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/20/17 23:09	1
1,3,5-Trimethylbenzene	0.56		0.39		ug/m3			04/20/17 23:09	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 23:09	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 23:09	1
1,4-Dioxane	ND		0.72		ug/m3			04/20/17 23:09	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/20/17 23:09	1
2-Butanone	2.2		0.94		ug/m3			04/20/17 23:09	1
4-Methyl-2-pentanone (MIBK)	1.1		0.82		ug/m3			04/20/17 23:09	1
Benzene	0.84		0.26		ug/m3			04/20/17 23:09	1
Benzyl chloride	ND		0.83		ug/m3			04/20/17 23:09	1
Bromodichloromethane	ND		0.54		ug/m3			04/20/17 23:09	1
Bromoform	ND		0.83		ug/m3			04/20/17 23:09	1
Bromomethane	ND		0.31		ug/m3			04/20/17 23:09	1
Carbon tetrachloride	2.1		0.25		ug/m3			04/20/17 23:09	1
Chlorobenzene	ND		0.37		ug/m3			04/20/17 23:09	1
Chloroethane	ND		0.21		ug/m3			04/20/17 23:09	1
Chloroform	0.55		0.39		ug/m3			04/20/17 23:09	1
Chloromethane	ND		0.41		ug/m3			04/20/17 23:09	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 23:09	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 23:09	1
Cyclohexane	1.8		0.69		ug/m3			04/20/17 23:09	1
Dibromochloromethane	ND		0.68		ug/m3			04/20/17 23:09	1
Dichlorodifluoromethane	2.4		0.40		ug/m3			04/20/17 23:09	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H44-SS

Lab Sample ID: 140-7831-12

Date Collected: 04/12/17 14:48

Matrix: Air

Date Received: 04/17/17 10:15

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	ND		3.8		ug/m3			04/20/17 23:09	1
Ethylbenzene	0.55		0.35		ug/m3			04/20/17 23:09	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/20/17 23:09	1
Hexane	3.6		0.70		ug/m3			04/20/17 23:09	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/20/17 23:09	1
Methylene Chloride	ND		0.69		ug/m3			04/20/17 23:09	1
m-Xylene & p-Xylene	3.3		0.35		ug/m3			04/20/17 23:09	1
o-Xylene	1.1		0.35		ug/m3			04/20/17 23:09	1
Styrene	ND		0.34		ug/m3			04/20/17 23:09	1
t-Butyl alcohol	ND		0.97		ug/m3			04/20/17 23:09	1
Tetrachloroethene	2.1		0.54		ug/m3			04/20/17 23:09	1
Toluene	2.7		0.45		ug/m3			04/20/17 23:09	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 23:09	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 23:09	1
Trichloroethene	0.54		0.21		ug/m3			04/20/17 23:09	1
Trichlorofluoromethane	1.4		0.45		ug/m3			04/20/17 23:09	1
Vinyl chloride	ND		0.10		ug/m3			04/20/17 23:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		60 - 140					04/20/17 23:09	1

Client Sample ID: H44-BA

Lab Sample ID: 140-7831-13

Date Collected: 04/12/17 14:47

Matrix: Air

Date Received: 04/17/17 10:15

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	0.47		0.080		ppb v/v			04/20/17 13:44	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/20/17 13:44	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/20/17 13:44	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/20/17 13:44	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/20/17 13:44	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/20/17 13:44	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/20/17 13:44	1
1,2,4-Trimethylbenzene	0.22		0.080		ppb v/v			04/20/17 13:44	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/20/17 13:44	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 13:44	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/20/17 13:44	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/20/17 13:44	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/20/17 13:44	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 13:44	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 13:44	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 13:44	1
1,4-Dioxane	ND		0.20		ppb v/v			04/20/17 13:44	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/20/17 13:44	1
2-Butanone	1.0		0.32		ppb v/v			04/20/17 13:44	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/20/17 13:44	1
Benzene	0.099		0.080		ppb v/v			04/20/17 13:44	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H44-BA

Lab Sample ID: 140-7831-13

Date Collected: 04/12/17 14:47

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 13:44	1
Bromodichloromethane	ND		0.080		ppb v/v			04/20/17 13:44	1
Bromoform	ND		0.080		ppb v/v			04/20/17 13:44	1
Bromomethane	ND		0.080		ppb v/v			04/20/17 13:44	1
Carbon tetrachloride	0.092		0.040		ppb v/v			04/20/17 13:44	1
Chlorobenzene	ND		0.080		ppb v/v			04/20/17 13:44	1
Chloroethane	ND		0.080		ppb v/v			04/20/17 13:44	1
Chloroform	0.14		0.080		ppb v/v			04/20/17 13:44	1
Chloromethane	0.46		0.20		ppb v/v			04/20/17 13:44	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 13:44	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 13:44	1
Cyclohexane	ND		0.20		ppb v/v			04/20/17 13:44	1
Dibromochloromethane	ND		0.080		ppb v/v			04/20/17 13:44	1
Dichlorodifluoromethane	0.52		0.080		ppb v/v			04/20/17 13:44	1
Ethanol	61		2.0		ppb v/v			04/20/17 13:44	1
Ethylbenzene	0.10		0.080		ppb v/v			04/20/17 13:44	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/20/17 13:44	1
Hexane	ND		0.20		ppb v/v			04/20/17 13:44	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/20/17 13:44	1
Methylene Chloride	0.24		0.20		ppb v/v			04/20/17 13:44	1
m-Xylene & p-Xylene	0.34		0.080		ppb v/v			04/20/17 13:44	1
o-Xylene	0.14		0.080		ppb v/v			04/20/17 13:44	1
Styrene	ND		0.080		ppb v/v			04/20/17 13:44	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/20/17 13:44	1
Tetrachloroethene	ND		0.080		ppb v/v			04/20/17 13:44	1
Toluene	0.77		0.12		ppb v/v			04/20/17 13:44	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 13:44	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 13:44	1
Trichloroethene	ND		0.040		ppb v/v			04/20/17 13:44	1
Trichlorofluoromethane	0.27		0.080		ppb v/v			04/20/17 13:44	1
Vinyl chloride	ND		0.040		ppb v/v			04/20/17 13:44	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	2.6		0.44		ug/m3			04/20/17 13:44	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/20/17 13:44	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/20/17 13:44	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/20/17 13:44	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/20/17 13:44	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/20/17 13:44	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/20/17 13:44	1
1,2,4-Trimethylbenzene	1.1		0.39		ug/m3			04/20/17 13:44	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/20/17 13:44	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 13:44	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/20/17 13:44	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/20/17 13:44	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/20/17 13:44	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/20/17 13:44	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 13:44	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 13:44	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H44-BA

Lab Sample ID: 140-7831-13

Date Collected: 04/12/17 14:47

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 13:44	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/20/17 13:44	1
2-Butanone	3.1		0.94		ug/m3			04/20/17 13:44	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/20/17 13:44	1
Benzene	0.32		0.26		ug/m3			04/20/17 13:44	1
Benzyl chloride	ND		0.83		ug/m3			04/20/17 13:44	1
Bromodichloromethane	ND		0.54		ug/m3			04/20/17 13:44	1
Bromoform	ND		0.83		ug/m3			04/20/17 13:44	1
Bromomethane	ND		0.31		ug/m3			04/20/17 13:44	1
Carbon tetrachloride	0.58		0.25		ug/m3			04/20/17 13:44	1
Chlorobenzene	ND		0.37		ug/m3			04/20/17 13:44	1
Chloroethane	ND		0.21		ug/m3			04/20/17 13:44	1
Chloroform	0.67		0.39		ug/m3			04/20/17 13:44	1
Chloromethane	0.95		0.41		ug/m3			04/20/17 13:44	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 13:44	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 13:44	1
Cyclohexane	ND		0.69		ug/m3			04/20/17 13:44	1
Dibromochloromethane	ND		0.68		ug/m3			04/20/17 13:44	1
Dichlorodifluoromethane	2.6		0.40		ug/m3			04/20/17 13:44	1
Ethanol	120		3.8		ug/m3			04/20/17 13:44	1
Ethylbenzene	0.44		0.35		ug/m3			04/20/17 13:44	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/20/17 13:44	1
Hexane	ND		0.70		ug/m3			04/20/17 13:44	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/20/17 13:44	1
Methylene Chloride	0.82		0.69		ug/m3			04/20/17 13:44	1
m-Xylene & p-Xylene	1.5		0.35		ug/m3			04/20/17 13:44	1
o-Xylene	0.61		0.35		ug/m3			04/20/17 13:44	1
Styrene	ND		0.34		ug/m3			04/20/17 13:44	1
t-Butyl alcohol	ND		0.97		ug/m3			04/20/17 13:44	1
Tetrachloroethene	ND		0.54		ug/m3			04/20/17 13:44	1
Toluene	2.9		0.45		ug/m3			04/20/17 13:44	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 13:44	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 13:44	1
Trichloroethene	ND		0.21		ug/m3			04/20/17 13:44	1
Trichlorofluoromethane	1.5		0.45		ug/m3			04/20/17 13:44	1
Vinyl chloride	ND		0.10		ug/m3			04/20/17 13:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		60 - 140		04/20/17 13:44	1

Client Sample ID: FIELD DUP-1

Lab Sample ID: 140-7831-14

Date Collected: 04/12/17 13:09

Matrix: Air

Date Received: 04/17/17 10:15

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	1.5		0.080		ppb v/v			04/20/17 14:31	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/20/17 14:31	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: FIELD DUP-1

Lab Sample ID: 140-7831-14

Date Collected: 04/12/17 13:09

Matrix: Air

Date Received: 04/17/17 10:15

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			04/20/17 14:31	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/20/17 14:31	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/20/17 14:31	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/20/17 14:31	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/20/17 14:31	1
1,2,4-Trimethylbenzene	0.12		0.080		ppb v/v			04/20/17 14:31	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/20/17 14:31	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 14:31	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/20/17 14:31	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/20/17 14:31	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/20/17 14:31	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 14:31	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 14:31	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 14:31	1
1,4-Dioxane	ND		0.20		ppb v/v			04/20/17 14:31	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/20/17 14:31	1
2-Butanone	0.32		0.32		ppb v/v			04/20/17 14:31	1
4-Methyl-2-pentanone (MIBK)	0.27		0.20		ppb v/v			04/20/17 14:31	1
Benzene	ND		0.080		ppb v/v			04/20/17 14:31	1
Benzyl chloride	ND		0.16		ppb v/v			04/20/17 14:31	1
Bromodichloromethane	ND		0.080		ppb v/v			04/20/17 14:31	1
Bromoform	ND		0.080		ppb v/v			04/20/17 14:31	1
Bromomethane	ND		0.080		ppb v/v			04/20/17 14:31	1
Carbon tetrachloride	0.077		0.040		ppb v/v			04/20/17 14:31	1
Chlorobenzene	ND		0.080		ppb v/v			04/20/17 14:31	1
Chloroethane	ND		0.080		ppb v/v			04/20/17 14:31	1
Chloroform	0.093		0.080		ppb v/v			04/20/17 14:31	1
Chloromethane	0.24		0.20		ppb v/v			04/20/17 14:31	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 14:31	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 14:31	1
Cyclohexane	ND		0.20		ppb v/v			04/20/17 14:31	1
Dibromochloromethane	ND		0.080		ppb v/v			04/20/17 14:31	1
Dichlorodifluoromethane	0.49		0.080		ppb v/v			04/20/17 14:31	1
Ethanol	ND		2.0		ppb v/v			04/20/17 14:31	1
Ethylbenzene	ND		0.080		ppb v/v			04/20/17 14:31	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/20/17 14:31	1
Hexane	ND		0.20		ppb v/v			04/20/17 14:31	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/20/17 14:31	1
Methylene Chloride	0.26		0.20		ppb v/v			04/20/17 14:31	1
m-Xylene & p-Xylene	0.31		0.080		ppb v/v			04/20/17 14:31	1
o-Xylene	0.094		0.080		ppb v/v			04/20/17 14:31	1
Styrene	ND		0.080		ppb v/v			04/20/17 14:31	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/20/17 14:31	1
Tetrachloroethene	0.92		0.080		ppb v/v			04/20/17 14:31	1
Toluene	0.35		0.12		ppb v/v			04/20/17 14:31	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 14:31	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 14:31	1
Trichloroethene	0.15		0.040		ppb v/v			04/20/17 14:31	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: FIELD DUP-1

Lab Sample ID: 140-7831-14

Date Collected: 04/12/17 13:09

Matrix: Air

Date Received: 04/17/17 10:15

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	0.25		0.080		ppb v/v			04/20/17 14:31	1
Vinyl chloride	ND		0.040		ppb v/v			04/20/17 14:31	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	8.3		0.44		ug/m3			04/20/17 14:31	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/20/17 14:31	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/20/17 14:31	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/20/17 14:31	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/20/17 14:31	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/20/17 14:31	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/20/17 14:31	1
1,2,4-Trimethylbenzene	0.57		0.39		ug/m3			04/20/17 14:31	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/20/17 14:31	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 14:31	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/20/17 14:31	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/20/17 14:31	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/20/17 14:31	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/20/17 14:31	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 14:31	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 14:31	1
1,4-Dioxane	ND		0.72		ug/m3			04/20/17 14:31	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/20/17 14:31	1
2-Butanone	0.93		0.94		ug/m3			04/20/17 14:31	1
4-Methyl-2-pentanone (MIBK)	1.1		0.82		ug/m3			04/20/17 14:31	1
Benzene	ND		0.26		ug/m3			04/20/17 14:31	1
Benzyl chloride	ND		0.83		ug/m3			04/20/17 14:31	1
Bromodichloromethane	ND		0.54		ug/m3			04/20/17 14:31	1
Bromoform	ND		0.83		ug/m3			04/20/17 14:31	1
Bromomethane	ND		0.31		ug/m3			04/20/17 14:31	1
Carbon tetrachloride	0.49		0.25		ug/m3			04/20/17 14:31	1
Chlorobenzene	ND		0.37		ug/m3			04/20/17 14:31	1
Chloroethane	ND		0.21		ug/m3			04/20/17 14:31	1
Chloroform	0.45		0.39		ug/m3			04/20/17 14:31	1
Chloromethane	0.49		0.41		ug/m3			04/20/17 14:31	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 14:31	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 14:31	1
Cyclohexane	ND		0.69		ug/m3			04/20/17 14:31	1
Dibromochloromethane	ND		0.68		ug/m3			04/20/17 14:31	1
Dichlorodifluoromethane	2.4		0.40		ug/m3			04/20/17 14:31	1
Ethanol	ND		3.8		ug/m3			04/20/17 14:31	1
Ethylbenzene	ND		0.35		ug/m3			04/20/17 14:31	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/20/17 14:31	1
Hexane	ND		0.70		ug/m3			04/20/17 14:31	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/20/17 14:31	1
Methylene Chloride	0.92		0.69		ug/m3			04/20/17 14:31	1
m-Xylene & p-Xylene	1.3		0.35		ug/m3			04/20/17 14:31	1
o-Xylene	0.41		0.35		ug/m3			04/20/17 14:31	1
Styrene	ND		0.34		ug/m3			04/20/17 14:31	1
t-Butyl alcohol	ND		0.97		ug/m3			04/20/17 14:31	1

TestAmerica Knoxville

Client Sample Results

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: FIELD DUP-1

Lab Sample ID: 140-7831-14

Date Collected: 04/12/17 13:09

Matrix: Air

Date Received: 04/17/17 10:15

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	6.3		0.54		ug/m3			04/20/17 14:31	1
Toluene	1.3		0.45		ug/m3			04/20/17 14:31	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 14:31	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 14:31	1
Trichloroethene	0.83		0.21		ug/m3			04/20/17 14:31	1
Trichlorofluoromethane	1.4		0.45		ug/m3			04/20/17 14:31	1
Vinyl chloride	ND		0.10		ug/m3			04/20/17 14:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		60 - 140		04/20/17 14:31	1

Default Detection Limits

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

TestAmerica Job ID: 140-7831-1

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	0.078	ppb v/v	TO 15 LL
4-Methyl-2-pentanone (MIBK)	0.82	0.32	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

Default Detection Limits

Client: New York State D.E.C.

TestAmerica Job ID: 140-7831-1

Project/Site: Former Ithaca Gun Factory # C755019A

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

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	2.0	0.64	ppb v/v	TO 15 LL
Ethanol	3.8	1.2	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	0.040	0.029	ppb v/v	TO 15 LL
Vinyl chloride	0.10	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: 140-7831-1

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)
140-7831-1	H40-SS	102
140-7831-2	H40-BA	102
140-7831-3	H41A-SS	101
140-7831-4	H41A-BA	103
140-7831-5	H42-SS	100
140-7831-6	H42-BA	100
140-7831-7	H43-SS-1018	104
140-7831-8	H43-BA-1018	102
140-7831-9	H43-OA-1	104
140-7831-10	H43-SS-1020	105
140-7831-11	H43-BA-1020	102
140-7831-12	H44-SS	106
140-7831-13	H44-BA	104
140-7831-14	FIELD DUP-1	102
LCS 140-10584/1002	Lab Control Sample	108
MB 140-10584/4	Method Blank	104

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: 140-7831-1

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

Lab Sample ID: MB 140-10584/4

Matrix: Air

Analysis Batch: 10584

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			04/20/17 12:11	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			04/20/17 12:11	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			04/20/17 12:11	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			04/20/17 12:11	1
1,1-Dichloroethane	ND		0.080		ppb v/v			04/20/17 12:11	1
1,1-Dichloroethene	ND		0.080		ppb v/v			04/20/17 12:11	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			04/20/17 12:11	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 12:11	1
1,2-Dibromoethane	ND		0.080		ppb v/v			04/20/17 12:11	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 12:11	1
1,2-Dichloroethane	ND		0.080		ppb v/v			04/20/17 12:11	1
1,2-Dichloropropane	ND		0.080		ppb v/v			04/20/17 12:11	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			04/20/17 12:11	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			04/20/17 12:11	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 12:11	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			04/20/17 12:11	1
1,4-Dioxane	ND		0.20		ppb v/v			04/20/17 12:11	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			04/20/17 12:11	1
2-Butanone	ND		0.32		ppb v/v			04/20/17 12:11	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			04/20/17 12:11	1
Benzene	ND		0.080		ppb v/v			04/20/17 12:11	1
Benzyl chloride	ND		0.16		ppb v/v			04/20/17 12:11	1
Bromodichloromethane	ND		0.080		ppb v/v			04/20/17 12:11	1
Bromoform	ND		0.080		ppb v/v			04/20/17 12:11	1
Bromomethane	ND		0.080		ppb v/v			04/20/17 12:11	1
Carbon tetrachloride	ND		0.040		ppb v/v			04/20/17 12:11	1
Chlorobenzene	ND		0.080		ppb v/v			04/20/17 12:11	1
Chloroethane	ND		0.080		ppb v/v			04/20/17 12:11	1
Chloroform	ND		0.080		ppb v/v			04/20/17 12:11	1
Chloromethane	ND		0.20		ppb v/v			04/20/17 12:11	1
cis-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 12:11	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			04/20/17 12:11	1
Cyclohexane	ND		0.20		ppb v/v			04/20/17 12:11	1
Dibromochloromethane	ND		0.080		ppb v/v			04/20/17 12:11	1
Dichlorodifluoromethane	ND		0.080		ppb v/v			04/20/17 12:11	1
Ethanol	ND		2.0		ppb v/v			04/20/17 12:11	1
Ethylbenzene	ND		0.080		ppb v/v			04/20/17 12:11	1
Hexachlorobutadiene	ND		0.080		ppb v/v			04/20/17 12:11	1
Hexane	ND		0.20		ppb v/v			04/20/17 12:11	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			04/20/17 12:11	1
Methylene Chloride	ND		0.20		ppb v/v			04/20/17 12:11	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			04/20/17 12:11	1
o-Xylene	ND		0.080		ppb v/v			04/20/17 12:11	1
Styrene	ND		0.080		ppb v/v			04/20/17 12:11	1
t-Butyl alcohol	ND		0.32		ppb v/v			04/20/17 12:11	1
Tetrachloroethene	ND		0.080		ppb v/v			04/20/17 12:11	1
Toluene	ND		0.12		ppb v/v			04/20/17 12:11	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			04/20/17 12:11	1

TestAmerica Knoxville

QC Sample Results

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

TestAmerica Job ID: 140-7831-1

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

Lab Sample ID: MB 140-10584/4
Matrix: Air
Analysis Batch: 10584

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			04/20/17 12:11	1
Trichloroethene	ND		0.040		ppb v/v			04/20/17 12:11	1
Trichlorofluoromethane	ND		0.080		ppb v/v			04/20/17 12:11	1
Vinyl chloride	ND		0.040		ppb v/v			04/20/17 12:11	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			04/20/17 12:11	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			04/20/17 12:11	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			04/20/17 12:11	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			04/20/17 12:11	1
1,1-Dichloroethane	ND		0.32		ug/m3			04/20/17 12:11	1
1,1-Dichloroethene	ND		0.32		ug/m3			04/20/17 12:11	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			04/20/17 12:11	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			04/20/17 12:11	1
1,2-Dibromoethane	ND		0.61		ug/m3			04/20/17 12:11	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 12:11	1
1,2-Dichloroethane	ND		0.32		ug/m3			04/20/17 12:11	1
1,2-Dichloropropane	ND		0.37		ug/m3			04/20/17 12:11	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			04/20/17 12:11	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			04/20/17 12:11	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 12:11	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			04/20/17 12:11	1
1,4-Dioxane	ND		0.72		ug/m3			04/20/17 12:11	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			04/20/17 12:11	1
2-Butanone	ND		0.94		ug/m3			04/20/17 12:11	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			04/20/17 12:11	1
Benzene	ND		0.26		ug/m3			04/20/17 12:11	1
Benzyl chloride	ND		0.83		ug/m3			04/20/17 12:11	1
Bromodichloromethane	ND		0.54		ug/m3			04/20/17 12:11	1
Bromoform	ND		0.83		ug/m3			04/20/17 12:11	1
Bromomethane	ND		0.31		ug/m3			04/20/17 12:11	1
Carbon tetrachloride	ND		0.25		ug/m3			04/20/17 12:11	1
Chlorobenzene	ND		0.37		ug/m3			04/20/17 12:11	1
Chloroethane	ND		0.21		ug/m3			04/20/17 12:11	1
Chloroform	ND		0.39		ug/m3			04/20/17 12:11	1
Chloromethane	ND		0.41		ug/m3			04/20/17 12:11	1
cis-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 12:11	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 12:11	1
Cyclohexane	ND		0.69		ug/m3			04/20/17 12:11	1
Dibromochloromethane	ND		0.68		ug/m3			04/20/17 12:11	1
Dichlorodifluoromethane	ND		0.40		ug/m3			04/20/17 12:11	1
Ethanol	ND		3.8		ug/m3			04/20/17 12:11	1
Ethylbenzene	ND		0.35		ug/m3			04/20/17 12:11	1
Hexachlorobutadiene	ND		0.85		ug/m3			04/20/17 12:11	1
Hexane	ND		0.70		ug/m3			04/20/17 12:11	1
Methyl tert-butyl ether	ND		0.58		ug/m3			04/20/17 12:11	1
Methylene Chloride	ND		0.69		ug/m3			04/20/17 12:11	1

TestAmerica Knoxville

QC Sample Results

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

TestAmerica Job ID: 140-7831-1

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

Lab Sample ID: MB 140-10584/4
Matrix: Air
Analysis Batch: 10584

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			04/20/17 12:11	1
o-Xylene	ND		0.35		ug/m3			04/20/17 12:11	1
Styrene	ND		0.34		ug/m3			04/20/17 12:11	1
t-Butyl alcohol	ND		0.97		ug/m3			04/20/17 12:11	1
Tetrachloroethene	ND		0.54		ug/m3			04/20/17 12:11	1
Toluene	ND		0.45		ug/m3			04/20/17 12:11	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			04/20/17 12:11	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			04/20/17 12:11	1
Trichloroethene	ND		0.21		ug/m3			04/20/17 12:11	1
Trichlorofluoromethane	ND		0.45		ug/m3			04/20/17 12:11	1
Vinyl chloride	ND		0.10		ug/m3			04/20/17 12:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		60 - 140		04/20/17 12:11	1

Lab Sample ID: LCS 140-10584/1002
Matrix: Air
Analysis Batch: 10584

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	2.45		ppb v/v		122	70 - 130
1,1,2,2-Tetrachloroethane	2.00	1.96		ppb v/v		98	70 - 130
1,1,2-Trichloroethane	2.00	1.92		ppb v/v		96	70 - 130
1,1,2-Trichlorotrifluoroethane	2.00	2.44		ppb v/v		122	70 - 130
1,1-Dichloroethane	2.00	1.75		ppb v/v		88	70 - 130
1,1-Dichloroethene	2.00	2.27		ppb v/v		113	70 - 130
1,2,4-Trichlorobenzene	2.00	1.63		ppb v/v		82	60 - 140
1,2,4-Trimethylbenzene	2.00	2.13		ppb v/v		107	70 - 130
1,2-Dibromoethane	2.00	2.21		ppb v/v		110	70 - 130
1,2-Dichlorobenzene	2.00	1.98		ppb v/v		99	70 - 130
1,2-Dichloroethane	2.00	2.19		ppb v/v		109	70 - 130
1,2-Dichloropropane	2.00	1.68		ppb v/v		84	70 - 130
1,2-Dichlorotetrafluoroethane	2.00	2.25		ppb v/v		112	60 - 140
1,3,5-Trimethylbenzene	2.00	2.04		ppb v/v		102	70 - 130
1,3-Dichlorobenzene	2.00	1.97		ppb v/v		98	70 - 130
1,4-Dichlorobenzene	2.00	1.98		ppb v/v		99	70 - 130
1,4-Dioxane	2.00	1.67		ppb v/v		83	60 - 140
2,2,4-Trimethylpentane	2.00	1.58		ppb v/v		79	70 - 130
2-Butanone	2.00	1.60		ppb v/v		80	60 - 140
4-Methyl-2-pentanone (MIBK)	2.00	1.44		ppb v/v		72	60 - 140
Benzene	2.00	1.86		ppb v/v		93	70 - 130
Benzyl chloride	2.00	2.07		ppb v/v		103	70 - 130
Bromodichloromethane	2.00	2.34		ppb v/v		117	70 - 130
Bromoform	2.00	1.93		ppb v/v		96	60 - 140
Bromomethane	2.00	2.08		ppb v/v		104	70 - 130
Carbon tetrachloride	2.00	2.56		ppb v/v		128	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: 140-7831-1

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

Lab Sample ID: LCS 140-10584/1002

Matrix: Air

Analysis Batch: 10584

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	2.00	1.74		ppb v/v		87	70 - 130
Chloroform	2.00	2.23		ppb v/v		111	70 - 130
Chloromethane	2.00	1.38		ppb v/v		69	60 - 140
cis-1,2-Dichloroethene	2.00	2.00		ppb v/v		100	70 - 130
cis-1,3-Dichloropropene	2.00	2.01		ppb v/v		100	70 - 130
Cyclohexane	2.00	1.91		ppb v/v		95	70 - 130
Dibromochloromethane	2.00	2.41		ppb v/v		120	70 - 130
Dichlorodifluoromethane	2.00	2.34		ppb v/v		117	60 - 140
Ethanol	10.0	6.63		ppb v/v		66	60 - 140
Ethylbenzene	2.00	2.02		ppb v/v		101	70 - 130
Hexachlorobutadiene	2.00	1.36		ppb v/v		68	60 - 140
Hexane	2.00	1.51		ppb v/v		75	70 - 130
Methyl tert-butyl ether	2.00	1.92		ppb v/v		96	60 - 140
Methylene Chloride	2.00	2.18		ppb v/v		109	70 - 130
m-Xylene & p-Xylene	4.00	4.08		ppb v/v		102	70 - 130
o-Xylene	2.00	2.04		ppb v/v		102	70 - 130
Styrene	2.00	2.20		ppb v/v		110	70 - 130
t-Butyl alcohol	2.00	1.74		ppb v/v		87	60 - 140
Tetrachloroethene	2.00	2.16		ppb v/v		108	70 - 130
Toluene	2.00	1.95		ppb v/v		97	70 - 130
trans-1,2-Dichloroethene	2.00	2.07		ppb v/v		103	70 - 130
trans-1,3-Dichloropropene	2.00	1.98		ppb v/v		99	70 - 130
Trichloroethene	2.00	2.07		ppb v/v		104	70 - 130
Trichlorofluoromethane	2.00	2.45		ppb v/v		122	60 - 140
Vinyl chloride	2.00	1.68		ppb v/v		84	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	11	13.4		ug/m3		122	70 - 130
1,1,1,2-Tetrachloroethane	14	13.5		ug/m3		98	70 - 130
1,1,2-Trichloroethane	11	10.5		ug/m3		96	70 - 130
1,1,2-Trichlorotrifluoroethane	15	18.7		ug/m3		122	70 - 130
1,1-Dichloroethane	8.1	7.09		ug/m3		88	70 - 130
1,1-Dichloroethene	7.9	9.00		ug/m3		113	70 - 130
1,2,4-Trichlorobenzene	15	12.1		ug/m3		82	60 - 140
1,2,4-Trimethylbenzene	9.8	10.5		ug/m3		107	70 - 130
1,2-Dibromoethane	15	17.0		ug/m3		110	70 - 130
1,2-Dichlorobenzene	12	11.9		ug/m3		99	70 - 130
1,2-Dichloroethane	8.1	8.85		ug/m3		109	70 - 130
1,2-Dichloropropane	9.2	7.77		ug/m3		84	70 - 130
1,2-Dichlorotetrafluoroethane	14	15.7		ug/m3		112	60 - 140
1,3,5-Trimethylbenzene	9.8	10.0		ug/m3		102	70 - 130
1,3-Dichlorobenzene	12	11.8		ug/m3		98	70 - 130
1,4-Dichlorobenzene	12	11.9		ug/m3		99	70 - 130
1,4-Dioxane	7.2	6.02		ug/m3		83	60 - 140
2,2,4-Trimethylpentane	9.4	7.39		ug/m3		79	70 - 130
2-Butanone	5.9	4.71		ug/m3		80	60 - 140
4-Methyl-2-pentanone (MIBK)	8.2	5.92		ug/m3		72	60 - 140

TestAmerica Knoxville

QC Sample Results

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

TestAmerica Job ID: 140-7831-1

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

Lab Sample ID: LCS 140-10584/1002

Matrix: Air

Analysis Batch: 10584

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	6.4	5.95		ug/m3		93	70 - 130
Benzyl chloride	10	10.7		ug/m3		103	70 - 130
Bromodichloromethane	13	15.7		ug/m3		117	70 - 130
Bromoform	21	19.9		ug/m3		96	60 - 140
Bromomethane	7.8	8.08		ug/m3		104	70 - 130
Carbon tetrachloride	13	16.1		ug/m3		128	70 - 130
Chlorobenzene	9.2	9.36		ug/m3		102	70 - 130
Chloroethane	5.3	4.58		ug/m3		87	70 - 130
Chloroform	9.8	10.9		ug/m3		111	70 - 130
Chloromethane	4.1	2.85		ug/m3		69	60 - 140
cis-1,2-Dichloroethene	7.9	7.92		ug/m3		100	70 - 130
cis-1,3-Dichloropropene	9.1	9.11		ug/m3		100	70 - 130
Cyclohexane	6.9	6.56		ug/m3		95	70 - 130
Dibromochloromethane	17	20.5		ug/m3		120	70 - 130
Dichlorodifluoromethane	9.9	11.6		ug/m3		117	60 - 140
Ethanol	19	12.5		ug/m3		66	60 - 140
Ethylbenzene	8.7	8.78		ug/m3		101	70 - 130
Hexachlorobutadiene	21	14.5		ug/m3		68	60 - 140
Hexane	7.1	5.32		ug/m3		75	70 - 130
Methyl tert-butyl ether	7.2	6.92		ug/m3		96	60 - 140
Methylene Chloride	7.0	7.56		ug/m3		109	70 - 130
m-Xylene & p-Xylene	17	17.7		ug/m3		102	70 - 130
o-Xylene	8.7	8.86		ug/m3		102	70 - 130
Styrene	8.5	9.39		ug/m3		110	70 - 130
t-Butyl alcohol	6.1	5.26		ug/m3		87	60 - 140
Tetrachloroethene	14	14.7		ug/m3		108	70 - 130
Toluene	7.5	7.35		ug/m3		97	70 - 130
trans-1,2-Dichloroethene	7.9	8.21		ug/m3		103	70 - 130
trans-1,3-Dichloropropene	9.1	8.97		ug/m3		99	70 - 130
Trichloroethene	11	11.1		ug/m3		104	70 - 130
Trichlorofluoromethane	11	13.8		ug/m3		122	60 - 140
Vinyl chloride	5.1	4.30		ug/m3		84	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		60 - 140

QC Association Summary

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

TestAmerica Job ID: 140-7831-1

Air - GC/MS VOA

Analysis Batch: 10584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-7831-1	H40-SS	Total/NA	Air	TO 15 LL	
140-7831-2	H40-BA	Total/NA	Air	TO 15 LL	
140-7831-3	H41A-SS	Total/NA	Air	TO 15 LL	
140-7831-4	H41A-BA	Total/NA	Air	TO 15 LL	
140-7831-5	H42-SS	Total/NA	Air	TO 15 LL	
140-7831-6	H42-BA	Total/NA	Air	TO 15 LL	
140-7831-7	H43-SS-1018	Total/NA	Air	TO 15 LL	
140-7831-8	H43-BA-1018	Total/NA	Air	TO 15 LL	
140-7831-9	H43-OA-1	Total/NA	Air	TO 15 LL	
140-7831-10	H43-SS-1020	Total/NA	Air	TO 15 LL	
140-7831-11	H43-BA-1020	Total/NA	Air	TO 15 LL	
140-7831-12	H44-SS	Total/NA	Air	TO 15 LL	
140-7831-13	H44-BA	Total/NA	Air	TO 15 LL	
140-7831-14	FIELD DUP-1	Total/NA	Air	TO 15 LL	
MB 140-10584/4	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-10584/1002	Lab Control Sample	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: 140-7831-1

Client Sample ID: H40-SS

Date Collected: 04/12/17 07:58

Date Received: 04/17/17 10:15

Lab Sample ID: 140-7831-1

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	10584	04/20/17 12:58	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H40-BA

Date Collected: 04/12/17 07:58

Date Received: 04/17/17 10:15

Lab Sample ID: 140-7831-2

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	10584	04/20/17 15:17	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H41A-SS

Date Collected: 04/12/17 09:02

Date Received: 04/17/17 10:15

Lab Sample ID: 140-7831-3

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	25 mL	500 mL	10584	04/20/17 16:04	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H41A-BA

Date Collected: 04/12/17 09:03

Date Received: 04/17/17 10:15

Lab Sample ID: 140-7831-4

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	10584	04/20/17 16:51	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H42-SS

Date Collected: 04/12/17 10:02

Date Received: 04/17/17 10:15

Lab Sample ID: 140-7831-5

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	10584	04/20/17 17:40	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H42-BA

Date Collected: 04/12/17 10:03

Date Received: 04/17/17 10:15

Lab Sample ID: 140-7831-6

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	10584	04/20/17 18:27	HMT	TAL KNX
Instrument ID: MG										

TestAmerica Knoxville

Lab Chronicle

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H43-SS-1018

Date Collected: 04/12/17 13:09

Date Received: 04/17/17 10:15

Lab Sample ID: 140-7831-7

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	10584	04/20/17 19:15	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H43-BA-1018

Date Collected: 04/12/17 13:08

Date Received: 04/17/17 10:15

Lab Sample ID: 140-7831-8

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	10584	04/20/17 20:02	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H43-OA-1

Date Collected: 04/12/17 13:06

Date Received: 04/17/17 10:15

Lab Sample ID: 140-7831-9

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	10584	04/20/17 20:48	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H43-SS-1020

Date Collected: 04/12/17 13:13

Date Received: 04/17/17 10:15

Lab Sample ID: 140-7831-10

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	10584	04/20/17 21:36	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H43-BA-1020

Date Collected: 04/12/17 13:14

Date Received: 04/17/17 10:15

Lab Sample ID: 140-7831-11

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	10584	04/20/17 22:23	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: H44-SS

Date Collected: 04/12/17 14:48

Date Received: 04/17/17 10:15

Lab Sample ID: 140-7831-12

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	10584	04/20/17 23:09	HMT	TAL KNX
Instrument ID: MG										

Lab Chronicle

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

TestAmerica Job ID: 140-7831-1

Client Sample ID: H44-BA

Date Collected: 04/12/17 14:47

Date Received: 04/17/17 10:15

Lab Sample ID: 140-7831-13

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	10584	04/20/17 13:44	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: FIELD DUP-1

Date Collected: 04/12/17 13:09

Date Received: 04/17/17 10:15

Lab Sample ID: 140-7831-14

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	10584	04/20/17 14:31	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: Method Blank

Date Collected: N/A

Date Received: N/A

Lab Sample ID: MB 140-10584/4

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	10584	04/20/17 12:11	HMT	TAL KNX
Instrument ID: MG										

Client Sample ID: Lab Control Sample

Date Collected: N/A

Date Received: N/A

Lab Sample ID: LCS 140-10584/1002

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	10584	04/20/17 09:46	HMT	TAL KNX
Instrument ID: MG										

Laboratory References:

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

Accreditation/Certification Summary

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

TestAmerica Job ID: 140-7831-1

Laboratory: TestAmerica Knoxville

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10781	03-31-18

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

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

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

Analysis Method	Prep Method	Matrix	Analyte
TO 15 LL		Air	Ethanol

Method Summary

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

TestAmerica Job ID: 140-7831-1

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

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

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

Sample Summary

Client: New York State D.E.C.

TestAmerica Job ID: 140-7831-1

Project/Site: Former Ithaca Gun Factory # C755019A

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
140-7831-1	H40-SS	Air	04/12/17 07:58	04/17/17 10:15
140-7831-2	H40-BA	Air	04/12/17 07:58	04/17/17 10:15
140-7831-3	H41A-SS	Air	04/12/17 09:02	04/17/17 10:15
140-7831-4	H41A-BA	Air	04/12/17 09:03	04/17/17 10:15
140-7831-5	H42-SS	Air	04/12/17 10:02	04/17/17 10:15
140-7831-6	H42-BA	Air	04/12/17 10:03	04/17/17 10:15
140-7831-7	H43-SS-1018	Air	04/12/17 13:09	04/17/17 10:15
140-7831-8	H43-BA-1018	Air	04/12/17 13:08	04/17/17 10:15
140-7831-9	H43-OA-1	Air	04/12/17 13:06	04/17/17 10:15
140-7831-10	H43-SS-1020	Air	04/12/17 13:13	04/17/17 10:15
140-7831-11	H43-BA-1020	Air	04/12/17 13:14	04/17/17 10:15
140-7831-12	H44-SS	Air	04/12/17 14:48	04/17/17 10:15
140-7831-13	H44-BA	Air	04/12/17 14:47	04/17/17 10:15
140-7831-14	FIELD DUP-1	Air	04/12/17 13:09	04/17/17 10:15

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.: 140-7831-1

SDG No.: _____

Matrix: Air

Level: Low

GC Column (1): RTX-5 ID: 0.32 (mm)

Client Sample ID	Lab Sample ID	BFB #
H40-SS	140-7831-1	102
H40-BA	140-7831-2	102
H41A-SS	140-7831-3	101
H41A-BA	140-7831-4	103
H42-SS	140-7831-5	100
H42-BA	140-7831-6	100
H43-SS-1018	140-7831-7	104
H43-BA-1018	140-7831-8	102
H43-OA-1	140-7831-9	104
H43-SS-1020	140-7831-10	105
H43-BA-1020	140-7831-11	102
H44-SS	140-7831-12	106
H44-BA	140-7831-13	104
FIELD DUP-1	140-7831-14	102
	MB 140-10584/4	104
	LCS 140-10584/1002	108

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.: 140-7831-1
SDG No.: _____
Matrix: Air Level: Low Lab File ID: GCCVD20-LCS.d
Lab ID: LCS 140-10584/1002 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	2.00	2.45	122	70-130	
1,1,2,2-Tetrachloroethane	2.00	1.96	98	70-130	
1,1,2-Trichloroethane	2.00	1.92	96	70-130	
1,1,2-Trichlorotrifluoroethane	2.00	2.44	122	70-130	
1,1-Dichloroethane	2.00	1.75	88	70-130	
1,1-Dichloroethene	2.00	2.27	113	70-130	
1,2,4-Trichlorobenzene	2.00	1.63	82	60-140	
1,2,4-Trimethylbenzene	2.00	2.13	107	70-130	
1,2-Dibromoethane	2.00	2.21	110	70-130	
1,2-Dichlorobenzene	2.00	1.98	99	70-130	
1,2-Dichloroethane	2.00	2.19	109	70-130	
1,2-Dichloropropane	2.00	1.68	84	70-130	
1,2-Dichlorotetrafluoroethane	2.00	2.25	112	60-140	
1,3,5-Trimethylbenzene	2.00	2.04	102	70-130	
1,3-Dichlorobenzene	2.00	1.97	98	70-130	
1,4-Dichlorobenzene	2.00	1.98	99	70-130	
1,4-Dioxane	2.00	1.67	83	60-140	
2,2,4-Trimethylpentane	2.00	1.58	79	70-130	
2-Butanone	2.00	1.60	80	60-140	
4-Methyl-2-pentanone (MIBK)	2.00	1.44	72	60-140	
Benzene	2.00	1.86	93	70-130	
Benzyl chloride	2.00	2.07	103	70-130	
Bromodichloromethane	2.00	2.34	117	70-130	
Bromoform	2.00	1.93	96	60-140	
Bromomethane	2.00	2.08	104	70-130	
Carbon tetrachloride	2.00	2.56	128	70-130	
Chlorobenzene	2.00	2.03	102	70-130	
Chloroethane	2.00	1.74	87	70-130	
Chloroform	2.00	2.23	111	70-130	
Chloromethane	2.00	1.38	69	60-140	
cis-1,2-Dichloroethene	2.00	2.00	100	70-130	
cis-1,3-Dichloropropene	2.00	2.01	100	70-130	
Cyclohexane	2.00	1.91	95	70-130	
Dibromochloromethane	2.00	2.41	120	70-130	
Dichlorodifluoromethane	2.00	2.34	117	60-140	
Ethanol	10.0	6.63	66	60-140	
Ethylbenzene	2.00	2.02	101	70-130	
Hexachlorobutadiene	2.00	1.36	68	60-140	
Hexane	2.00	1.51	75	70-130	
Methyl tert-butyl ether	2.00	1.92	96	60-140	
Methylene Chloride	2.00	2.18	109	70-130	
m-Xylene & p-Xylene	4.00	4.08	102	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Matrix: Air Level: Low Lab File ID: GCCVD20-LCS.d
 Lab ID: LCS 140-10584/1002 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
o-Xylene	2.00	2.04	102	70-130	
Styrene	2.00	2.20	110	70-130	
t-Butyl alcohol	2.00	1.74	87	60-140	
Tetrachloroethene	2.00	2.16	108	70-130	
Toluene	2.00	1.95	97	70-130	
trans-1,2-Dichloroethene	2.00	2.07	103	70-130	
trans-1,3-Dichloropropene	2.00	1.98	99	70-130	
Trichloroethene	2.00	2.07	104	70-130	
Trichlorofluoromethane	2.00	2.45	122	60-140	
Vinyl chloride	2.00	1.68	84	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.: 140-7831-1
 SDG No.: _____
 Lab File ID: GMB500D20.D Lab Sample ID: MB 140-10584/4
 Matrix: Air Heated Purge: (Y/N) N
 Instrument ID: MG Date Analyzed: 04/20/2017 12:11
 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 140-10584/1002	GCCVD20-LCS .d	04/20/2017 09:46
H40-SS	140-7831-1	GD20P101.D	04/20/2017 12:58
H44-BA	140-7831-13	GD20P102.D	04/20/2017 13:44
FIELD DUP-1	140-7831-14	GD20P103.D	04/20/2017 14:31
H40-BA	140-7831-2	GD20P104.D	04/20/2017 15:17
H41A-SS	140-7831-3	GD20P105.D	04/20/2017 16:04
H41A-BA	140-7831-4	GD20P106.D	04/20/2017 16:51
H42-SS	140-7831-5	GD20P107.D	04/20/2017 17:40
H42-BA	140-7831-6	GD20P108.D	04/20/2017 18:27
H43-SS-1018	140-7831-7	GD20P109.D	04/20/2017 19:15
H43-BA-1018	140-7831-8	GD20P110.D	04/20/2017 20:02
H43-OA-1	140-7831-9	GD20P111.D	04/20/2017 20:48
H43-SS-1020	140-7831-10	GD20P112.D	04/20/2017 21:36
H43-BA-1020	140-7831-11	GD20P113.D	04/20/2017 22:23
H44-SS	140-7831-12	GD20P114.D	04/20/2017 23:09

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Lab File ID: GBFBC15.D BFB Injection Date: 03/15/2017
 Instrument ID: MG BFB Injection Time: 14:04
 Analysis Batch No.: 9482

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	18.5
75	30.0 - 60.0 % of mass 95	57.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.8
173	Less than 2.0 % of mass 174	0.5 (0.6) 1
174	50.0 - 120.00 % of mass 95	88.1
175	5.0 - 9.0 % of mass 174	6.1 (6.9) 1
176	95.0 - 101.0 % of mass 174	85.3 (96.8) 1
177	5.0 - 9.0 % of mass 176	5.3 (6.3) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-9482/3	GC15IC01.D	03/15/2017	14:36
	IC 140-9482/4	GC15IC02.D	03/15/2017	15:20
	IC 140-9482/5	GC15IC03.D	03/15/2017	16:02
	IC 140-9482/6	GC15IC04.D	03/15/2017	16:45
	IC 140-9482/7	GC15IC05.D	03/15/2017	17:29
	ICIS 140-9482/8	GC15IC06.D	03/15/2017	18:13
	IC 140-9482/9	GC15IC07.D	03/15/2017	18:56
	IC 140-9482/10	GC15IC08.D	03/15/2017	19:39
	IC 140-9482/11	GC15IC09.D	03/15/2017	20:21
	ICV 140-9482/13	GICVC15.D	03/15/2017	21:46

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Lab File ID: GBFBD20.D BFB Injection Date: 04/20/2017
 Instrument ID: MG BFB Injection Time: 09:13
 Analysis Batch No.: 10584

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	15.7
75	30.0 - 60.0 % of mass 95	55.7
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	0.4 (0.5) 1
174	50.0 - 120.00 % of mass 95	71.9
175	5.0 - 9.0 % of mass 174	5.0 (6.9) 1
176	95.0 - 101.0 % of mass 174	71.1 (98.9) 1
177	5.0 - 9.0 % of mass 176	4.4 (6.1) 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 140-10584/2	GCCVD20.D	04/20/2017	09:46
	LCS 140-10584/1002	GCCVD20-LCS.d	04/20/2017	09:46
	MB 140-10584/4	GMB500D20.D	04/20/2017	12:11
H40-SS	140-7831-1	GD20P101.D	04/20/2017	12:58
H44-BA	140-7831-13	GD20P102.D	04/20/2017	13:44
FIELD DUP-1	140-7831-14	GD20P103.D	04/20/2017	14:31
H40-BA	140-7831-2	GD20P104.D	04/20/2017	15:17
H41A-SS	140-7831-3	GD20P105.D	04/20/2017	16:04
H41A-BA	140-7831-4	GD20P106.D	04/20/2017	16:51
H42-SS	140-7831-5	GD20P107.D	04/20/2017	17:40
H42-BA	140-7831-6	GD20P108.D	04/20/2017	18:27
H43-SS-1018	140-7831-7	GD20P109.D	04/20/2017	19:15
H43-BA-1018	140-7831-8	GD20P110.D	04/20/2017	20:02
H43-OA-1	140-7831-9	GD20P111.D	04/20/2017	20:48
H43-SS-1020	140-7831-10	GD20P112.D	04/20/2017	21:36
H43-BA-1020	140-7831-11	GD20P113.D	04/20/2017	22:23
H44-SS	140-7831-12	GD20P114.D	04/20/2017	23:09

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Sample No.: ICIS 140-9482/8 Date Analyzed: 03/15/2017 18:13
 Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm)
 Lab File ID (Standard): GC15IC06.D Heated Purge: (Y/N) N
 Calibration ID: 962

	CBM		DFBZ		CBZd5	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	356237	7.99	1693700	10.16	1673092	15.03
UPPER LIMIT	498732	8.32	2371180	10.49	2342329	15.36
LOWER LIMIT	213742	7.66	1016220	9.83	1003855	14.70
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 140-9482/13		414852	7.99	2002906	10.16	1960813 15.03

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

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

Column used to flag values outside QC limits

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Sample No.: CCVIS 140-10584/2 Date Analyzed: 04/20/2017 09:46
 Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm)
 Lab File ID (Standard): GCCVD20.D Heated Purge: (Y/N) N
 Calibration ID: 962

	CBM		DFBZ		CBZd5	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	287854	7.97	1428849	10.13	1413484	15.01
UPPER LIMIT	402996	8.30	2000389	10.46	1978878	15.34
LOWER LIMIT	172712	7.64	857309	9.80	848090	14.68
LAB SAMPLE ID	CLIENT SAMPLE ID					
LCS 140-10584/1002		287854	7.97	1428849	10.13	1413484
MB 140-10584/4		256855	7.96	1252605	10.12	1249896
140-7831-1	H40-SS	277478	7.97	1421081	10.13	1388973
140-7831-13	H44-BA	279030	7.96	1407758	10.13	1430209
140-7831-14	FIELD DUP-1	285303	7.97	1406620	10.13	1450636
140-7831-2	H40-BA	288205	7.96	1436518	10.13	1421798
140-7831-3	H41A-SS	290129	7.96	1433372	10.13	1410956
140-7831-4	H41A-BA	283672	7.97	1440903	10.13	1418062
140-7831-5	H42-SS	276194	7.96	1376745	10.13	1379559
140-7831-6	H42-BA	279605	7.96	1398834	10.13	1395340
140-7831-7	H43-SS-1018	290914	7.96	1443986	10.13	1463888
140-7831-8	H43-BA-1018	272321	7.96	1383328	10.13	1356700
140-7831-9	H43-OA-1	272022	7.96	1385300	10.12	1336733
140-7831-10	H43-SS-1020	272907	7.96	1313598	10.12	1366531
140-7831-11	H43-BA-1020	290317	7.96	1446464	10.13	1422459
140-7831-12	H44-SS	272454	7.96	1303472	10.13	1395671

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

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

Column used to flag values outside QC limits

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H40-SS Lab Sample ID: 140-7831-1
 Matrix: Air Lab File ID: GD20P101.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 07:58
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 12:58
 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.: 10584 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	0.095		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	0.33		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	0.057		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H40-SS Lab Sample ID: 140-7831-1
 Matrix: Air Lab File ID: GD20P101.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 07:58
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 12:58
 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.: 10584 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	0.48		0.080	
64-17-5	Ethanol	46.07	ND		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	ND		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.22		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	0.22		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H40-SS Lab Sample ID: 140-7831-1
 Matrix: Air Lab File ID: GD20P101.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 07:58
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 12:58
 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.: 10584 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	0.47		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	0.98		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	0.36		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H40-SS Lab Sample ID: 140-7831-1
 Matrix: Air Lab File ID: GD20P101.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 07:58
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 12:58
 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.: 10584 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	ND		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	0.95		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	0.57		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		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P101.D
 Lims ID: 140-7831-A-1
 Client ID: H40-SS
 Sample Type: Client
 Inject. Date: 20-Apr-2017 12:58:30 ALS Bottle#: 1 Worklist Smp#: 5
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004683-005
 Misc. Info.: 140-7831-a-1
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 20-Apr-2017 13:34:03 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK017

First Level Reviewer: tajh

Date: 20-Apr-2017 13:33:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.969	7.969	0.000	68	277478	4.00	
* 2 1,4-Difluorobenzene	114	10.131	10.131	0.000	94	1421081	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.006	15.006	0.000	88	1388973	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.678	16.678	0.000	84	1123215	4.09	
8 Dichlorodifluoromethane	85	3.520	3.515	0.005	99	139522	0.4751	
17 Ethanol	31	4.372	4.356	0.016	95	32621	1.17	
20 Trichlorofluoromethane	101	4.744	4.739	0.005	99	63367	0.2167	
30 1,1,2-Trichloro-1,2,2-trif	101	5.516	5.510	0.006	95	12146	0.0712	
31 Methylene Chloride	84	5.645	5.639	0.006	77	8070	0.1209	
39 2-Butanone (MEK)	72	7.273	7.252	0.021	95	10503	0.3326	
40 Hexane	56	7.322	7.317	0.006	60	1968	0.0359	
49 Benzene	78	9.554	9.554	0.000	97	5426	0.0225	
50 Cyclohexane	69	9.549	9.560	-0.011	52	724	0.0178	
51 Carbon tetrachloride	117	9.587	9.581	0.006	97	14379	0.0570	
65 4-Methyl-2-pentanone (MIBK	43	12.121	12.100	0.021	93	14919	0.1076	
68 Toluene	91	12.995	12.995	0.000	92	42158	0.1524	
76 Tetrachloroethene	129	14.170	14.165	0.005	86	3660	0.0289	
79 Ethylbenzene	91	15.367	15.362	0.005	99	16816	0.0435	
81 m-Xylene & p-Xylene	91	15.529	15.534	-0.005	99	67958	0.2177	
85 o-Xylene	91	16.063	16.063	0.000	95	22895	0.0717	
96 1,2,4-Trimethylbenzene	105	17.929	17.929	0.000	97	37109	0.0946	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P101.D

Injection Date: 20-Apr-2017 12:58:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7831-A-1

Lab Sample ID: 140-7831-1

Worklist Smp#: 5

Client ID: H40-SS

Purge Vol: 500.000 mL

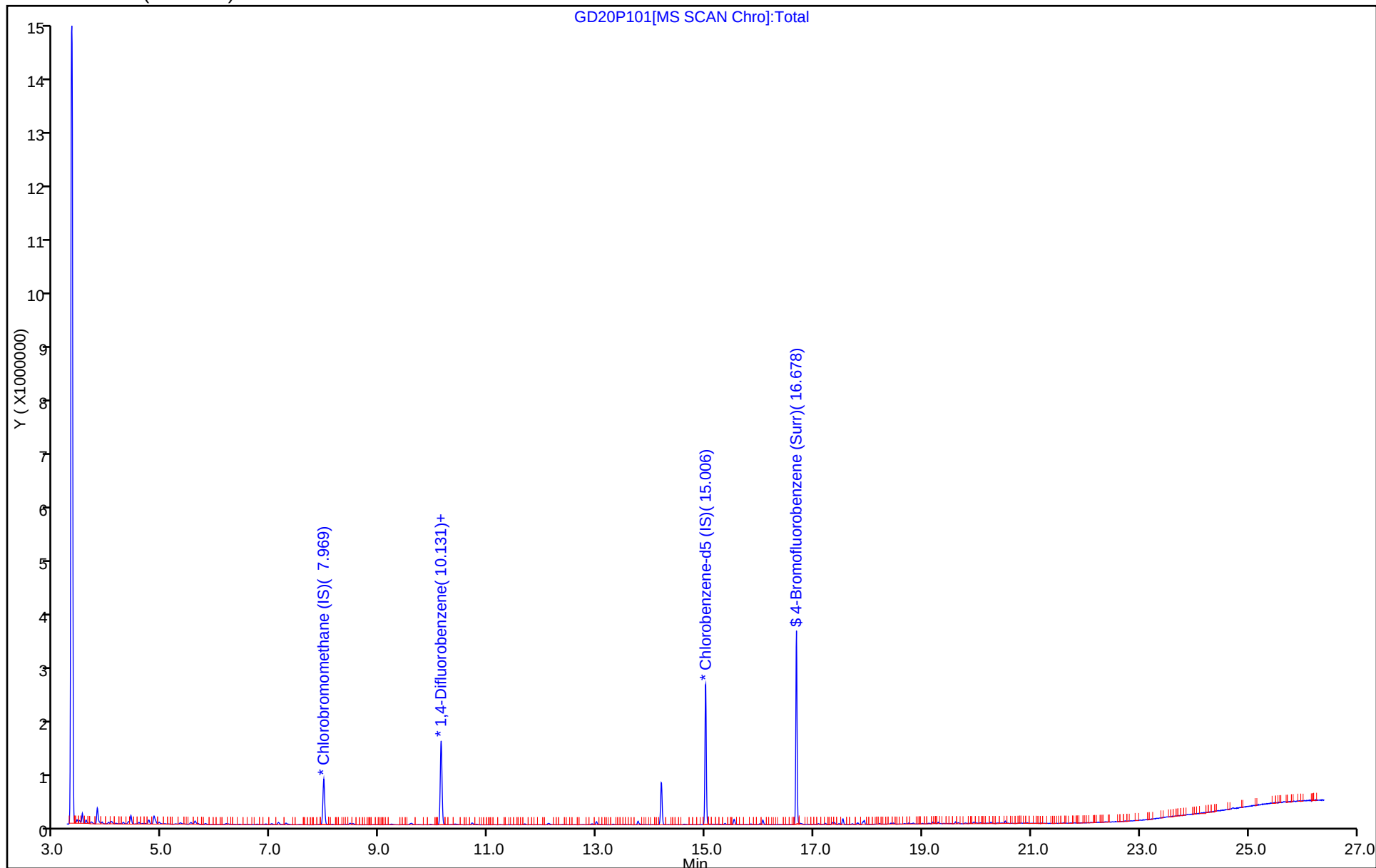
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P101.D
Lims ID: 140-7831-A-1
Client ID: H40-SS
Sample Type: Client
Inject. Date: 20-Apr-2017 12:58:30 ALS Bottle#: 1 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004683-005
Misc. Info.: 140-7831-a-1
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 20-Apr-2017 13:34:03 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: tajh

Date: 20-Apr-2017 13:33:46

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.09	102.30

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P101.D

Injection Date: 20-Apr-2017 12:58:30

Instrument ID: MG

Lims ID: 140-7831-A-1

Lab Sample ID: 140-7831-1

Client ID: H40-SS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 5

Purge Vol: 500.000 mL

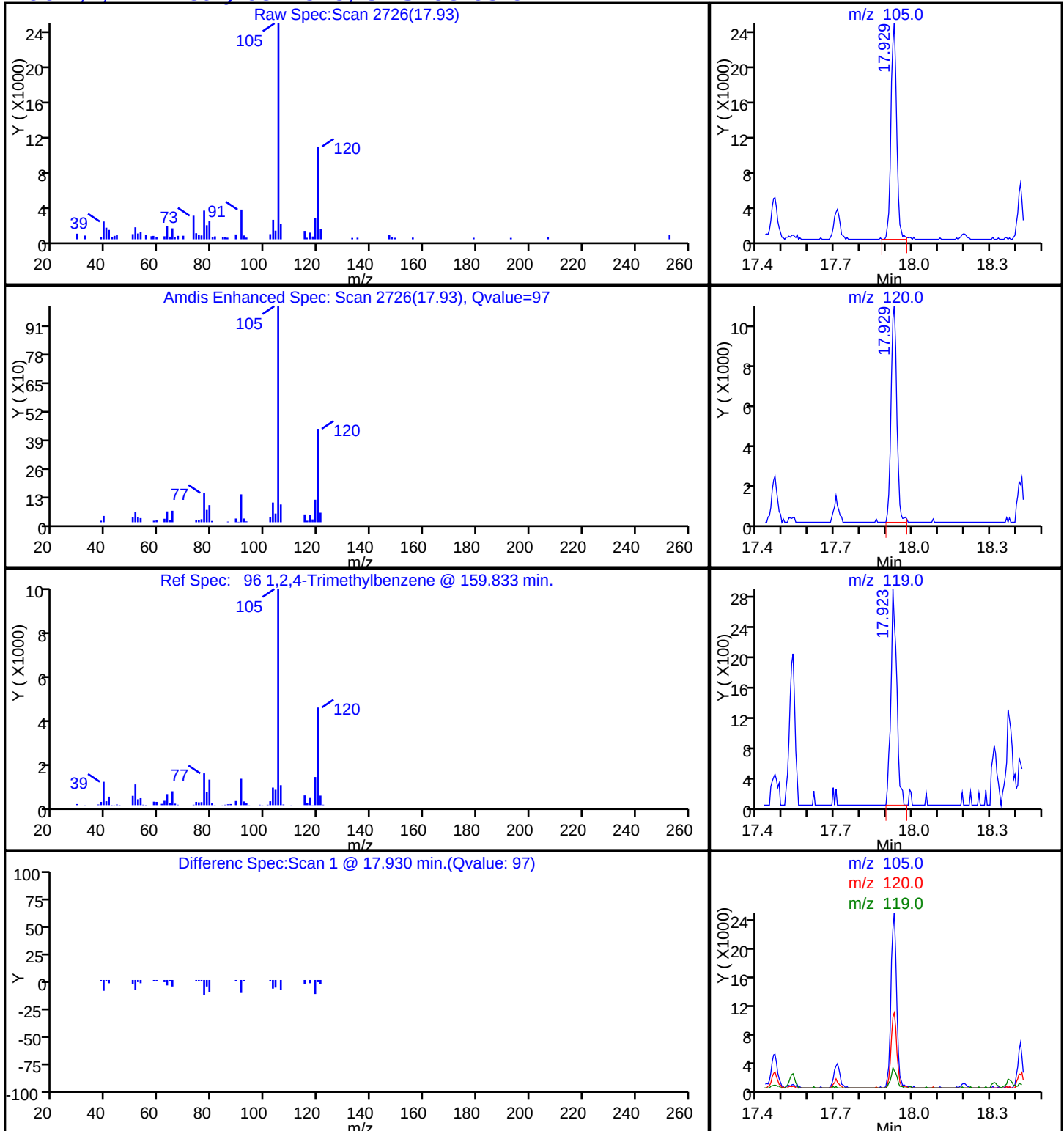
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

96 1,2,4-Trimethylbenzene, CAS: 95-63-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P101.D

Injection Date: 20-Apr-2017 12:58:30

Instrument ID: MG

Lims ID: 140-7831-A-1

Lab Sample ID: 140-7831-1

Client ID: H40-SS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 5

Purge Vol: 500.000 mL

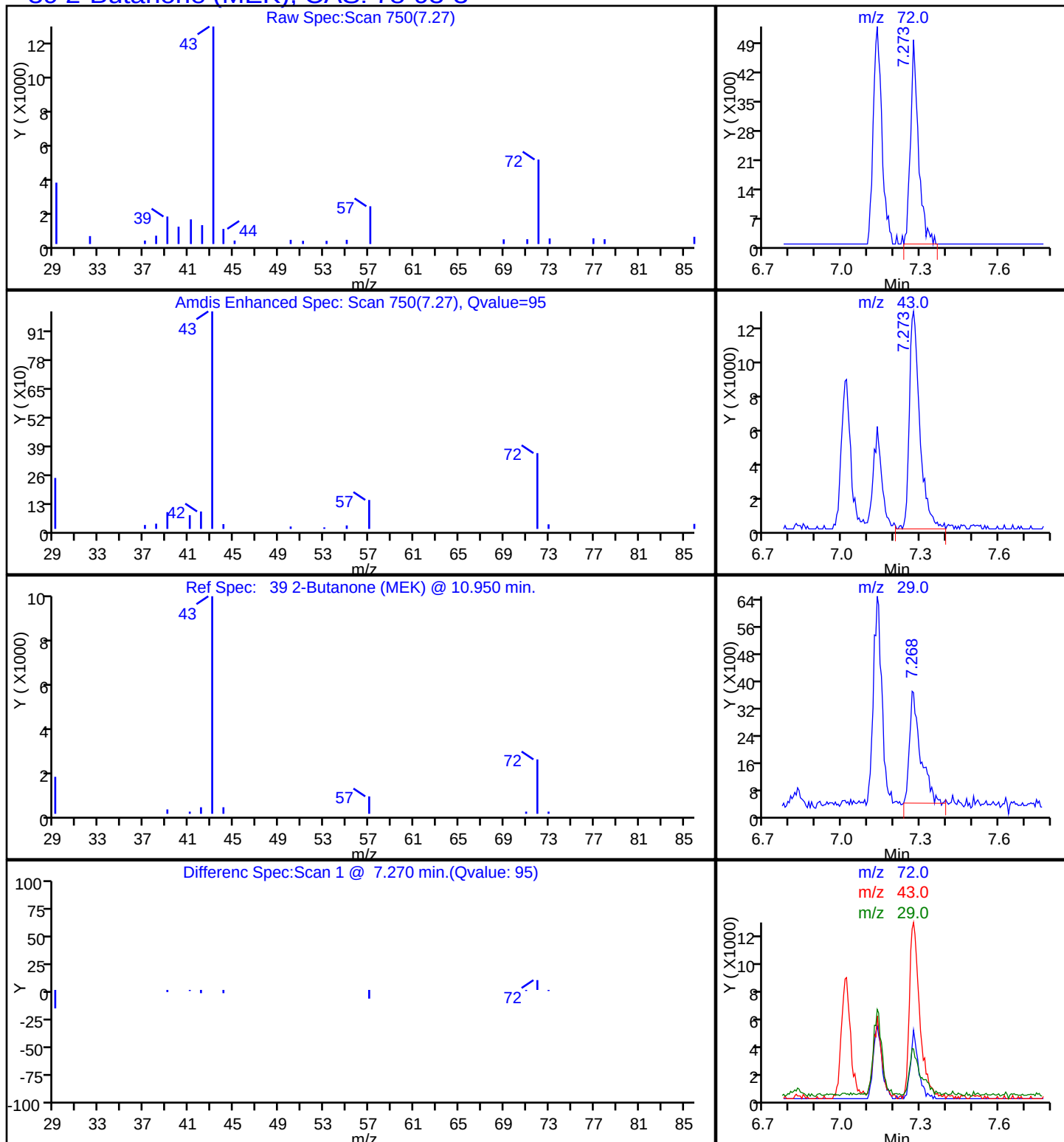
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P101.D

Injection Date: 20-Apr-2017 12:58:30

Instrument ID: MG

Lims ID: 140-7831-A-1

Lab Sample ID: 140-7831-1

Client ID: H40-SS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 5

Purge Vol: 500.000 mL

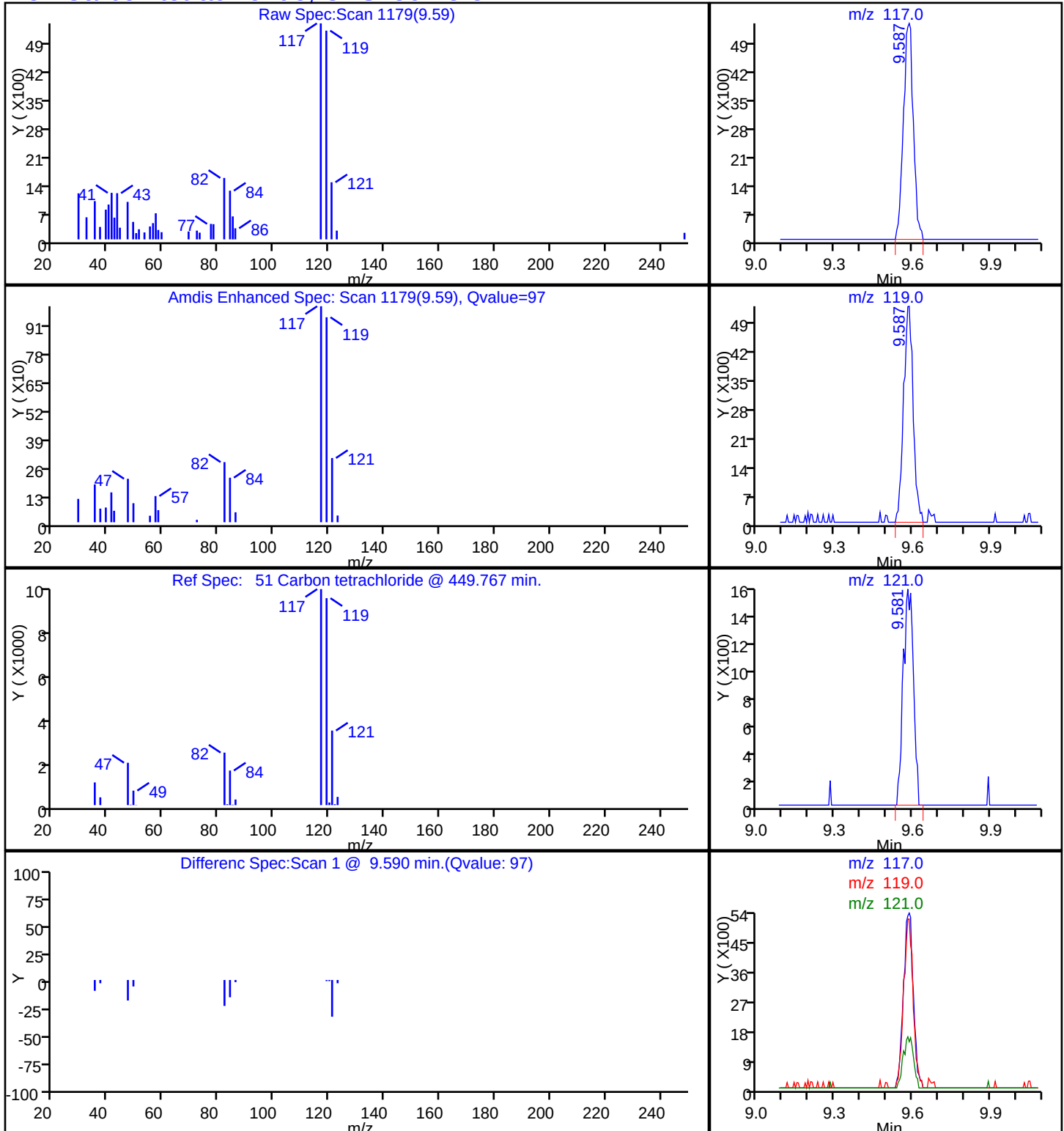
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P101.D

Injection Date: 20-Apr-2017 12:58:30

Instrument ID: MG

Lims ID: 140-7831-A-1

Lab Sample ID: 140-7831-1

Client ID: H40-SS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 5

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

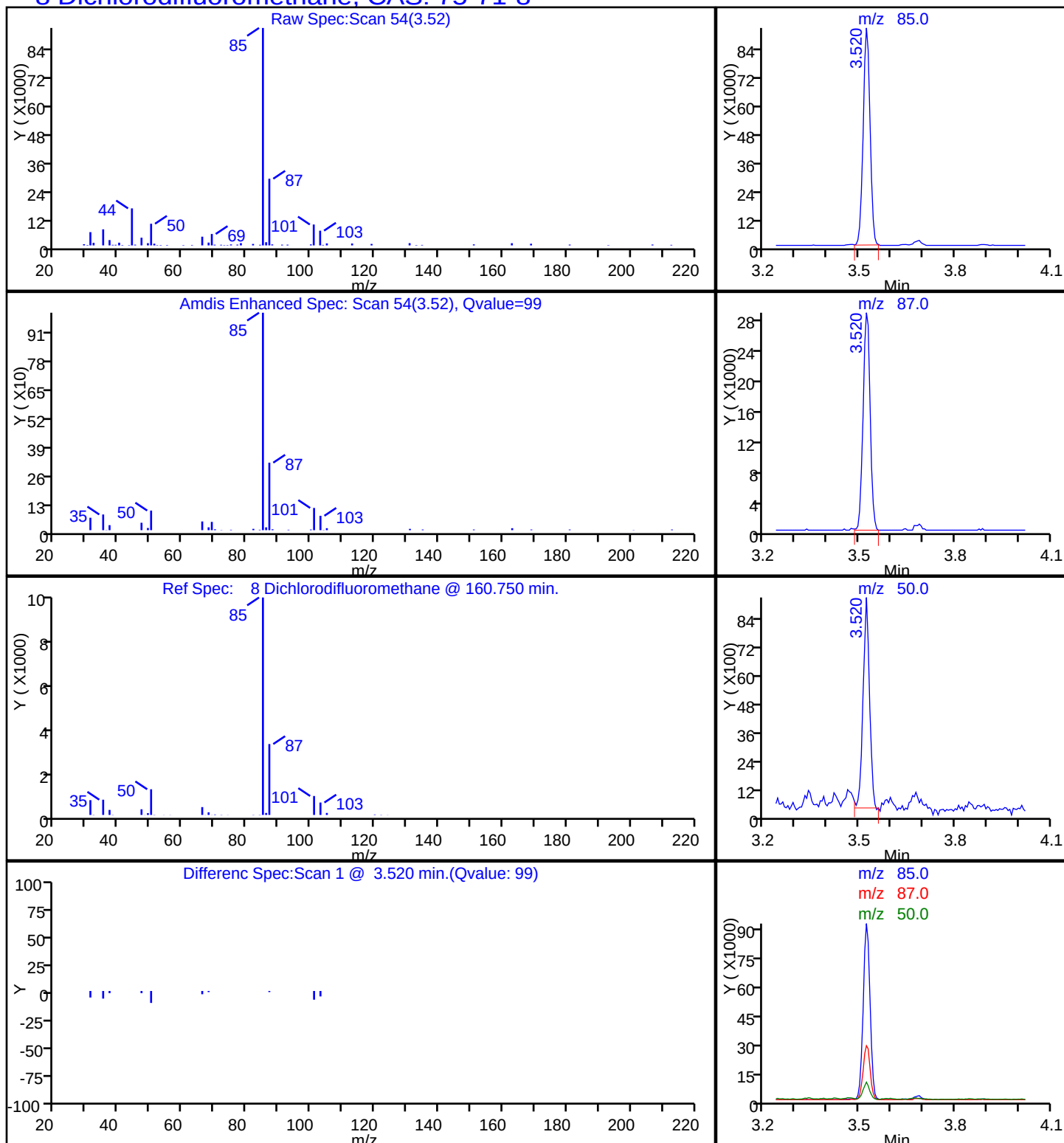
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P101.D

Injection Date: 20-Apr-2017 12:58:30

Instrument ID: MG

Lims ID: 140-7831-A-1

Lab Sample ID: 140-7831-1

Client ID: H40-SS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 5

Purge Vol: 500.000 mL

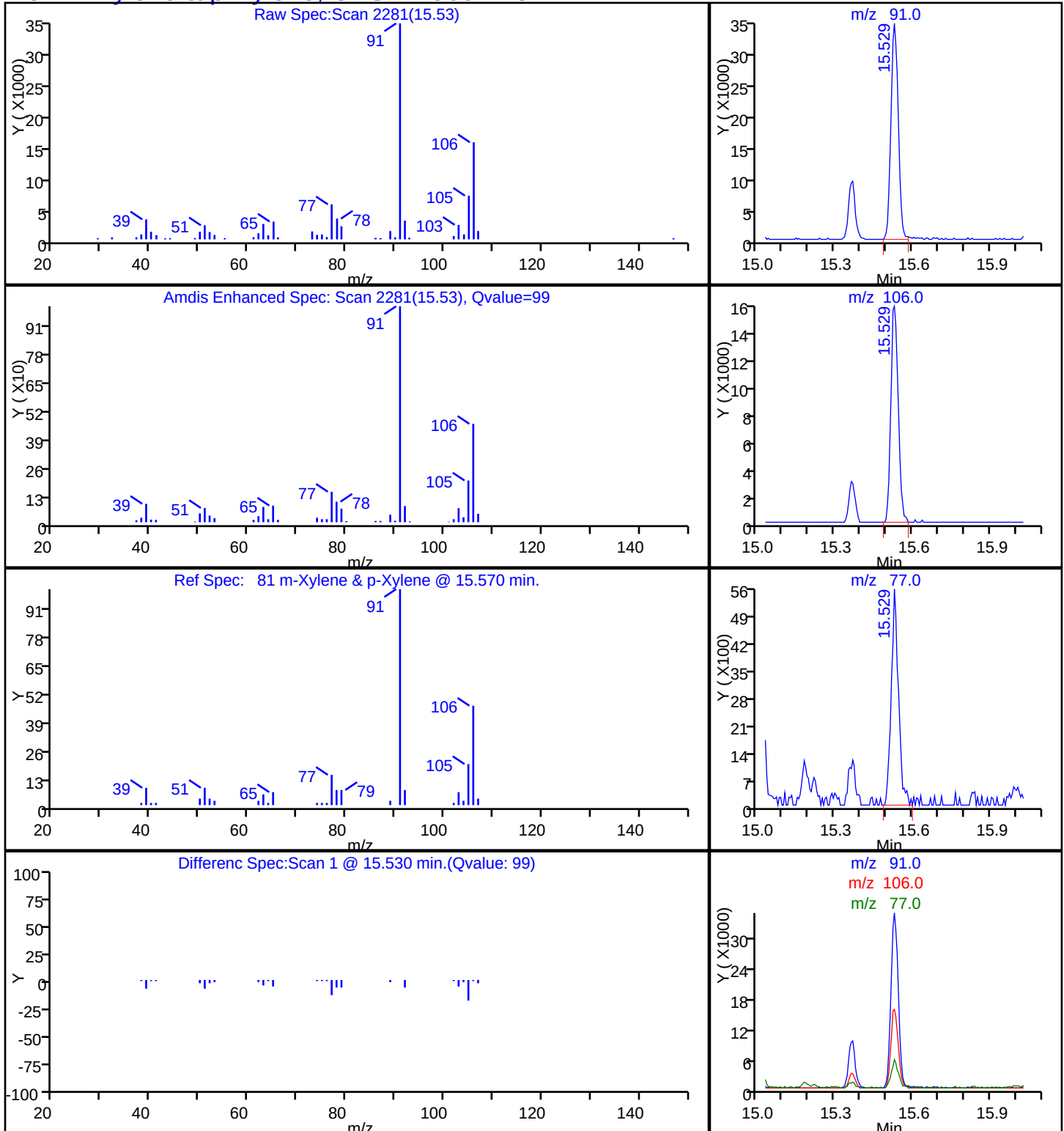
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P101.D

Injection Date: 20-Apr-2017 12:58:30

Instrument ID: MG

Lims ID: 140-7831-A-1

Lab Sample ID: 140-7831-1

Client ID: H40-SS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 5

Purge Vol: 500.000 mL

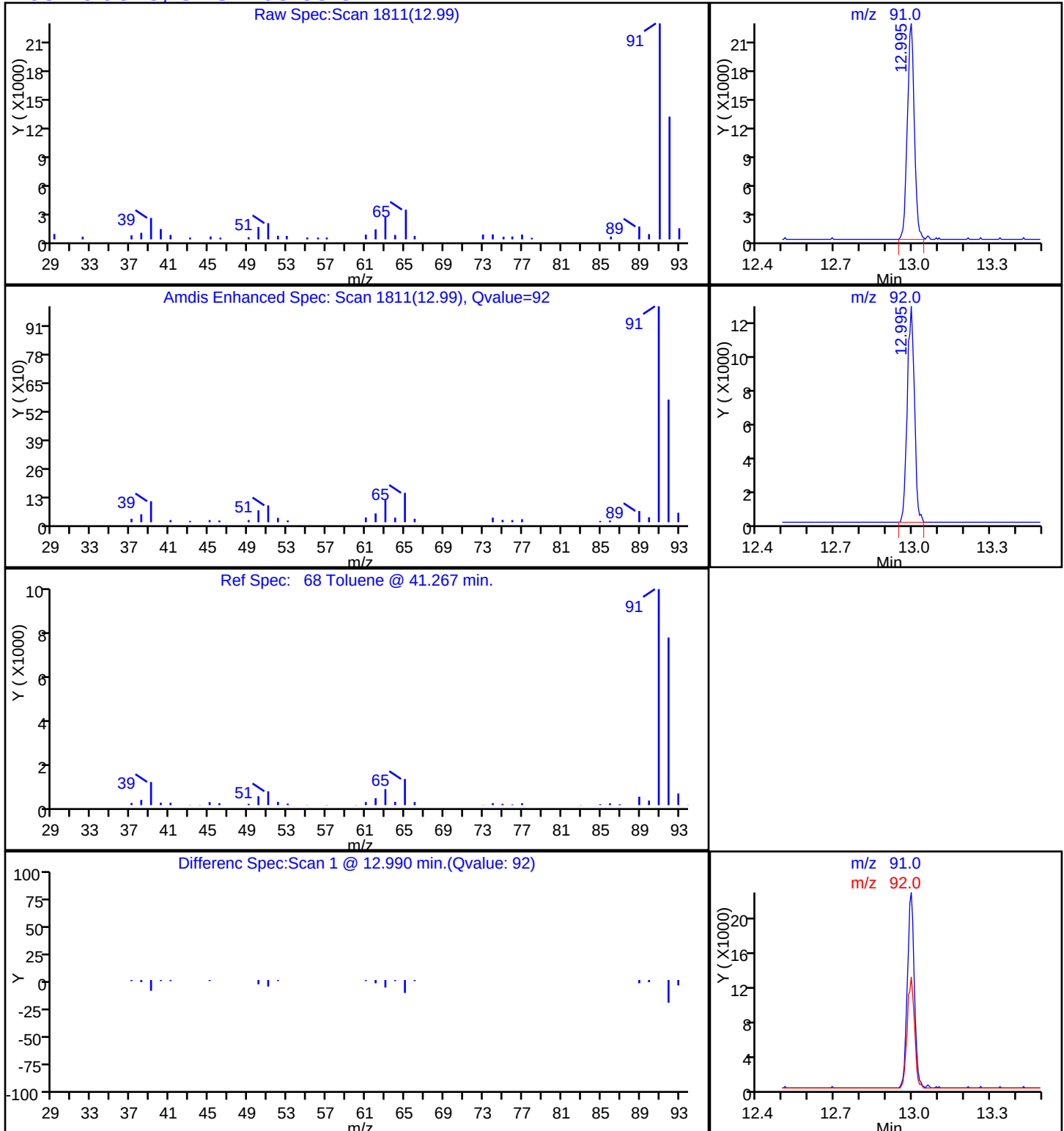
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P101.D

Injection Date: 20-Apr-2017 12:58:30

Instrument ID: MG

Lims ID: 140-7831-A-1

Lab Sample ID: 140-7831-1

Client ID: H40-SS

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 5

Purge Vol: 500.000 mL

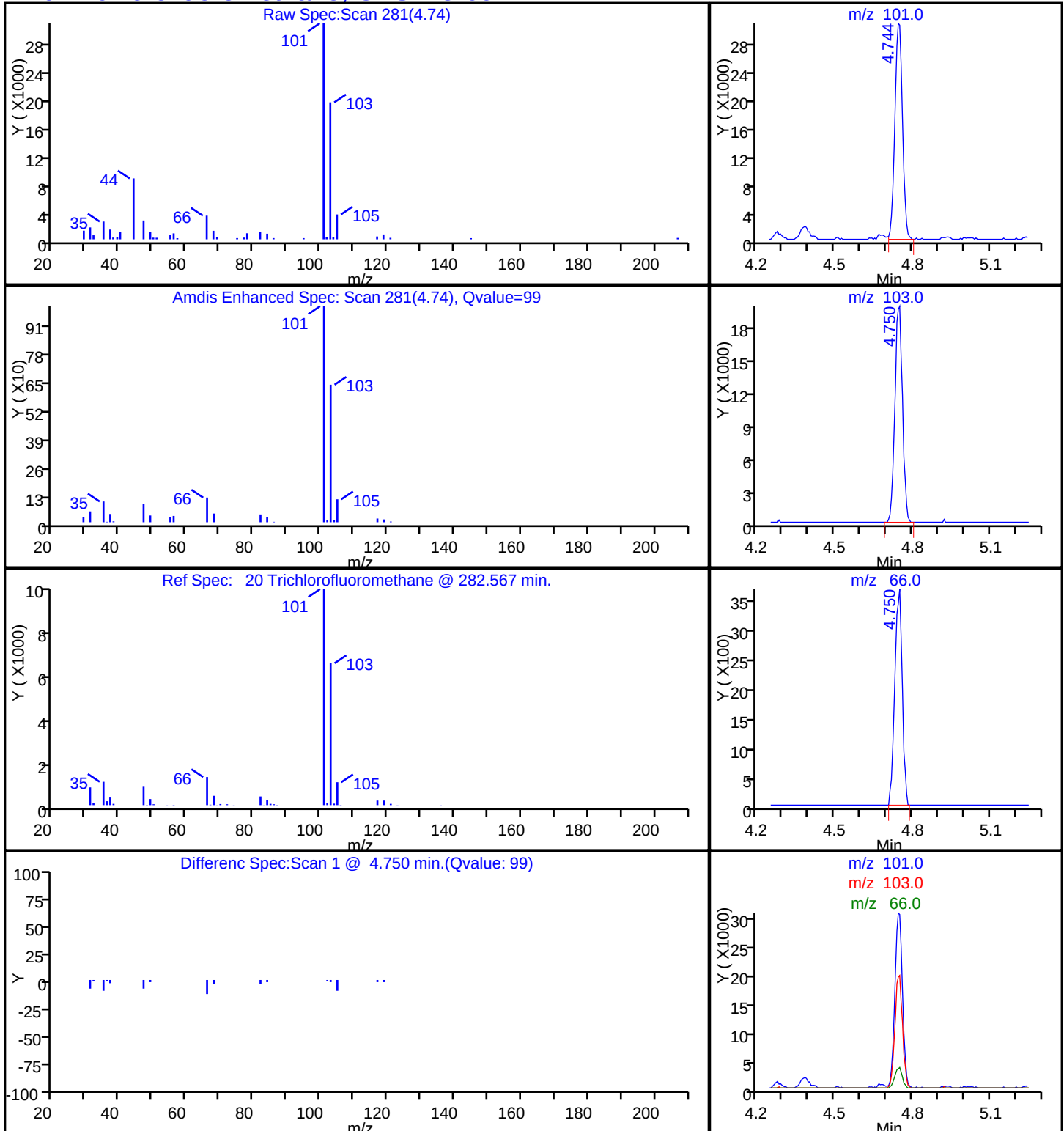
Dil. Factor: 1.0000

Method: MG_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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H40-BA Lab Sample ID: 140-7831-2
 Matrix: Air Lab File ID: GD20P104.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 07:58
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 15:17
 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.: 10584 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	0.50		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	0.80		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	0.080		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	0.36		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H40-BA Lab Sample ID: 140-7831-2
 Matrix: Air Lab File ID: GD20P104.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 07:58
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 15:17
 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.: 10584 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	20		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	0.27		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	0.14		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	0.25		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

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.: 140-7831-1

SDG No.: _____

Client Sample ID: H40-BA Lab Sample ID: 140-7831-2

Matrix: Air Lab File ID: GD20P104.D

Analysis Method: TO 15 LL Date Collected: 04/12/2017 07:58

Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 15:17

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.: 10584 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	3.3		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	0.50		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	0.74		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H40-BA Lab Sample ID: 140-7831-2
 Matrix: Air Lab File ID: GD20P104.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 07:58
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 15:17
 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.: 10584 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	38		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	0.93		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	0.52		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		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P104.D
 Lims ID: 140-7831-A-2
 Client ID: H40-BA
 Sample Type: Client
 Inject. Date: 20-Apr-2017 15:17:30 ALS Bottle#: 4 Worklist Smp#: 8
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004683-008
 Misc. Info.: 140-7831-a-2
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 20-Apr-2017 15:53:29 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK017

First Level Reviewer: tajh

Date: 20-Apr-2017 15:53:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.964	7.969	-0.005	68	288205	4.00	
* 2 1,4-Difluorobenzene	114	10.126	10.131	-0.005	94	1436518	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.001	15.006	-0.005	88	1421798	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.678	16.678	0.000	85	1142352	4.07	
8 Dichlorodifluoromethane	85	3.520	3.515	0.005	99	154295	0.5058	
9 Chloromethane	52	3.666	3.660	0.006	98	7390	0.3601	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.677	3.671	0.006	90	3199	0.0176	
17 Ethanol	31	4.372	4.356	0.016	97	579547	20.0	
20 Trichlorofluoromethane	101	4.739	4.739	0.000	99	77427	0.2549	
30 1,1,2-Trichloro-1,2,2-trif	101	5.510	5.510	0.000	93	12246	0.0691	
31 Methylene Chloride	84	5.645	5.639	0.006	82	18630	0.2688	
39 2-Butanone (MEK)	72	7.257	7.252	0.005	95	16372	0.4992	
40 Hexane	56	7.316	7.317	0.000	70	2173	0.0382	
44 Chloroform	83	7.991	7.996	-0.005	44	6005	0.0297	
49 Benzene	78	9.549	9.554	-0.005	96	16920	0.0693	
51 Carbon tetrachloride	117	9.581	9.581	0.000	98	20299	0.0796	
65 4-Methyl-2-pentanone (MIBK	43	12.100	12.100	0.000	94	112051	0.7993	
68 Toluene	91	12.989	12.995	-0.006	93	38828	0.1371	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P104.D

Injection Date: 20-Apr-2017 15:17:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7831-A-2

Lab Sample ID: 140-7831-2

Worklist Smp#: 8

Client ID: H40-BA

Purge Vol: 500.000 mL

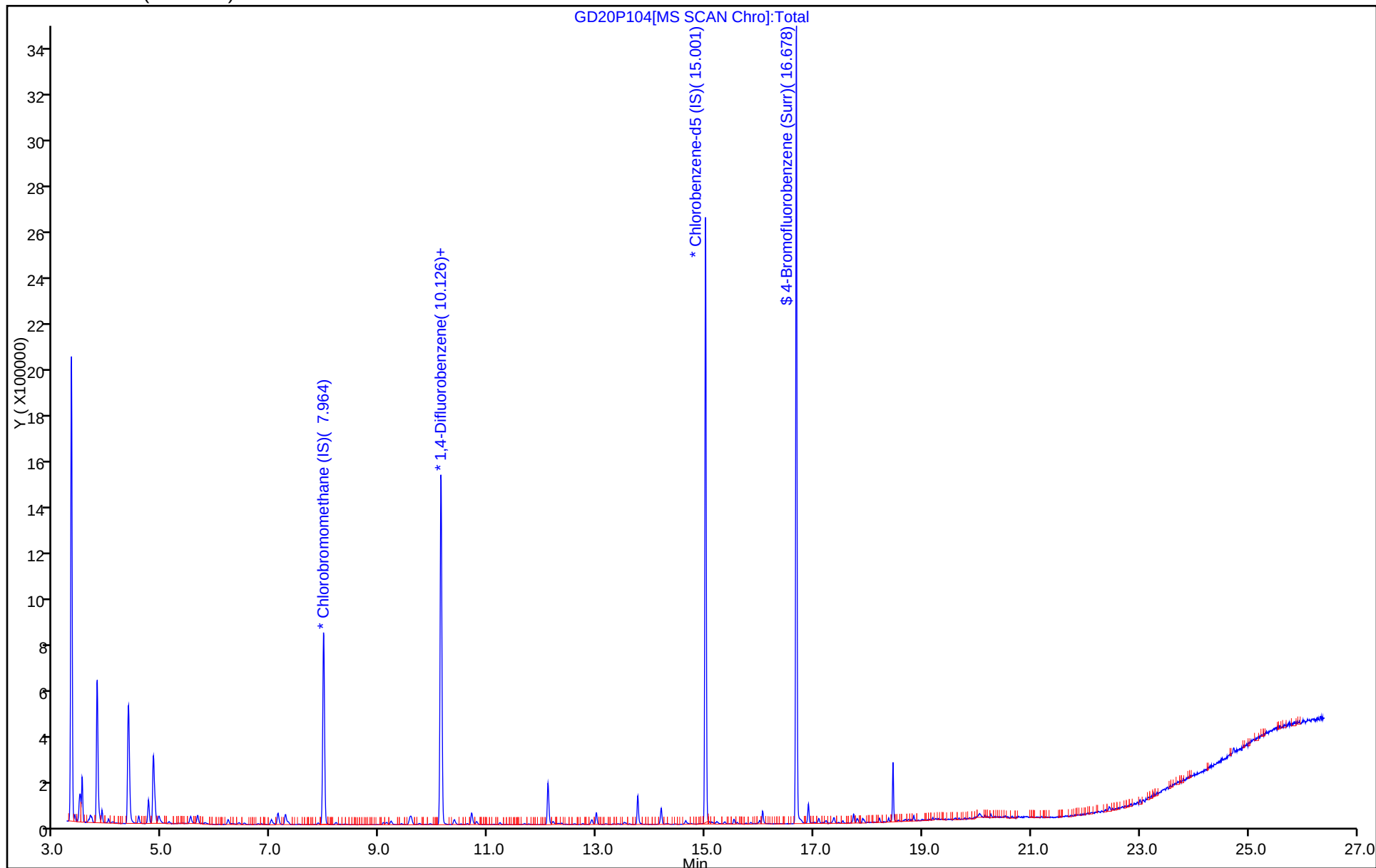
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P104.D
Lims ID: 140-7831-A-2
Client ID: H40-BA
Sample Type: Client
Inject. Date: 20-Apr-2017 15:17:30 ALS Bottle#: 4 Worklist Smp#: 8
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004683-008
Misc. Info.: 140-7831-a-2
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 20-Apr-2017 15:53:29 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: tajh

Date: 20-Apr-2017 15:53:29

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.07	101.64

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P104.D

Injection Date: 20-Apr-2017 15:17:30

Instrument ID: MG

Lims ID: 140-7831-A-2

Lab Sample ID: 140-7831-2

Client ID: H40-BA

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

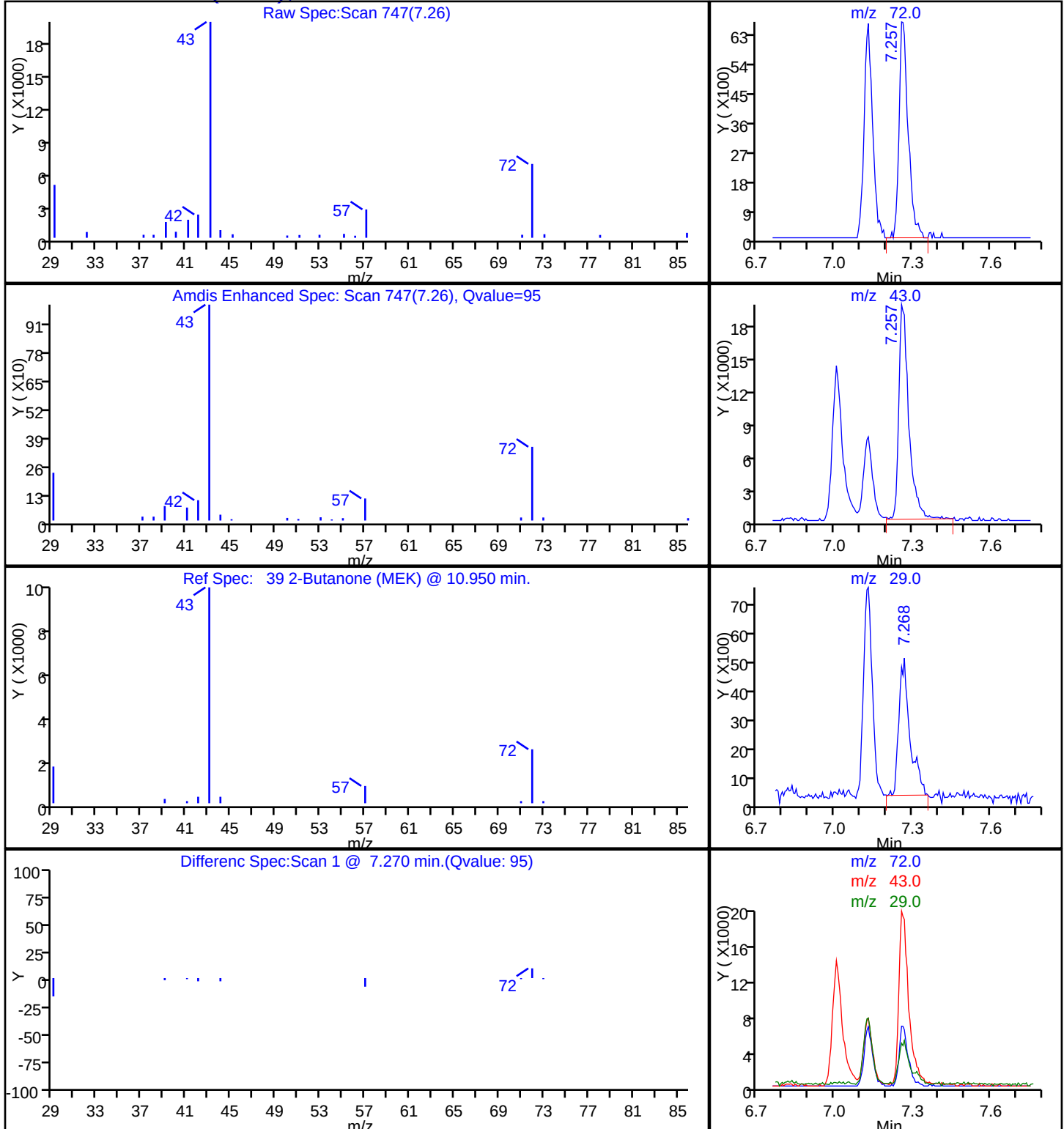
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P104.D

Injection Date: 20-Apr-2017 15:17:30

Instrument ID: MG

Lims ID: 140-7831-A-2

Lab Sample ID: 140-7831-2

Client ID: H40-BA

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

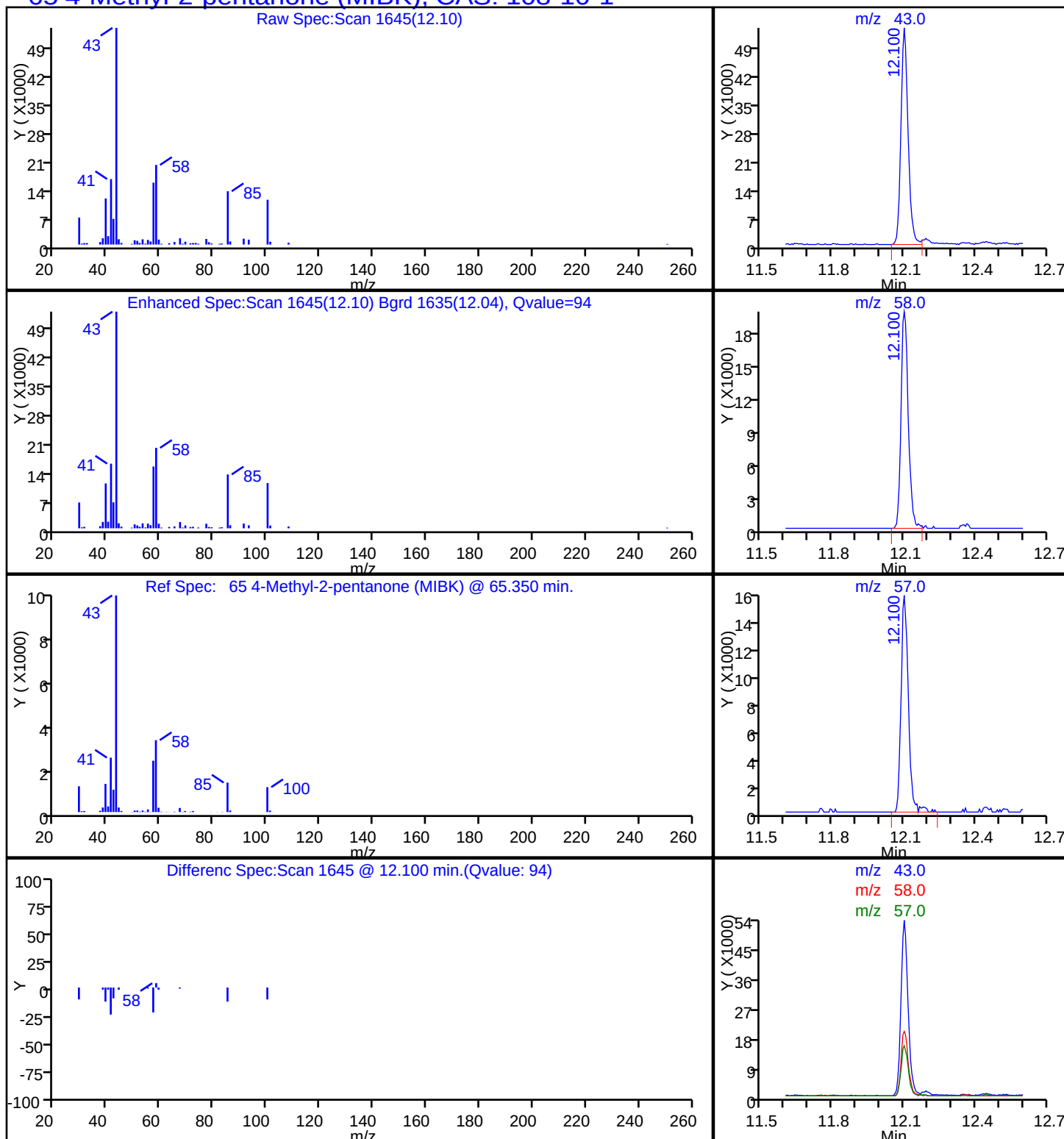
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

65 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P104.D

Injection Date: 20-Apr-2017 15:17:30

Instrument ID: MG

Lims ID: 140-7831-A-2

Lab Sample ID: 140-7831-2

Client ID: H40-BA

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

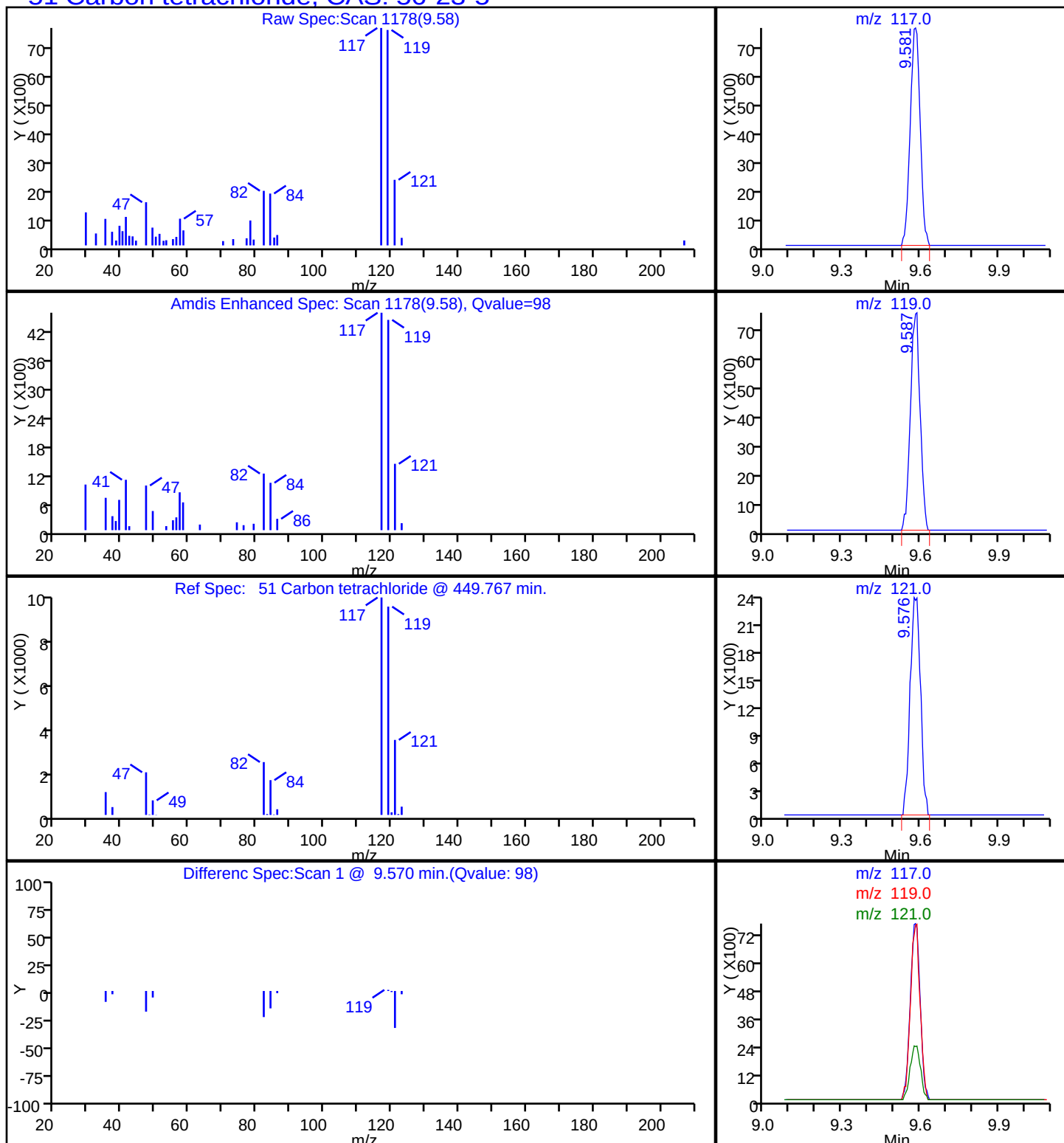
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P104.D

Injection Date: 20-Apr-2017 15:17:30

Instrument ID: MG

Lims ID: 140-7831-A-2

Lab Sample ID: 140-7831-2

Client ID: H40-BA

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

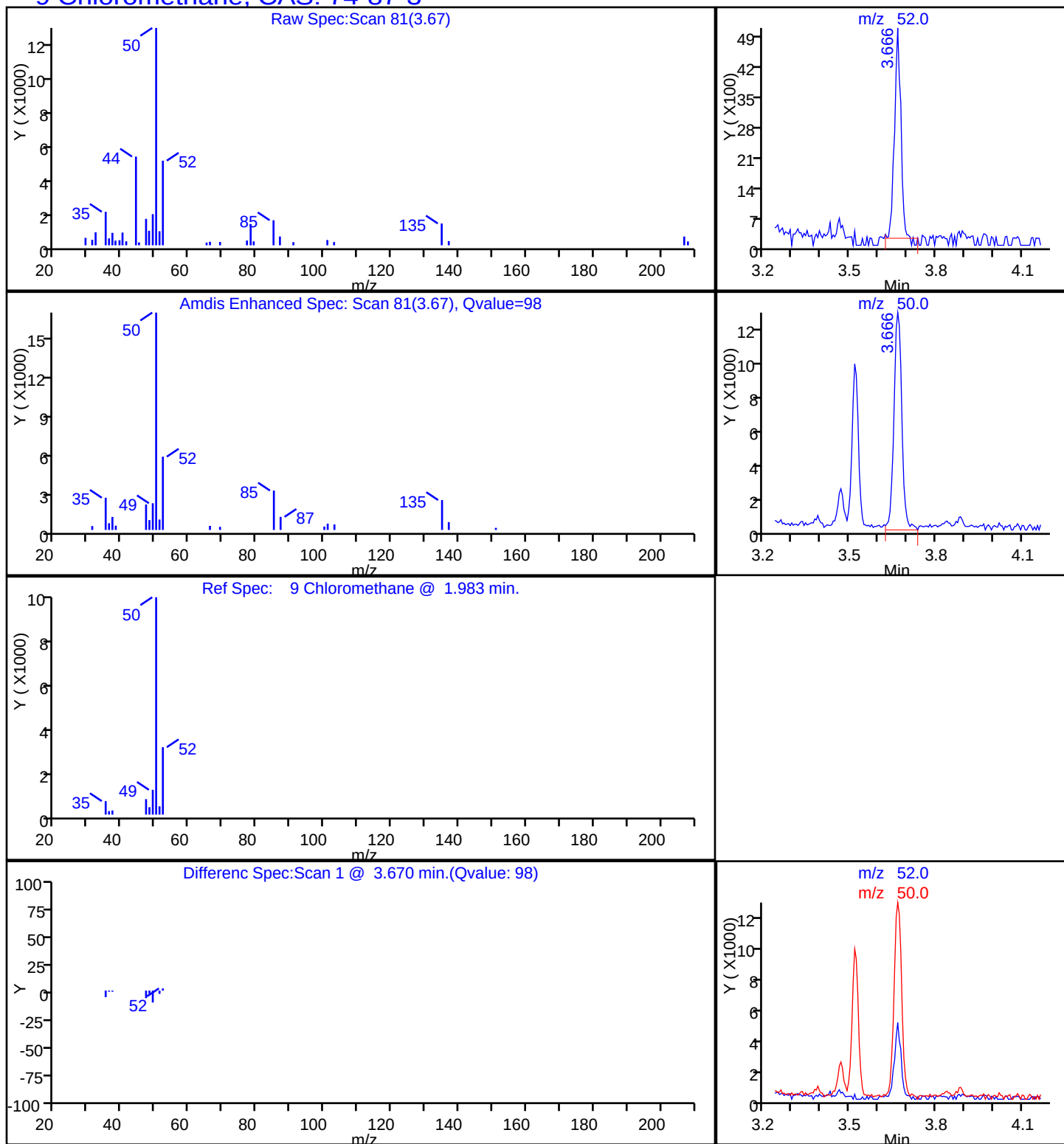
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\\Knoxville\\ChromData\\MG\\20170418-4683.b\\GD20P104.D

Injection Date: 20-Apr-2017 15:17:30

Instrument ID: MG

Lims ID: 140-7831-A-2

Lab Sample ID: 140-7831-2

Client ID: H40-BA

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

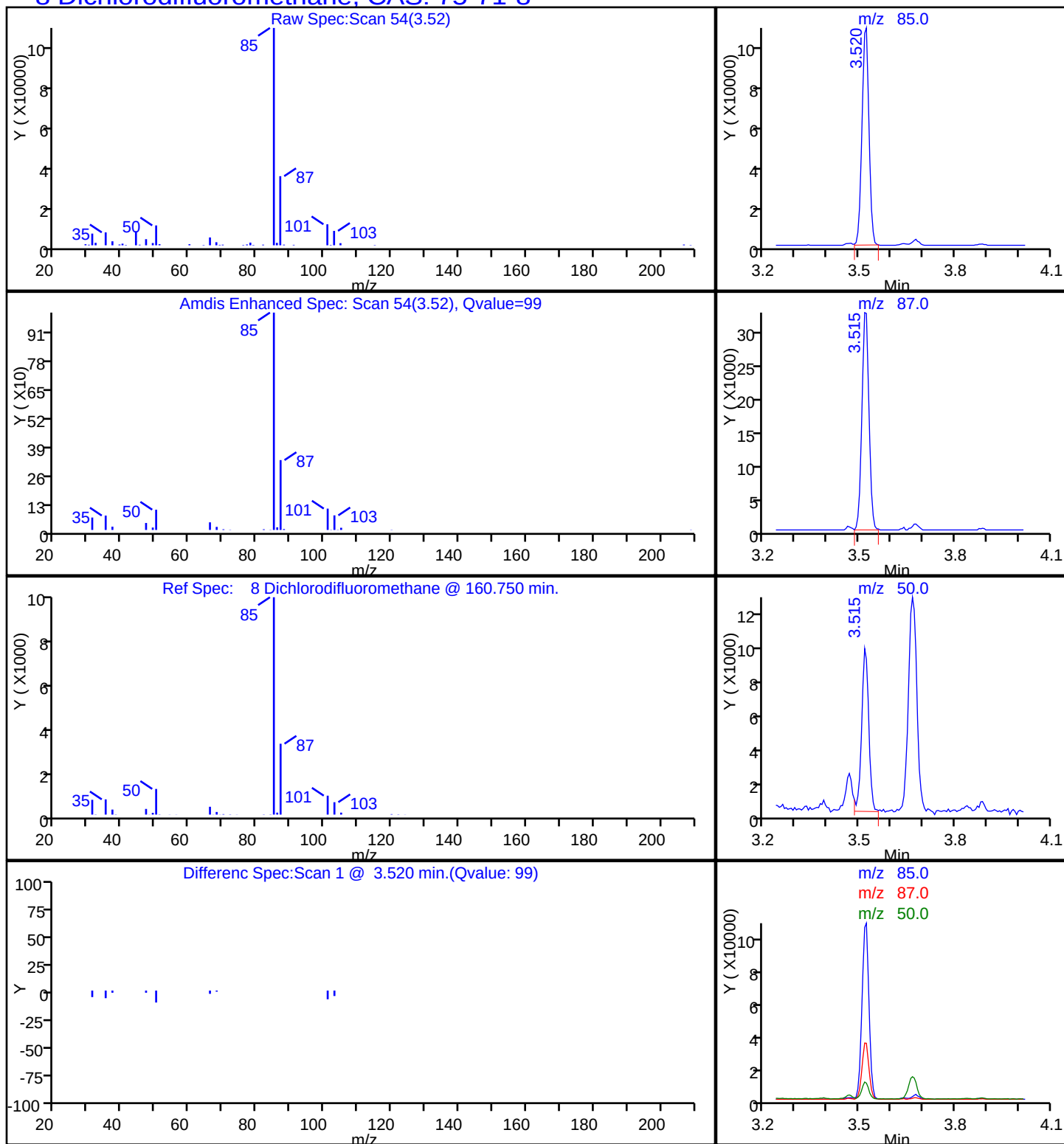
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P104.D

Injection Date: 20-Apr-2017 15:17:30

Instrument ID: MG

Lims ID: 140-7831-A-2

Lab Sample ID: 140-7831-2

Client ID: H40-BA

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

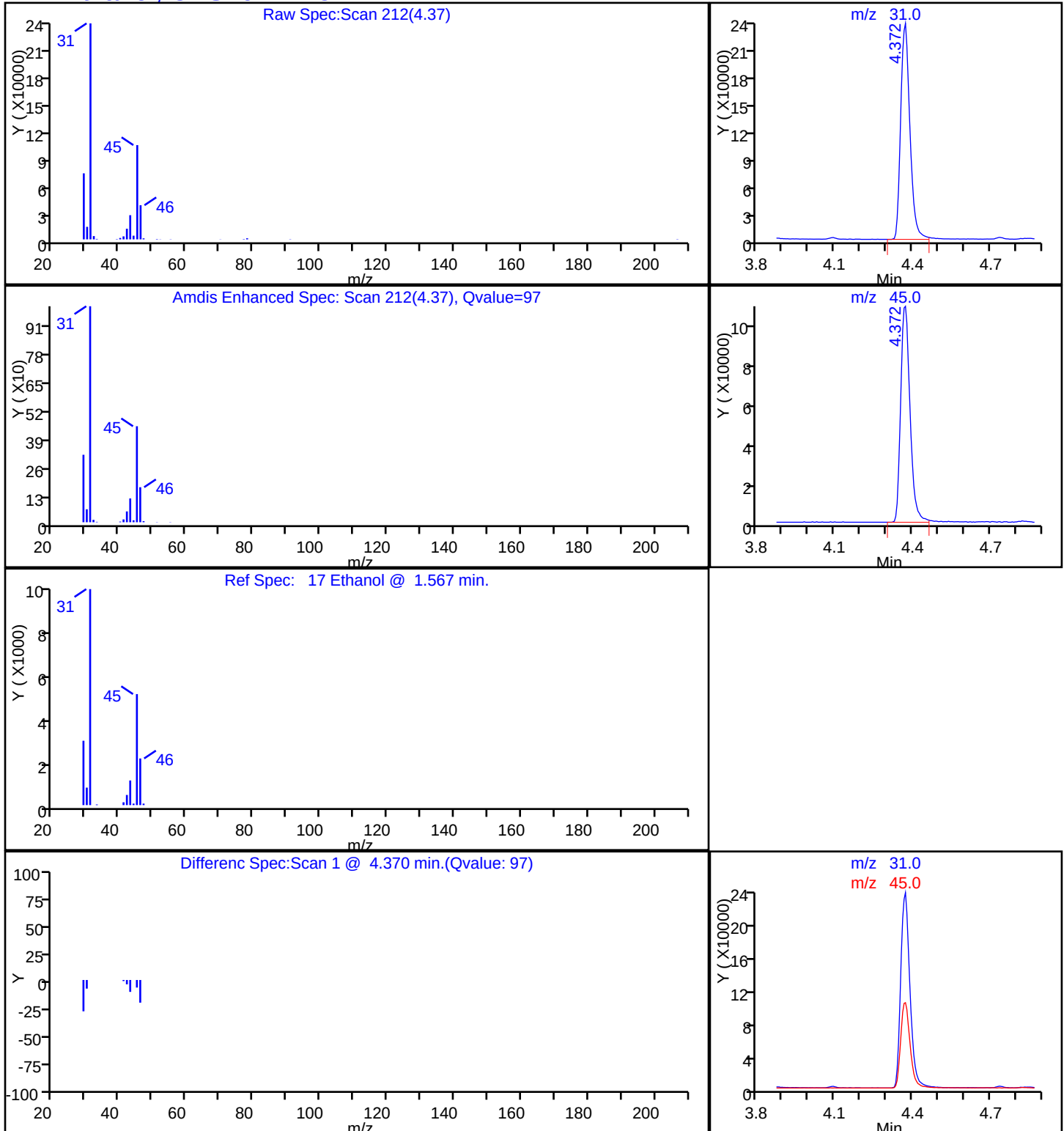
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P104.D

Injection Date: 20-Apr-2017 15:17:30

Instrument ID: MG

Lims ID: 140-7831-A-2

Lab Sample ID: 140-7831-2

Client ID: H40-BA

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

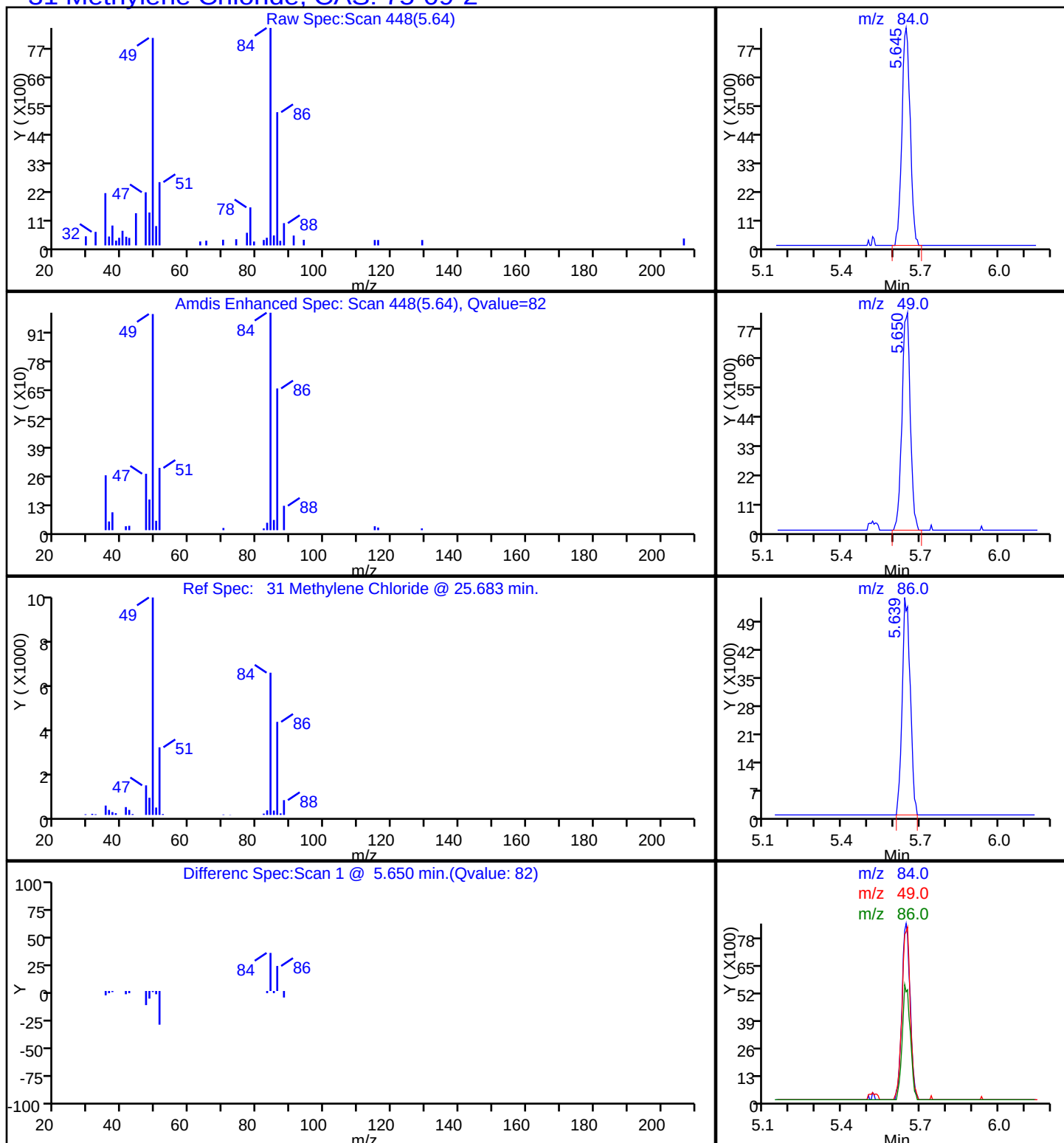
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P104.D

Injection Date: 20-Apr-2017 15:17:30

Instrument ID: MG

Lims ID: 140-7831-A-2

Lab Sample ID: 140-7831-2

Client ID: H40-BA

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

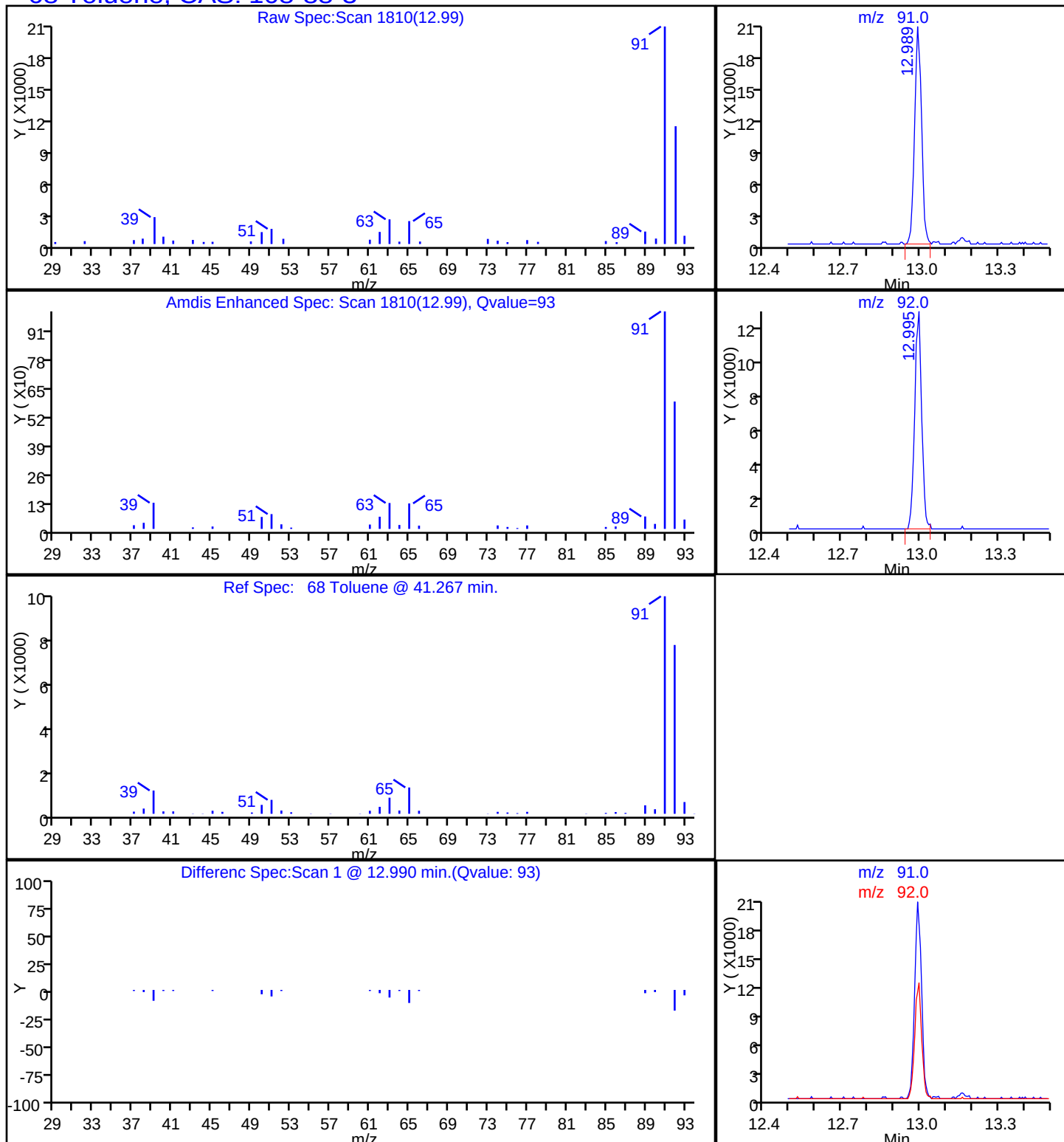
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P104.D

Injection Date: 20-Apr-2017 15:17:30

Instrument ID: MG

Lims ID: 140-7831-A-2

Lab Sample ID: 140-7831-2

Client ID: H40-BA

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 8

Purge Vol: 500.000 mL

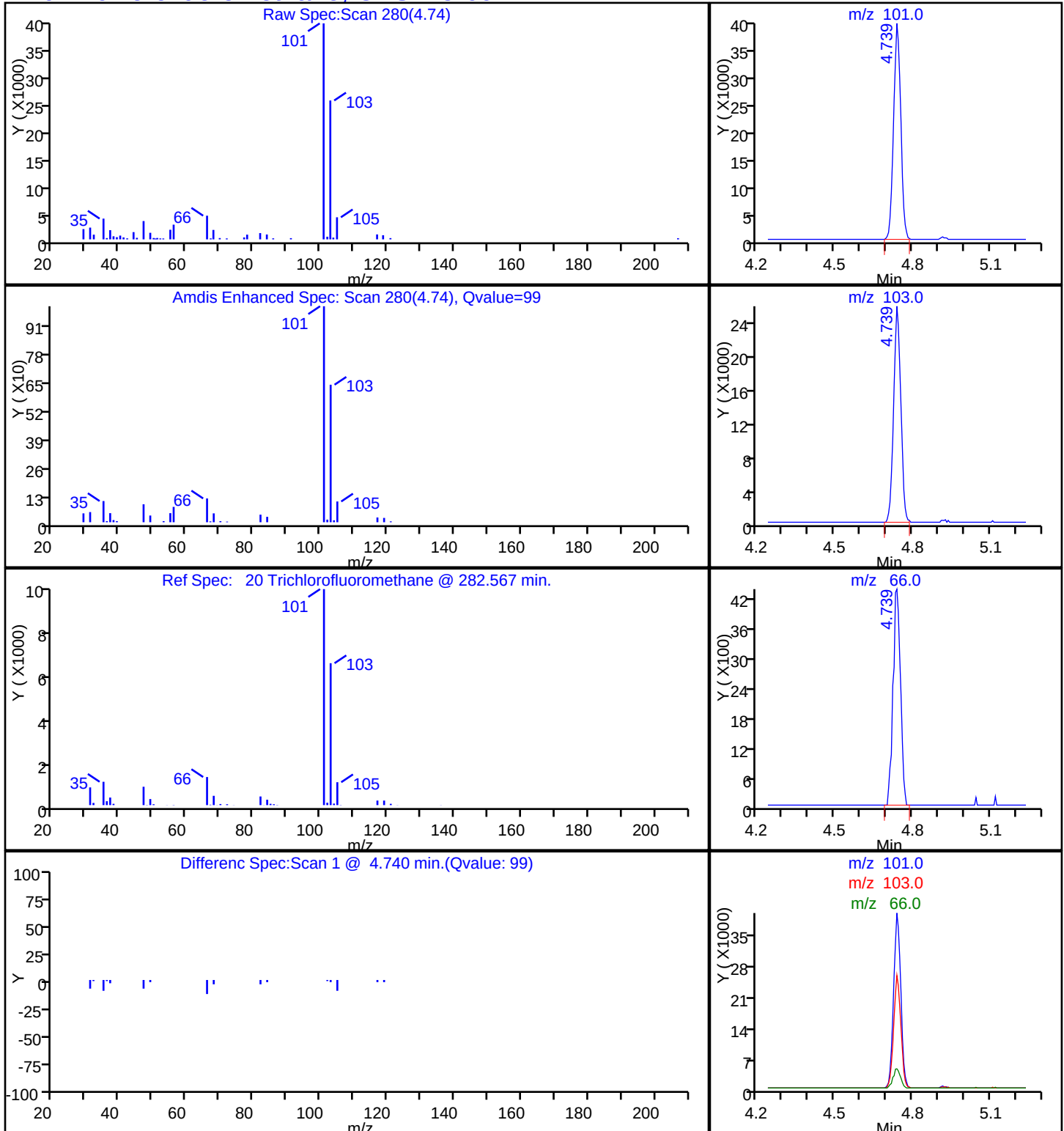
Dil. Factor: 1.0000

Method: MG_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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H41A-SS Lab Sample ID: 140-7831-3
 Matrix: Air Lab File ID: GD20P105.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 09:02
 Sample wt/vol: 25 (mL) Date Analyzed: 04/20/2017 16:04
 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.: 10584 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	8.1		1.6	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		1.6	
79-00-5	1,1,2-Trichloroethane	133.41	ND		1.6	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		1.6	
75-34-3	1,1-Dichloroethane	98.96	ND		1.6	
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		1.6	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		1.6	
106-93-4	1,2-Dibromoethane	187.87	ND		1.6	
95-50-1	1,2-Dichlorobenzene	147.00	ND		1.6	
107-06-2	1,2-Dichloroethane	98.96	ND		1.6	
78-87-5	1,2-Dichloropropane	112.99	ND		1.6	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		1.6	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		1.6	
541-73-1	1,3-Dichlorobenzene	147.00	ND		1.6	
106-46-7	1,4-Dichlorobenzene	147.00	ND		1.6	
123-91-1	1,4-Dioxane	88.11	ND		4.0	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		4.0	
78-93-3	2-Butanone	72.11	ND		6.4	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		4.0	
71-43-2	Benzene	78.11	ND		1.6	
100-44-7	Benzyl chloride	126.58	ND		3.2	
75-27-4	Bromodichloromethane	163.83	ND		1.6	
75-25-2	Bromoform	252.75	ND		1.6	
74-83-9	Bromomethane	94.94	ND		1.6	
56-23-5	Carbon tetrachloride	153.81	5.0		0.80	
108-90-7	Chlorobenzene	112.56	ND		1.6	
75-00-3	Chloroethane	64.52	ND		1.6	
67-66-3	Chloroform	119.38	41		1.6	
74-87-3	Chloromethane	50.49	ND		4.0	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		1.6	
110-82-7	Cyclohexane	84.16	ND		4.0	

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H41A-SS Lab Sample ID: 140-7831-3
 Matrix: Air Lab File ID: GD20P105.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 09:02
 Sample wt/vol: 25 (mL) Date Analyzed: 04/20/2017 16:04
 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.: 10584 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		1.6	
75-71-8	Dichlorodifluoromethane	120.91	ND		1.6	
64-17-5	Ethanol	46.07	ND		40	
100-41-4	Ethylbenzene	106.17	ND		1.6	
87-68-3	Hexachlorobutadiene	260.76	ND		1.6	
110-54-3	Hexane	86.17	ND		4.0	
1634-04-4	Methyl tert-butyl ether	88.15	ND		3.2	
75-09-2	Methylene Chloride	84.93	ND		4.0	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		1.6	
95-47-6	o-Xylene	106.17	ND		1.6	
100-42-5	Styrene	104.15	ND		1.6	
75-65-0	t-Butyl alcohol	74.12	ND		6.4	
127-18-4	Tetrachloroethene	165.83	ND		1.6	
108-88-3	Toluene	92.14	ND		2.4	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		1.6	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		1.6	
79-01-6	Trichloroethene	131.39	76		0.80	
75-69-4	Trichlorofluoromethane	137.37	ND		1.6	
75-01-4	Vinyl chloride	62.50	ND		0.80	

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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H41A-SS Lab Sample ID: 140-7831-3
 Matrix: Air Lab File ID: GD20P105.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 09:02
 Sample wt/vol: 25 (mL) Date Analyzed: 04/20/2017 16:04
 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.: 10584 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	44		8.7	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		11	
79-00-5	1,1,2-Trichloroethane	133.41	ND		8.7	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		12	
75-34-3	1,1-Dichloroethane	98.96	ND		6.5	
75-35-4	1,1-Dichloroethene	96.94	ND		6.3	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		12	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		7.9	
106-93-4	1,2-Dibromoethane	187.87	ND		12	
95-50-1	1,2-Dichlorobenzene	147.00	ND		9.6	
107-06-2	1,2-Dichloroethane	98.96	ND		6.5	
78-87-5	1,2-Dichloropropane	112.99	ND		7.4	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		11	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		7.9	
541-73-1	1,3-Dichlorobenzene	147.00	ND		9.6	
106-46-7	1,4-Dichlorobenzene	147.00	ND		9.6	
123-91-1	1,4-Dioxane	88.11	ND		14	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		19	
78-93-3	2-Butanone	72.11	ND		19	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		16	
71-43-2	Benzene	78.11	ND		5.1	
100-44-7	Benzyl chloride	126.58	ND		17	
75-27-4	Bromodichloromethane	163.83	ND		11	
75-25-2	Bromoform	252.75	ND		17	
74-83-9	Bromomethane	94.94	ND		6.2	
56-23-5	Carbon tetrachloride	153.81	31		5.0	
108-90-7	Chlorobenzene	112.56	ND		7.4	
75-00-3	Chloroethane	64.52	ND		4.2	
67-66-3	Chloroform	119.38	200		7.8	
74-87-3	Chloromethane	50.49	ND		8.3	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		6.3	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		7.3	
110-82-7	Cyclohexane	84.16	ND		14	

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H41A-SS Lab Sample ID: 140-7831-3
 Matrix: Air Lab File ID: GD20P105.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 09:02
 Sample wt/vol: 25 (mL) Date Analyzed: 04/20/2017 16:04
 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.: 10584 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		14	
75-71-8	Dichlorodifluoromethane	120.91	ND		7.9	
64-17-5	Ethanol	46.07	ND		75	
100-41-4	Ethylbenzene	106.17	ND		6.9	
87-68-3	Hexachlorobutadiene	260.76	ND		17	
110-54-3	Hexane	86.17	ND		14	
1634-04-4	Methyl tert-butyl ether	88.15	ND		12	
75-09-2	Methylene Chloride	84.93	ND		14	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		6.9	
95-47-6	o-Xylene	106.17	ND		6.9	
100-42-5	Styrene	104.15	ND		6.8	
75-65-0	t-Butyl alcohol	74.12	ND		19	
127-18-4	Tetrachloroethene	165.83	ND		11	
108-88-3	Toluene	92.14	ND		9.0	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		6.3	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		7.3	
79-01-6	Trichloroethene	131.39	410		4.3	
75-69-4	Trichlorofluoromethane	137.37	ND		9.0	
75-01-4	Vinyl chloride	62.50	ND		2.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P105.D
 Lims ID: 140-7831-A-3
 Client ID: H41A-SS
 Sample Type: Client
 Inject. Date: 20-Apr-2017 16:04:30 ALS Bottle#: 5 Worklist Smp#: 9
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004683-009
 Misc. Info.: 140-7831-a-3
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 20-Apr-2017 16:39:58 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK017

First Level Reviewer: tajh

Date: 20-Apr-2017 16:39:58

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.958	7.969	-0.011	68	290129	4.00	
* 2 1,4-Difluorobenzene	114	10.126	10.131	-0.005	94	1433372	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.001	15.006	-0.005	87	1410956	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.672	16.678	-0.006	84	1120972	4.02	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	9845	0.0321	
20 Trichlorofluoromethane	101	4.739	4.739	0.000	95	5591	0.0183	
31 Methylene Chloride	84	5.645	5.639	0.006	82	6764	0.0969	
44 Chloroform	83	7.980	7.996	-0.016	96	414879	2.04	
47 1,1,1-Trichloroethane	97	8.961	8.967	-0.006	94	94998	0.4035	
51 Carbon tetrachloride	117	9.576	9.581	-0.005	99	63143	0.2481	
59 Trichloroethene	130	10.859	10.870	-0.011	96	500686	3.80	
76 Tetrachloroethene	129	14.165	14.165	0.000	88	4000	0.0311	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P105.D

Injection Date: 20-Apr-2017 16:04:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7831-A-3

Lab Sample ID: 140-7831-3

Worklist Smp#: 9

Client ID: H41A-SS

Purge Vol: 500.000 mL

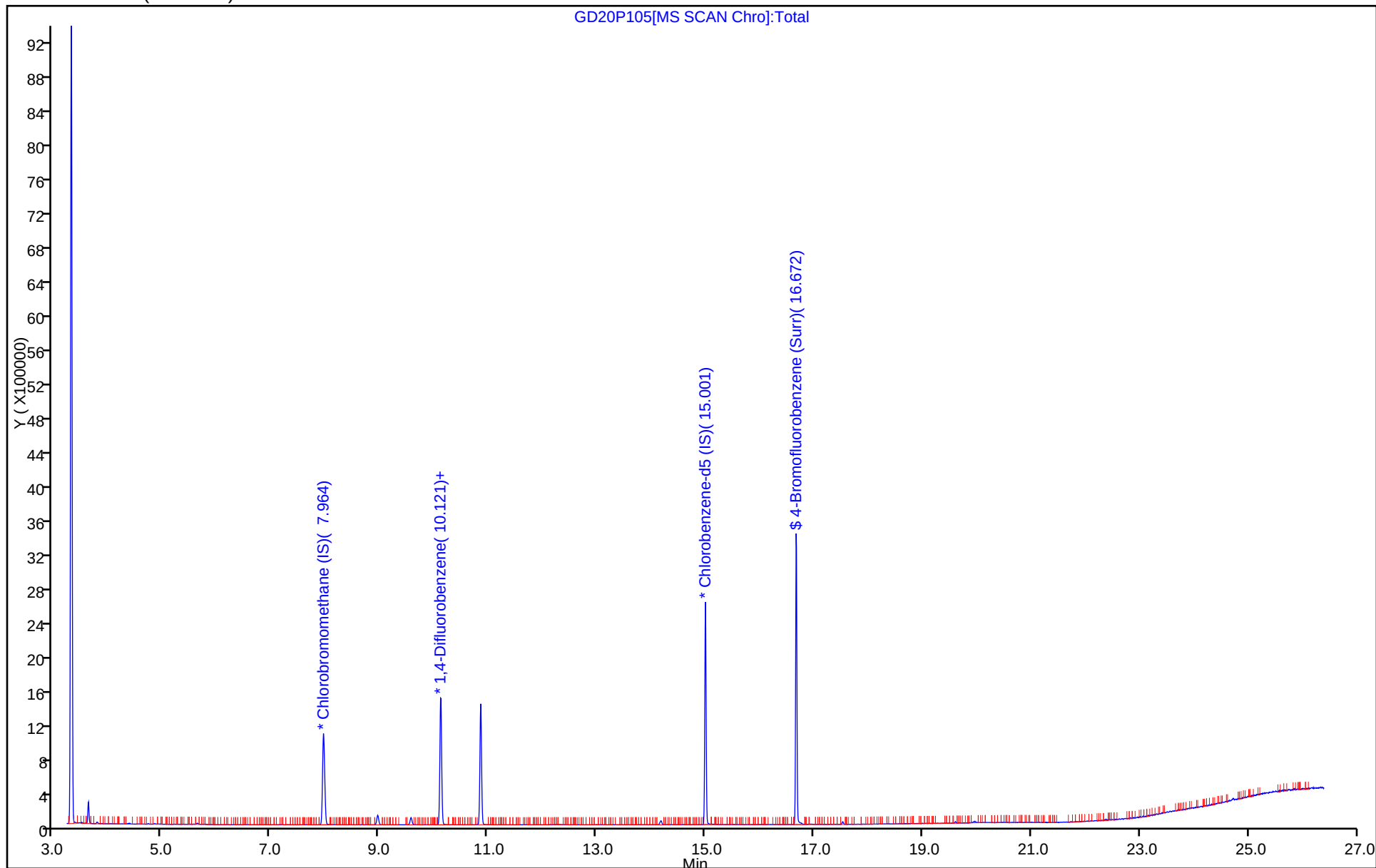
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P105.D
Lims ID: 140-7831-A-3
Client ID: H41A-SS
Sample Type: Client
Inject. Date: 20-Apr-2017 16:04:30 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004683-009
Misc. Info.: 140-7831-a-3
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 20-Apr-2017 16:39:58 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: tajh

Date: 20-Apr-2017 16:39:58

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.02	100.50

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P105.D

Injection Date: 20-Apr-2017 16:04:30

Instrument ID: MG

Lims ID: 140-7831-A-3

Lab Sample ID: 140-7831-3

Client ID: H41A-SS

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 9

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

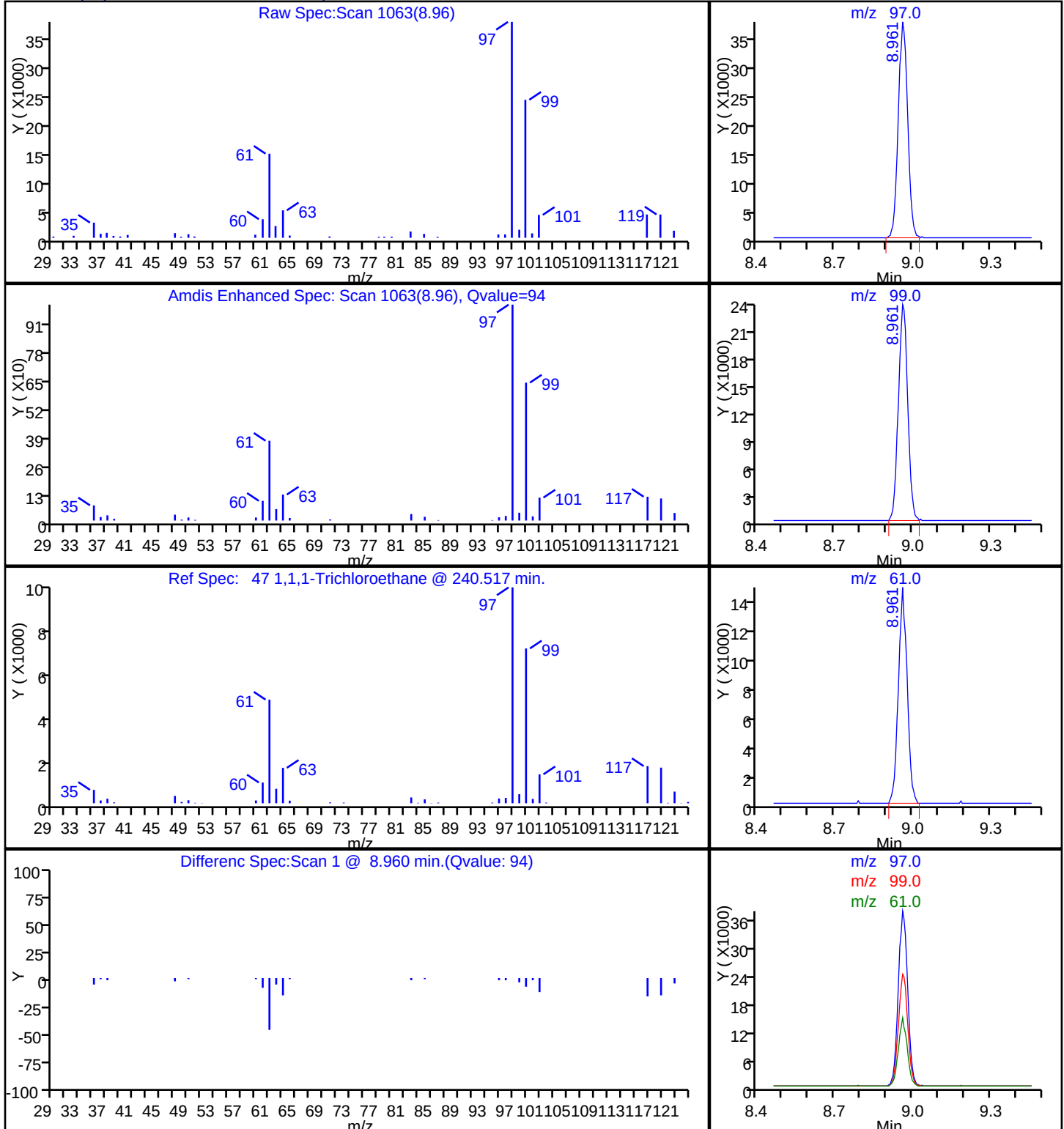
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

47 1,1,1-Trichloroethane, CAS: 71-55-6



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P105.D

Injection Date: 20-Apr-2017 16:04:30

Instrument ID: MG

Lims ID: 140-7831-A-3

Lab Sample ID: 140-7831-3

Client ID: H41A-SS

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 9

Purge Vol: 500.000 mL

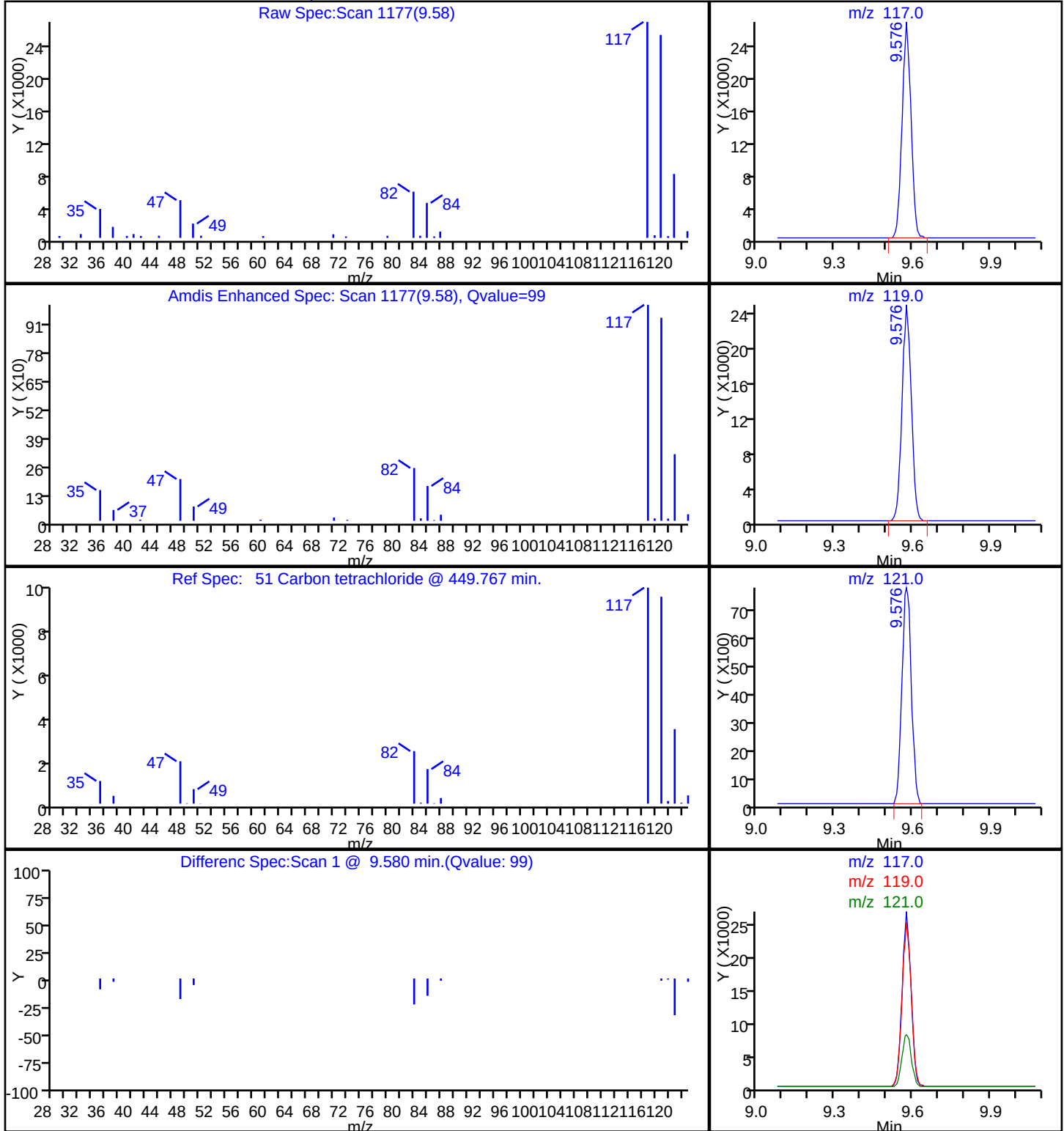
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P105.D

Injection Date: 20-Apr-2017 16:04:30

Instrument ID: MG

Lims ID: 140-7831-A-3

Lab Sample ID: 140-7831-3

Client ID: H41A-SS

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 9

Purge Vol: 500.000 mL

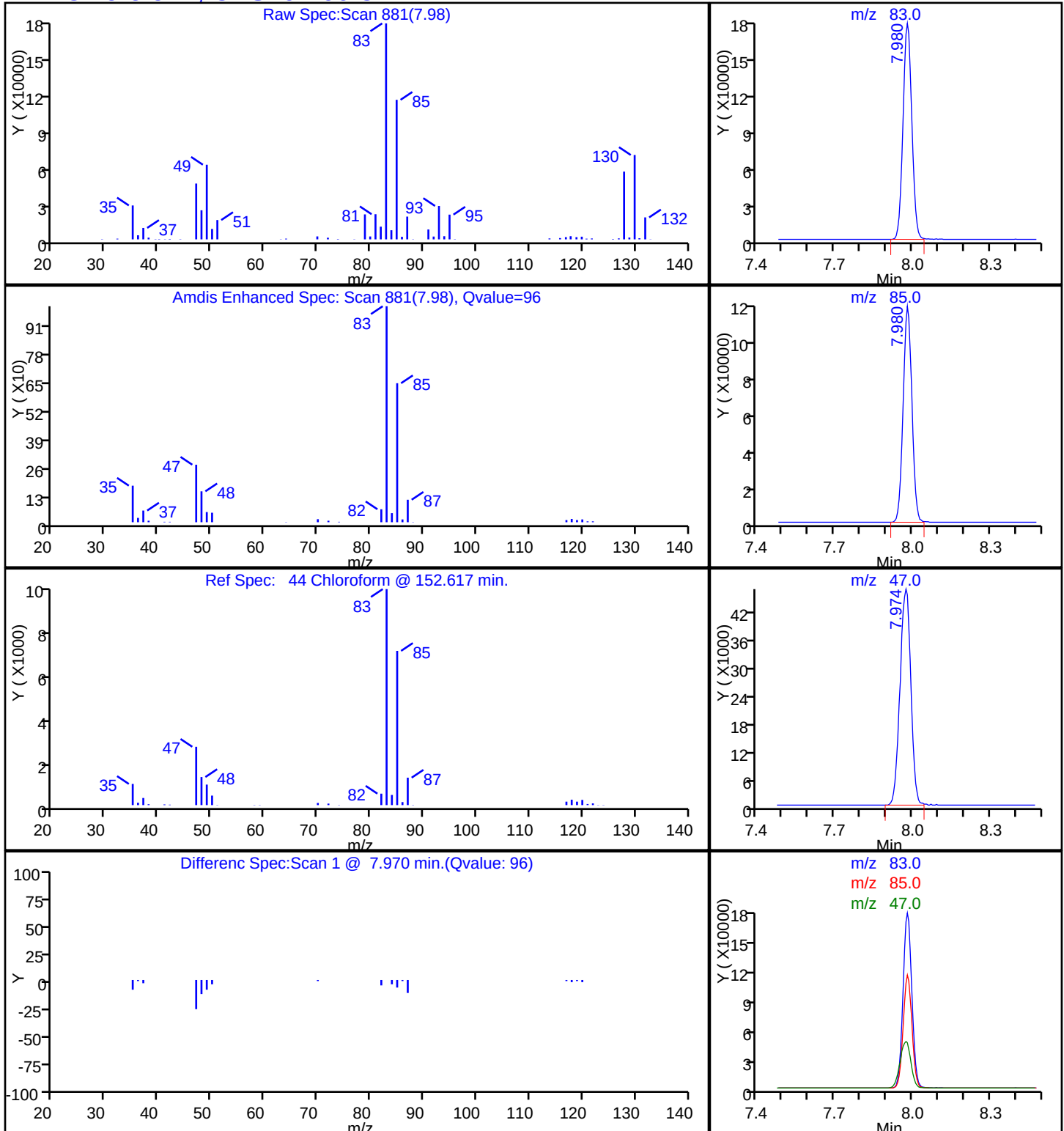
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

44 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P105.D

Injection Date: 20-Apr-2017 16:04:30

Instrument ID: MG

Lims ID: 140-7831-A-3

Lab Sample ID: 140-7831-3

Client ID: H41A-SS

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 9

Purge Vol: 500.000 mL

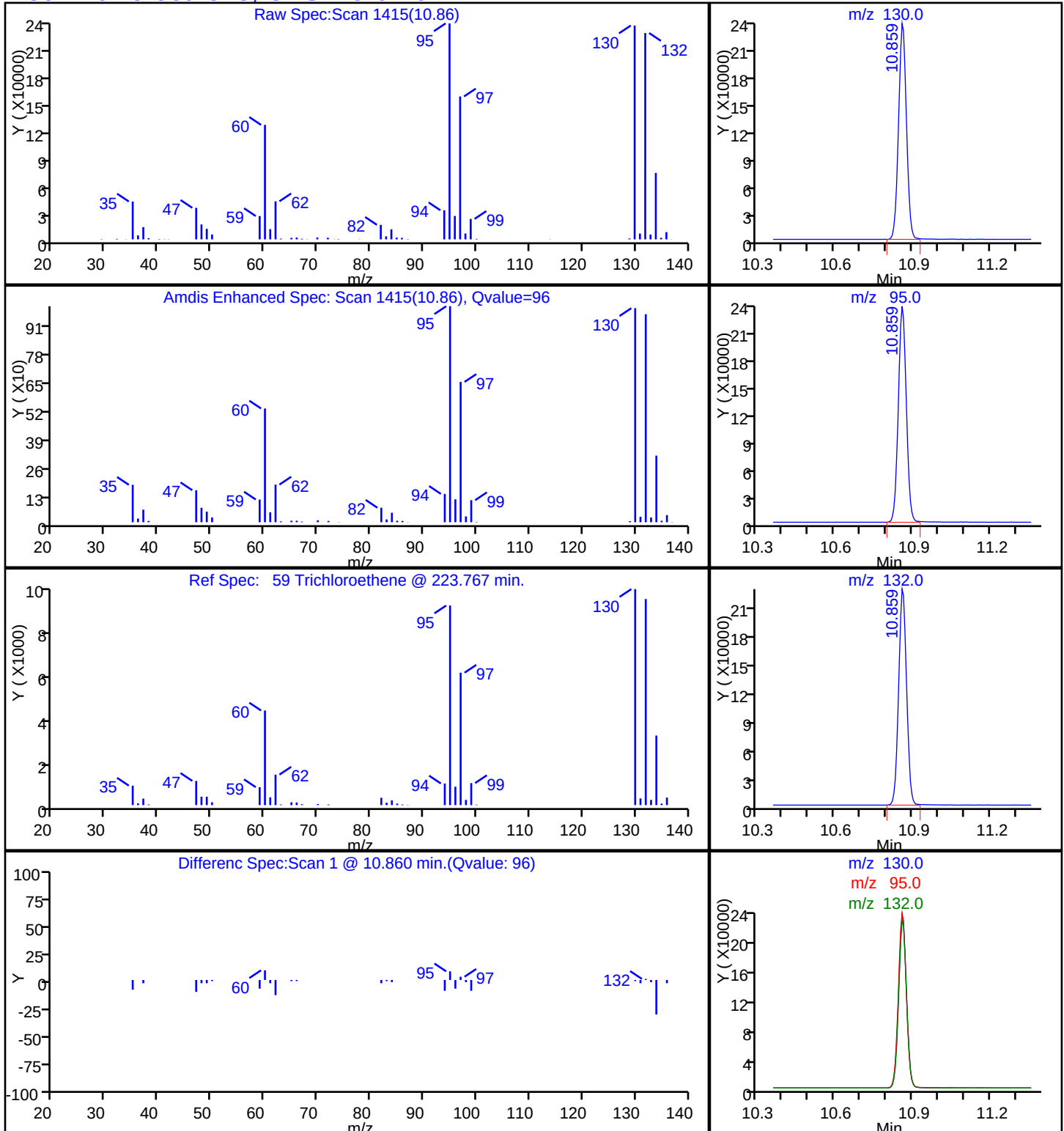
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

59 Trichloroethene, CAS: 79-01-6

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H41A-BA Lab Sample ID: 140-7831-4
 Matrix: Air Lab File ID: GD20P106.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 09:03
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 16:51
 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.: 10584 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	0.79		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	0.44		0.20	
71-43-2	Benzene	78.11	0.081		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	0.097		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	0.45		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H41A-BA Lab Sample ID: 140-7831-4
 Matrix: Air Lab File ID: GD20P106.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 09:03
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 16:51
 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.: 10584 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	47		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	0.28		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	0.18		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	0.61		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.26		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H41A-BA Lab Sample ID: 140-7831-4
 Matrix: Air Lab File ID: GD20P106.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 09:03
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 16:51
 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.: 10584 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	2.3		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.8		0.82	
71-43-2	Benzene	78.11	0.26		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	0.61		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	2.2		0.39	
74-87-3	Chloromethane	50.49	0.81		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H41A-BA Lab Sample ID: 140-7831-4
 Matrix: Air Lab File ID: GD20P106.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 09:03
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 16:51
 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.: 10584 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	89		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	0.96		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	0.68		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	3.3		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.5		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P106.D
 Lims ID: 140-7831-A-4
 Client ID: H41A-BA
 Sample Type: Client
 Inject. Date: 20-Apr-2017 16:51:30 ALS Bottle#: 6 Worklist Smp#: 10
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004683-010
 Misc. Info.: 140-7831-a-4
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 21-Apr-2017 11:03:51 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK027

First Level Reviewer: tajh

Date: 21-Apr-2017 10:44:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.969	7.969	0.000	68	283672	4.00	
* 2 1,4-Difluorobenzene	114	10.131	10.131	0.000	94	1440903	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.006	15.006	0.000	88	1418062	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.678	16.678	0.000	84	1150468	4.11	
8 Dichlorodifluoromethane	85	3.520	3.515	0.005	99	152308	0.5073	
9 Chloromethane	52	3.666	3.660	0.006	99	7910	0.3916	
17 Ethanol	31	4.388	4.356	0.032	97	1347847	47.2	
20 Trichlorofluoromethane	101	4.739	4.739	0.000	98	77687	0.2598	
29 2-Methyl-2-propanol	59	5.494	5.456	0.038	89	12634	0.1097	
30 1,1,2-Trichloro-1,2,2-trif	101	5.521	5.510	0.011	95	12917	0.0741	
31 Methylene Chloride	84	5.650	5.639	0.011	83	18858	0.2764	
39 2-Butanone (MEK)	72	7.263	7.252	0.011	95	25405	0.7870	
40 Hexane	56	7.311	7.317	-0.005	67	3151	0.0563	
44 Chloroform	83	7.996	7.996	0.000	95	90079	0.4527	
47 1,1,1-Trichloroethane	97	8.967	8.967	0.000	94	11093	0.0482	
49 Benzene	78	9.554	9.554	0.000	96	19829	0.0810	
50 Cyclohexane	69	9.565	9.560	0.005	45	1334	0.0324	
51 Carbon tetrachloride	117	9.581	9.581	0.000	98	24845	0.0971	
59 Trichloroethene	130	10.865	10.870	-0.005	96	80913	0.6102	
65 4-Methyl-2-pentanone (MIBK	43	12.105	12.100	0.005	93	61685	0.4387	
68 Toluene	91	12.995	12.995	0.000	93	51119	0.1809	
79 Ethylbenzene	91	15.362	15.362	0.000	98	16765	0.0425	
81 m-Xylene & p-Xylene	91	15.524	15.534	-0.010	99	32440	0.1018	
83 Styrene	104	15.998	15.998	0.000	96	12038	0.0573	
85 o-Xylene	91	16.058	16.063	-0.005	77	14213	0.0436	
96 1,2,4-Trimethylbenzene	105	17.923	17.929	-0.006	96	11083	0.0277	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P106.D

Injection Date: 20-Apr-2017 16:51:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7831-A-4

Lab Sample ID: 140-7831-4

Worklist Smp#: 10

Client ID: H41A-BA

Purge Vol: 500.000 mL

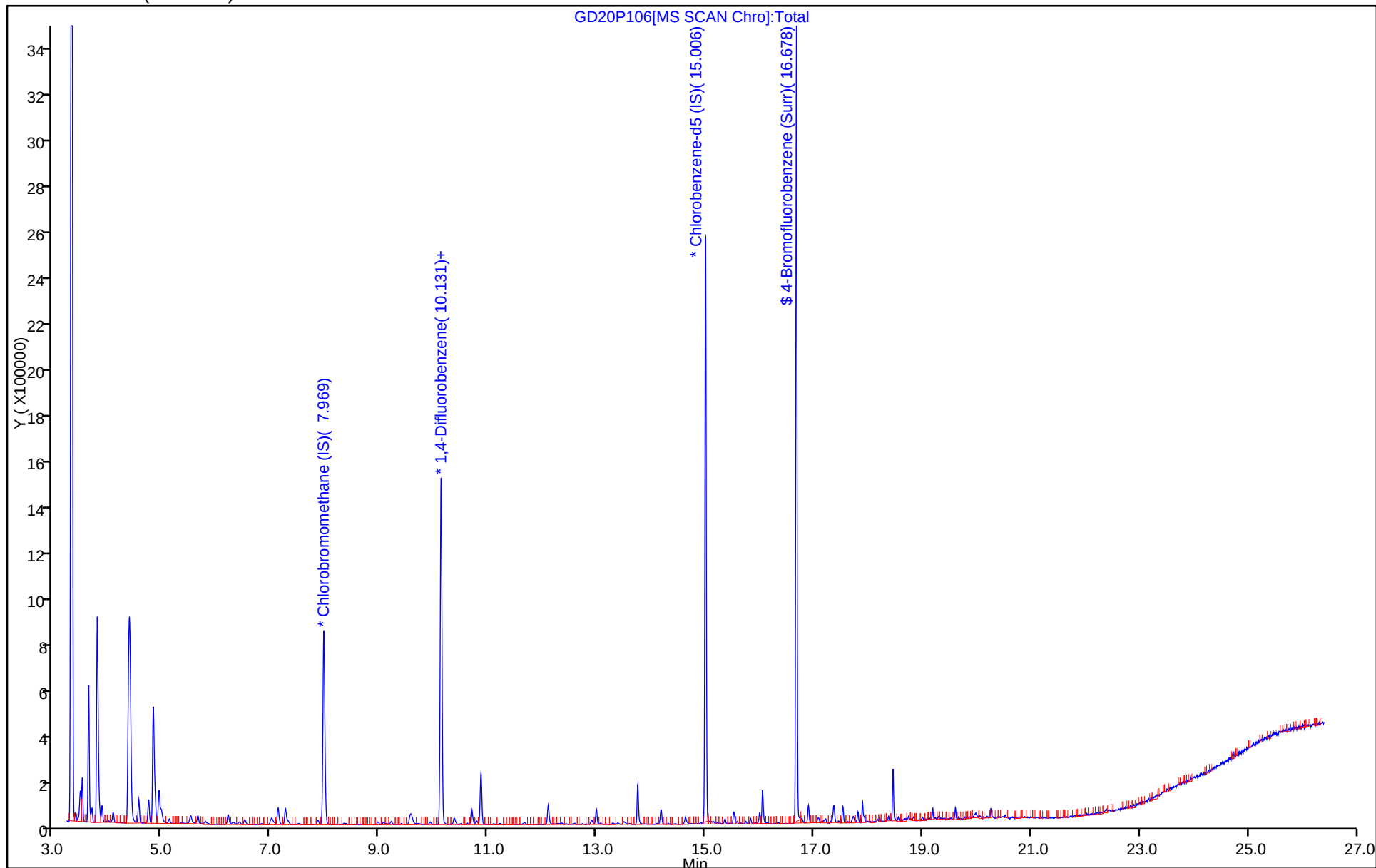
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P106.D
Lims ID: 140-7831-A-4
Client ID: H41A-BA
Sample Type: Client
Inject. Date: 20-Apr-2017 16:51:30 ALS Bottle#: 6 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004683-010
Misc. Info.: 140-7831-a-4
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2017 11:03:51 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: tajh

Date: 21-Apr-2017 10:44:29

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.11	102.63

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P106.D

Injection Date: 20-Apr-2017 16:51:30

Instrument ID: MG

Lims ID: 140-7831-A-4

Lab Sample ID: 140-7831-4

Client ID: H41A-BA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

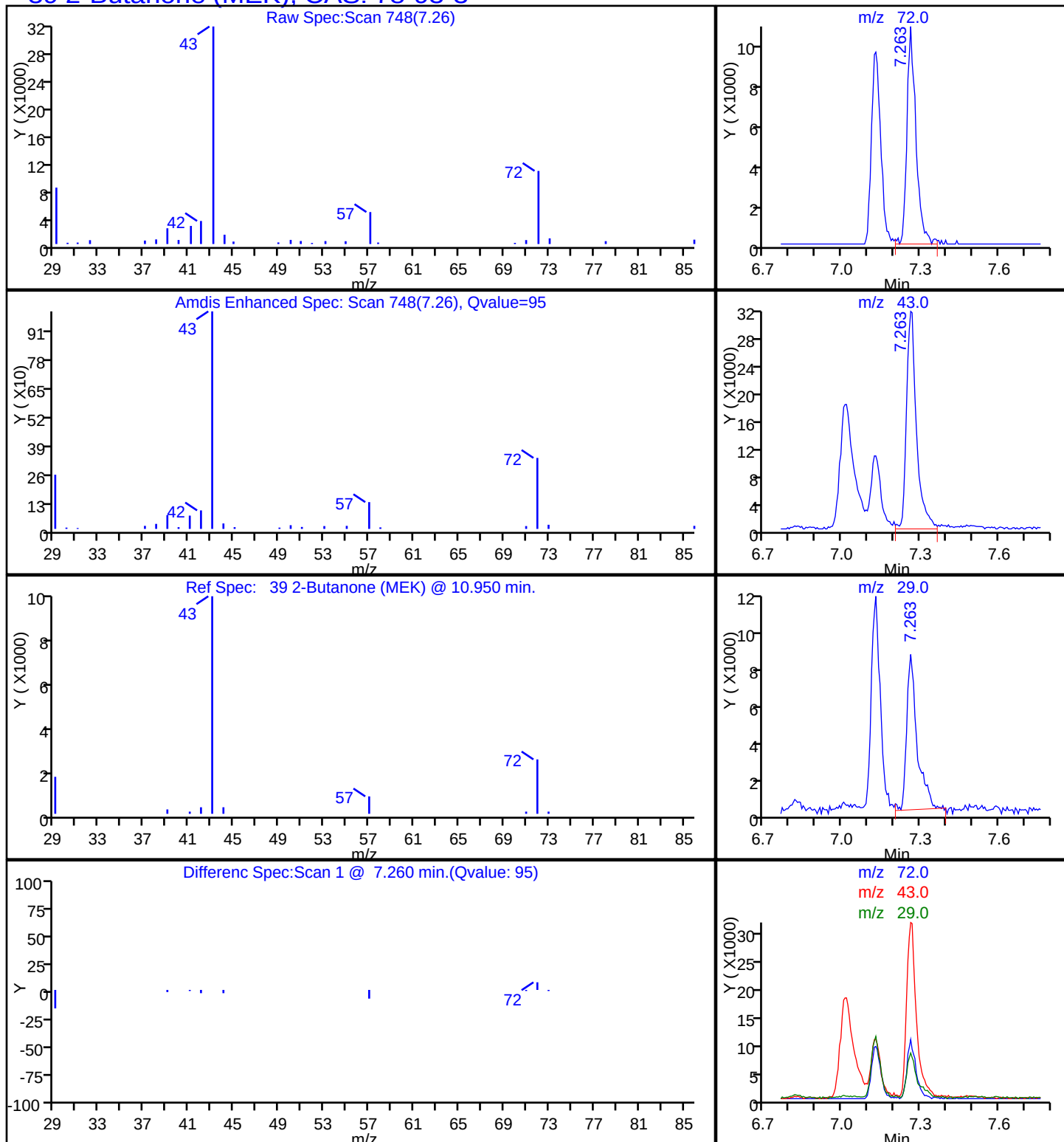
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P106.D

Injection Date: 20-Apr-2017 16:51:30

Instrument ID: MG

Lims ID: 140-7831-A-4

Lab Sample ID: 140-7831-4

Client ID: H41A-BA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

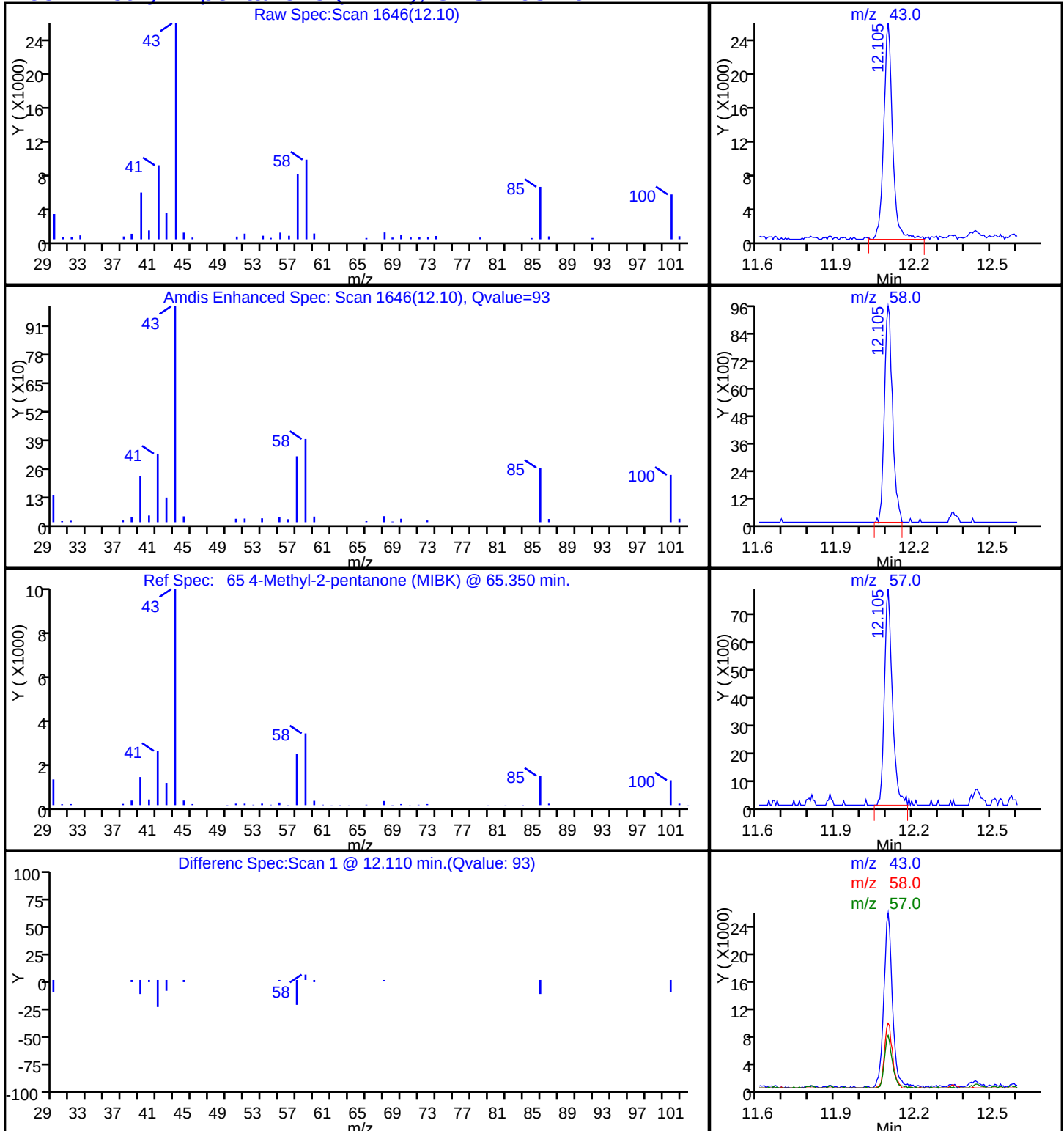
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P106.D

Injection Date: 20-Apr-2017 16:51:30

Instrument ID: MG

Lims ID: 140-7831-A-4

Lab Sample ID: 140-7831-4

Client ID: H41A-BA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

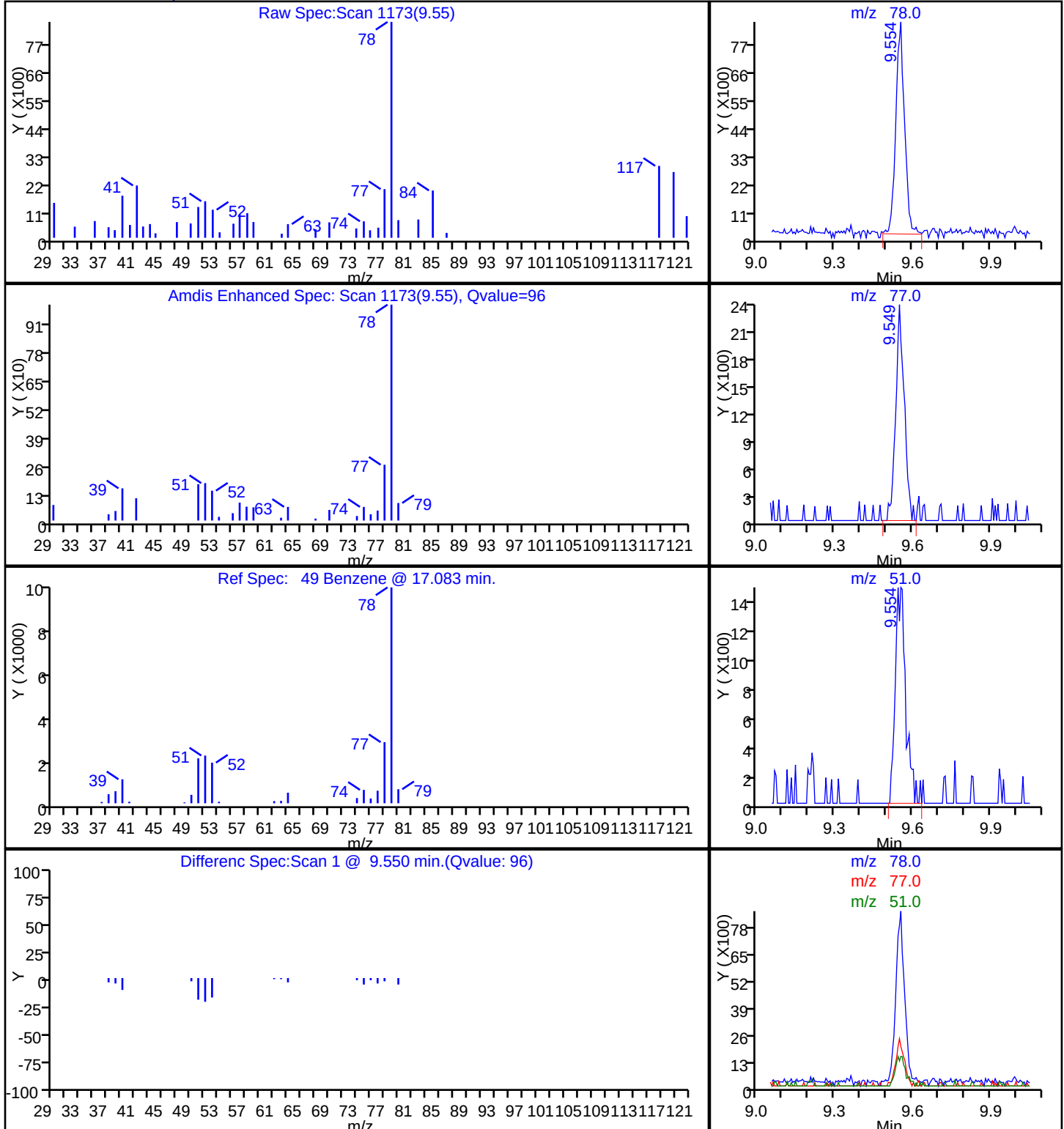
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P106.D

Injection Date: 20-Apr-2017 16:51:30

Instrument ID: MG

Lims ID: 140-7831-A-4

Lab Sample ID: 140-7831-4

Client ID: H41A-BA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

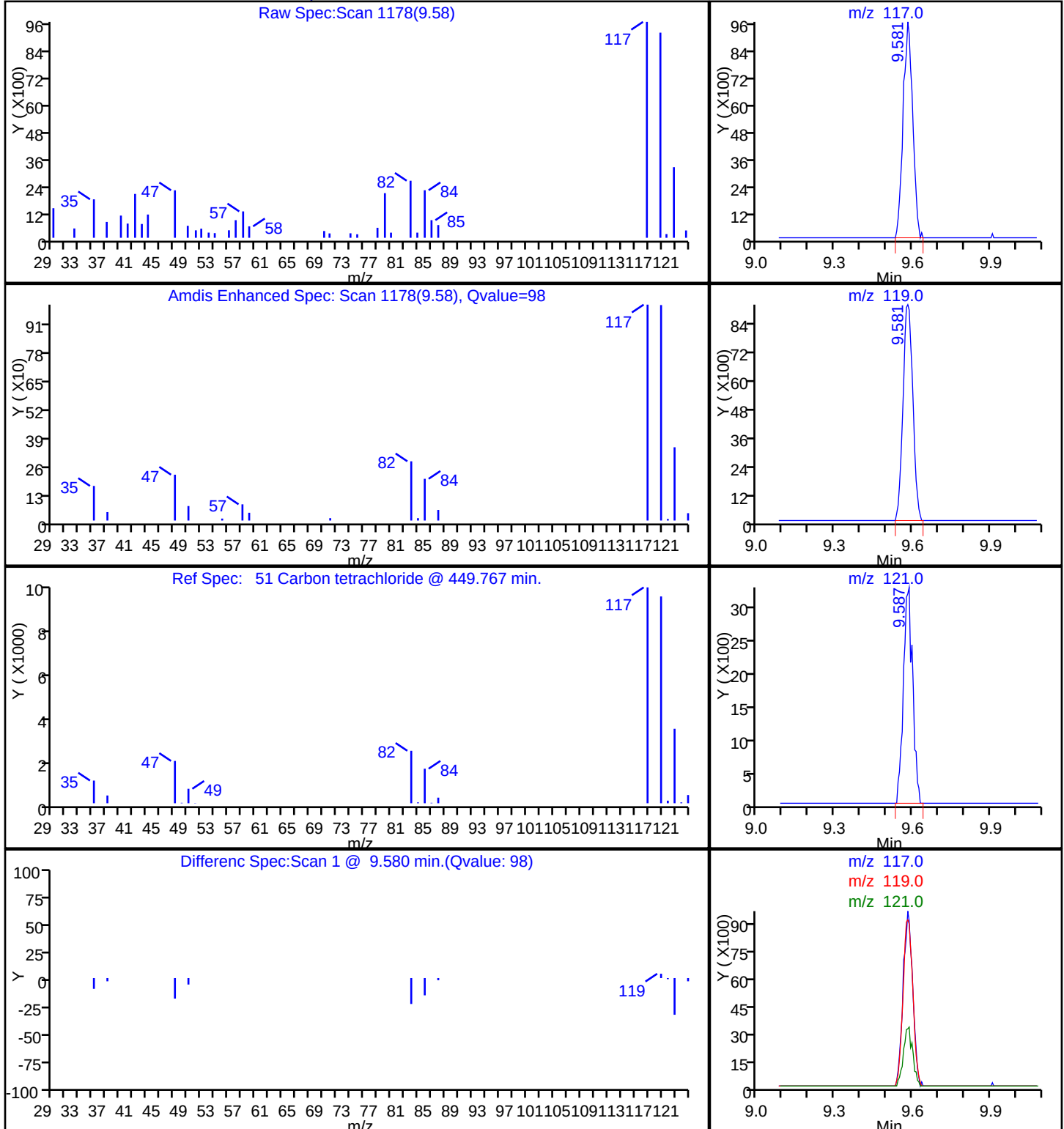
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P106.D

Injection Date: 20-Apr-2017 16:51:30

Instrument ID: MG

Lims ID: 140-7831-A-4

Lab Sample ID: 140-7831-4

Client ID: H41A-BA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

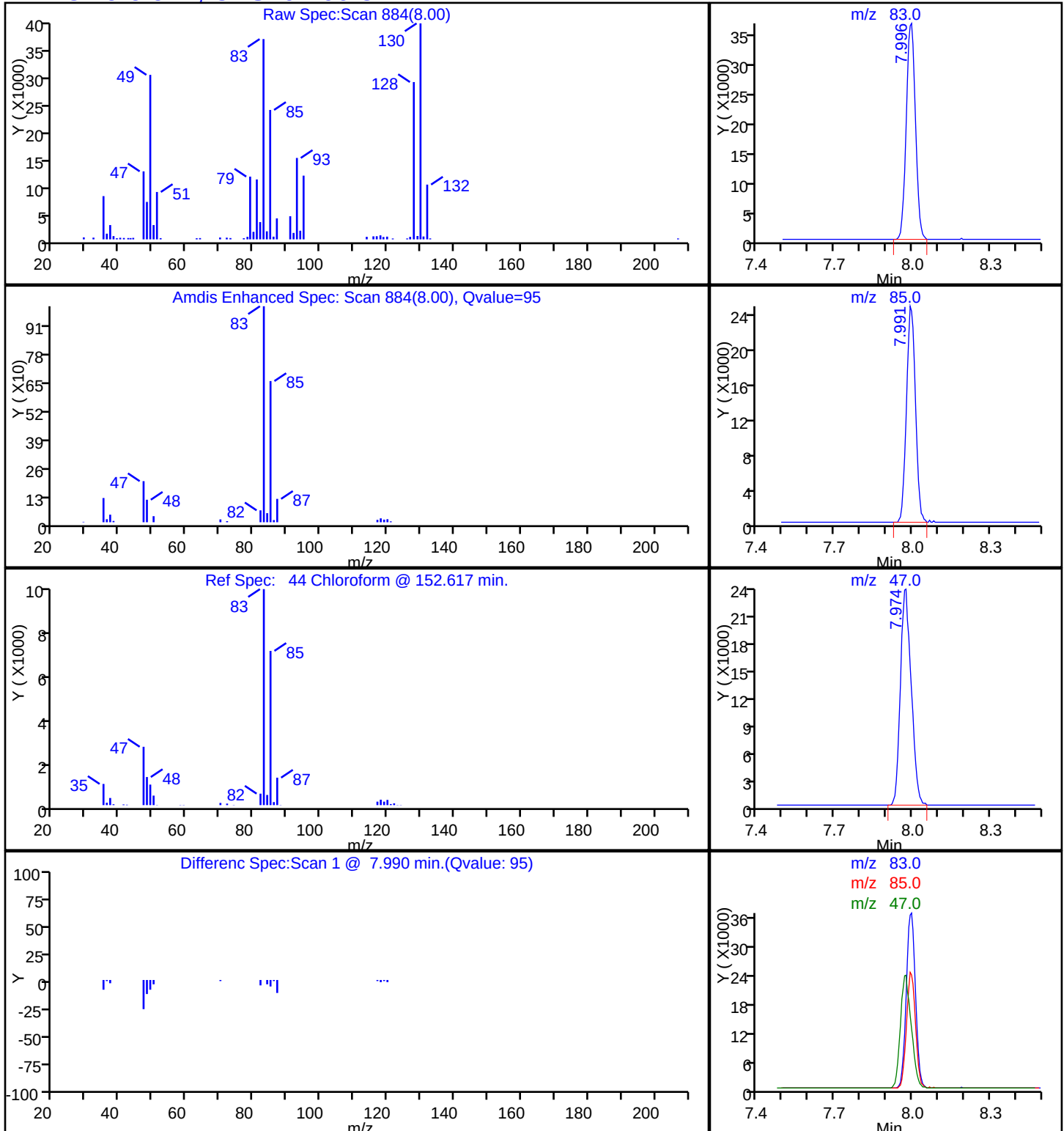
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

44 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P106.D

Injection Date: 20-Apr-2017 16:51:30

Instrument ID: MG

Lims ID: 140-7831-A-4

Lab Sample ID: 140-7831-4

Client ID: H41A-BA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

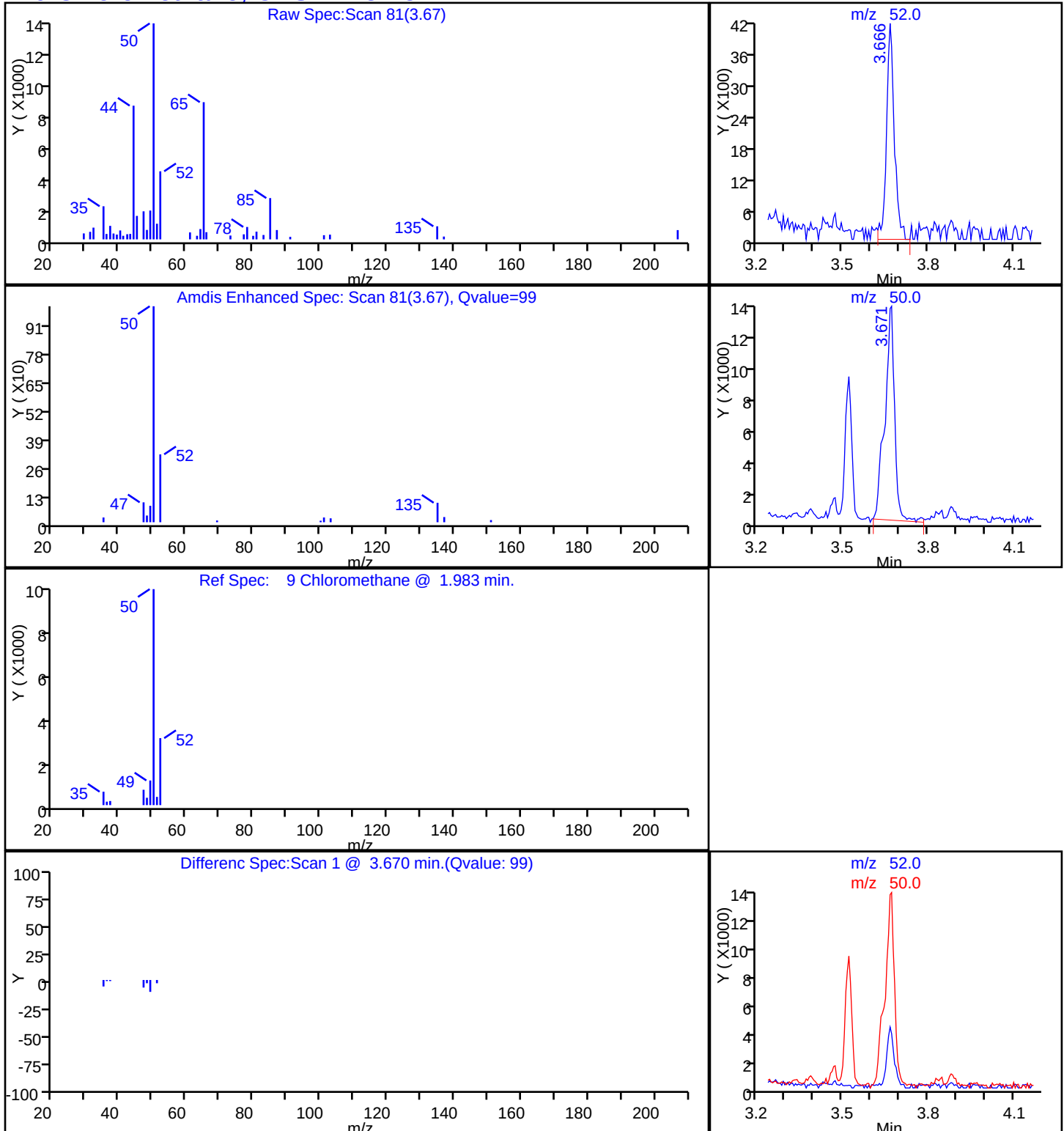
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P106.D

Injection Date: 20-Apr-2017 16:51:30

Instrument ID: MG

Lims ID: 140-7831-A-4

Lab Sample ID: 140-7831-4

Client ID: H41A-BA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

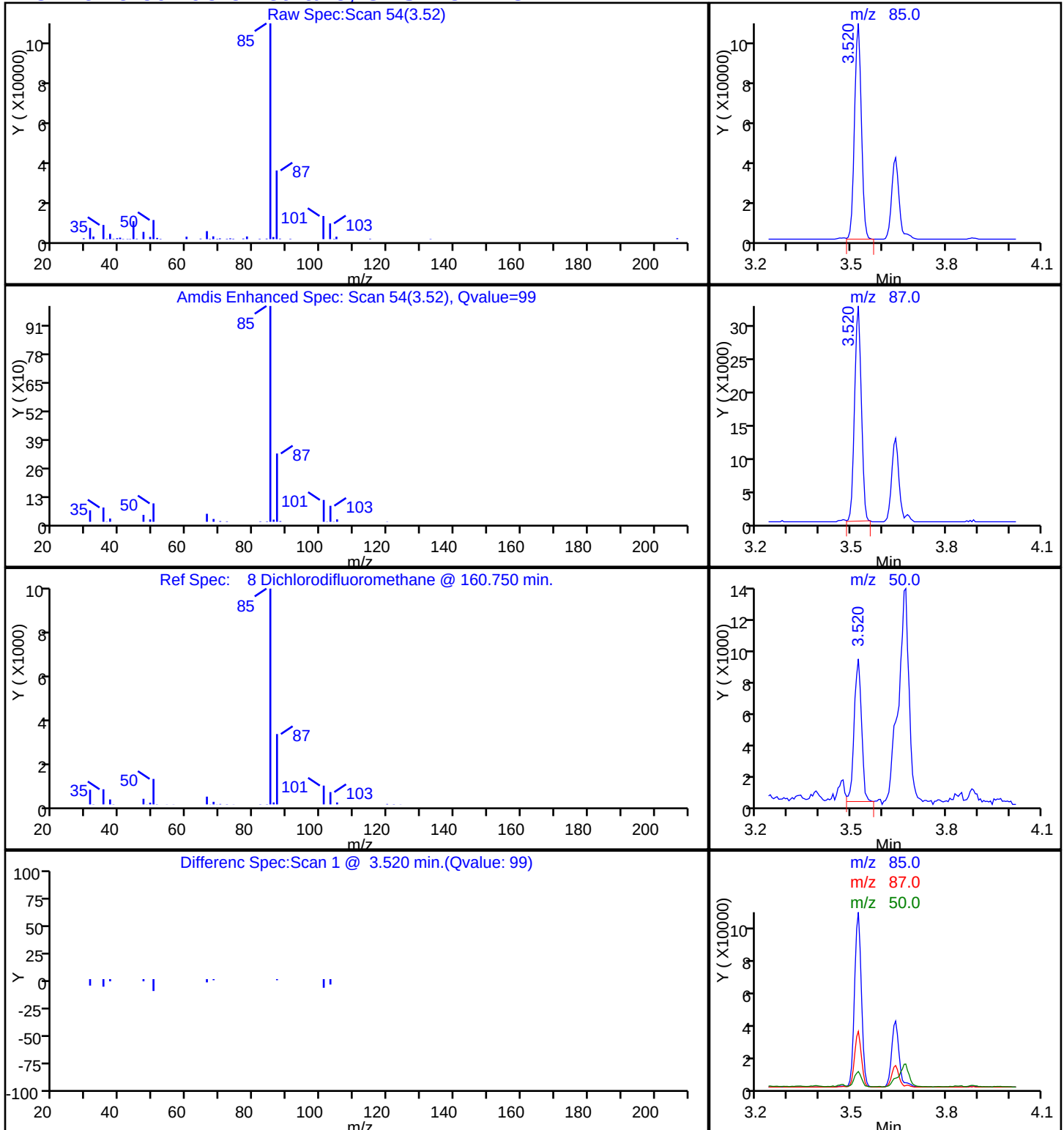
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P106.D

Injection Date: 20-Apr-2017 16:51:30

Instrument ID: MG

Lims ID: 140-7831-A-4

Lab Sample ID: 140-7831-4

Client ID: H41A-BA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

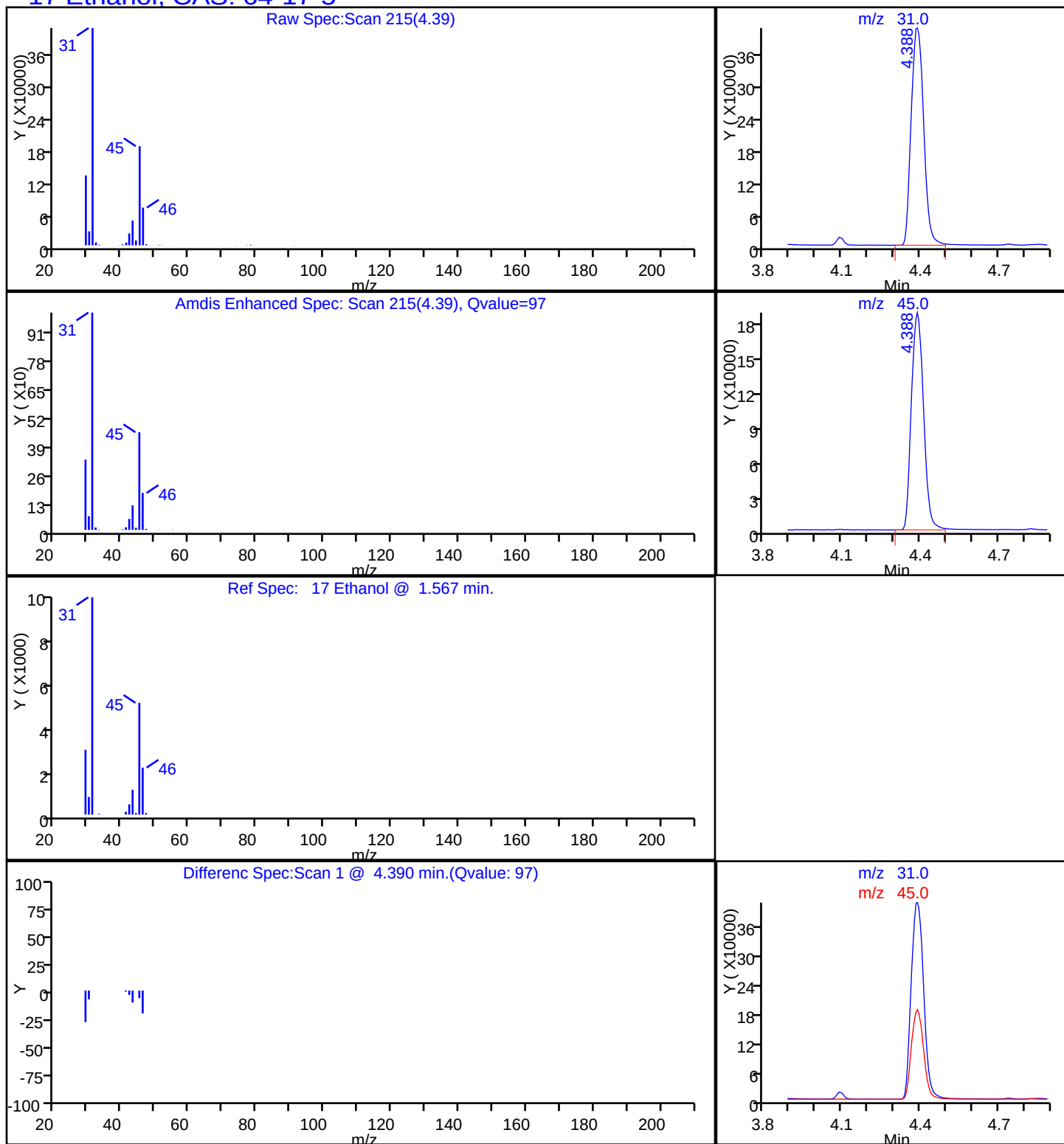
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P106.D

Injection Date: 20-Apr-2017 16:51:30

Instrument ID: MG

Lims ID: 140-7831-A-4

Lab Sample ID: 140-7831-4

Client ID: H41A-BA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

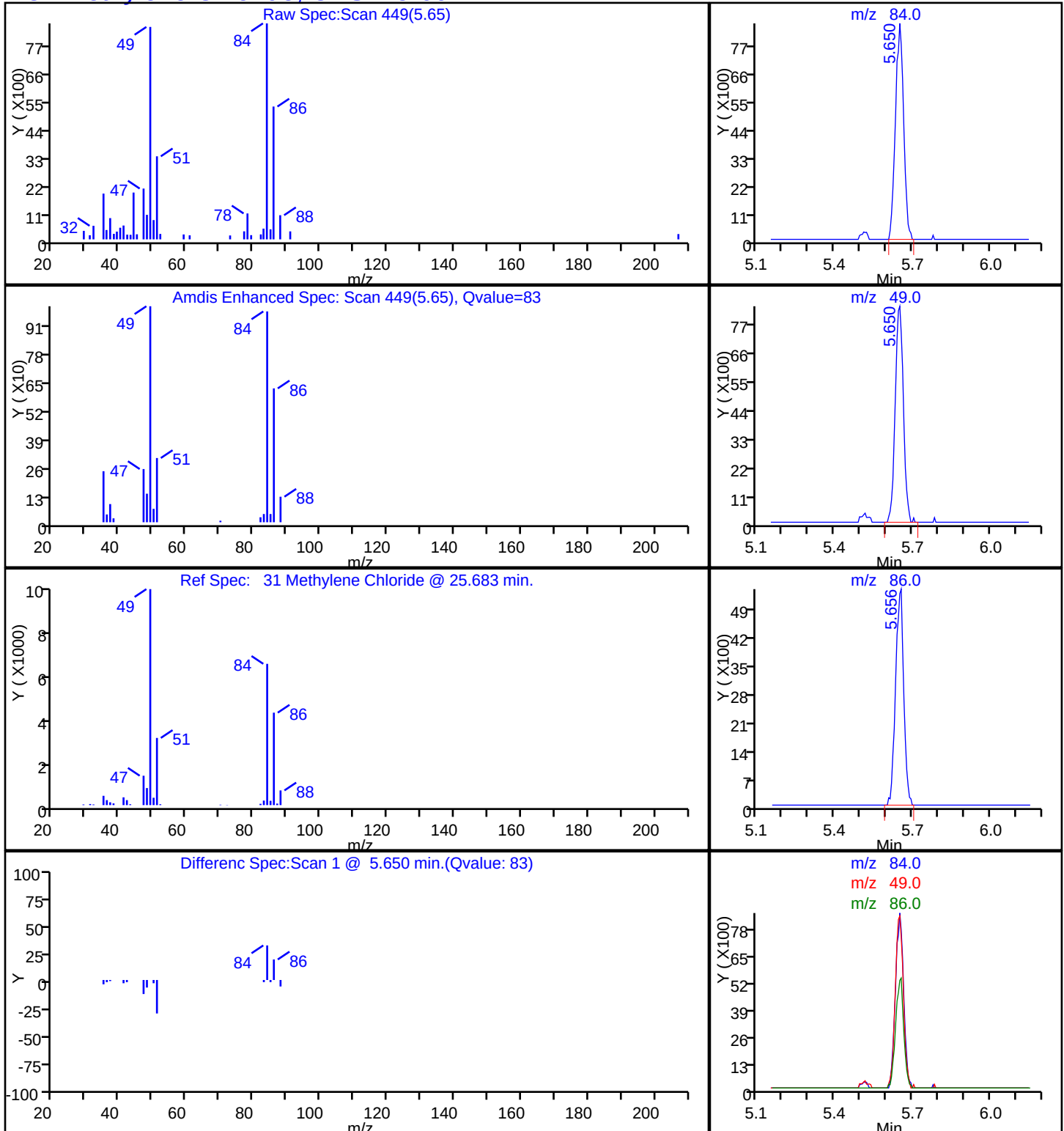
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P106.D

Injection Date: 20-Apr-2017 16:51:30

Instrument ID: MG

Lims ID: 140-7831-A-4

Lab Sample ID: 140-7831-4

Client ID: H41A-BA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

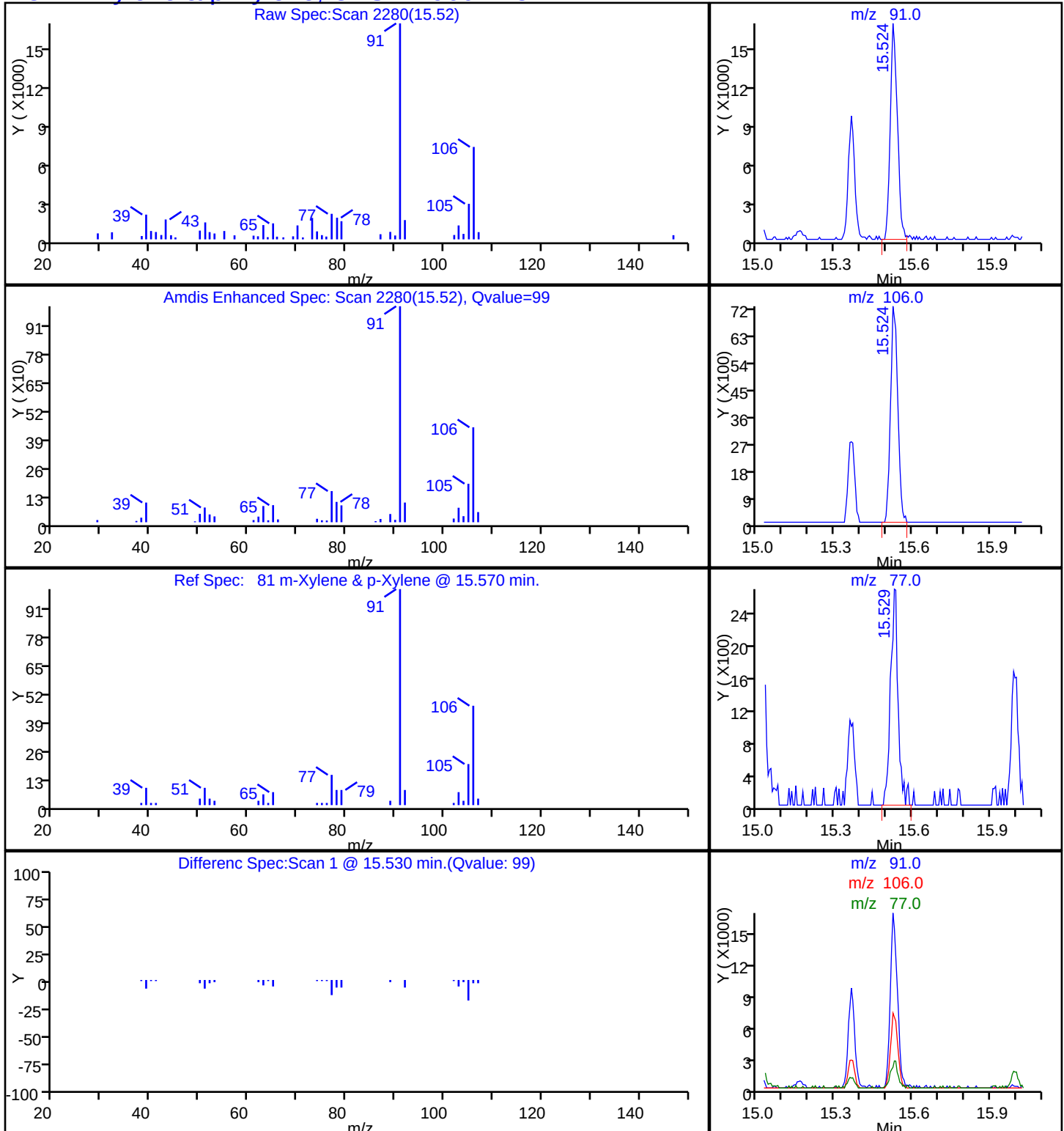
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P106.D

Injection Date: 20-Apr-2017 16:51:30

Instrument ID: MG

Lims ID: 140-7831-A-4

Lab Sample ID: 140-7831-4

Client ID: H41A-BA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

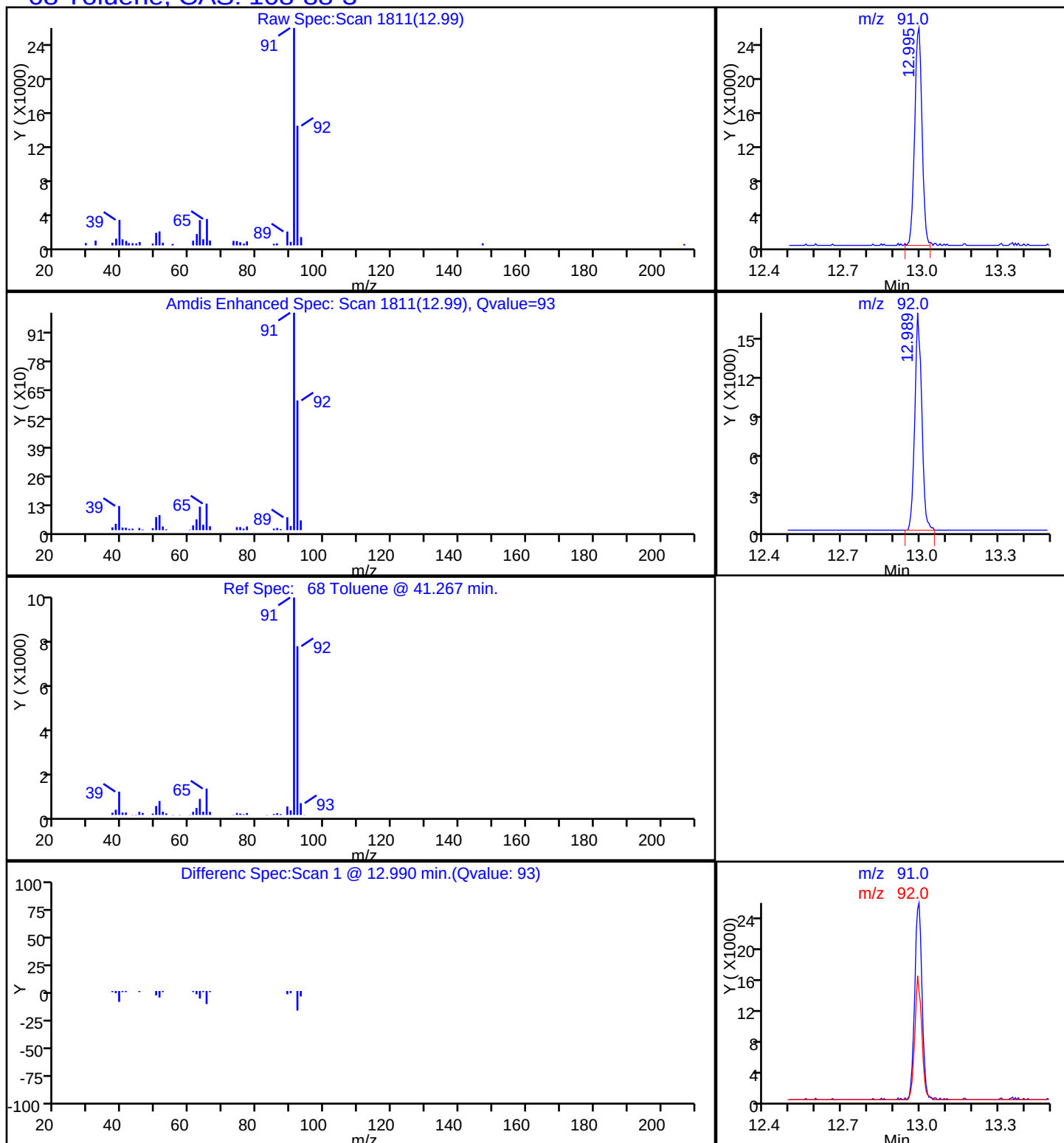
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P106.D

Injection Date: 20-Apr-2017 16:51:30

Instrument ID: MG

Lims ID: 140-7831-A-4

Lab Sample ID: 140-7831-4

Client ID: H41A-BA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

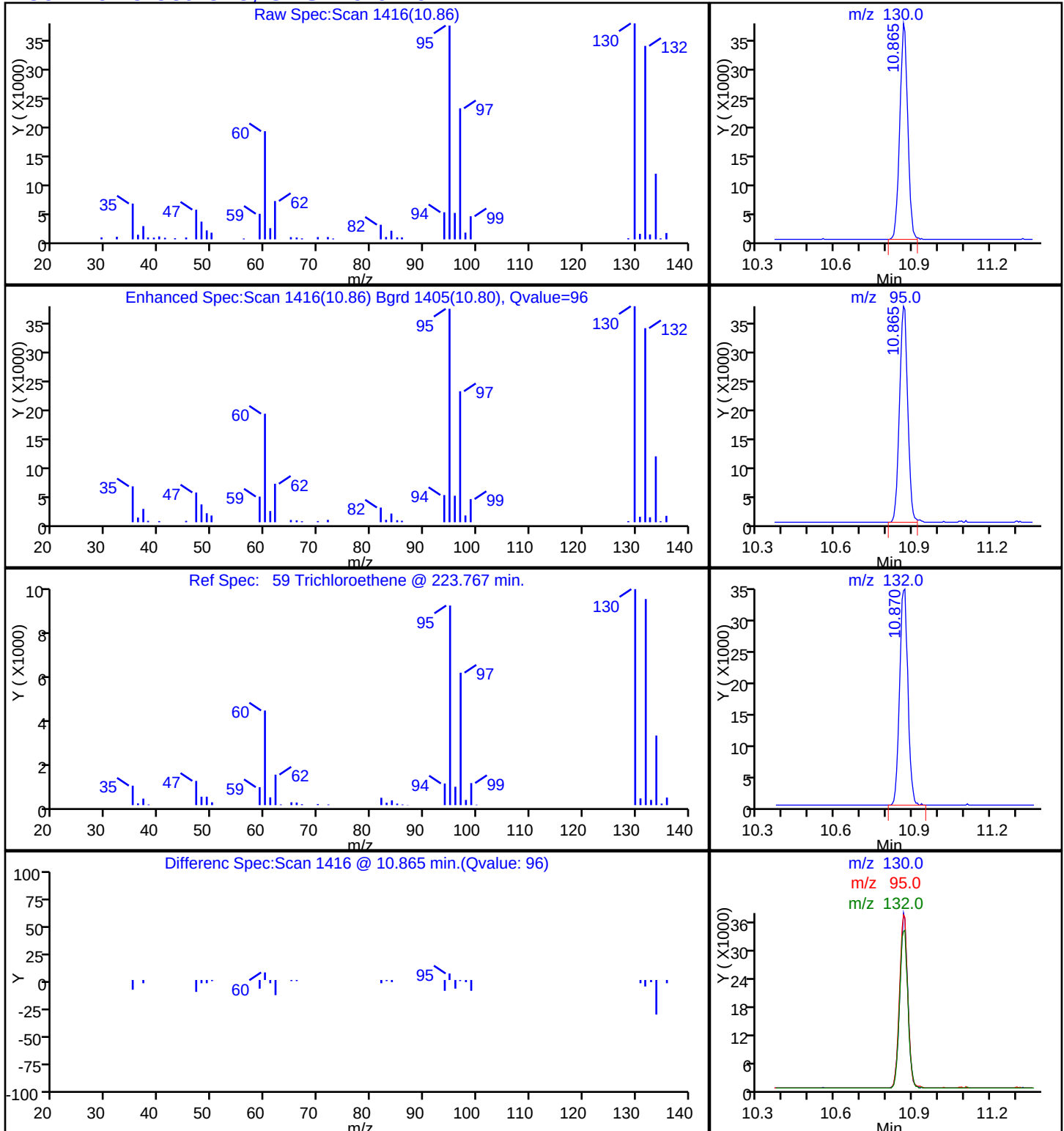
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

59 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P106.D

Injection Date: 20-Apr-2017 16:51:30

Instrument ID: MG

Lims ID: 140-7831-A-4

Lab Sample ID: 140-7831-4

Client ID: H41A-BA

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 10

Purge Vol: 500.000 mL

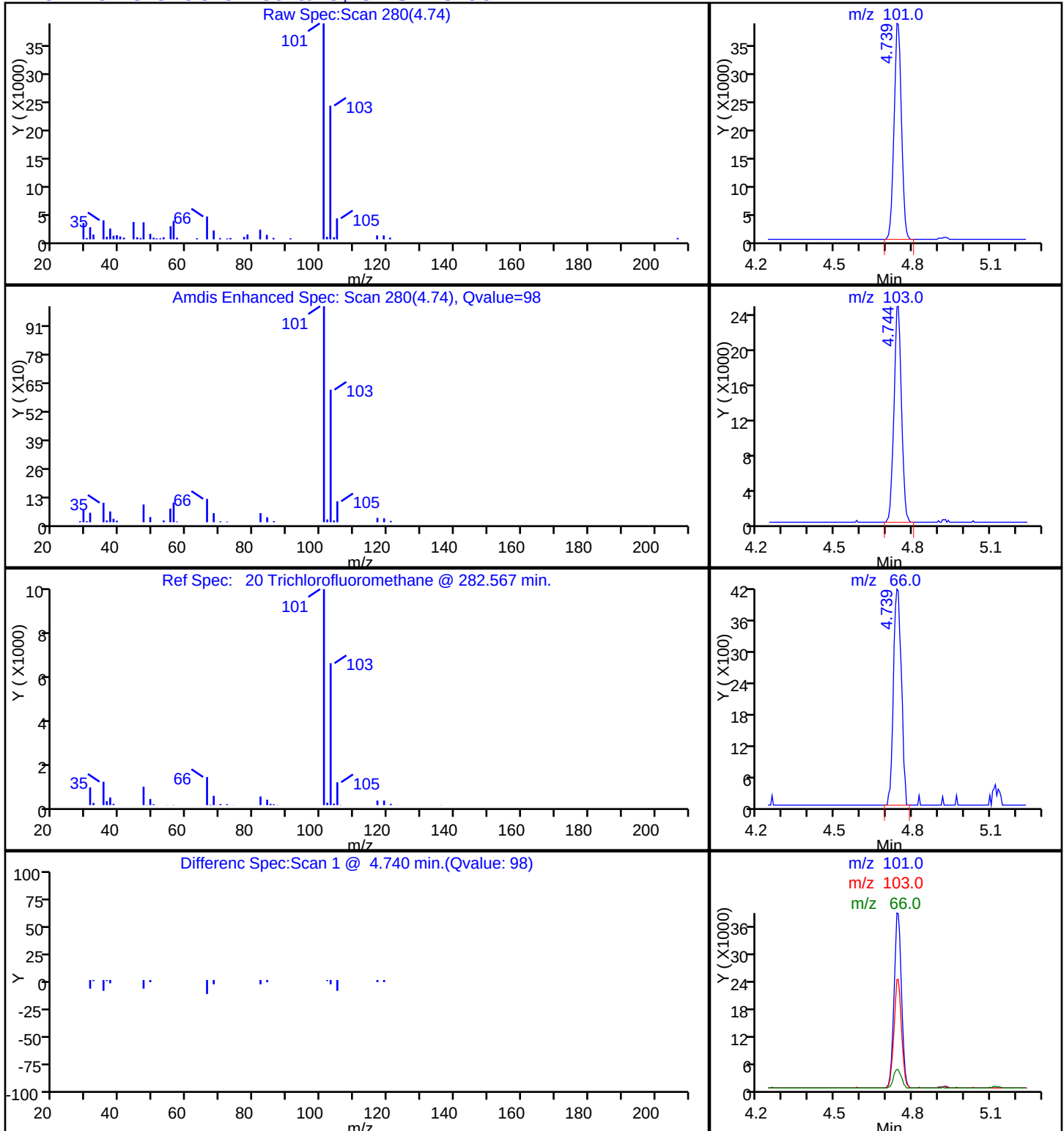
Dil. Factor: 1.0000

Method: MG_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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H42-SS Lab Sample ID: 140-7831-5
 Matrix: Air Lab File ID: GD20P107.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 10:02
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 17:40
 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.: 10584 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	0.22		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	0.080		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	0.24		0.080	
106-93-4	1,2-Dibromoethane	187.87	ND		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.080	
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	
78-87-5	1,2-Dichloropropane	112.99	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	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	0.47		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.20	
78-93-3	2-Butanone	72.11	0.82		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	0.52		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	0.052		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	0.31		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	0.48		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H42-SS Lab Sample ID: 140-7831-5
 Matrix: Air Lab File ID: GD20P107.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 10:02
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 17:40
 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.: 10584 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	0.55		0.080	
64-17-5	Ethanol	46.07	3.8		2.0	
100-41-4	Ethylbenzene	106.17	0.18		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	1.2		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	0.87		0.080	
95-47-6	o-Xylene	106.17	0.24		0.080	
100-42-5	Styrene	104.15	ND		0.080	
75-65-0	t-Butyl alcohol	74.12	ND		0.32	
127-18-4	Tetrachloroethene	165.83	0.083		0.080	
108-88-3	Toluene	92.14	1.1		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	1.0		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.33		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H42-SS Lab Sample ID: 140-7831-5
 Matrix: Air Lab File ID: GD20P107.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 10:02
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 17:40
 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.: 10584 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	1.2		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	0.62		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	1.2		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	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	1.7		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	2.4		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	1.7		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	0.33		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	1.5		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	1.6		0.69	

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H42-SS Lab Sample ID: 140-7831-5
 Matrix: Air Lab File ID: GD20P107.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 10:02
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 17:40
 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.: 10584 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	2.7		0.40	
64-17-5	Ethanol	46.07	7.2		3.8	
100-41-4	Ethylbenzene	106.17	0.78		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	4.3		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	3.8		0.35	
95-47-6	o-Xylene	106.17	1.0		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	0.56		0.54	
108-88-3	Toluene	92.14	4.2		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	5.5		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.9		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D
 Lims ID: 140-7831-A-5
 Client ID: H42-SS
 Sample Type: Client
 Inject. Date: 20-Apr-2017 17:40:30 ALS Bottle#: 7 Worklist Smp#: 11
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004683-011
 Misc. Info.: 140-7831-a-5
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 21-Apr-2017 11:03:51 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK027

First Level Reviewer: tajh

Date: 21-Apr-2017 10:49:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.964	7.969	-0.005	68	276194	4.00	
* 2 1,4-Difluorobenzene	114	10.126	10.131	-0.005	94	1376745	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.001	15.006	-0.005	88	1379559	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.672	16.678	-0.006	84	1089282	4.00	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	159560	0.5459	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.677	3.671	0.006	48	3332	0.0191	
17 Ethanol	31	4.356	4.356	0.000	97	106903	3.85	
20 Trichlorofluoromethane	101	4.734	4.739	-0.005	99	96038	0.3299	
29 2-Methyl-2-propanol	59	5.472	5.456	0.016	89	5819	0.0519	
30 1,1,2-Trichloro-1,2,2-trif	101	5.510	5.510	0.000	95	13648	0.0804	
31 Methylene Chloride	84	5.645	5.639	0.006	79	12194	0.1836	
39 2-Butanone (MEK)	72	7.252	7.252	0.000	97	25844	0.8223	
40 Hexane	56	7.317	7.317	0.001	83	66402	1.22	
44 Chloroform	83	7.991	7.996	-0.005	95	60123	0.3103	
47 1,1,1-Trichloroethane	97	8.972	8.967	0.005	95	49039	0.2188	
49 Benzene	78	9.549	9.554	-0.005	96	121826	0.5209	
50 Cyclohexane	69	9.555	9.560	-0.005	86	18716	0.4754	M
51 Carbon tetrachloride	117	9.576	9.581	-0.005	45	12820	0.0524	
56 Isooctane	57	10.380	10.385	-0.005	49	6768	0.0195	
59 Trichloroethene	130	10.865	10.870	-0.005	95	128550	1.01	
62 1,4-Dioxane	88	11.113	11.113	0.000	85	15003	0.4739	
65 4-Methyl-2-pentanone (MIBK	43	12.132	12.100	0.032	94	20366	0.1516	
68 Toluene	91	12.989	12.995	-0.006	93	308149	1.12	
76 Tetrachloroethene	129	14.165	14.165	0.000	85	10431	0.0830	
79 Ethylbenzene	91	15.362	15.362	0.000	99	69271	0.1804	
81 m-Xylene & p-Xylene	91	15.529	15.534	-0.005	100	270834	0.8735	
85 o-Xylene	91	16.058	16.063	-0.005	97	74867	0.2362	
92 1,3,5-Trimethylbenzene	120	17.460	17.465	-0.005	91	16035	0.0789	
96 1,2,4-Trimethylbenzene	105	17.923	17.929	-0.006	98	95006	0.2439	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Worklist Smp#: 11

Client ID: H42-SS

Purge Vol: 500.000 mL

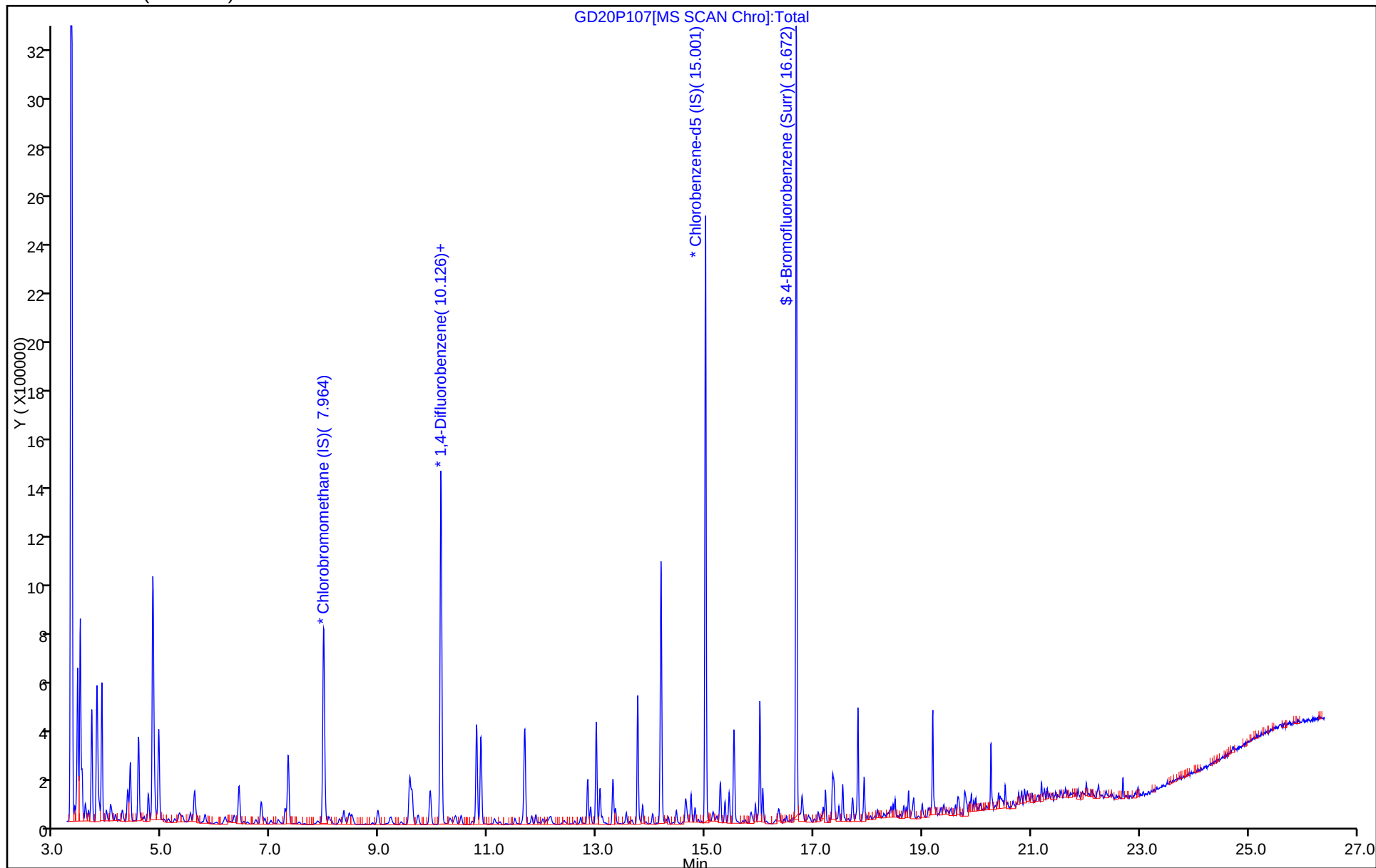
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D
Lims ID: 140-7831-A-5
Client ID: H42-SS
Sample Type: Client
Inject. Date: 20-Apr-2017 17:40:30 ALS Bottle#: 7 Worklist Smp#: 11
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004683-011
Misc. Info.: 140-7831-a-5
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2017 11:03:51 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: tajh

Date: 21-Apr-2017 10:49:07

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.00	99.89

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Client ID: H42-SS

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

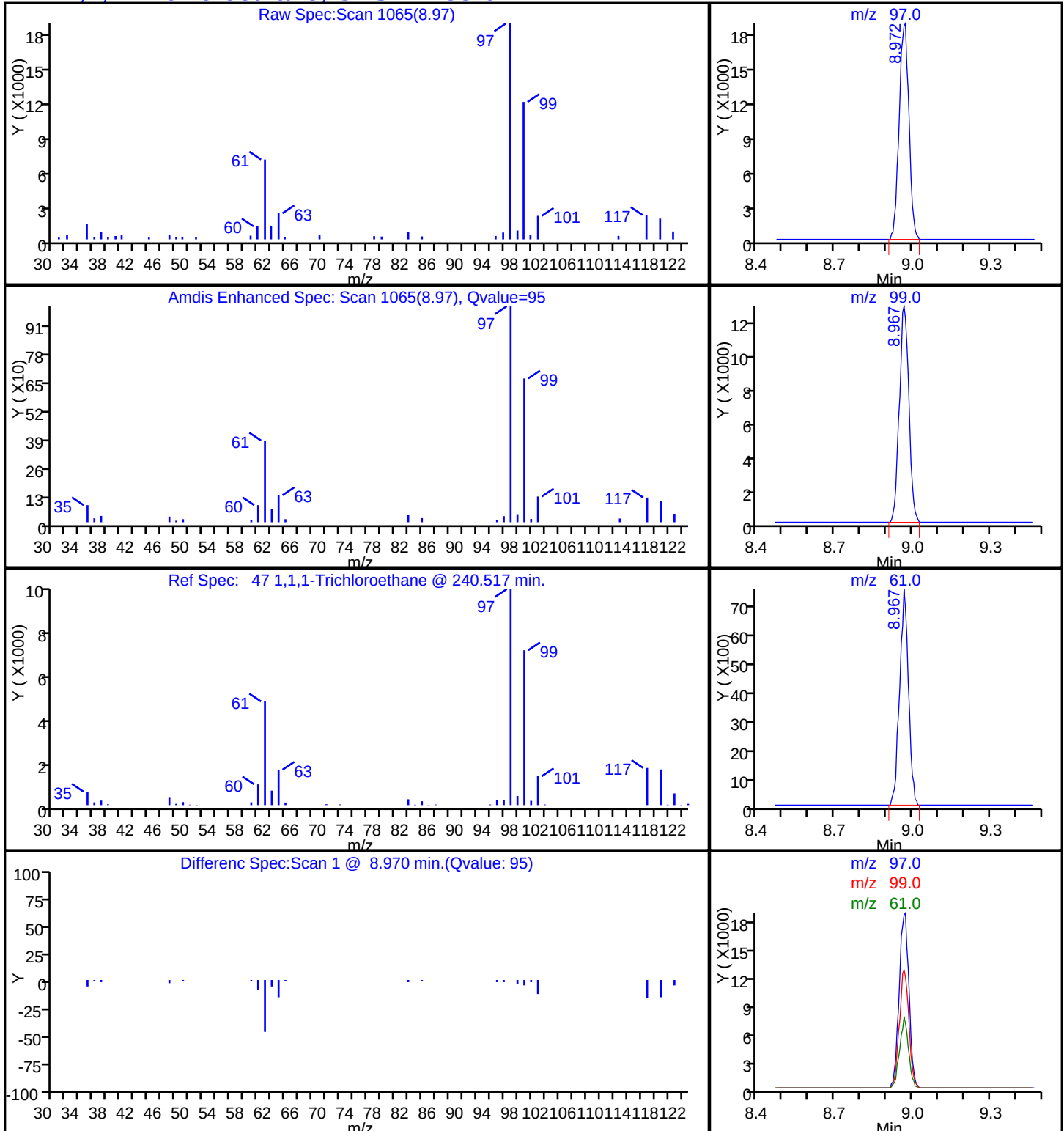
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

47 1,1,1-Trichloroethane, CAS: 71-55-6



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Client ID: H42-SS

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

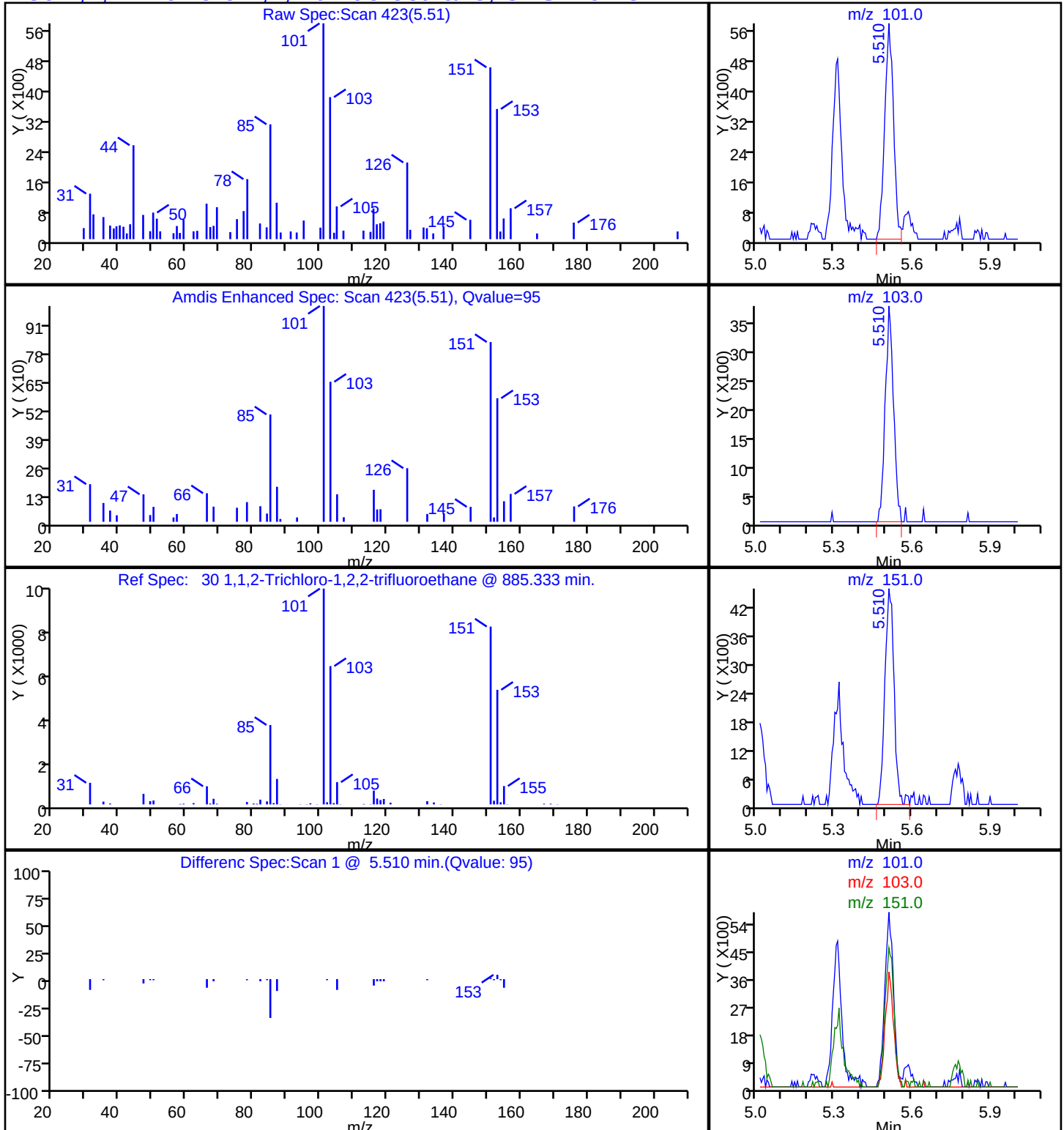
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

30 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Client ID: H42-SS

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

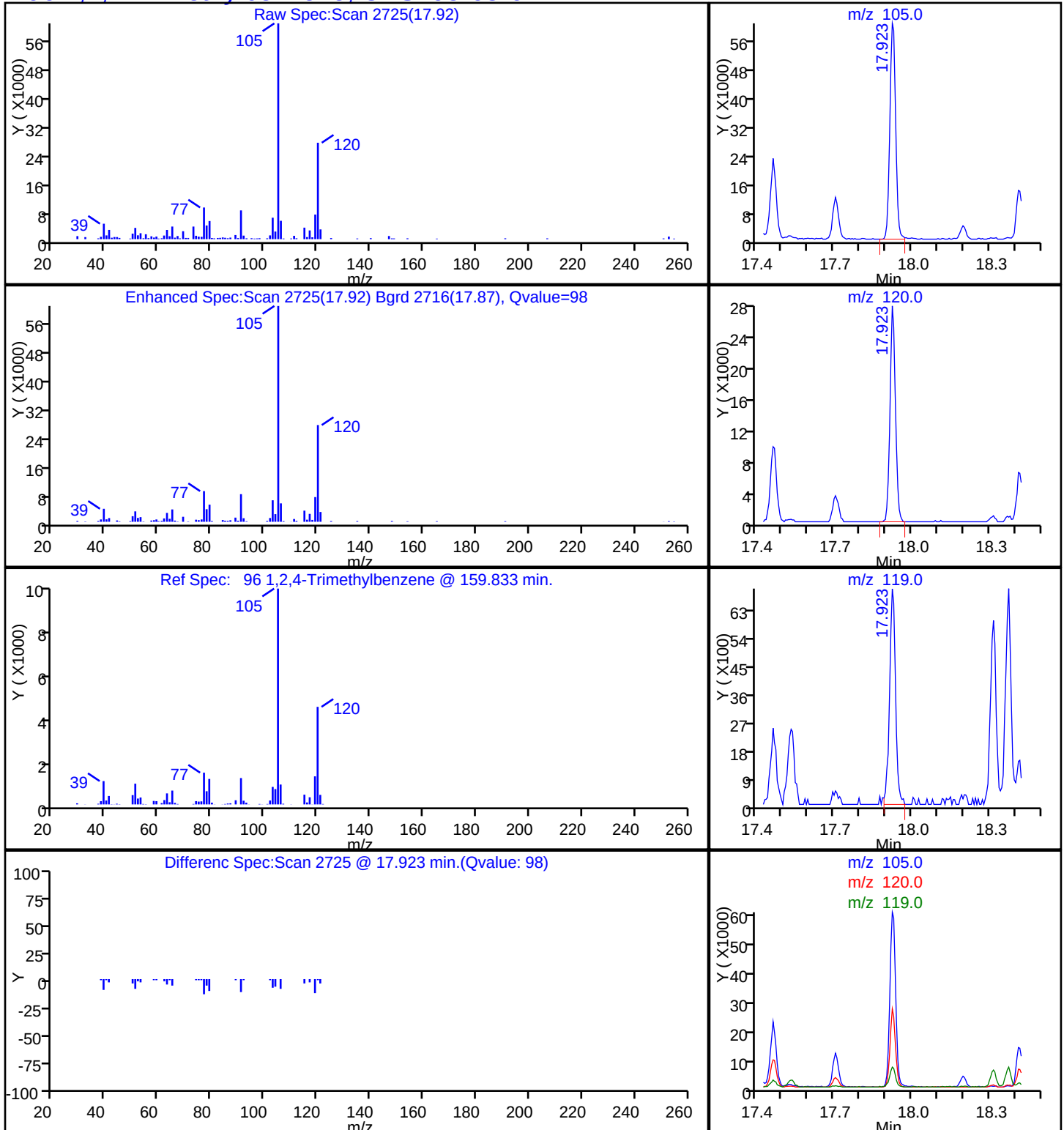
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

96 1,2,4-Trimethylbenzene, CAS: 95-63-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Client ID: H42-SS

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

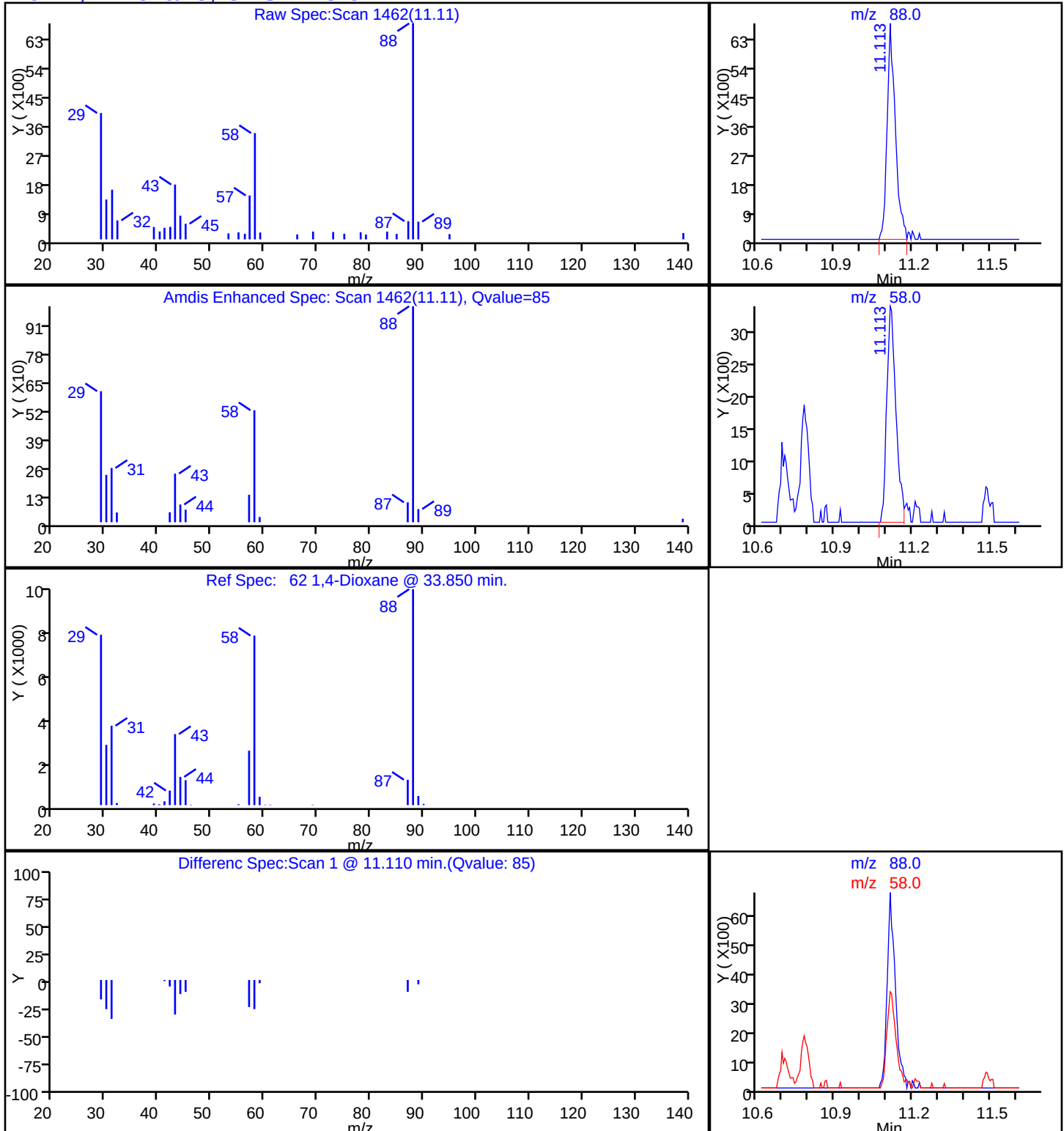
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

62 1,4-Dioxane, CAS: 123-91-1

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Client ID: H42-SS

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

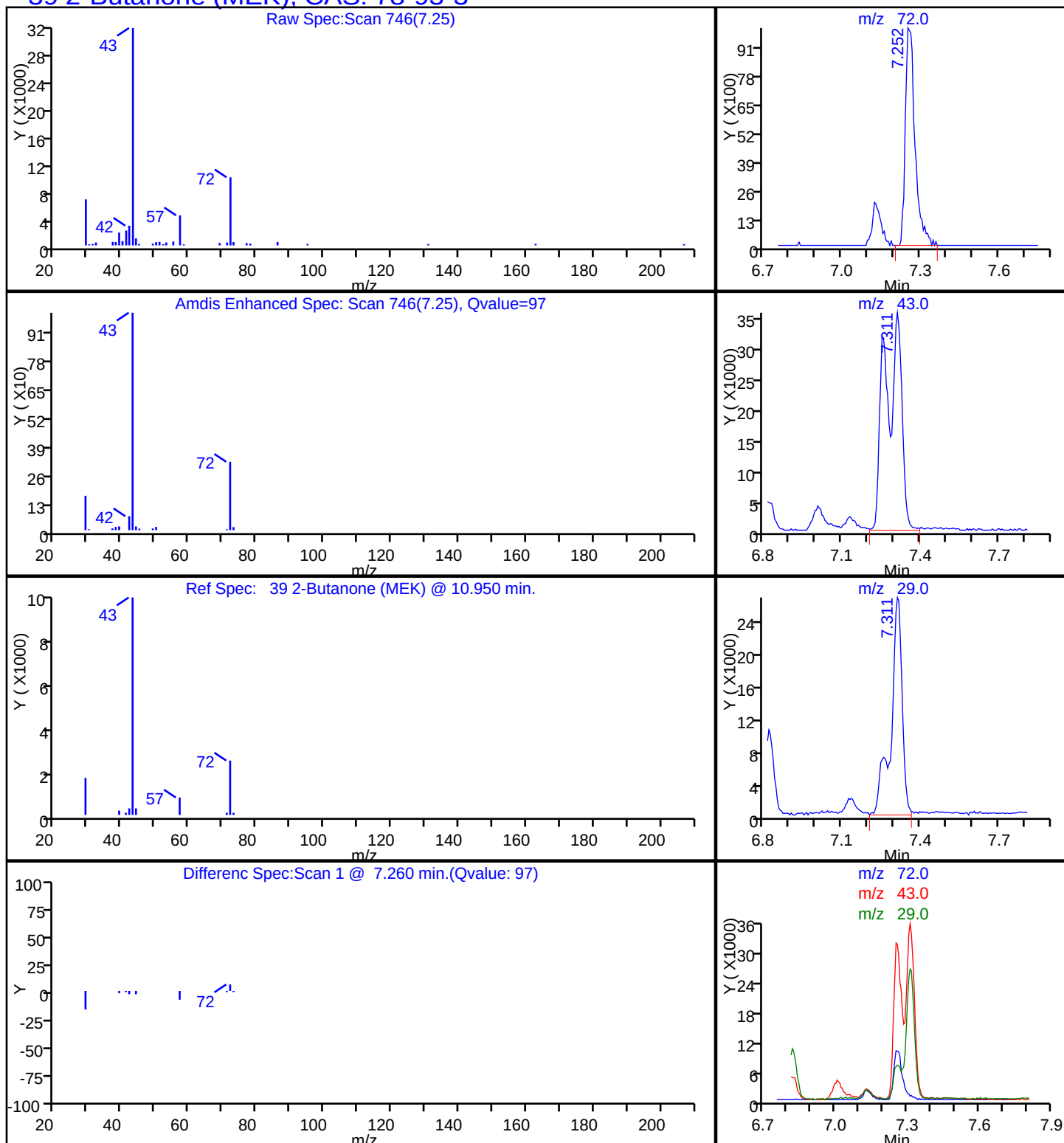
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\\Knoxville\\ChromData\\MG\\20170418-4683.b\\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Client ID: H42-SS

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

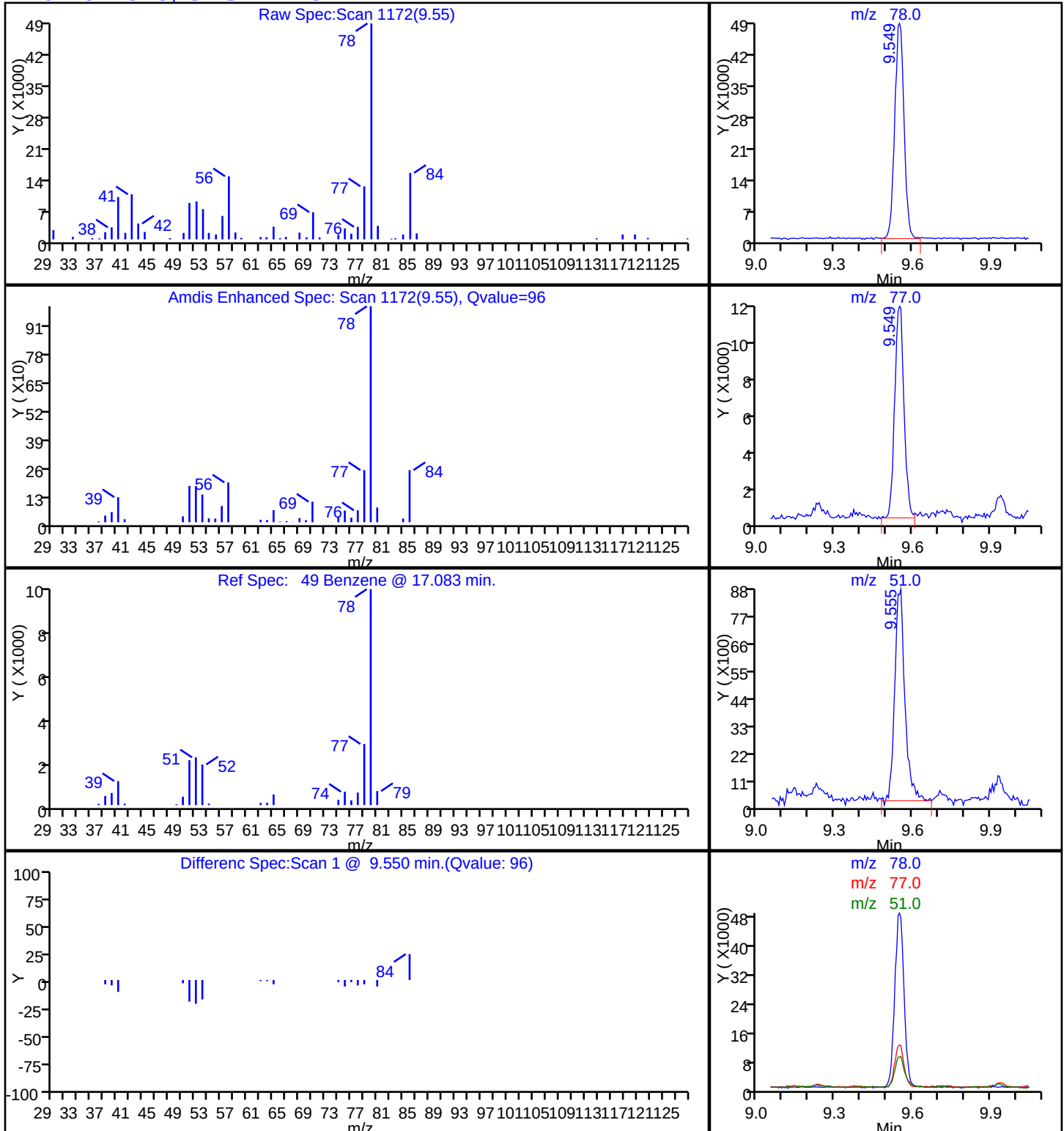
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Client ID: H42-SS

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

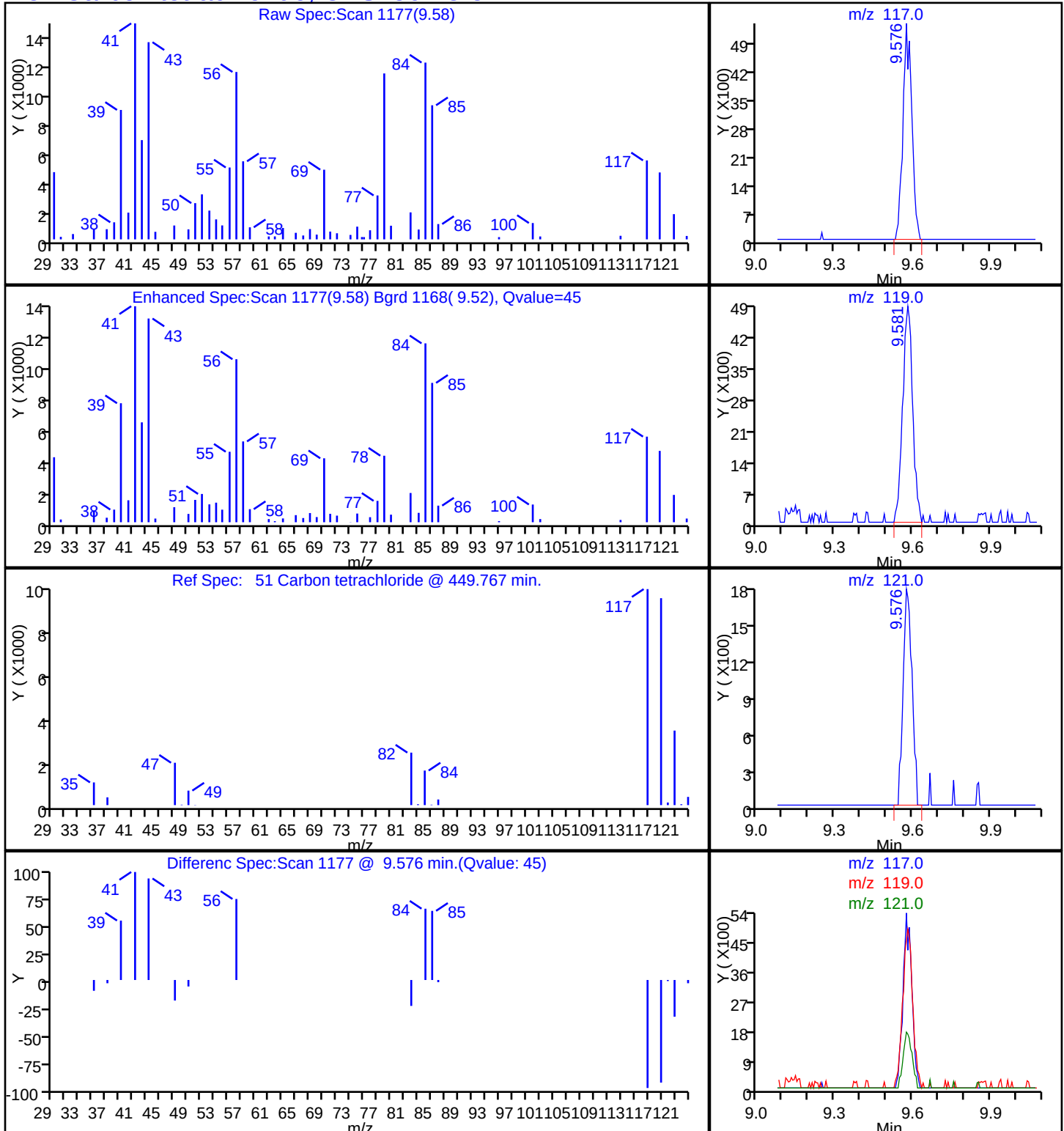
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Client ID: H42-SS

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

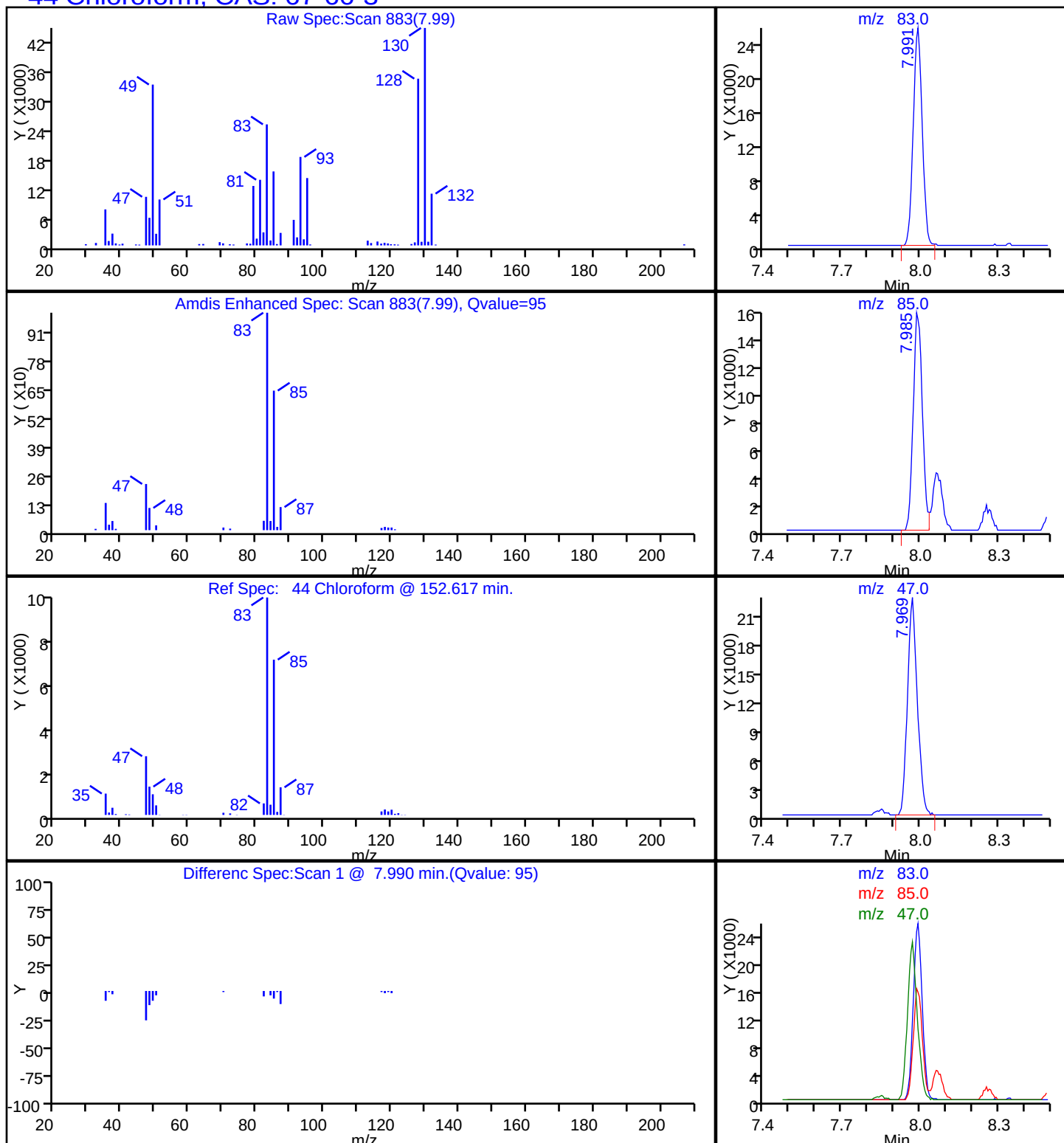
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

44 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Client ID: H42-SS

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

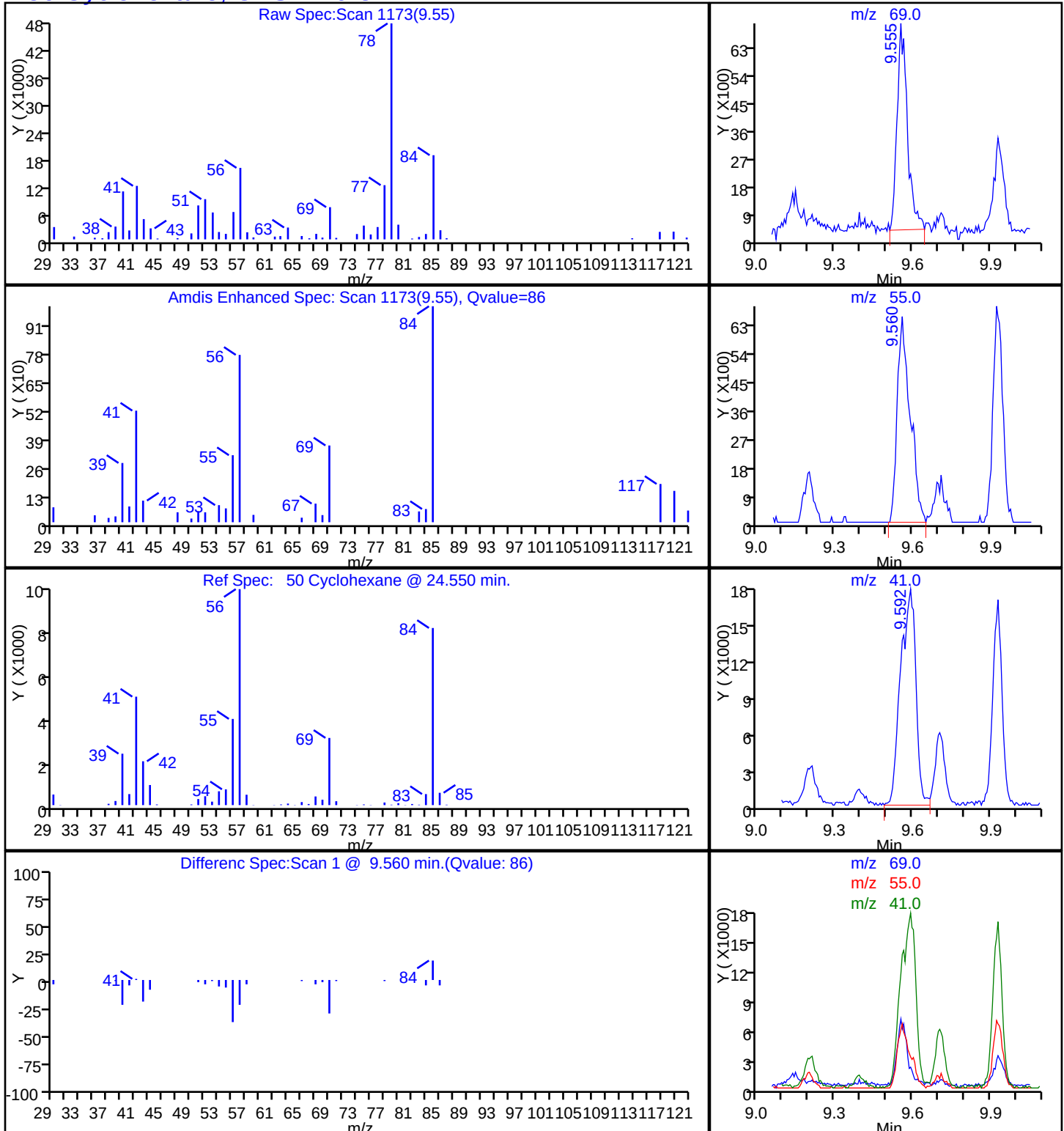
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Cyclohexane, CAS: 110-82-7



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Client ID: H42-SS

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

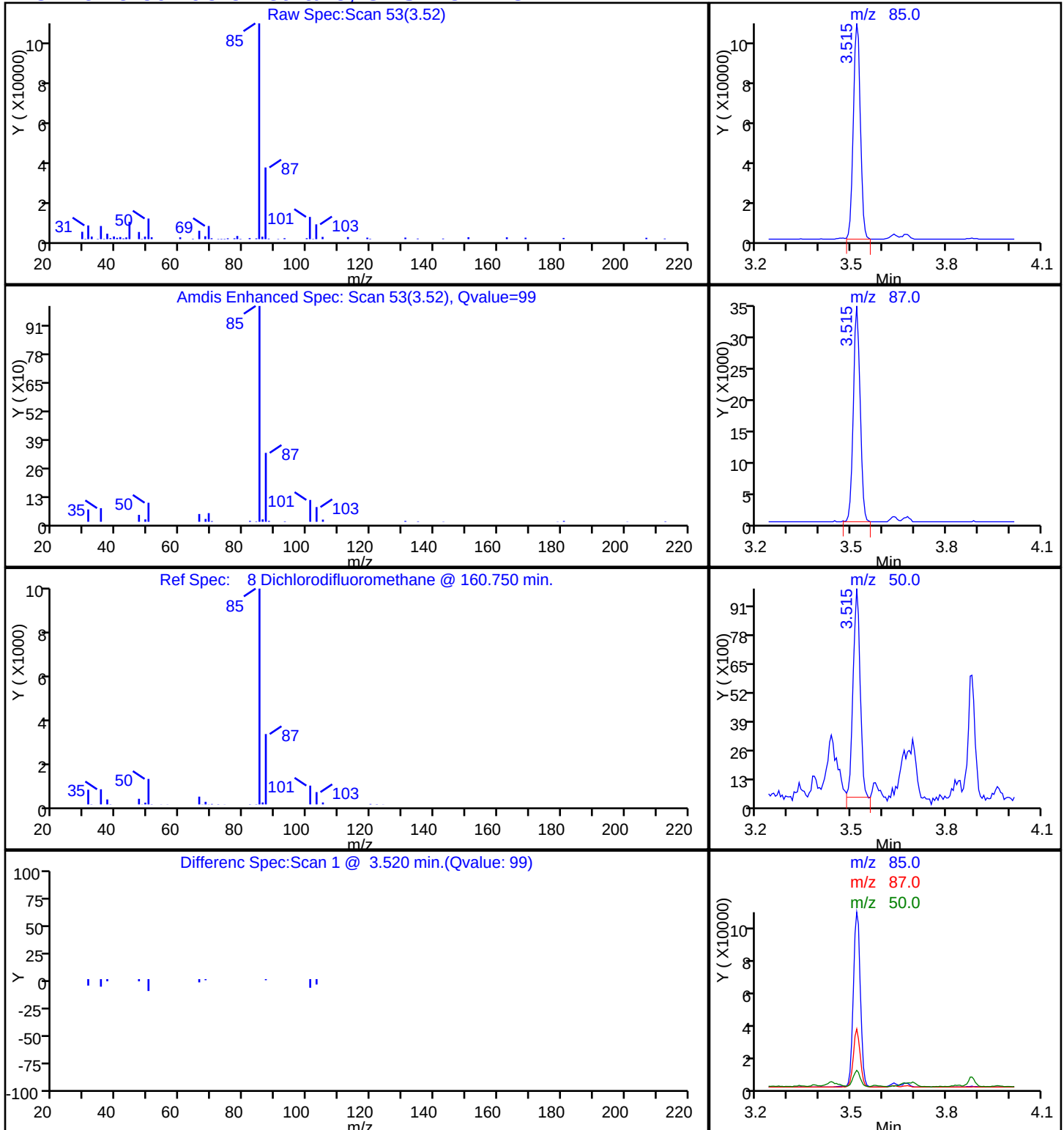
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Client ID: H42-SS

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

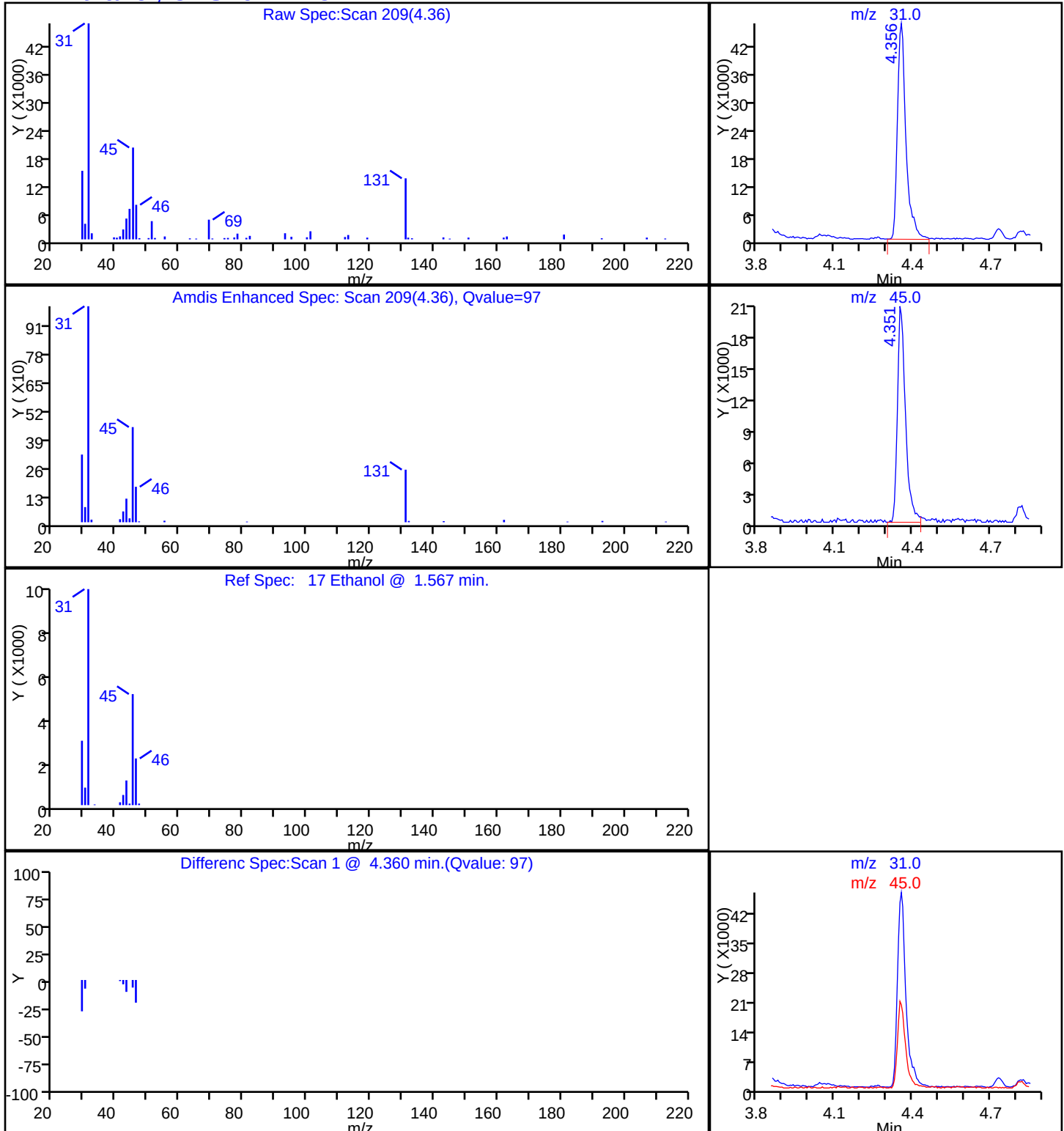
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Client ID: H42-SS

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

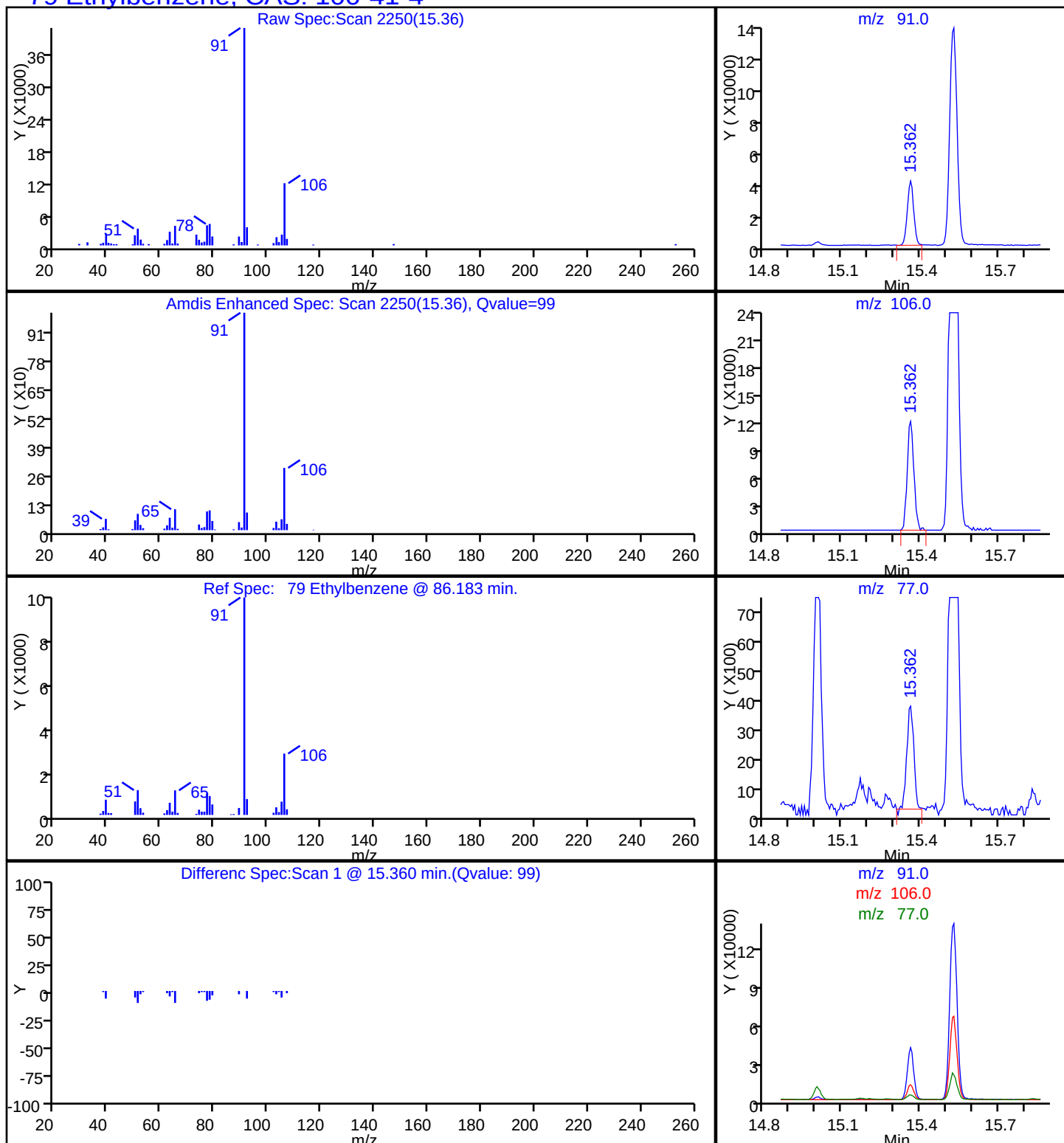
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

79 Ethylbenzene, CAS: 100-41-4



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Client ID: H42-SS

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

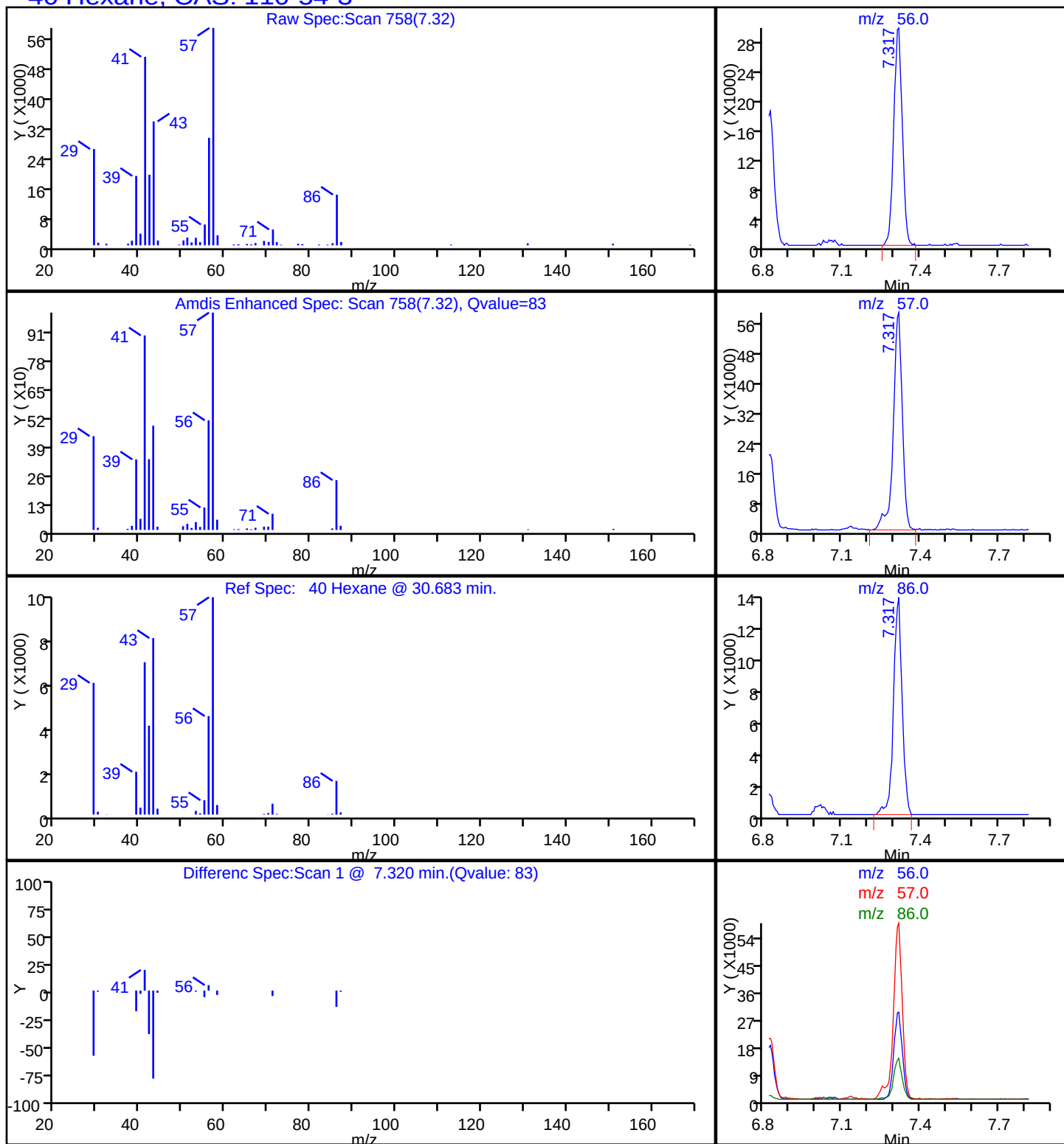
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Client ID: H42-SS

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

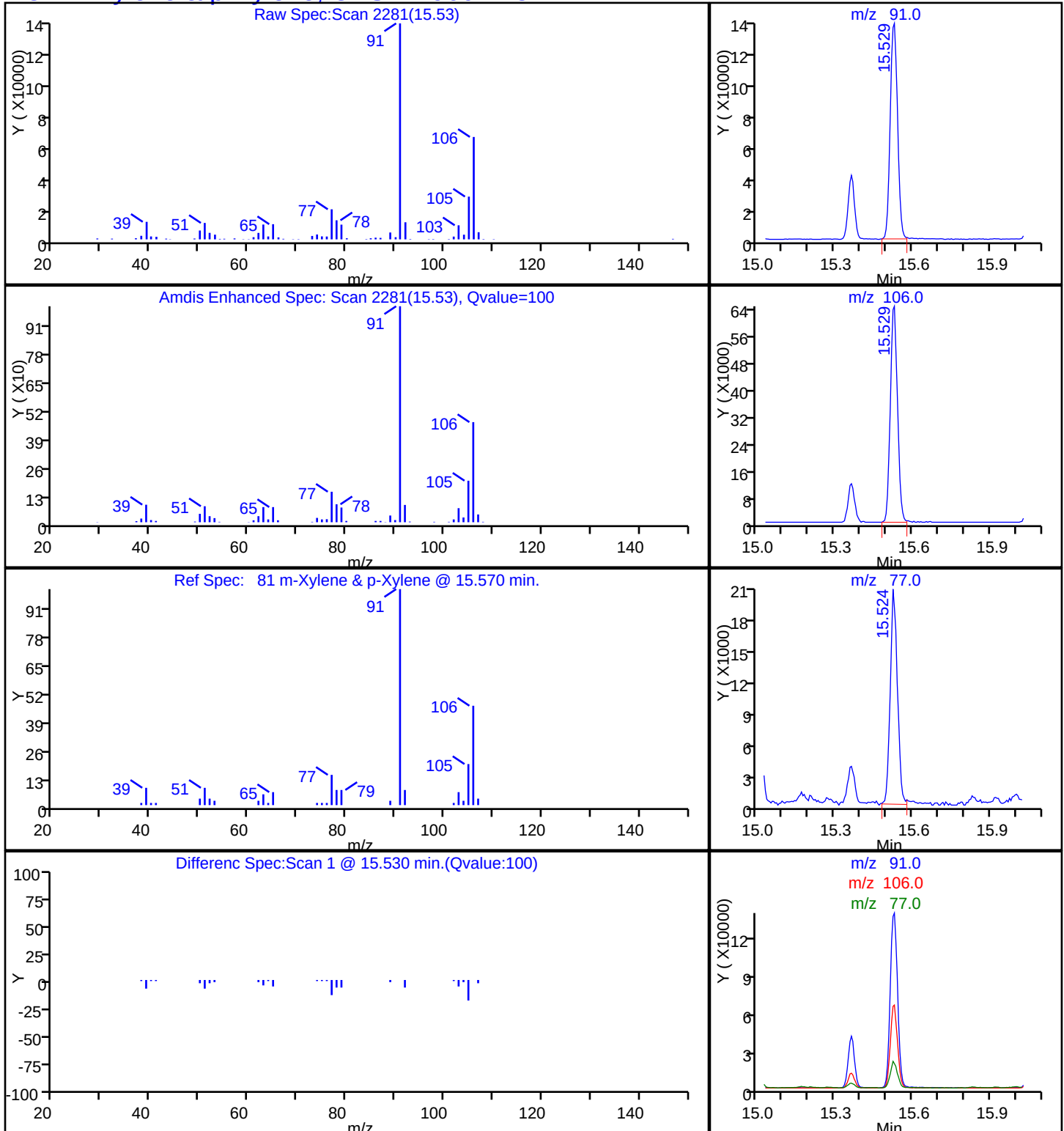
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Client ID: H42-SS

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

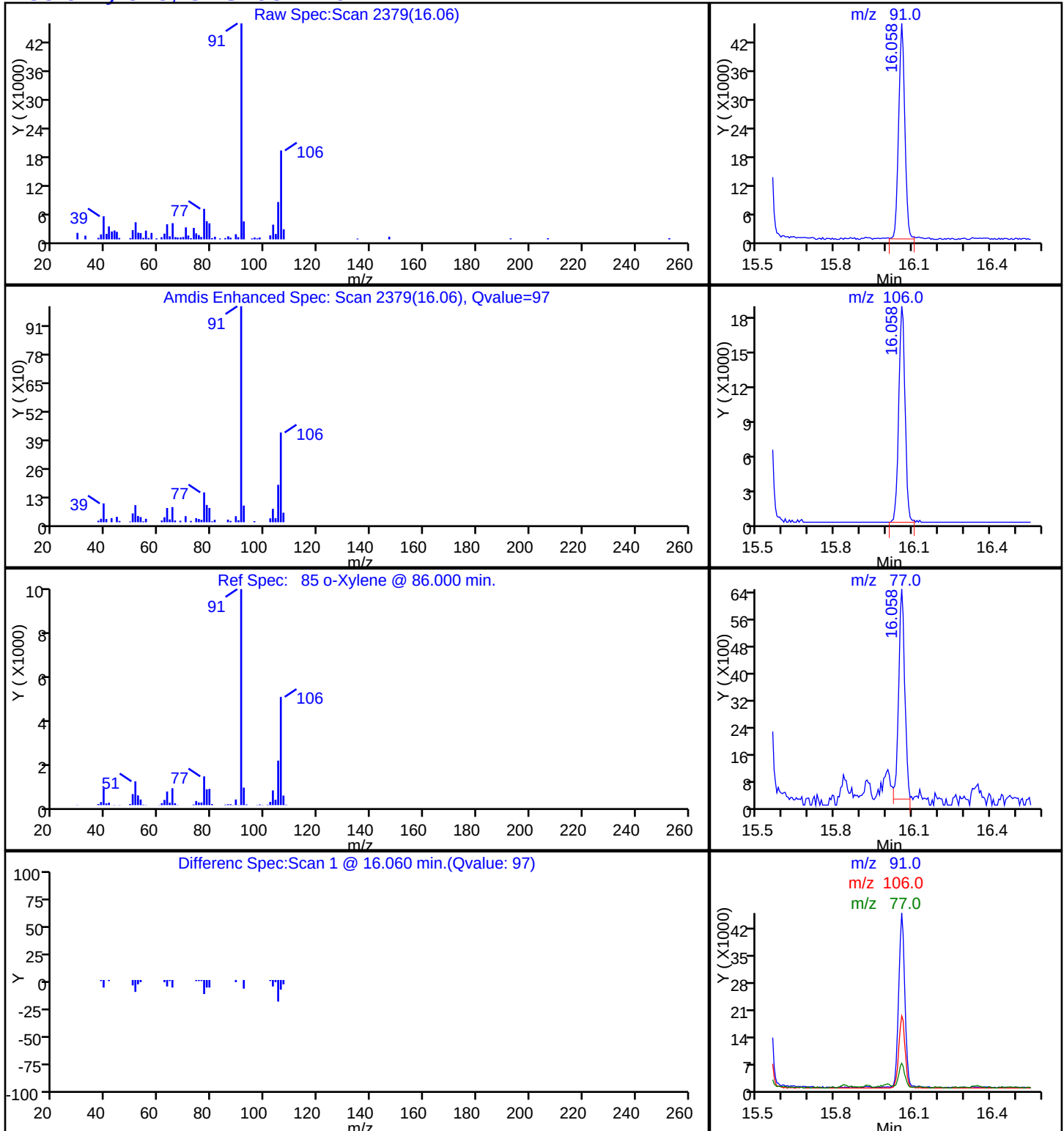
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Client ID: H42-SS

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

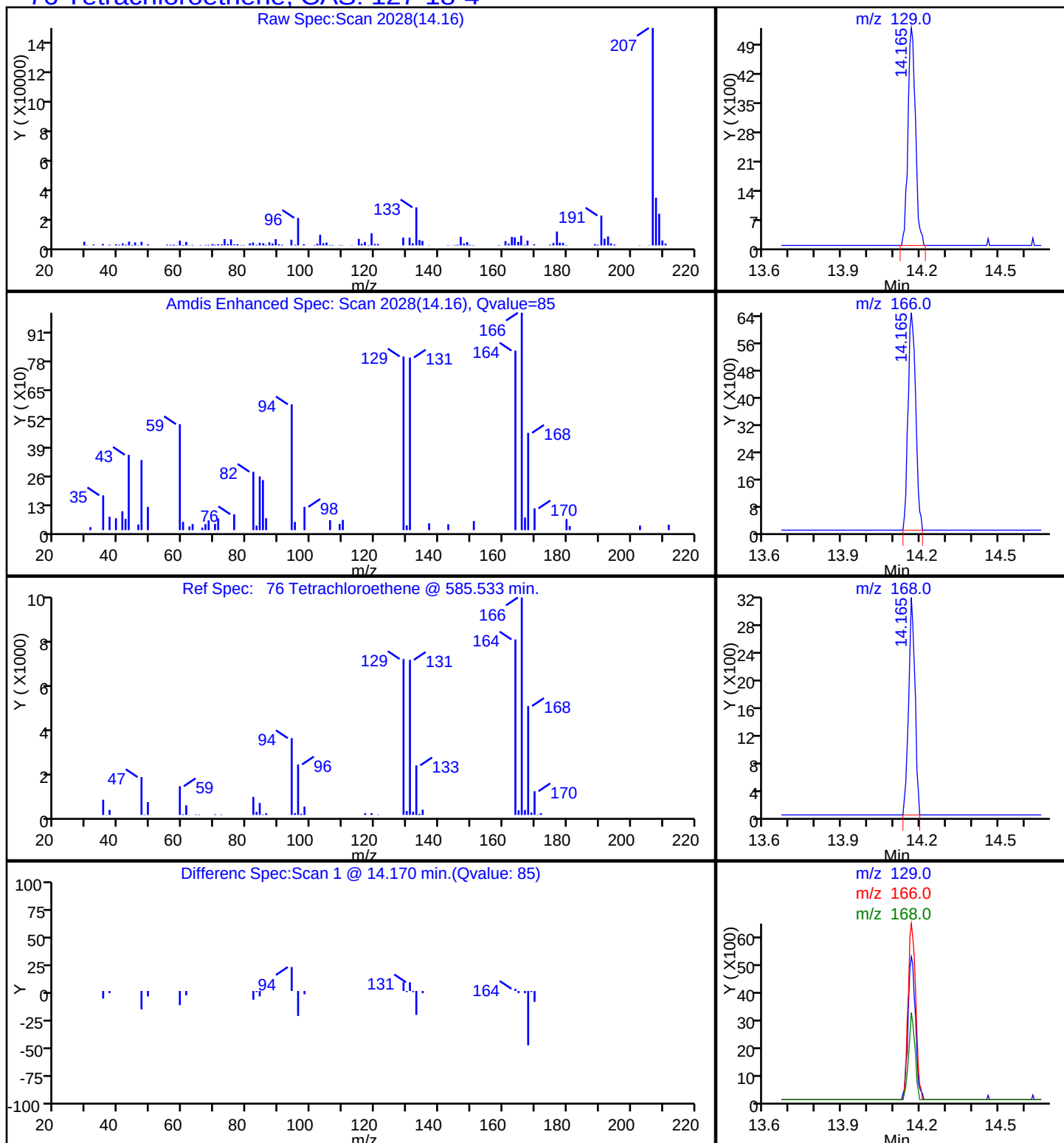
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

76 Tetrachloroethene, CAS: 127-18-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Client ID: H42-SS

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

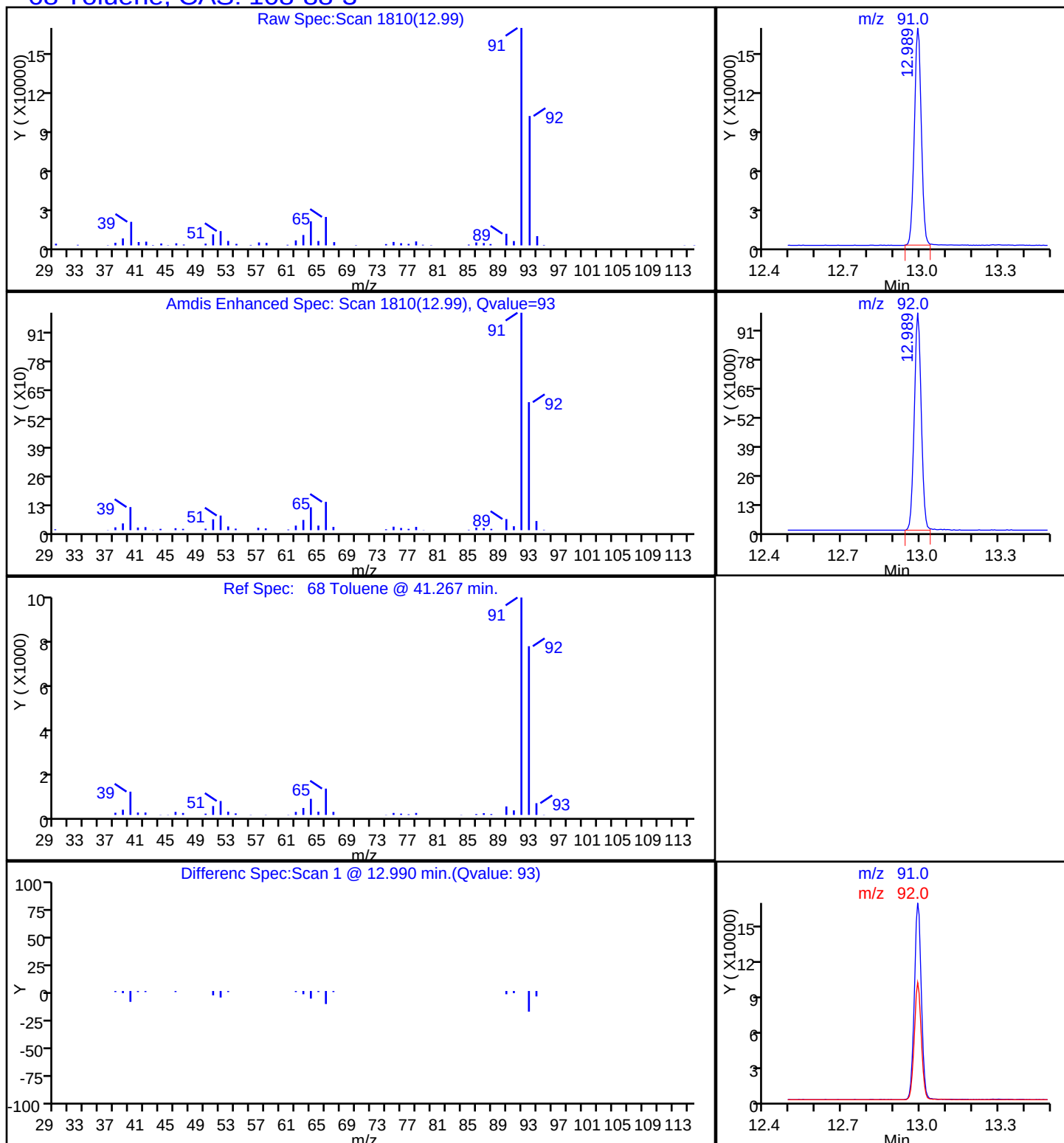
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Client ID: H42-SS

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

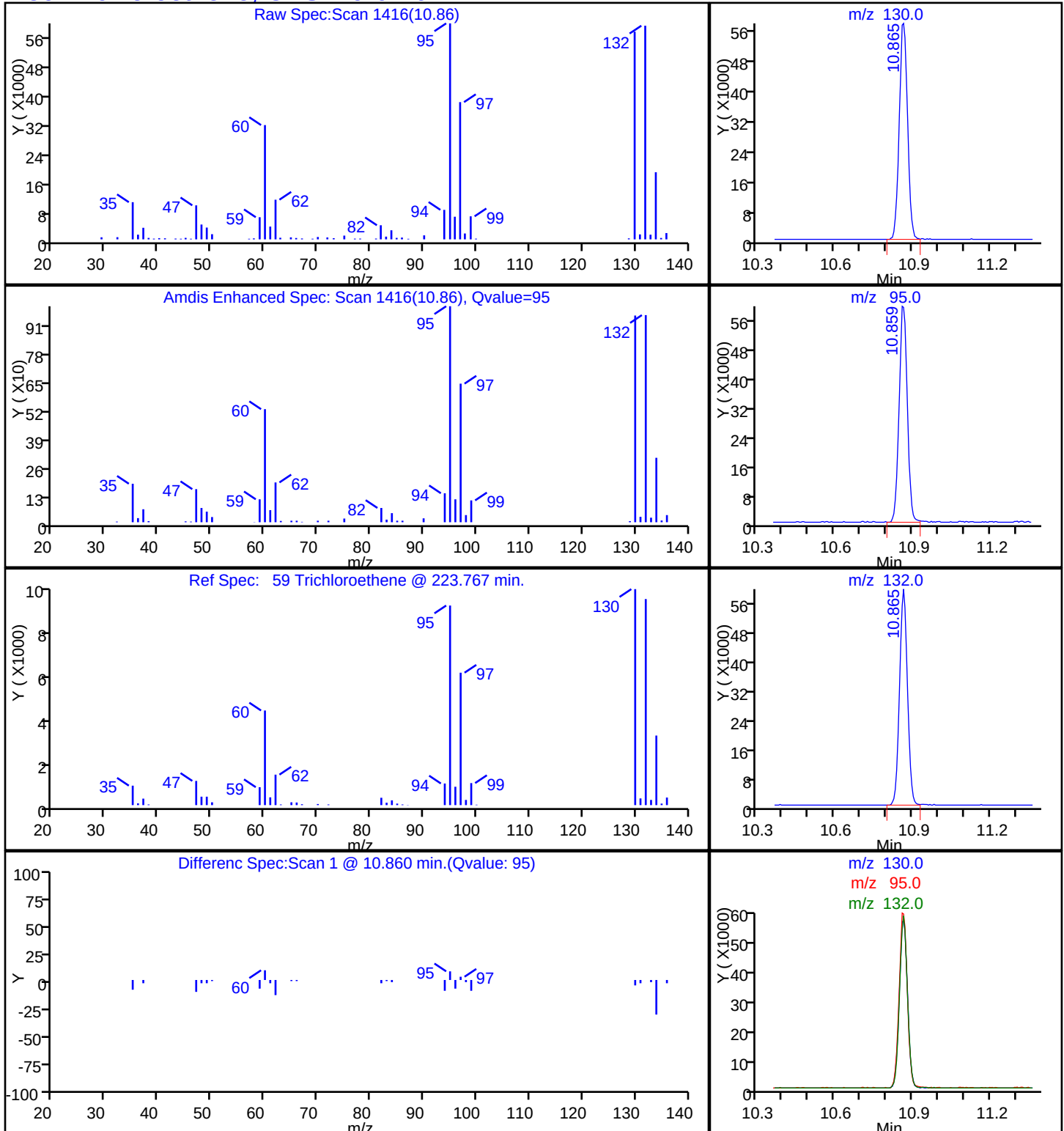
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

59 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Client ID: H42-SS

Operator ID: 7126

ALS Bottle#: 7

Worklist Smp#: 11

Purge Vol: 500.000 mL

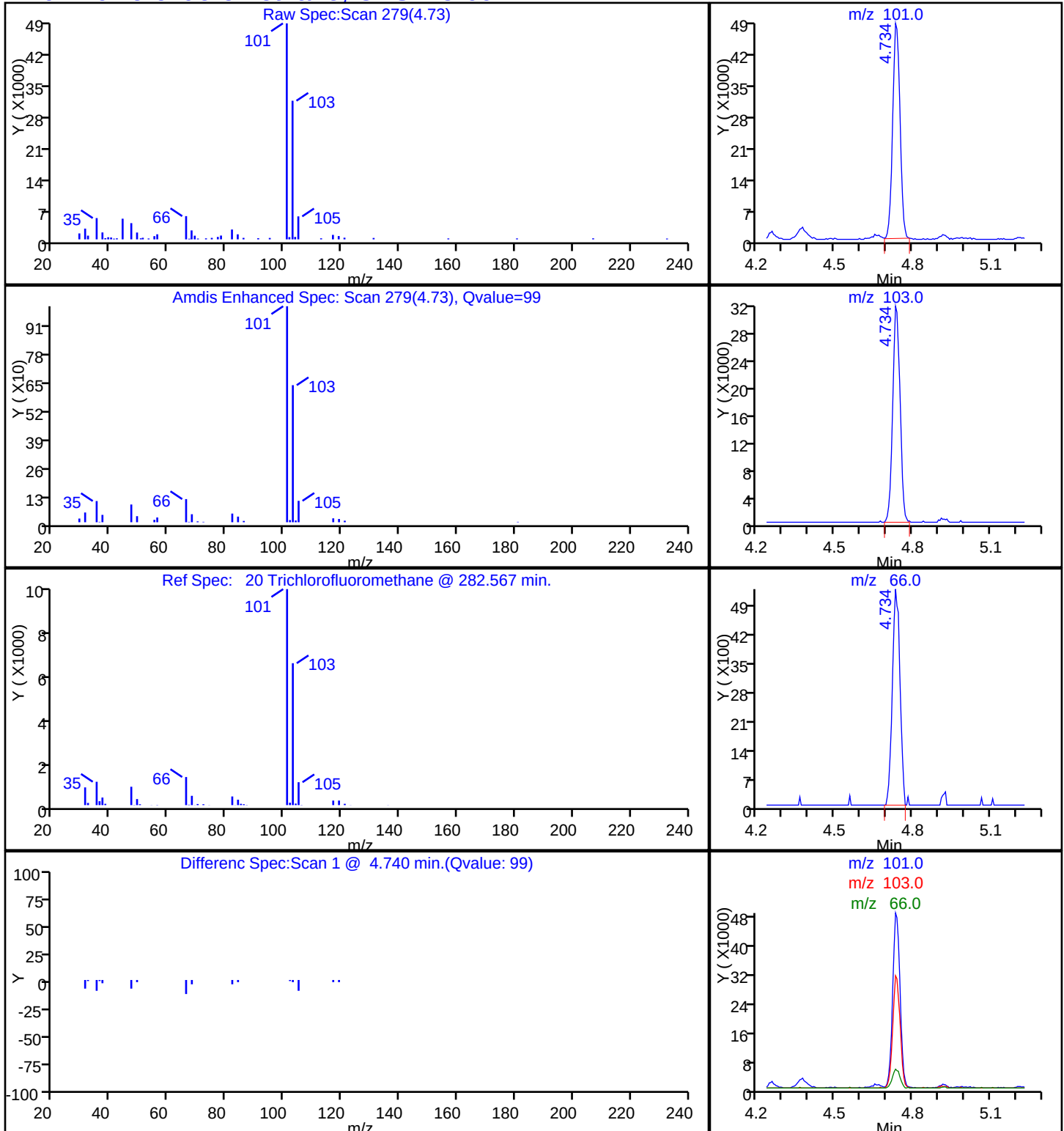
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P107.D

Injection Date: 20-Apr-2017 17:40:30

Instrument ID: MG

Lims ID: 140-7831-A-5

Lab Sample ID: 140-7831-5

Client ID: H42-SS

Operator ID: 7126

ALS Bottle#: 7 Worklist Smp#: 11

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

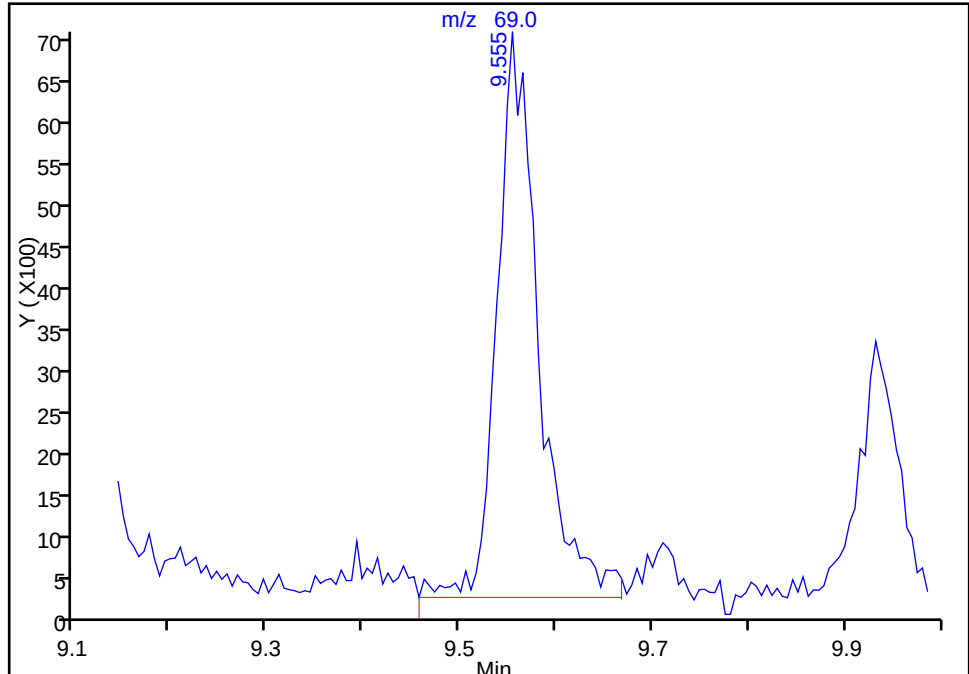
Detector: MS SCAN

50 Cyclohexane, CAS: 110-82-7

Signal: 1

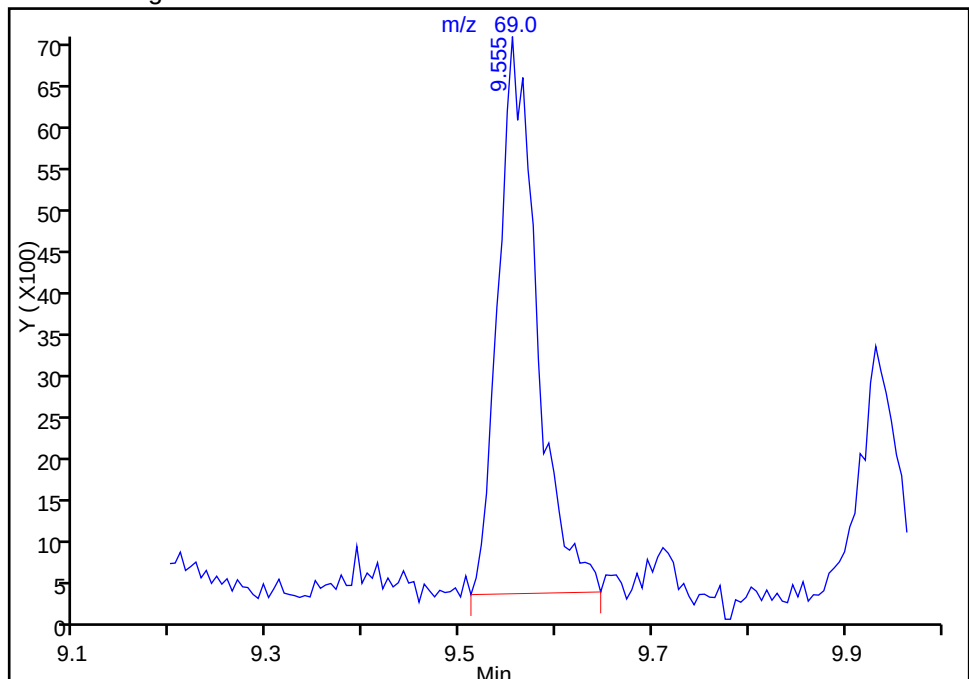
RT: 9.55
Area: 20458
Amount: 0.519700
Amount Units: ppb v/v

Processing Integration Results



RT: 9.55
Area: 18716
Amount: 0.475447
Amount Units: ppb v/v

Manual Integration Results



Reviewer: tajh, 21-Apr-2017 10:48:24

Audit Action: Manually Integrated

Audit Reason: Baseline

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H42-BA Lab Sample ID: 140-7831-6
 Matrix: Air Lab File ID: GD20P108.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 10:03
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 18:27
 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.: 10584 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	0.86		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	0.082		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	0.33		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H42-BA Lab Sample ID: 140-7831-6
 Matrix: Air Lab File ID: GD20P108.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 10:03
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 18:27
 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.: 10584 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	17		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	ND		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.080	
95-47-6	o-Xylene	106.17	ND		0.080	
100-42-5	Styrene	104.15	ND		0.080	
75-65-0	t-Butyl alcohol	74.12	ND		0.32	
127-18-4	Tetrachloroethene	165.83	ND		0.080	
108-88-3	Toluene	92.14	ND		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.080	
79-01-6	Trichloroethene	131.39	ND		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.26		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

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.: 140-7831-1

SDG No.: _____

Client Sample ID: H42-BA Lab Sample ID: 140-7831-6

Matrix: Air Lab File ID: GD20P108.D

Analysis Method: TO 15 LL Date Collected: 04/12/2017 10:03

Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 18:27

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.: 10584 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	2.5		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	0.52		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	0.68		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H42-BA Lab Sample ID: 140-7831-6
 Matrix: Air Lab File ID: GD20P108.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 10:03
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 18:27
 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.: 10584 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	32		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	ND		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.5		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P108.D
 Lims ID: 140-7831-A-6
 Client ID: H42-BA
 Sample Type: Client
 Inject. Date: 20-Apr-2017 18:27:30 ALS Bottle#: 8 Worklist Smp#: 12
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004683-012
 Misc. Info.: 140-7831-a-6
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 21-Apr-2017 11:03:51 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK027

First Level Reviewer: tajh

Date: 21-Apr-2017 10:49:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.964	7.969	-0.005	68	279605	4.00	
* 2 1,4-Difluorobenzene	114	10.126	10.131	-0.005	94	1398834	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.001	15.006	-0.005	88	1395340	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.672	16.678	-0.006	84	1101576	3.99	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	155540	0.5256	
9 Chloromethane	52	3.666	3.660	0.006	98	6581	0.3306	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.671	0.000	47	2961	0.0168	
17 Ethanol	31	4.351	4.356	-0.005	97	484864	17.2	
20 Trichlorofluoromethane	101	4.734	4.739	-0.005	99	77135	0.2617	
29 2-Methyl-2-propanol	59	5.467	5.456	0.011	89	8013	0.0706	
30 1,1,2-Trichloro-1,2,2-trif	101	5.510	5.510	0.000	95	12958	0.0754	
31 Methylene Chloride	84	5.645	5.639	0.006	81	12823	0.1907	
39 2-Butanone (MEK)	72	7.252	7.252	0.000	96	27501	0.8643	
44 Chloroform	83	7.980	7.996	-0.016	88	6108	0.0311	
49 Benzene	78	9.544	9.554	-0.010	96	17191	0.0723	
51 Carbon tetrachloride	117	9.581	9.581	0.000	98	20357	0.0820	
65 4-Methyl-2-pentanone (MIBK	43	12.100	12.100	0.000	94	19798	0.1450	
68 Toluene	91	12.995	12.995	0.000	92	22759	0.0819	
81 m-Xylene & p-Xylene	91	15.524	15.534	-0.010	99	21854	0.0697	
85 o-Xylene	91	16.058	16.063	-0.005	65	10231	0.0319	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P108.D

Injection Date: 20-Apr-2017 18:27:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7831-A-6

Lab Sample ID: 140-7831-6

Worklist Smp#: 12

Client ID: H42-BA

Purge Vol: 500.000 mL

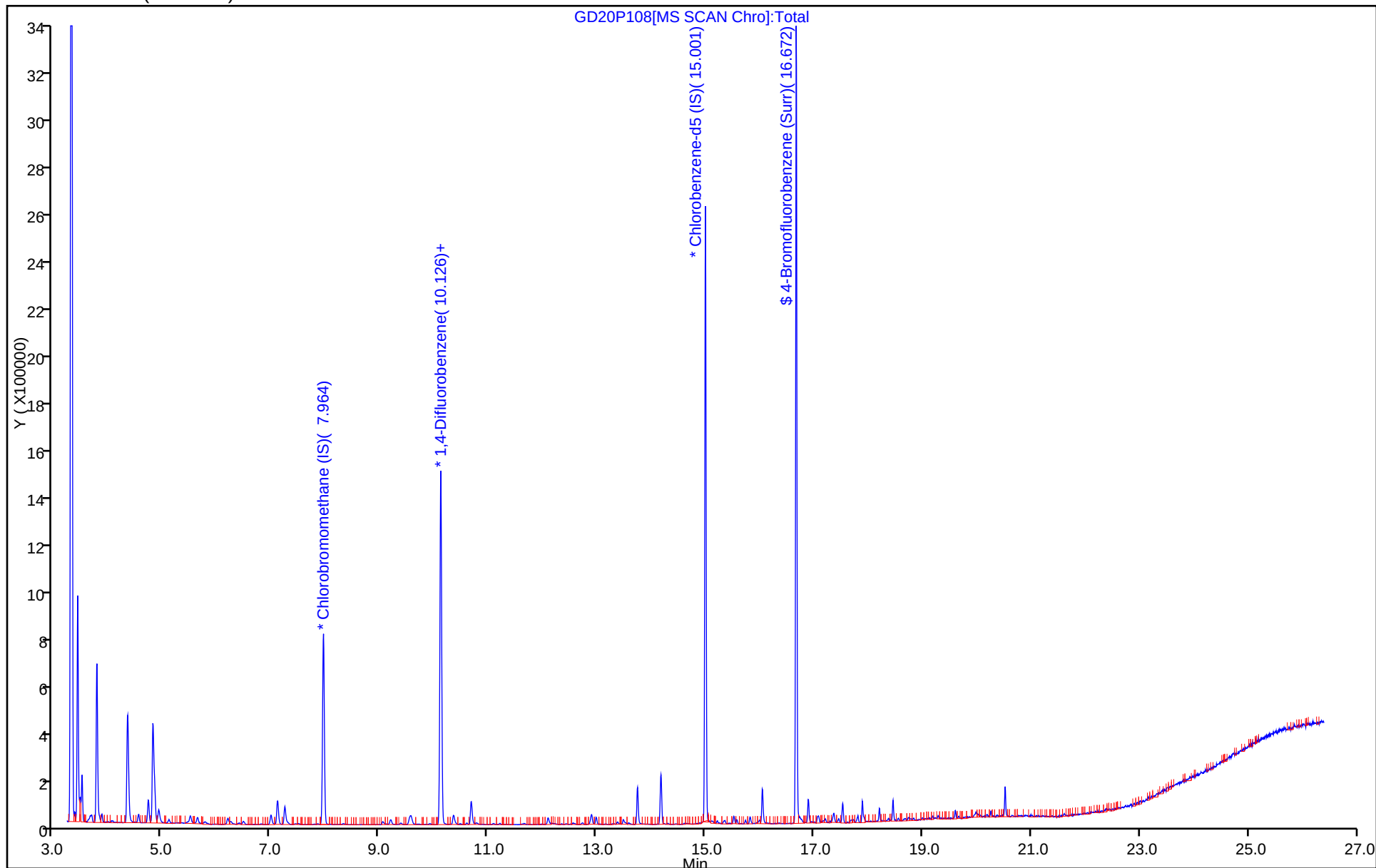
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P108.D
Lims ID: 140-7831-A-6
Client ID: H42-BA
Sample Type: Client
Inject. Date: 20-Apr-2017 18:27:30 ALS Bottle#: 8 Worklist Smp#: 12
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004683-012
Misc. Info.: 140-7831-a-6
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2017 11:03:51 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: tajh

Date: 21-Apr-2017 10:49:42

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	3.99	99.87

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P108.D

Injection Date: 20-Apr-2017 18:27:30

Instrument ID: MG

Lims ID: 140-7831-A-6

Lab Sample ID: 140-7831-6

Client ID: H42-BA

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 12

Purge Vol: 500.000 mL

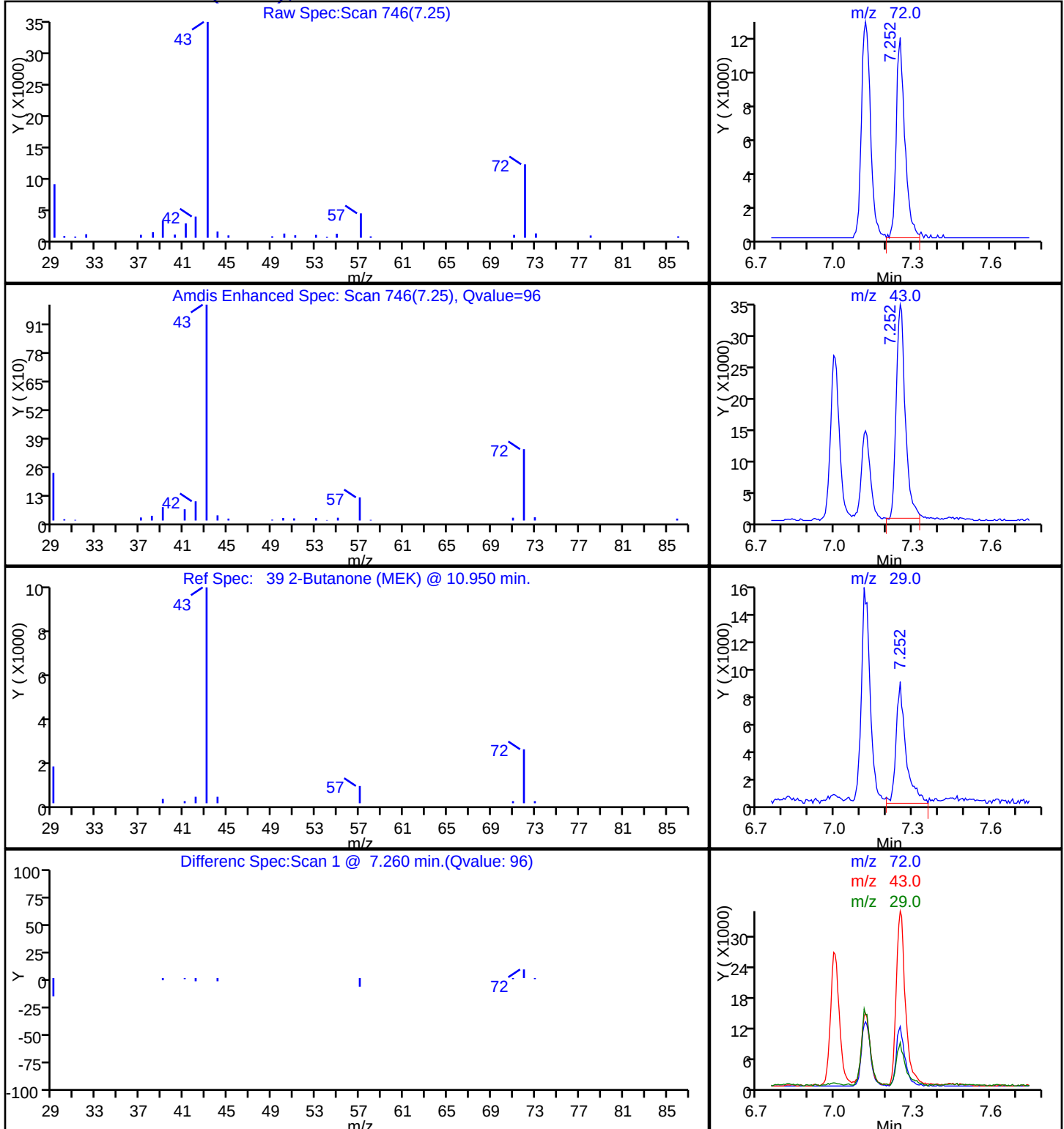
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P108.D

Injection Date: 20-Apr-2017 18:27:30

Instrument ID: MG

Lims ID: 140-7831-A-6

Lab Sample ID: 140-7831-6

Client ID: H42-BA

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 12

Purge Vol: 500.000 mL

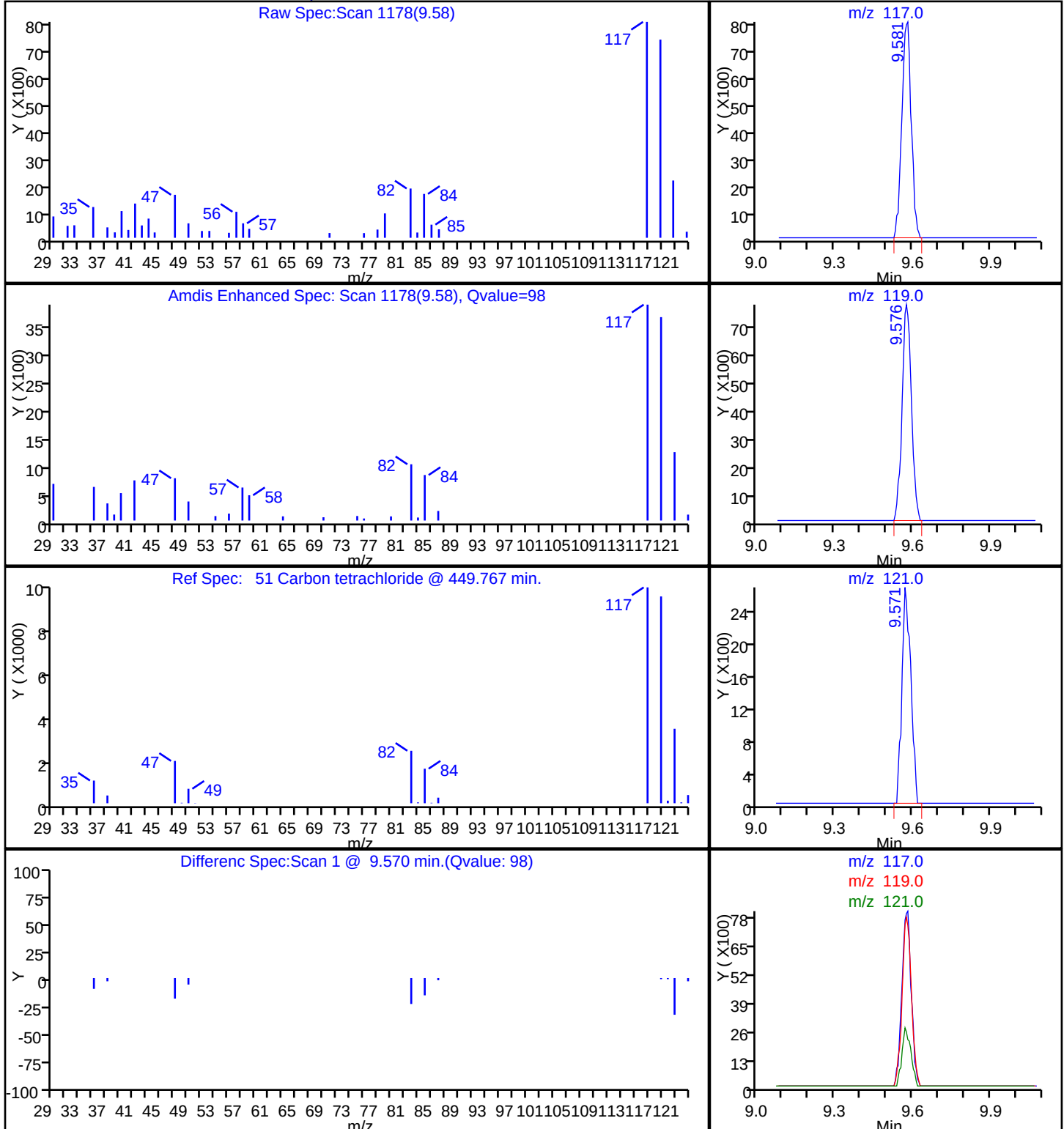
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P108.D

Injection Date: 20-Apr-2017 18:27:30

Instrument ID: MG

Lims ID: 140-7831-A-6

Lab Sample ID: 140-7831-6

Client ID: H42-BA

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 12

Purge Vol: 500.000 mL

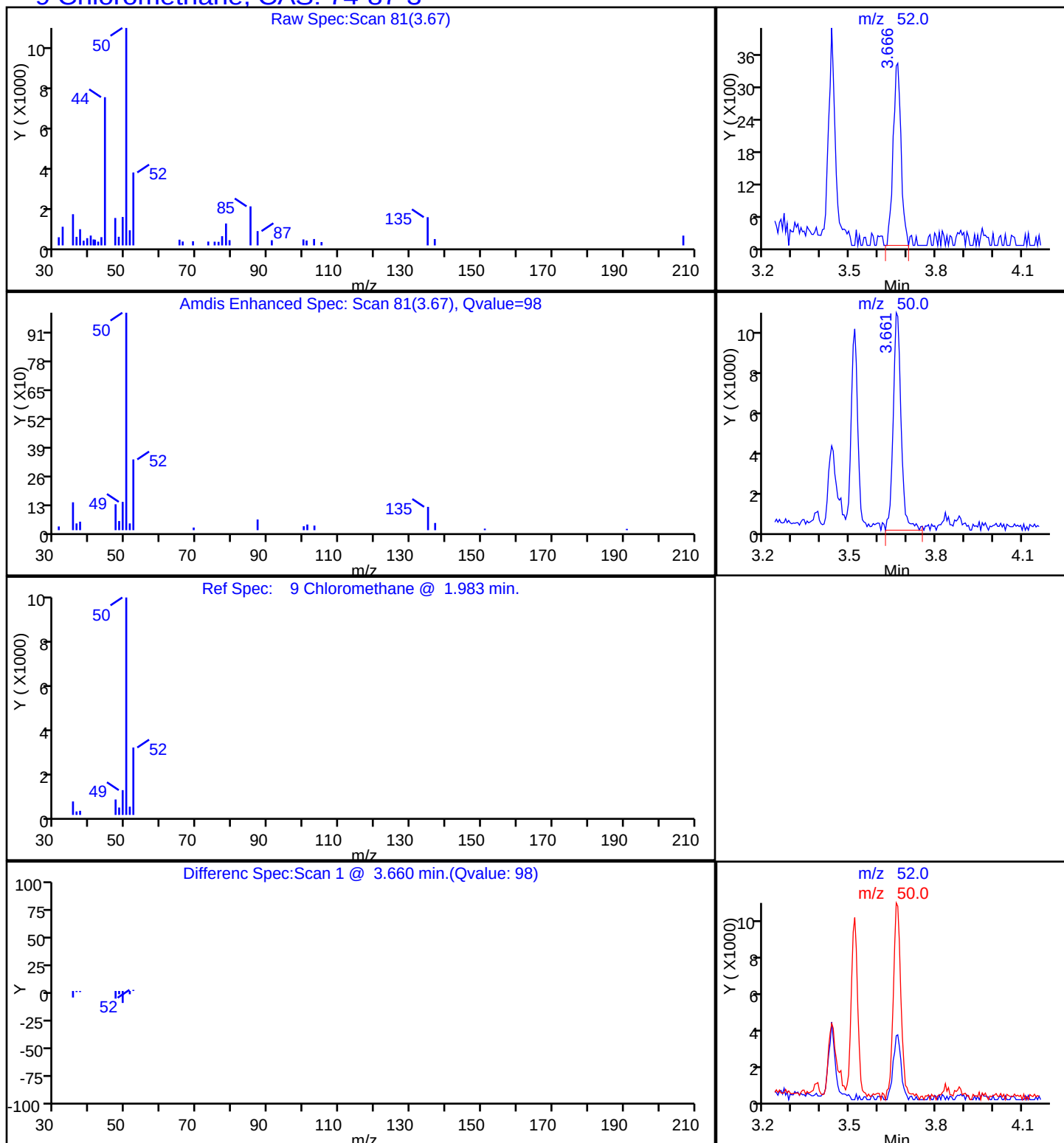
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P108.D

Injection Date: 20-Apr-2017 18:27:30

Instrument ID: MG

Lims ID: 140-7831-A-6

Lab Sample ID: 140-7831-6

Client ID: H42-BA

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 12

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

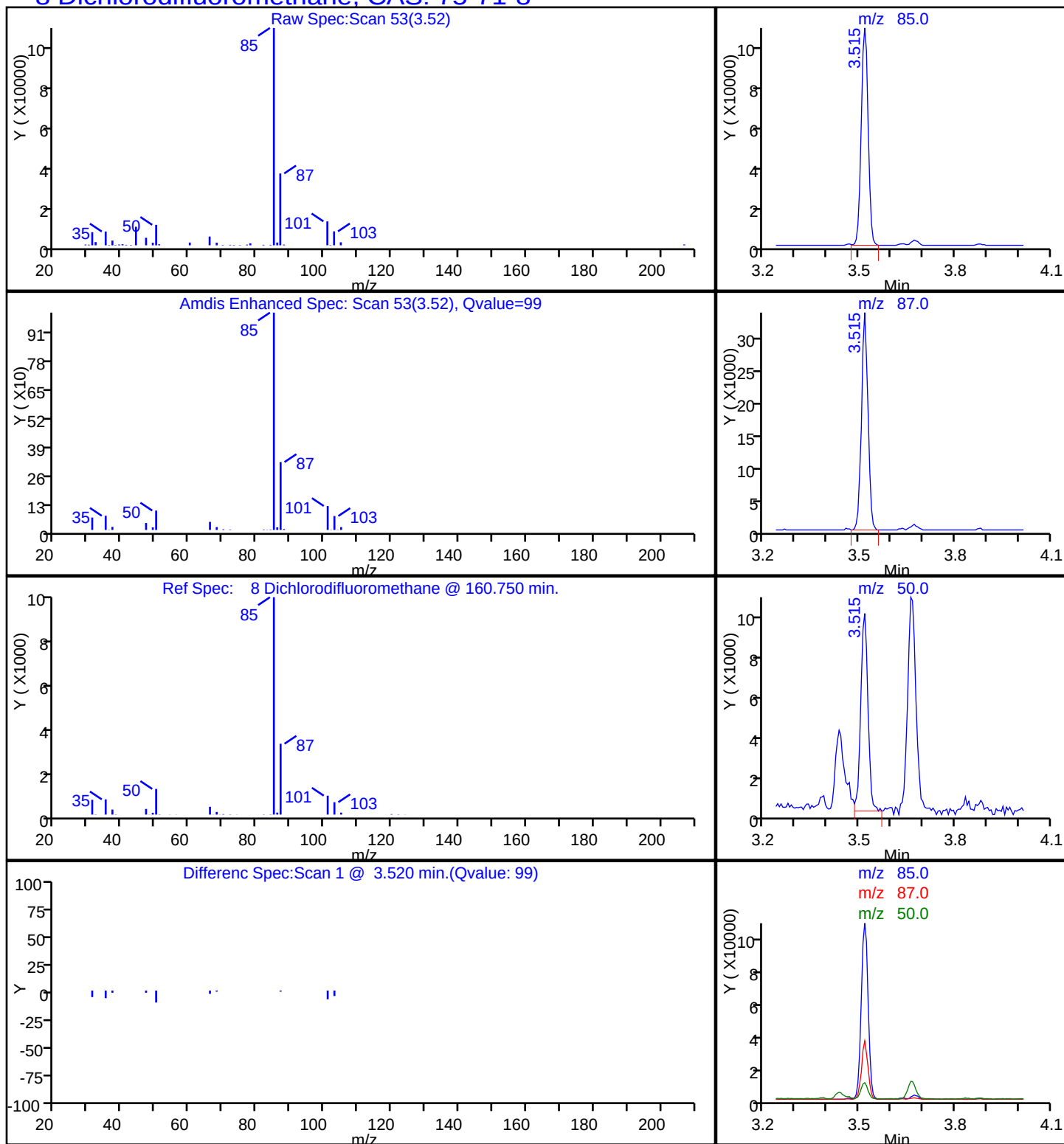
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P108.D

Injection Date: 20-Apr-2017 18:27:30

Instrument ID: MG

Lims ID: 140-7831-A-6

Lab Sample ID: 140-7831-6

Client ID: H42-BA

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 12

Purge Vol: 500.000 mL

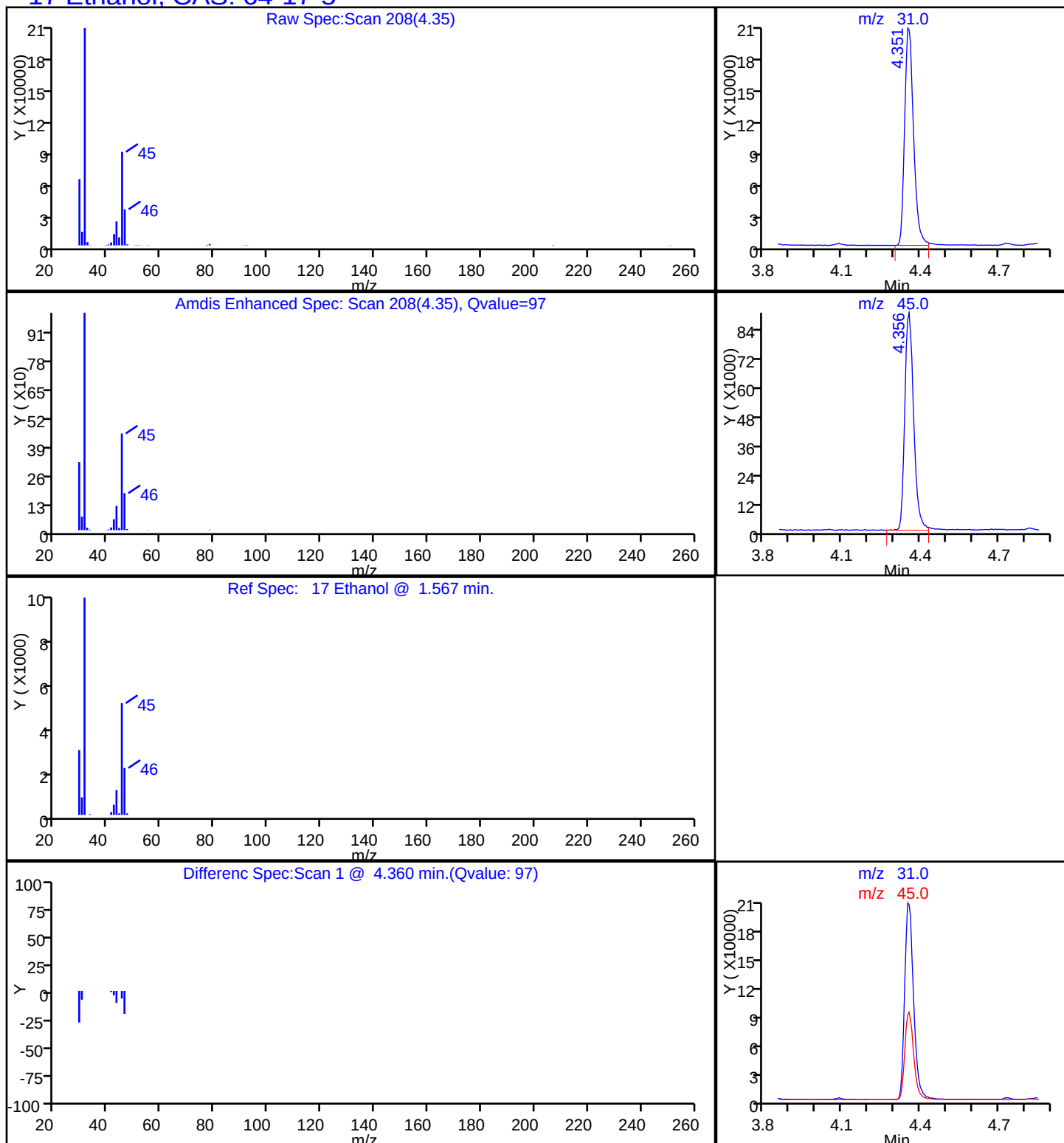
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P108.D

Injection Date: 20-Apr-2017 18:27:30

Instrument ID: MG

Lims ID: 140-7831-A-6

Lab Sample ID: 140-7831-6

Client ID: H42-BA

Operator ID: 7126

ALS Bottle#: 8

Worklist Smp#: 12

Purge Vol: 500.000 mL

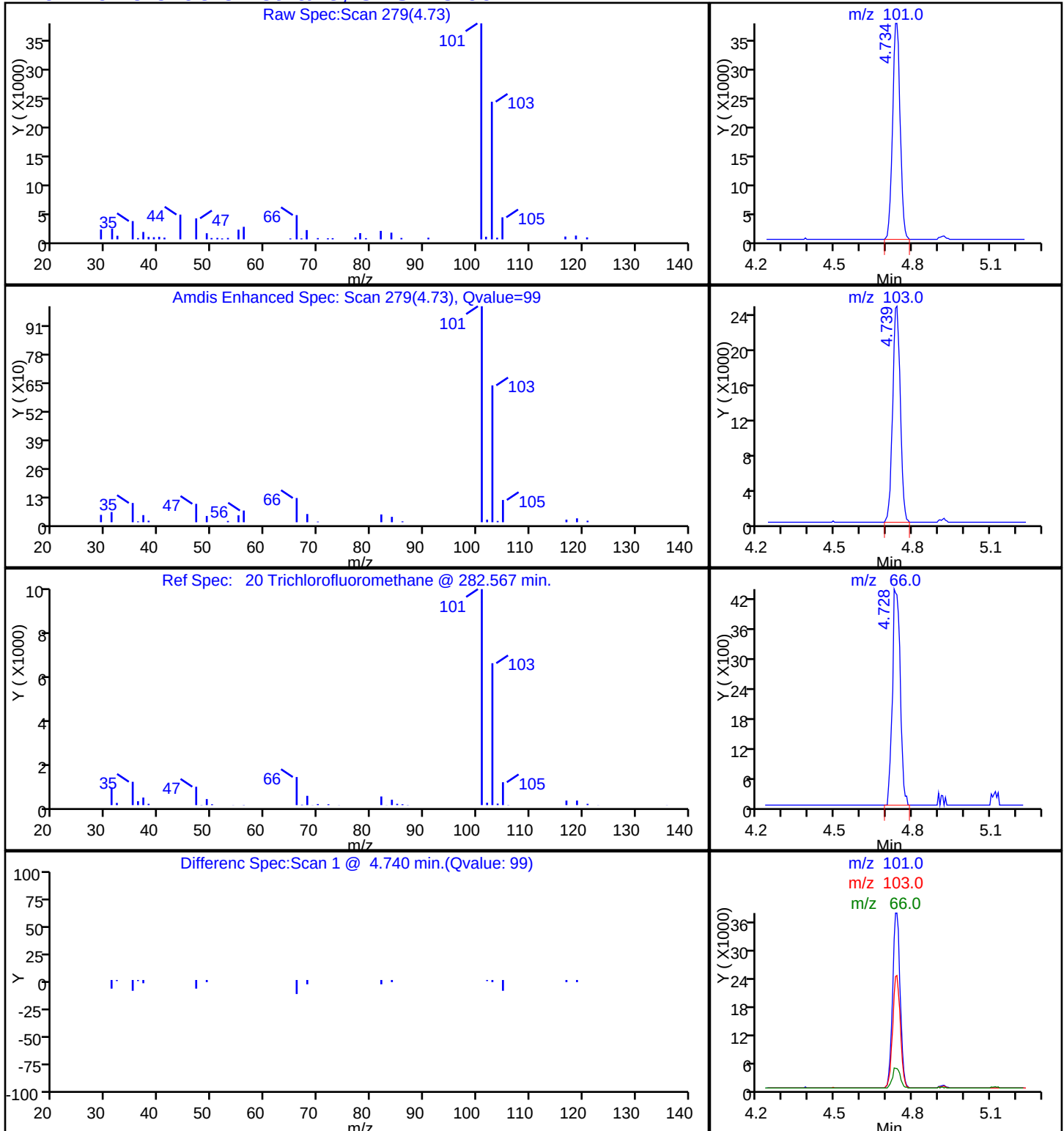
Dil. Factor: 1.0000

Method: MG_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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H43-SS-1018 Lab Sample ID: 140-7831-7
 Matrix: Air Lab File ID: GD20P109.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:09
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 19:15
 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.: 10584 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	0.14		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	1.3		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	0.26		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	0.080		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	0.35		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H43-SS-1018 Lab Sample ID: 140-7831-7
 Matrix: Air Lab File ID: GD20P109.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:09
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 19:15
 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.: 10584 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	6.9		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	ND		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	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	0.25		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		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H43-SS-1018 Lab Sample ID: 140-7831-7
 Matrix: Air Lab File ID: GD20P109.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:09
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 19:15
 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.: 10584 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	0.75		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	3.8		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.1		0.82	
71-43-2	Benzene	78.11	0.36		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	0.51		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	0.73		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H43-SS-1018 Lab Sample ID: 140-7831-7
 Matrix: Air Lab File ID: GD20P109.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:09
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 19:15
 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.: 10584 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	13		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	0.88		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	0.95		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		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P109.D
 Lims ID: 140-7831-A-7
 Client ID: H43-SS-1018
 Sample Type: Client
 Inject. Date: 20-Apr-2017 19:15:30 ALS Bottle#: 9 Worklist Smp#: 13
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004683-013
 Misc. Info.: 140-7831-a-7
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 21-Apr-2017 11:03:51 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK027

First Level Reviewer: tajh

Date: 21-Apr-2017 10:52:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.964	7.969	-0.005	68	290914	4.00	
* 2 1,4-Difluorobenzene	114	10.126	10.131	-0.005	94	1443986	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.001	15.006	-0.005	88	1463888	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.678	16.678	0.000	85	1198479	4.14	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	152266	0.4945	
9 Chloromethane	52	3.661	3.660	0.000	98	7352	0.3549	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.677	3.671	0.006	55	3102	0.0169	
16 Chloroethane	64	4.259	4.259	0.000	50	876	0.0213	
17 Ethanol	31	4.356	4.356	0.000	96	203126	6.94	
20 Trichlorofluoromethane	101	4.739	4.739	0.000	99	72381	0.2360	
29 2-Methyl-2-propanol	59	5.467	5.456	0.011	86	5473	0.0463	
30 1,1,2-Trichloro-1,2,2-trif	101	5.510	5.510	0.000	95	12541	0.0701	
31 Methylene Chloride	84	5.645	5.639	0.006	80	13032	0.1863	
39 2-Butanone (MEK)	72	7.252	7.252	0.000	96	43063	1.30	
40 Hexane	56	7.311	7.317	-0.005	76	7047	0.1227	
44 Chloroform	83	7.985	7.996	-0.011	88	7480	0.0367	
47 1,1,1-Trichloroethane	97	8.961	8.967	-0.006	94	32649	0.1383	
49 Benzene	78	9.549	9.554	-0.005	62	27889	0.1137	
50 Cyclohexane	69	9.544	9.560	-0.016	45	3637	0.0881	
51 Carbon tetrachloride	117	9.581	9.581	0.000	98	20618	0.0804	
56 Isooctane	57	10.374	10.385	-0.011	83	12562	0.0345	
59 Trichloroethene	130	10.859	10.870	-0.011	90	2744	0.0207	
65 4-Methyl-2-pentanone (MIBK	43	12.100	12.100	0.000	92	36805	0.2612	
68 Toluene	91	12.989	12.995	-0.006	93	73255	0.2512	
76 Tetrachloroethene	129	14.165	14.165	0.000	87	2350	0.0176	
79 Ethylbenzene	91	15.362	15.362	0.000	98	22470	0.0552	
81 m-Xylene & p-Xylene	91	15.529	15.534	-0.005	100	66696	0.2027	
85 o-Xylene	91	16.063	16.063	0.000	96	25707	0.0764	
96 1,2,4-Trimethylbenzene	105	17.923	17.929	-0.006	97	22069	0.0534	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P109.D

Injection Date: 20-Apr-2017 19:15:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7831-A-7

Lab Sample ID: 140-7831-7

Worklist Smp#: 13

Client ID: H43-SS-1018

Purge Vol: 500.000 mL

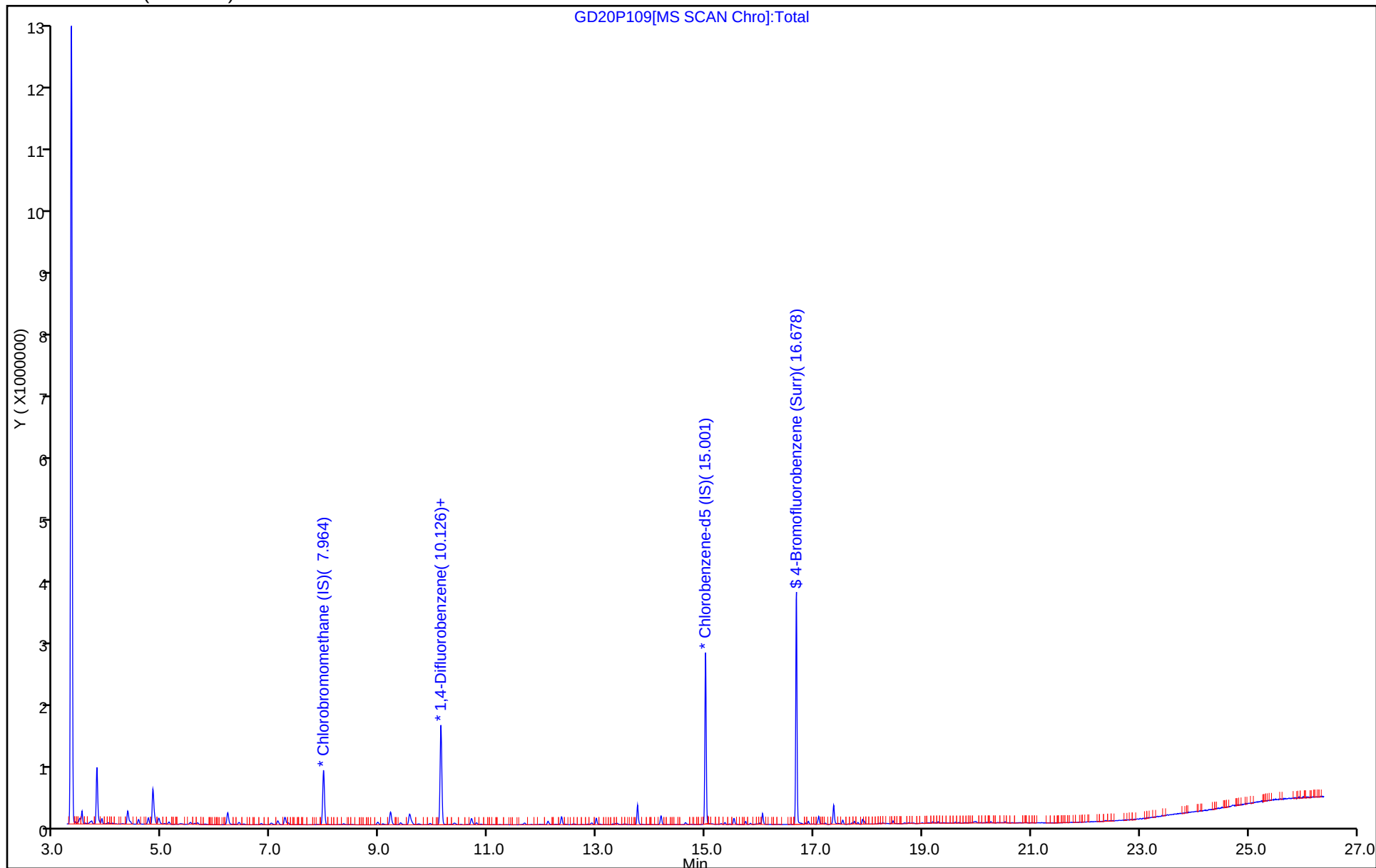
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P109.D
Lims ID: 140-7831-A-7
Client ID: H43-SS-1018
Sample Type: Client
Inject. Date: 20-Apr-2017 19:15:30 ALS Bottle#: 9 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004683-013
Misc. Info.: 140-7831-a-7
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2017 11:03:51 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: tajh

Date: 21-Apr-2017 10:52:26

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.14	103.57

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P109.D

Injection Date: 20-Apr-2017 19:15:30

Instrument ID: MG

Lims ID: 140-7831-A-7

Lab Sample ID: 140-7831-7

Client ID: H43-SS-1018

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 13

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

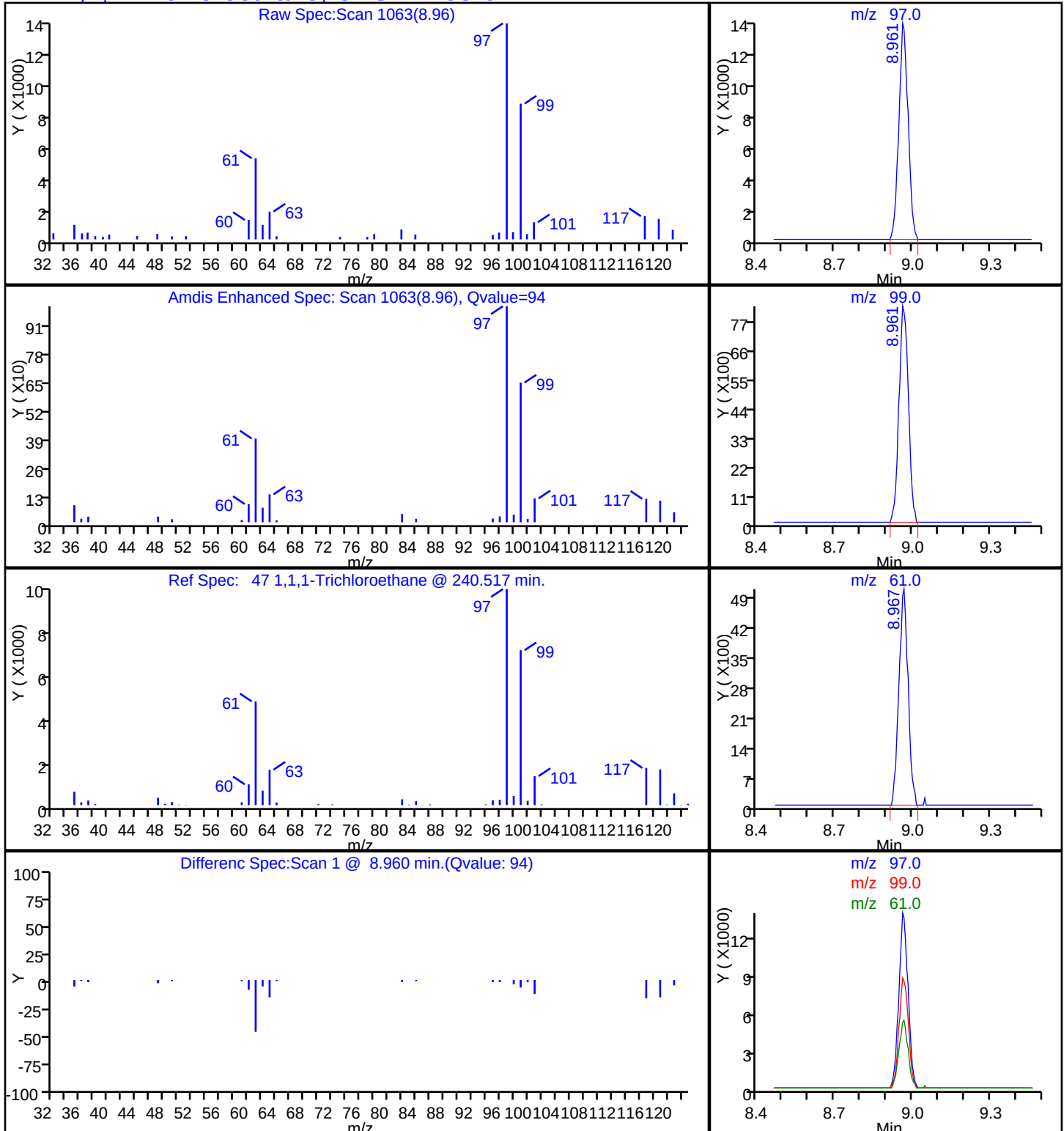
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

47 1,1,1-Trichloroethane, CAS: 71-55-6



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P109.D

Injection Date: 20-Apr-2017 19:15:30

Instrument ID: MG

Lims ID: 140-7831-A-7

Lab Sample ID: 140-7831-7

Client ID: H43-SS-1018

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 13

Purge Vol: 500.000 mL

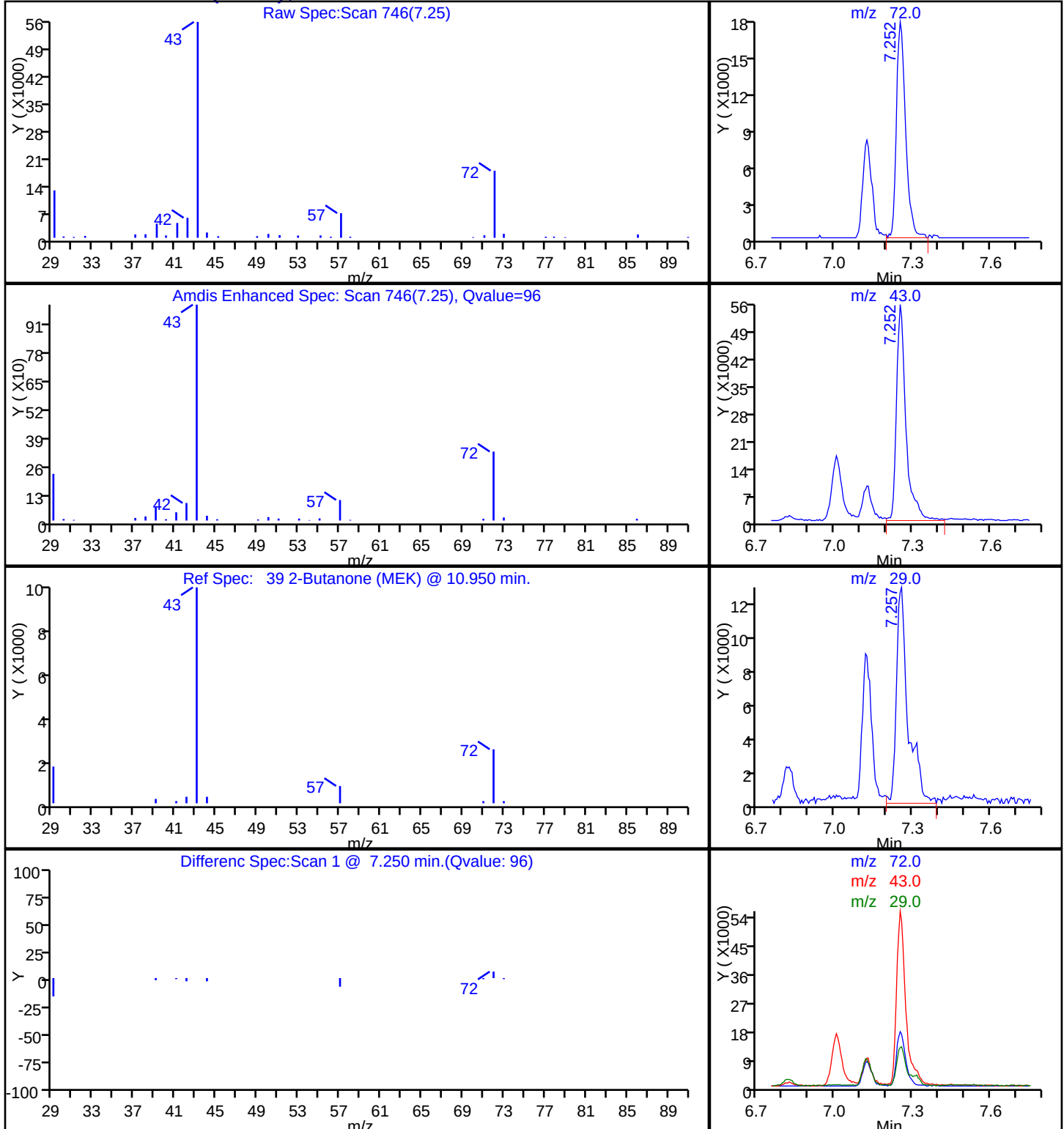
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P109.D

Injection Date: 20-Apr-2017 19:15:30

Instrument ID: MG

Lims ID: 140-7831-A-7

Lab Sample ID: 140-7831-7

Client ID: H43-SS-1018

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 13

Purge Vol: 500.000 mL

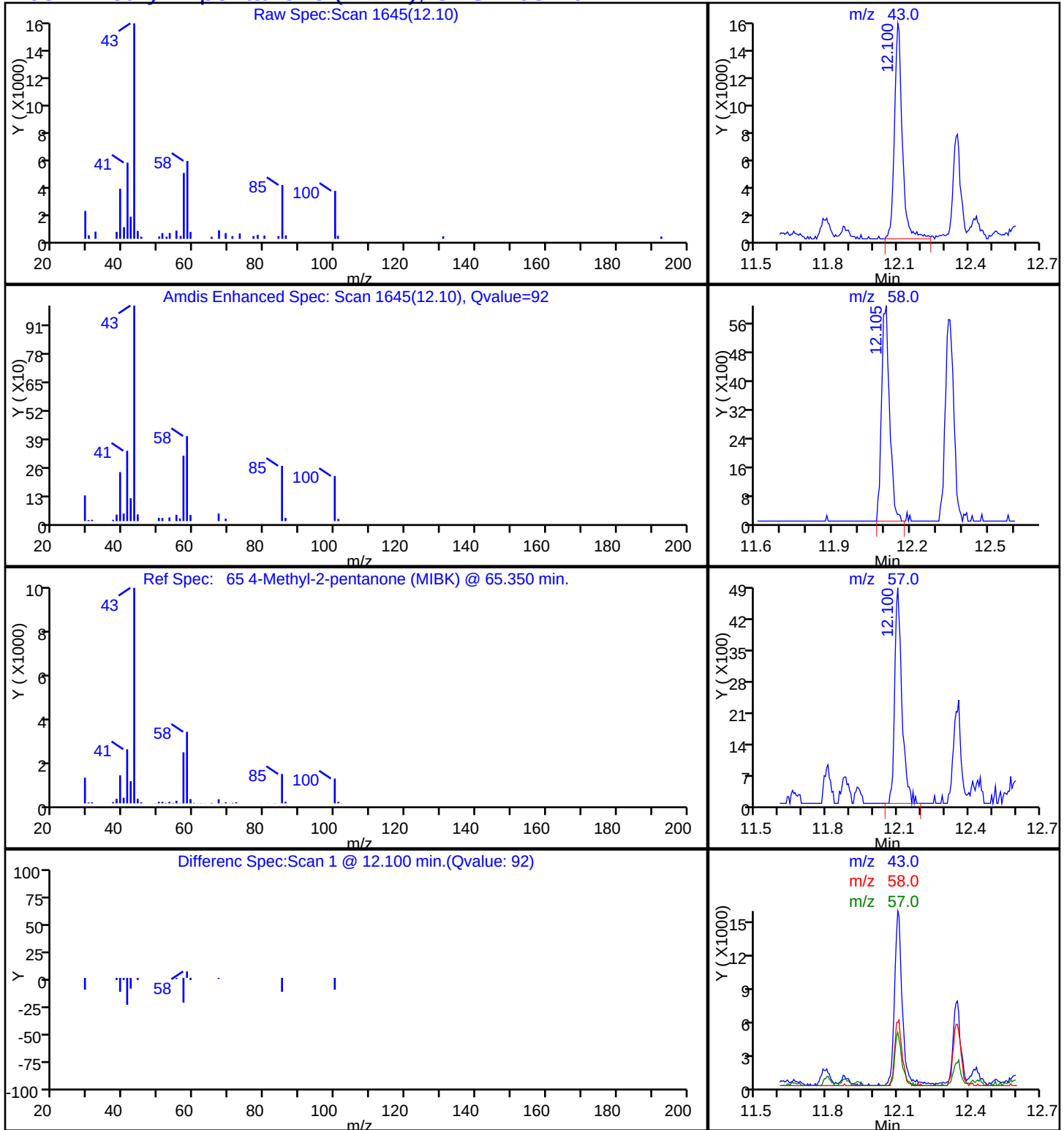
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P109.D

Injection Date: 20-Apr-2017 19:15:30

Instrument ID: MG

Lims ID: 140-7831-A-7

Lab Sample ID: 140-7831-7

Client ID: H43-SS-1018

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 13

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

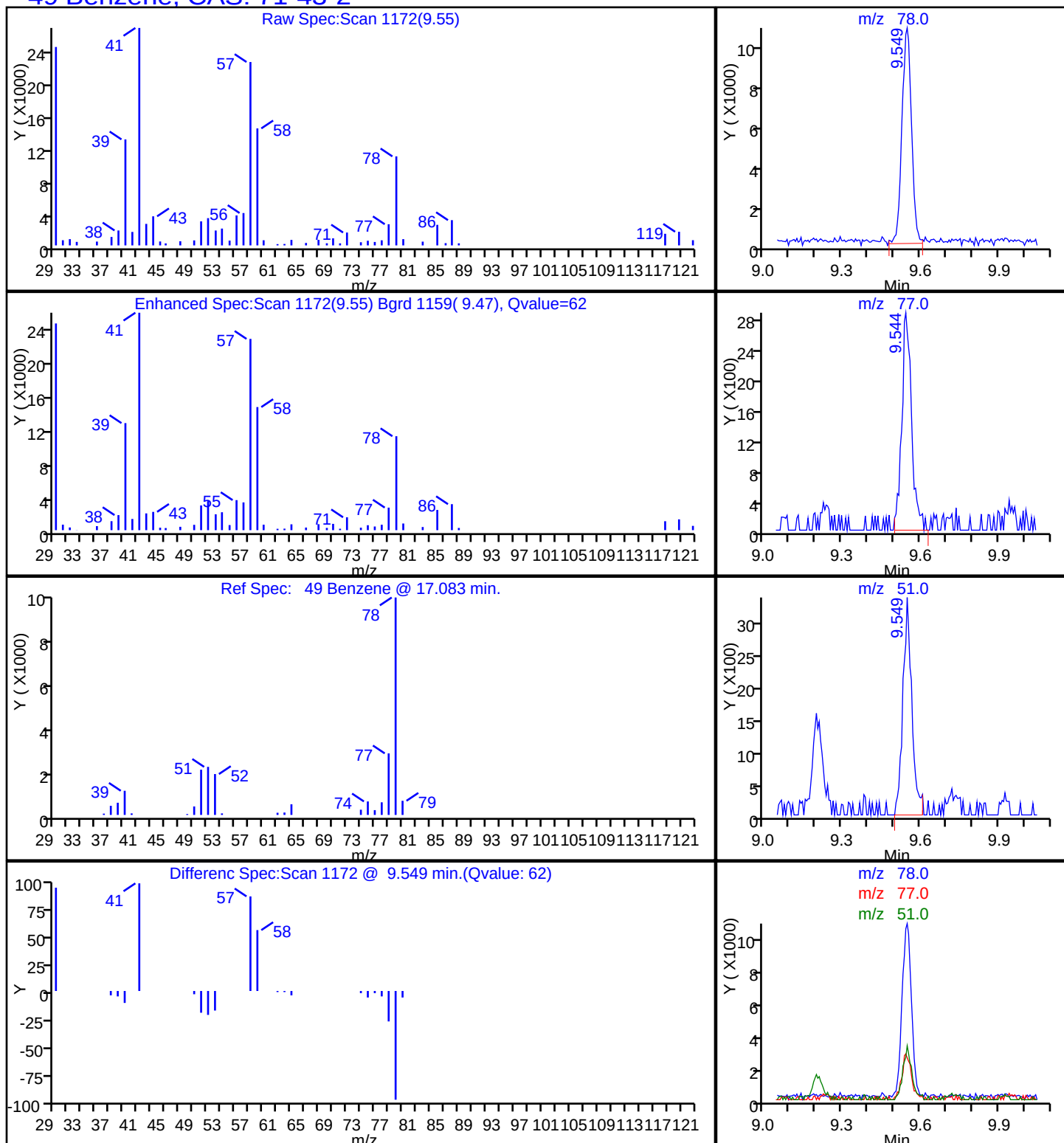
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P109.D

Injection Date: 20-Apr-2017 19:15:30

Instrument ID: MG

Lims ID: 140-7831-A-7

Lab Sample ID: 140-7831-7

Client ID: H43-SS-1018

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 13

Purge Vol: 500.000 mL

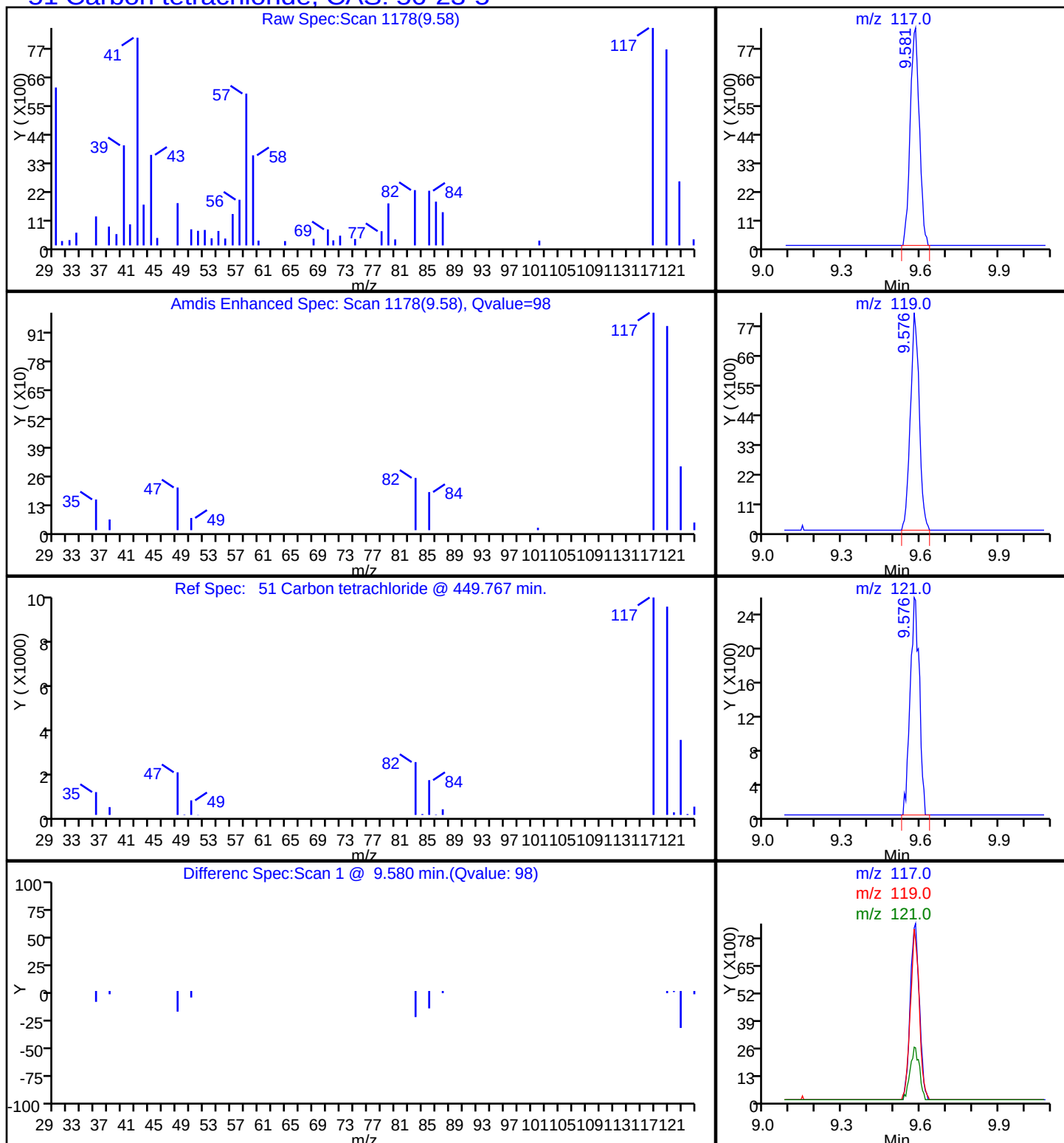
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P109.D

Injection Date: 20-Apr-2017 19:15:30

Instrument ID: MG

Lims ID: 140-7831-A-7

Lab Sample ID: 140-7831-7

Client ID: H43-SS-1018

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 13

Purge Vol: 500.000 mL

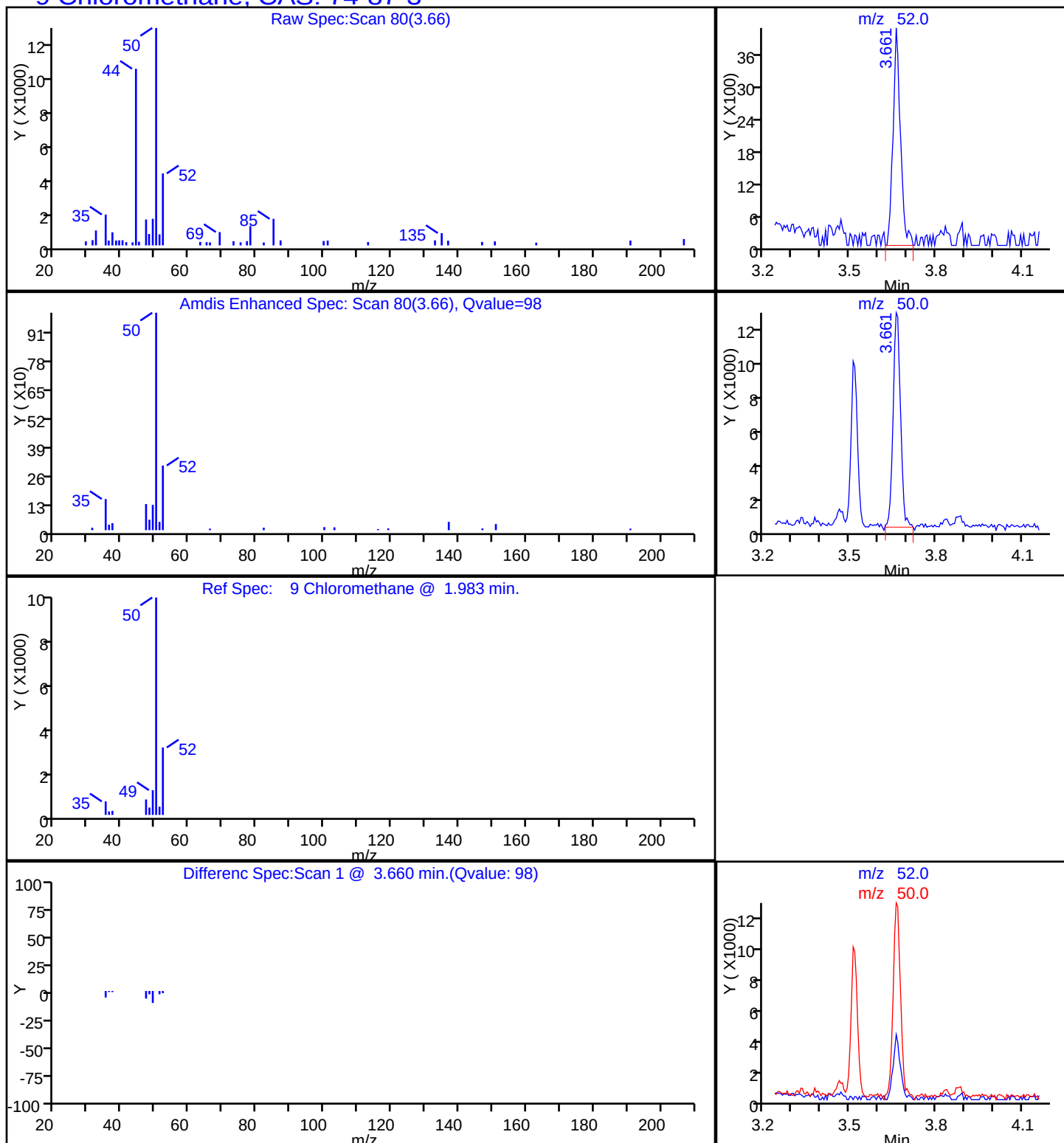
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\\Knoxville\\ChromData\\MG\\20170418-4683.b\\GD20P109.D

Injection Date: 20-Apr-2017 19:15:30

Instrument ID: MG

Lims ID: 140-7831-A-7

Lab Sample ID: 140-7831-7

Client ID: H43-SS-1018

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 13

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

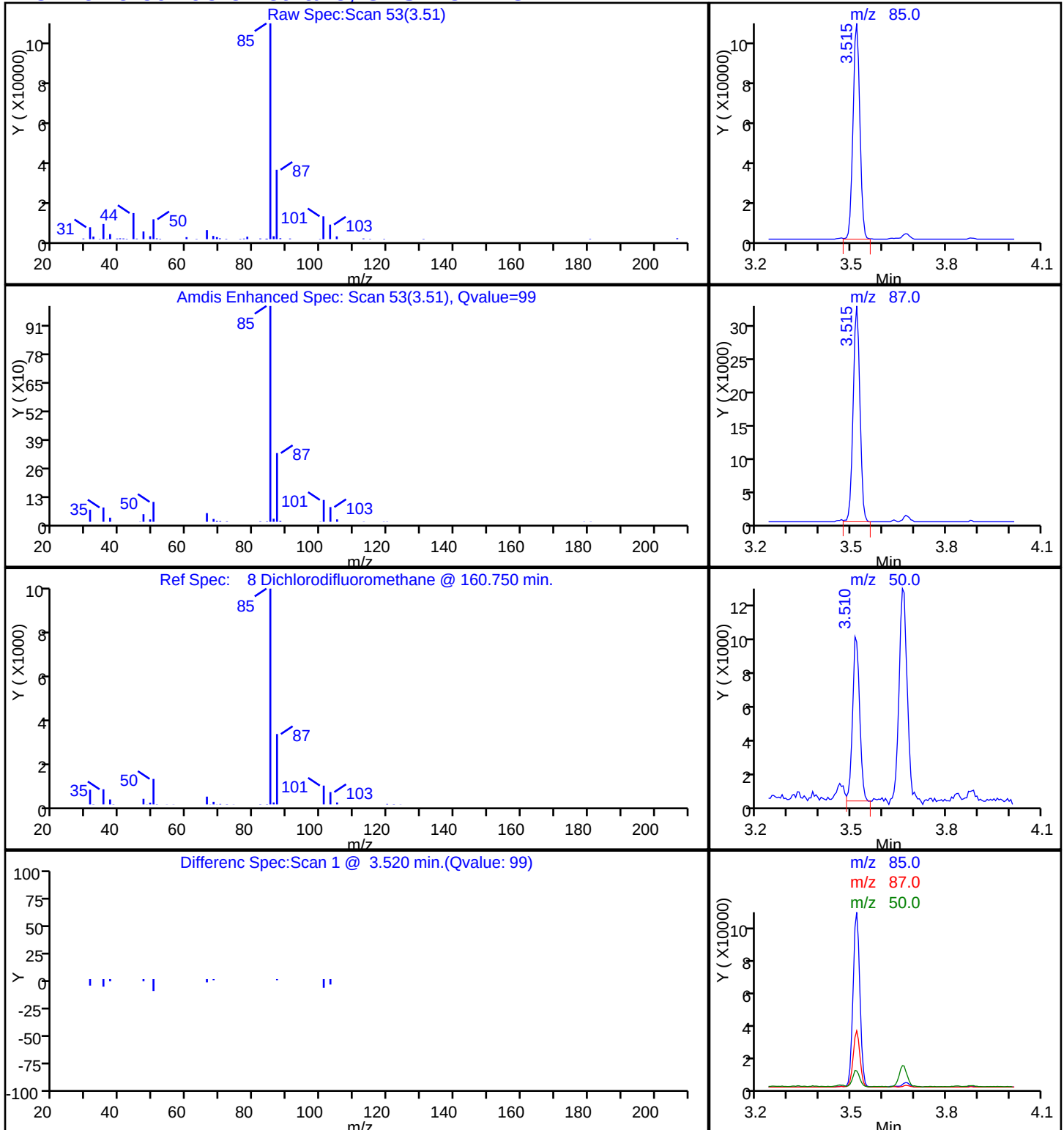
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P109.D

Injection Date: 20-Apr-2017 19:15:30

Instrument ID: MG

Lims ID: 140-7831-A-7

Lab Sample ID: 140-7831-7

Client ID: H43-SS-1018

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 13

Purge Vol: 500.000 mL

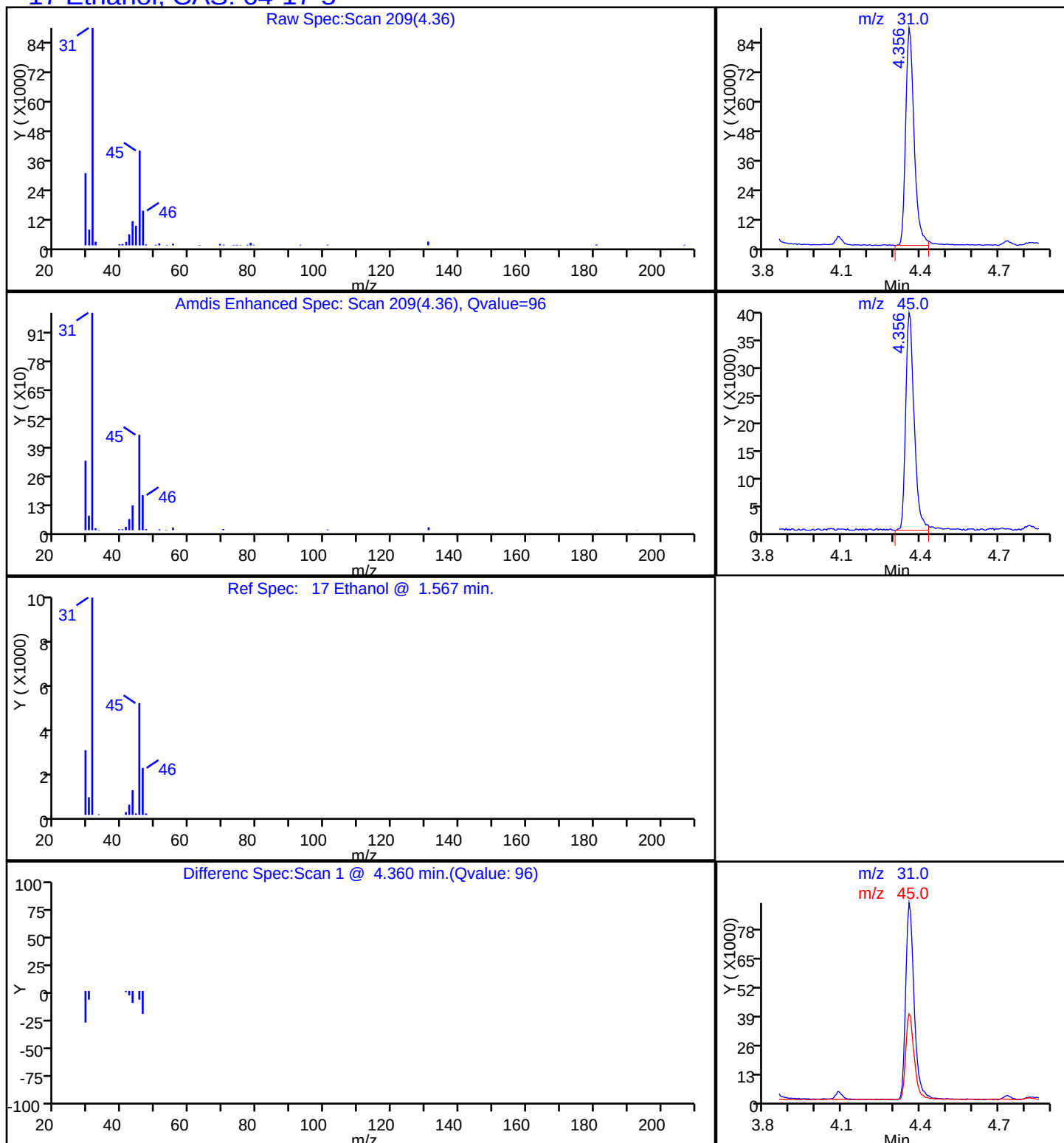
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P109.D

Injection Date: 20-Apr-2017 19:15:30

Instrument ID: MG

Lims ID: 140-7831-A-7

Lab Sample ID: 140-7831-7

Client ID: H43-SS-1018

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 13

Purge Vol: 500.000 mL

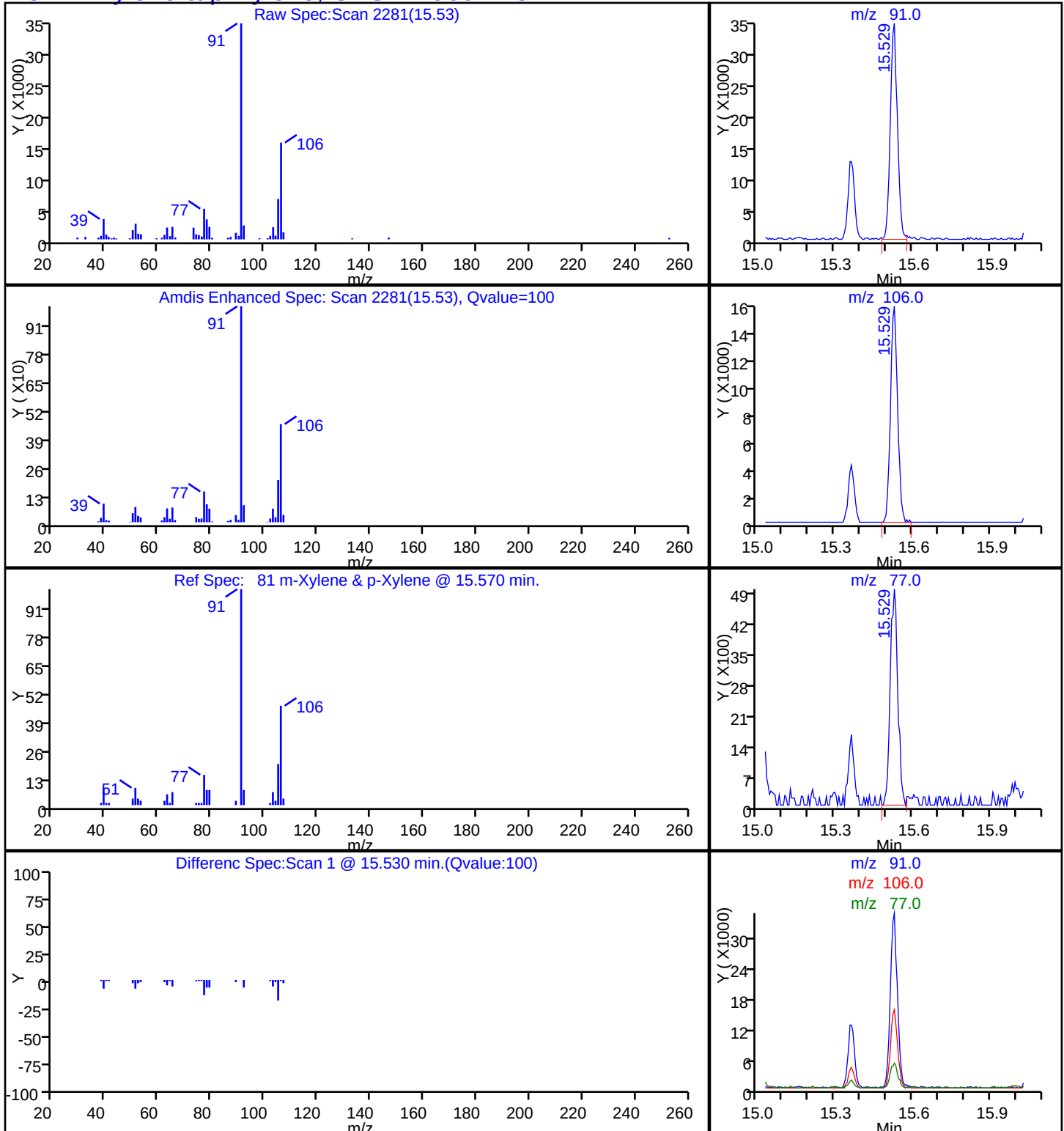
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P109.D

Injection Date: 20-Apr-2017 19:15:30

Instrument ID: MG

Lims ID: 140-7831-A-7

Lab Sample ID: 140-7831-7

Client ID: H43-SS-1018

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 13

Purge Vol: 500.000 mL

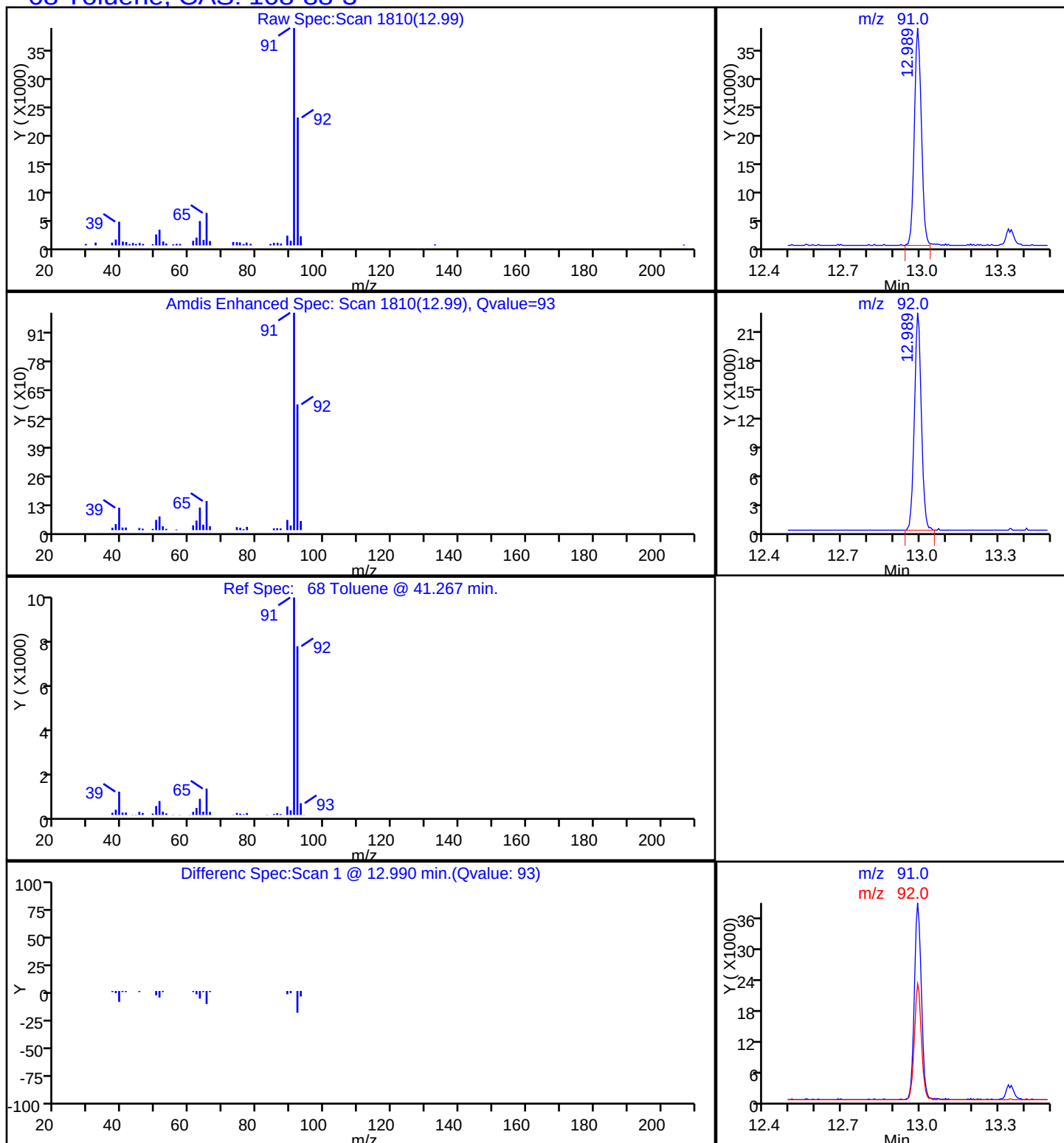
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P109.D

Injection Date: 20-Apr-2017 19:15:30

Instrument ID: MG

Lims ID: 140-7831-A-7

Lab Sample ID: 140-7831-7

Client ID: H43-SS-1018

Operator ID: 7126

ALS Bottle#: 9

Worklist Smp#: 13

Purge Vol: 500.000 mL

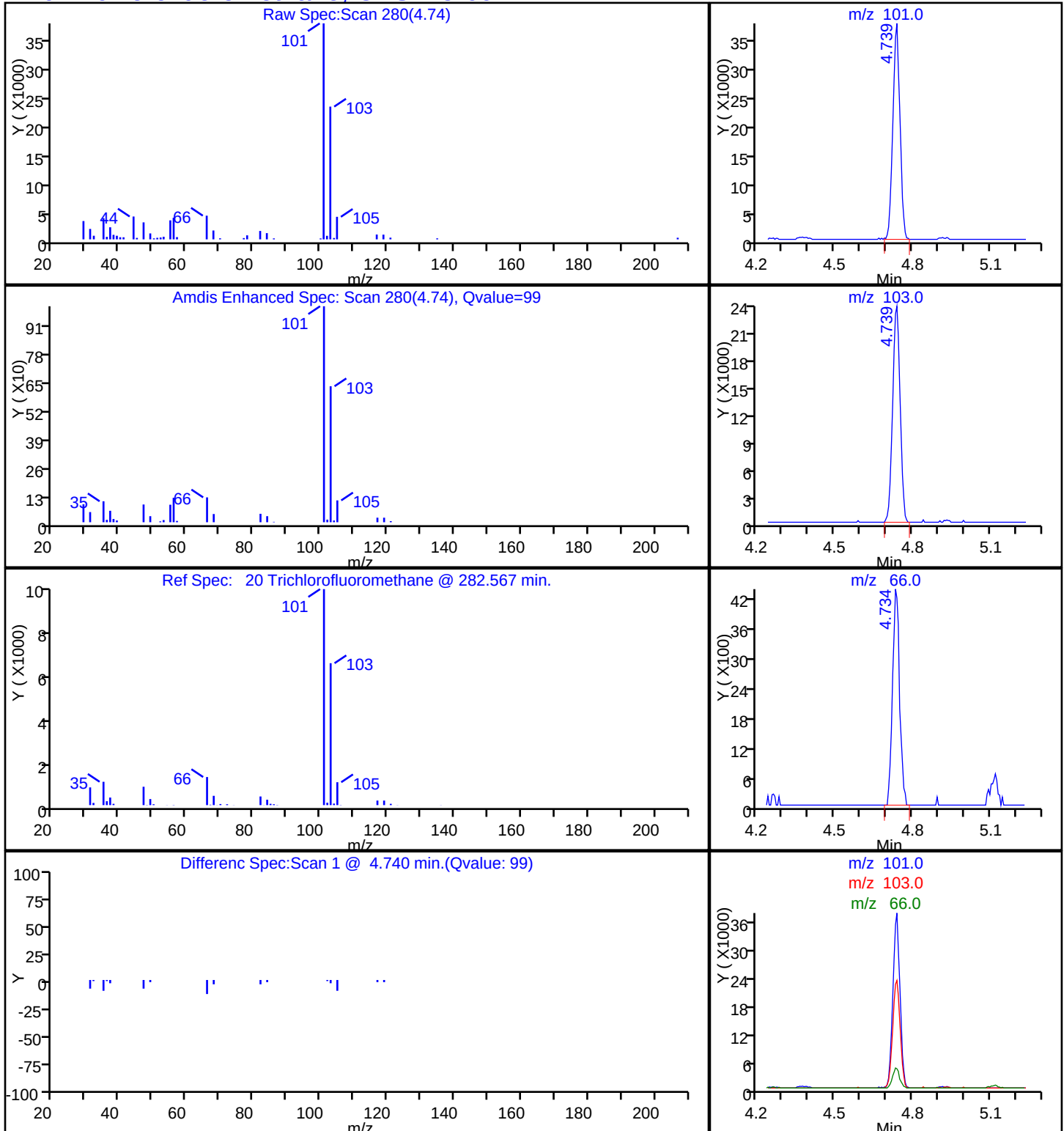
Dil. Factor: 1.0000

Method: MG_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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H43-BA-1018 Lab Sample ID: 140-7831-8
 Matrix: Air Lab File ID: GD20P110.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:08
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 20:02
 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.: 10584 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	0.60		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	0.080		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H43-BA-1018 Lab Sample ID: 140-7831-8
 Matrix: Air Lab File ID: GD20P110.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:08
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 20:02
 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.: 10584 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	6.0		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	0.84		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	0.17		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	0.31		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H43-BA-1018 Lab Sample ID: 140-7831-8
 Matrix: Air Lab File ID: GD20P110.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:08
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 20:02
 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.: 10584 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	1.8		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	0.50		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	0.80		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H43-BA-1018 Lab Sample ID: 140-7831-8
 Matrix: Air Lab File ID: GD20P110.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:08
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 20:02
 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.: 10584 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	11		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	2.9		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	0.53		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	0.63		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	1.7		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P110.D
 Lims ID: 140-7831-A-8
 Client ID: H43-BA-1018
 Sample Type: Client
 Inject. Date: 20-Apr-2017 20:02:30 ALS Bottle#: 10 Worklist Smp#: 14
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004683-014
 Misc. Info.: 140-7831-a-8
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 21-Apr-2017 11:03:51 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK027

First Level Reviewer: tajh

Date: 21-Apr-2017 10:53:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.964	7.969	-0.005	68	272321	4.00	
* 2 1,4-Difluorobenzene	114	10.126	10.131	-0.005	94	1383328	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.001	15.006	-0.005	87	1356700	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.672	16.678	-0.006	84	1089922	4.07	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	152123	0.5278	
9 Chloromethane	52	3.666	3.660	0.006	99	7502	0.3869	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.671	0.000	42	2902	0.0169	
17 Ethanol	31	4.356	4.356	0.000	97	165565	6.04	
20 Trichlorofluoromethane	101	4.739	4.739	0.000	99	87582	0.3051	
29 2-Methyl-2-propanol	59	5.478	5.456	0.022	90	7637	0.0691	
30 1,1,2-Trichloro-1,2,2-trif	101	5.515	5.510	0.005	95	12788	0.0764	
31 Methylene Chloride	84	5.639	5.639	0.000	82	54889	0.8382	
39 2-Butanone (MEK)	72	7.257	7.252	0.005	96	18493	0.5968	
40 Hexane	56	7.306	7.317	-0.010	78	4150	0.0772	
44 Chloroform	83	7.985	7.996	-0.011	91	5918	0.0310	
49 Benzene	78	9.544	9.554	-0.010	96	17591	0.0749	
50 Cyclohexane	69	9.560	9.560	0.000	43	792	0.0200	
51 Carbon tetrachloride	117	9.576	9.581	-0.005	98	19634	0.0799	
56 Isooctane	57	10.374	10.385	-0.011	36	6370	0.0183	
65 4-Methyl-2-pentanone (MIBK	43	12.110	12.100	0.010	93	10348	0.0767	
68 Toluene	91	12.989	12.995	-0.006	93	45051	0.1667	
79 Ethylbenzene	91	15.357	15.362	-0.006	98	12773	0.0338	
81 m-Xylene & p-Xylene	91	15.524	15.534	-0.010	99	37374	0.1226	
85 o-Xylene	91	16.058	16.063	-0.005	96	15052	0.0483	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P110.D

Injection Date: 20-Apr-2017 20:02:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7831-A-8

Lab Sample ID: 140-7831-8

Worklist Smp#: 14

Client ID: H43-BA-1018

Purge Vol: 500.000 mL

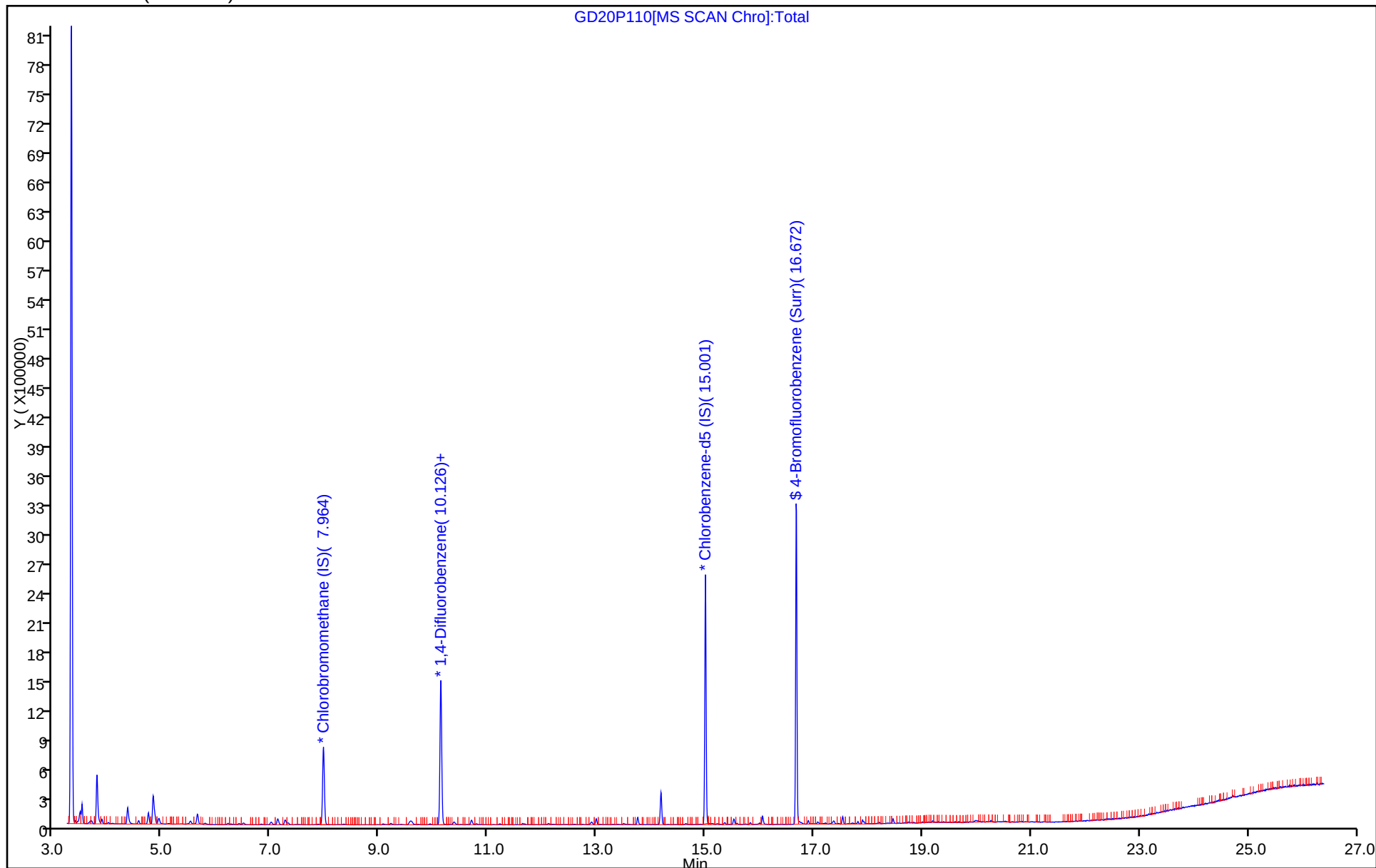
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P110.D
Lims ID: 140-7831-A-8
Client ID: H43-BA-1018
Sample Type: Client
Inject. Date: 20-Apr-2017 20:02:30 ALS Bottle#: 10 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004683-014
Misc. Info.: 140-7831-a-8
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2017 11:03:51 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: tajh

Date: 21-Apr-2017 10:53:03

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.07	101.63

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P110.D

Injection Date: 20-Apr-2017 20:02:30

Instrument ID: MG

Lims ID: 140-7831-A-8

Lab Sample ID: 140-7831-8

Client ID: H43-BA-1018

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

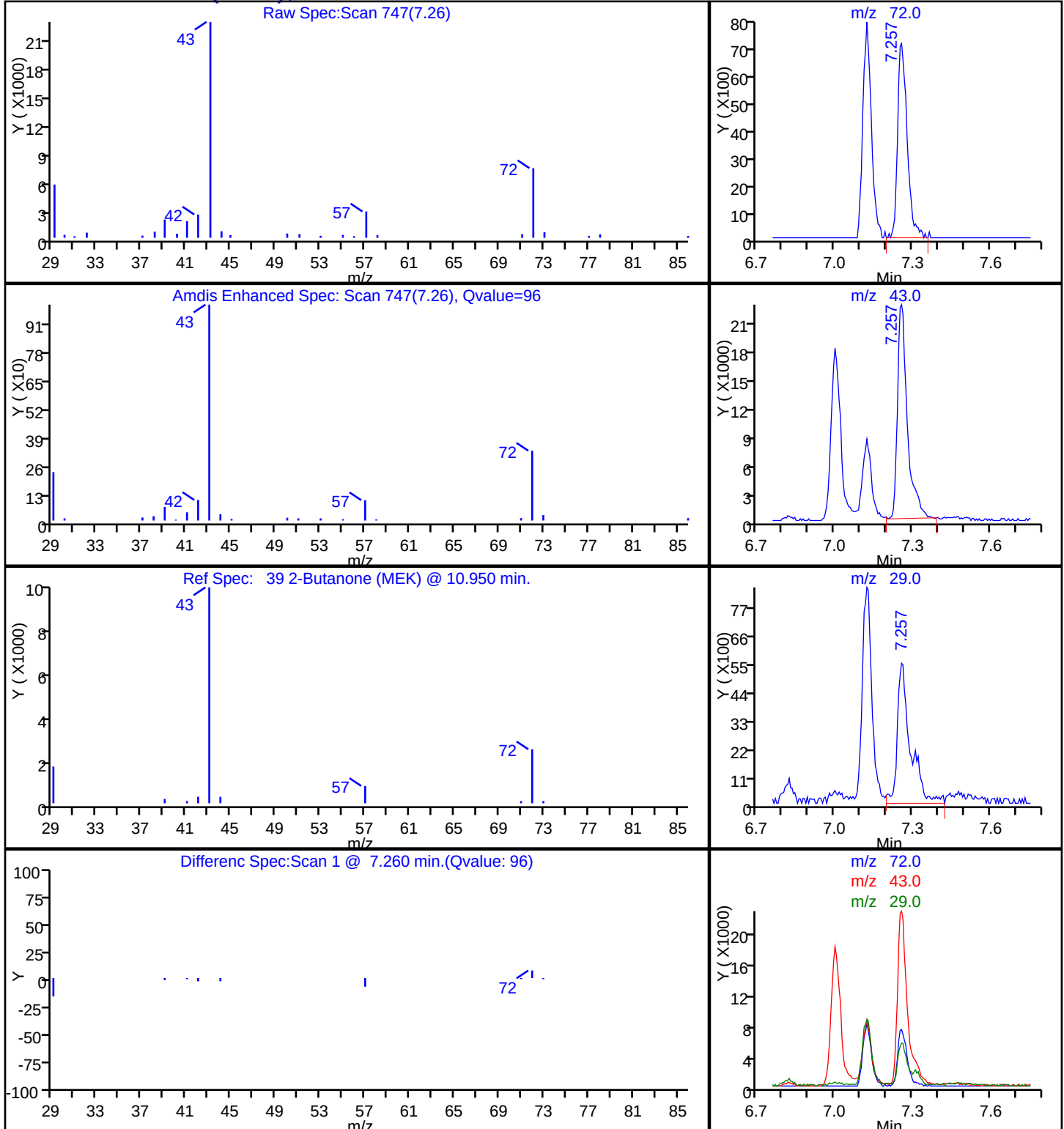
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P110.D

Injection Date: 20-Apr-2017 20:02:30

Instrument ID: MG

Lims ID: 140-7831-A-8

Lab Sample ID: 140-7831-8

Client ID: H43-BA-1018

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

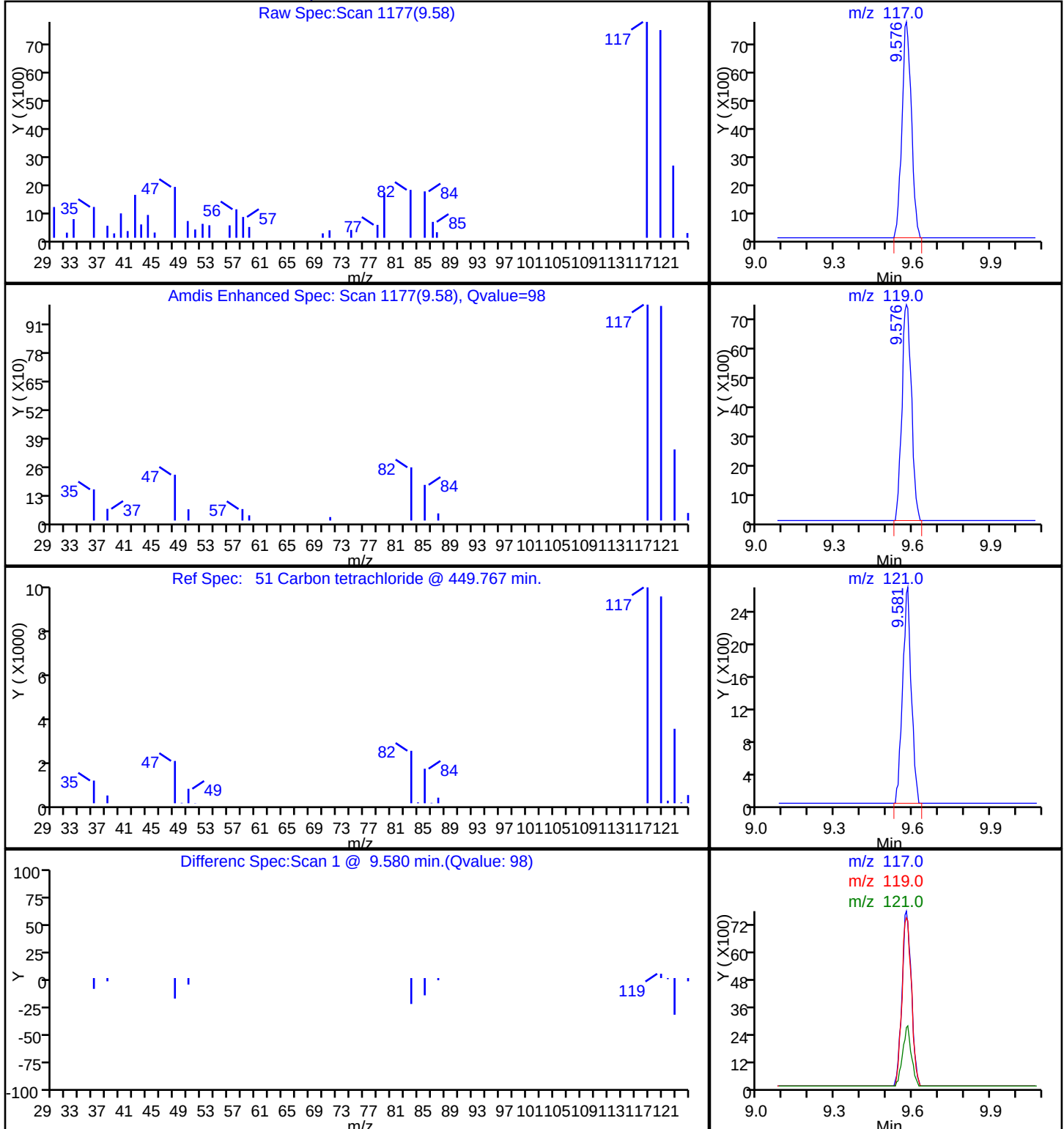
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P110.D

Injection Date: 20-Apr-2017 20:02:30

Instrument ID: MG

Lims ID: 140-7831-A-8

Lab Sample ID: 140-7831-8

Client ID: H43-BA-1018

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

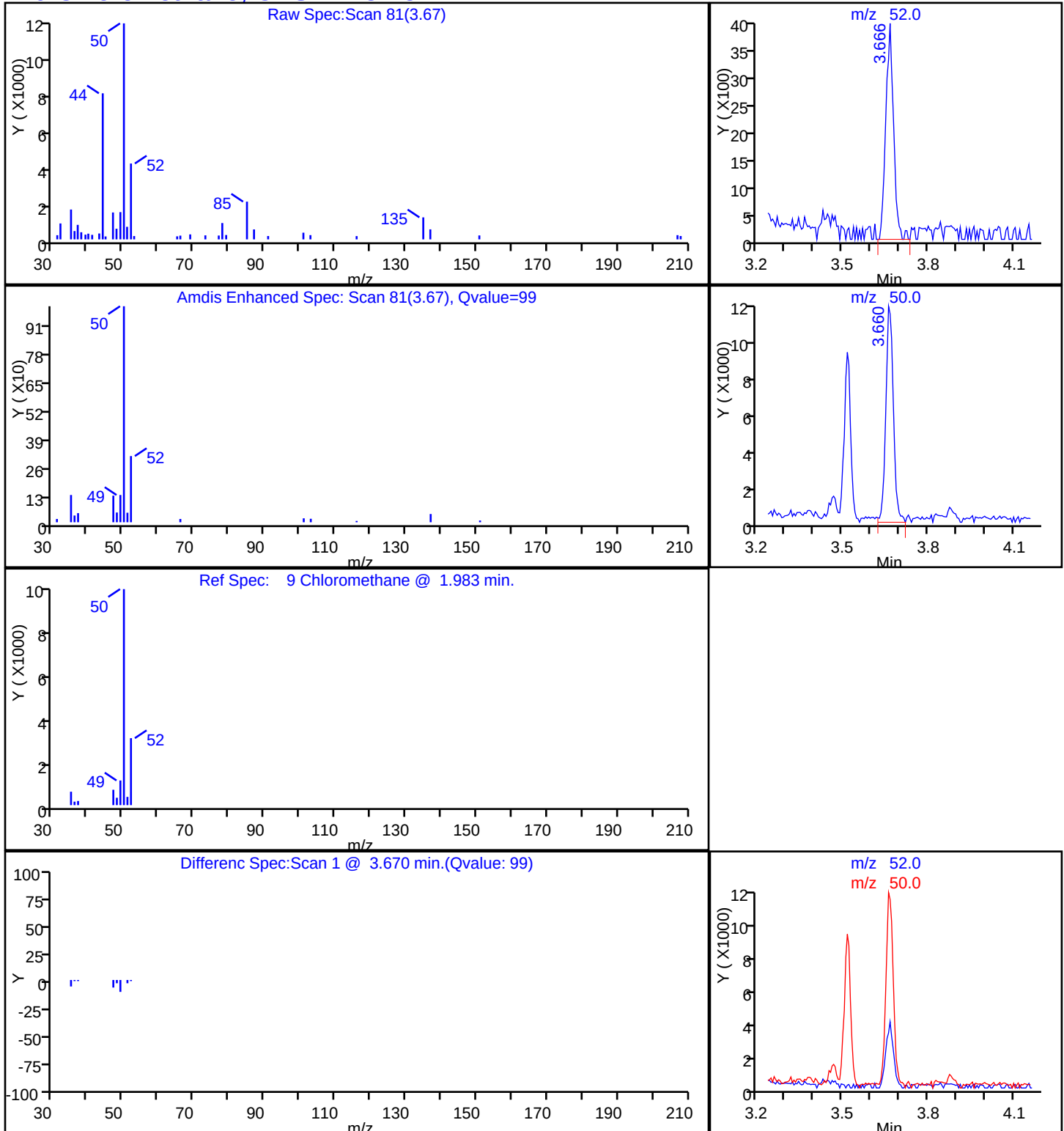
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P110.D

Injection Date: 20-Apr-2017 20:02:30

Instrument ID: MG

Lims ID: 140-7831-A-8

Lab Sample ID: 140-7831-8

Client ID: H43-BA-1018

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

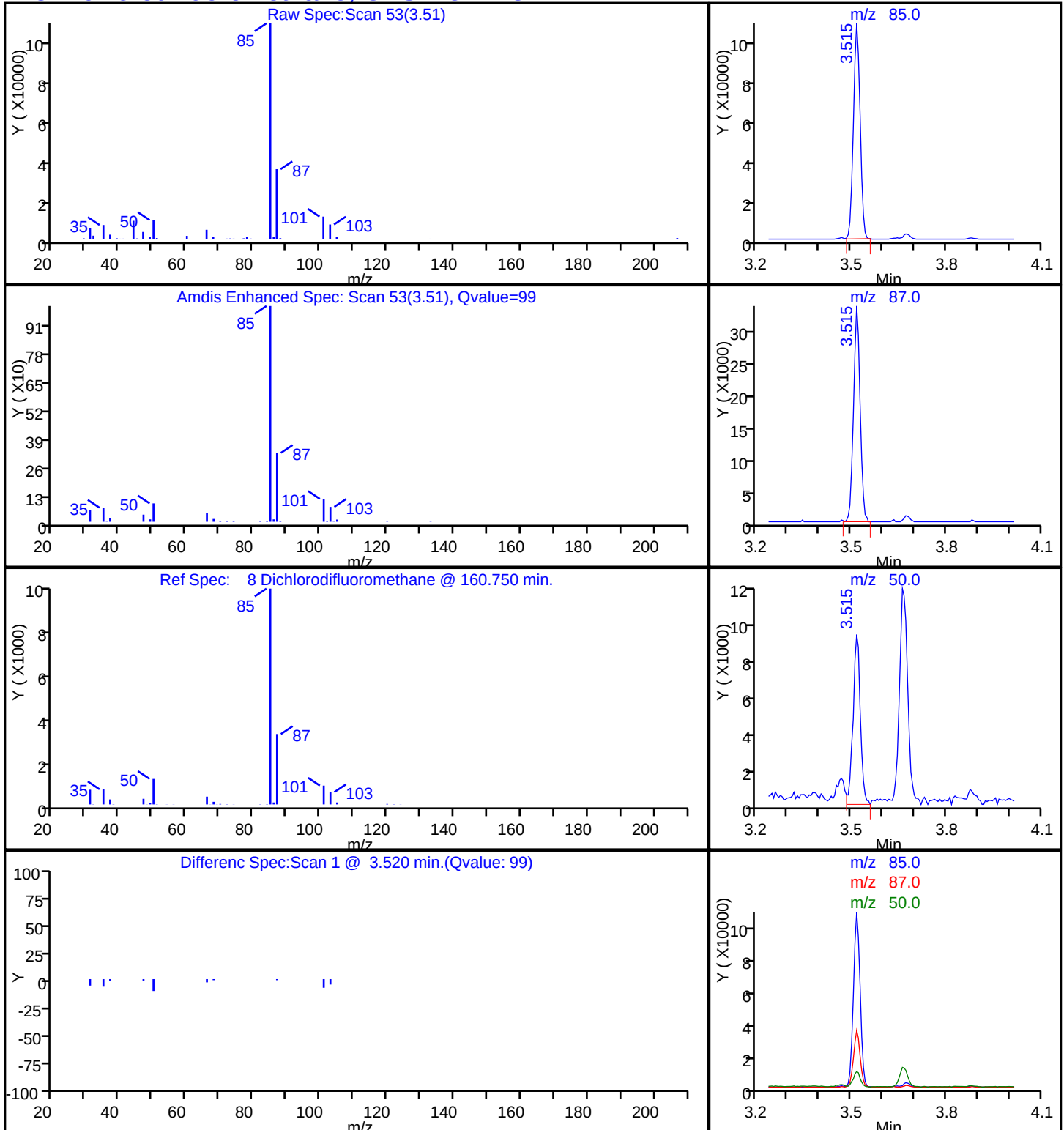
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P110.D

Injection Date: 20-Apr-2017 20:02:30

Instrument ID: MG

Lims ID: 140-7831-A-8

Lab Sample ID: 140-7831-8

Client ID: H43-BA-1018

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

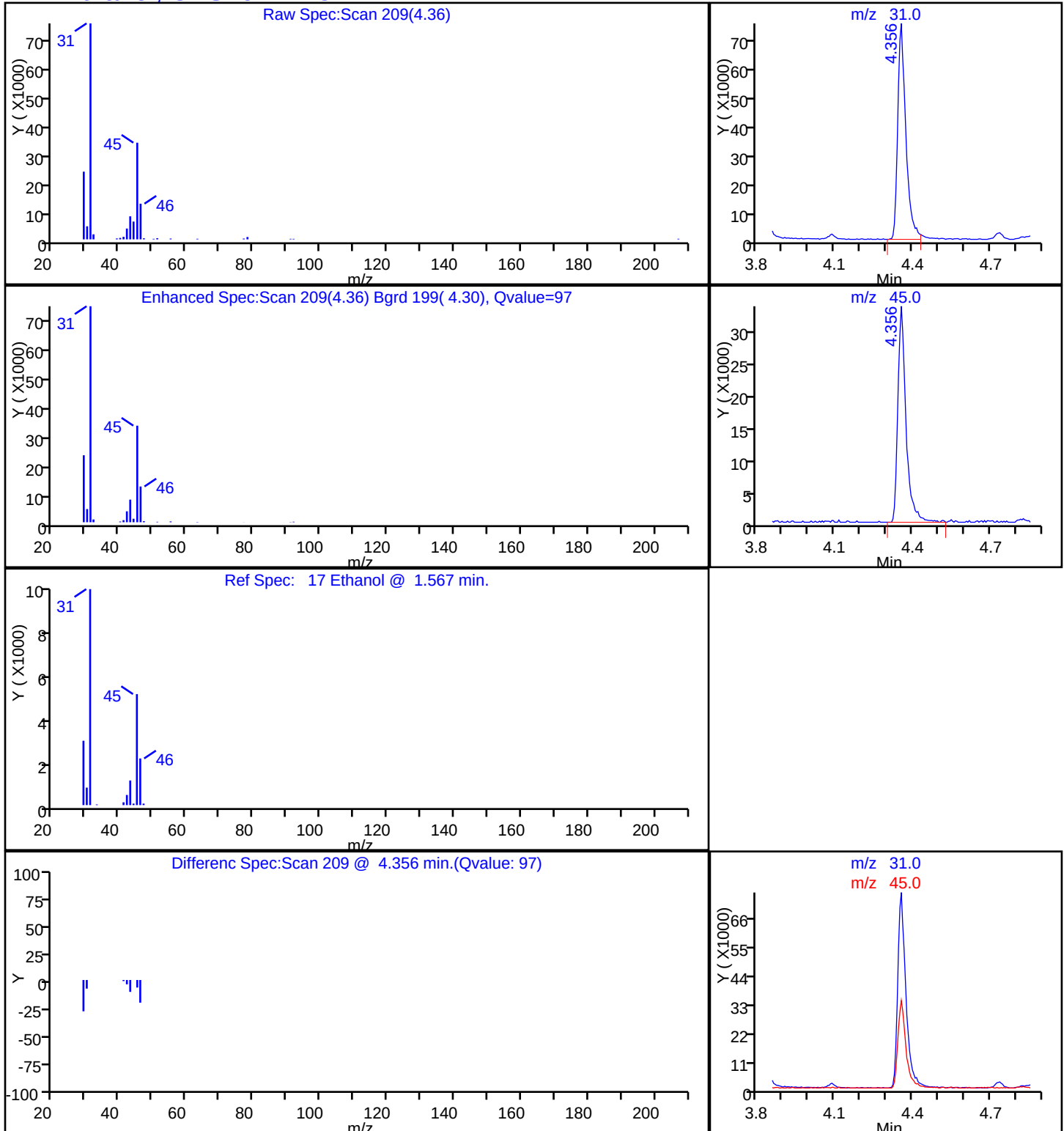
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P110.D

Injection Date: 20-Apr-2017 20:02:30

Instrument ID: MG

Lims ID: 140-7831-A-8

Lab Sample ID: 140-7831-8

Client ID: H43-BA-1018

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

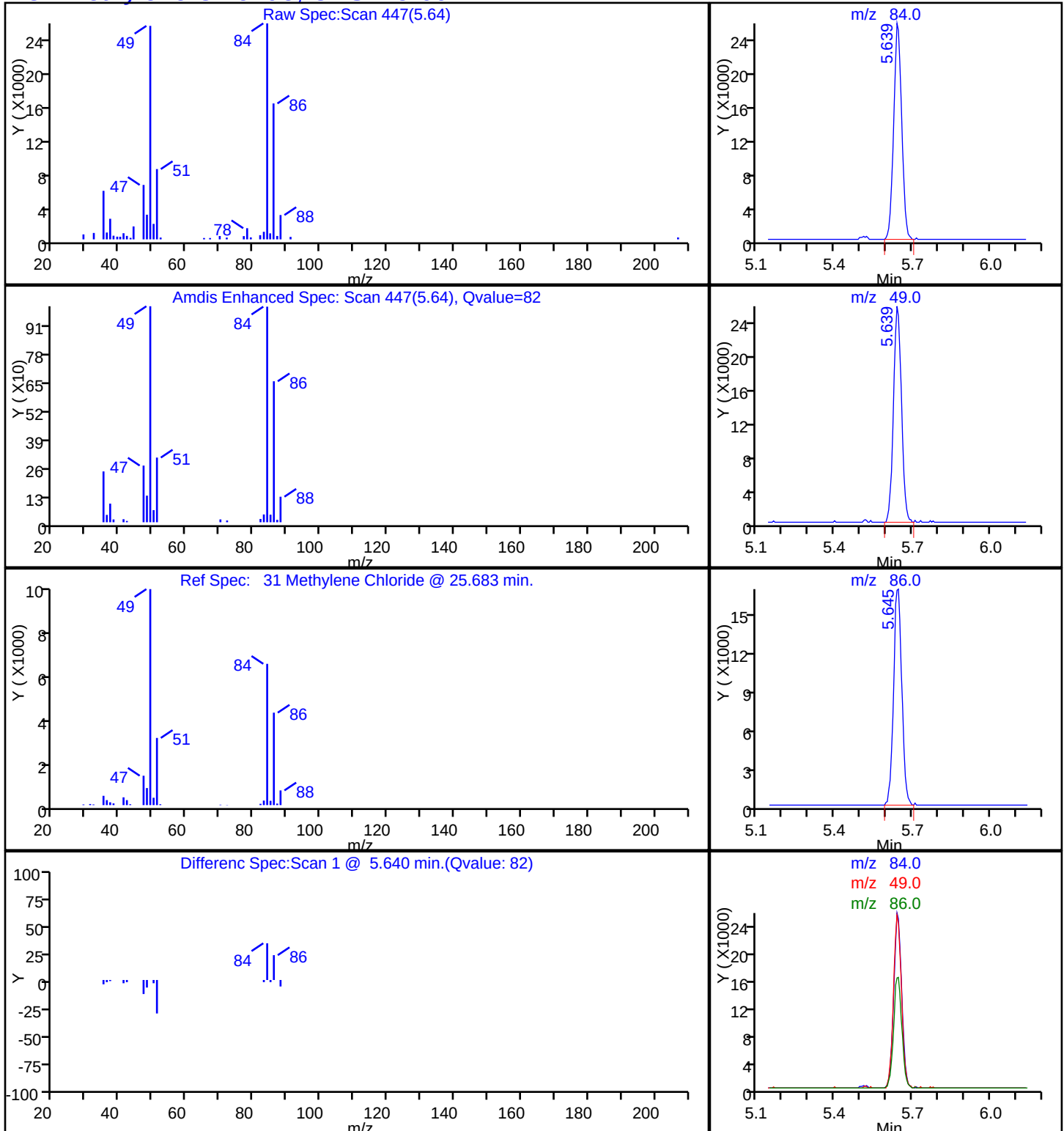
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P110.D

Injection Date: 20-Apr-2017 20:02:30

Instrument ID: MG

Lims ID: 140-7831-A-8

Lab Sample ID: 140-7831-8

Client ID: H43-BA-1018

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

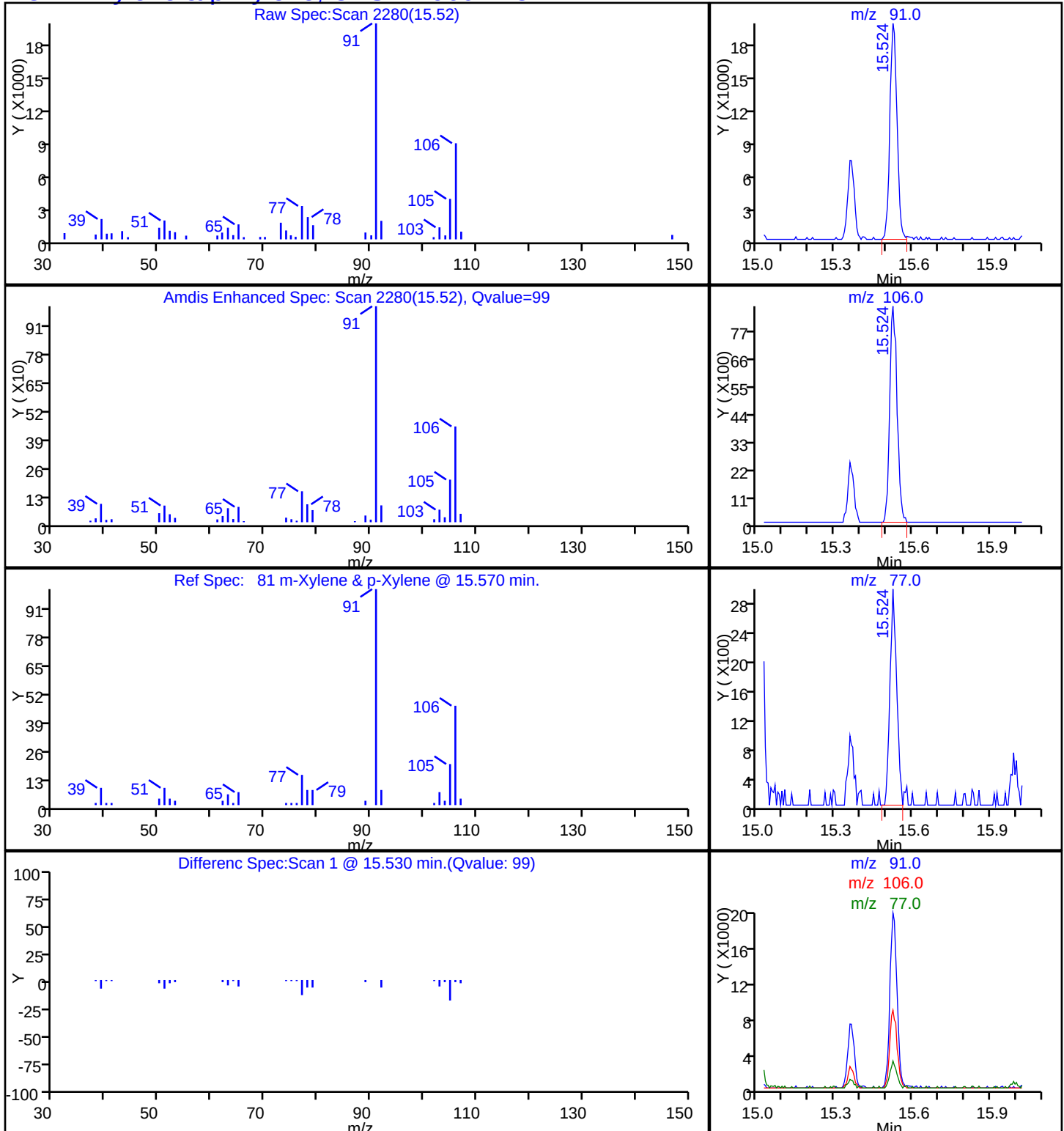
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P110.D

Injection Date: 20-Apr-2017 20:02:30

Instrument ID: MG

Lims ID: 140-7831-A-8

Lab Sample ID: 140-7831-8

Client ID: H43-BA-1018

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

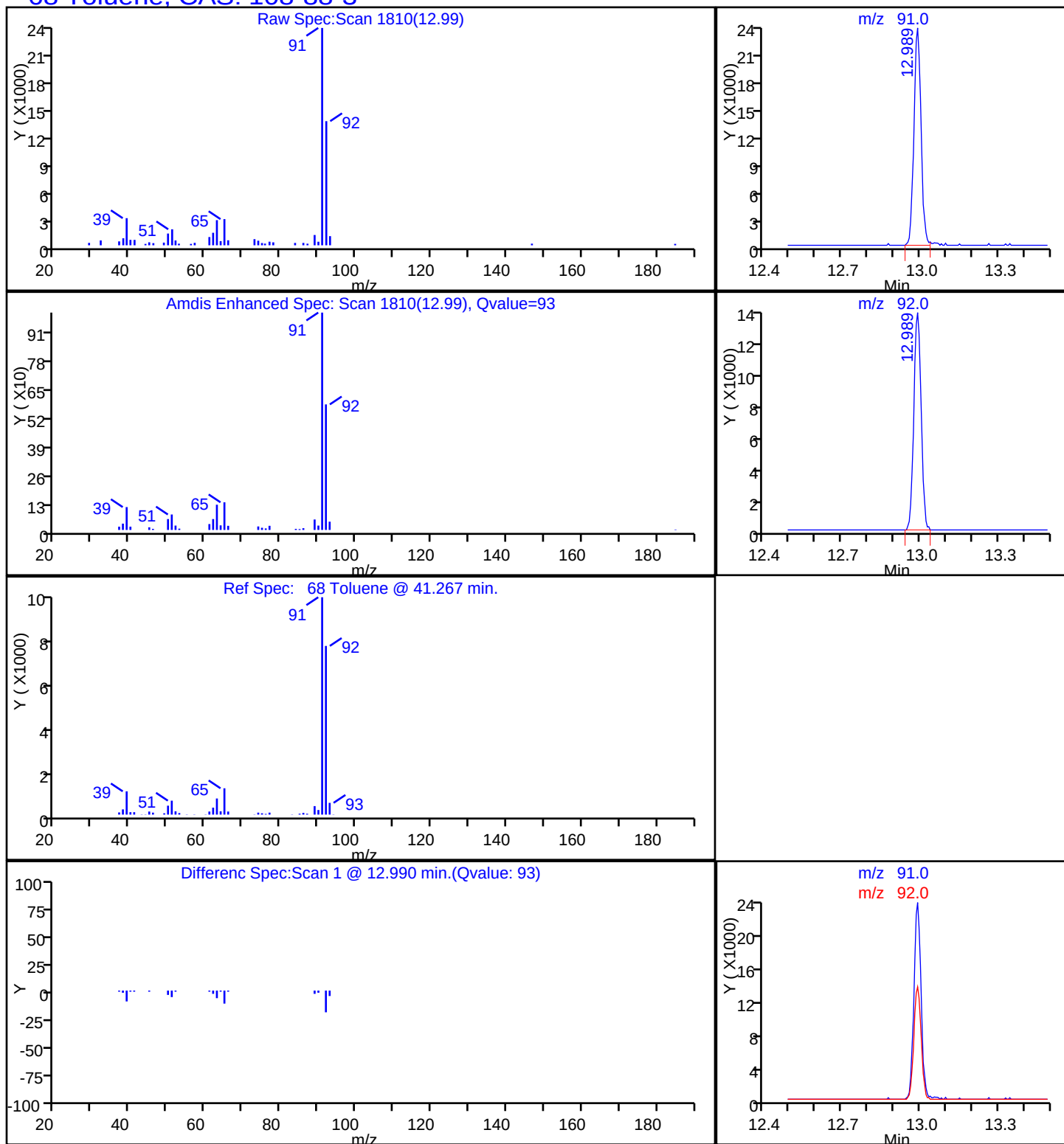
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P110.D

Injection Date: 20-Apr-2017 20:02:30

Instrument ID: MG

Lims ID: 140-7831-A-8

Lab Sample ID: 140-7831-8

Client ID: H43-BA-1018

Operator ID: 7126

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

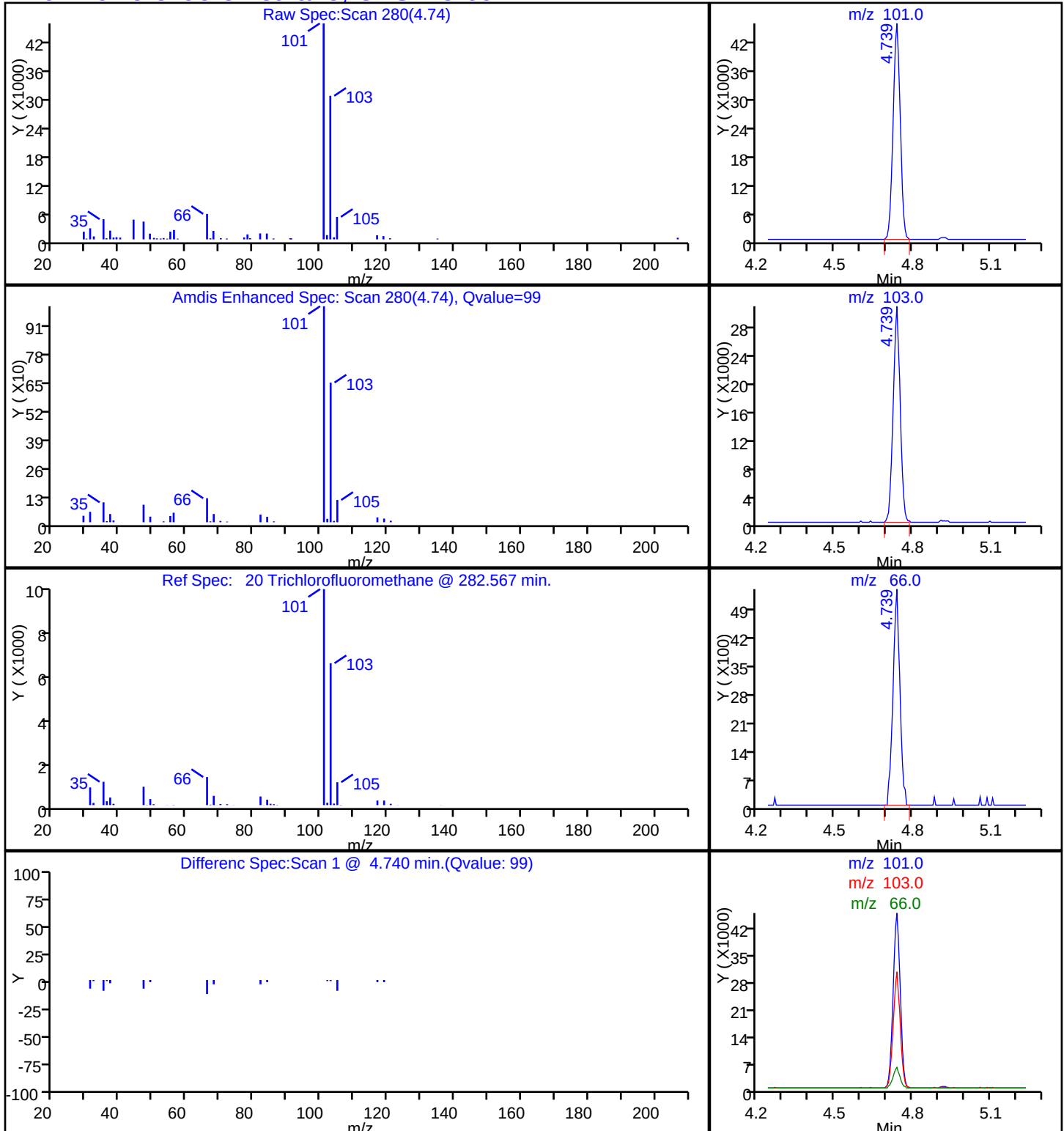
Dil. Factor: 1.0000

Method: MG_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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H43-OA-1 Lab Sample ID: 140-7831-9
 Matrix: Air Lab File ID: GD20P111.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:06
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 20:48
 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.: 10584 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	0.077		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	0.53		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H43-OA-1 Lab Sample ID: 140-7831-9
 Matrix: Air Lab File ID: GD20P111.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:06
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 20:48
 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.: 10584 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	0.52		0.080	
64-17-5	Ethanol	46.07	ND		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	0.45		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	0.12		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	0.26		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H43-OA-1 Lab Sample ID: 140-7831-9
 Matrix: Air Lab File ID: GD20P111.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:06
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 20:48
 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.: 10584 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	0.48		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	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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H43-OA-1 Lab Sample ID: 140-7831-9
 Matrix: Air Lab File ID: GD20P111.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:06
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 20:48
 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.: 10584 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	ND		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	1.6		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	0.47		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	1.5		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P111.D
 Lims ID: 140-7831-A-9
 Client ID: H43-OA-1
 Sample Type: Client
 Inject. Date: 20-Apr-2017 20:48:30 ALS Bottle#: 11 Worklist Smp#: 15
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004683-015
 Misc. Info.: 140-7831-a-9
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 21-Apr-2017 11:03:51 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK027

First Level Reviewer: tajh

Date: 21-Apr-2017 10:53:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.958	7.969	-0.011	69	272022	4.00	
* 2 1,4-Difluorobenzene	114	10.121	10.131	-0.010	94	1385300	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.001	15.006	-0.005	88	1336733	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.672	16.678	-0.006	83	1094170	4.14	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	148920	0.5173	
9 Chloromethane	52	3.666	3.660	0.006	98	10169	0.5250	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.671	0.000	40	3120	0.0182	
17 Ethanol	31	4.345	4.356	-0.011	96	41625	1.52	
20 Trichlorofluoromethane	101	4.734	4.739	-0.005	99	75329	0.2627	
30 1,1,2-Trichloro-1,2,2-trif	101	5.505	5.510	-0.005	93	12015	0.0718	
31 Methylene Chloride	84	5.640	5.639	0.001	82	29383	0.4492	
39 2-Butanone (MEK)	72	7.263	7.252	0.011	96	3899	0.1260	
40 Hexane	56	7.306	7.317	-0.010	69	3515	0.0654	
44 Chloroform	83	7.985	7.996	-0.011	87	4335	0.0227	
49 Benzene	78	9.538	9.554	-0.016	96	16265	0.0691	
51 Carbon tetrachloride	117	9.576	9.581	-0.005	98	18949	0.0770	
65 4-Methyl-2-pentanone (MIBK	43	12.110	12.100	0.010	92	4050	0.0300	
68 Toluene	91	12.989	12.995	-0.006	92	32865	0.1234	
81 m-Xylene & p-Xylene	91	15.524	15.534	-0.010	98	16999	0.0566	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P111.D

Injection Date: 20-Apr-2017 20:48:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7831-A-9

Lab Sample ID: 140-7831-9

Worklist Smp#: 15

Client ID: H43-OA-1

Purge Vol: 500.000 mL

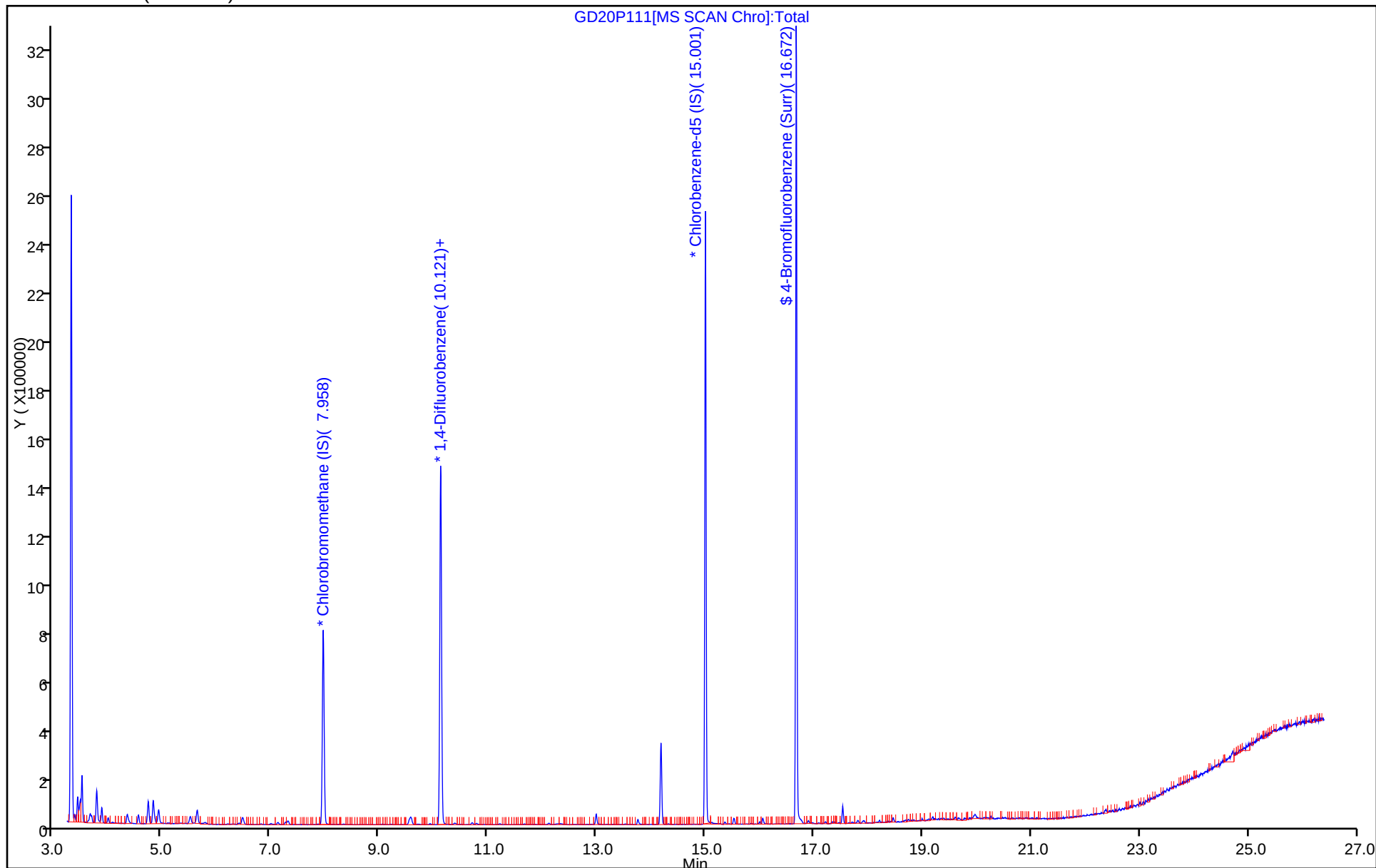
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P111.D
Lims ID: 140-7831-A-9
Client ID: H43-OA-1
Sample Type: Client
Inject. Date: 20-Apr-2017 20:48:30 ALS Bottle#: 11 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004683-015
Misc. Info.: 140-7831-a-9
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2017 11:03:51 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: tajh

Date: 21-Apr-2017 10:53:33

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.14	103.55

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P111.D

Injection Date: 20-Apr-2017 20:48:30

Instrument ID: MG

Lims ID: 140-7831-A-9

Lab Sample ID: 140-7831-9

Client ID: H43-OA-1

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 15

Purge Vol: 500.000 mL

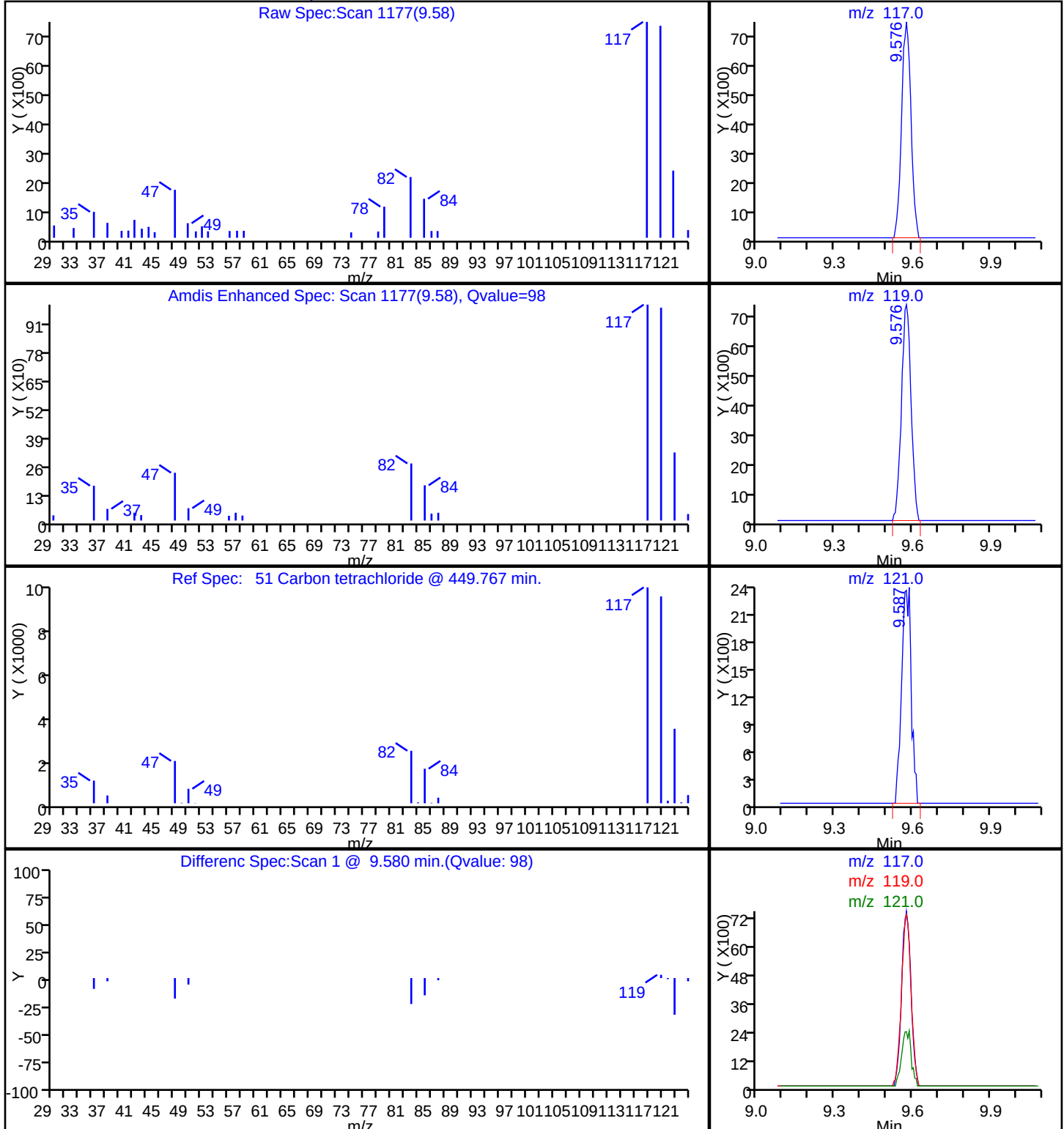
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P111.D

Injection Date: 20-Apr-2017 20:48:30

Instrument ID: MG

Lims ID: 140-7831-A-9

Lab Sample ID: 140-7831-9

Client ID: H43-OA-1

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 15

Purge Vol: 500.000 mL

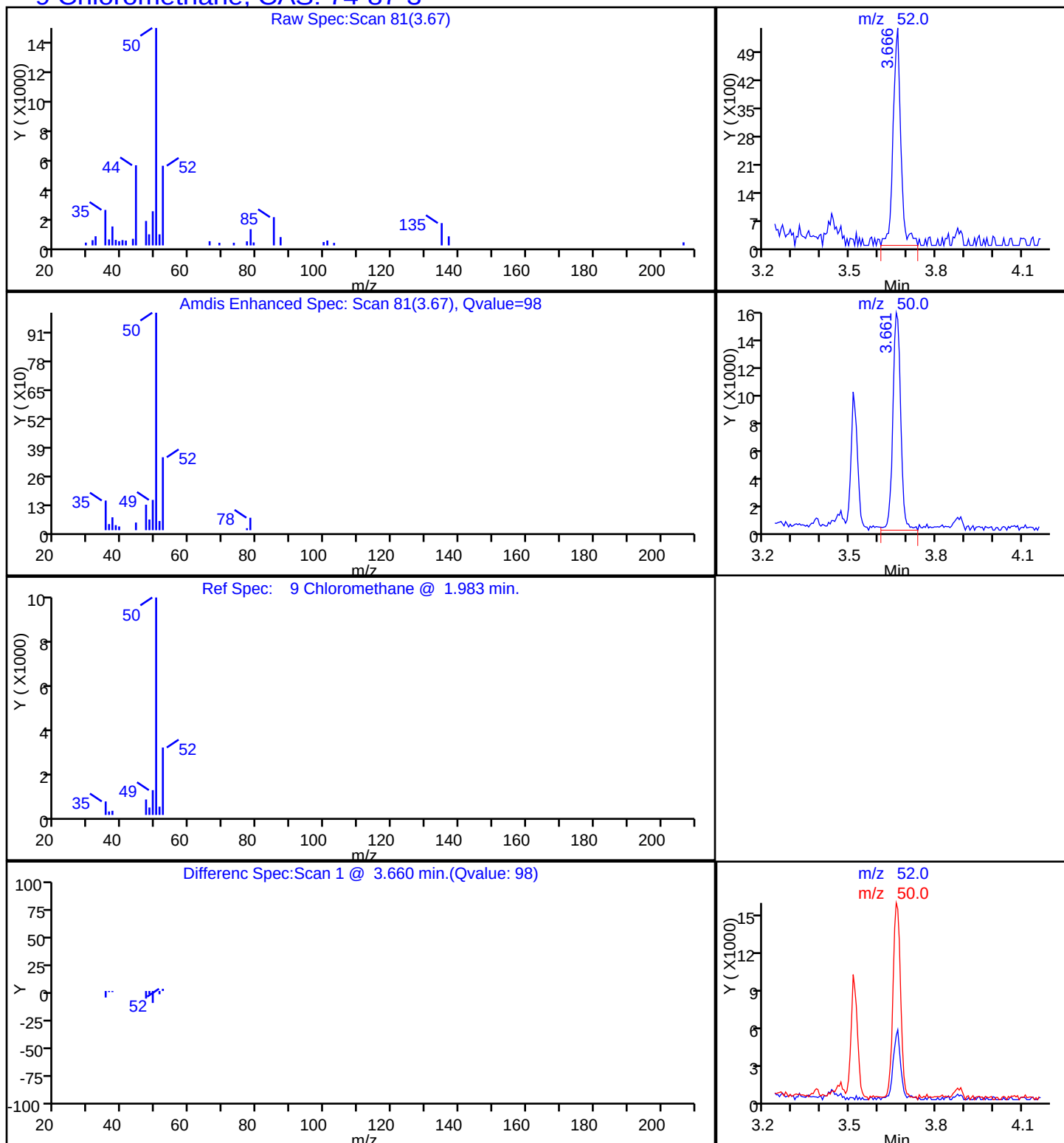
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P111.D

Injection Date: 20-Apr-2017 20:48:30

Instrument ID: MG

Lims ID: 140-7831-A-9

Lab Sample ID: 140-7831-9

Client ID: H43-OA-1

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 15

Purge Vol: 500.000 mL

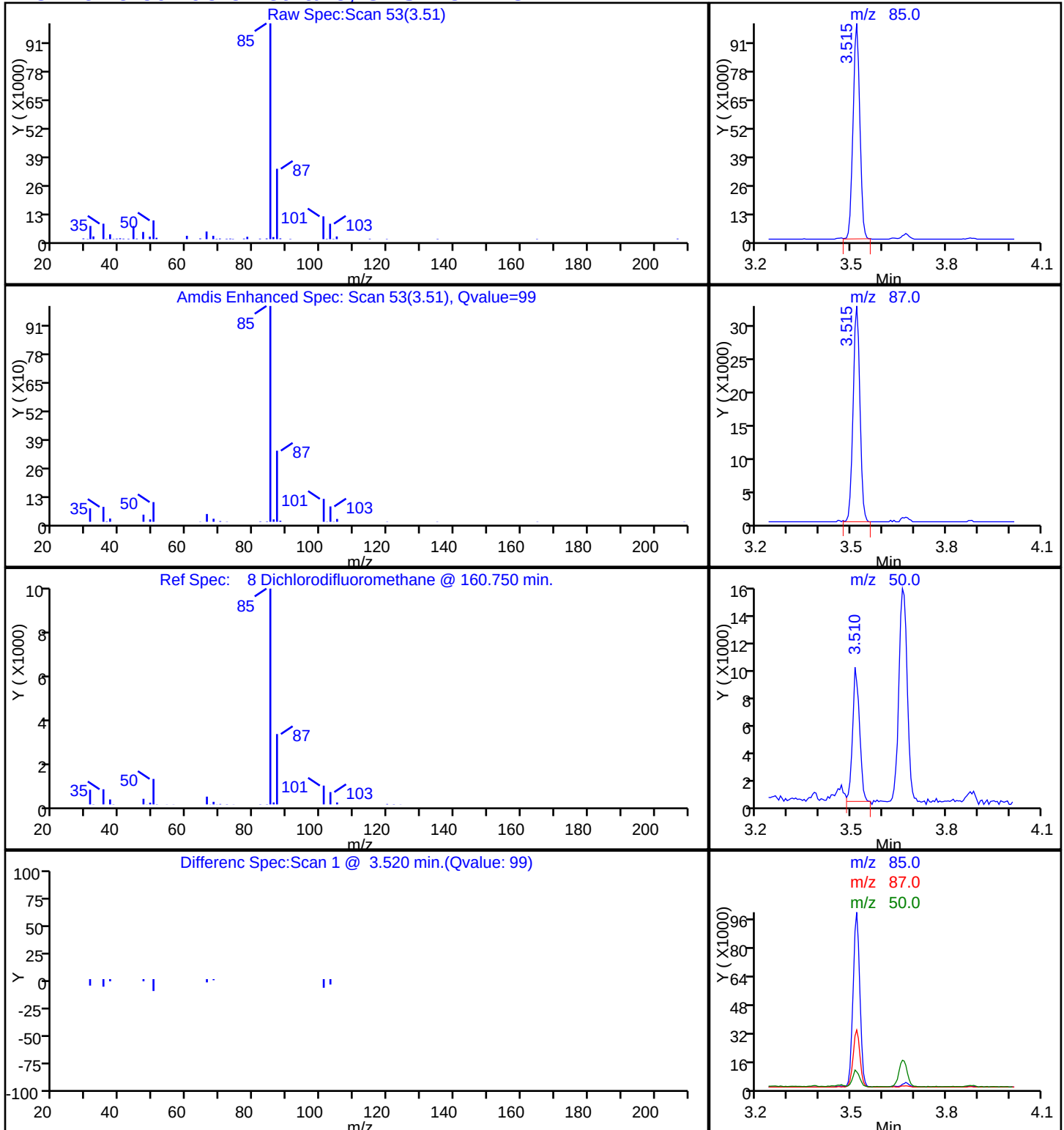
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P111.D

Injection Date: 20-Apr-2017 20:48:30

Instrument ID: MG

Lims ID: 140-7831-A-9

Lab Sample ID: 140-7831-9

Client ID: H43-OA-1

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 15

Purge Vol: 500.000 mL

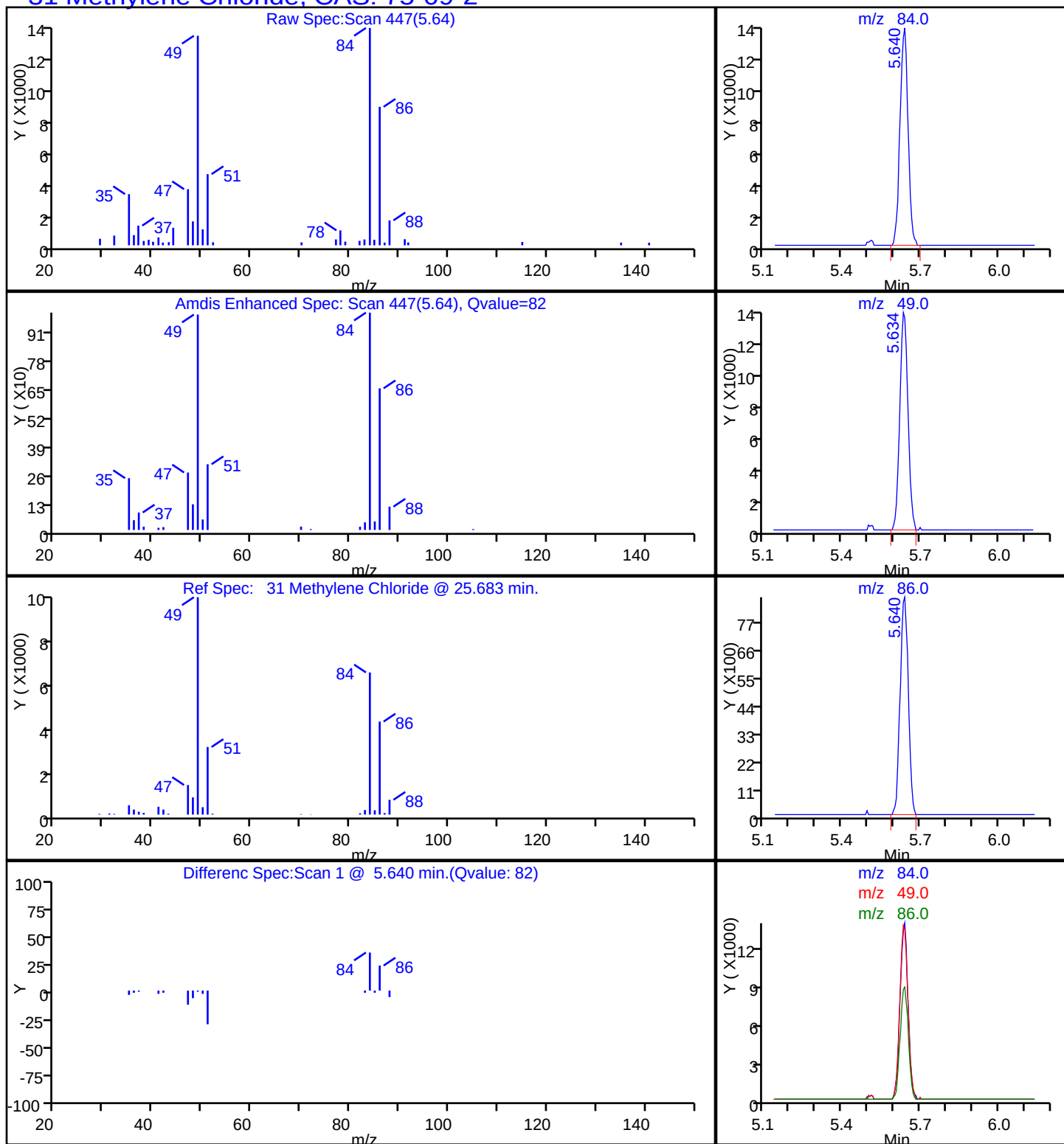
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P111.D

Injection Date: 20-Apr-2017 20:48:30

Instrument ID: MG

Lims ID: 140-7831-A-9

Lab Sample ID: 140-7831-9

Client ID: H43-OA-1

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 15

Purge Vol: 500.000 mL

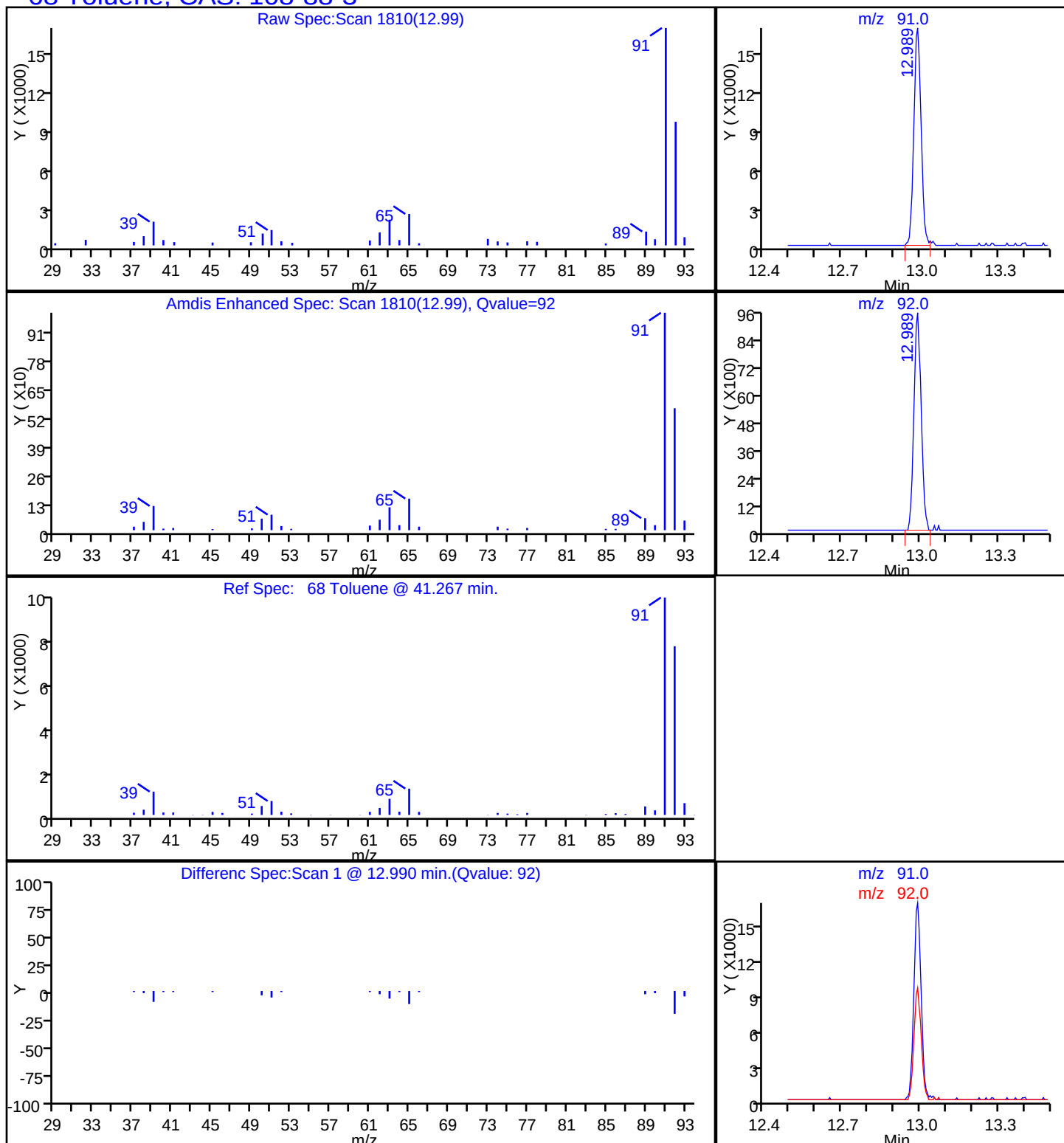
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P111.D

Injection Date: 20-Apr-2017 20:48:30

Instrument ID: MG

Lims ID: 140-7831-A-9

Lab Sample ID: 140-7831-9

Client ID: H43-OA-1

Operator ID: 7126

ALS Bottle#: 11

Worklist Smp#: 15

Purge Vol: 500.000 mL

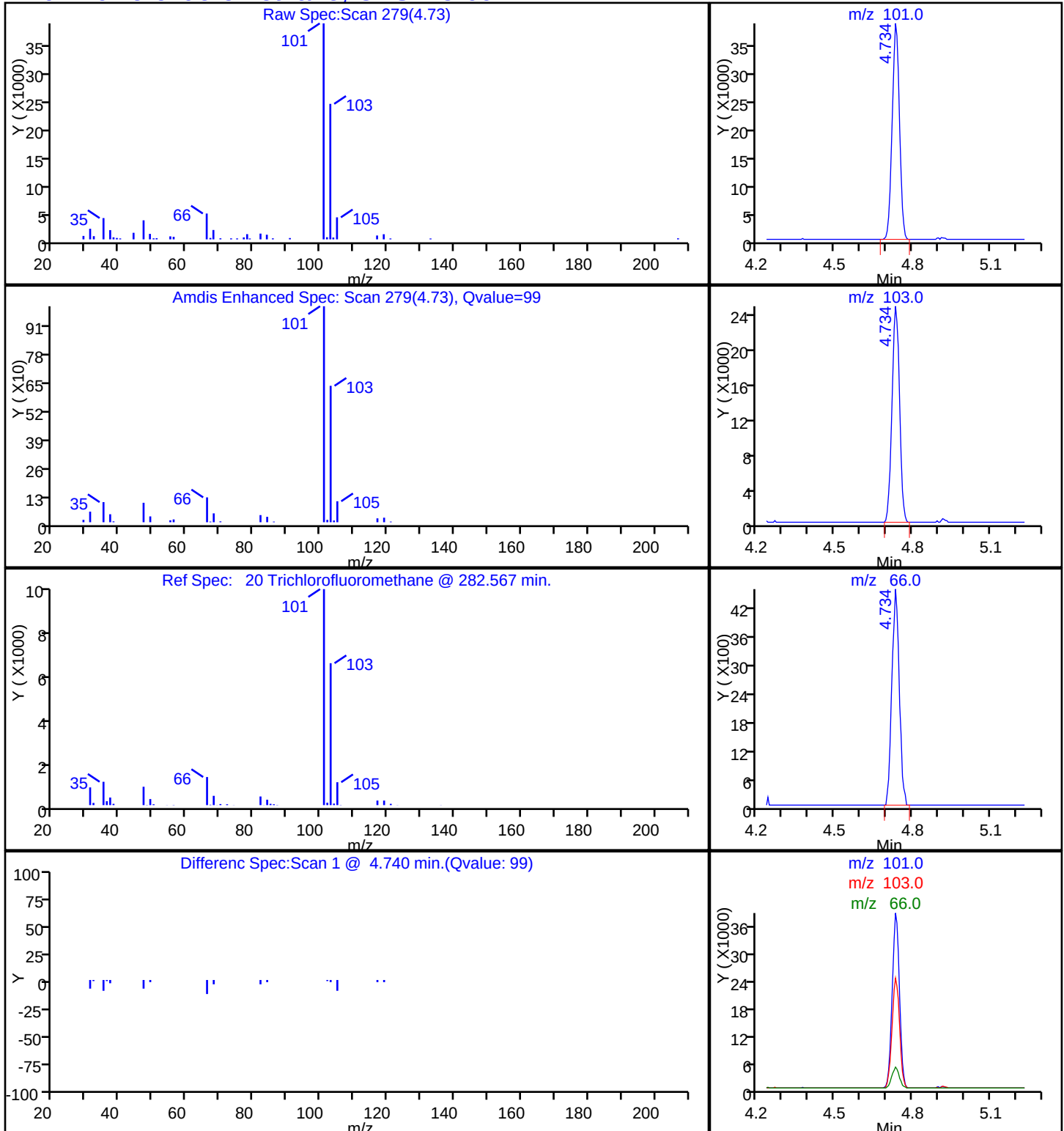
Dil. Factor: 1.0000

Method: MG_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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H43-SS-1020 Lab Sample ID: 140-7831-10
 Matrix: Air Lab File ID: GD20P112.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:13
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 21:36
 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.: 10584 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	0.52		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	0.080		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	0.17		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	0.60		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	0.048		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	1.4		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H43-SS-1020 Lab Sample ID: 140-7831-10
 Matrix: Air Lab File ID: GD20P112.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:13
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 21:36
 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.: 10584 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	ND		2.0	
100-41-4	Ethylbenzene	106.17	0.082		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	0.40		0.080	
95-47-6	o-Xylene	106.17	0.13		0.080	
100-42-5	Styrene	104.15	ND		0.080	
75-65-0	t-Butyl alcohol	74.12	ND		0.32	
127-18-4	Tetrachloroethene	165.83	ND		0.080	
108-88-3	Toluene	92.14	0.34		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	0.062		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.24		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	105		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H43-SS-1020 Lab Sample ID: 140-7831-10
 Matrix: Air Lab File ID: GD20P112.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:13
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 21:36
 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.: 10584 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	2.9		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	0.61		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	0.86		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	1.8		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	0.30		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	7.0		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H43-SS-1020 Lab Sample ID: 140-7831-10
 Matrix: Air Lab File ID: GD20P112.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:13
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 21:36
 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.: 10584 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	ND		3.8	
100-41-4	Ethylbenzene	106.17	0.36		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	1.7		0.35	
95-47-6	o-Xylene	106.17	0.56		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	1.3		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	0.34		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.4		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	105		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P112.D
 Lims ID: 140-7831-A-10
 Client ID: H43-SS-1020
 Sample Type: Client
 Inject. Date: 20-Apr-2017 21:36:30 ALS Bottle#: 12 Worklist Smp#: 16
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004683-016
 Misc. Info.: 140-7831-a-10
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 21-Apr-2017 11:03:51 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK027

First Level Reviewer: tajh

Date: 21-Apr-2017 10:54:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.958	7.969	-0.011	69	272907	4.00	
* 2 1,4-Difluorobenzene	114	10.121	10.131	-0.010	94	1313598	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.001	15.006	-0.005	88	1366531	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.672	16.678	-0.006	84	1130160	4.18	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	133133	0.4609	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.671	0.000	39	3198	0.0186	
17 Ethanol	31	4.346	4.356	-0.010	95	48622	1.77	
20 Trichlorofluoromethane	101	4.734	4.739	-0.005	99	69982	0.2433	
29 2-Methyl-2-propanol	59	5.456	5.456	0.000	83	2922	0.0264	
30 1,1,2-Trichloro-1,2,2-trif	101	5.505	5.510	-0.005	94	13363	0.0796	
31 Methylene Chloride	84	5.640	5.639	0.001	84	9035	0.1377	
39 2-Butanone (MEK)	72	7.252	7.252	0.000	96	18627	0.5998	
40 Hexane	56	7.311	7.317	-0.005	73	5126	0.0951	
44 Chloroform	83	7.980	7.996	-0.016	95	273047	1.43	
47 1,1,1-Trichloroethane	97	8.961	8.967	-0.006	93	116132	0.5244	
49 Benzene	78	9.544	9.554	-0.010	97	10033	0.0450	
50 Cyclohexane	69	9.549	9.560	-0.011	58	1419	0.0378	
51 Carbon tetrachloride	117	9.576	9.581	-0.005	98	11089	0.0475	
59 Trichloroethene	130	10.859	10.870	-0.011	94	7546	0.0624	
65 4-Methyl-2-pentanone (MIBK	43	12.100	12.100	0.000	93	21152	0.1650	
68 Toluene	91	12.989	12.995	-0.006	92	93209	0.3424	
76 Tetrachloroethene	129	14.165	14.165	0.000	83	6647	0.0534	
79 Ethylbenzene	91	15.357	15.362	-0.005	99	31207	0.0821	
81 m-Xylene & p-Xylene	91	15.529	15.534	-0.005	100	122870	0.4001	
85 o-Xylene	91	16.052	16.063	-0.011	95	40732	0.1297	
92 1,3,5-Trimethylbenzene	120	17.460	17.465	-0.005	90	5745	0.0285	
96 1,2,4-Trimethylbenzene	105	17.924	17.929	-0.005	97	67452	0.1748	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P112.D

Injection Date: 20-Apr-2017 21:36:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7831-A-10

Lab Sample ID: 140-7831-10

Worklist Smp#: 16

Client ID: H43-SS-1020

Purge Vol: 500.000 mL

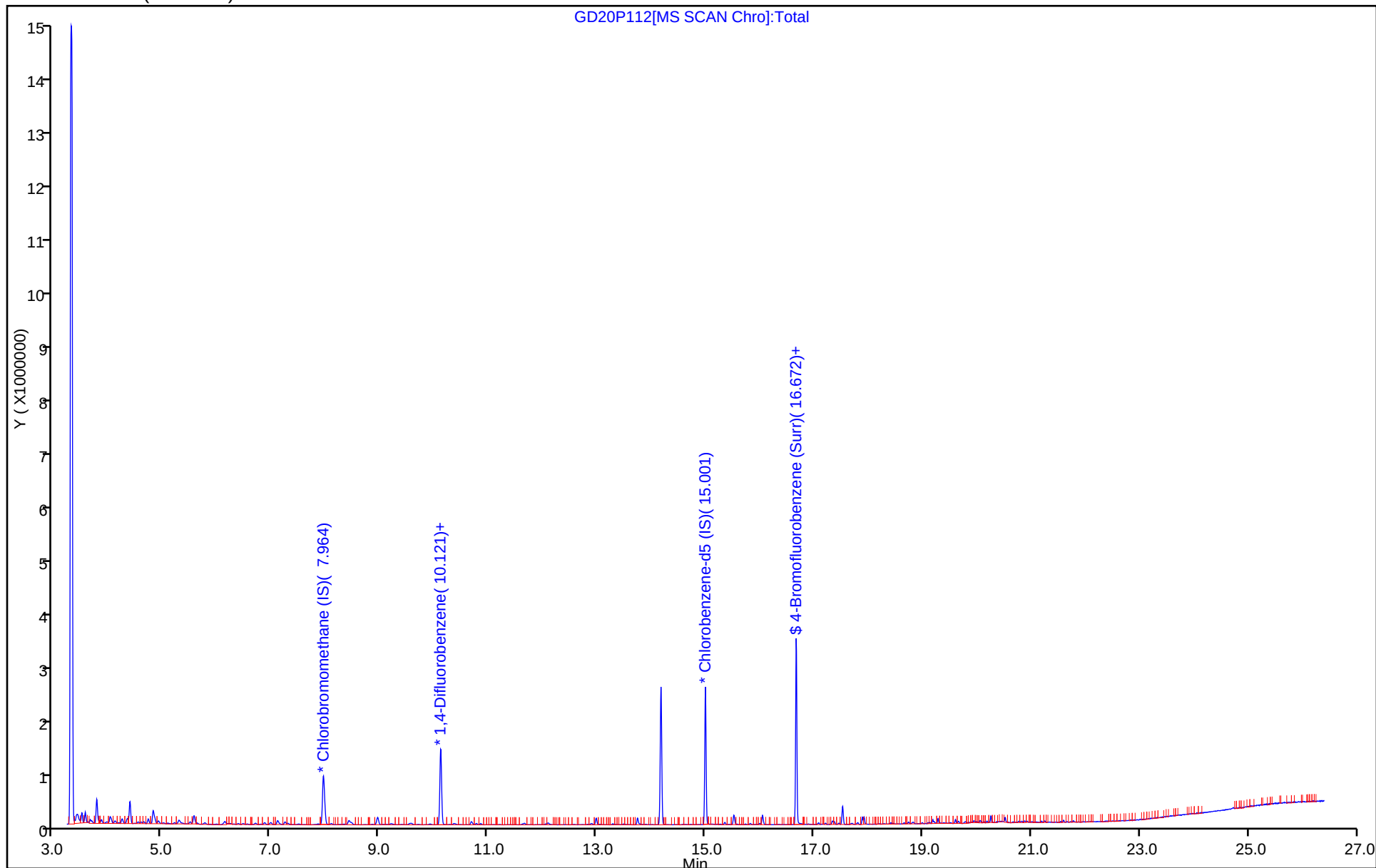
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P112.D
Lims ID: 140-7831-A-10
Client ID: H43-SS-1020
Sample Type: Client
Inject. Date: 20-Apr-2017 21:36:30 ALS Bottle#: 12 Worklist Smp#: 16
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004683-016
Misc. Info.: 140-7831-a-10
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2017 11:03:51 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: tajh

Date: 21-Apr-2017 10:54:21

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.18	104.62

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P112.D

Injection Date: 20-Apr-2017 21:36:30

Instrument ID: MG

Lims ID: 140-7831-A-10

Lab Sample ID: 140-7831-10

Client ID: H43-SS-1020

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

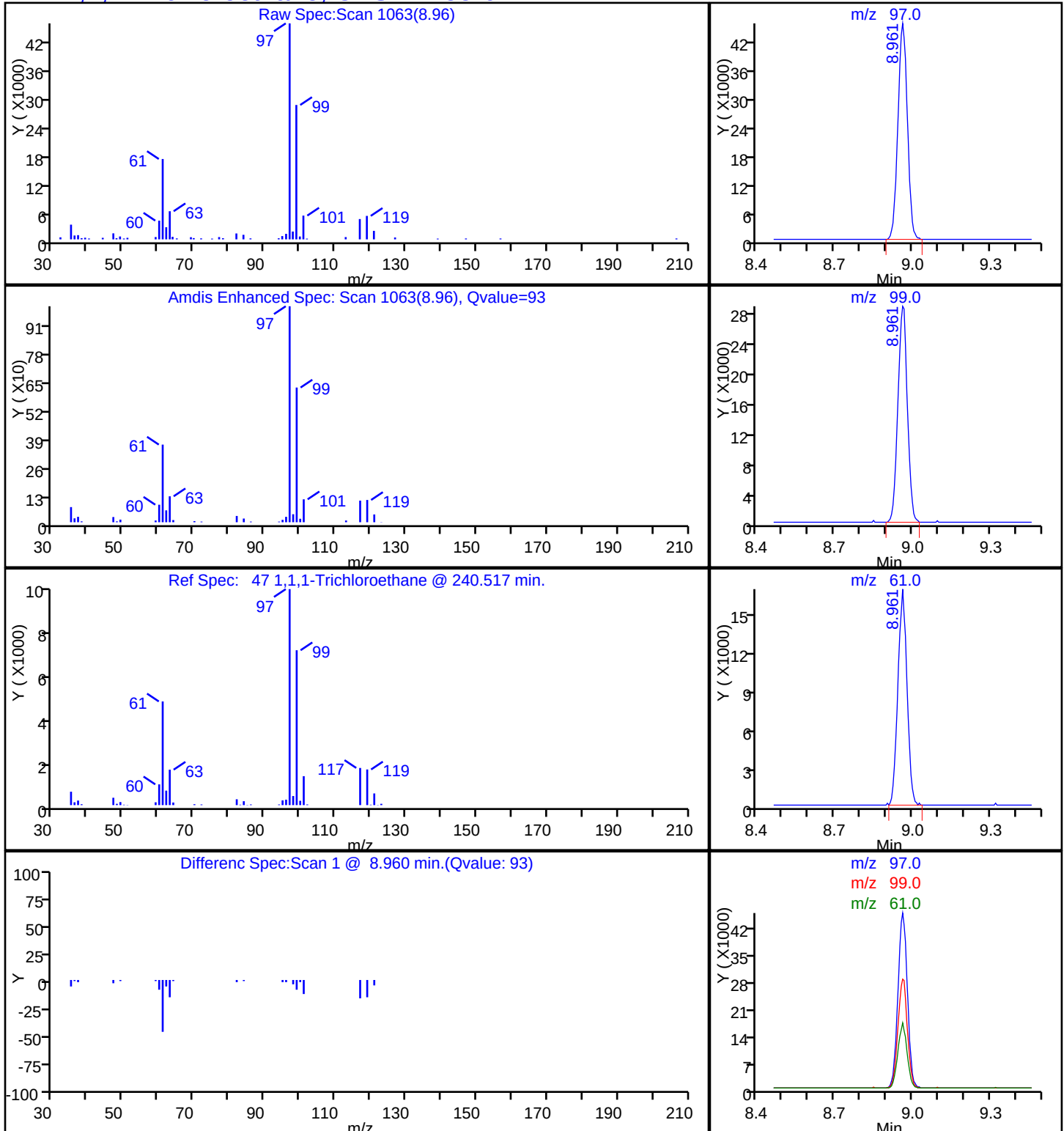
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

47 1,1,1-Trichloroethane, CAS: 71-55-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P112.D

Injection Date: 20-Apr-2017 21:36:30

Instrument ID: MG

Lims ID: 140-7831-A-10

Lab Sample ID: 140-7831-10

Client ID: H43-SS-1020

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

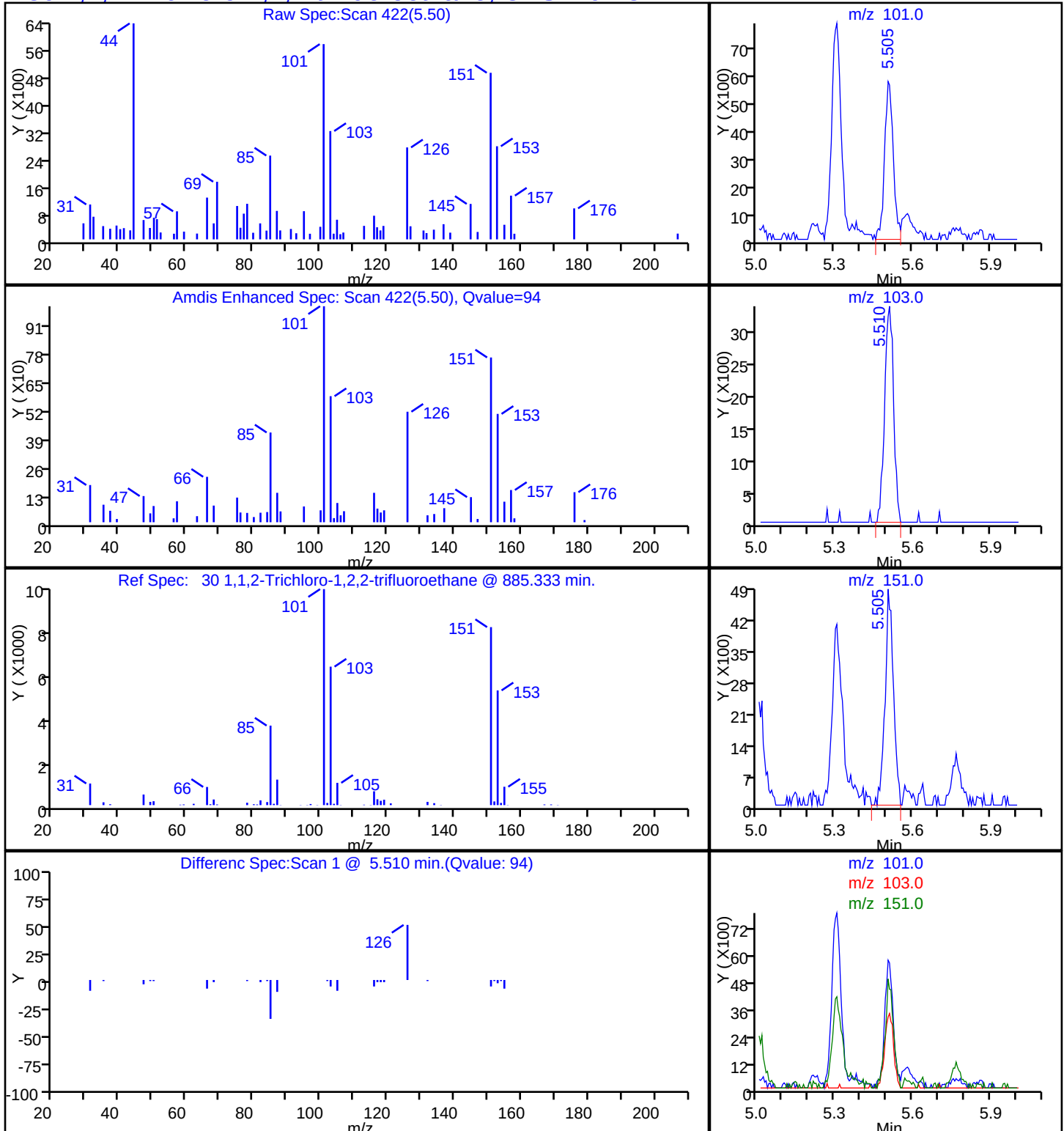
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

30 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P112.D

Injection Date: 20-Apr-2017 21:36:30

Instrument ID: MG

Lims ID: 140-7831-A-10

Lab Sample ID: 140-7831-10

Client ID: H43-SS-1020

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

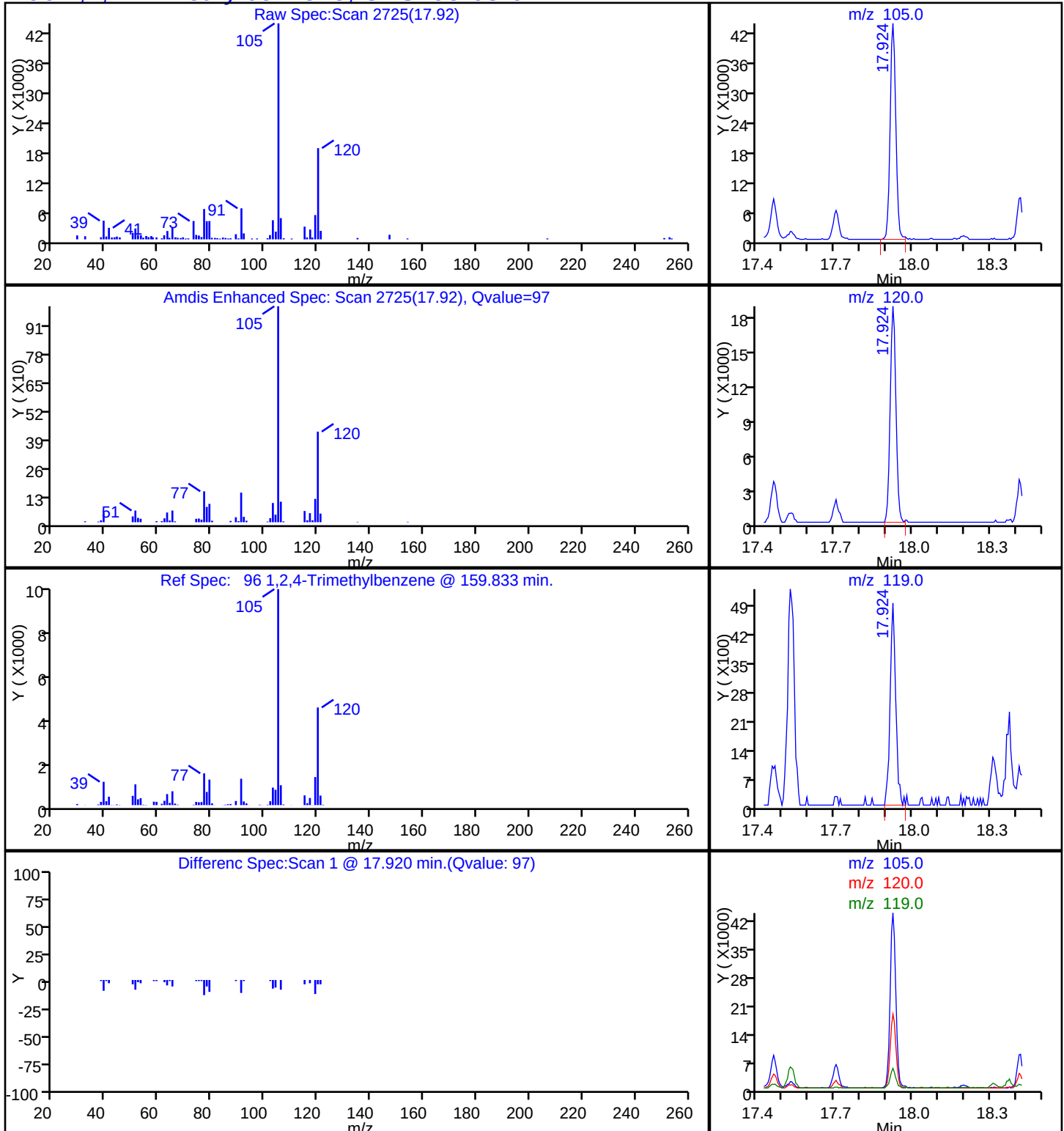
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

96 1,2,4-Trimethylbenzene, CAS: 95-63-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P112.D

Injection Date: 20-Apr-2017 21:36:30

Instrument ID: MG

Lims ID: 140-7831-A-10

Lab Sample ID: 140-7831-10

Client ID: H43-SS-1020

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

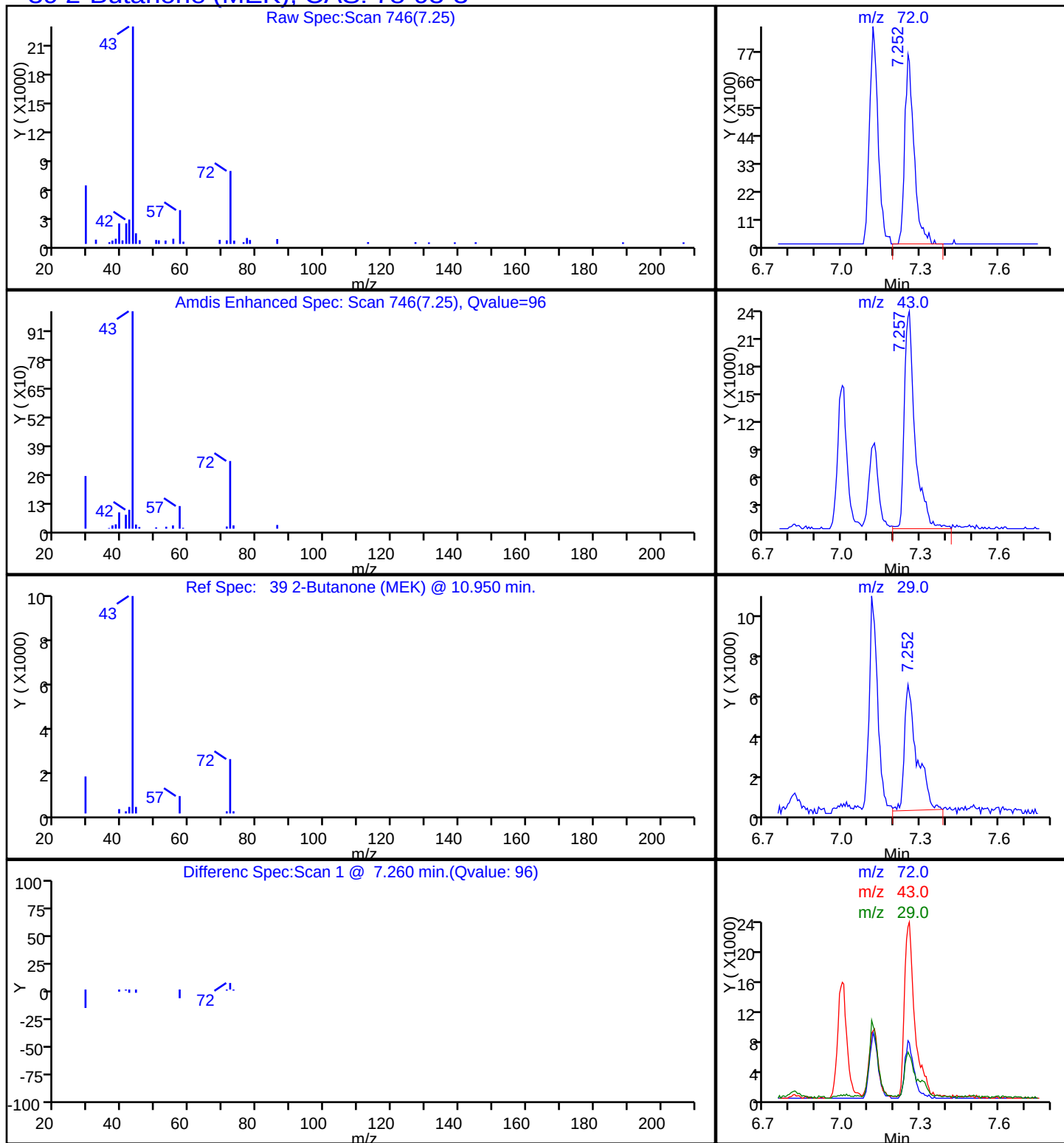
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P112.D

Injection Date: 20-Apr-2017 21:36:30

Instrument ID: MG

Lims ID: 140-7831-A-10

Lab Sample ID: 140-7831-10

Client ID: H43-SS-1020

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

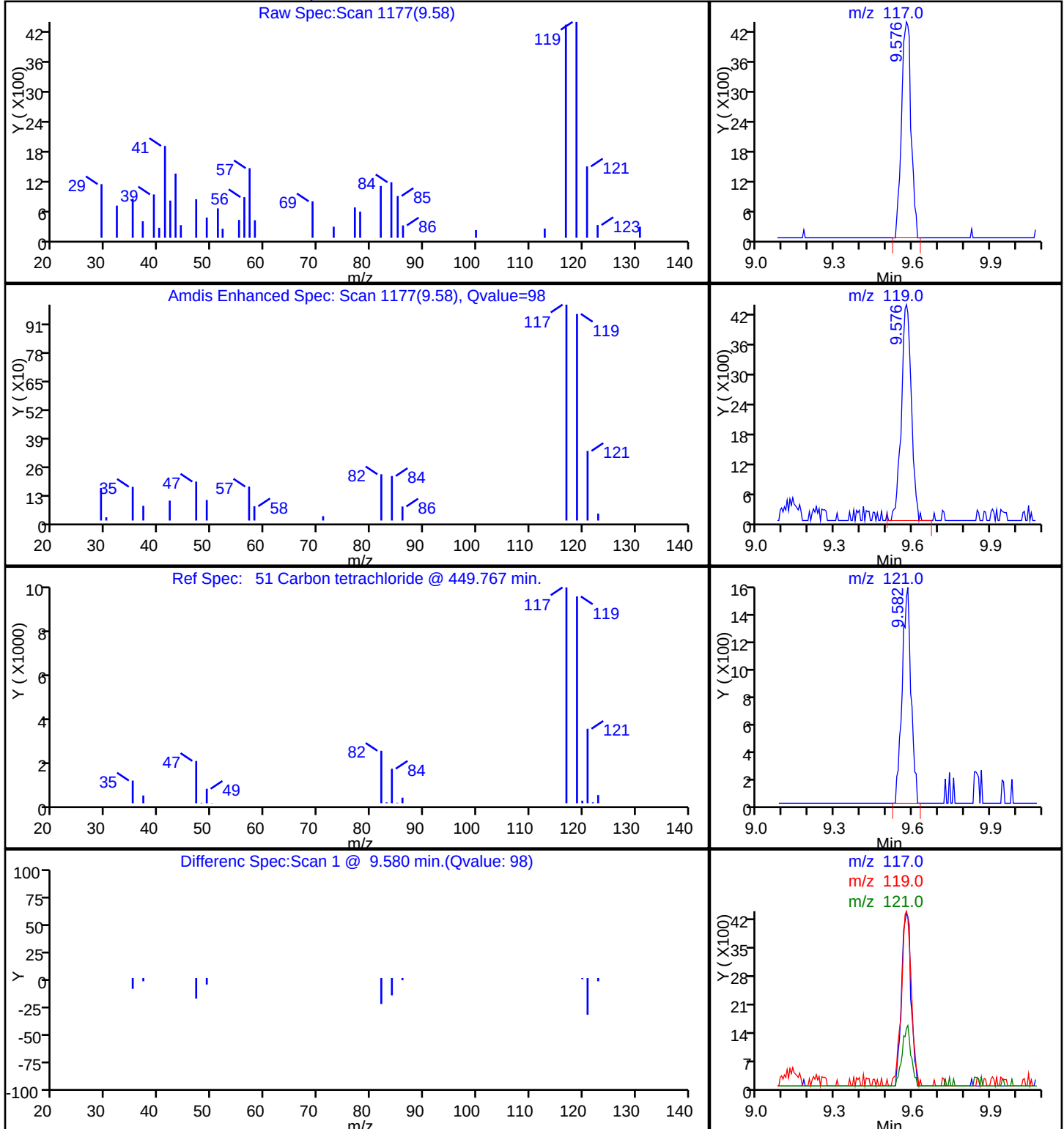
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P112.D

Injection Date: 20-Apr-2017 21:36:30

Instrument ID: MG

Lims ID: 140-7831-A-10

Lab Sample ID: 140-7831-10

Client ID: H43-SS-1020

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

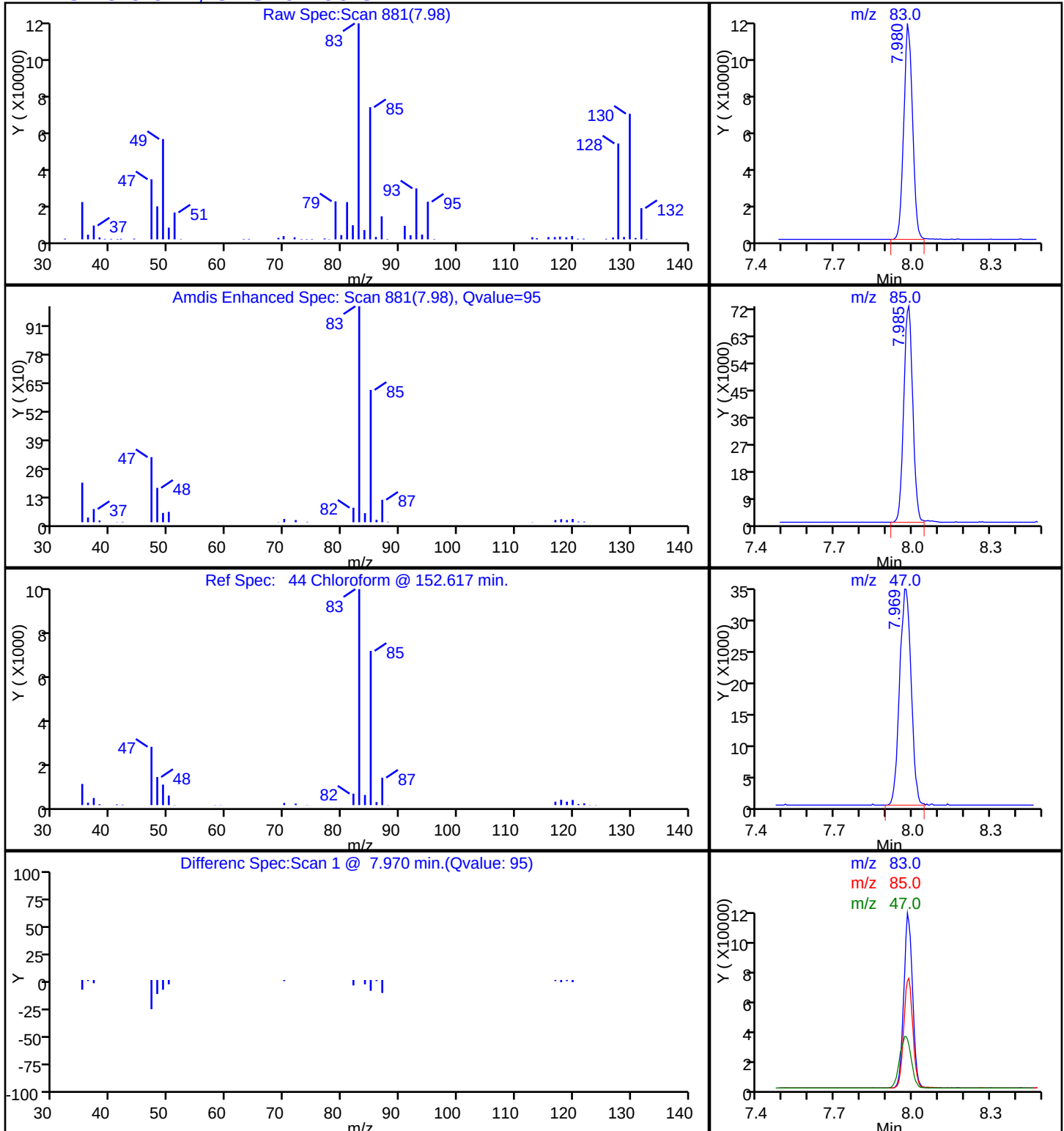
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

44 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P112.D

Injection Date: 20-Apr-2017 21:36:30

Instrument ID: MG

Lims ID: 140-7831-A-10

Lab Sample ID: 140-7831-10

Client ID: H43-SS-1020

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

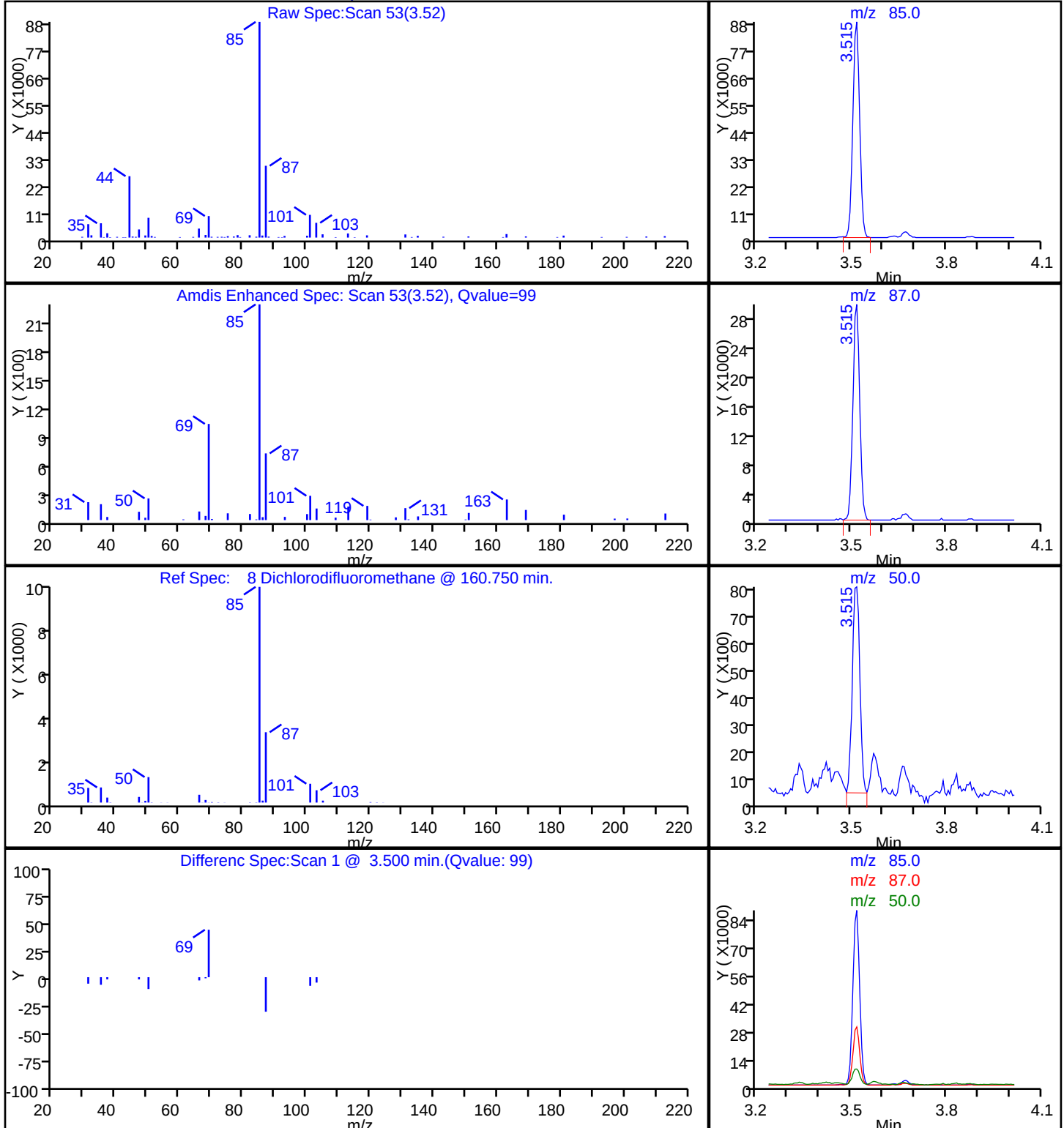
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P112.D

Injection Date: 20-Apr-2017 21:36:30

Instrument ID: MG

Lims ID: 140-7831-A-10

Lab Sample ID: 140-7831-10

Client ID: H43-SS-1020

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

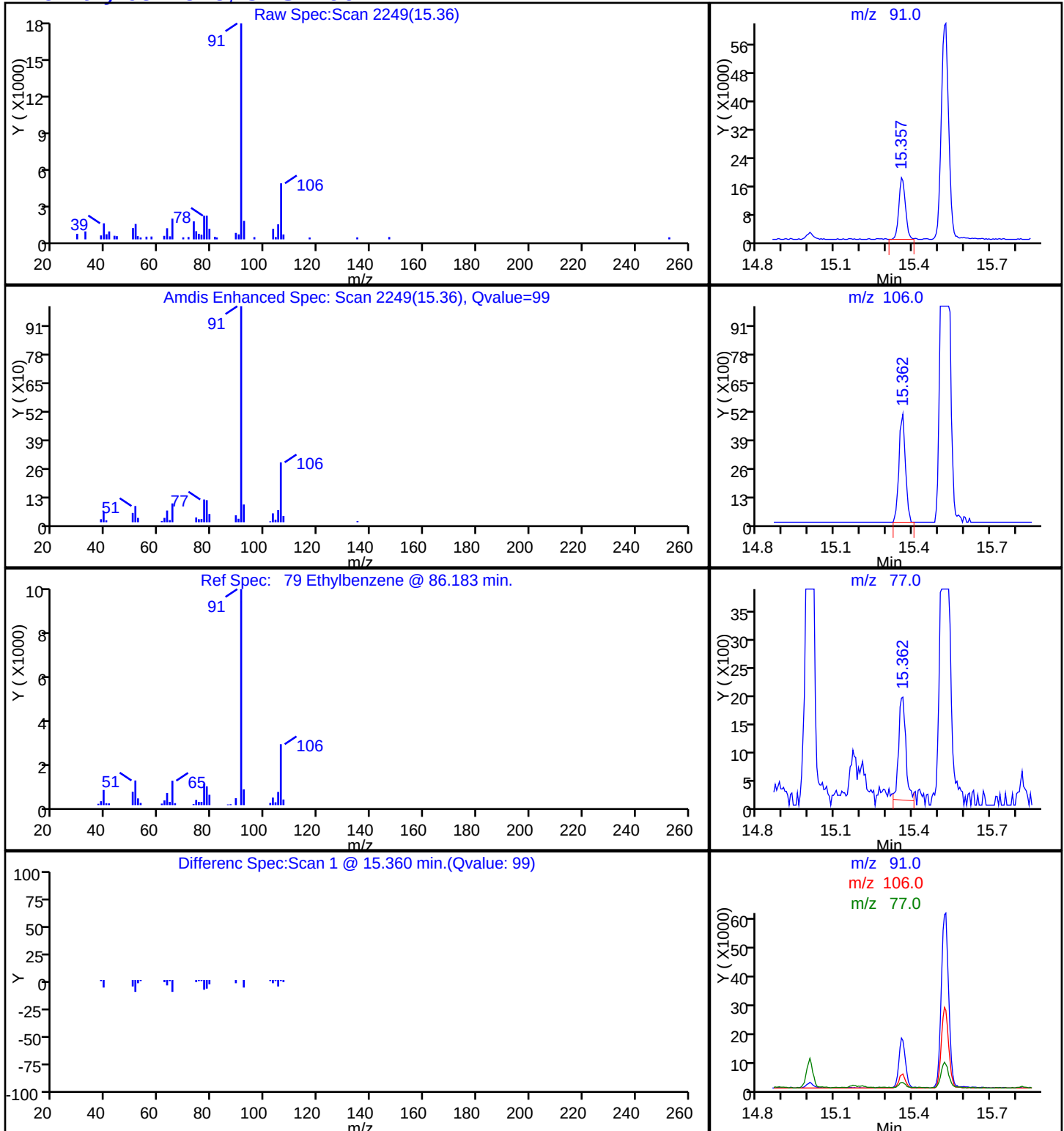
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

79 Ethylbenzene, CAS: 100-41-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P112.D

Injection Date: 20-Apr-2017 21:36:30

Instrument ID: MG

Lims ID: 140-7831-A-10

Lab Sample ID: 140-7831-10

Client ID: H43-SS-1020

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

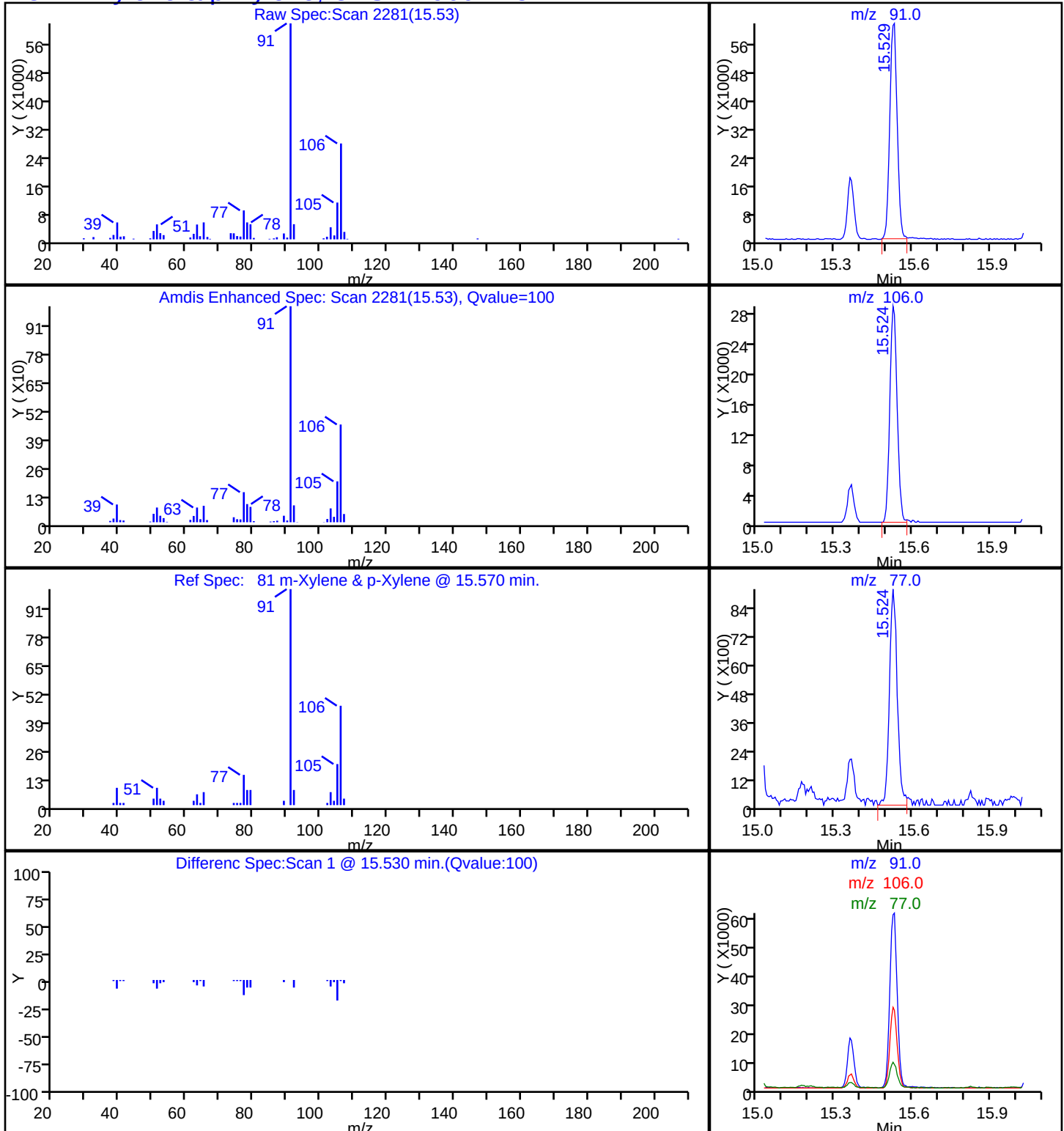
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P112.D

Injection Date: 20-Apr-2017 21:36:30

Instrument ID: MG

Lims ID: 140-7831-A-10

Lab Sample ID: 140-7831-10

Client ID: H43-SS-1020

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

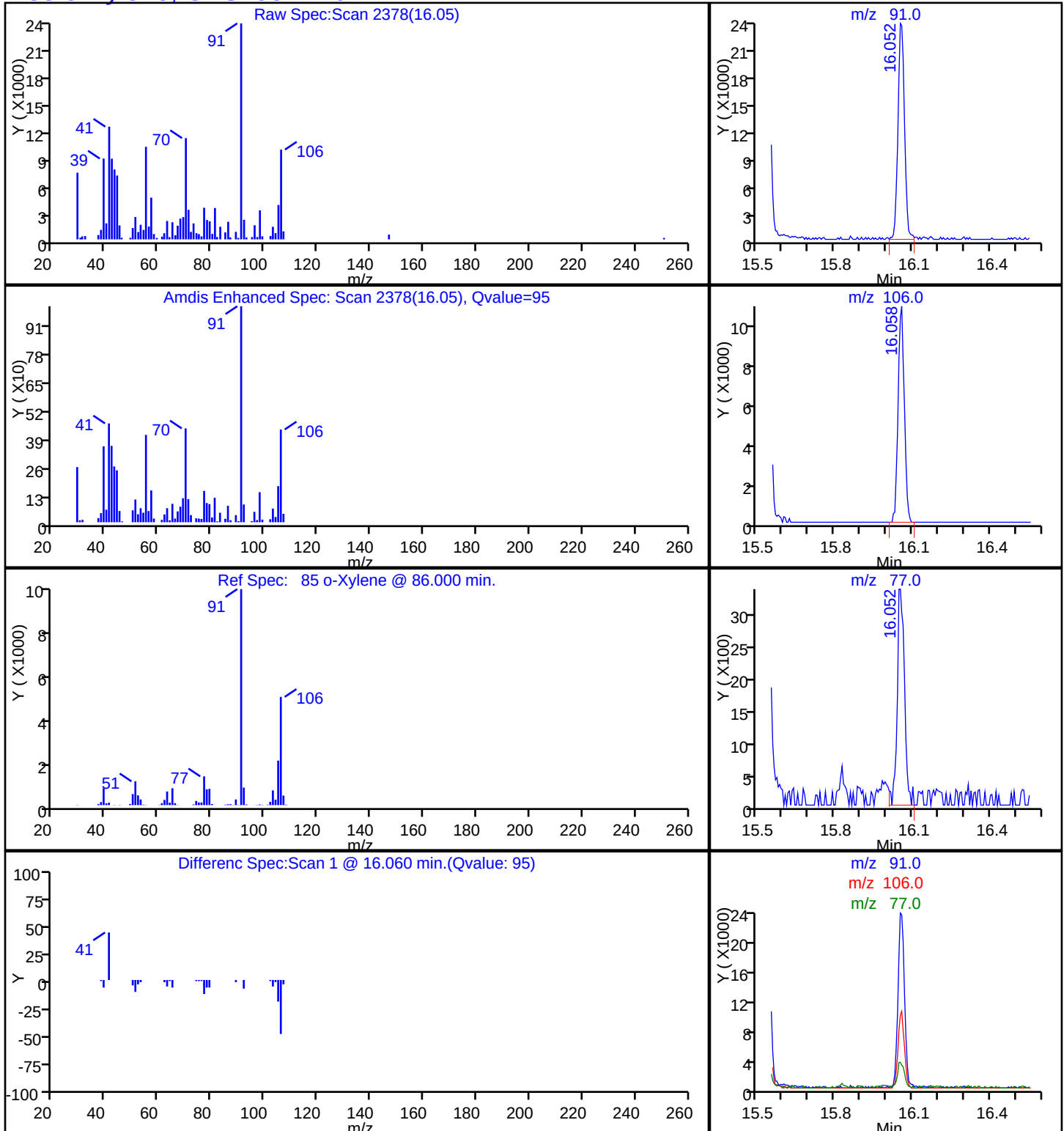
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P112.D

Injection Date: 20-Apr-2017 21:36:30

Instrument ID: MG

Lims ID: 140-7831-A-10

Lab Sample ID: 140-7831-10

Client ID: H43-SS-1020

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

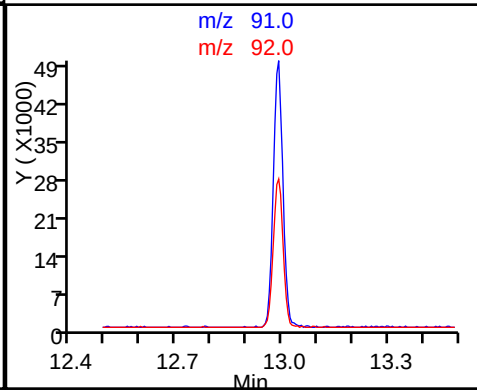
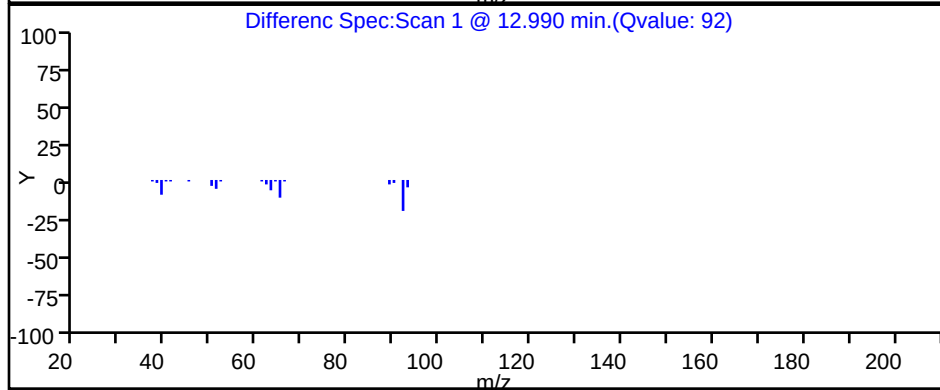
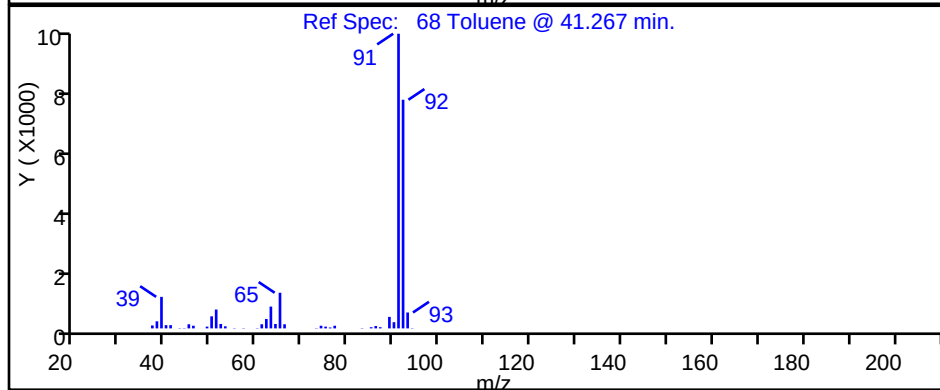
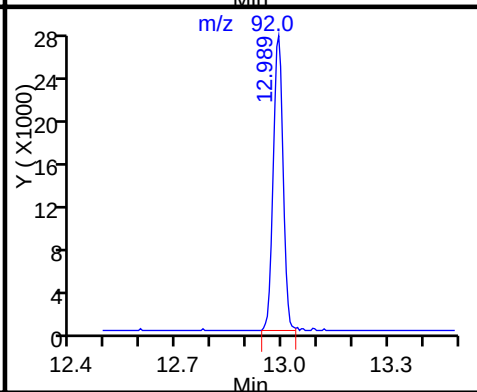
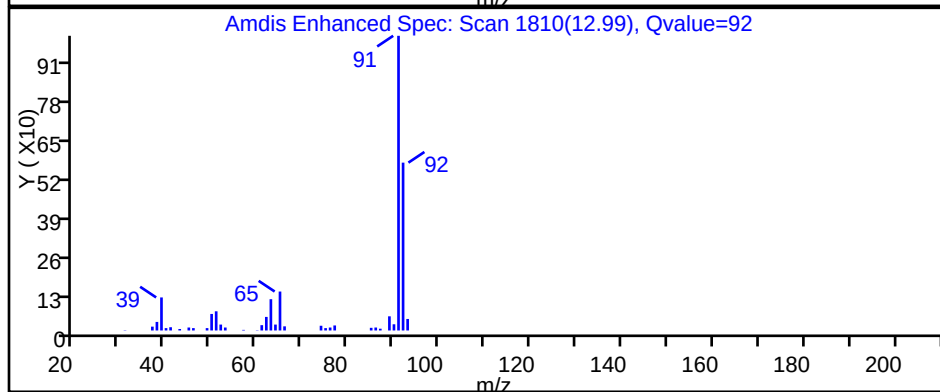
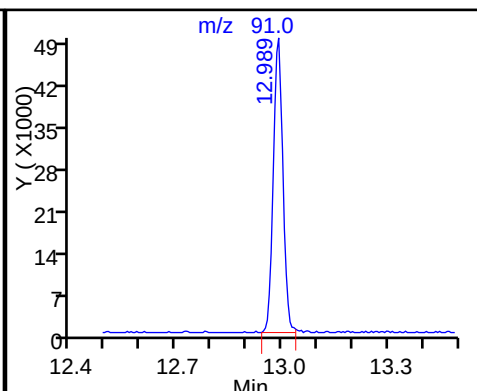
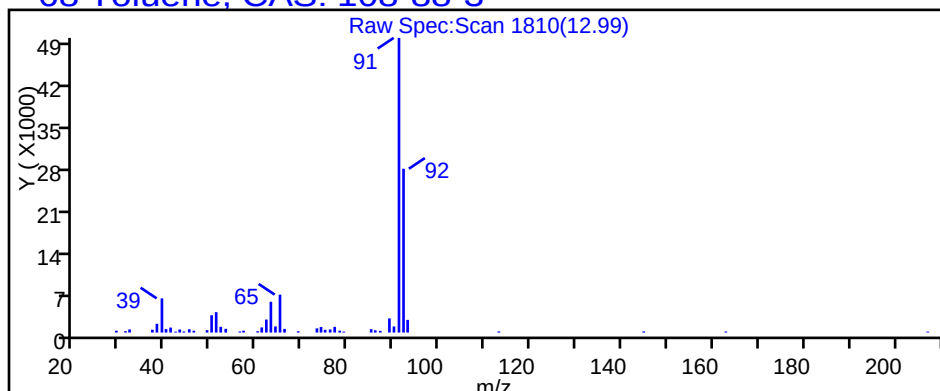
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P112.D

Injection Date: 20-Apr-2017 21:36:30

Instrument ID: MG

Lims ID: 140-7831-A-10

Lab Sample ID: 140-7831-10

Client ID: H43-SS-1020

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

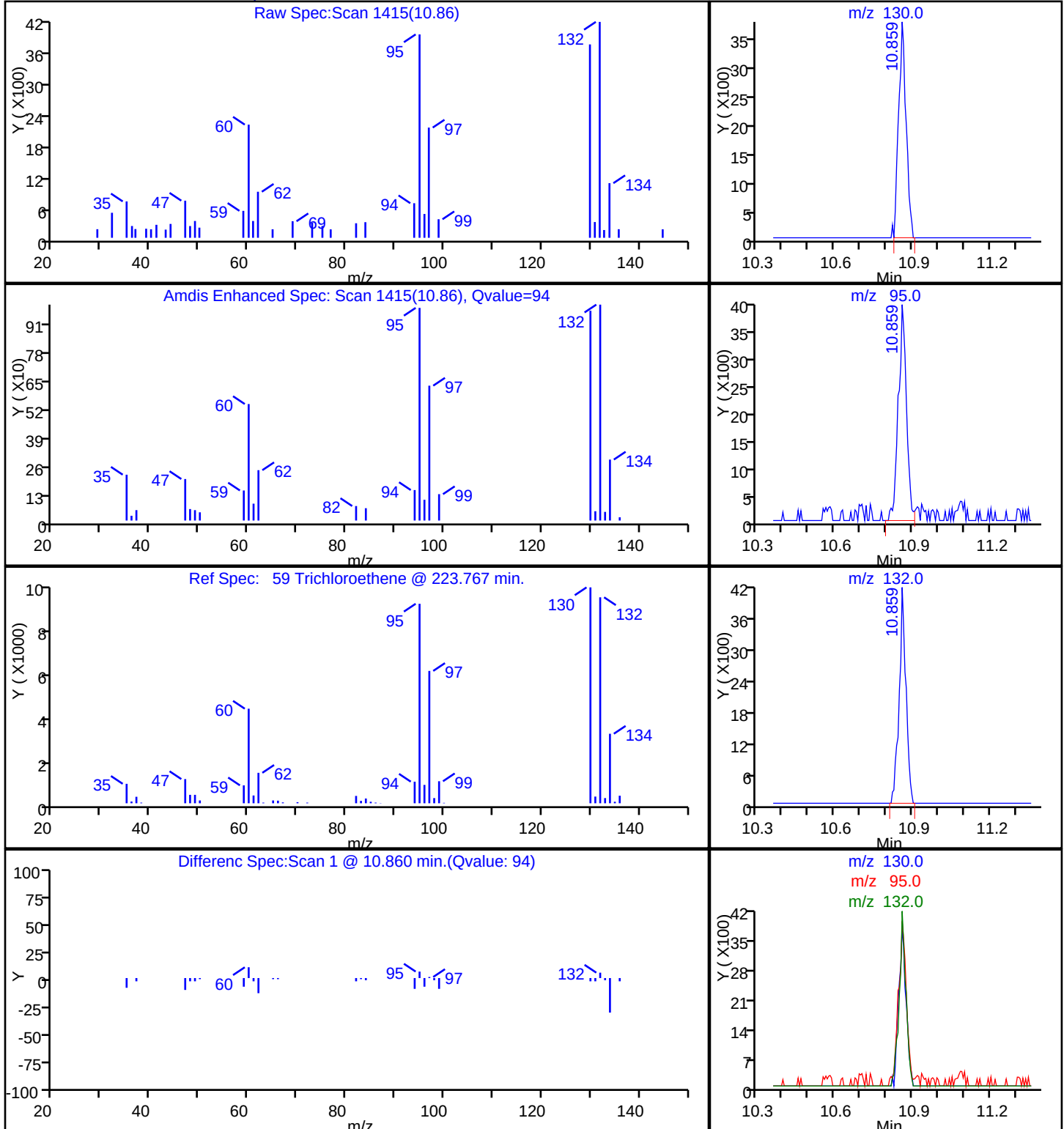
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

59 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P112.D

Injection Date: 20-Apr-2017 21:36:30

Instrument ID: MG

Lims ID: 140-7831-A-10

Lab Sample ID: 140-7831-10

Client ID: H43-SS-1020

Operator ID: 7126

ALS Bottle#: 12

Worklist Smp#: 16

Purge Vol: 500.000 mL

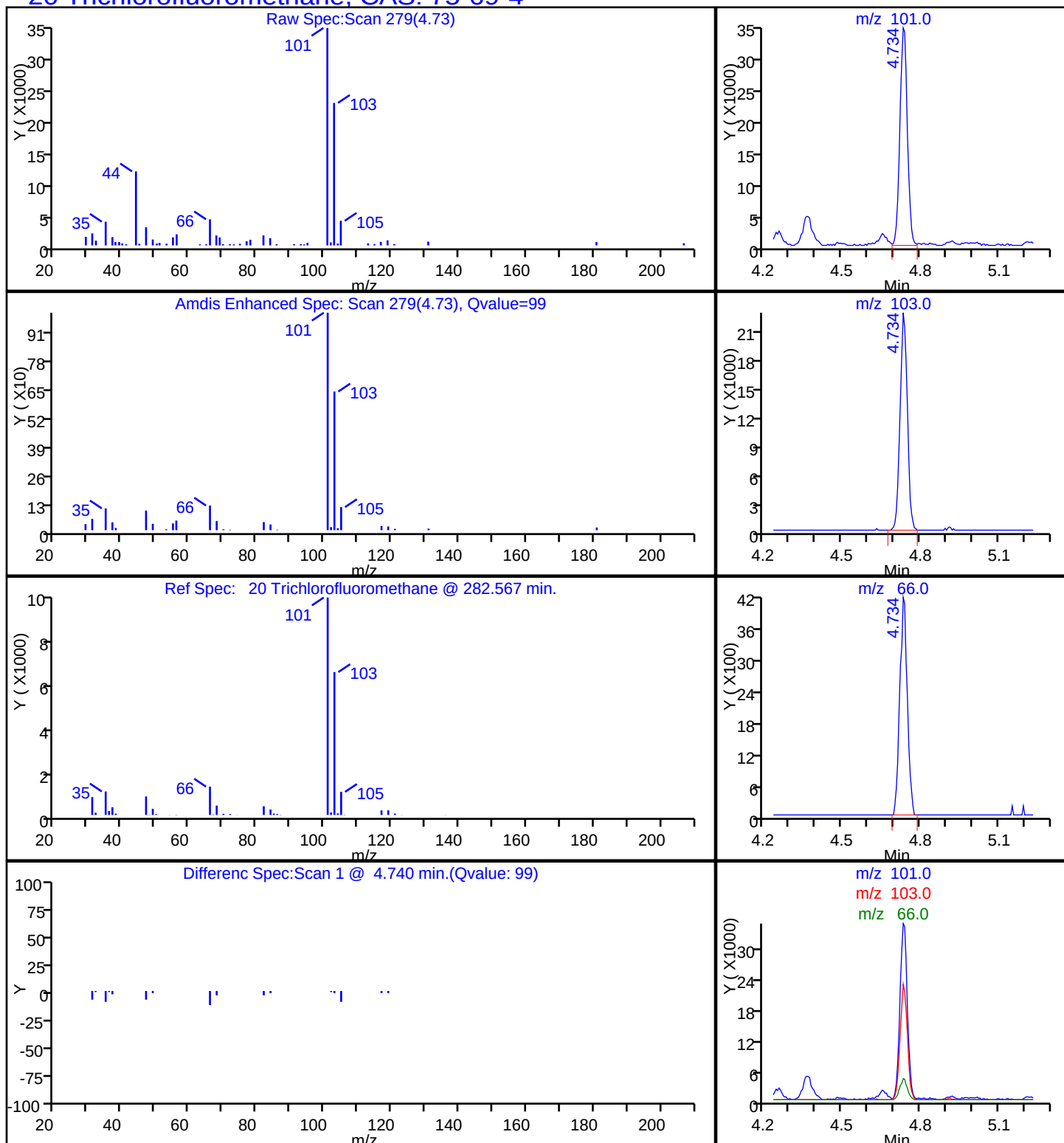
Dil. Factor: 1.0000

Method: MG_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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H43-BA-1020 Lab Sample ID: 140-7831-11
 Matrix: Air Lab File ID: GD20P113.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:14
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 22:23
 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.: 10584 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	0.086		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	0.081		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H43-BA-1020 Lab Sample ID: 140-7831-11
 Matrix: Air Lab File ID: GD20P113.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:14
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 22:23
 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.: 10584 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	17		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	0.21		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	0.28		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	0.24		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H43-BA-1020 Lab Sample ID: 140-7831-11
 Matrix: Air Lab File ID: GD20P113.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:14
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 22:23
 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.: 10584 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	0.28		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	0.51		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	0.88		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H43-BA-1020 Lab Sample ID: 140-7831-11
 Matrix: Air Lab File ID: GD20P113.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:14
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 22:23
 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.: 10584 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	32		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	0.71		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	1.9		0.54	
108-88-3	Toluene	92.14	0.44		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		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P113.D
 Lims ID: 140-7831-A-11
 Client ID: H43-BA-1020
 Sample Type: Client
 Inject. Date: 20-Apr-2017 22:23:30 ALS Bottle#: 13 Worklist Smp#: 17
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004683-017
 Misc. Info.: 140-7831-a-11
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 21-Apr-2017 11:03:51 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK027

First Level Reviewer: tajh

Date: 21-Apr-2017 10:55:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.958	7.969	-0.011	68	290317	4.00	
* 2 1,4-Difluorobenzene	114	10.126	10.131	-0.005	94	1446464	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.001	15.006	-0.005	88	1422459	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.672	16.678	-0.006	84	1145863	4.08	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	151880	0.4943	
9 Chloromethane	52	3.666	3.660	0.006	99	8847	0.4280	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.671	0.000	40	2970	0.0162	
17 Ethanol	31	4.351	4.356	-0.005	96	492928	16.9	
20 Trichlorofluoromethane	101	4.734	4.739	-0.005	99	73903	0.2415	
29 2-Methyl-2-propanol	59	5.462	5.456	0.006	91	7365	0.0625	
30 1,1,2-Trichloro-1,2,2-trif	101	5.505	5.510	-0.005	95	12874	0.0721	
31 Methylene Chloride	84	5.640	5.639	0.001	82	14354	0.2056	
39 2-Butanone (MEK)	72	7.252	7.252	0.000	95	14576	0.4412	
40 Hexane	56	7.317	7.317	0.001	1	1901	0.0332	
44 Chloroform	83	7.980	7.996	-0.016	30	5364	0.0263	
48 1,2-Dichloroethane	62	9.048	9.058	-0.010	92	3314	0.0227	
49 Benzene	78	9.544	9.554	-0.010	95	21187	0.0862	
51 Carbon tetrachloride	117	9.571	9.581	-0.010	97	20886	0.0813	
62 1,4-Dioxane	88	11.124	11.113	0.011	89	2449	0.0736	
65 4-Methyl-2-pentanone (MIBK	43	12.110	12.100	0.010	94	6227	0.0441	
68 Toluene	91	12.989	12.995	-0.006	94	32723	0.1155	
76 Tetrachloroethene	129	14.165	14.165	0.000	91	35867	0.2767	
81 m-Xylene & p-Xylene	91	15.524	15.534	-0.010	99	19458	0.0609	
85 o-Xylene	91	16.058	16.063	-0.005	91	9277	0.0284	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P113.D

Injection Date: 20-Apr-2017 22:23:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7831-A-11

Lab Sample ID: 140-7831-11

Worklist Smp#: 17

Client ID: H43-BA-1020

Purge Vol: 500.000 mL

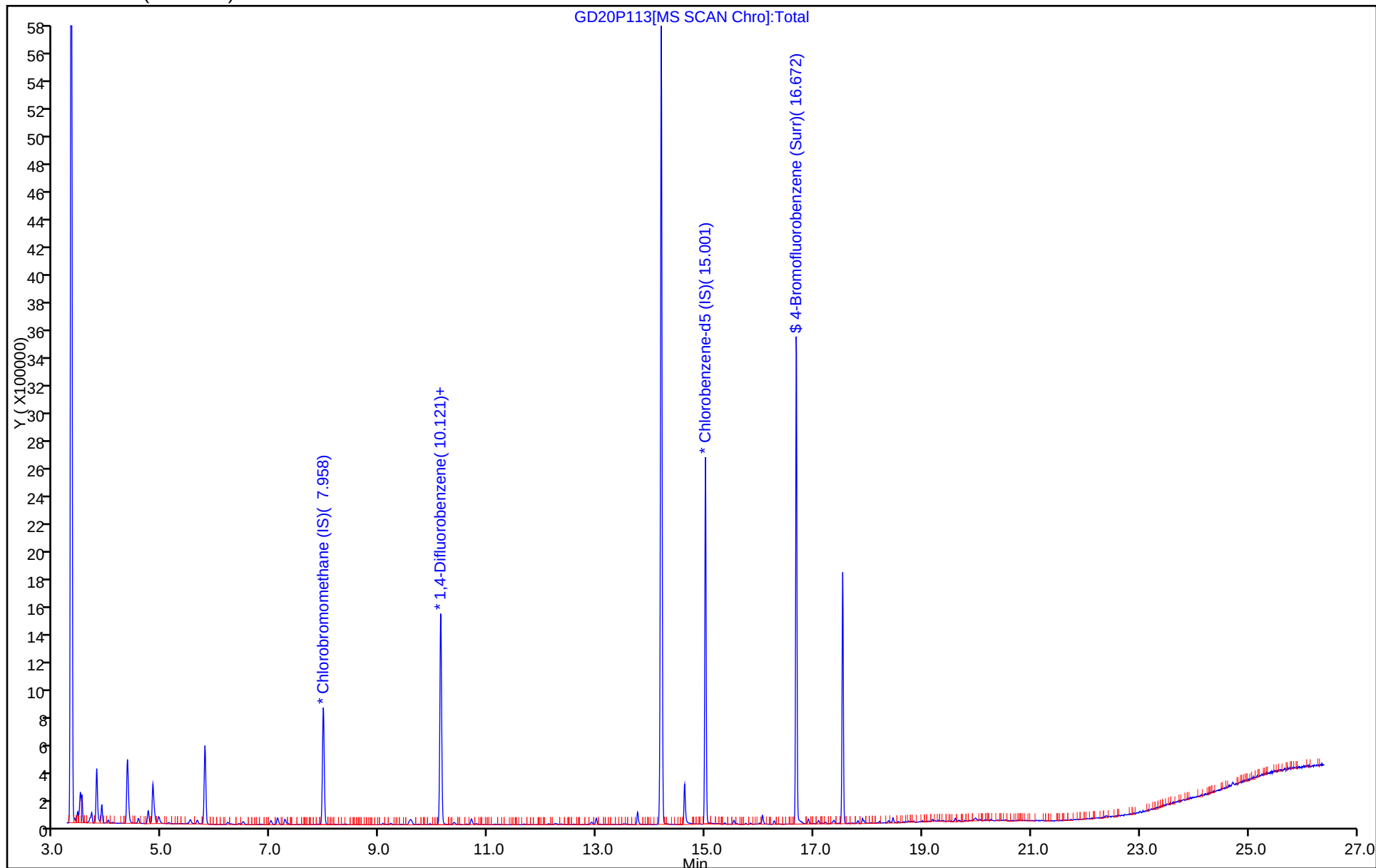
Dil. Factor: 1.0000

ALS Bottle#: 13

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P113.D
Lims ID: 140-7831-A-11
Client ID: H43-BA-1020
Sample Type: Client
Inject. Date: 20-Apr-2017 22:23:30 ALS Bottle#: 13 Worklist Smp#: 17
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004683-017
Misc. Info.: 140-7831-a-11
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2017 11:03:51 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: tajh

Date: 21-Apr-2017 10:55:02

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.08	101.91

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P113.D

Injection Date: 20-Apr-2017 22:23:30

Instrument ID: MG

Lims ID: 140-7831-A-11

Lab Sample ID: 140-7831-11

Client ID: H43-BA-1020

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

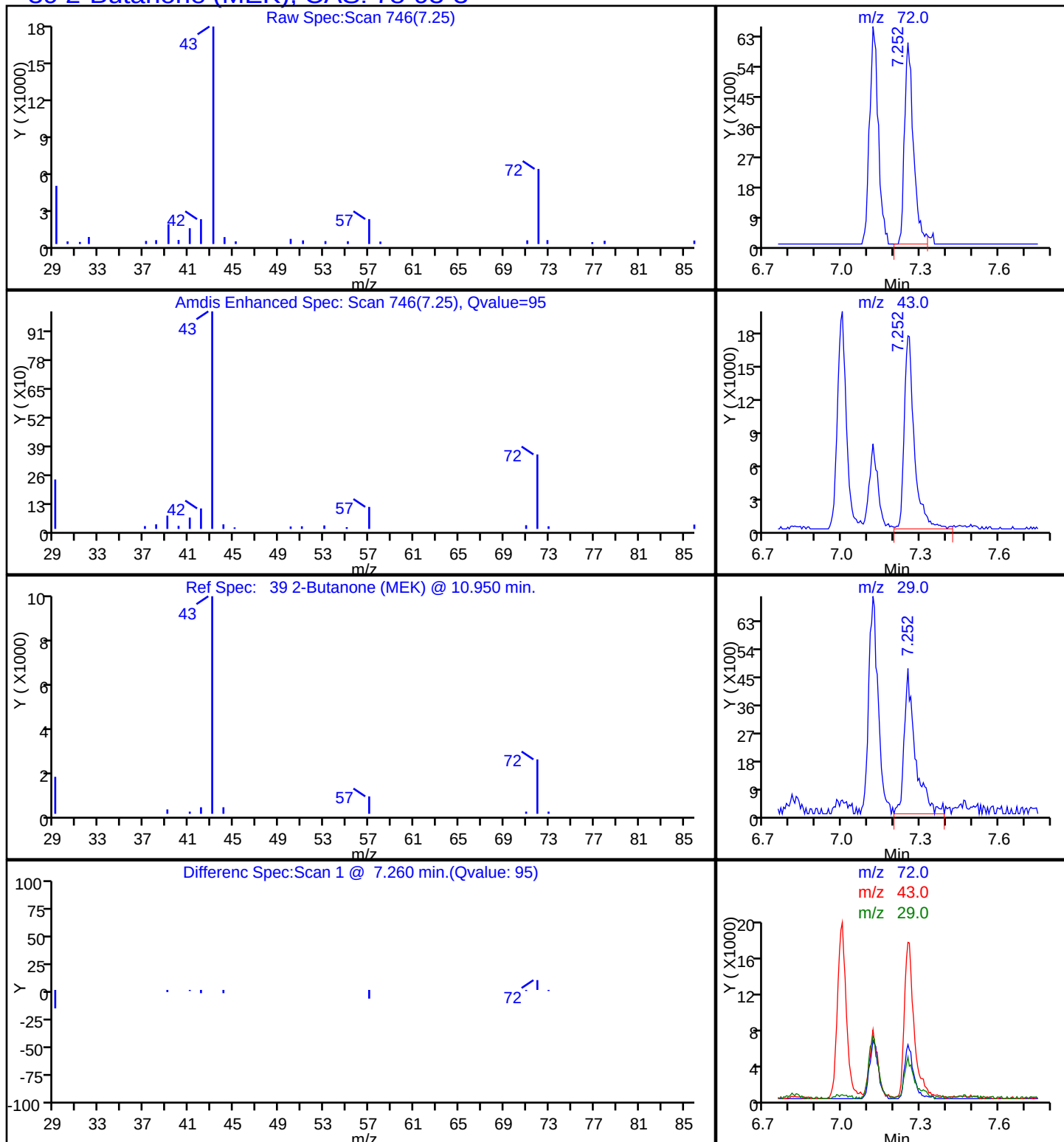
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P113.D

Injection Date: 20-Apr-2017 22:23:30

Instrument ID: MG

Lims ID: 140-7831-A-11

Lab Sample ID: 140-7831-11

Client ID: H43-BA-1020

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

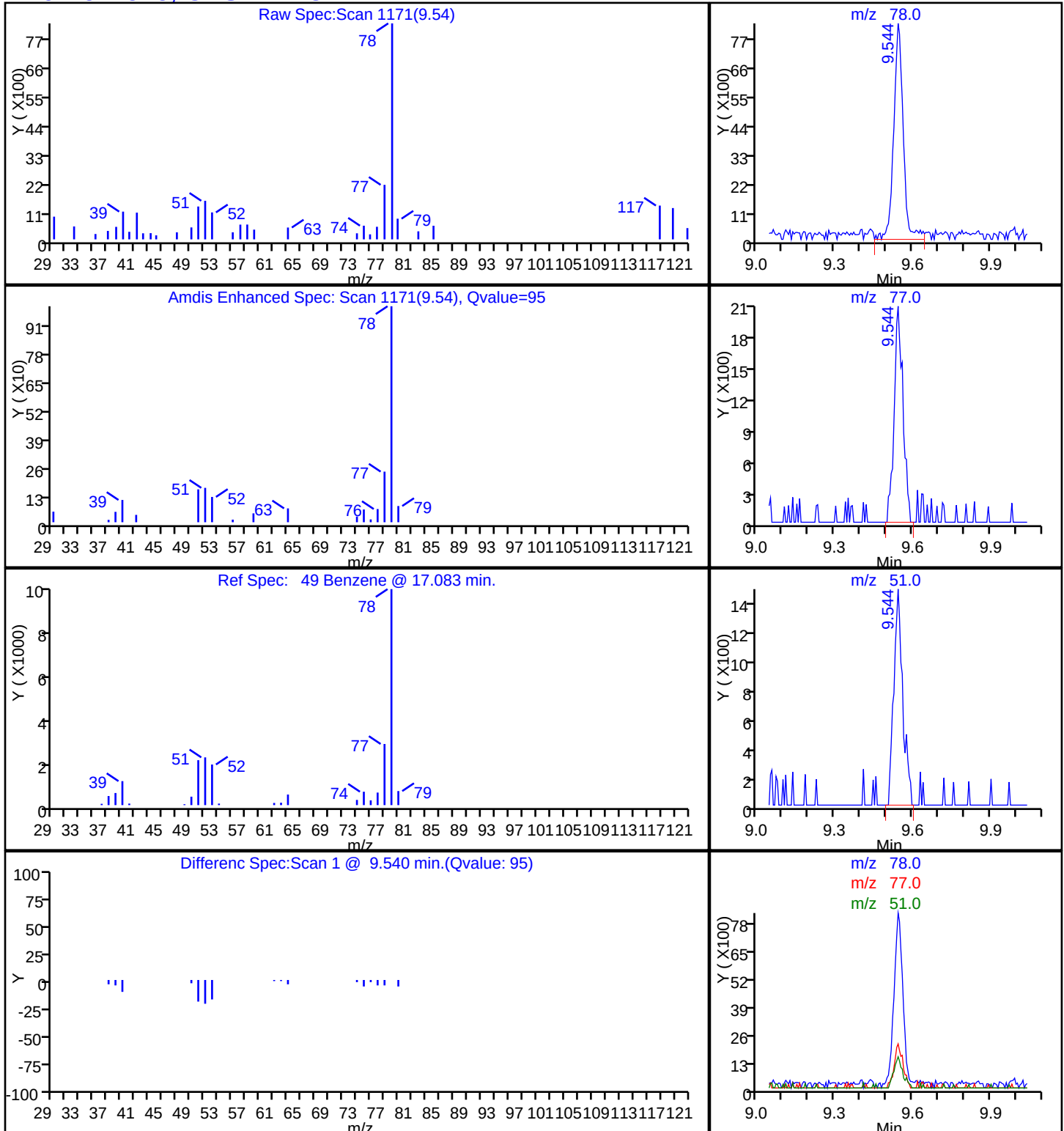
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P113.D

Injection Date: 20-Apr-2017 22:23:30

Instrument ID: MG

Lims ID: 140-7831-A-11

Lab Sample ID: 140-7831-11

Client ID: H43-BA-1020

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

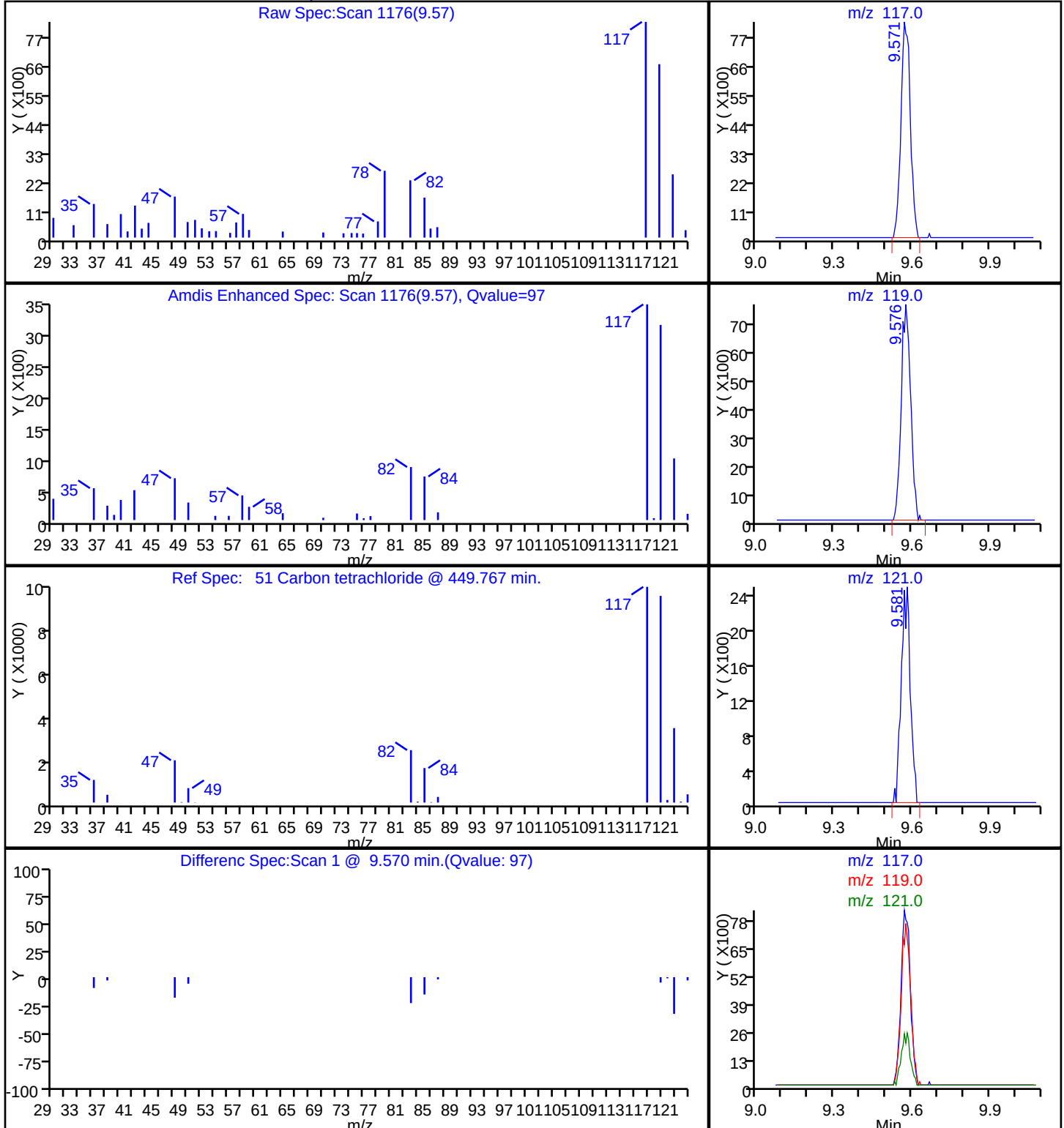
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P113.D

Injection Date: 20-Apr-2017 22:23:30

Instrument ID: MG

Lims ID: 140-7831-A-11

Lab Sample ID: 140-7831-11

Client ID: H43-BA-1020

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

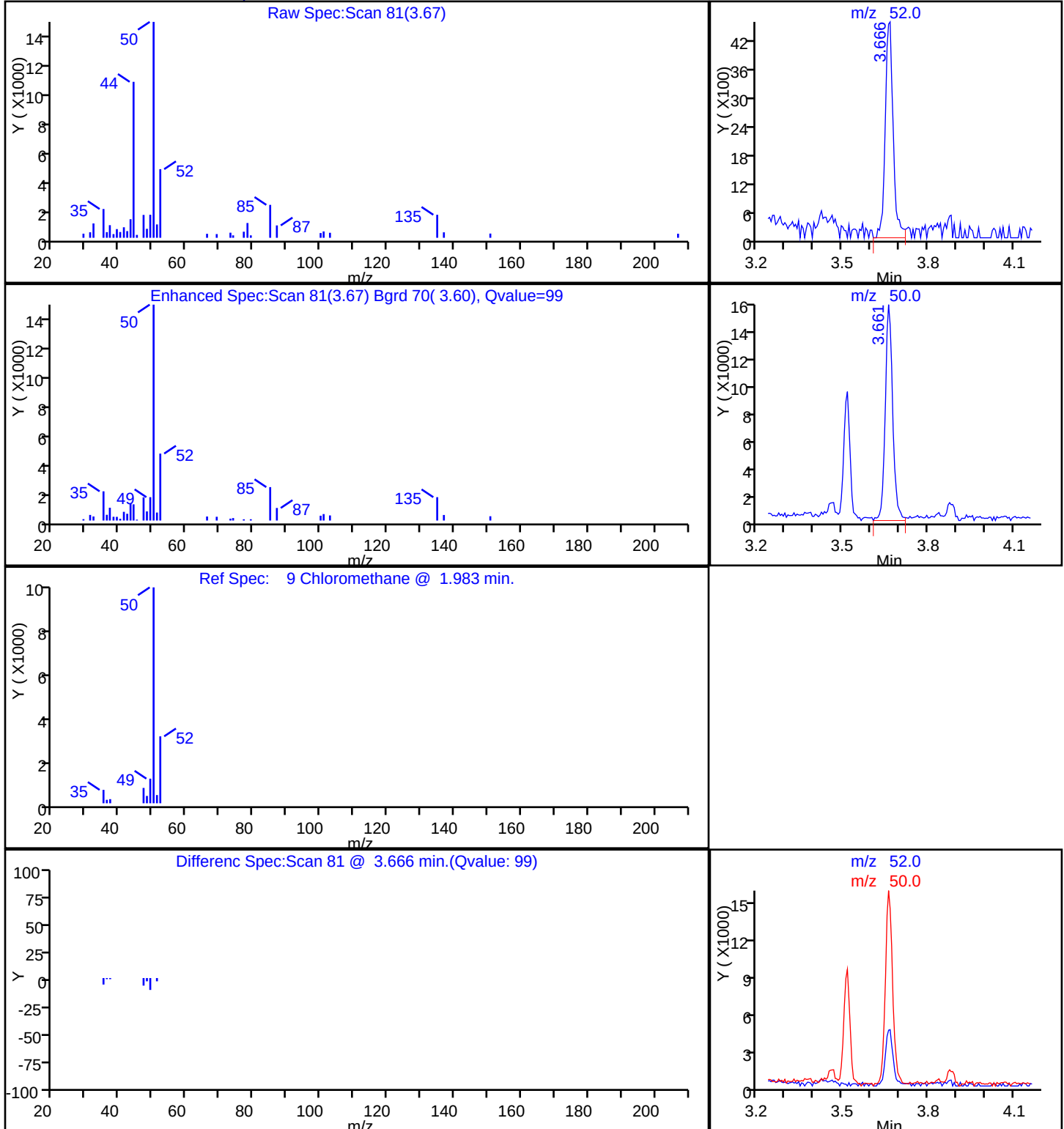
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P113.D

Injection Date: 20-Apr-2017 22:23:30

Instrument ID: MG

Lims ID: 140-7831-A-11

Lab Sample ID: 140-7831-11

Client ID: H43-BA-1020

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

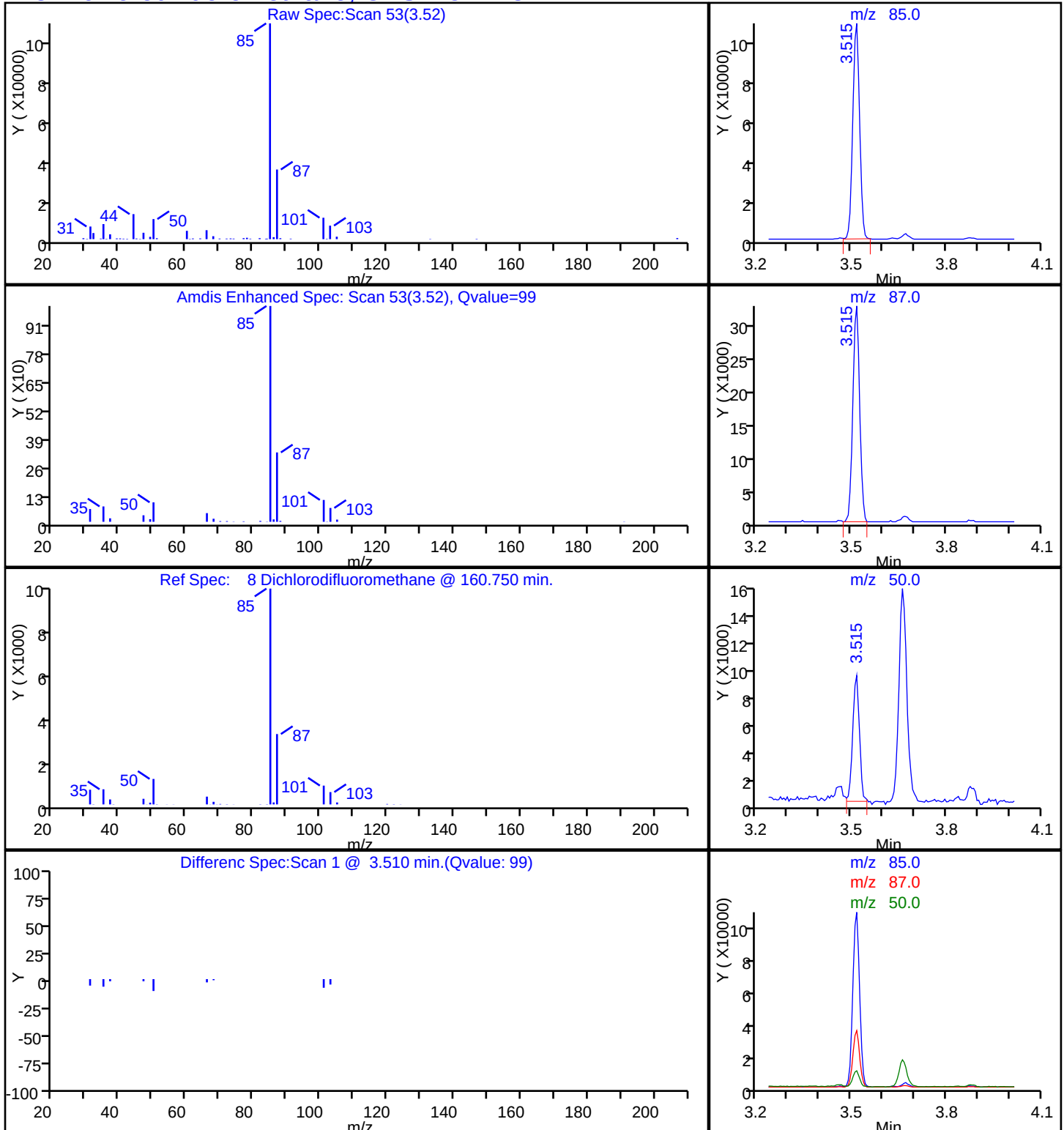
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P113.D

Injection Date: 20-Apr-2017 22:23:30

Instrument ID: MG

Lims ID: 140-7831-A-11

Lab Sample ID: 140-7831-11

Client ID: H43-BA-1020

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

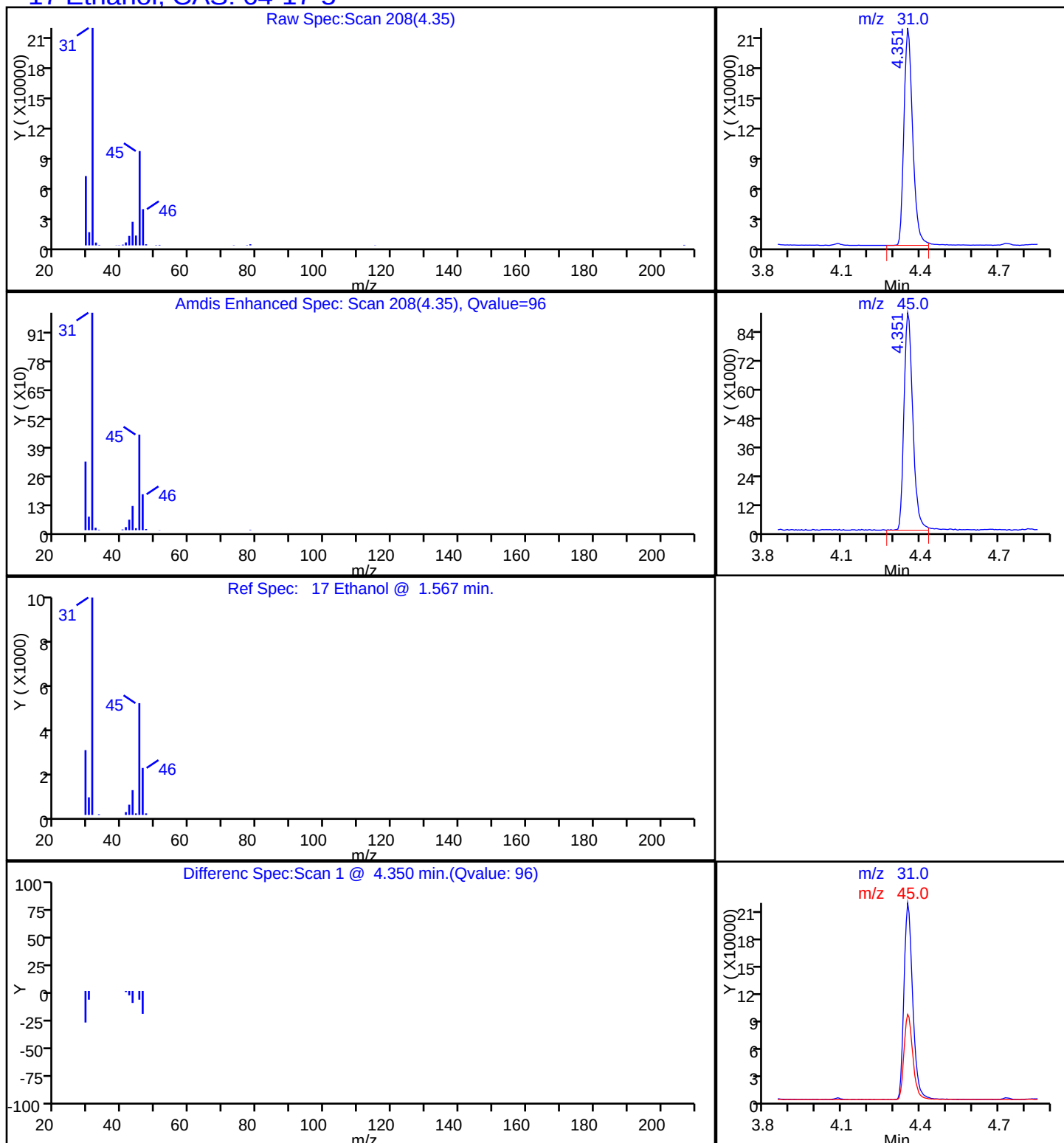
Method: MG_TO15

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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P113.D

Injection Date: 20-Apr-2017 22:23:30

Instrument ID: MG

Lims ID: 140-7831-A-11

Lab Sample ID: 140-7831-11

Client ID: H43-BA-1020

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

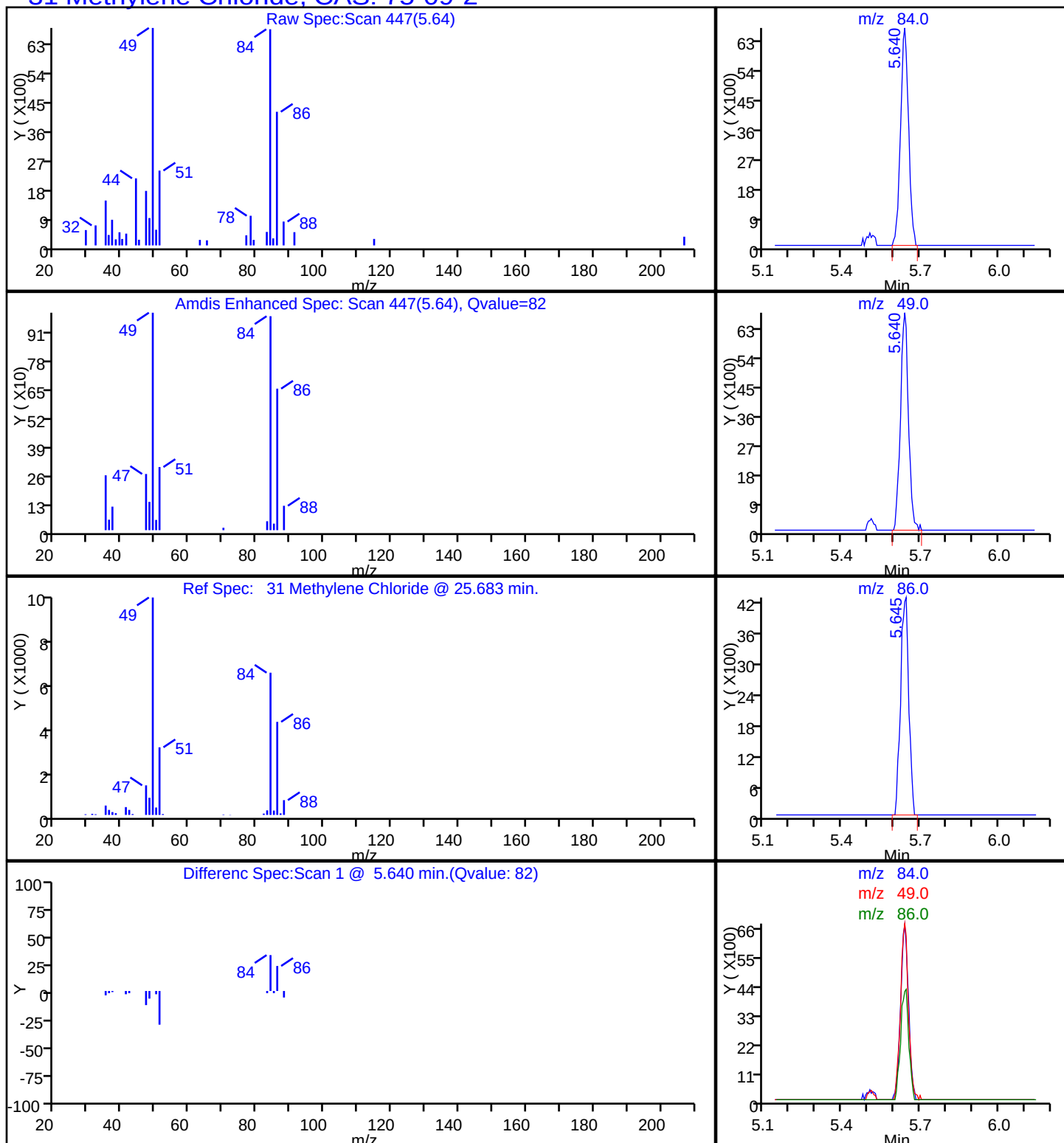
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\\Knoxville\\ChromData\\MG\\20170418-4683.b\\GD20P113.D

Injection Date: 20-Apr-2017 22:23:30

Instrument ID: MG

Lims ID: 140-7831-A-11

Lab Sample ID: 140-7831-11

Client ID: H43-BA-1020

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

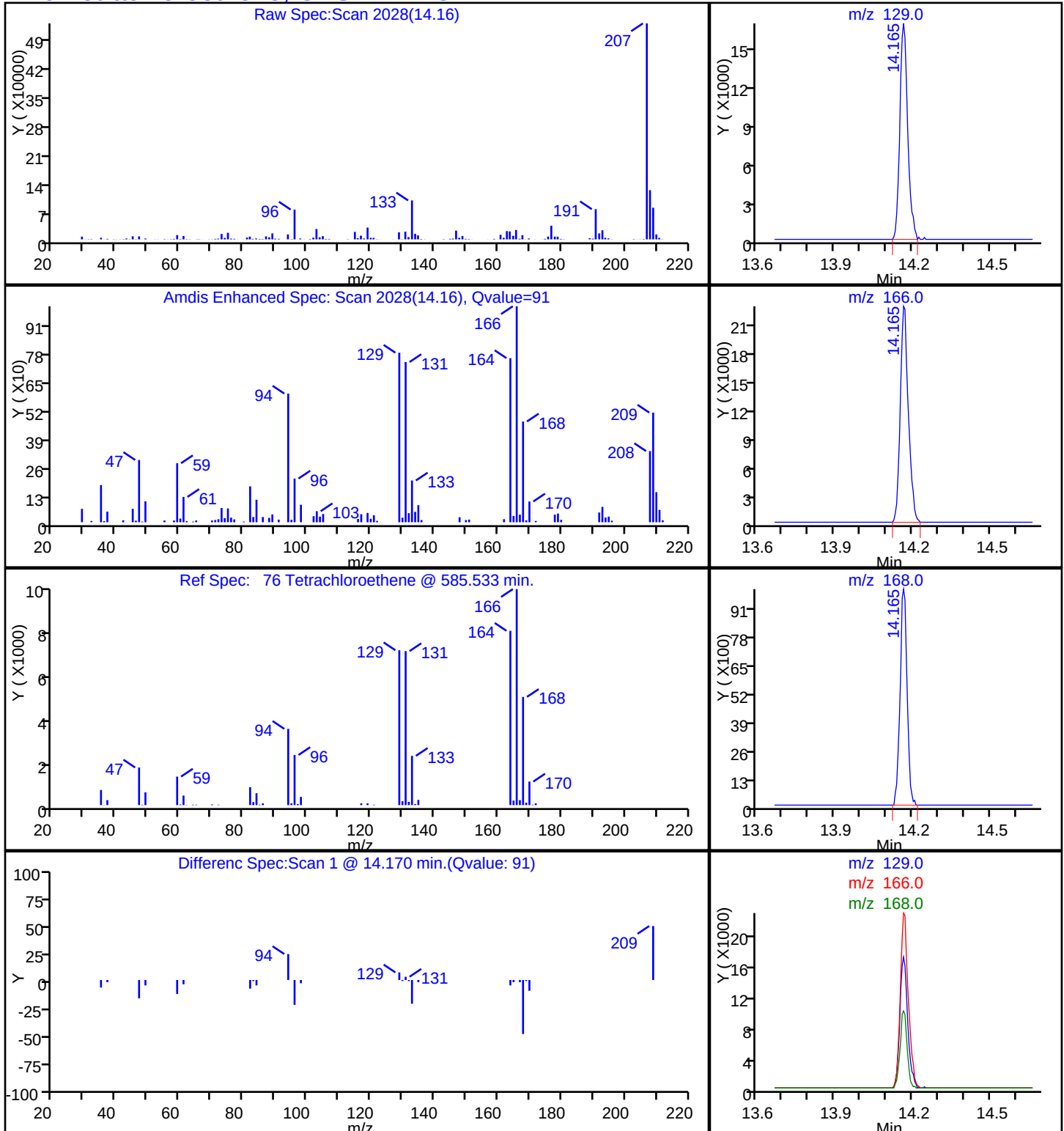
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

76 Tetrachloroethene, CAS: 127-18-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P113.D

Injection Date: 20-Apr-2017 22:23:30

Instrument ID: MG

Lims ID: 140-7831-A-11

Lab Sample ID: 140-7831-11

Client ID: H43-BA-1020

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

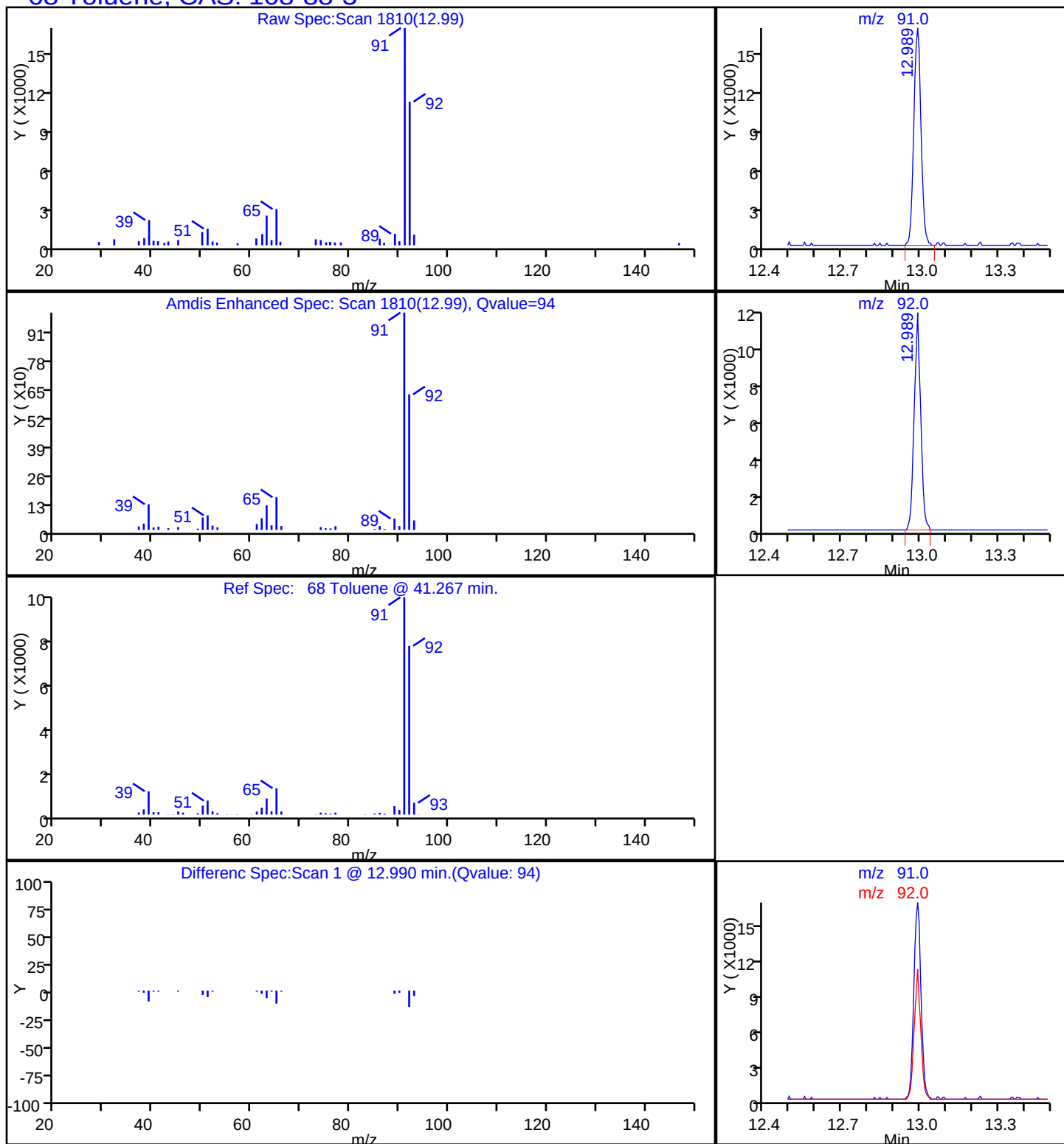
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P113.D

Injection Date: 20-Apr-2017 22:23:30

Instrument ID: MG

Lims ID: 140-7831-A-11

Lab Sample ID: 140-7831-11

Client ID: H43-BA-1020

Operator ID: 7126

ALS Bottle#: 13

Worklist Smp#: 17

Purge Vol: 500.000 mL

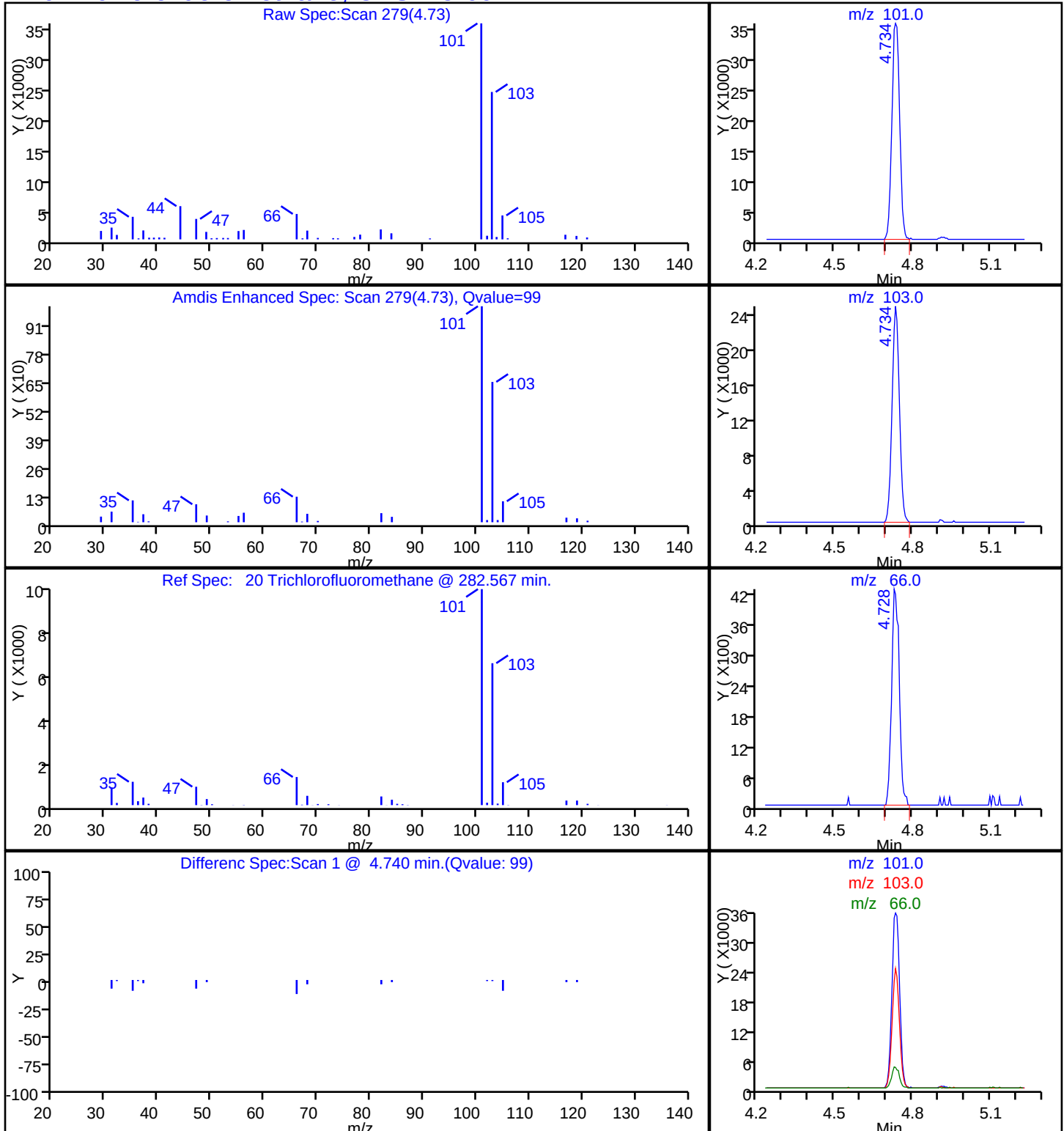
Dil. Factor: 1.0000

Method: MG_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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H44-SS Lab Sample ID: 140-7831-12
 Matrix: Air Lab File ID: GD20P114.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 14:48
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 23:09
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 10584 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	0.91		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	0.26		0.080	
106-93-4	1,2-Dibromoethane	187.87	ND		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.080	
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	
78-87-5	1,2-Dichloropropane	112.99	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.11		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.080	
123-91-1	1,4-Dioxane	88.11	ND		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.20	
78-93-3	2-Butanone	72.11	0.76		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	0.27		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	0.33		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	0.11		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	0.52		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H44-SS Lab Sample ID: 140-7831-12
 Matrix: Air Lab File ID: GD20P114.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 14:48
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 23:09
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 10584 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	ND		2.0	
100-41-4	Ethylbenzene	106.17	0.13		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	1.0		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	0.75		0.080	
95-47-6	o-Xylene	106.17	0.25		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	0.31		0.080	
108-88-3	Toluene	92.14	0.73		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	0.10		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.25		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	106		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H44-SS Lab Sample ID: 140-7831-12
 Matrix: Air Lab File ID: GD20P114.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 14:48
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 23:09
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 10584 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	5.0		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	1.3		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.56		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	2.2		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.1		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	2.1		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	0.55		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	1.8		0.69	

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H44-SS Lab Sample ID: 140-7831-12
 Matrix: Air Lab File ID: GD20P114.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 14:48
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 23:09
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 10584 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	ND		3.8	
100-41-4	Ethylbenzene	106.17	0.55		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	3.6		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	3.3		0.35	
95-47-6	o-Xylene	106.17	1.1		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	2.1		0.54	
108-88-3	Toluene	92.14	2.7		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	0.54		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.4		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	106		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D
 Lims ID: 140-7831-A-12
 Client ID: H44-SS
 Sample Type: Client
 Inject. Date: 20-Apr-2017 23:09:30 ALS Bottle#: 14 Worklist Smp#: 18
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004683-018
 Misc. Info.: 140-7831-a-12
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 21-Apr-2017 11:03:51 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK027

First Level Reviewer: tajh

Date: 21-Apr-2017 09:07:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.964	7.969	-0.005	69	272454	4.00	
* 2 1,4-Difluorobenzene	114	10.131	10.131	0.000	94	1303472	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.006	15.006	0.000	88	1395671	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.678	16.678	0.000	85	1166307	4.23	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	141062	0.4892	
9 Chloromethane	52	3.666	3.660	0.006	28	1120	0.0577	7M
10 1,2-Dichloro-1,1,2,2-tetra	135	3.677	3.671	0.006	40	3424	0.0199	
17 Ethanol	31	4.356	4.356	0.000	68	42844	1.56	
20 Trichlorofluoromethane	101	4.739	4.739	0.000	100	72341	0.2519	
30 1,1,2-Trichloro-1,2,2-trif	101	5.510	5.510	0.000	93	13009	0.0777	
31 Methylene Chloride	84	5.645	5.639	0.006	76	8901	0.1359	
39 2-Butanone (MEK)	72	7.257	7.252	0.005	96	23516	0.7585	
40 Hexane	56	7.317	7.317	0.001	84	55195	1.03	
44 Chloroform	83	7.985	7.996	-0.011	94	21344	0.1117	
47 1,1,1-Trichloroethane	97	8.967	8.967	0.000	93	201708	0.9124	
49 Benzene	78	9.549	9.554	-0.005	95	58468	0.2640	
50 Cyclohexane	69	9.560	9.560	0.000	80	19447	0.5218	
51 Carbon tetrachloride	117	9.587	9.581	0.006	97	76065	0.3287	
56 Isooctane	57	10.380	10.385	-0.005	63	9897	0.0301	
59 Trichloroethene	130	10.865	10.870	-0.005	94	11950	0.0996	
65 4-Methyl-2-pentanone (MIBK	43	12.105	12.100	0.005	92	34966	0.2749	M
68 Toluene	91	12.989	12.995	-0.006	93	201664	0.7253	
76 Tetrachloroethene	129	14.165	14.165	0.000	89	39524	0.3108	
79 Ethylbenzene	91	15.362	15.362	0.000	98	49367	0.1271	
81 m-Xylene & p-Xylene	91	15.529	15.534	-0.005	100	235015	0.7492	
85 o-Xylene	91	16.058	16.063	-0.005	97	78625	0.2452	
92 1,3,5-Trimethylbenzene	120	17.460	17.465	-0.005	92	23443	0.1140	
96 1,2,4-Trimethylbenzene	105	17.923	17.929	-0.006	98	103551	0.2628	

[QC Flag Legend](#)

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

[Reagents:](#)

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D

Injection Date: 20-Apr-2017 23:09:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7831-A-12

Lab Sample ID: 140-7831-12

Worklist Smp#: 18

Client ID: H44-SS

Purge Vol: 500.000 mL

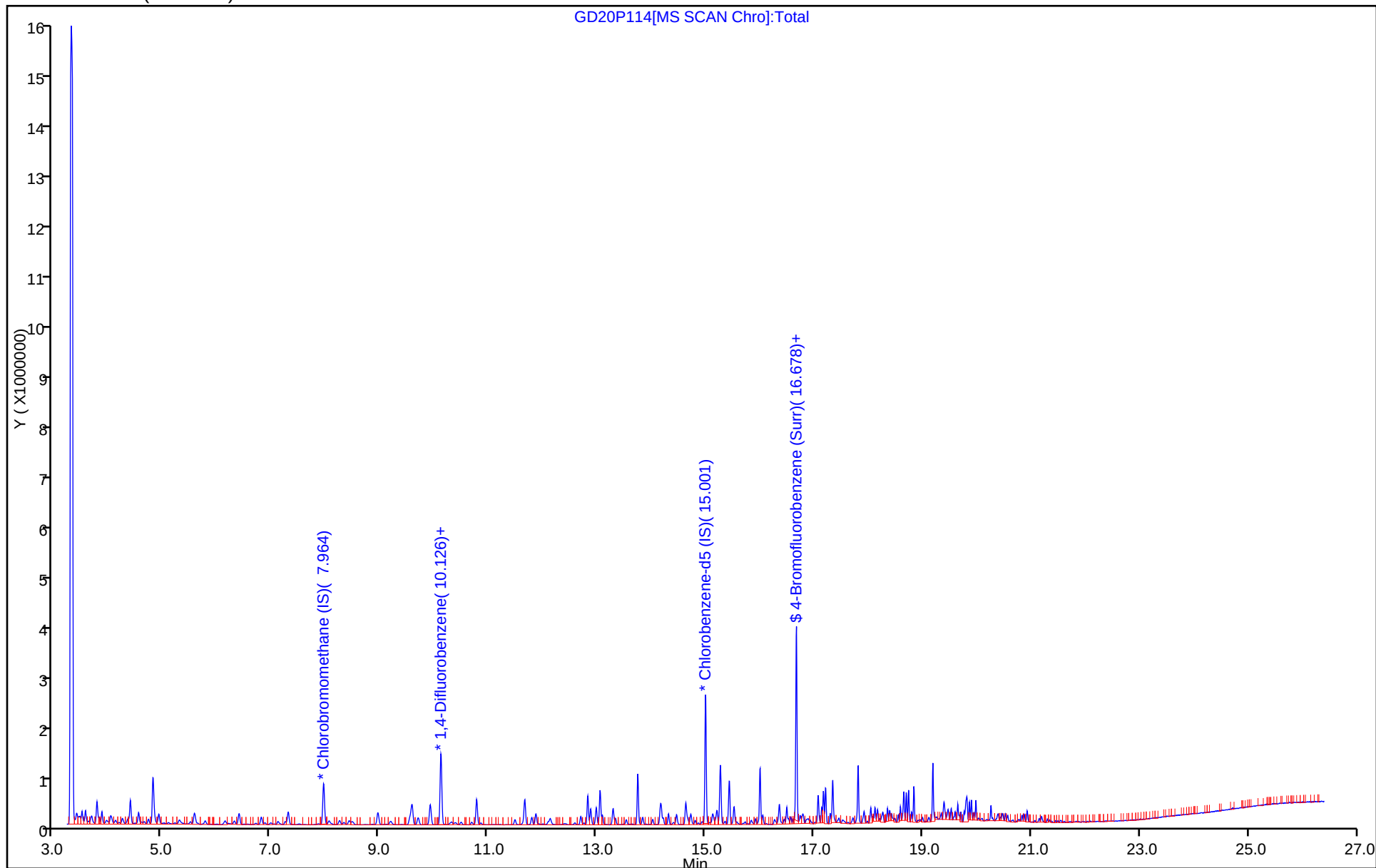
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D
Lims ID: 140-7831-A-12
Client ID: H44-SS
Sample Type: Client
Inject. Date: 20-Apr-2017 23:09:30 ALS Bottle#: 14 Worklist Smp#: 18
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004683-018
Misc. Info.: 140-7831-a-12
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 21-Apr-2017 11:03:51 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: tajh

Date: 21-Apr-2017 09:07:45

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.23	105.71

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D

Injection Date: 20-Apr-2017 23:09:30

Instrument ID: MG

Lims ID: 140-7831-A-12

Lab Sample ID: 140-7831-12

Client ID: H44-SS

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

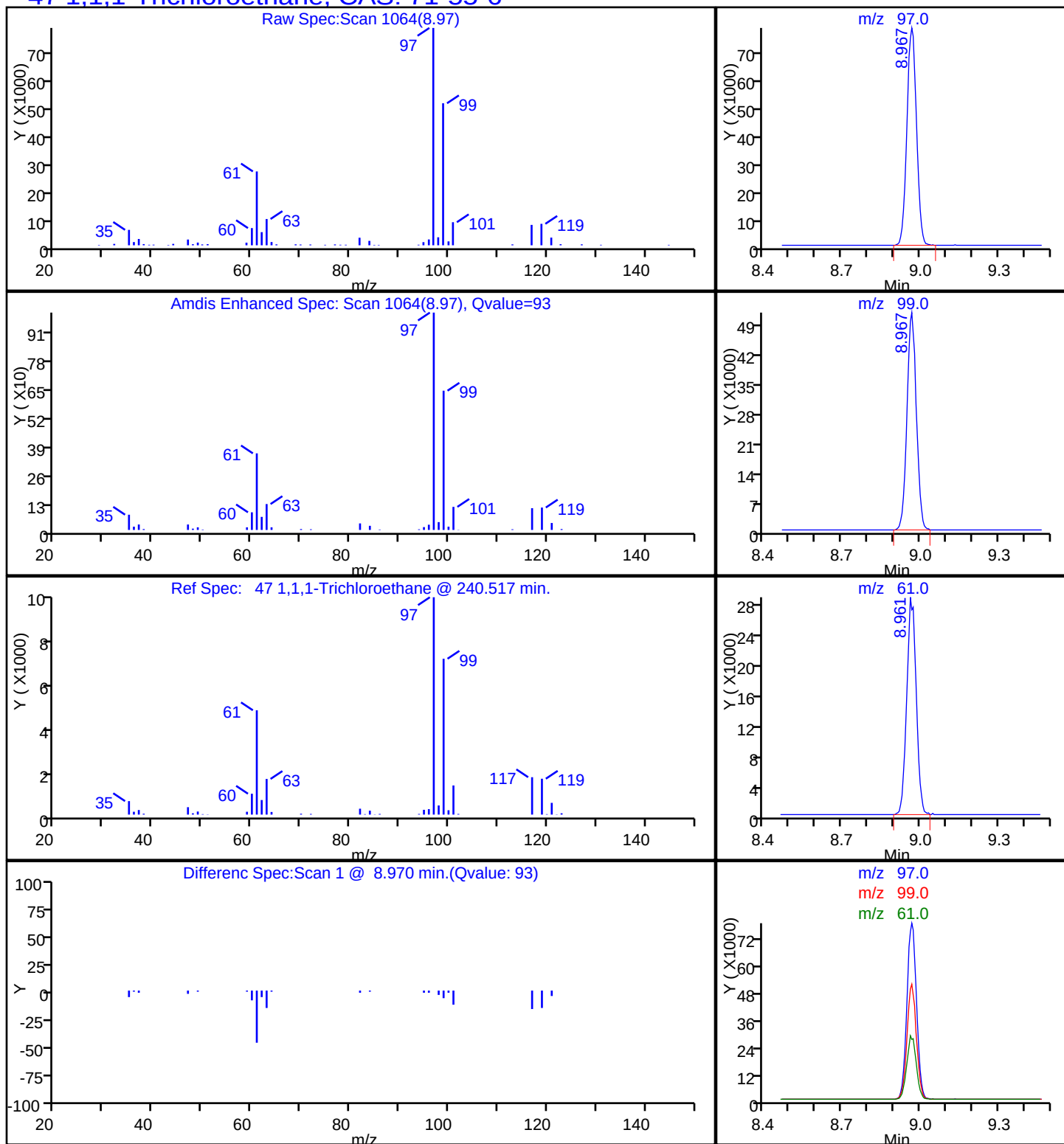
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

47 1,1,1-Trichloroethane, CAS: 71-55-6



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D

Injection Date: 20-Apr-2017 23:09:30

Instrument ID: MG

Lims ID: 140-7831-A-12

Lab Sample ID: 140-7831-12

Client ID: H44-SS

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

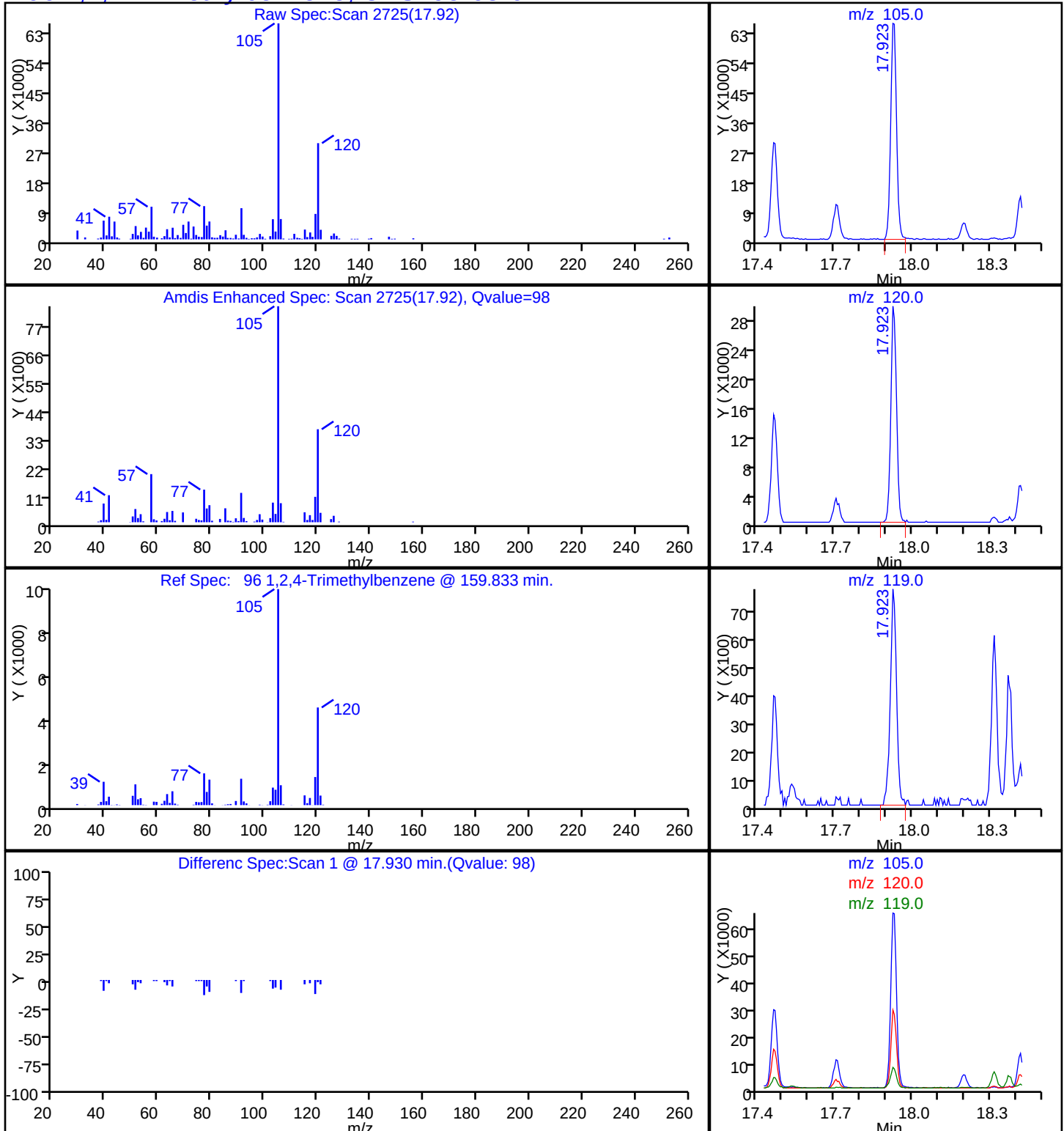
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

96 1,2,4-Trimethylbenzene, CAS: 95-63-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D

Injection Date: 20-Apr-2017 23:09:30

Instrument ID: MG

Lims ID: 140-7831-A-12

Lab Sample ID: 140-7831-12

Client ID: H44-SS

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

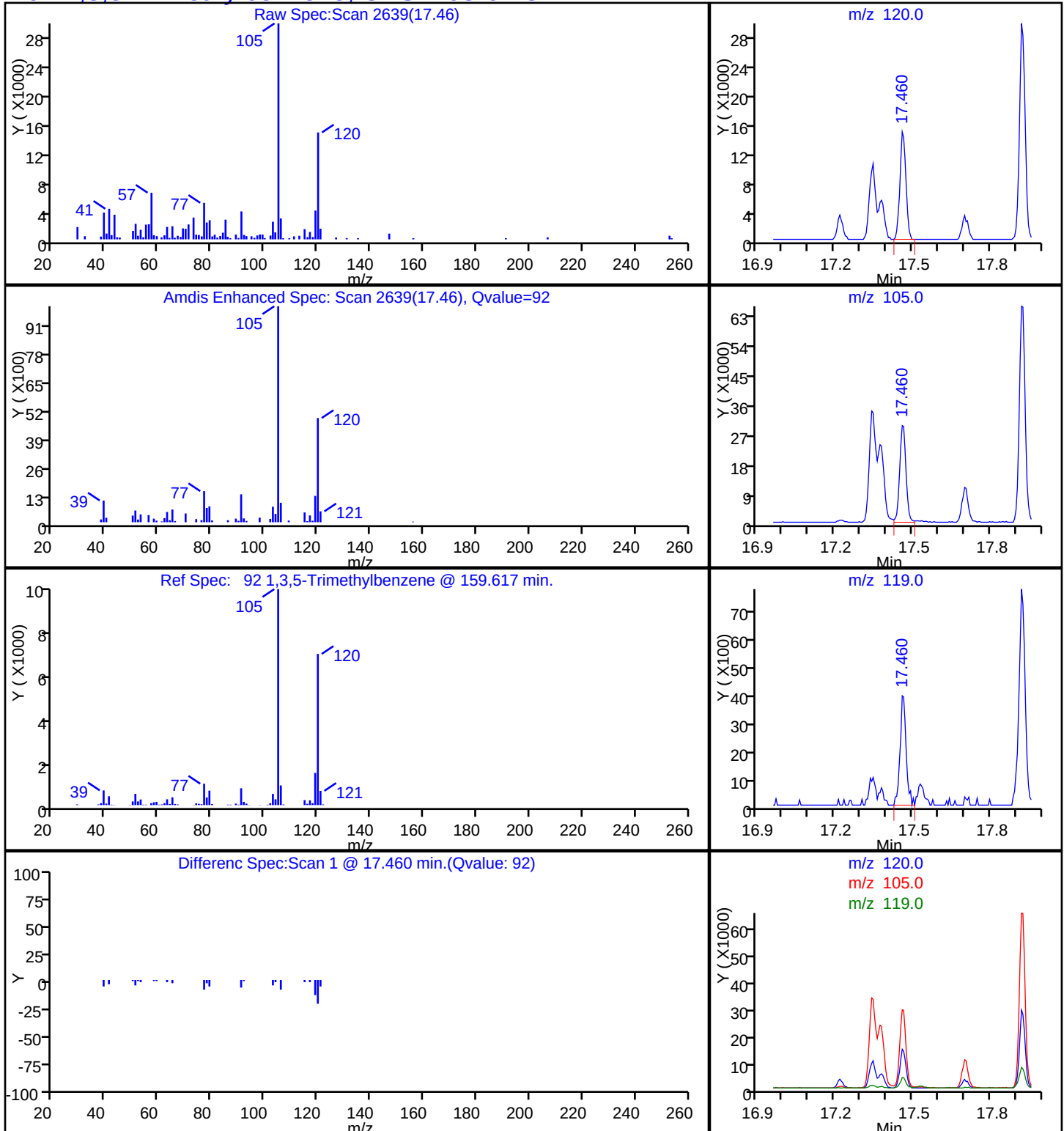
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

92 1,3,5-Trimethylbenzene, CAS: 108-67-8

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D

Injection Date: 20-Apr-2017 23:09:30

Instrument ID: MG

Lims ID: 140-7831-A-12

Lab Sample ID: 140-7831-12

Client ID: H44-SS

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

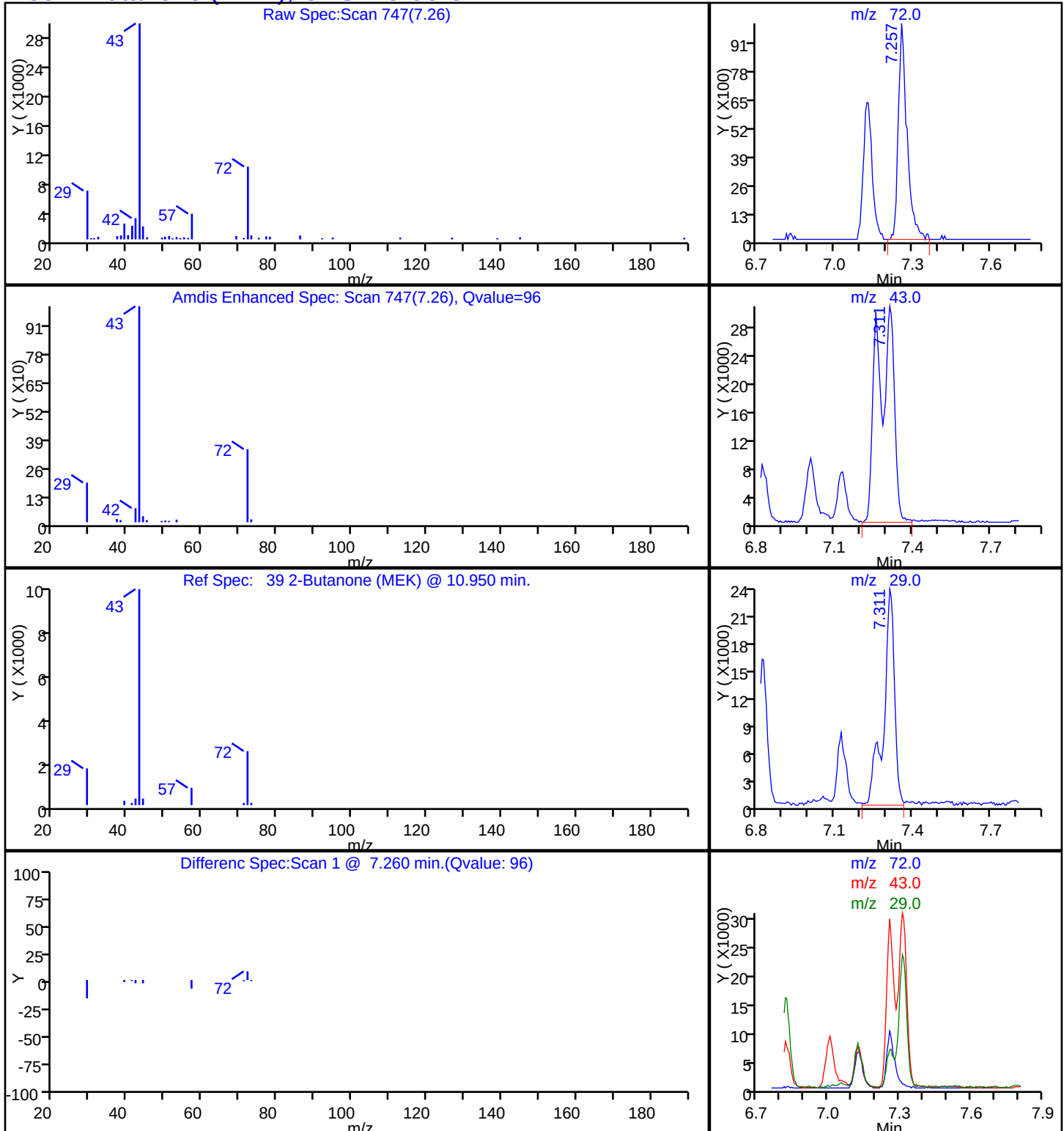
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D

Injection Date: 20-Apr-2017 23:09:30

Instrument ID: MG

Lims ID: 140-7831-A-12

Lab Sample ID: 140-7831-12

Client ID: H44-SS

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

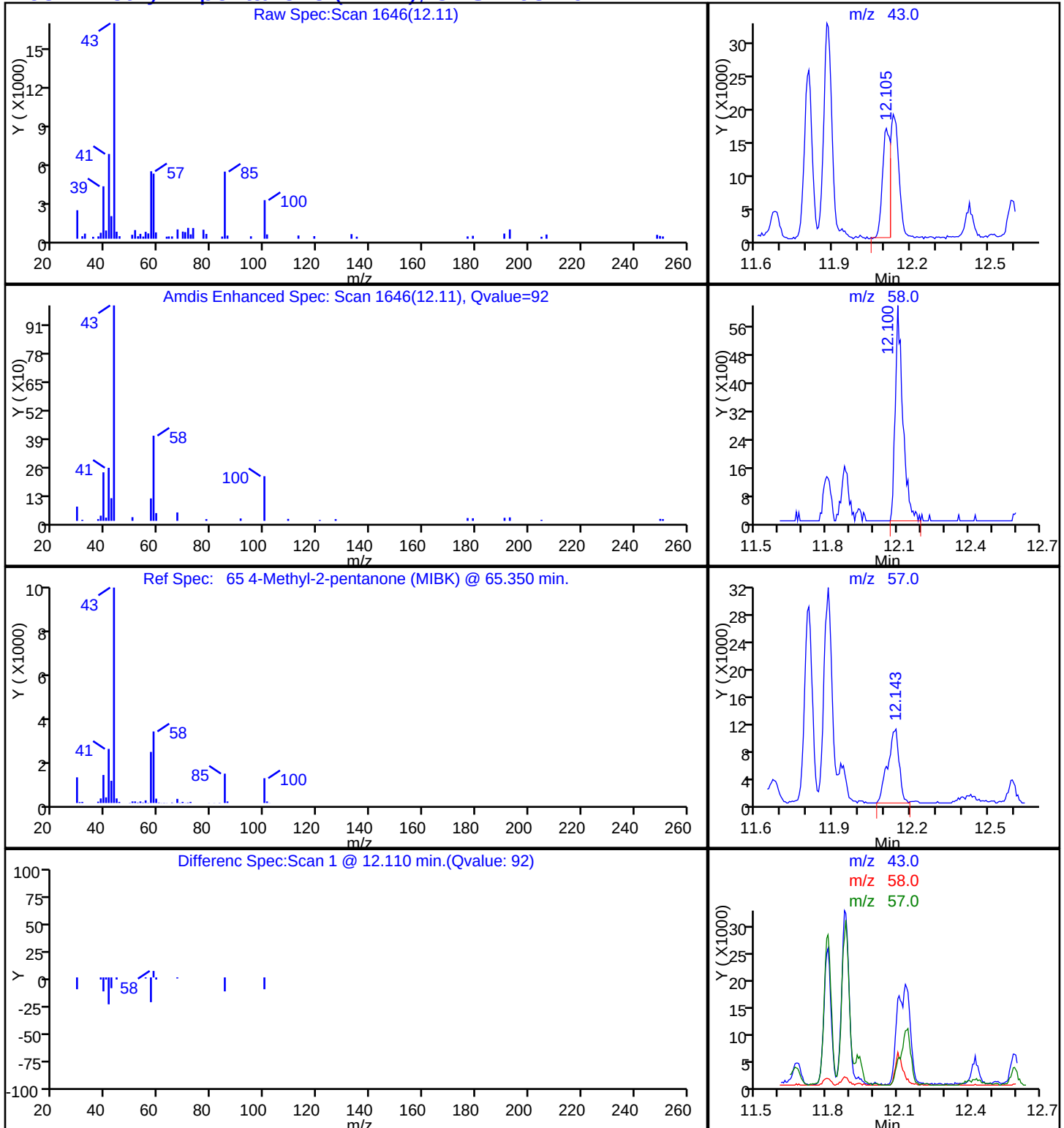
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

65 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D

Injection Date: 20-Apr-2017 23:09:30

Instrument ID: MG

Lims ID: 140-7831-A-12

Lab Sample ID: 140-7831-12

Client ID: H44-SS

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

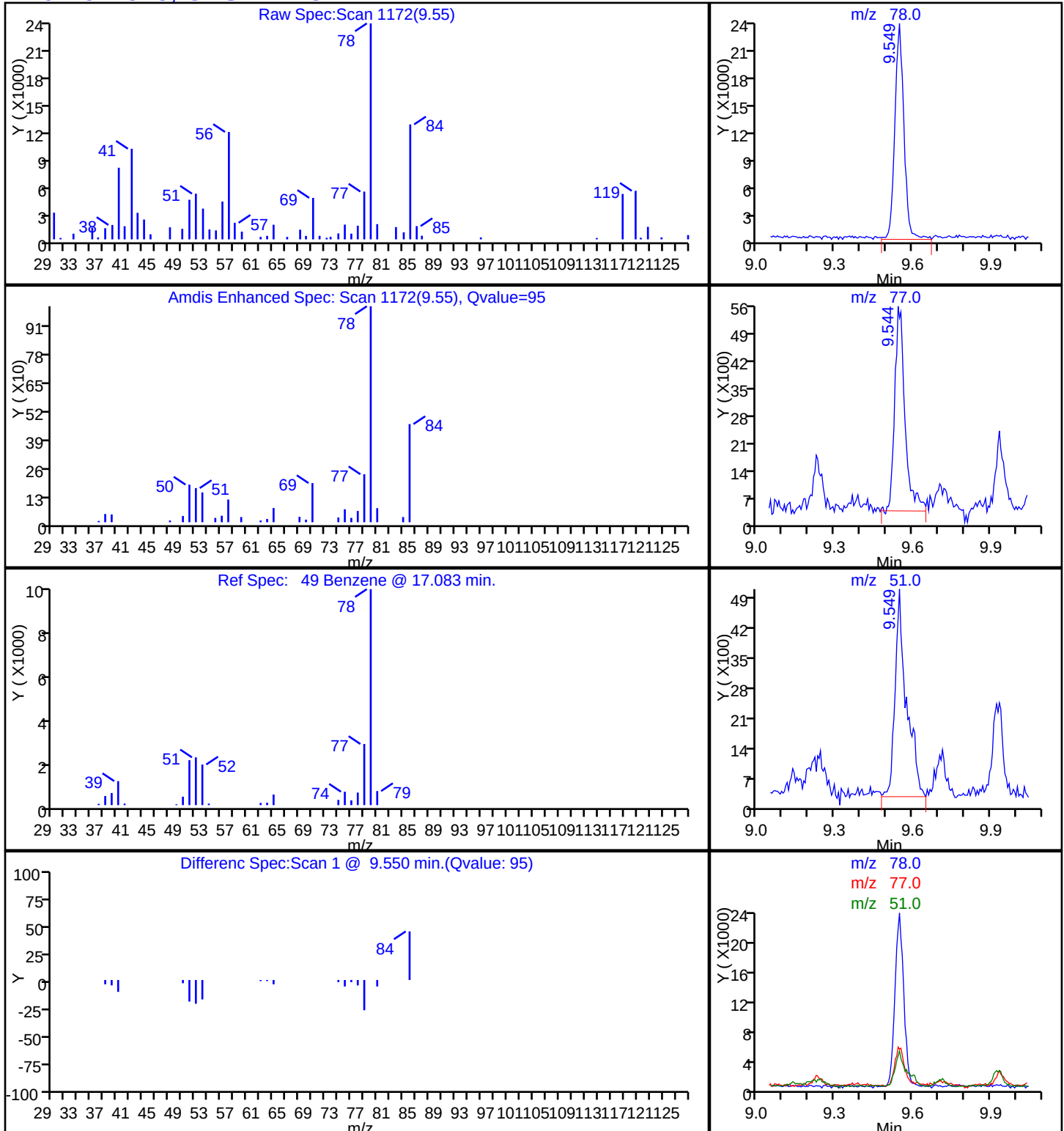
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D

Injection Date: 20-Apr-2017 23:09:30

Instrument ID: MG

Lims ID: 140-7831-A-12

Lab Sample ID: 140-7831-12

Client ID: H44-SS

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

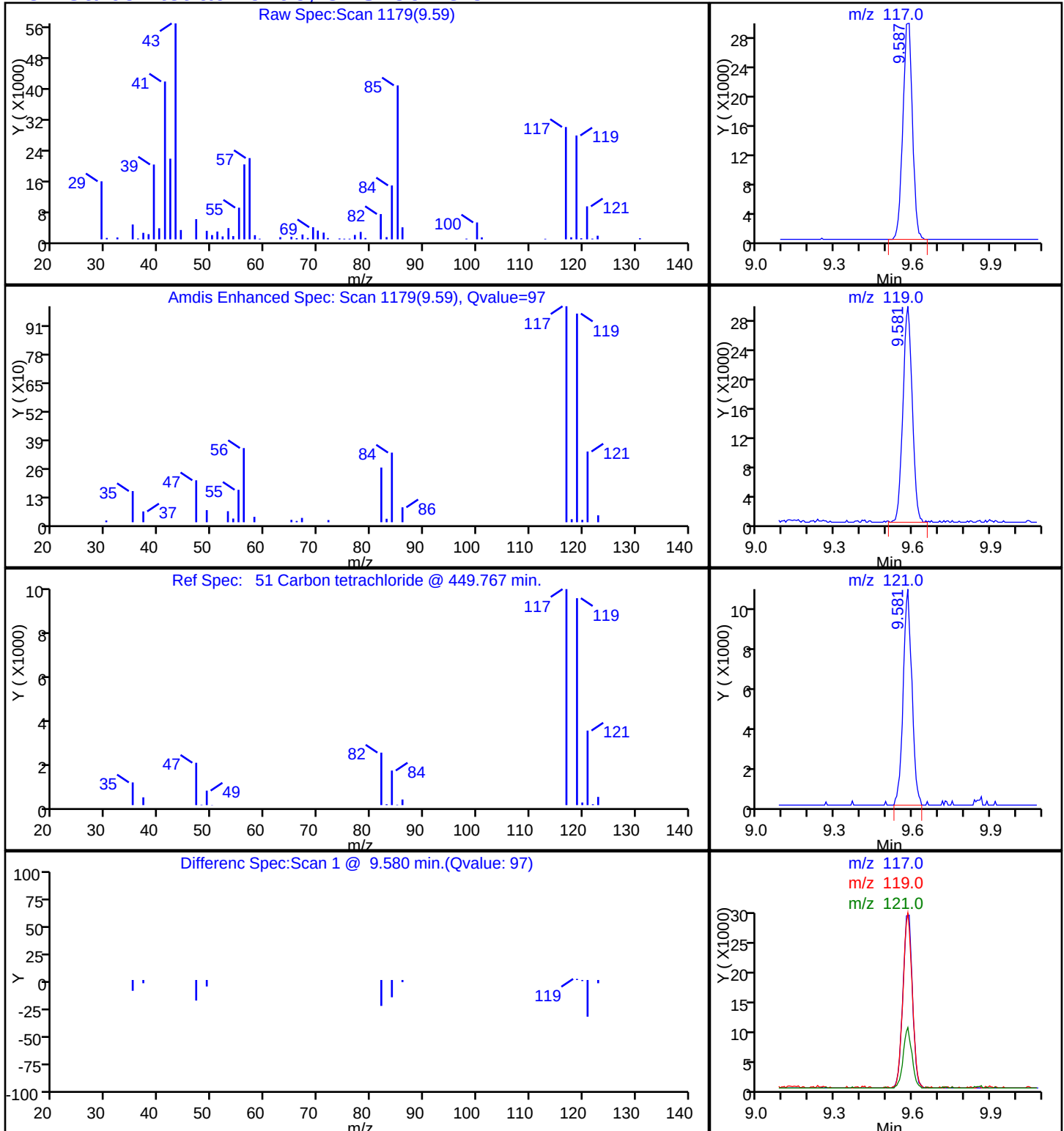
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D

Injection Date: 20-Apr-2017 23:09:30

Instrument ID: MG

Lims ID: 140-7831-A-12

Lab Sample ID: 140-7831-12

Client ID: H44-SS

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

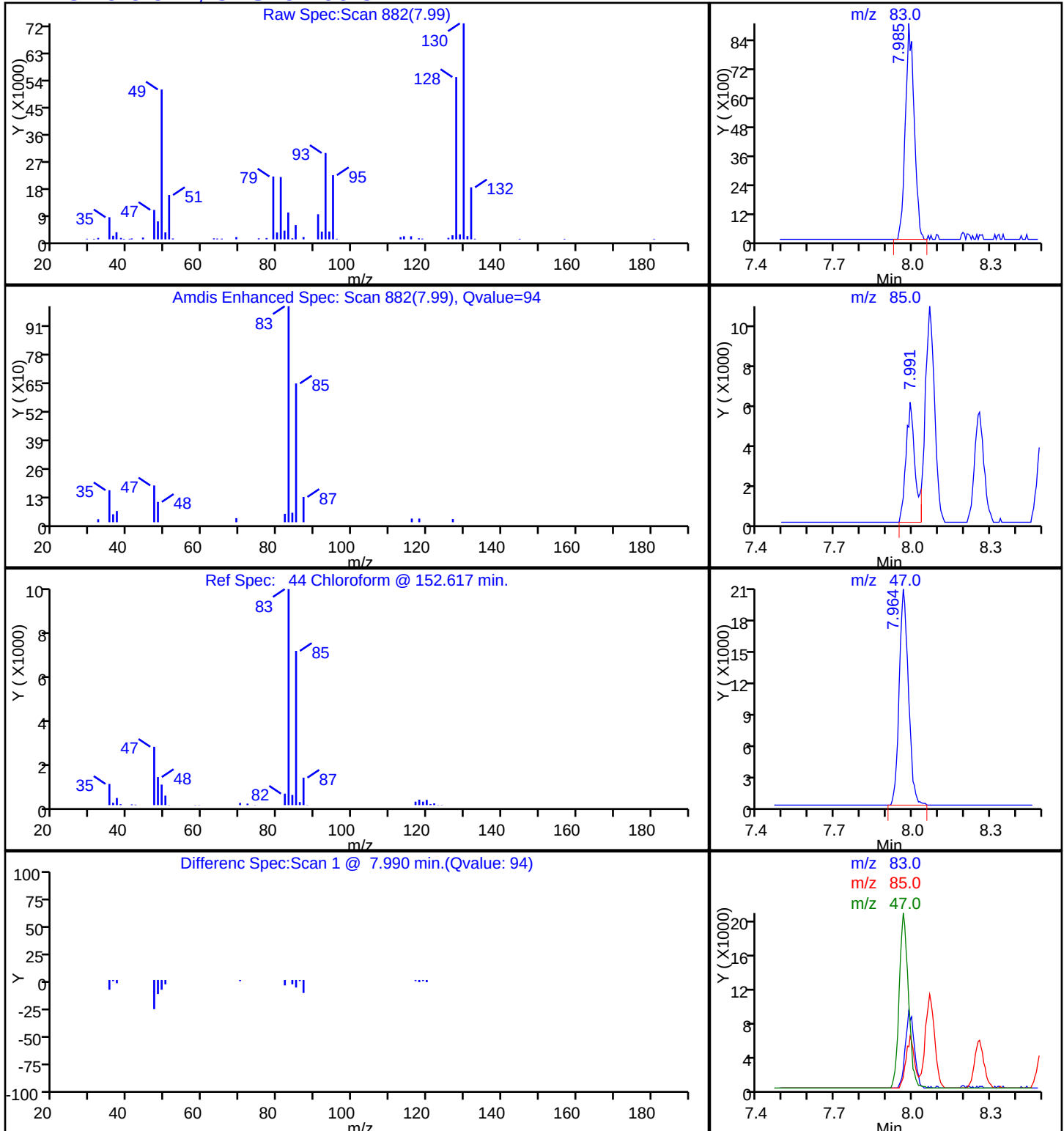
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

44 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D

Injection Date: 20-Apr-2017 23:09:30

Instrument ID: MG

Lims ID: 140-7831-A-12

Lab Sample ID: 140-7831-12

Client ID: H44-SS

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

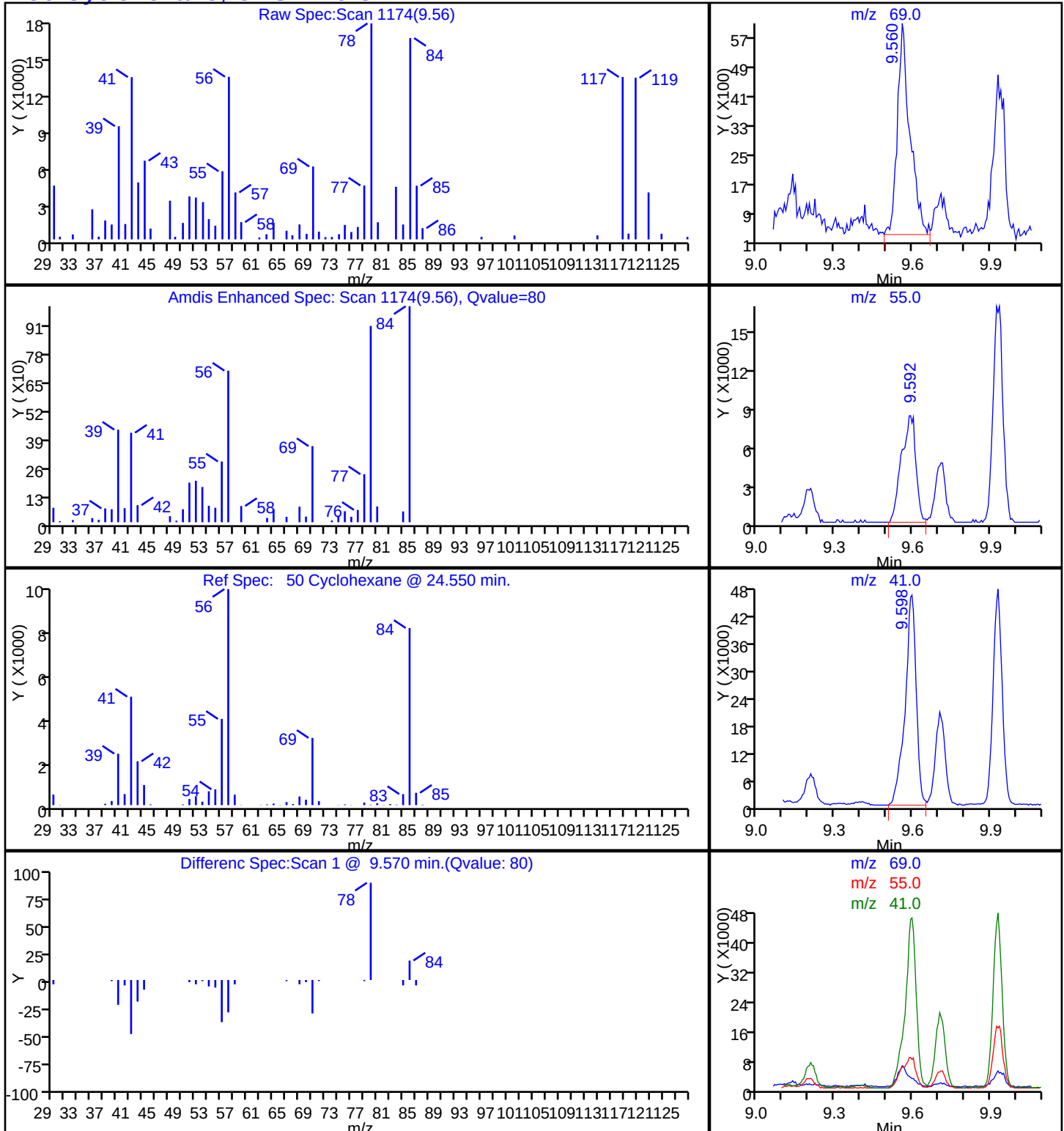
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

50 Cyclohexane, CAS: 110-82-7



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D

Injection Date: 20-Apr-2017 23:09:30

Instrument ID: MG

Lims ID: 140-7831-A-12

Lab Sample ID: 140-7831-12

Client ID: H44-SS

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

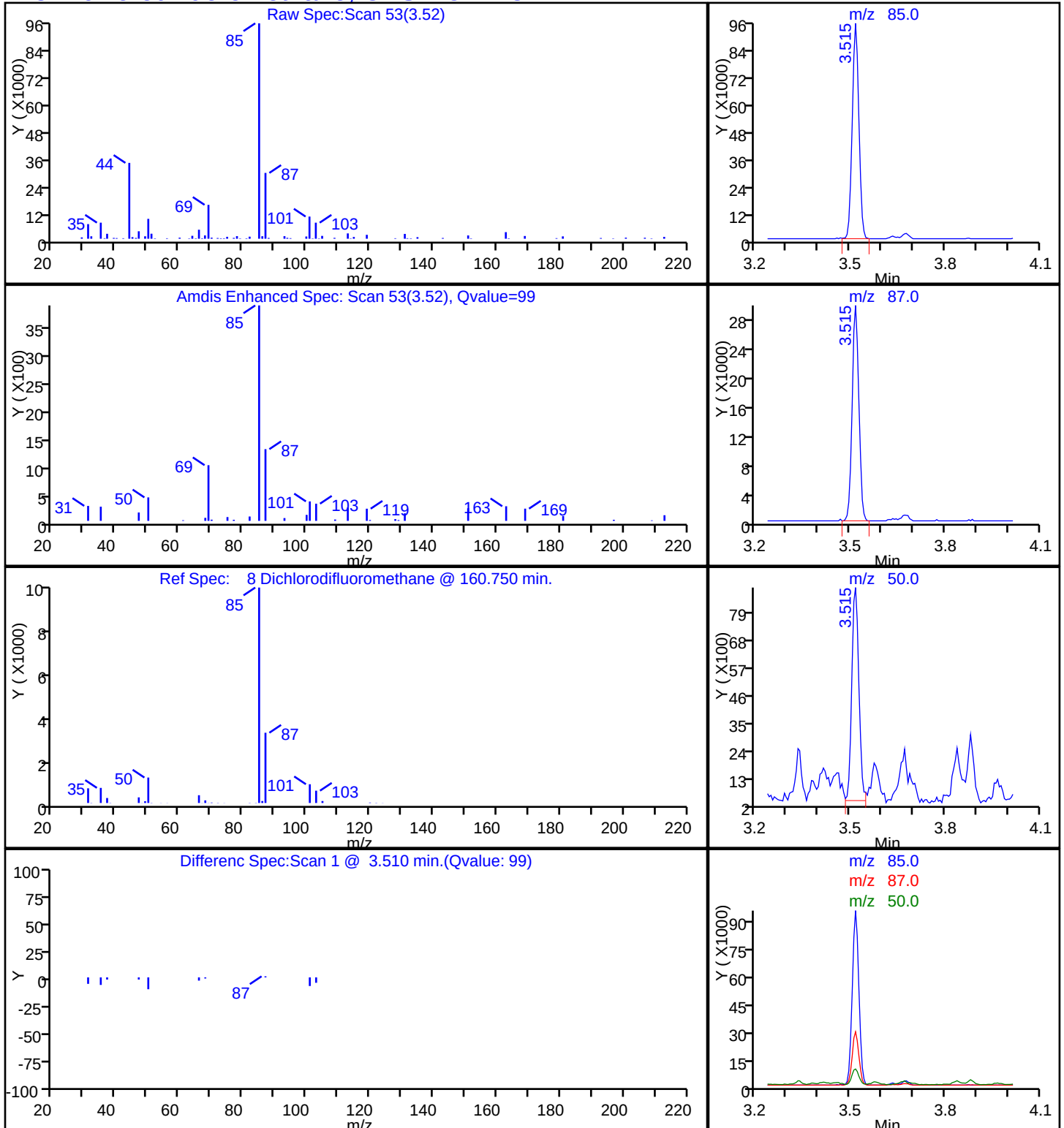
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D

Injection Date: 20-Apr-2017 23:09:30

Instrument ID: MG

Lims ID: 140-7831-A-12

Lab Sample ID: 140-7831-12

Client ID: H44-SS

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

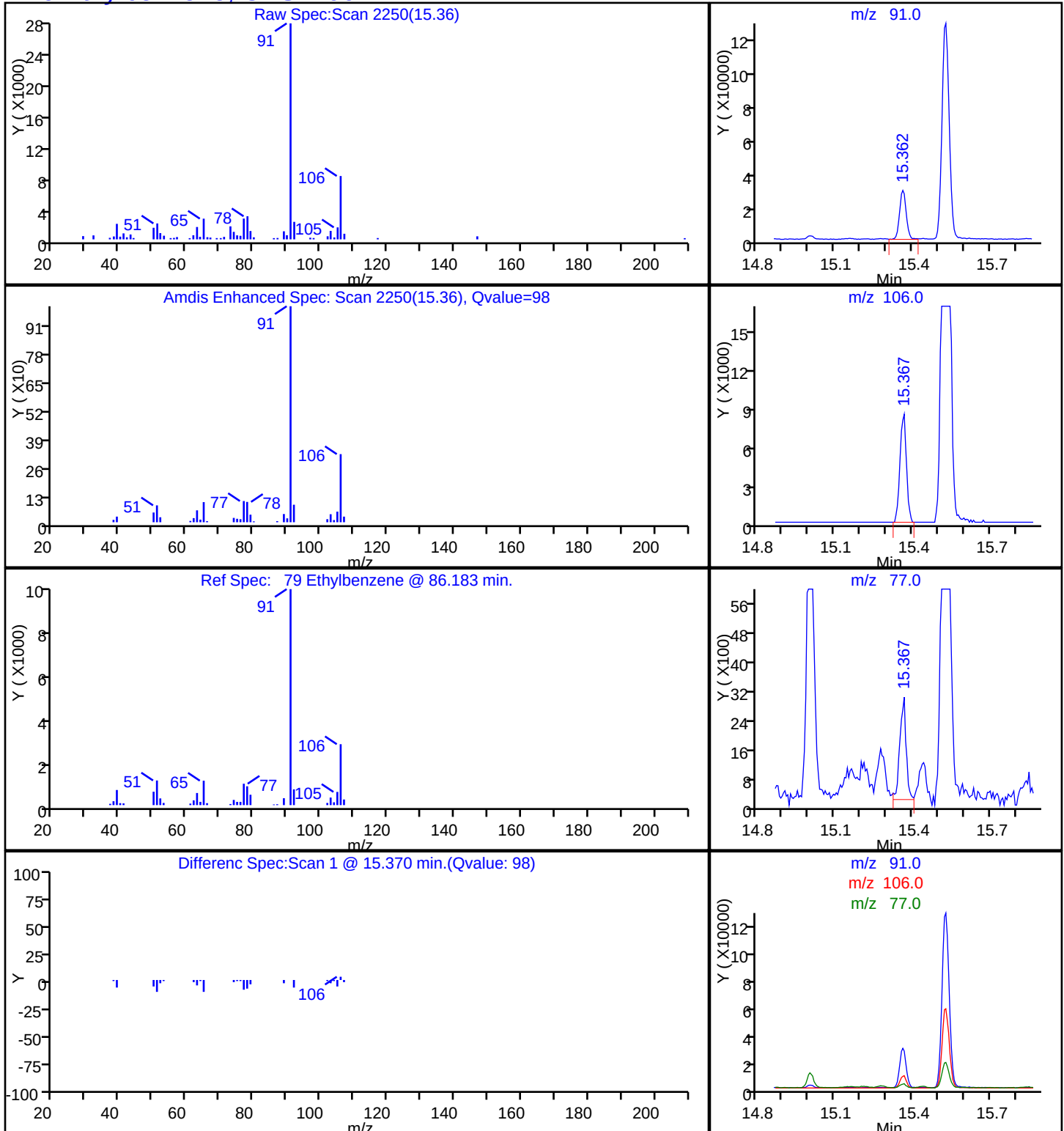
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

79 Ethylbenzene, CAS: 100-41-4



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D

Injection Date: 20-Apr-2017 23:09:30

Instrument ID: MG

Lims ID: 140-7831-A-12

Lab Sample ID: 140-7831-12

Client ID: H44-SS

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

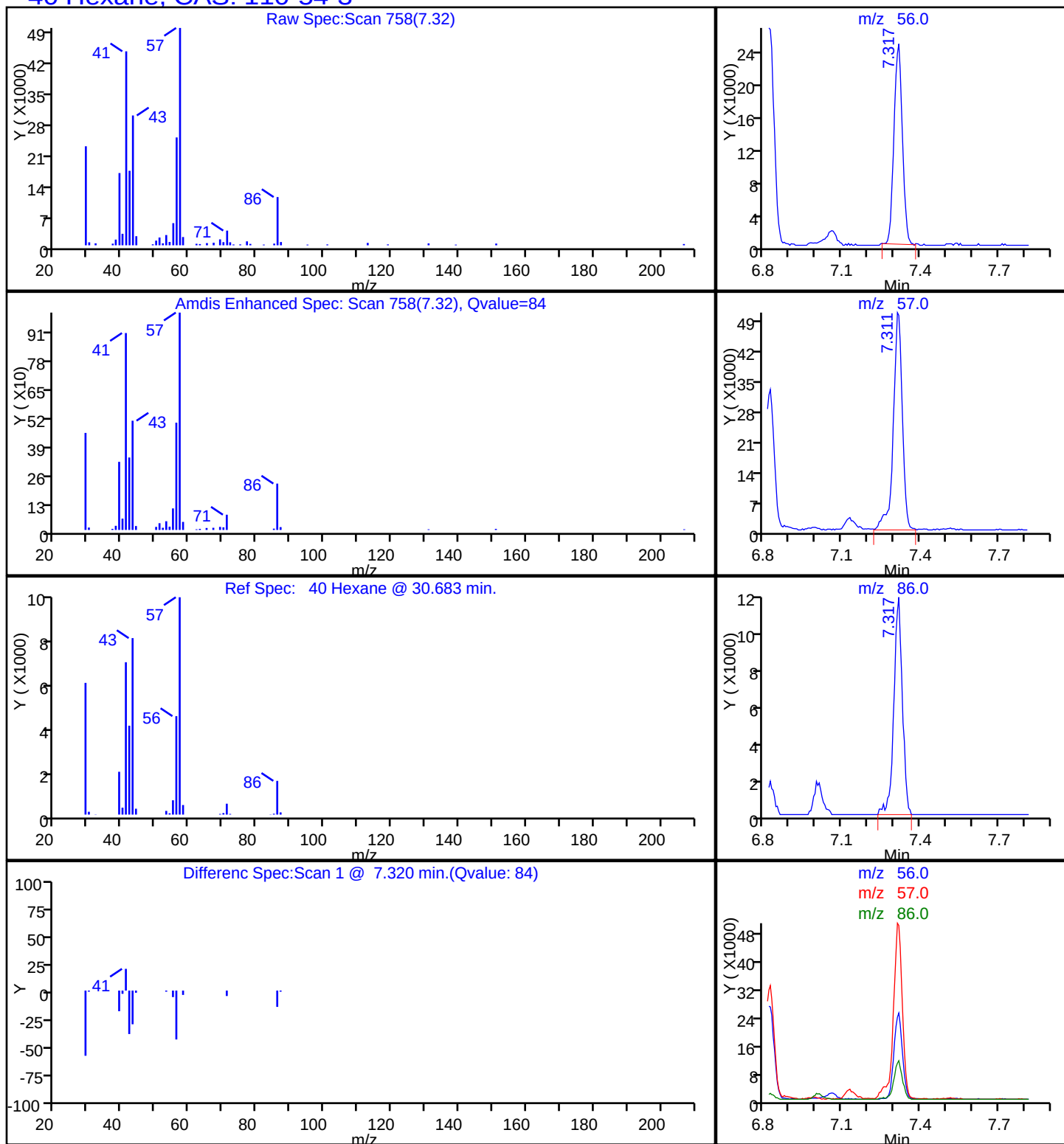
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D

Injection Date: 20-Apr-2017 23:09:30

Instrument ID: MG

Lims ID: 140-7831-A-12

Lab Sample ID: 140-7831-12

Client ID: H44-SS

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

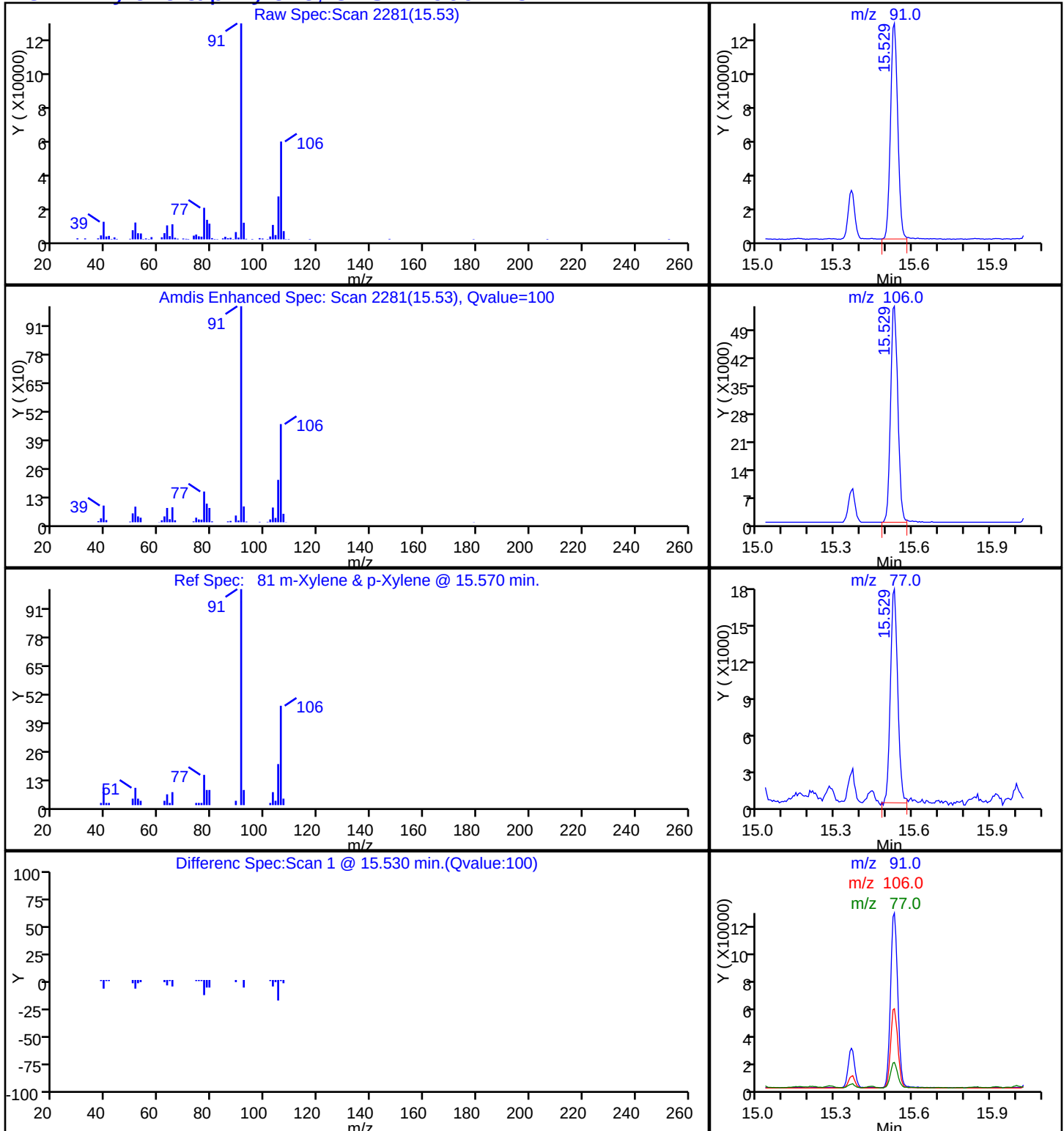
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D

Injection Date: 20-Apr-2017 23:09:30

Instrument ID: MG

Lims ID: 140-7831-A-12

Lab Sample ID: 140-7831-12

Client ID: H44-SS

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

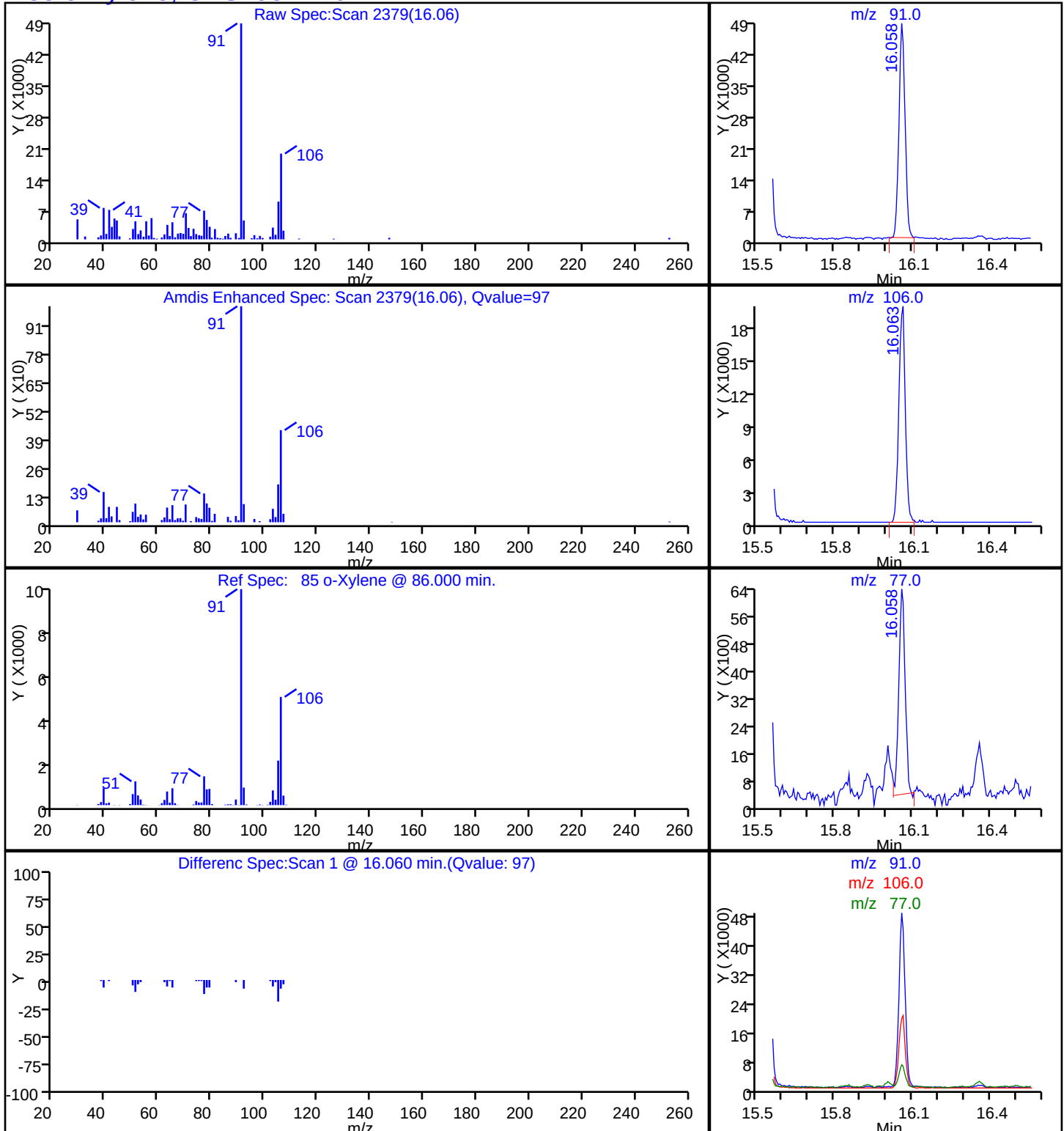
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D

Injection Date: 20-Apr-2017 23:09:30

Instrument ID: MG

Lims ID: 140-7831-A-12

Lab Sample ID: 140-7831-12

Client ID: H44-SS

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

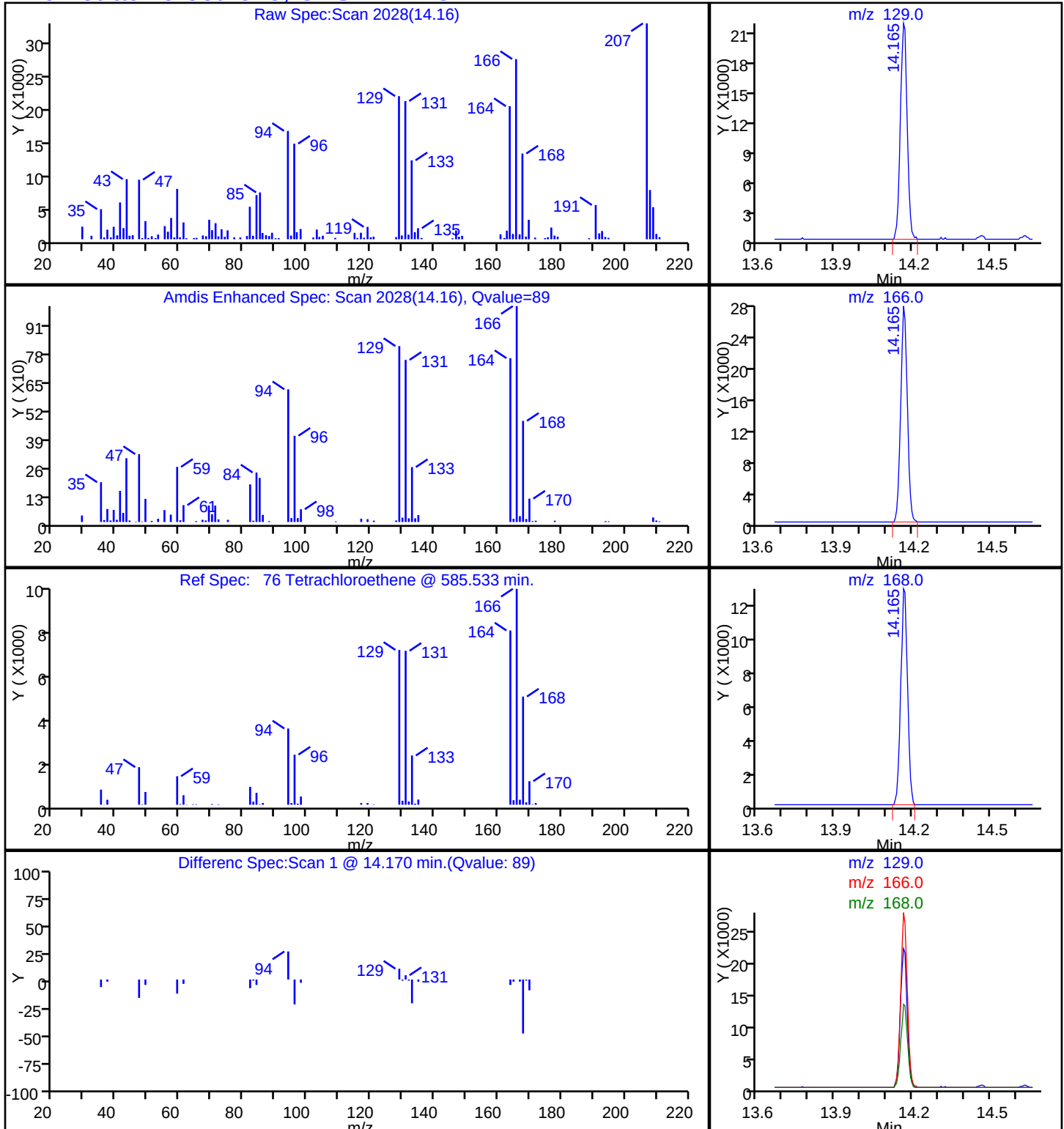
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

76 Tetrachloroethene, CAS: 127-18-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D

Injection Date: 20-Apr-2017 23:09:30

Instrument ID: MG

Lims ID: 140-7831-A-12

Lab Sample ID: 140-7831-12

Client ID: H44-SS

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

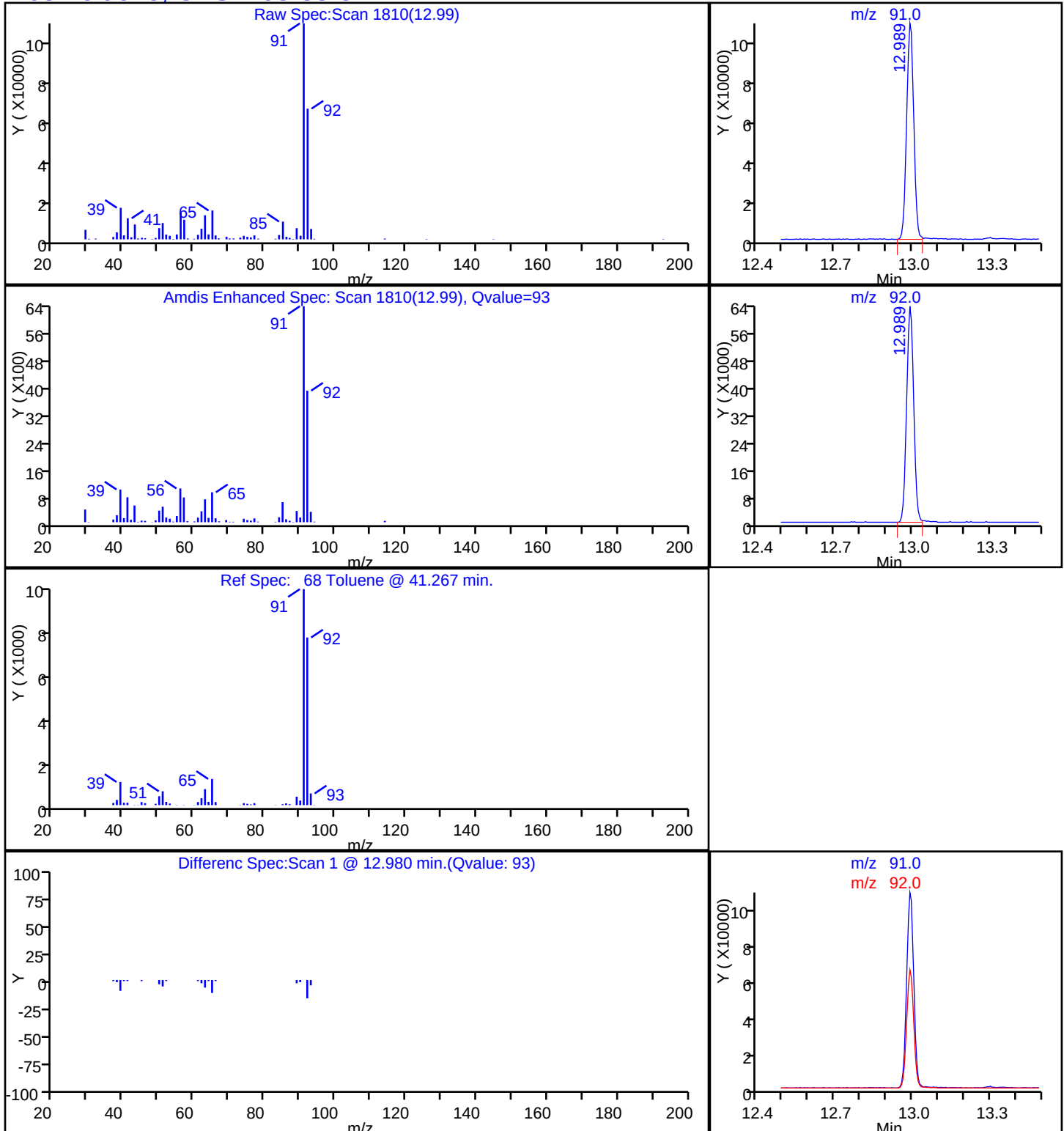
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D

Injection Date: 20-Apr-2017 23:09:30

Instrument ID: MG

Lims ID: 140-7831-A-12

Lab Sample ID: 140-7831-12

Client ID: H44-SS

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

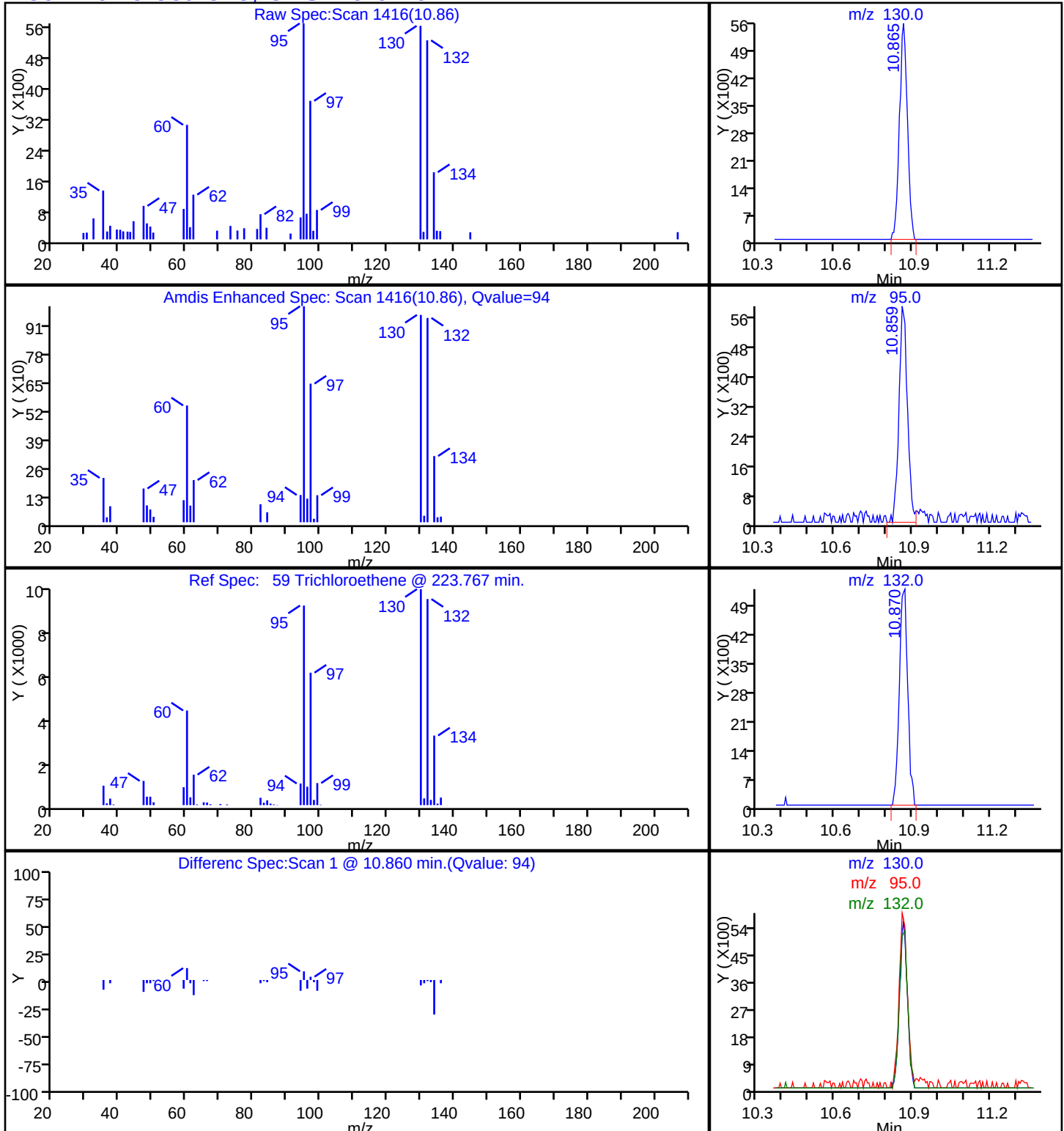
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

59 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D

Injection Date: 20-Apr-2017 23:09:30

Instrument ID: MG

Lims ID: 140-7831-A-12

Lab Sample ID: 140-7831-12

Client ID: H44-SS

Operator ID: 7126

ALS Bottle#: 14

Worklist Smp#: 18

Purge Vol: 500.000 mL

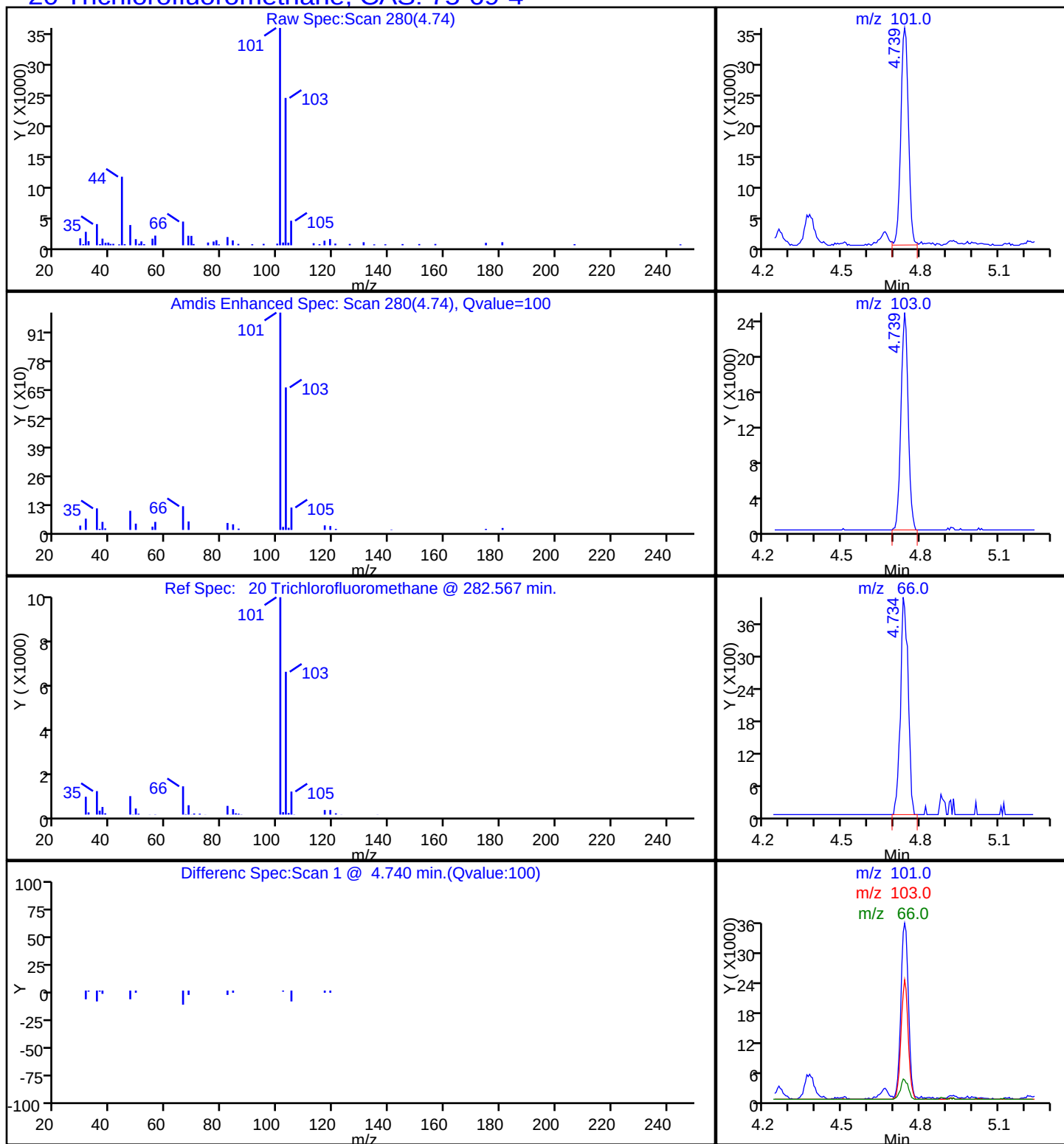
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

20 Trichlorofluoromethane, CAS: 75-69-4

TestAmerica Knoxville

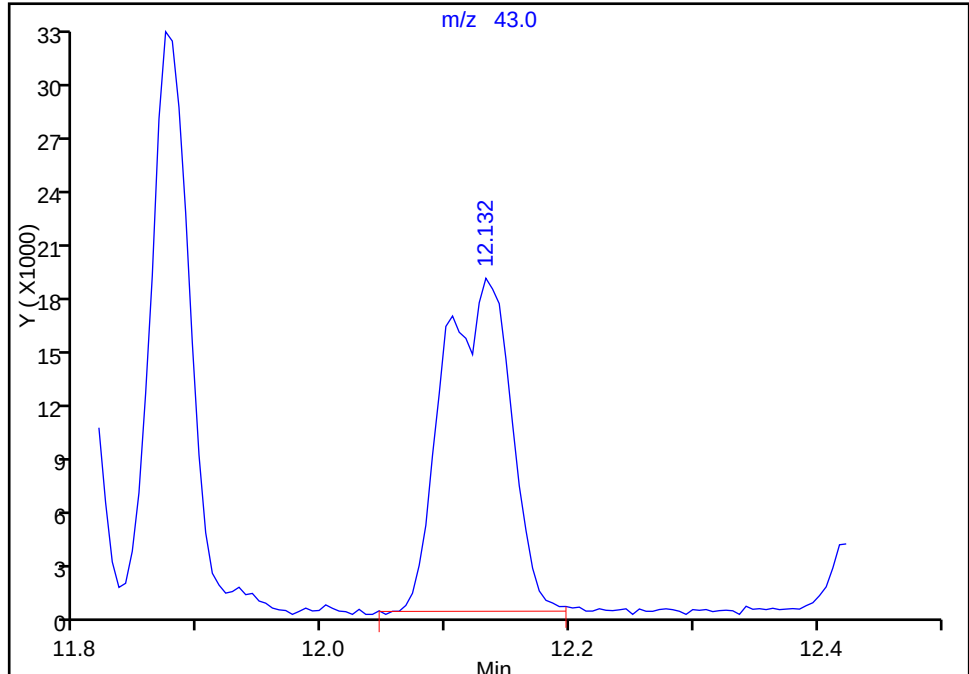
Data File:	\\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D		
Injection Date:	20-Apr-2017 23:09:30	Instrument ID:	MG
Lims ID:	140-7831-A-12	Lab Sample ID:	140-7831-12
Client ID:	H44-SS		
Operator ID:	7126	ALS Bottle#:	14
Purge Vol:	500.000 mL	Dil. Factor:	1.0000
Method:	MG_TO15	Limit Group:	MSA TO14A_15 Routine ICAL
Column:	RTX-5 (0.32 mm)	Detector:	MS SCAN
		Worklist Smp#:	18

65 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Signal: 1

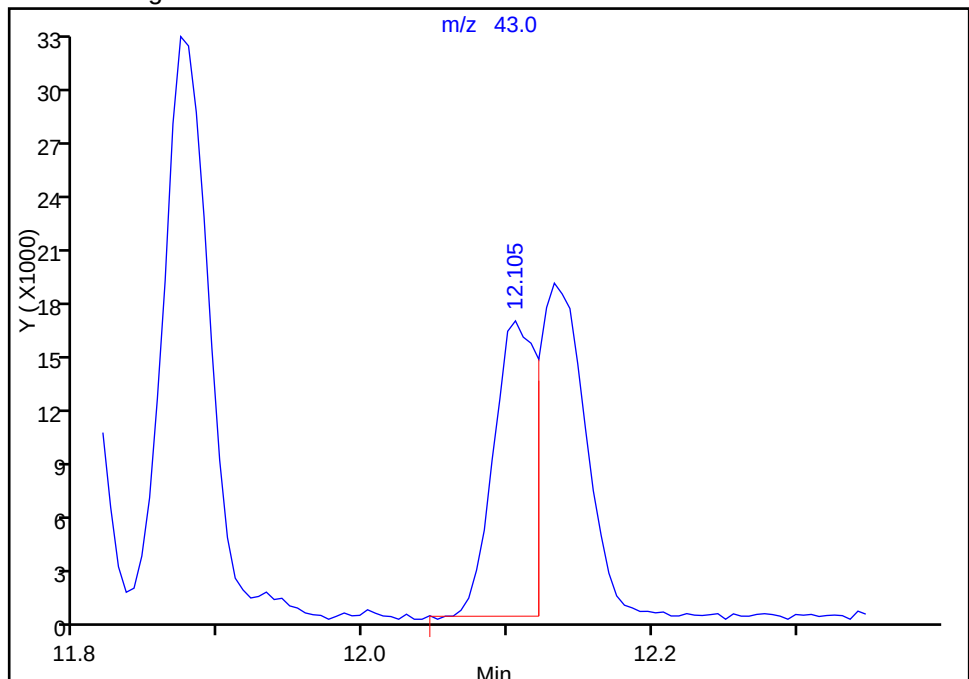
RT: 12.13
Area: 71614
Amount: 0.563001
Amount Units: ppb v/v

Processing Integration Results



RT: 12.11
Area: 34966
Amount: 0.274889
Amount Units: ppb v/v

Manual Integration Results



Reviewer: tajh, 21-Apr-2017 10:56:31
Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

TestAmerica Knoxville

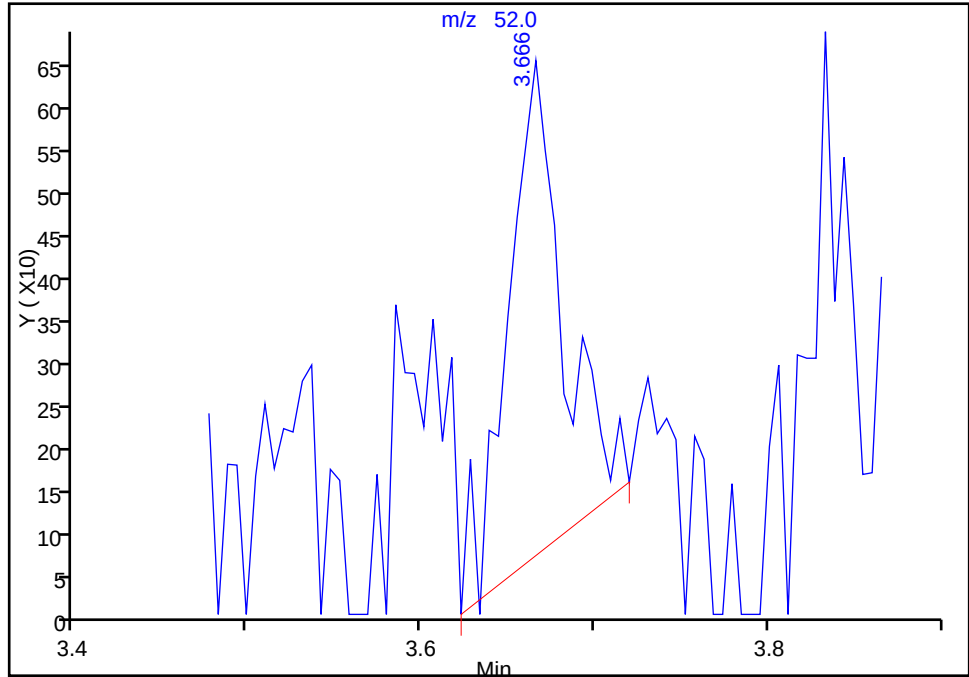
Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P114.D
Injection Date: 20-Apr-2017 23:09:30 Instrument ID: MG
Lims ID: 140-7831-A-12 Lab Sample ID: 140-7831-12
Client ID: H44-SS
Operator ID: 7126 ALS Bottle#: 14 Worklist Smp#: 18
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MG_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

Signal: 1

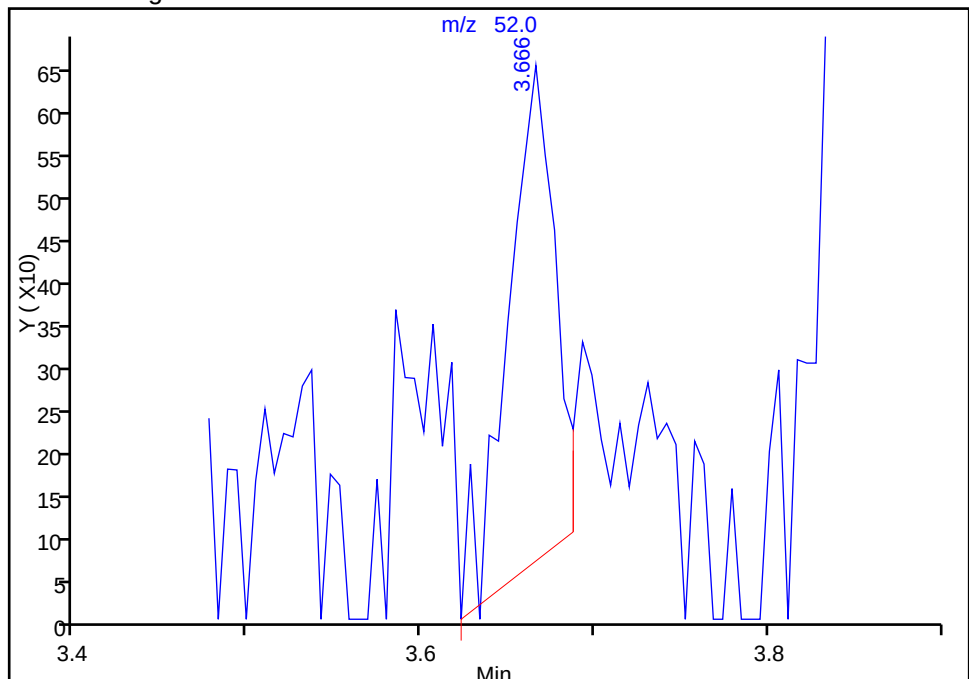
RT: 3.67
Area: 1301
Amount: 0.067065
Amount Units: ppb v/v

Processing Integration Results



RT: 3.67
Area: 1120
Amount: 0.057734
Amount Units: ppb v/v

Manual Integration Results



Reviewer: tajh, 21-Apr-2017 10:55:55
Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H44-BA Lab Sample ID: 140-7831-13
 Matrix: Air Lab File ID: GD20P102.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 14:47
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 13:44
 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.: 10584 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	0.47		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	0.22		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	1.0		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	0.099		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	0.092		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	0.14		0.080	
74-87-3	Chloromethane	50.49	0.46		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H44-BA Lab Sample ID: 140-7831-13
 Matrix: Air Lab File ID: GD20P102.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 14:47
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 13:44
 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.: 10584 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	0.52		0.080	
64-17-5	Ethanol	46.07	61		2.0	
100-41-4	Ethylbenzene	106.17	0.10		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	0.24		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.34		0.080	
95-47-6	o-Xylene	106.17	0.14		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	0.77		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	0.27		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H44-BA Lab Sample ID: 140-7831-13
 Matrix: Air Lab File ID: GD20P102.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 14:47
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 13:44
 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.: 10584 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	2.6		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	1.1		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	3.1		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.32		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	0.58		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	0.67		0.39	
74-87-3	Chloromethane	50.49	0.95		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: H44-BA Lab Sample ID: 140-7831-13
 Matrix: Air Lab File ID: GD20P102.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 14:47
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 13:44
 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.: 10584 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	120		3.8	
100-41-4	Ethylbenzene	106.17	0.44		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	0.82		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	1.5		0.35	
95-47-6	o-Xylene	106.17	0.61		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	2.9		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	ND		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.5		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P102.D
 Lims ID: 140-7831-A-13
 Client ID: H44-BA
 Sample Type: Client
 Inject. Date: 20-Apr-2017 13:44:30 ALS Bottle#: 2 Worklist Smp#: 6
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004683-006
 Misc. Info.: 140-7831-a-13
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 20-Apr-2017 14:35:16 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK017

First Level Reviewer: tajh

Date: 20-Apr-2017 14:35:16

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.964	7.969	-0.005	68	279030	4.00	
* 2 1,4-Difluorobenzene	114	10.126	10.131	-0.005	94	1407758	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.001	15.006	-0.005	88	1430209	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.672	16.678	-0.006	84	1172683	4.15	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	153204	0.5188	
9 Chloromethane	52	3.666	3.660	0.006	98	9151	0.4606	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.666	3.671	-0.005	41	3387	0.0193	
17 Ethanol	31	4.372	4.356	0.016	97	1724130	61.4	
20 Trichlorofluoromethane	101	4.734	4.739	-0.005	99	78216	0.2659	
29 2-Methyl-2-propanol	59	5.489	5.456	0.033	41	4739	0.0418	
30 1,1,2-Trichloro-1,2,2-trif	101	5.510	5.510	0.000	94	12294	0.0717	
31 Methylene Chloride	84	5.640	5.639	0.001	79	15924	0.2373	
39 2-Butanone (MEK)	72	7.252	7.252	0.000	97	32929	1.04	
40 Hexane	56	7.306	7.317	-0.010	63	4020	0.0730	
44 Chloroform	83	7.985	7.996	-0.011	95	26744	0.1366	
47 1,1,1-Trichloroethane	97	8.961	8.967	-0.006	94	107488	0.4747	
49 Benzene	78	9.544	9.554	-0.010	96	23679	0.0990	
50 Cyclohexane	69	9.565	9.560	0.005	37	1223	0.0304	
51 Carbon tetrachloride	117	9.576	9.581	-0.005	98	22966	0.0919	
56 Isooctane	57	10.380	10.385	-0.005	86	10780	0.0304	
65 4-Methyl-2-pentanone (MIBK	43	12.094	12.100	-0.006	95	24011	0.1748	
68 Toluene	91	12.989	12.995	-0.006	94	219791	0.7714	
79 Ethylbenzene	91	15.362	15.362	0.000	99	39963	0.1004	
81 m-Xylene & p-Xylene	91	15.524	15.534	-0.010	100	110809	0.3447	
83 Styrene	104	15.998	15.998	0.000	95	14079	0.0664	
85 o-Xylene	91	16.058	16.063	-0.005	96	46003	0.1400	
92 1,3,5-Trimethylbenzene	120	17.460	17.465	-0.005	90	14704	0.0698	
96 1,2,4-Trimethylbenzene	105	17.923	17.929	-0.006	98	88661	0.2196	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P102.D

Injection Date: 20-Apr-2017 13:44:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7831-A-13

Lab Sample ID: 140-7831-13

Worklist Smp#: 6

Client ID: H44-BA

Purge Vol: 500.000 mL

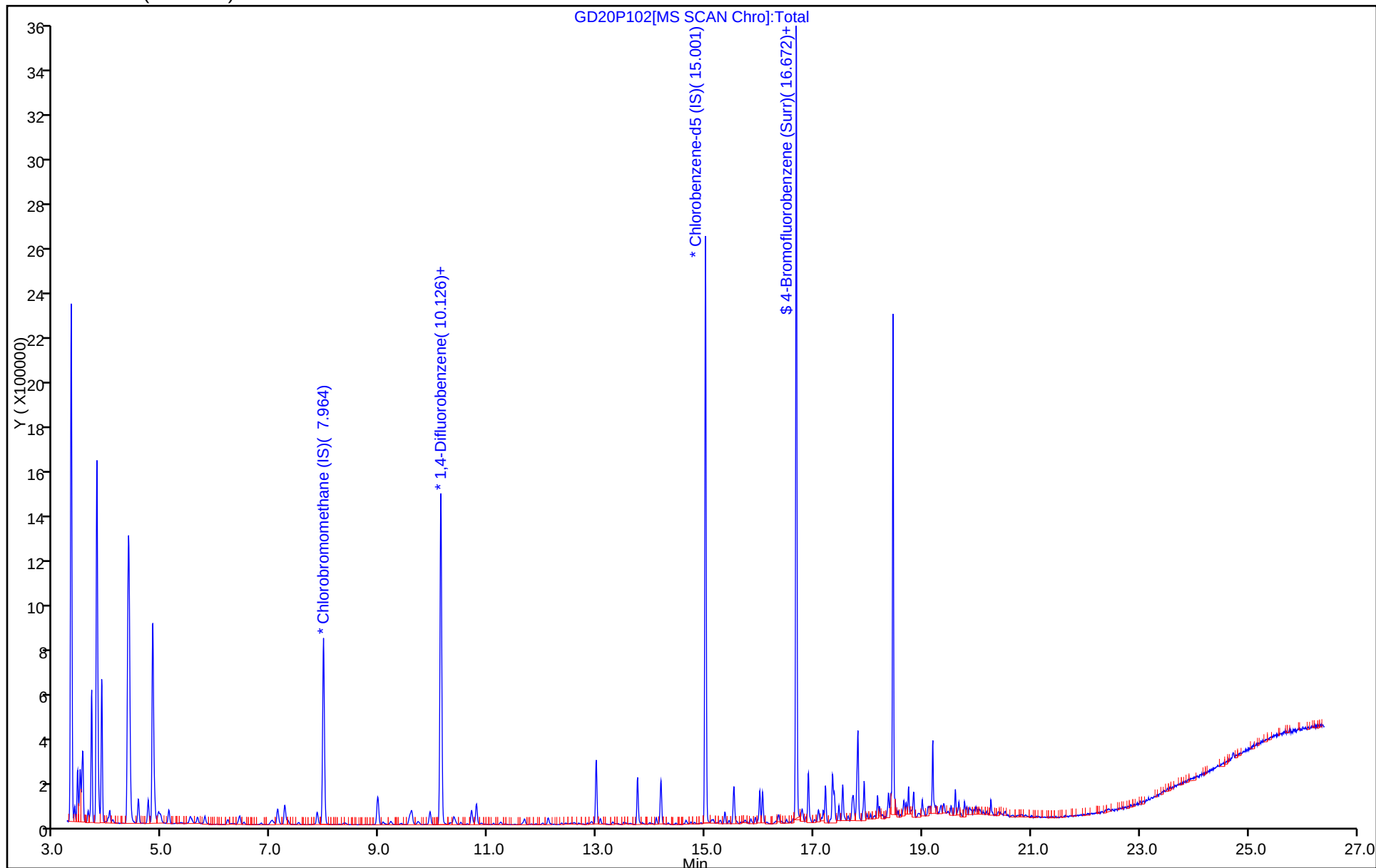
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P102.D
Lims ID: 140-7831-A-13
Client ID: H44-BA
Sample Type: Client
Inject. Date: 20-Apr-2017 13:44:30 ALS Bottle#: 2 Worklist Smp#: 6
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004683-006
Misc. Info.: 140-7831-a-13
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 20-Apr-2017 14:35:16 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: tajh

Date: 20-Apr-2017 14:35:16

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.15	103.73

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P102.D

Injection Date: 20-Apr-2017 13:44:30

Instrument ID: MG

Lims ID: 140-7831-A-13

Lab Sample ID: 140-7831-13

Client ID: H44-BA

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 6

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

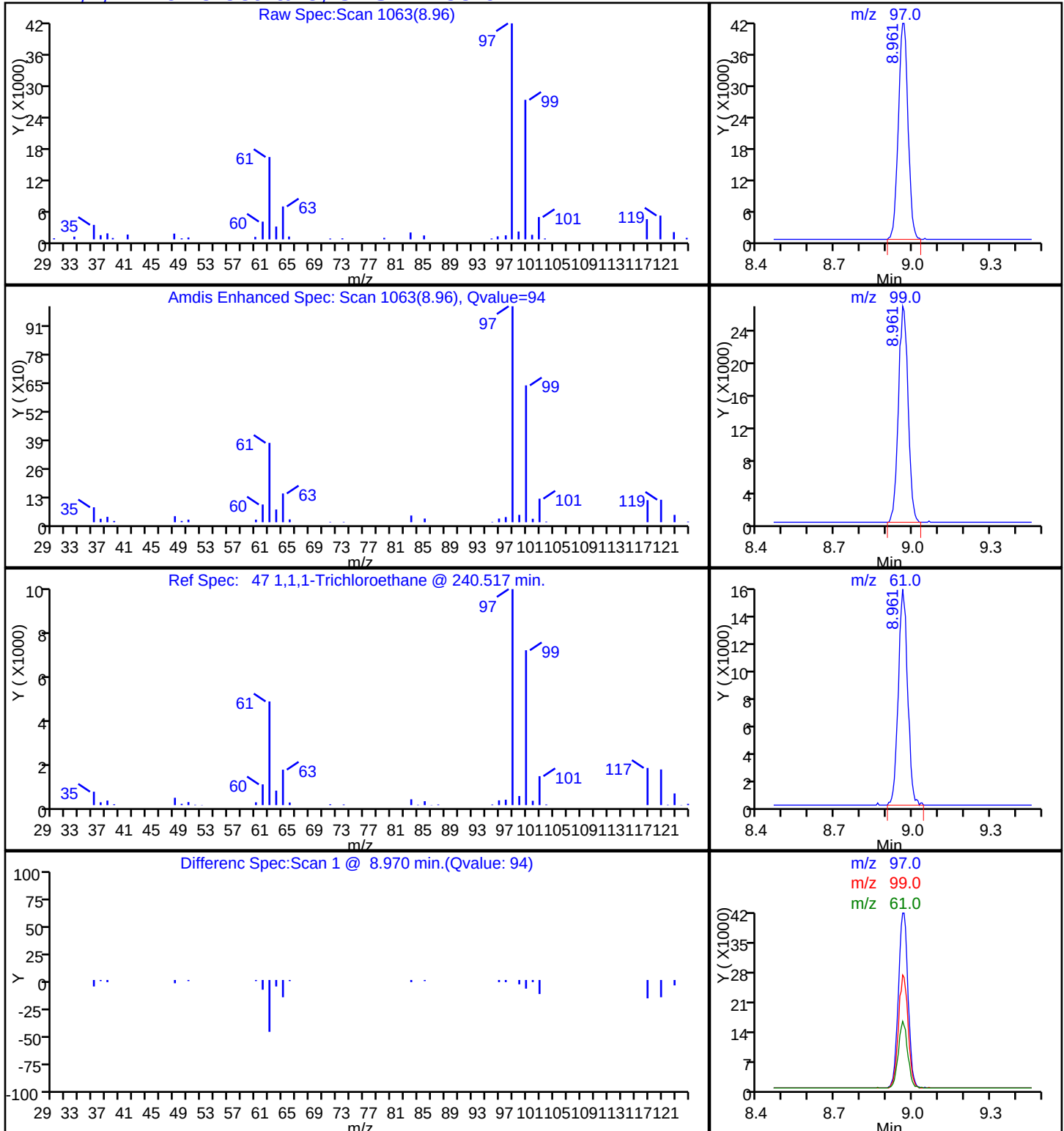
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

47 1,1,1-Trichloroethane, CAS: 71-55-6



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P102.D

Injection Date: 20-Apr-2017 13:44:30

Instrument ID: MG

Lims ID: 140-7831-A-13

Lab Sample ID: 140-7831-13

Client ID: H44-BA

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 6

Purge Vol: 500.000 mL

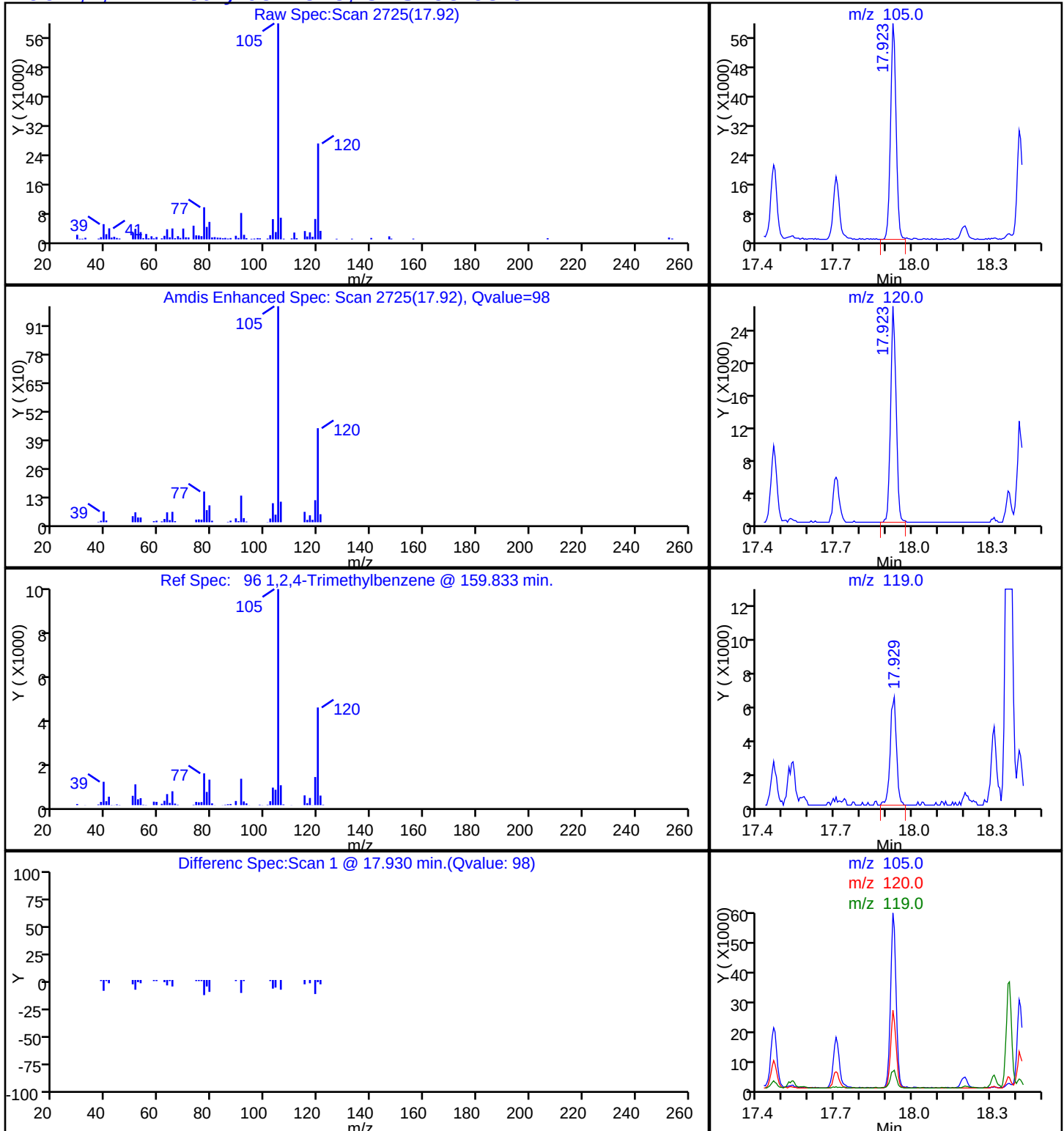
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

96 1,2,4-Trimethylbenzene, CAS: 95-63-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P102.D

Injection Date: 20-Apr-2017 13:44:30

Instrument ID: MG

Lims ID: 140-7831-A-13

Lab Sample ID: 140-7831-13

Client ID: H44-BA

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 6

Purge Vol: 500.000 mL

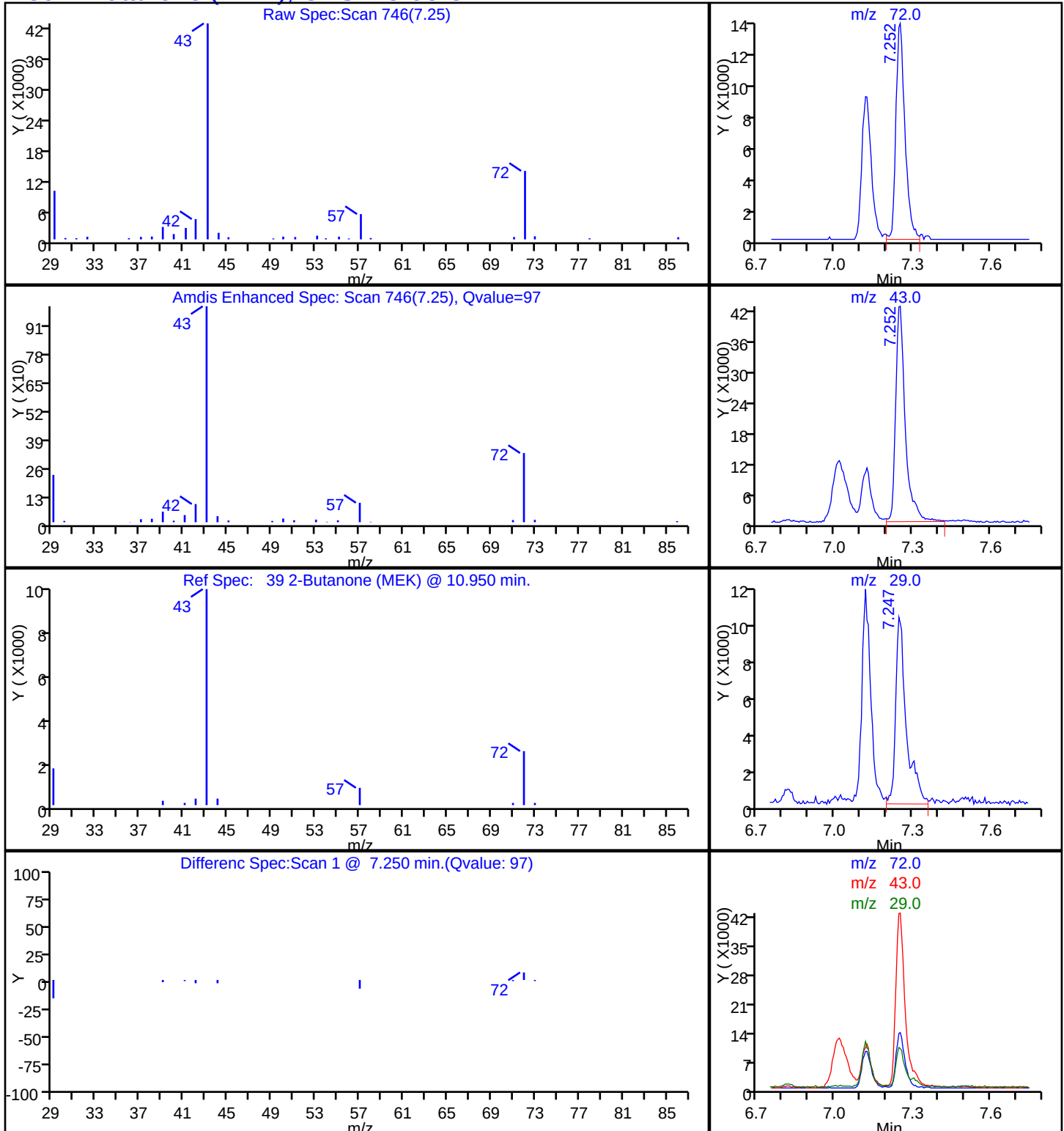
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P102.D

Injection Date: 20-Apr-2017 13:44:30

Instrument ID: MG

Lims ID: 140-7831-A-13

Lab Sample ID: 140-7831-13

Client ID: H44-BA

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 6

Purge Vol: 500.000 mL

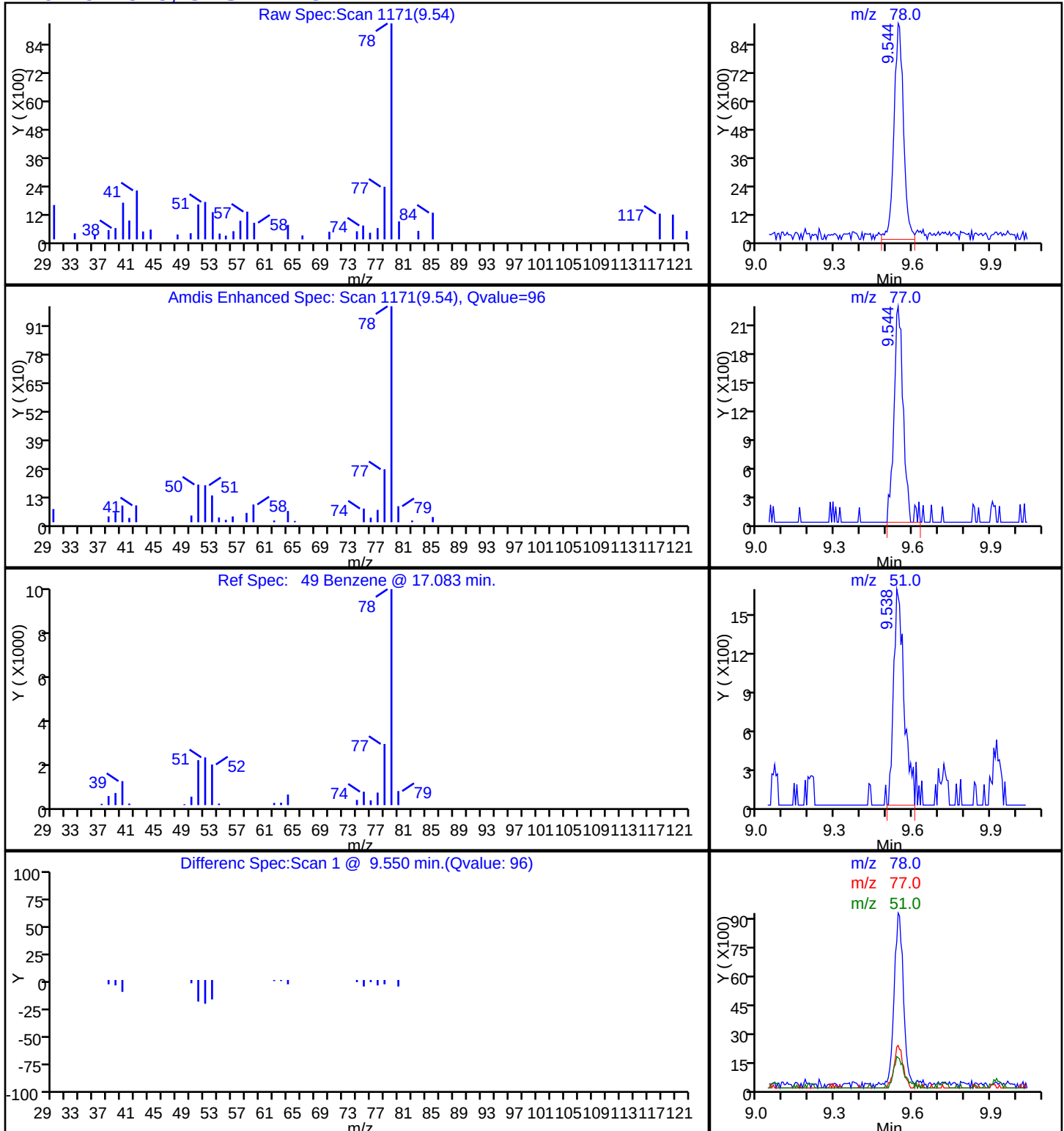
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P102.D

Injection Date: 20-Apr-2017 13:44:30

Instrument ID: MG

Lims ID: 140-7831-A-13

Lab Sample ID: 140-7831-13

Client ID: H44-BA

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 6

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

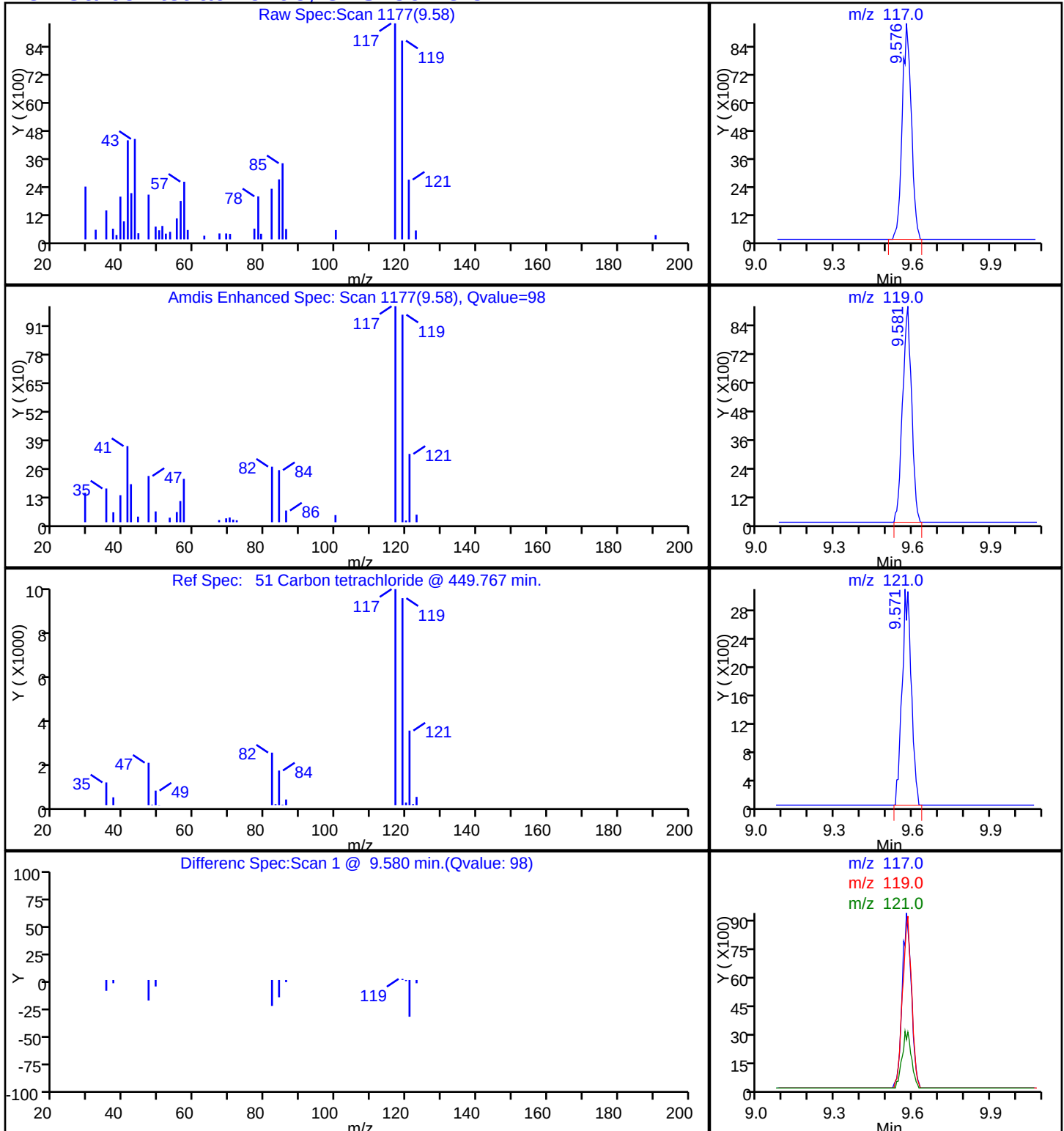
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P102.D

Injection Date: 20-Apr-2017 13:44:30

Instrument ID: MG

Lims ID: 140-7831-A-13

Lab Sample ID: 140-7831-13

Client ID: H44-BA

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 6

Purge Vol: 500.000 mL

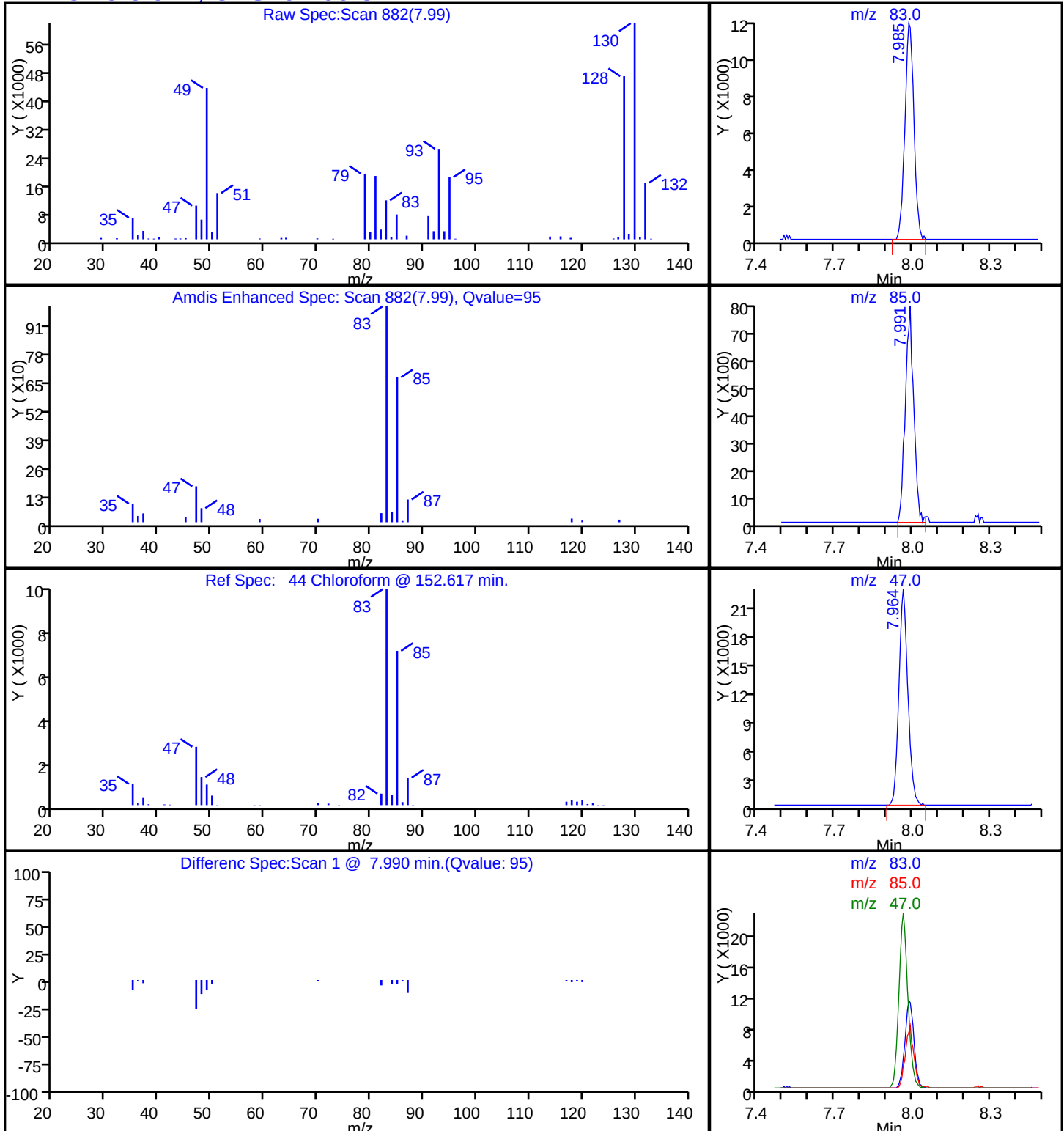
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

44 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P102.D

Injection Date: 20-Apr-2017 13:44:30

Instrument ID: MG

Lims ID: 140-7831-A-13

Lab Sample ID: 140-7831-13

Client ID: H44-BA

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 6

Purge Vol: 500.000 mL

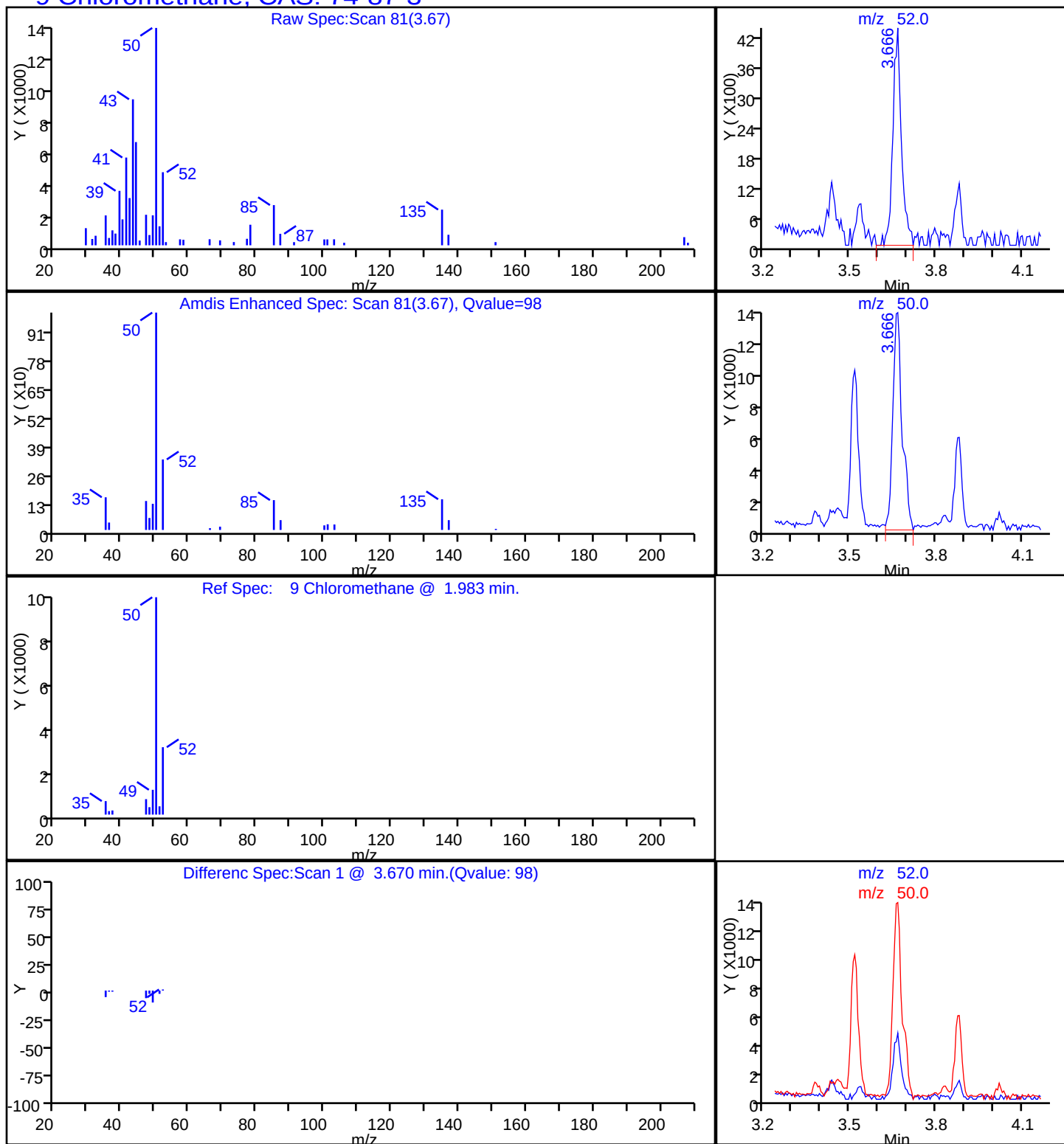
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P102.D

Injection Date: 20-Apr-2017 13:44:30

Instrument ID: MG

Lims ID: 140-7831-A-13

Lab Sample ID: 140-7831-13

Client ID: H44-BA

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 6

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

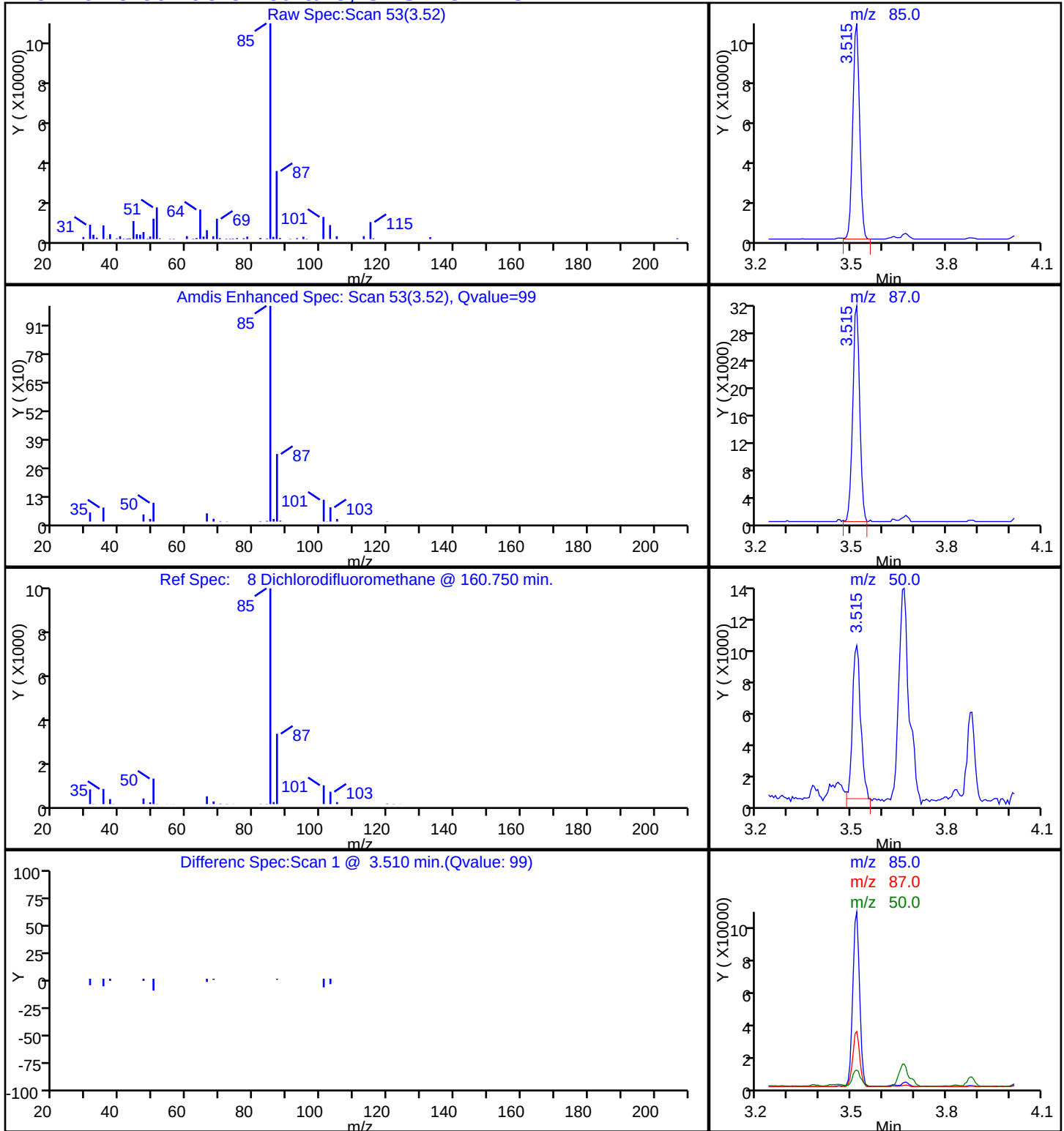
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8



Detector MS SCAN

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P102.D

Injection Date: 20-Apr-2017 13:44:30

Instrument ID: MG

Lims ID: 140-7831-A-13

Lab Sample ID: 140-7831-13

Client ID: H44-BA

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 6

Purge Vol: 500.000 mL

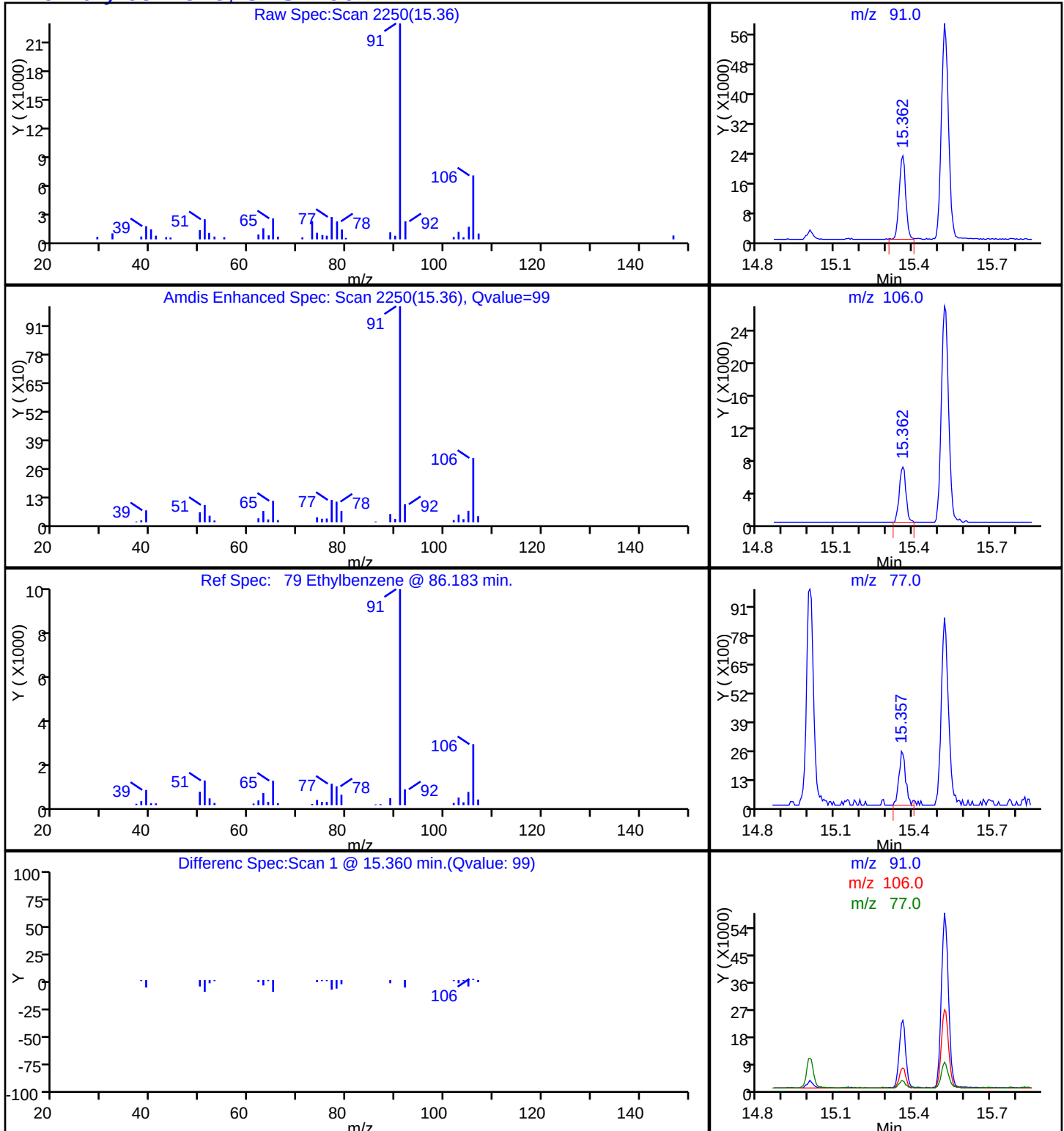
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

79 Ethylbenzene, CAS: 100-41-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P102.D

Injection Date: 20-Apr-2017 13:44:30

Instrument ID: MG

Lims ID: 140-7831-A-13

Lab Sample ID: 140-7831-13

Client ID: H44-BA

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 6

Purge Vol: 500.000 mL

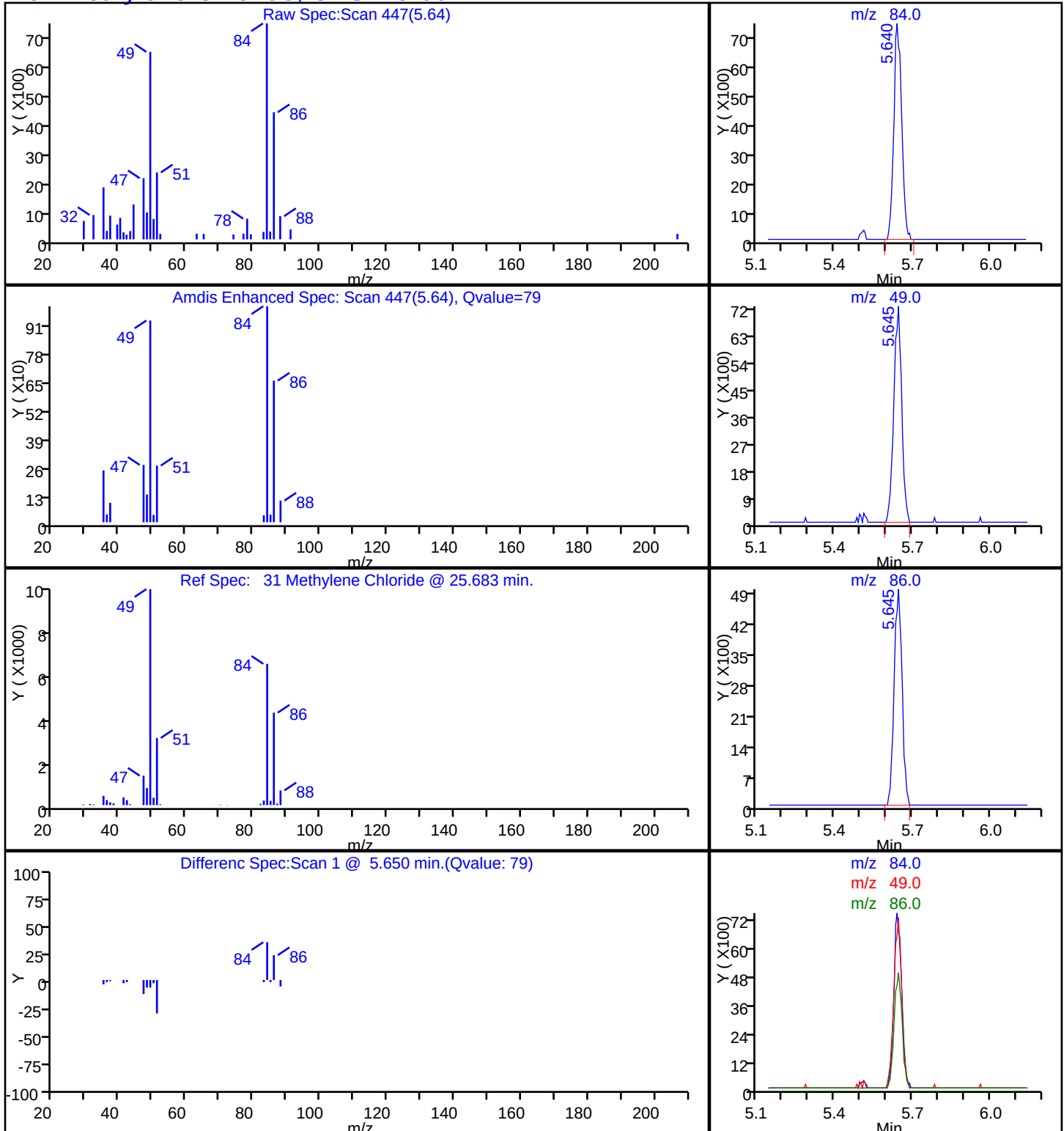
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P102.D

Injection Date: 20-Apr-2017 13:44:30

Instrument ID: MG

Lims ID: 140-7831-A-13

Lab Sample ID: 140-7831-13

Client ID: H44-BA

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 6

Purge Vol: 500.000 mL

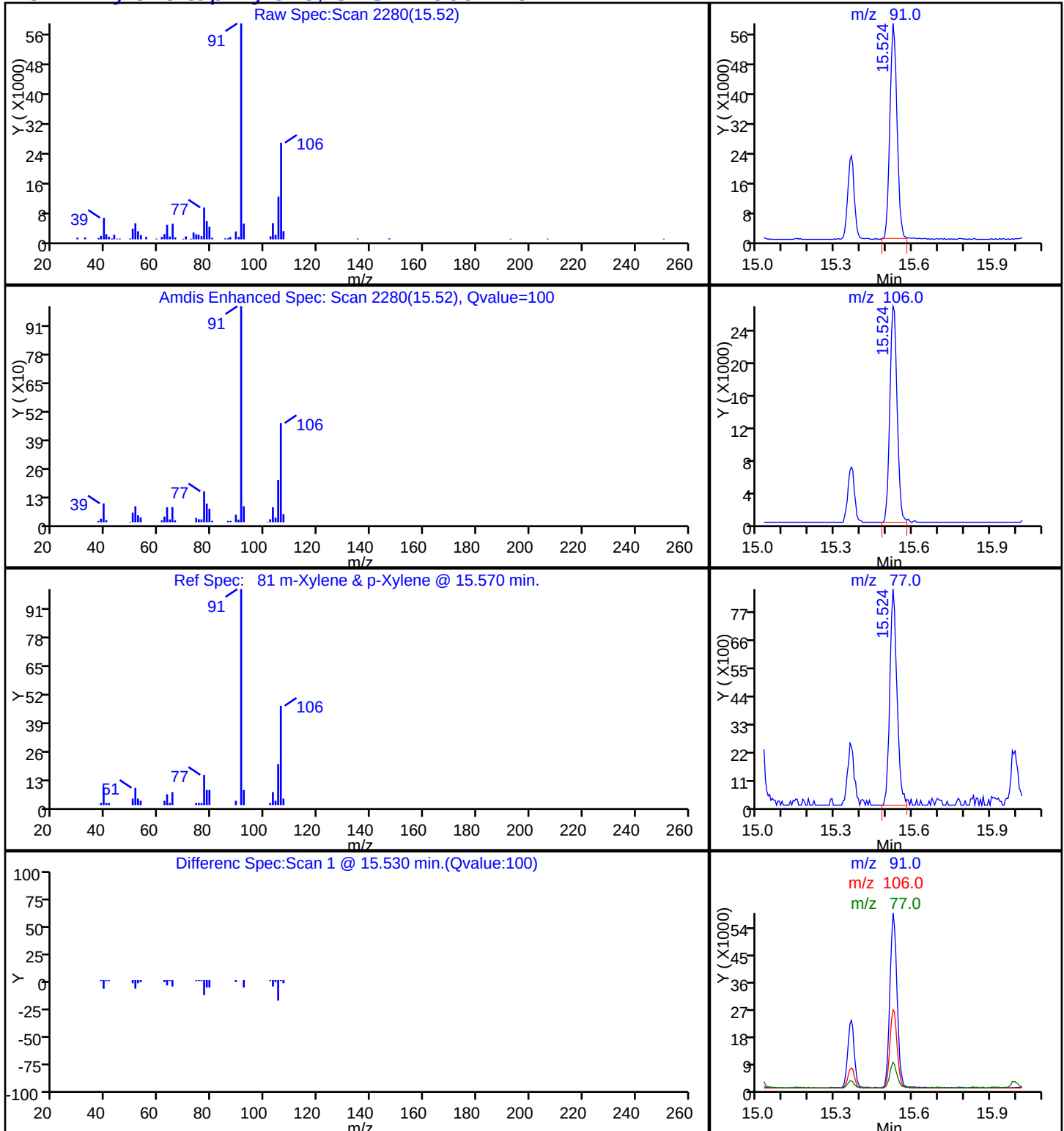
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P102.D

Injection Date: 20-Apr-2017 13:44:30

Instrument ID: MG

Lims ID: 140-7831-A-13

Lab Sample ID: 140-7831-13

Client ID: H44-BA

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 6

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

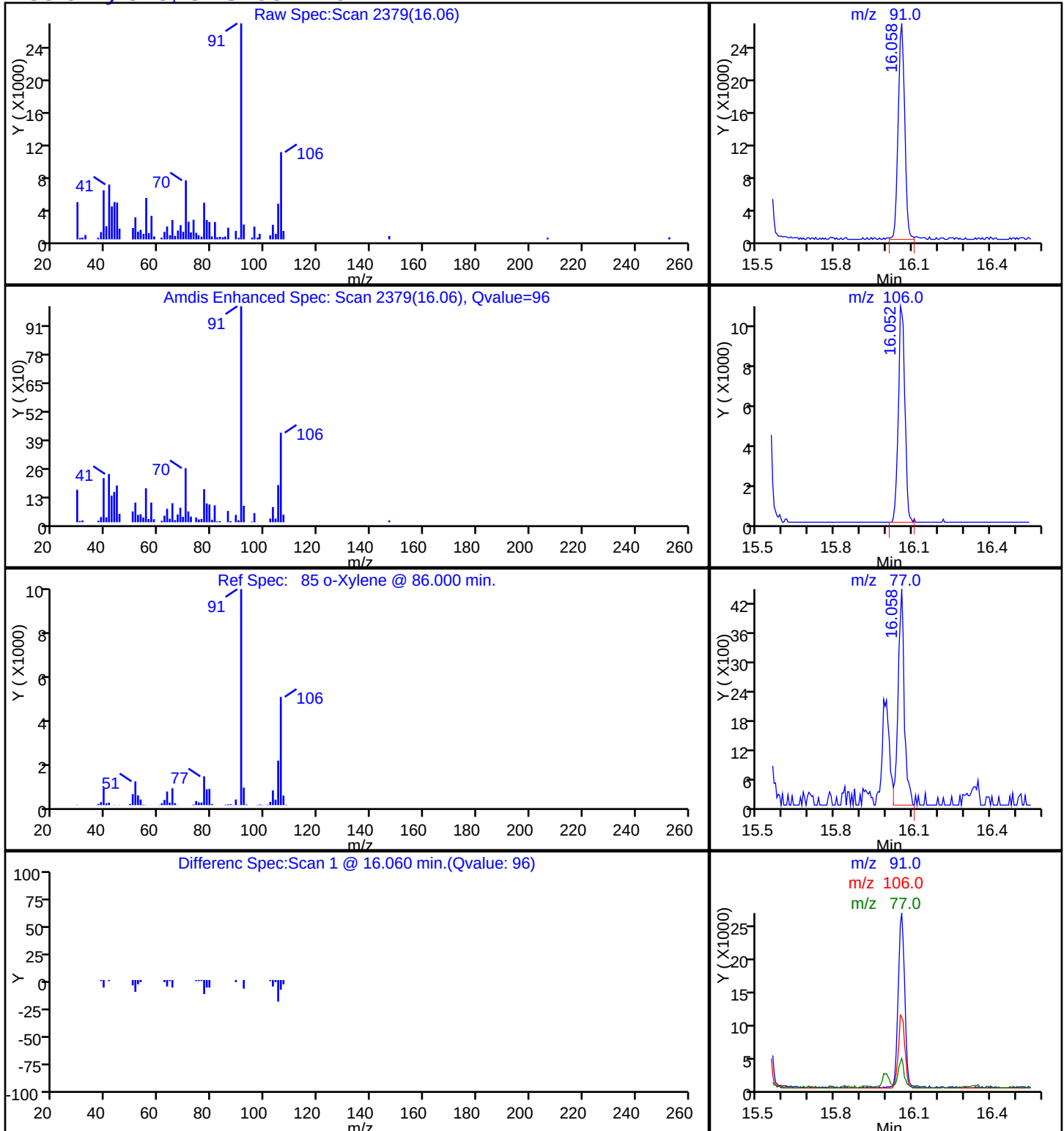
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P102.D

Injection Date: 20-Apr-2017 13:44:30

Instrument ID: MG

Lims ID: 140-7831-A-13

Lab Sample ID: 140-7831-13

Client ID: H44-BA

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 6

Purge Vol: 500.000 mL

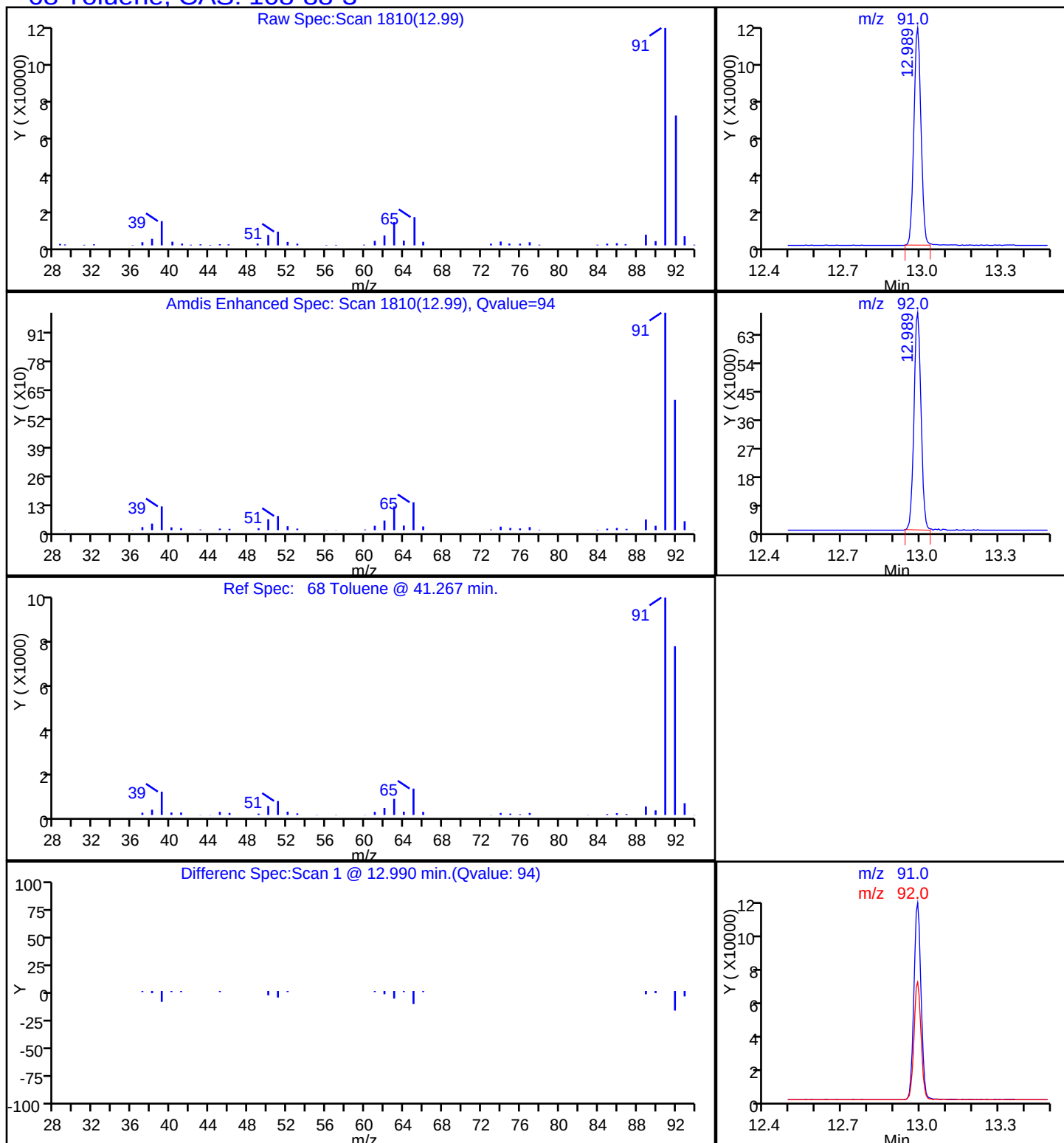
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P102.D

Injection Date: 20-Apr-2017 13:44:30

Instrument ID: MG

Lims ID: 140-7831-A-13

Lab Sample ID: 140-7831-13

Client ID: H44-BA

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 6

Purge Vol: 500.000 mL

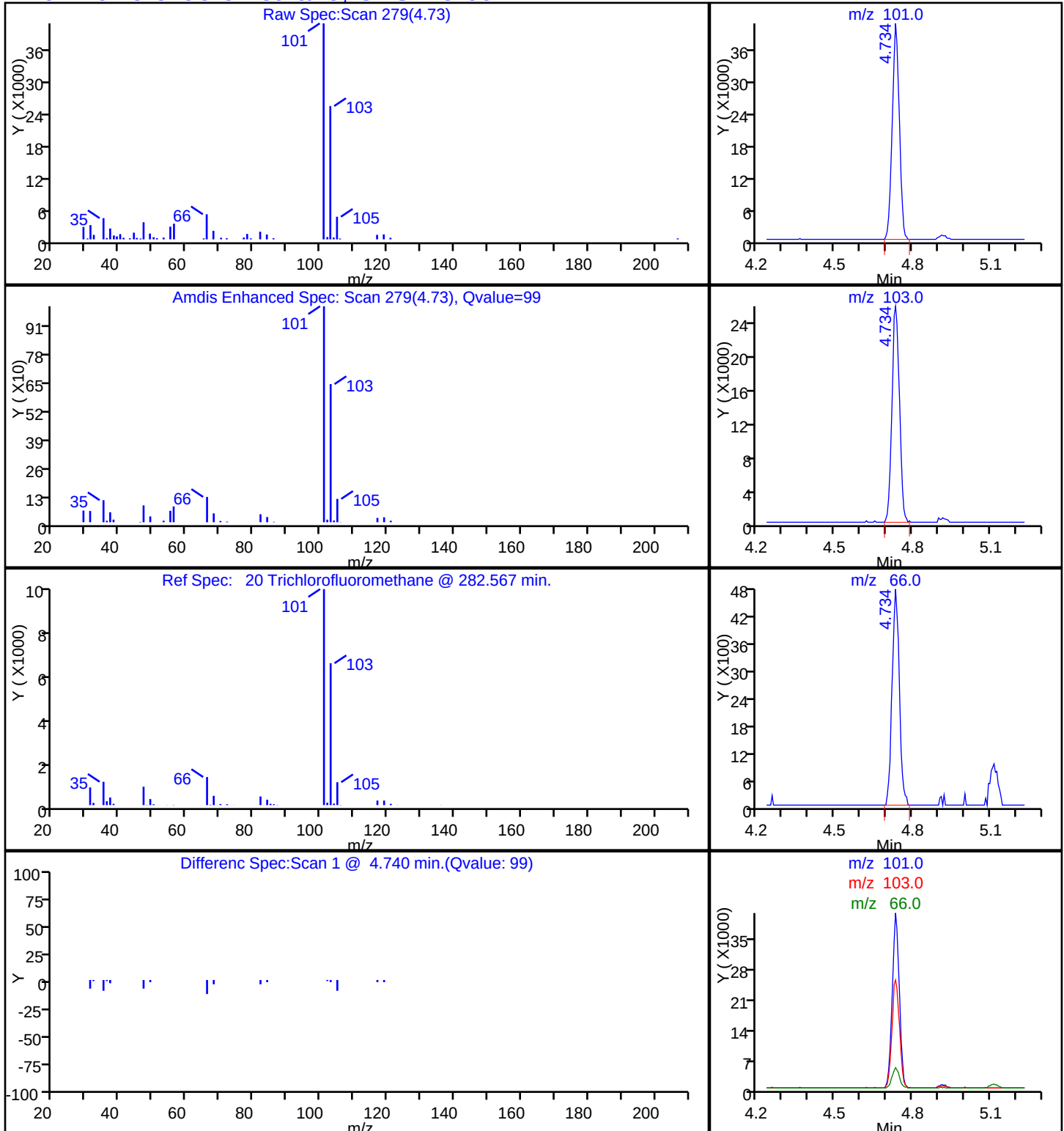
Dil. Factor: 1.0000

Method: MG_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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: FIELD DUP-1 Lab Sample ID: 140-7831-14
 Matrix: Air Lab File ID: GD20P103.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:09
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 14:31
 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.: 10584 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	1.5		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	0.12		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	0.27		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	0.077		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	0.093		0.080	
74-87-3	Chloromethane	50.49	0.24		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: FIELD DUP-1 Lab Sample ID: 140-7831-14
 Matrix: Air Lab File ID: GD20P103.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:09
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 14:31
 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.: 10584 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	ND		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	0.26		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.31		0.080	
95-47-6	o-Xylene	106.17	0.094		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	0.92		0.080	
108-88-3	Toluene	92.14	0.35		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	0.15		0.040	
75-69-4	Trichlorofluoromethane	137.37	0.25		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: FIELD DUP-1 Lab Sample ID: 140-7831-14
 Matrix: Air Lab File ID: GD20P103.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:09
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 14:31
 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.: 10584 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	8.3		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	0.57		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	0.93		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.1		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	0.49		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	0.45		0.39	
74-87-3	Chloromethane	50.49	0.49		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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: FIELD DUP-1 Lab Sample ID: 140-7831-14
 Matrix: Air Lab File ID: GD20P103.D
 Analysis Method: TO 15 LL Date Collected: 04/12/2017 13:09
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 14:31
 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.: 10584 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	ND		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	0.92		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	1.3		0.35	
95-47-6	o-Xylene	106.17	0.41		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	1.3		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	0.83		0.21	
75-69-4	Trichlorofluoromethane	137.37	1.4		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P103.D
 Lims ID: 140-7831-A-14
 Client ID: FIELD DUP-1
 Sample Type: Client
 Inject. Date: 20-Apr-2017 14:31:30 ALS Bottle#: 3 Worklist Smp#: 7
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004683-007
 Misc. Info.: 140-7831-a-14
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 20-Apr-2017 15:18:24 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK017

First Level Reviewer: tajh

Date: 20-Apr-2017 15:18:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.969	7.969	0.000	68	285303	4.00	
* 2 1,4-Difluorobenzene	114	10.132	10.131	0.001	94	1406620	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.006	15.006	0.000	87	1450636	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.678	16.678	0.000	84	1172629	4.09	
8 Dichlorodifluoromethane	85	3.521	3.515	0.005	99	148873	0.4930	
9 Chloromethane	52	3.677	3.660	0.017	97	4786	0.2356	
15 Bromomethane	94	4.135	4.140	-0.005	29	1486	0.0180	
16 Chloroethane	64	4.265	4.259	0.006	28	1538	0.0381	
17 Ethanol	31	4.373	4.356	0.016	97	50585	1.76	
20 Trichlorofluoromethane	101	4.750	4.739	0.011	99	76474	0.2543	
30 1,1,2-Trichloro-1,2,2-trif	101	5.521	5.510	0.011	90	13039	0.0743	
31 Methylene Chloride	84	5.650	5.639	0.011	83	18120	0.2641	
39 2-Butanone (MEK)	72	7.279	7.252	0.027	97	10251	0.3157	
40 Hexane	56	7.322	7.317	0.006	69	5519	0.0980	
44 Chloroform	83	7.996	7.996	0.000	93	18567	0.0928	
47 1,1,1-Trichloroethane	97	8.972	8.967	0.005	93	353849	1.53	
49 Benzene	78	9.555	9.554	0.001	92	11280	0.0472	
50 Cyclohexane	69	9.565	9.560	0.005	72	2369	0.0589	
51 Carbon tetrachloride	117	9.582	9.581	0.001	97	19338	0.0774	
59 Trichloroethene	130	10.870	10.870	0.000	94	19954	0.1542	
62 1,4-Dioxane	88	11.151	11.113	0.038	38	2107	0.0651	
65 4-Methyl-2-pentanone (MIBK	43	12.116	12.100	0.016	93	37582	0.2738	
68 Toluene	91	12.995	12.995	0.000	92	100427	0.3475	
76 Tetrachloroethene	129	14.165	14.165	0.000	91	121818	0.9215	
79 Ethylbenzene	91	15.362	15.362	0.000	98	26169	0.0648	
81 m-Xylene & p-Xylene	91	15.529	15.534	-0.005	100	100183	0.3073	
85 o-Xylene	91	16.058	16.063	-0.005	96	31245	0.0937	
92 1,3,5-Trimethylbenzene	120	17.460	17.465	-0.005	73	3916	0.0183	7
96 1,2,4-Trimethylbenzene	105	17.929	17.929	0.000	97	47202	0.1153	

[QC Flag Legend](#)

Processing Flags

7 - Failed Limit of Detection

[Reagents:](#)

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P103.D

Injection Date: 20-Apr-2017 14:31:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7831-A-14

Lab Sample ID: 140-7831-14

Worklist Smp#: 7

Client ID: FIELD DUP-1

Purge Vol: 500.000 mL

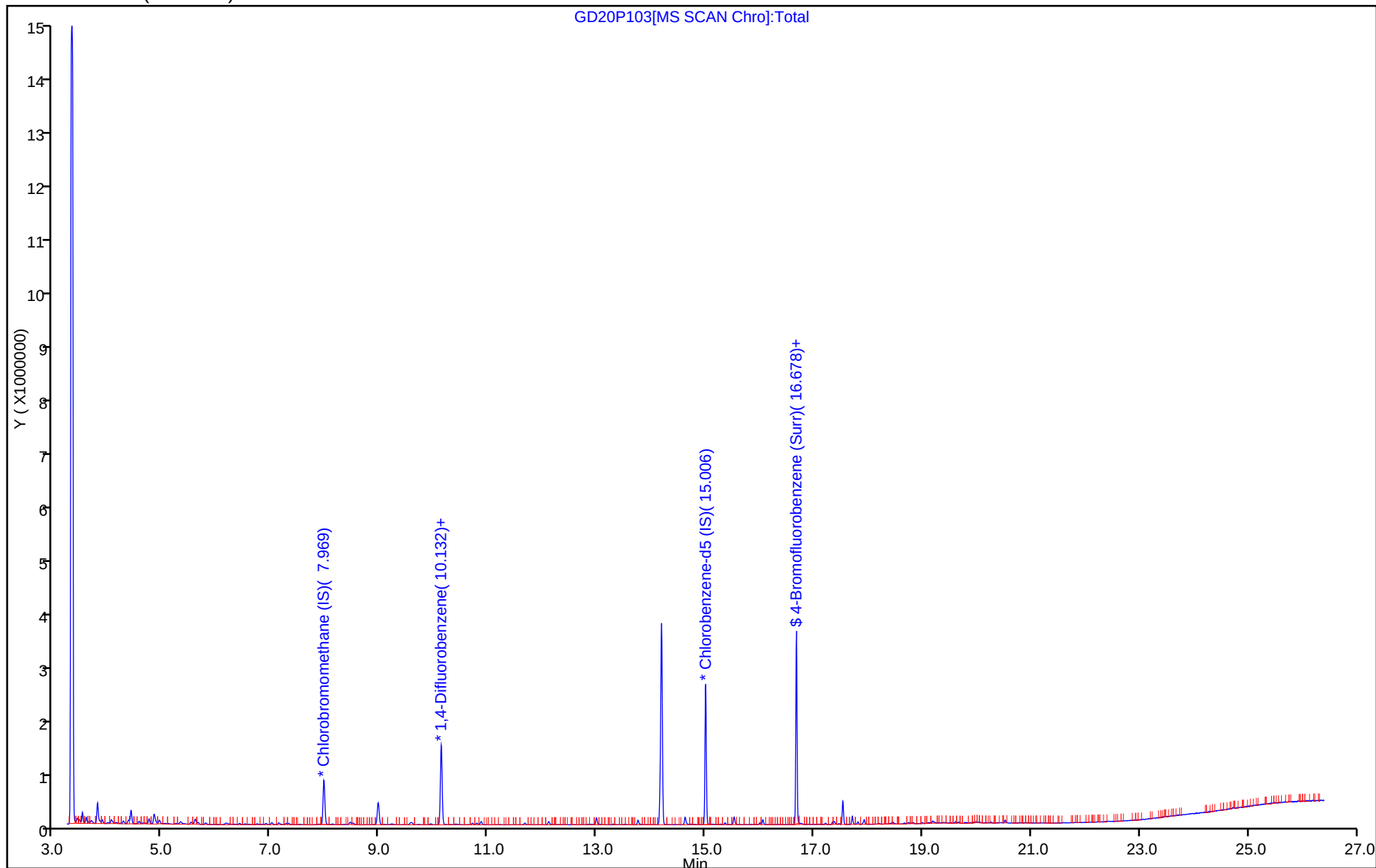
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P103.D
Lims ID: 140-7831-A-14
Client ID: FIELD DUP-1
Sample Type: Client
Inject. Date: 20-Apr-2017 14:31:30 ALS Bottle#: 3 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004683-007
Misc. Info.: 140-7831-a-14
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 20-Apr-2017 15:18:24 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: tajh

Date: 20-Apr-2017 15:18:24

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.09	102.26

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P103.D

Injection Date: 20-Apr-2017 14:31:30

Instrument ID: MG

Lims ID: 140-7831-A-14

Lab Sample ID: 140-7831-14

Client ID: FIELD DUP-1

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

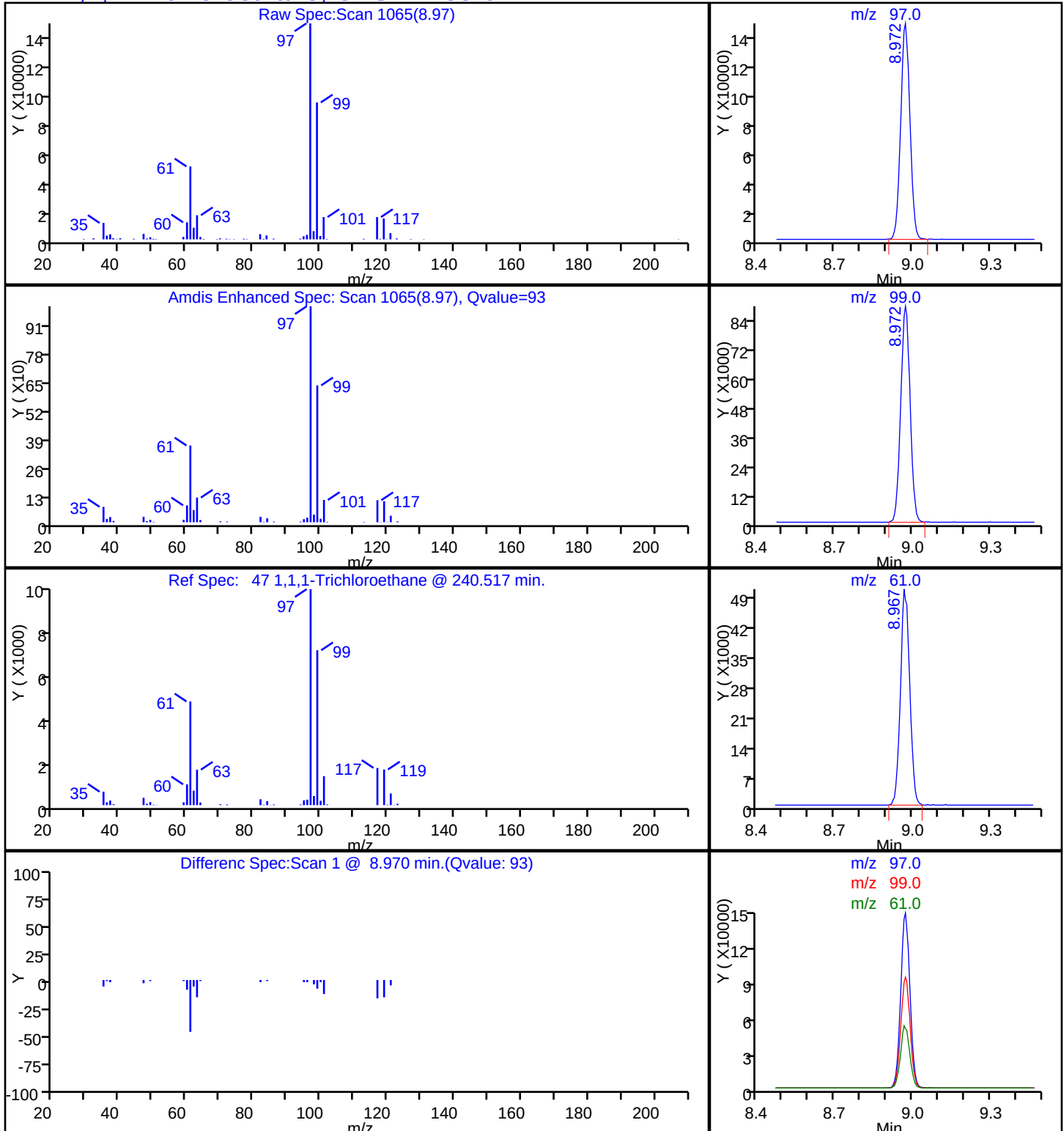
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

47 1,1,1-Trichloroethane, CAS: 71-55-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P103.D

Injection Date: 20-Apr-2017 14:31:30

Instrument ID: MG

Lims ID: 140-7831-A-14

Lab Sample ID: 140-7831-14

Client ID: FIELD DUP-1

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

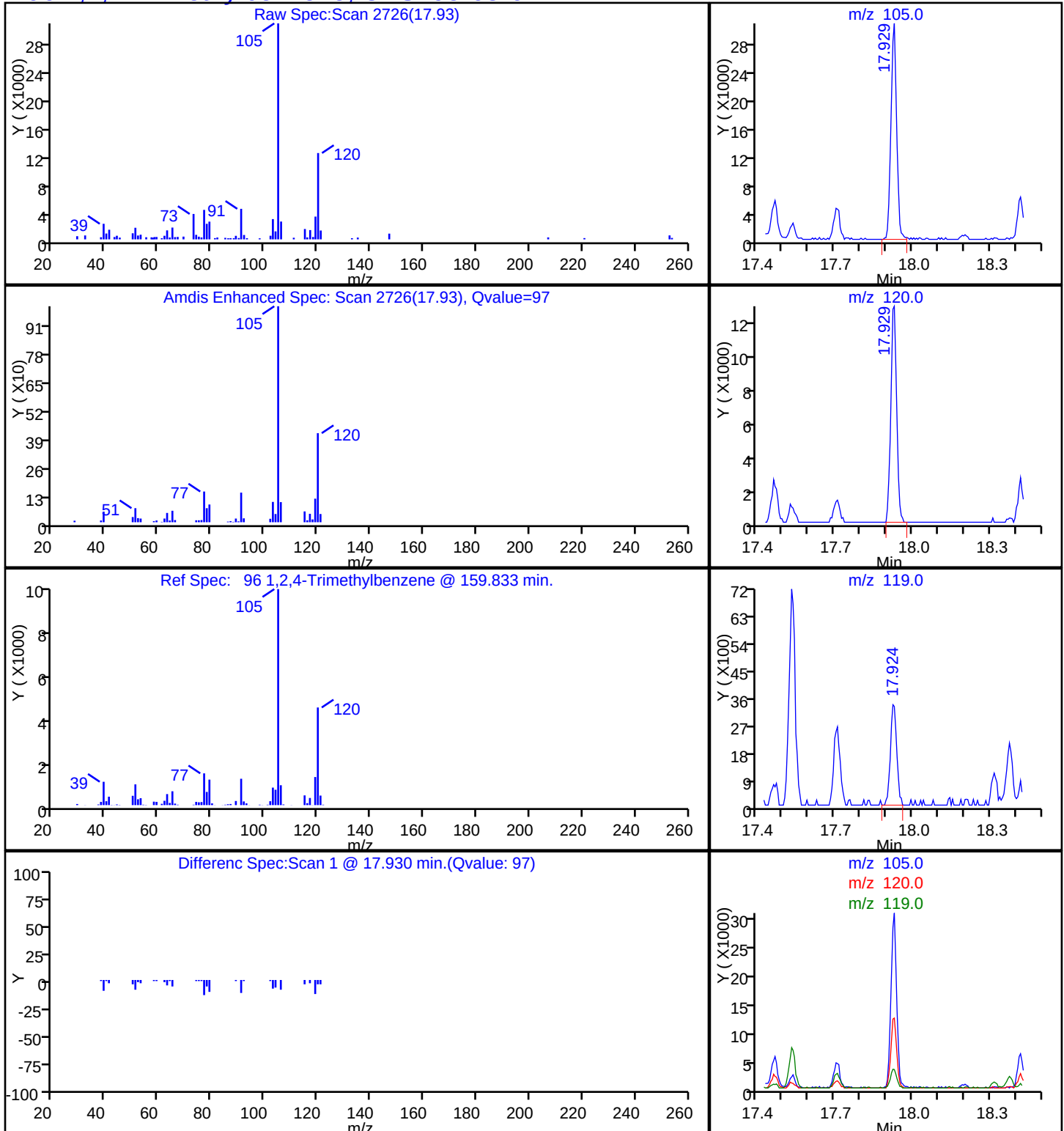
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

96 1,2,4-Trimethylbenzene, CAS: 95-63-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P103.D

Injection Date: 20-Apr-2017 14:31:30

Instrument ID: MG

Lims ID: 140-7831-A-14

Lab Sample ID: 140-7831-14

Client ID: FIELD DUP-1

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

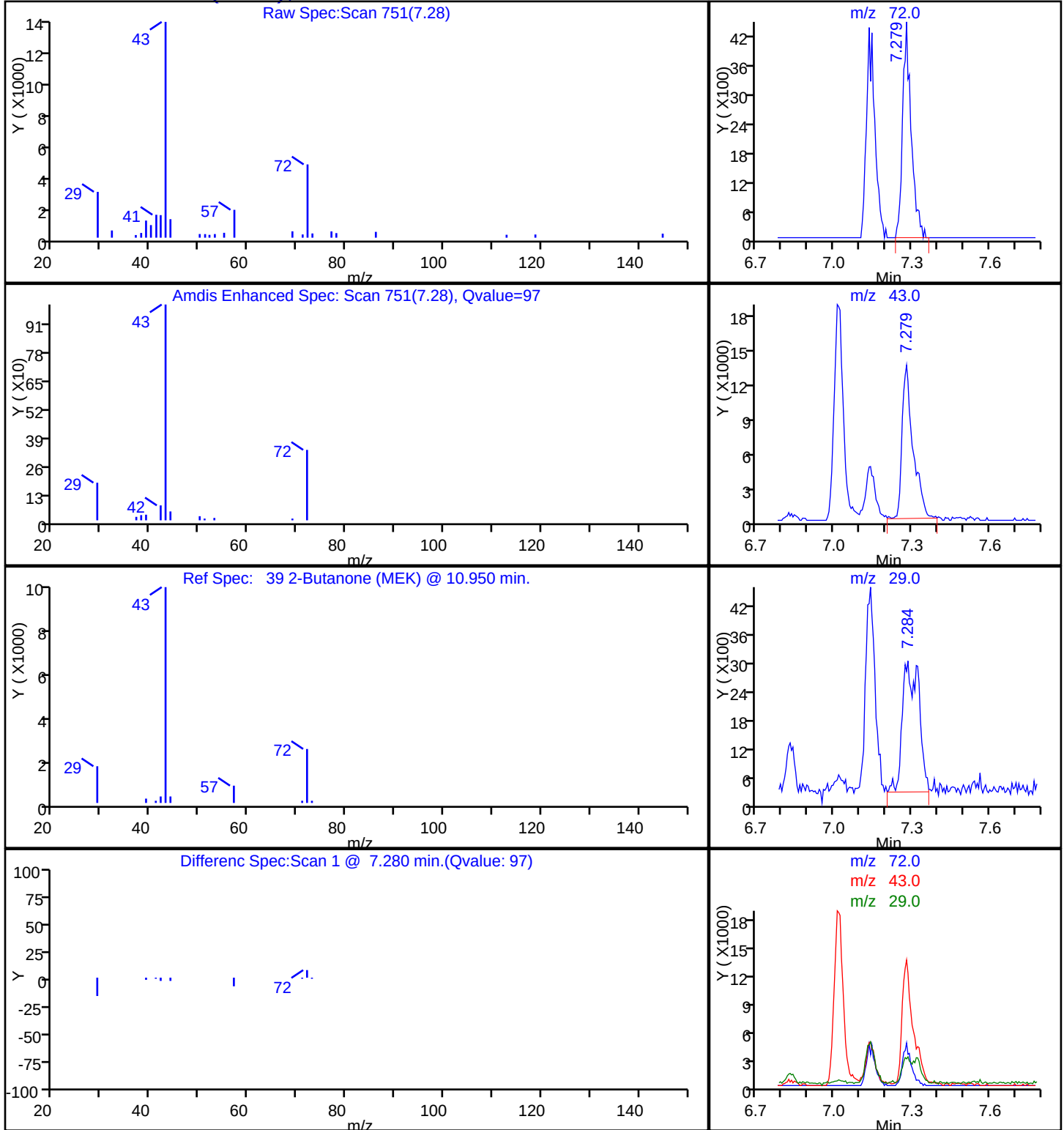
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P103.D

Injection Date: 20-Apr-2017 14:31:30

Instrument ID: MG

Lims ID: 140-7831-A-14

Lab Sample ID: 140-7831-14

Client ID: FIELD DUP-1

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

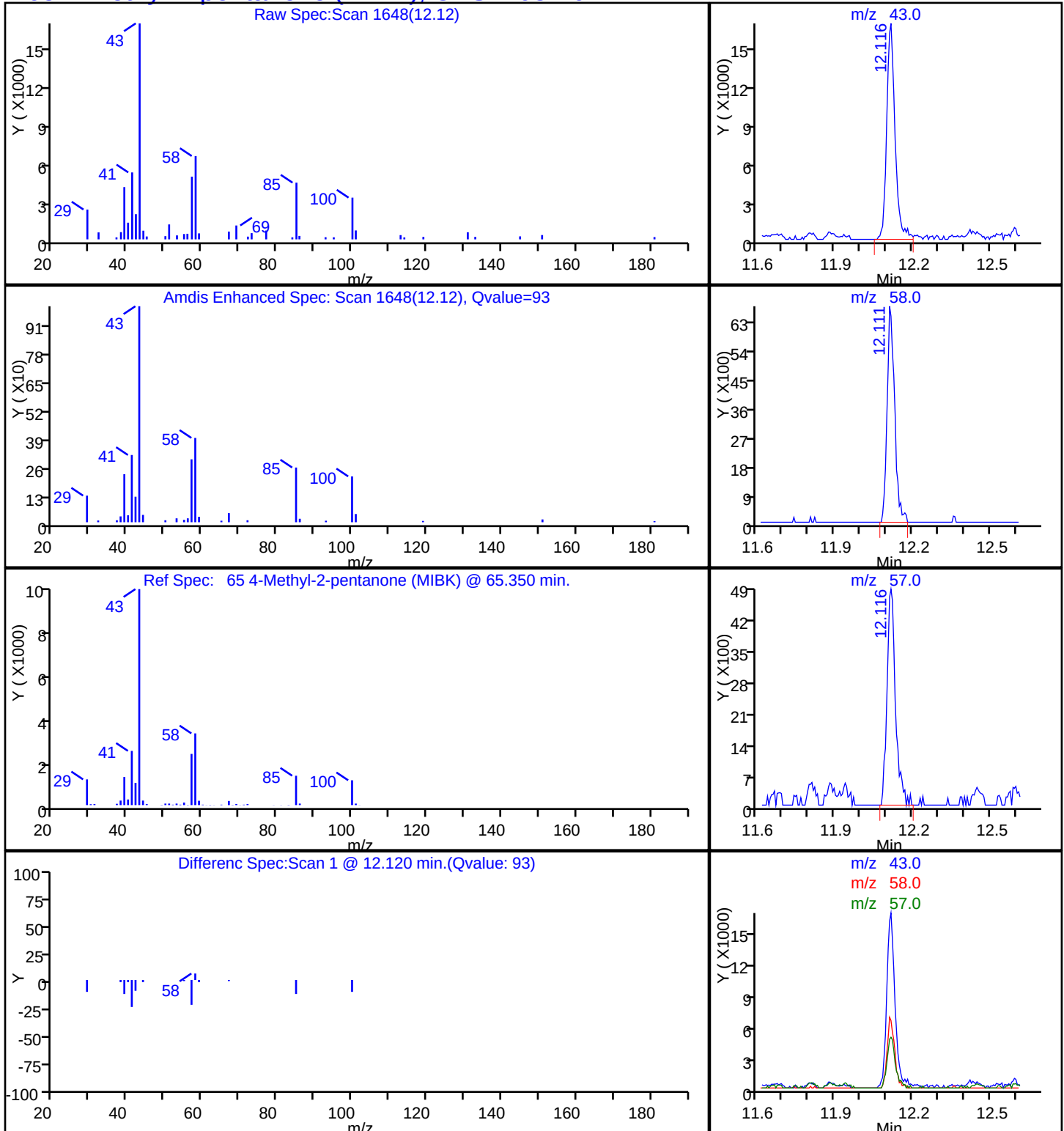
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

65 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P103.D

Injection Date: 20-Apr-2017 14:31:30

Instrument ID: MG

Lims ID: 140-7831-A-14

Lab Sample ID: 140-7831-14

Client ID: FIELD DUP-1

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

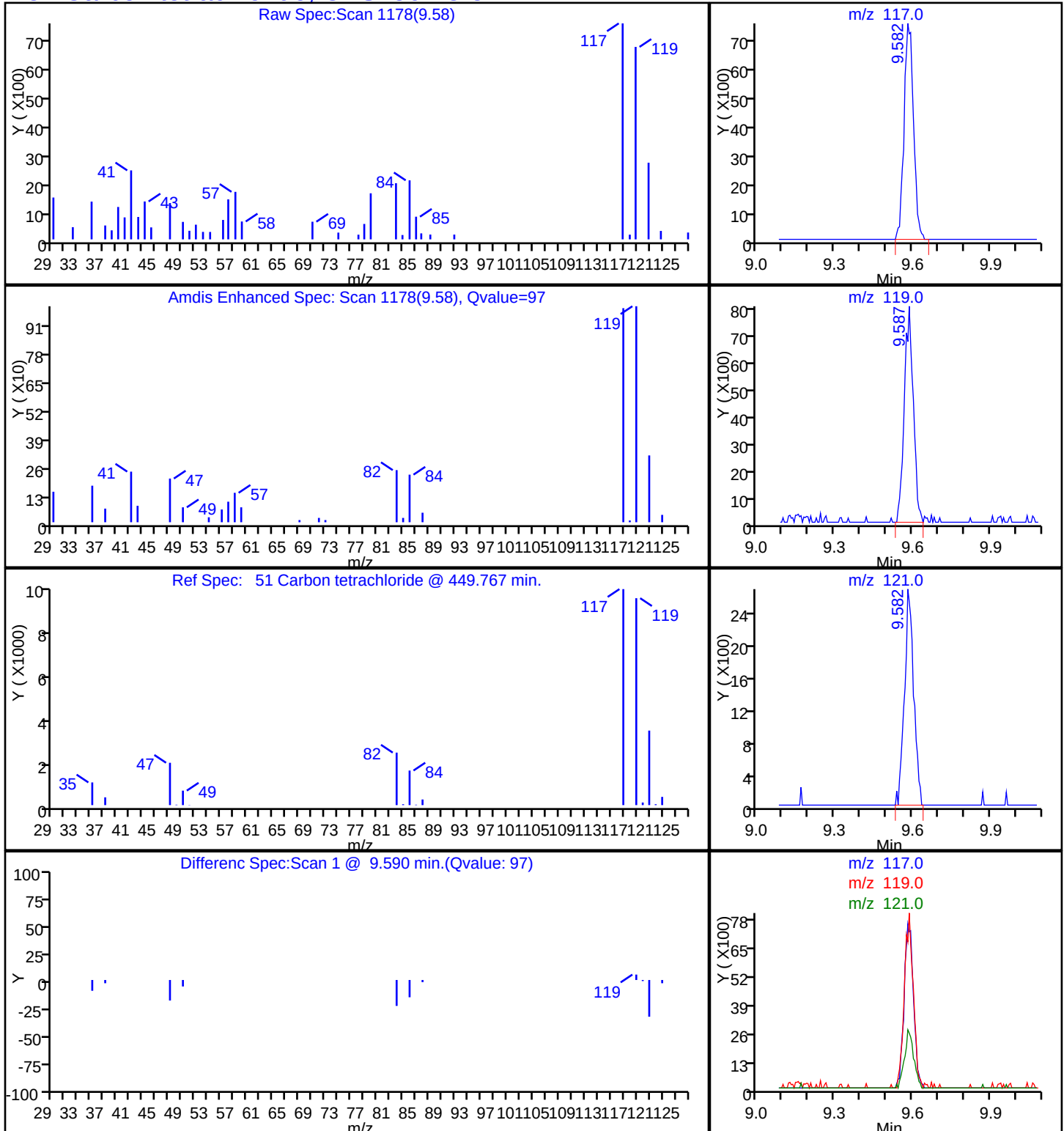
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

51 Carbon tetrachloride, CAS: 56-23-5

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P103.D

Injection Date: 20-Apr-2017 14:31:30

Instrument ID: MG

Lims ID: 140-7831-A-14

Lab Sample ID: 140-7831-14

Client ID: FIELD DUP-1

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

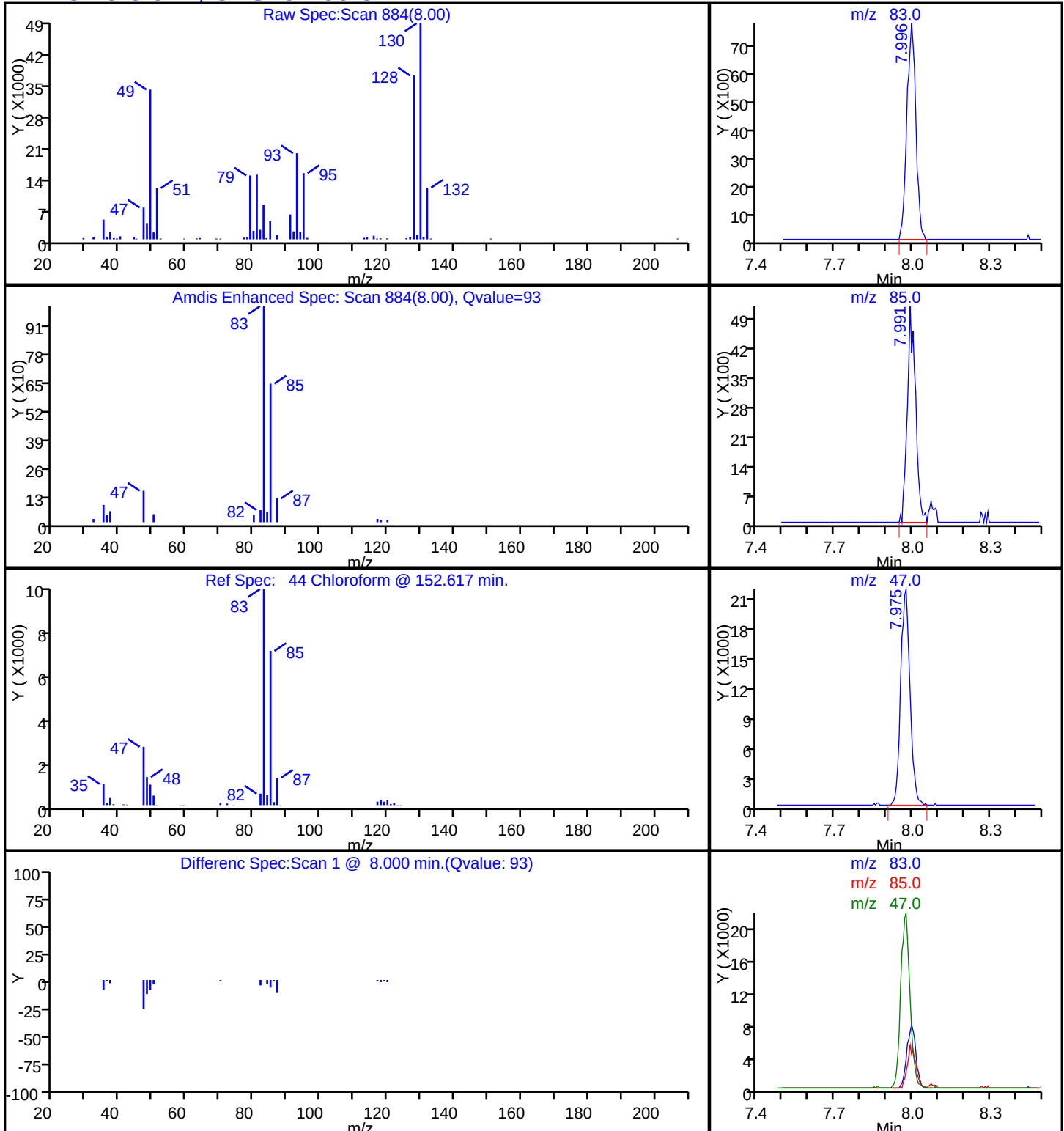
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

44 Chloroform, CAS: 67-66-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P103.D

Injection Date: 20-Apr-2017 14:31:30

Instrument ID: MG

Lims ID: 140-7831-A-14

Lab Sample ID: 140-7831-14

Client ID: FIELD DUP-1

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

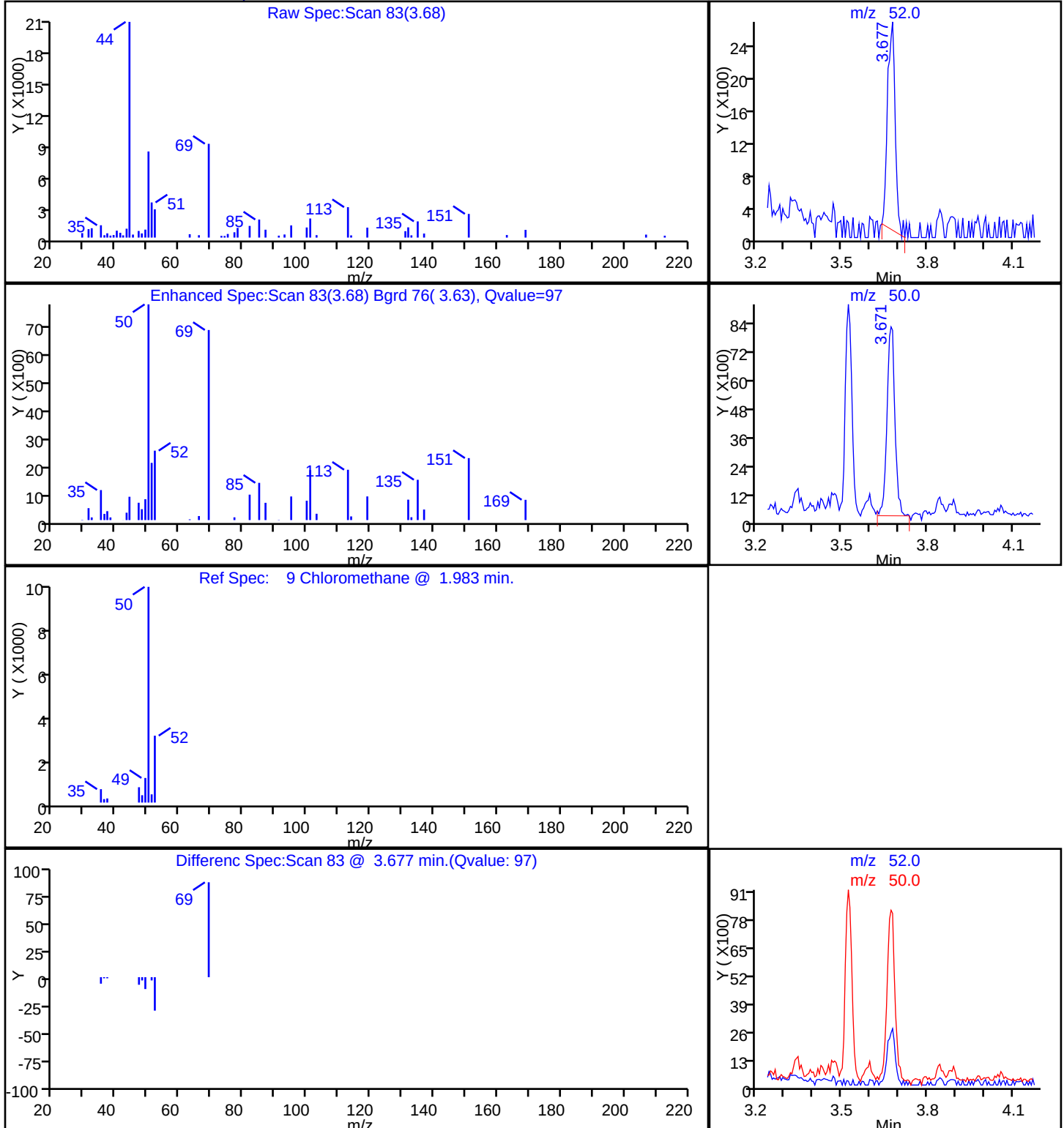
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P103.D

Injection Date: 20-Apr-2017 14:31:30

Instrument ID: MG

Lims ID: 140-7831-A-14

Lab Sample ID: 140-7831-14

Client ID: FIELD DUP-1

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

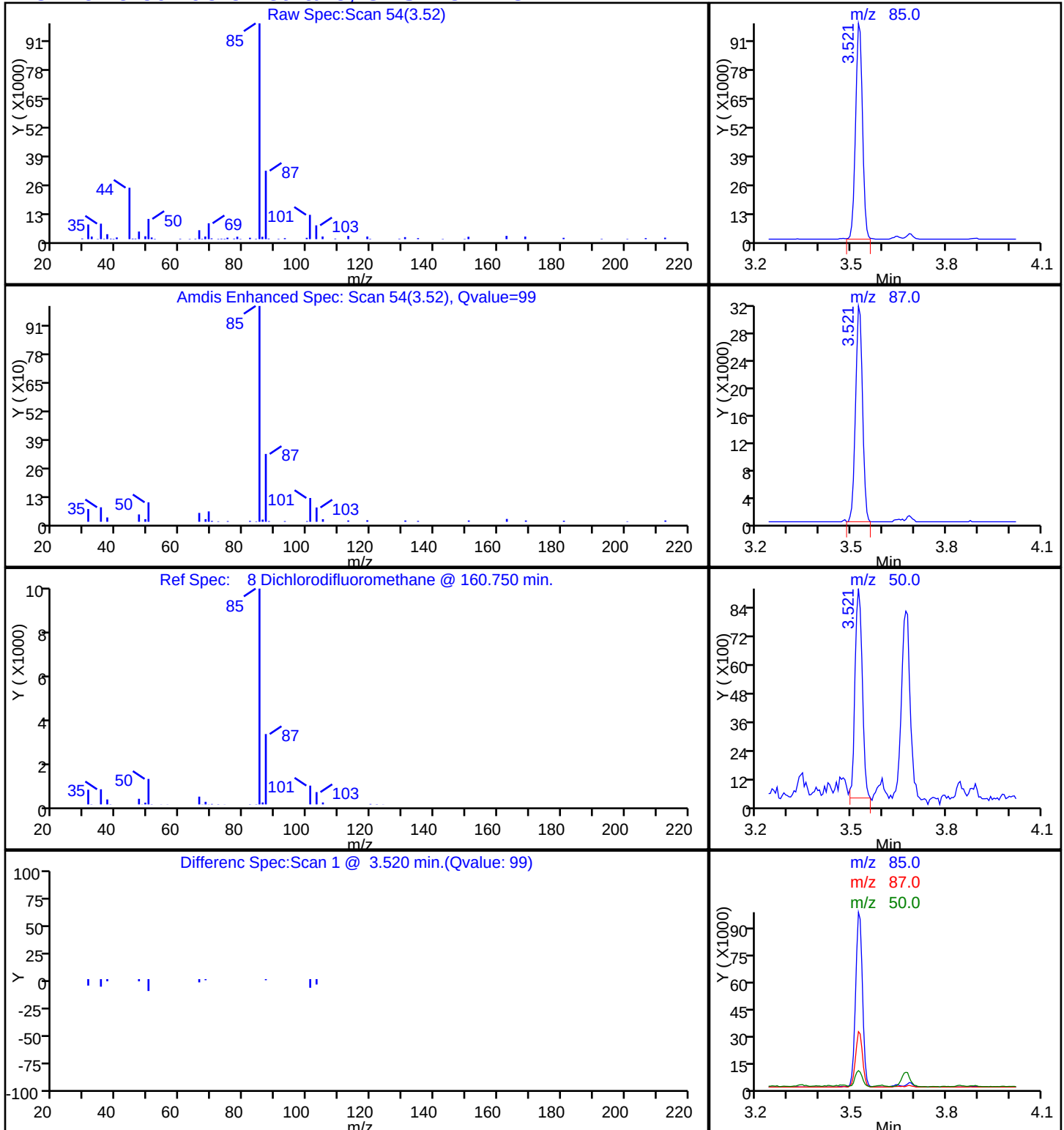
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P103.D

Injection Date: 20-Apr-2017 14:31:30

Instrument ID: MG

Lims ID: 140-7831-A-14

Lab Sample ID: 140-7831-14

Client ID: FIELD DUP-1

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

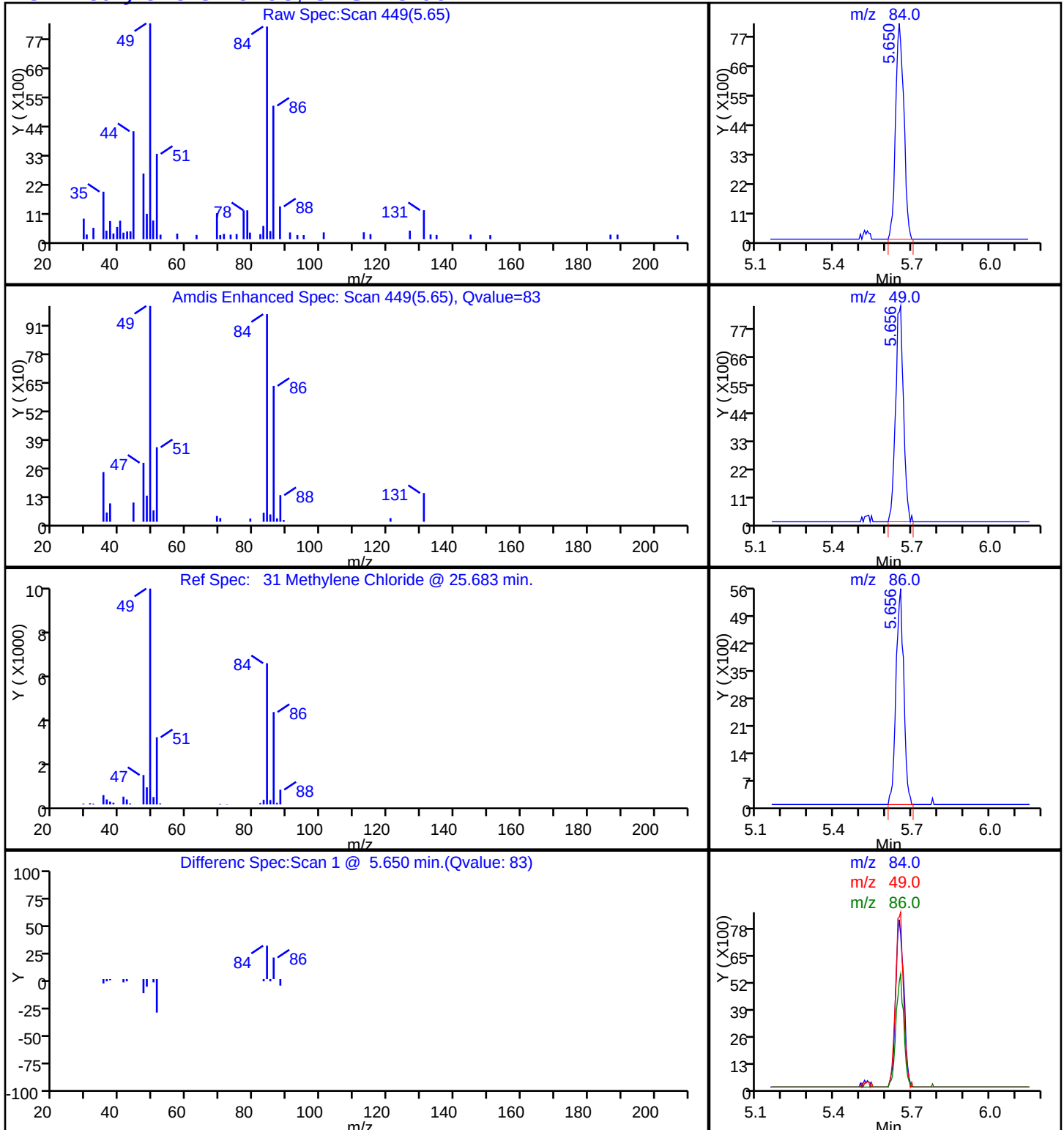
Dil. Factor: 1.0000

Method: MG_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: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P103.D

Injection Date: 20-Apr-2017 14:31:30

Instrument ID: MG

Lims ID: 140-7831-A-14

Lab Sample ID: 140-7831-14

Client ID: FIELD DUP-1

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

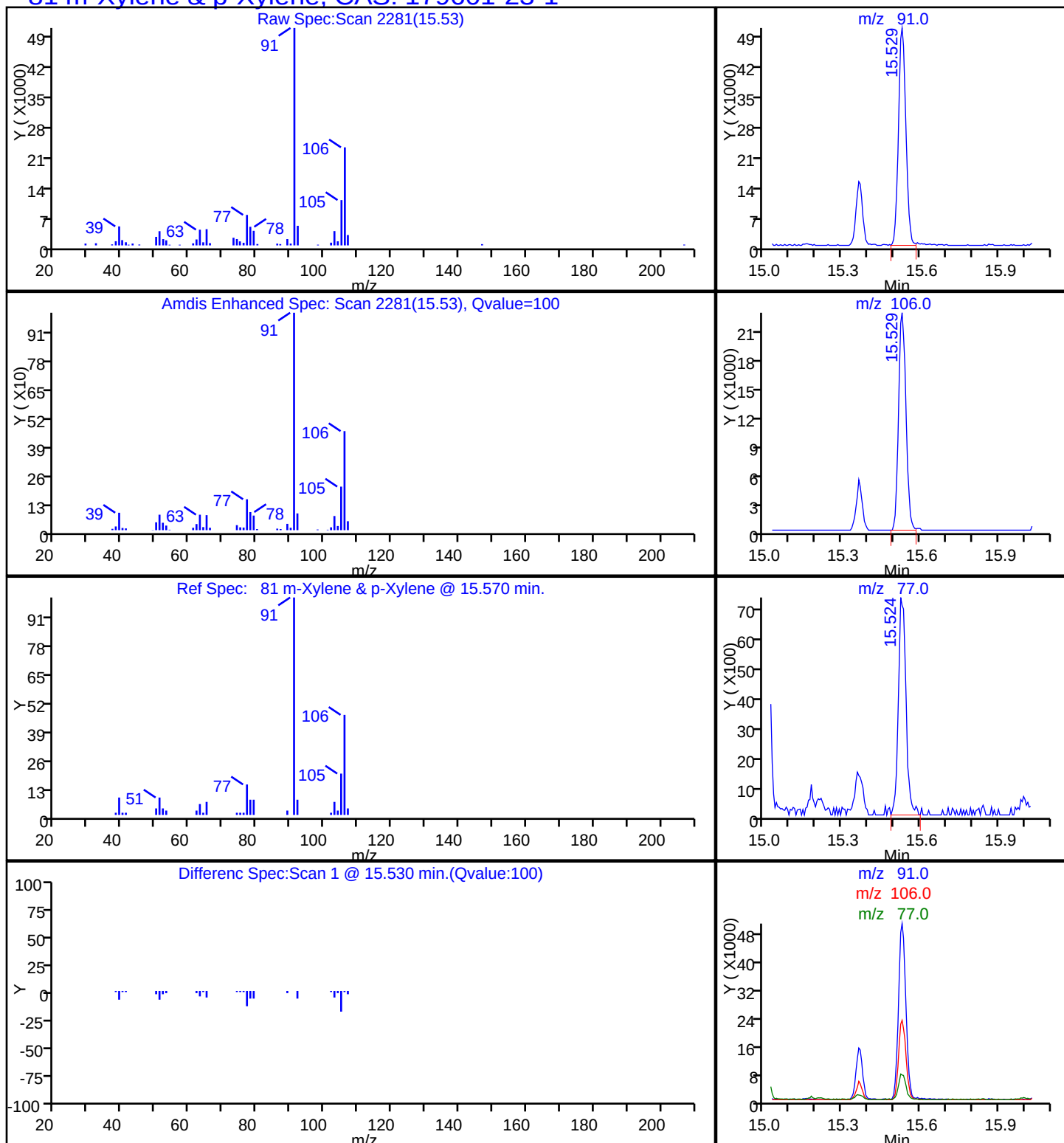
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P103.D

Injection Date: 20-Apr-2017 14:31:30

Instrument ID: MG

Lims ID: 140-7831-A-14

Lab Sample ID: 140-7831-14

Client ID: FIELD DUP-1

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

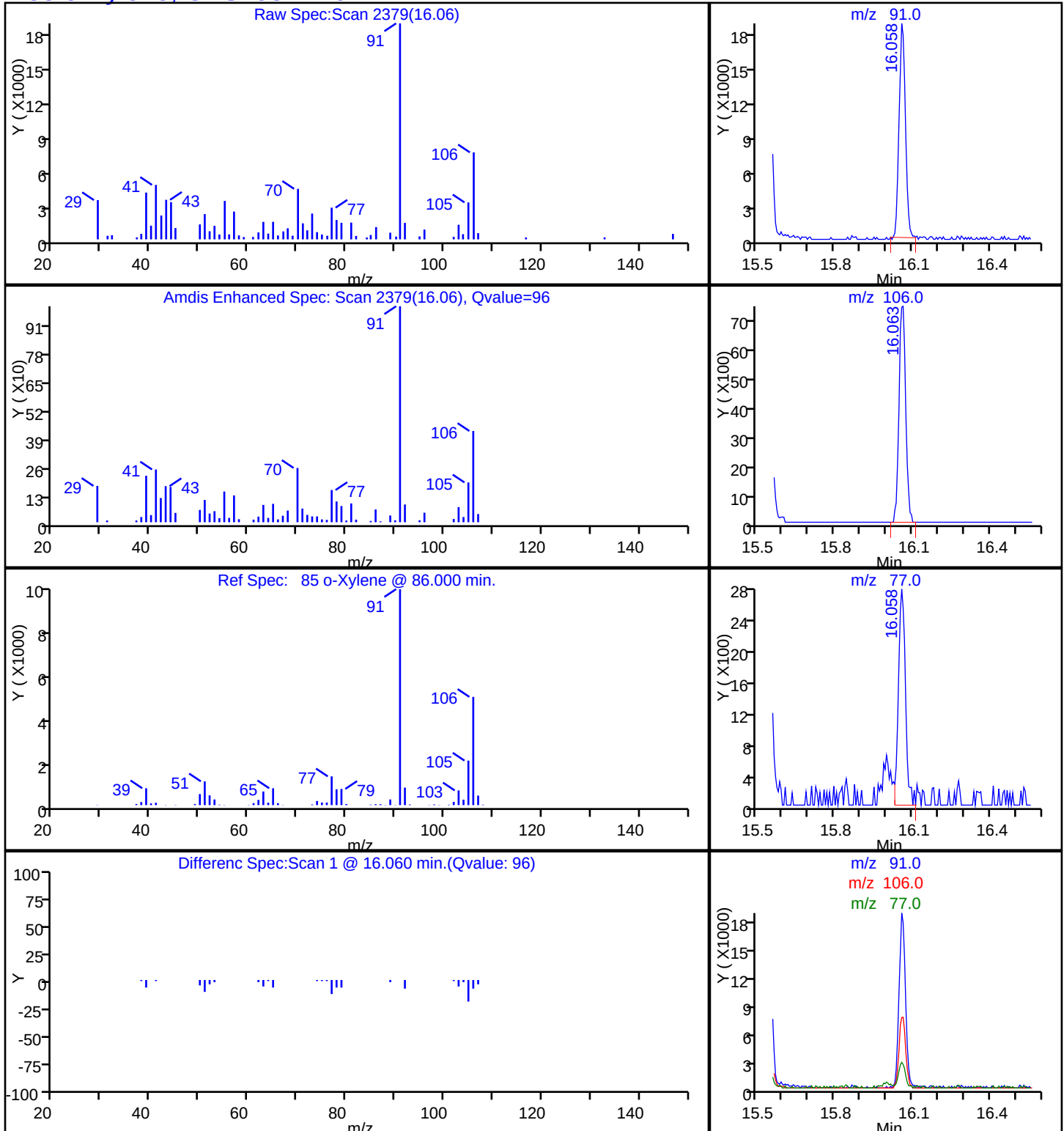
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

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

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P103.D

Injection Date: 20-Apr-2017 14:31:30

Instrument ID: MG

Lims ID: 140-7831-A-14

Lab Sample ID: 140-7831-14

Client ID: FIELD DUP-1

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

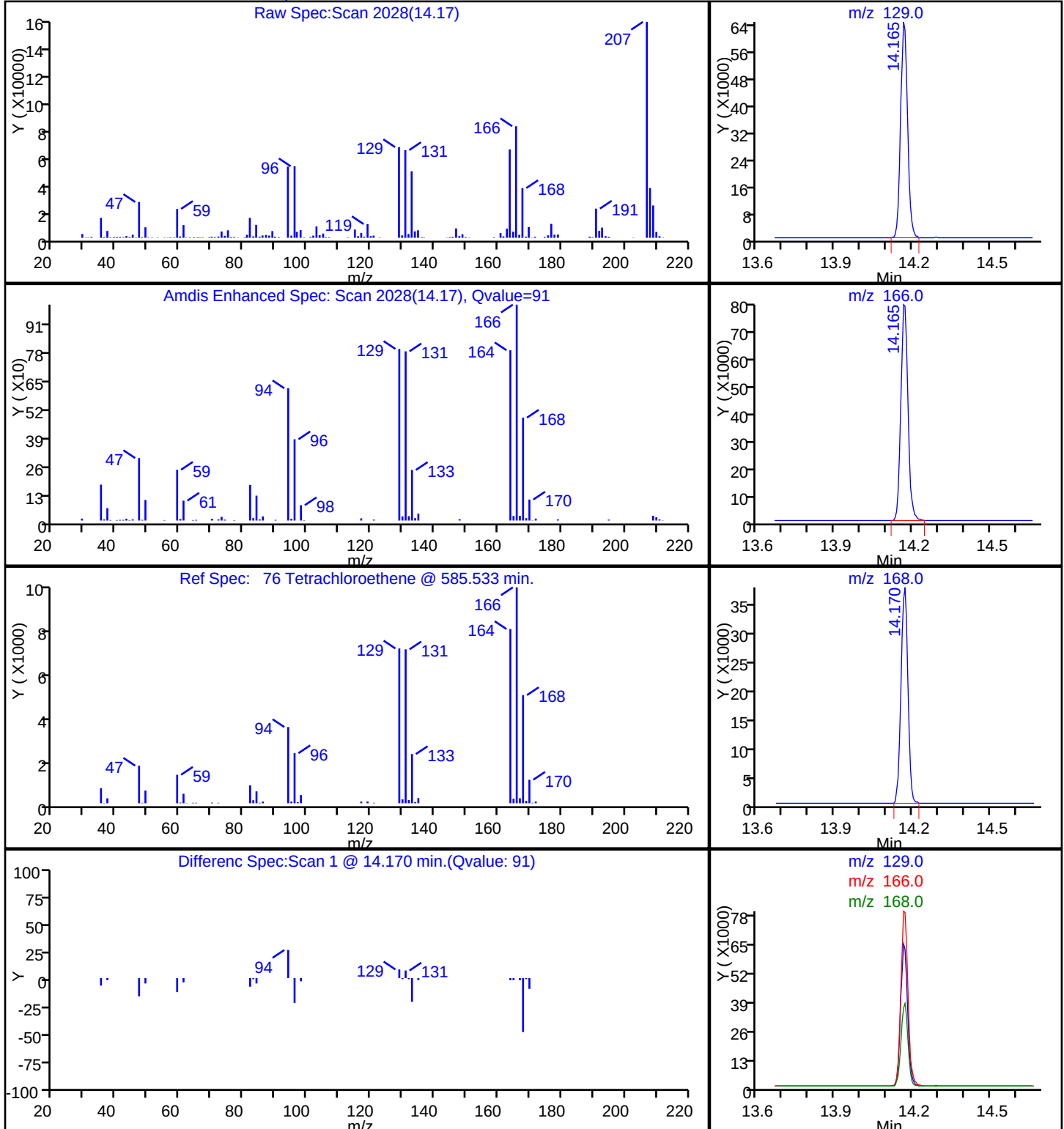
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

76 Tetrachloroethene, CAS: 127-18-4

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P103.D

Injection Date: 20-Apr-2017 14:31:30

Instrument ID: MG

Lims ID: 140-7831-A-14

Lab Sample ID: 140-7831-14

Client ID: FIELD DUP-1

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

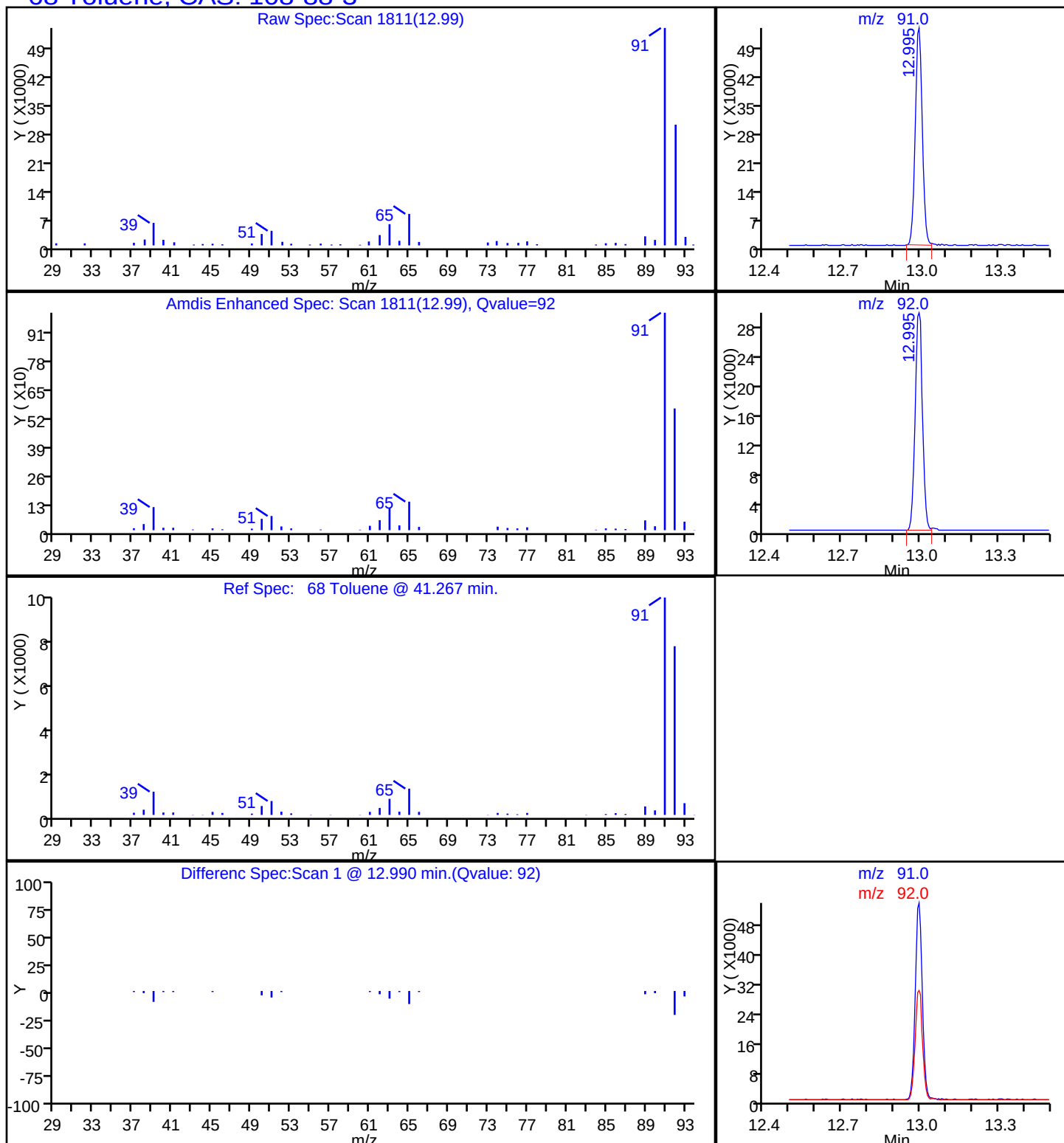
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

68 Toluene, CAS: 108-88-3

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P103.D

Injection Date: 20-Apr-2017 14:31:30

Instrument ID: MG

Lims ID: 140-7831-A-14

Lab Sample ID: 140-7831-14

Client ID: FIELD DUP-1

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

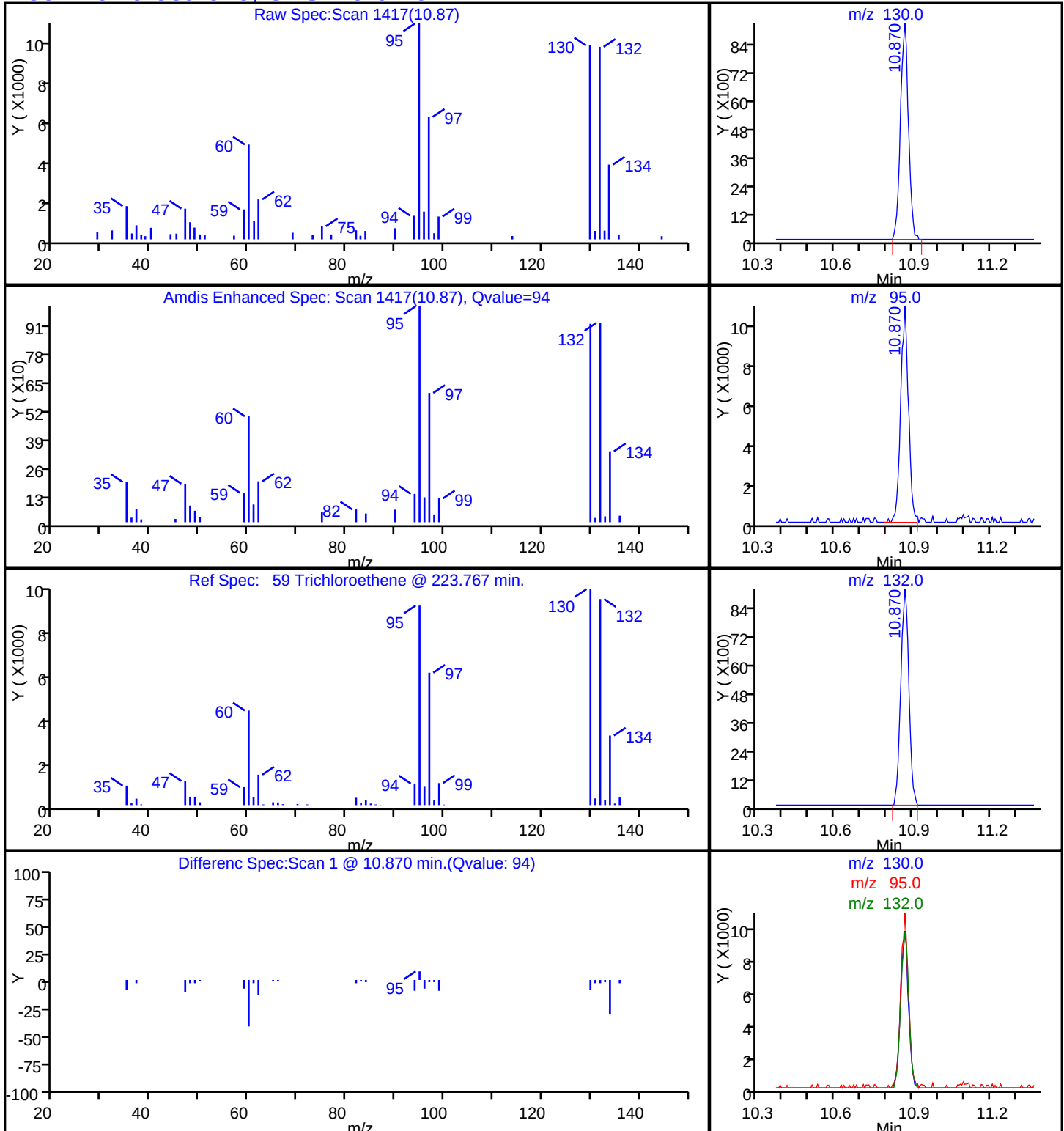
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

59 Trichloroethene, CAS: 79-01-6

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GD20P103.D

Injection Date: 20-Apr-2017 14:31:30

Instrument ID: MG

Lims ID: 140-7831-A-14

Lab Sample ID: 140-7831-14

Client ID: FIELD DUP-1

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 7

Purge Vol: 500.000 mL

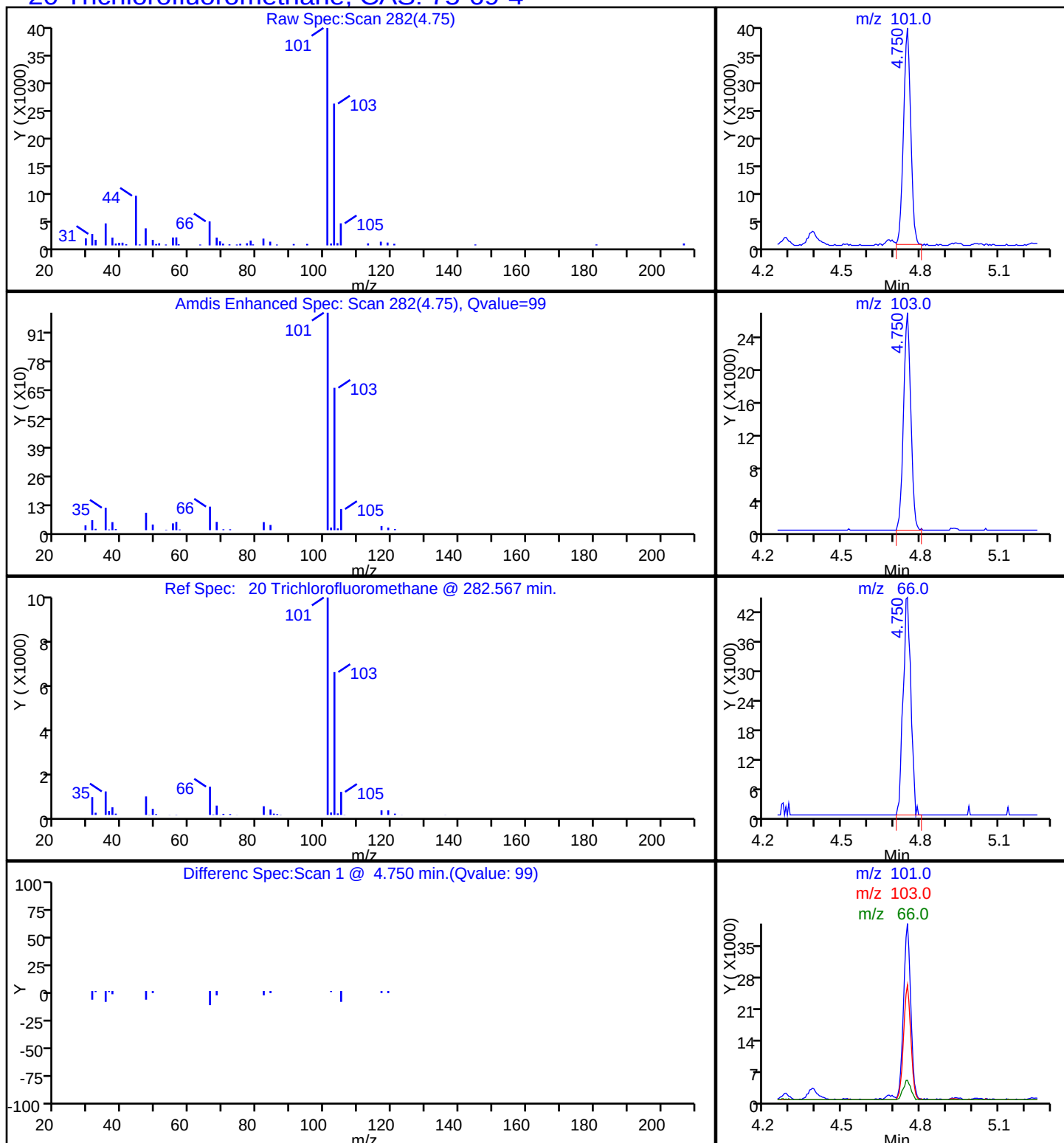
Dil. Factor: 1.0000

Method: MG_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 BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1 Analy Batch No.: 9482

SDG No.: _____

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

Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-9482/3	GC15IC01.D
Level 2	IC 140-9482/4	GC15IC02.D
Level 3	IC 140-9482/5	GC15IC03.D
Level 4	IC 140-9482/6	GC15IC04.D
Level 5	IC 140-9482/7	GC15IC05.D
Level 6	ICIS 140-9482/8	GC15IC06.D
Level 7	IC 140-9482/9	GC15IC07.D
Level 8	IC 140-9482/10	GC15IC08.D
Level 9	IC 140-9482/11	GC15IC09.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	+++++ 0.4492	0.5243 0.4243	0.4768 0.3958	0.4692 0.3664	0.4517	Ave		0.4447				11.1		30.0			
Propene	1.2559 1.0478	1.2382 0.9657	1.1468 0.8917	1.1084 0.7546	1.1130	Ave		1.0580				15.4		30.0			
Dichlorodifluoromethane	4.8320 4.2127	4.6343 3.9990	4.3917 3.8216	4.2891 3.5675	4.3531	Ave		4.2334				9.3		30.0			
Chloromethane	+++++ 0.2919	+++++ 0.2699	0.3511 0.2437	0.3157 0.2157	0.3055	Ave		0.2848				16.0		30.0			
1,2-Dichlorotetrafluoroethane	2.6647 2.4528	2.7171 2.4377	2.5660 2.4240	2.4867 2.4540	2.4764	Ave		2.5199				4.2		30.0			
Acetaldehyde	+++++ 0.3520	+++++ 0.3138	+++++ 0.2823	0.4204 0.2466	0.3916	Ave		0.3344				19.8		30.0			
Vinyl chloride	1.3581 1.1850	1.3052 1.0914	1.2835 1.0073	1.2092 0.8963	1.1952	Ave		1.1701				12.7		30.0			
1,3-Butadiene	0.8307 0.8039	0.8697 0.7476	0.8308 0.6849	0.8235 0.6065	0.8156	Ave		0.7793				10.8		30.0			
Butane	2.0474 1.6504	1.8888 1.5358	1.8200 1.3619	1.7380 1.1943	1.6862	Ave		1.6581				15.9		30.0			
Bromomethane	1.2729 1.1473	1.2685 1.1211	1.1982 1.0600	1.1615 1.0020	1.1747	Ave		1.1562				7.7		30.0			
Chloroethane	0.6202 0.5523	0.6462 0.5375	0.5992 0.5102	0.5796 0.4698	0.5813	Ave		0.5663				9.7		30.0			
Ethanol	0.4667 0.3882	0.4764 0.3730	0.4356 0.3514	0.4071 0.3093	0.4143	Ave		0.4025				13.4		30.0			
Vinyl bromide	1.1369 1.0936	1.2219 1.0624	1.1482 1.0193	1.1018 0.9772	1.1008	Ave		1.0958				6.6		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1 Analy Batch No.: 9482

SDG No.: _____

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

Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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	1.2979 1.1019	1.3019 1.0531	1.1814 0.9805	1.1311 0.9018	1.1319	Ave		1.1202				11.8		30.0			
Acrolein	++++ 0.1689	++++ 0.1838	0.1515 0.1664	0.1415 0.1869	0.1478	Ave		0.1638				10.8		30.0			
Trichlorofluoromethane	4.8982 4.1780	4.5033 4.0365	4.2099 3.8886	4.2004 3.7805	4.2513	Ave		4.2163				7.9		30.0			
Acetonitrile	++++ 0.3455	++++ 0.3253	++++ 0.3091	0.3670 0.2962	0.3713	Ave		0.3357				9.2		30.0			
Acetone	++++ 0.3988	++++ 0.3747	++++ 0.3572	0.4582 0.3327	0.4350	Ave		0.3928				12.1		30.0			
Pentane	++++ 0.2081	0.2306 0.1963	0.2111 0.1889	0.2019 0.1831	0.2097	Ave		0.2037				7.3		30.0			
Isopropyl alcohol	++++ 1.3318	++++ 1.2860	1.4634 1.2076	1.5818 1.2506	1.3883	Ave		1.3585				9.6		30.0			
Ethyl ether	0.9382 0.9126	1.0226 0.8738	0.9338 0.8382	0.9342 0.8824	0.9813	Ave		0.9241				6.1		30.0			
1,1-Dichloroethene	1.1997 1.0521	1.1238 1.0202	1.0793 0.9944	1.0590 1.0026	1.0636	Ave		1.0661				6.0		30.0			
Acrylonitrile	++++ 0.4755	0.5548 0.4637	0.5320 0.4448	0.4820 0.4378	0.4985	Ave		0.4861				8.4		30.0			
t-Butyl alcohol	1.7335 1.5954	1.6954 1.6067	1.7782 1.5471	1.6014 1.4137	1.6439	Ave		1.6239				6.6		30.0			
1,1,2-Trichlorotrifluoroethane	2.7462 2.4294	2.5716 2.3469	2.4578 2.3134	2.4601 2.3195	2.4878	Ave		2.4592				5.6		30.0			
Methylene Chloride	++++ 0.8898	++++ 0.8426	1.3997 0.8059	1.0494 0.7857	0.9603	Ave		0.9619				22.2		30.0			
3-Chloropropene	1.3230 1.0002	1.1895 0.9454	1.0528 0.8875	1.0053 0.8637	1.0378	Ave		1.0339				14.0		30.0			
Carbon disulfide	3.1830 2.6914	2.9030 2.5798	2.7447 2.4737	2.6742 2.4755	2.7200	Ave		2.7161				8.1		30.0			
trans-1,2-Dichloroethene	1.1520 1.0243	1.0869 1.0160	1.0319 1.0020	1.0004 1.0168	1.0512	Ave		1.0424				4.7		30.0			
2-Methylpentane	2.4442 2.0107	2.2935 1.8810	2.1617 1.7802	2.0757 1.6497	2.1100	Ave		2.0452				12.2		30.0			
Methyl tert-butyl ether	3.2716 3.0742	3.3148 2.9891	3.1854 2.8934	3.0695 2.8251	3.2425	Ave		3.0962				5.5		30.0			
1,1-Dichloroethane	2.4649 1.9932	2.1933 1.9091	2.0960 1.8234	2.0124 1.7705	2.0509	Ave		2.0349				10.2		30.0			
Vinyl acetate	2.3537 2.3986	2.4371 2.3555	2.3018 2.2353	2.3117 2.1757	2.4624	Ave		2.3369				4.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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	++++ 0.4477	0.5290 0.4398	0.4791 0.4291	0.4391 0.4150	0.4626	Ave		0.4552				7.8		30.0			
Hexane	0.9272 0.7802	0.8897 0.7413	0.8149 0.6991	0.8020 0.6548	0.7995	Ave		0.7899				10.8		30.0			
C6 Range	++++ 1.5533	++++ 1.4918	++++ 1.4753	1.5507 ++++	1.5868	Ave		1.5316				3.0		30.0			
Isopropyl ether	2.9696 2.9568	3.0846 2.8425	3.0439 2.6777	2.9405 2.5359	3.1080	Ave		2.9066				6.6		30.0			
cis-1,2-Dichloroethene	1.1807 1.1054	1.2051 1.0733	1.1183 1.0545	1.0720 1.0570	1.0986	Ave		1.1072				4.8		30.0			
Ethyl acetate	1.9826 1.9470	2.0492 1.8805	1.9970 1.8074	1.9306 1.7180	2.0347	Ave		1.9274				5.7		30.0			
Chloroform	3.1680 2.7810	3.0658 2.6656	2.7927 2.5757	2.7886 2.5332	2.8816	Ave		2.8058				7.5		30.0			
Tert-butyl ethyl ether	3.1533 2.9551	3.0716 2.8268	2.9525 2.7461	2.8883 2.6238	3.0788	Ave		2.9218				5.8		30.0			
Tetrahydrofuran	1.1323 0.9962	1.1580 0.9617	1.0365 0.9258	1.0347 0.8837	1.0616	Ave		1.0212				8.8		30.0			
1,1,1-Trichloroethane	3.6366 3.1948	3.4605 3.1195	3.2415 3.0594	3.1658 3.0511	3.2818	Ave		3.2457				5.9		30.0			
1,2-Dichloroethane	0.4453 0.4146	0.4341 0.3909	0.4133 0.3759	0.3926 0.3665	0.4014	Ave		0.4038				6.4		30.0			
Benzene	0.8565 0.6763	0.7234 0.6426	0.6692 0.6290	0.6431 0.6244	0.6512	Ave		0.6795				10.7		30.0			
Cyclohexane	0.1266 0.1179	0.1269 0.1115	0.1114 0.1058	0.1140 0.1025	0.1128	Ave		0.1144				7.3		30.0			
1-Butanol	++++ 0.0749	++++ 0.0748	0.0782 0.0711	0.0719 0.0702	0.0681	Ave		0.0727				4.7		30.0			
Carbon tetrachloride	0.7406 0.7383	0.6978 0.7281	0.6474 0.7266	0.6648 0.7560	0.6919	Ave		0.7102				5.2		30.0			
2,3-Dimethylpentane	0.1613 0.1609	0.1727 0.1546	0.1548 0.1480	0.1546 0.1433	0.1578	Ave		0.1564				5.4		30.0			
Thiophene	0.3984 0.3926	0.3997 0.3758	0.3824 0.3643	0.3701 0.3561	0.3777	Ave		0.3797				4.0		30.0			
Tert-amyl methyl ether	++++ 0.6573	0.6040 0.6339	0.5913 0.6224	0.6275 0.6000	0.6476	Ave		0.6230				3.7		30.0			
2,2,4-Trimethylpentane	1.1319 1.0337	1.0910 0.9745	1.0171 0.9296	1.0057 0.8832	1.0118	Ave		1.0087				7.5		30.0			
Heptane	0.2793 0.2604	0.2754 0.2466	0.2504 0.2381	0.2394 0.2297	0.2480	Ave		0.2519				6.7		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1 Analy Batch No.: 9482

SDG No.: _____

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

Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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	0.2369 0.2379	0.2592 0.2239	0.2423 0.2138	0.2307 0.2044	0.2282	Ave		0.2308				7.0		30.0			
Trichloroethene	0.3913 0.3732	0.3778 0.3641	0.3535 0.3793	0.3420 0.3811	0.3505	Ave		0.3681				4.5		30.0			
Dibromomethane	0.3543 0.3167	0.3067 0.3050	0.2852 0.3044	0.2873 0.3024	0.2986	Ave		0.3067				6.6		30.0			
Bromodichloromethane	0.6086 0.6261	0.5498 0.6149	0.5387 0.6089	0.5577 0.6031	0.5917	Ave		0.5888				5.4		30.0			
1,4-Dioxane	0.0864 0.0991	0.0977 0.0939	0.0920 0.0920	0.0895 0.0845	0.0928	Ave		0.0920				5.2		30.0			
Methyl methacrylate	0.2506 0.2719	0.2669 0.2669	0.2455 0.2567	0.2369 0.2462	0.2534	Ave		0.2550				4.6		30.0			
Methylcyclohexane	0.5429 0.5509	0.5520 0.5254	0.5273 0.5144	0.5134 0.5090	0.5296	Ave		0.5294				3.0		30.0			
4-Methyl-2-pentanone (MIBK)	0.3776 0.4117	0.3958 0.4017	0.3967 0.3926	0.3789 0.3610	0.3969	Ave		0.3903				3.9		30.0			
cis-1,3-Dichloropropene	0.4475 0.4489	0.4392 0.4328	0.4056 0.4255	0.4041 0.4132	0.4296	Ave		0.4274				3.9		30.0			
trans-1,3-Dichloropropene	0.4385 0.4472	0.4225 0.4317	0.4283 0.4230	0.4164 0.4211	0.4273	Ave		0.4284				2.2		30.0			
Toluene Range	++++ 2.0153	++++ 1.9295	++++ 1.8763	1.8534 1.8846	1.9262	Ave		1.9142				3.0		30.0			
Toluene	0.8395 0.8093	0.8491 0.7770	0.7936 0.7642	0.7738 0.7773	0.7881	Ave		0.7969				3.8		30.0			
1,1,2-Trichloroethane	0.2473 0.2468	0.2582 0.2332	0.2411 0.2289	0.2313 0.2284	0.2347	Ave		0.2389				4.3		30.0			
2-Methylthiophene	0.6786 0.6945	0.6915 0.6634	0.6567 0.6465	0.6589 0.6593	0.6702	Ave		0.6689				2.4		30.0			
3-Methylthiophene	0.6861 0.6844	0.6815 0.6575	0.6391 0.6481	0.6408 0.6536	0.6684	Ave		0.6622				2.8		30.0			
2-Hexanone	0.1705 0.2083	0.1899 0.2042	0.1871 0.1978	0.1825 0.1879	0.1884	Ave		0.1907				6.0		30.0			
Octane	0.3046 0.2983	0.2938 0.2856	0.2875 0.2800	0.2759 0.2759	0.2901	Ave		0.2880				3.4		30.0			
Dibromochloromethane	0.5147 0.6391	0.4976 0.6658	0.5002 0.6985	0.5208 0.7314	0.5960	Ave		0.5960				15.3		30.0			
1,2-Dibromoethane	0.4514 0.4987	0.4414 0.4873	0.4271 0.4908	0.4418 0.4998	0.4725	Ave		0.4679				6.0		30.0			
Tetrachloroethene	0.3686 0.3715	0.3773 0.3614	0.3461 0.3710	0.3339 0.3954	0.3554	Ave		0.3645				4.9		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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								
Chlorobenzene	0.6950 0.6883	0.6894 0.6657	0.6599 0.6734	0.6471 0.6950	0.6559	Ave		0.6744				2.7		30.0			
2,3-Dimethylheptane	0.7899 0.6914	0.7827 0.6350	0.7170 0.5879	0.6997 0.5398	0.6966	Ave		0.6822				12.1		30.0			
Ethylbenzene	1.1434 1.1417	1.1377 1.1050	1.1069 1.0902	1.0700 1.1099	1.1134	Ave		1.1131				2.2		30.0			
2-Ethylthiophene	0.8499 0.9248	0.8830 0.8941	0.8364 0.8781	0.8529 0.8854	0.8866	Ave		0.8768				3.1		30.0			
m-Xylene & p-Xylene	0.9244 0.9307	0.9041 0.8929	0.8801 0.8889	0.8676 0.9026	0.8999	Ave		0.8990				2.2		30.0			
Bromoform	0.4414 0.6021	0.4305 0.7122	0.4383 0.7997	0.4732 +++++	0.5776	Ave		0.5594				24.9		30.0			
Styrene	0.4659 0.6631	0.4995 0.6610	0.5075 0.6798	0.5351 0.7078	0.6183	Ave		0.5931				15.4		30.0			
Nonane	0.5320 0.5077	0.5212 0.4643	0.5212 0.4376	0.4918 0.4085	0.5133	Ave		0.4886				8.7		30.0			
o-Xylene	0.9666 0.9452	0.9743 0.9037	0.9096 0.8874	0.8846 0.8870	0.9138	Ave		0.9191				3.8		30.0			
1,1,2,2-Tetrachloroethane	0.5455 0.6248	0.5869 0.6002	0.5295 0.5769	0.5547 0.5835	0.6125	Ave		0.5794				5.4		30.0			
1,2,3-Trichloropropane	0.2174 0.2205	0.2166 0.2110	0.2058 0.2107	0.2000 0.2121	0.2139	Ave		0.2120				2.9		30.0			
Isopropylbenzene	1.4295 1.3572	1.3734 1.3141	1.3130 1.3091	1.2638 1.3243	1.3304	Ave		1.3350				3.5		30.0			
Propylbenzene	0.3206 0.3696	0.3283 0.3614	0.3301 0.3700	0.3300 0.3908	0.3507	Ave		0.3502				6.9		30.0			
2-Chlorotoluene	+++++ 0.3340	0.3335 0.3298	0.3098 0.3343	0.3015 0.3477	0.3231	Ave		0.3267				4.5		30.0			
4-Ethyltoluene	1.1970 1.3224	1.2319 1.2896	1.1897 1.3003	1.1796 1.3269	1.2762	Ave		1.2571				4.6		30.0			
1,3,5-Trimethylbenzene	0.5469 0.6243	0.5674 0.6109	0.5327 0.6231	0.5477 0.6499	0.6024	Ave		0.5895				7.1		30.0			
Alpha Methyl Styrene	+++++ 0.5207	0.3639 0.5401	0.3656 0.5610	0.3863 0.5861	0.4774	Ave		0.4751				19.2		30.0			
Decane	0.5864 0.6383	0.6469 0.5959	0.6103 0.5500	0.6147 0.5048	0.6447	Ave		0.5991				7.9		30.0			
tert-Butylbenzene	1.1155 1.3026	1.2200 1.2873	1.1544 1.3340	1.1382 1.3748	1.2508	Ave		1.2420				7.4		30.0			
1,2,4-Trimethylbenzene	1.0567 1.1887	1.0858 1.1674	1.0572 1.1857	1.0569 1.2179	1.1475	Ave		1.1293				5.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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								
sec-Butylbenzene	1.4575 1.6940	1.5550 1.6784	1.4797 1.7510	1.4842 +++++	1.6224	Ave		1.5903				7.0		30.0			
1,3-Dichlorobenzene	0.7839 0.8746	0.7680 0.9113	0.7371 1.0012	0.7327 1.0431	0.8146	Ave		0.8518				13.3		30.0			
Benzyl chloride	0.9913 1.1502	0.9509 1.1420	0.9751 1.1585	0.9861 1.1519	1.0824	Ave		1.0654				8.3		30.0			
1,4-Dichlorobenzene	0.7832 0.8555	0.7728 0.8624	0.7394 0.9397	0.7367 0.9958	0.8073	Ave		0.8325				10.7		30.0			
4-Isopropyltoluene	1.2787 1.5072	1.3728 1.4704	1.3354 1.5104	1.3072 +++++	1.4520	Ave		1.4043				6.6		30.0			
1,2,3-Trimethylbenzene	0.7980 0.8970	0.8575 0.8524	0.8145 0.8449	0.7986 0.8469	0.8775	Ave		0.8430				4.0		30.0			
Butylcyclohexane	0.8269 0.8735	0.8430 0.8279	0.8368 0.8147	0.8222 0.7686	0.8741	Ave		0.8320				3.8		30.0			
1,2-Dichlorobenzene	0.7339 0.8390	0.7467 0.8639	0.7024 0.9401	0.7046 0.9877	0.7869	Ave		0.8117				12.7		30.0			
Indane	0.8988 1.0874	0.9453 1.0871	0.9346 1.1500	0.9155 1.2030	1.0376	Ave		1.0288				10.7		30.0			
Indene	+++++ 0.8020	0.6602 0.8044	0.6375 0.8255	0.6603 0.8617	0.7619	Ave		0.7517				11.5		30.0			
Butylbenzene	1.3043 1.3941	1.2970 1.3165	1.2882 1.3191	1.2631 1.2590	1.3725	Ave		1.3127				3.5		30.0			
Undecane	0.7087 0.7450	0.7870 0.6698	0.7061 0.6436	0.7148 0.5617	0.7894	Ave		0.7029				10.2		30.0			
1,2-Dimethyl-4-Ethylbenzene	+++++ 1.1145	0.9799 1.0683	0.9582 1.1101	0.9631 1.0986	1.0937	Ave		1.0483				6.6		30.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.3626	0.2848 0.3888	0.2556 0.4208	0.2832 0.4321	0.3569	Ave		0.3481				19.1		30.0			
1,2,4,5-Tetramethylbenzene	1.1280 1.3892	1.1793 1.3109	1.1313 1.4313	1.1592 +++++	1.3455	Ave		1.2593				9.8		30.0			
1,2,3,5-Tetramethylbenzene	0.7014 0.8228	0.7621 0.7627	0.6772 0.8072	0.6958 0.7761	0.8138	Ave		0.7577				7.2		30.0			
1,2,3,4-Tetramethylbenzene	0.9370 1.1438	0.9768 1.0541	0.9292 1.1581	0.9384 1.0472	1.1276	Ave		1.0347				9.0		30.0			
Dodecane	0.6092 0.6657	0.7288 0.5555	0.6338 0.6382	0.6127 0.3833	0.7850	Ave		0.6236				18.1		30.0			
1,2,4-Trichlorobenzene	0.6272 0.8005	0.6639 0.7430	0.5713 0.9298	0.5791 0.7414	0.7733	Ave		0.7144				16.2		30.0			
Naphthalene	1.3527 1.6696	1.4676 1.5877	1.2582 1.7071	1.2708 +++++	1.6598	Ave		1.4967				12.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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													
Benzo(b)thiophene	0.7926 0.9824	0.8643 0.9431	0.7434 0.9932	0.7548 0.7832	0.9779	Ave		0.8706				12.0		30.0			
Hexachlorobutadiene	0.6444 0.7667	0.6789 0.7046	0.6040 0.8911	0.6006 0.6659	0.7840	Ave		0.7045				13.4		30.0			
1,2,3-Trichlorobenzene	0.6779 0.7664	0.7017 0.6913	0.5616 0.8404	0.5574 0.5093	0.7607	Ave		0.6741				16.4		30.0			
2-Methylnaphthalene	++++ 0.3374	0.2697 0.3653	0.2434 0.4468	0.2127 ++++	0.3001	Ave		0.3108				25.7		50.0			
1-Methylnaphthalene	++++ 0.3303	0.2976 0.3653	0.2352 0.4362	0.2020 ++++	0.2997	Ave		0.3095				25.3		50.0			
4-Bromofluorobenzene (Surr)	0.7862 0.7838	0.7836 0.7899	0.7710 0.8014	0.7914 0.8000	0.8071	Ave		0.7905				1.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1 Analy Batch No.: 9482

SDG No.: _____

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

Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-9482/3	GC15IC01.D
Level 2	IC 140-9482/4	GC15IC02.D
Level 3	IC 140-9482/5	GC15IC03.D
Level 4	IC 140-9482/6	GC15IC04.D
Level 5	IC 140-9482/7	GC15IC05.D
Level 6	ICIS 140-9482/8	GC15IC06.D
Level 7	IC 140-9482/9	GC15IC07.D
Level 8	IC 140-9482/10	GC15IC08.D
Level 9	IC 140-9482/11	GC15IC09.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	+++++ 79923	3314 161083	6330 317499	16118 648102	38106	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Propene	CBM	Ave	3760 186431	7827 366636	15226 715294	38073 1334692	93889	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Dichlorodifluoromethane	CBM	Ave	14467 749517	29295 1518249	58308 3065573	147329 6309639	367220	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Chloromethane	CBM	Ave	+++++ 51943	+++++ 102473	4662 195522	10845 381523	25770	+++++ 2.00	+++++ 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dichlorotetrafluoroethane	CBM	Ave	7978 436402	17176 925480	34069 1944481	85416 4340354	208904	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Acetaldehyde	CBM	Ave	+++++ 313096	+++++ 595674	+++++ 1132144	72210 2180620	165163	+++++ 9.99	+++++ 20.0	+++++ 40.0	2.00 80.0	5.01
Vinyl chloride	CBM	Ave	4066 210834	8251 414360	17041 808059	41537 1585259	100829	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,3-Butadiene	CBM	Ave	2487 143038	5498 283835	11030 549398	28287 1072769	68804	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Butane	CBM	Ave	6130 293638	11940 583059	24164 1092508	59701 2112304	142250	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Bromomethane	CBM	Ave	3811 204127	8019 425627	15909 850291	39896 1772157	99093	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Chloroethane	CBM	Ave	1857 98257	4085 204064	7956 409306	19908 830849	49038	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Ethanol	CBM	Ave	6987 345378	15059 707984	28920 1409489	69923 2735400	174754	0.196 9.99	0.392 20.0	0.794 40.0	2.00 80.0	5.01
Vinyl bromide	CBM	Ave	3404 194576	7724 403357	15245 817628	37848 1728343	92859	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Methylbutane	CBM	Ave	3886 196053	8230 399830	15685 786537	38853 1595022	95489	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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
Acrolein	CBM	Ave	++++ 30056	++++ 69764	2011 133516	4862 330540	12471	++++ 2.00	++++ 4.00	0.159 8.00	0.400 16.0	1.00
Trichlorofluoromethane	CBM	Ave	14665 743344	28467 1532462	55895 3119354	144284 6686372	358635	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Acetonitrile	CBM	Ave	++++ 61466	++++ 123503	++++ 247919	12605 523809	31325	++++ 2.00	++++ 4.00	++++ 8.00	0.400 16.0	1.00
Acetone	CBM	Ave	++++ 208378	++++ 417742	++++ 841477	46214 1728119	107750	++++ 5.87	++++ 11.7	++++ 23.5	1.17 47.0	2.94
Pentane	CBM	Ave	++++ 37027	1458 74522	2803 151563	6934 323924	17688	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Isopropyl alcohol	CBM	Ave	++++ 695832	++++ 1433726	57055 2844607	159557 6495368	343901	++++ 5.87	++++ 11.7	0.466 23.5	1.17 47.0	2.94
Ethyl ether	CBM	Ave	2809 162376	6464 331731	12398 672373	32090 1560739	82779	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1-Dichloroethene	CBM	Ave	3592 187192	7104 387339	14330 797692	36376 1773303	89728	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Acrylonitrile	CBM	Ave	++++ 84597	3507 176062	7063 356803	16558 774315	42053	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
t-Butyl alcohol	CBM	Ave	5190 283850	10717 610004	23609 1241041	55009 2500383	138675	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1,2-Trichlorotrifluoroethane	CBM	Ave	8222 432242	16256 891000	32632 1855781	84505 4102363	209870	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Methylene Chloride	CBM	Ave	++++ 158311	++++ 319885	18584 646443	36046 1389569	81013	++++ 2.00	++++ 4.00	0.159 8.00	0.400 16.0	1.00
3-Chloropropene	CBM	Ave	3961 177955	7519 358922	13978 711970	34533 1527575	87550	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Carbon disulfide	CBM	Ave	9530 478845	18351 979418	36441 1984338	91859 4378380	229458	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
trans-1,2-Dichloroethene	CBM	Ave	3449 182249	6871 385716	13700 803766	34363 1798426	88680	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Methylpentane	CBM	Ave	7318 357751	14498 714141	28701 1428051	71301 2917758	177996	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Methyl tert-butyl ether	CBM	Ave	9795 546952	20954 1134810	42292 2321003	105435 4996692	273536	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1-Dichloroethane	CBM	Ave	7380 354630	13865 724800	27828 1462691	69127 3131504	173008	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Vinyl acetate	CBM	Ave	7047 426758	15406 894260	30561 1793080	79405 3848118	207726	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Butanone	CBM	Ave	++++ 79660	3344 166968	6361 344230	15082 734059	39027	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Hexane	CBM	Ave	2776 138819	5624 281421	10820 560820	27547 1158063	67446	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1 Analy Batch No.: 9482

SDG No.: _____

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

Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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	DFBZ	Ave	+++++ 1313930	+++++ 2723811	+++++ 5679805	265311 +++++	680124	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 +++++	1.00
Isopropyl ether	CBM	Ave	8891 526080	19499 1079183	40414 2148000	101005 4485105	262185	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
cis-1,2-Dichloroethene	CBM	Ave	3535 196676	7618 407485	14847 845905	36823 1869513	92674	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Ethyl acetate	CBM	Ave	5936 346406	12954 713928	26514 1449886	66315 3038641	171642	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Chloroform	CBM	Ave	9485 494799	19380 1012011	37079 2066202	95787 4480470	243090	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Tert-butyl ethyl ether	CBM	Ave	9441 525778	19417 1073194	39200 2202848	99212 4640558	259723	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Tetrahydrofuran	CBM	Ave	3390 177245	7320 365105	13762 742637	35542 1562956	89552	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1,1-Trichloroethane	CBM	Ave	10888 568413	21875 1184348	43037 2454172	108746 5396460	276845	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dichloroethane	DFBZ	Ave	6535 350677	13373 713806	27277 1447194	67175 3085614	172041	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Benzene	DFBZ	Ave	12569 572098	22286 1173319	44171 2421461	110029 5257486	279122	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Cyclohexane	DFBZ	Ave	1858 99763	3909 203651	7351 407285	19497 863041	48328	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1-Butanol	DFBZ	Ave	+++++ 63344	+++++ 136613	5160 273762	12296 591245	29171	+++++ 2.00	+++++ 4.00	0.159 8.00	0.400 16.0	1.00
Carbon tetrachloride	DFBZ	Ave	10868 624502	21497 1329349	42733 2797102	113747 6365119	296576	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2,3-Dimethylpentane	DFBZ	Ave	2367 136123	5321 282206	10219 569652	26444 1206293	67650	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Thiophene	DFBZ	Ave	5847 332092	12315 686171	25238 1402526	63320 2998594	161878	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Tert-amyl methyl ether	DFBZ	Ave	+++++ 556050	18607 1157370	39025 2396229	107357 5052003	277565	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2,2,4-Trimethylpentane	DFBZ	Ave	16611 874389	33610 1779183	67131 3578687	172066 7435991	433667	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Heptane	DFBZ	Ave	4099 220272	8485 450272	16529 916791	40968 1934212	106290	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dichloropropane	DFBZ	Ave	3477 201269	7985 408812	15995 823056	39466 1721134	97796	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Trichloroethene	DFBZ	Ave	5743 315722	11638 664844	23332 1460218	58508 3208650	150217	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Dibromomethane	DFBZ	Ave	5200 267885	9448 556851	18824 1171750	49152 2546424	127996	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1 Analy Batch No.: 9482

SDG No.: _____

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

Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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	DFBZ	Ave	8931 529608	16938 1122661	35557 2343991	95415 5078012	253630	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,4-Dioxane	DFBZ	Ave	1268 83850	3011 171415	6069 354151	15307 711143	39782	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Methyl methacrylate	DFBZ	Ave	3677 229984	8221 487379	16201 988227	40539 2072888	108599	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Methylcyclohexane	DFBZ	Ave	7968 465979	17005 959276	34804 1980430	87846 4285973	227011	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	5542 348265	12195 733481	26186 1511574	64835 3039224	170118	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
cis-1,3-Dichloropropene	DFBZ	Ave	6567 379694	13530 790238	26770 1637962	69133 3479031	184126	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
trans-1,3-Dichloropropene	CBZd 5	Ave	6192 373664	12488 789307	26814 1645268	68241 3558024	178625	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Toluene Range	DFBZ	Ave	++++ 1704710	++++ 3522873	++++ 7223375	317115 15867496	825588	++++ 2.00	++++ 4.00	++++ 8.00	0.400 16.0	1.00
Toluene	CBZd 5	Ave	11856 676247	25094 1420544	49691 2972164	126815 6568341	329471	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1,2-Trichloroethane	CBZd 5	Ave	3493 206257	7631 426290	15096 890354	37911 1930179	98117	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Methylthiophene	CBZd 5	Ave	9584 580302	20438 1212899	41117 2514496	107989 5571008	280205	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
3-Methylthiophene	CBZd 5	Ave	9689 571930	20142 1202168	40017 2520669	105015 5522937	279432	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Hexanone	CBZd 5	Ave	2408 174060	5612 373275	11715 769096	29914 1588026	78752	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Octane	CBZd 5	Ave	4302 249240	8683 522104	18002 1089002	45217 2331636	121262	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Dibromochloromethane	CBZd 5	Ave	7269 534023	14707 1217195	31316 2716554	85348 6180157	249183	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dibromoethane	CBZd 5	Ave	6375 416730	13045 890944	26740 1908708	72403 4223710	197523	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Tetrachloroethene	CBZd 5	Ave	5206 310406	11152 660677	21668 1442699	54718 3341461	148601	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Chlorobenzene	CBZd 5	Ave	9815 575122	20374 1217110	41319 2618941	106057 5872788	274196	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2,3-Dimethylheptane	CBZd 5	Ave	11155 577752	23134 1160951	44892 2286470	114675 4561552	291234	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Ethylbenzene	CBZd 5	Ave	16148 954045	33624 2020166	69301 4239909	175356 9378439	465478	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Ethylthiophene	CBZd 5	Ave	12002 772778	26097 1634721	52367 3415104	139782 7482070	370649	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1 Analy Batch No.: 9482
SDG No.: _____
Instrument ID: MG GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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
m-Xylene & p-Xylene	CBZd 5	Ave	26110 1555433	53439 3265060	110203 6914176	284366 15254685	752459	0.0784 4.00	0.157 8.00	0.317 16.0	0.800 32.0	2.00
Bromoform	CBZd 5	Ave	6234 503085	12722 1302027	27441 3110131	77559 +++++	241462	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 +++++	1.00
Styrene	CBZd 5	Ave	6579 554081	14764 1208558	31773 2643863	87701 5980940	258497	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Nonane	CBZd 5	Ave	7513 424281	15404 848900	32630 1702072	80602 3451826	214597	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
o-Xylene	CBZd 5	Ave	13651 789853	28796 1652204	56948 3451230	144970 7495466	382052	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	7704 522069	17347 1097235	33152 2243454	90906 4930342	256086	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,3-Trichloropropane	CBZd 5	Ave	3070 184265	6401 385852	12888 819612	32782 1792574	89439	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Isopropylbenzene	CBZd 5	Ave	20188 1134088	40591 2402575	82210 5091349	207127 11190142	556209	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Propylbenzene	CBZd 5	Ave	4528 308856	9702 660707	20666 1438960	54076 3302547	146598	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Chlorotoluene	CBZd 5	Ave	+++++ 279105	9858 602879	19395 1300045	49412 2937732	135063	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
4-Ethyltoluene	CBZd 5	Ave	16904 1105029	36409 2357742	74487 5056909	193325 11212261	533550	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,3,5-Trimethylbenzene	CBZd 5	Ave	7724 521704	16770 1116920	33353 2423508	89762 5491943	251859	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Alpha Methyl Styrene	CBZd 5	Ave	+++++ 435119	10756 987378	22891 2181723	63304 4952983	199600	+++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Decane	CBZd 5	Ave	8281 533364	19120 1089510	38214 2139210	100736 4265576	269524	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
tert-Butylbenzene	CBZd 5	Ave	15754 1088441	36058 2353545	72279 5188127	186533 11616984	522916	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,4-Trimethylbenzene	CBZd 5	Ave	14923 993298	32090 2134348	66195 4611406	173218 10291549	479730	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
sec-Butylbenzene	CBZd 5	Ave	20583 1415485	45958 3068495	92643 6810067	243244 +++++	678287	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 +++++	1.00
1,3-Dichlorobenzene	CBZd 5	Ave	11070 730798	22698 1666142	46148 3893907	120087 8814211	340580	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Benzyl chloride	CBZd 5	Ave	14000 961111	28105 2087808	61054 4505667	161617 9733935	452529	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,4-Dichlorobenzene	CBZd 5	Ave	11061 714901	22839 1576716	46292 3654606	120739 8414582	337505	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
4-Isopropyltoluene	CBZd 5	Ave	18058 1259395	40574 2688329	83608 5874319	214236 +++++	607035	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 +++++	1.00

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1 Analy Batch No.: 9482

SDG No.: _____

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

Calibration Start Date: 03/15/2017 14:36 Calibration End Date: 03/15/2017 20:21 Calibration ID: 962

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
1,2,3-Trimethylbenzene	CBZd 5	Ave	11269 749546	25342 1558491	50998 3285785	130876 7156186	366844	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Butylcyclohexane	CBZd 5	Ave	11678 729918	24915 1513686	52392 3168620	134750 6495136	365451	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dichlorobenzene	CBZd 5	Ave	10364 701112	22069 1579523	43975 3656010	115468 8346220	328983	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Indane	CBZd 5	Ave	12693 908631	27938 1987507	58519 4472405	150042 10165330	433789	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Indene	CBZd 5	Ave	++++ 670154	19511 1470712	39915 3210332	108215 7281318	318543	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Butylbenzene	CBZd 5	Ave	18420 1164905	38334 2406878	80658 5130283	207014 10638853	573821	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Undecane	CBZd 5	Ave	10009 622503	23261 1224656	44209 2502915	117141 4746027	330016	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dimethyl-4-Ethylbenzene	CBZd 5	Ave	++++ 931315	28961 1953205	59995 4317337	157840 9283464	457261	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2-Dibromo-3-Chloropropane	CBZd 5	Ave	++++ 302962	8417 710910	16001 1636568	46413 3651422	149226	++++ 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,4,5-Tetramethylbenzene	CBZd 5	Ave	15930 1160795	34855 2396674	70829 5566375	189973 ++++	562520	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 ++++	1.00
1,2,3,5-Tetramethylbenzene	CBZd 5	Ave	9905 687501	22523 1394400	42400 3139429	114039 6557823	340236	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,3,4-Tetramethylbenzene	CBZd 5	Ave	13233 955751	28869 1927205	58175 4503997	153792 8848915	471400	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Dodecane	CBZd 5	Ave	8604 556303	21541 1015546	39684 2482191	100417 3238859	328197	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,4-Trichlorobenzene	CBZd 5	Ave	8857 668939	19622 1358330	35767 3616219	94904 6264846	323309	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Naphthalene	CBZd 5	Ave	19103 1395111	43374 2902807	78779 6639288	208260 ++++	693914	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 ++++	1.00
Benzo(b)thiophene	CBZd 5	Ave	11193 820908	25544 1724284	46547 3862788	123697 6618484	408835	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
Hexachlorobutadiene	CBZd 5	Ave	9101 640650	20064 1288187	37819 3465632	98425 5626941	327761	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
1,2,3-Trichlorobenzene	CBZd 5	Ave	9574 640410	20740 1263910	35163 3268537	91350 4303288	318023	0.0392 2.00	0.0784 4.00	0.159 8.00	0.400 16.0	1.00
2-Methylnaphthalene	CBZd 5	Ave	++++ 852913	24114 2020346	46113 5256646	105461 ++++	379553	++++ 6.04	0.237 12.1	0.480 24.2	1.21 ++++	3.03
1-Methylnaphthalene	CBZd 5	Ave	++++ 834902	26609 2020334	44542 5132440	100155 ++++	379039	++++ 6.04	0.237 12.1	0.480 24.2	1.21 ++++	3.03
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	1132701 1311298	1181326 1443792	1216766 1558022	1296737 1689695	1347272	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00	4.00

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

Lab Name: <u>TestAmerica Knoxville</u>	Job No.: <u>140-7831-1</u>	Analy Batch No.: <u>9482</u>
SDG No.: _____		
Instrument ID: <u>MG</u>	GC Column: <u>RTX-5</u> ID: <u>0.32 (mm)</u>	Heated Purge: (Y/N) <u>N</u>
Calibration Start Date: <u>03/15/2017 14:36</u>	Calibration End Date: <u>03/15/2017 20:21</u>	Calibration ID: <u>962</u>

Curve Type Legend:

Ave = Average ISTD

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC01.D
 Lims ID: IC L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 15-Mar-2017 14:36:30 ALS Bottle#: 1 Worklist Smp#: 3
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-003
 Misc. Info.: 083683
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 11-Apr-2017 10:07:11 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK028

First Level Reviewer: tajh

Date: 15-Mar-2017 15:37:22

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	7.985	7.993	-0.008	81	305443	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.153	10.161	-0.008	95	1497178	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.028	15.034	-0.006	88	1440748	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.699	16.705	-0.006	92	1132701	4.00	3.98	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	96	1904	0.0392	0.0561	
7 Propene	41	3.466	3.466	0.000	81	3760	0.0392	0.0465	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	14467	0.0392	0.0448	
9 Chloromethane	52	3.655	3.659	-0.004	55	1551	0.0392	0.0713	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.666	3.669	-0.003	89	7978	0.0392	0.0415	
11 Acetaldehyde	44	3.785	3.786	-0.001	84	13227	0.1960	0.5179	
12 Vinyl chloride	62	3.801	3.803	-0.002	98	4066	0.0392	0.0455	
13 Butadiene	54	3.876	3.876	0.000	70	2487	0.0392	0.0418	
14 Butane	43	3.876	3.879	-0.003	85	6130	0.0392	0.0484	
15 Bromomethane	94	4.135	4.141	-0.006	96	3811	0.0392	0.0432	
16 Chloroethane	64	4.259	4.258	0.001	91	1857	0.0392	0.0429	
17 Ethanol	31	4.356	4.357	-0.001	96	6987	0.1960	0.2273	
18 Vinyl bromide	106	4.507	4.511	-0.004	97	3404	0.0392	0.0407	
19 2-Methylbutane	43	4.556	4.560	-0.004	89	3886	0.0392	0.0454	
21 Acrolein	56	4.750	4.742	0.008	27	513	0.0392	0.0410	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	100	14665	0.0392	0.0455	
22 Acetonitrile	40	4.793	4.793	0.000	89	1363	0.0392	0.0532	
23 Acetone	58	4.841	4.835	0.006	99	5677	0.1151	0.1893	
25 Pentane	72	4.933	4.937	-0.004	80	741	0.0392	0.0476	
24 Isopropyl alcohol	45	4.933	4.939	-0.006	77	12981	0.1151	0.1251	
26 Ethyl ether	31	5.084	5.075	0.009	86	2809	0.0392	0.0398	
27 1,1-Dichloroethene	96	5.348	5.354	-0.006	96	3592	0.0392	0.0441	
28 Acrylonitrile	53	5.429	5.435	-0.006	96	1959	0.0392	0.0528	
29 2-Methyl-2-propanol	59	5.467	5.467	0.000	94	5190	0.0392	0.0419	
30 1,1,2-Trichloro-1,2,2-trif	101	5.516	5.521	-0.005	92	8222	0.0392	0.0438	
31 Methylene Chloride	84	5.650	5.656	-0.006	86	9041	0.0392	0.1231	

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	5.667	5.673	-0.006	89	3961	0.0392	0.0502	
33 Carbon disulfide	76	5.791	5.797	-0.006	99	9530	0.0392	0.0459	
34 trans-1,2-Dichloroethene	96	6.395	6.393	0.001	95	3449	0.0392	0.0433	
35 2-Methylpentane	43	6.421	6.426	-0.005	91	7318	0.0392	0.0469	
36 Methyl tert-butyl ether	73	6.524	6.513	0.011	95	9795	0.0392	0.0414	
37 1,1-Dichloroethane	63	6.756	6.771	-0.015	98	7380	0.0392	0.0475	
38 Vinyl acetate	43	6.880	6.881	-0.001	99	7047	0.0392	0.0395	
39 2-Butanone (MEK)	72	7.295	7.283	0.012	99	1469	0.0392	0.0423	
40 Hexane	56	7.333	7.336	-0.003	90	2776	0.0392	0.0460	
41 Isopropyl ether	45	7.489	7.483	0.006	91	8891	0.0392	0.0401	
42 cis-1,2-Dichloroethene	96	7.683	7.691	-0.008	95	3535	0.0392	0.0418	
43 Ethyl acetate	43	7.888	7.880	0.008	97	5936	0.0392	0.0403	
44 Chloroform	83	8.012	8.019	-0.007	89	9485	0.0392	0.0443	
45 Tert-butyl ethyl ether	59	8.131	8.122	0.009	96	9441	0.0392	0.0423	
46 Tetrahydrofuran	42	8.406	8.387	0.019	83	3390	0.0392	0.0435	
47 1,1,1-Trichloroethane	97	8.988	8.997	-0.009	95	10888	0.0392	0.0439	
48 1,2-Dichloroethane	62	9.080	9.087	-0.007	98	6535	0.0392	0.0432	
49 Benzene	78	9.576	9.582	-0.006	95	12569	0.0392	0.0494	
50 Cyclohexane	69	9.587	9.590	-0.003	82	1858	0.0392	0.0434	
51 Carbon tetrachloride	117	9.603	9.611	-0.008	96	10868	0.0392	0.0409	
53 2,3-Dimethylpentane	71	9.732	9.740	-0.008	88	2367	0.0392	0.0404	
54 Thiophene	84	9.851	9.855	-0.004	95	5847	0.0392	0.0411	
55 Tert-amyl methyl ether	73	10.104	10.100	0.004	40	7626	0.0392	0.0327	
56 Isooctane	57	10.412	10.414	-0.002	95	16611	0.0392	0.0440	
57 n-Heptane	71	10.816	10.816	0.000	83	4099	0.0392	0.0435	
58 1,2-Dichloropropane	63	10.838	10.846	-0.008	57	3477	0.0392	0.0402	
59 Trichloroethene	130	10.886	10.897	-0.011	93	5743	0.0392	0.0417	
60 Dibromomethane	93	10.951	10.961	-0.010	92	5200	0.0392	0.0453	
61 Dichlorobromomethane	83	11.118	11.126	-0.008	97	8931	0.0392	0.0405	
62 1,4-Dioxane	88	11.172	11.152	0.020	69	1268	0.0392	0.0368	
63 Methyl methacrylate	41	11.258	11.260	-0.002	86	3677	0.0392	0.0385	
64 Methylcyclohexane	83	11.706	11.704	0.002	93	7968	0.0392	0.0402	
65 4-Methyl-2-pentanone (MIBK)	43	12.143	12.133	0.010	94	5542	0.0392	0.0379	
66 cis-1,3-Dichloropropene	75	12.170	12.174	-0.004	96	6567	0.0392	0.0411	
67 trans-1,3-Dichloropropene	75	12.887	12.897	-0.010	96	6192	0.0392	0.0401	
68 Toluene	91	13.016	13.021	-0.005	93	11856	0.0392	0.0413	
69 1,1,2-Trichloroethane	83	13.086	13.091	-0.005	95	3493	0.0392	0.0406	
70 2-Methylthiophene	97	13.167	13.173	-0.006	98	9584	0.0392	0.0398	
71 3-Methylthiophene	97	13.378	13.381	-0.003	98	9689	0.0392	0.0406	
72 2-Hexanone	58	13.529	13.519	0.010	95	2408	0.0392	0.0351	
73 n-Octane	85	13.777	13.780	-0.003	86	4302	0.0392	0.0415	
74 Chlorodibromomethane	129	13.798	13.803	-0.005	95	7269	0.0392	0.0339	
75 Ethylene Dibromide	107	14.079	14.092	-0.013	98	6375	0.0392	0.0378	
76 Tetrachloroethene	129	14.192	14.195	-0.003	90	5206	0.0392	0.0397	
77 Chlorobenzene	112	15.082	15.082	0.000	92	9815	0.0392	0.0404	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	90	11155	0.0392	0.0454	
79 Ethylbenzene	91	15.389	15.393	-0.004	98	16148	0.0392	0.0403	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	12002	0.0392	0.0380	
81 m-Xylene & p-Xylene	91	15.551	15.559	-0.008	99	26110	0.0784	0.0806	
82 Bromoform	173	15.971	15.979	-0.008	93	6234	0.0392	0.0309	
83 Styrene	104	16.025	16.027	-0.002	81	6579	0.0392	0.0308	
84 n-Nonane	57	16.025	16.029	-0.004	88	7513	0.0392	0.0427	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 o-Xylene	91	16.085	16.088	-0.003	97	13651	0.0392	0.0412	
86 1,1,2,2-Tetrachloroethane	83	16.408	16.411	-0.003	95	7704	0.0392	0.0369	
87 1,2,3-Trichloropropane	110	16.554	16.565	-0.011	93	3070	0.0392	0.0402	
88 Isopropylbenzene	105	16.683	16.692	-0.009	91	20188	0.0392	0.0420	
89 N-Propylbenzene	120	17.239	17.246	-0.007	98	4528	0.0392	0.0359	
91 4-Ethyltoluene	105	17.406	17.409	-0.003	97	16904	0.0392	0.0373	
92 1,3,5-Trimethylbenzene	120	17.487	17.490	-0.003	91	7724	0.0392	0.0364	
93 Alpha Methyl Styrene	118	17.729	17.734	-0.005	87	4705	0.0392	0.0275	
94 n-Decane	57	17.832	17.837	-0.005	94	8281	0.0392	0.0384	
95 tert-Butylbenzene	119	17.934	17.939	-0.005	91	15754	0.0392	0.0352	
96 1,2,4-Trimethylbenzene	105	17.945	17.953	-0.008	96	14923	0.0392	0.0367	
97 1,3-Dichlorobenzene	146	18.220	18.223	-0.003	94	11070	0.0392	0.0361	
98 sec-Butylbenzene	105	18.220	18.225	-0.005	96	20583	0.0392	0.0359	
99 Benzyl chloride	91	18.295	18.303	-0.008	96	14000	0.0392	0.0365	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	93	11061	0.0392	0.0369	
101 4-Isopropyltoluene	119	18.398	18.402	-0.004	96	18058	0.0392	0.0357	
102 1,2,3-Trimethylbenzene	105	18.441	18.445	-0.004	97	11269	0.0392	0.0371	
103 Butylcyclohexane	83	18.517	18.520	-0.003	93	11678	0.0392	0.0390	
104 1,2-Dichlorobenzene	146	18.684	18.689	-0.005	90	10364	0.0392	0.0354	
105 2,3-Dihydroindene	117	18.689	18.693	-0.004	92	12693	0.0392	0.0343	
106 Indene	116	18.824	18.827	-0.003	92	8277	0.0392	0.0306	
107 n-Butylbenzene	91	18.851	18.854	-0.003	97	18420	0.0392	0.0390	
108 Undecane	57	19.207	19.209	-0.002	94	10009	0.0392	0.0395	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.234	19.239	-0.005	96	13104	0.0392	0.0347	
110 1,2-Dibromo-3-Chloropropan	157	19.304	19.308	-0.004	85	3309	0.0392	0.0264	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.635	-0.002	95	15930	0.0392	0.0351	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	94	9905	0.0392	0.0363	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	95	13233	0.0392	0.0355	
114 Dodecane	57	20.280	20.280	0.000	92	8604	0.0392	0.0383	
115 1,2,4-Trichlorobenzene	180	20.415	20.418	-0.003	92	8857	0.0392	0.0344	
116 Naphthalene	128	20.544	20.546	-0.002	98	19103	0.0392	0.0354	
117 Benzo(b)thiophene	134	20.647	20.645	0.002	98	11193	0.0392	0.0357	
118 Hexachlorobutadiene	225	20.771	20.776	-0.005	91	9101	0.0392	0.0359	
119 1,2,3-Trichlorobenzene	180	20.824	20.825	-0.001	94	9574	0.0392	0.0394	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	96	12576	0.1186	0.1124	
121 1-Methylnaphthalene	142	21.801	21.801	-0.001	97	14522	0.1186	0.1303	
A 122 C6 Range	1	7.343	(7.303-7.383)		0	36327	0.0392	0.0634	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	30770	0.0392	0.0429	
S 126 Xylenes, Total	100				0		0.1176	0.1219	
S 127 1,2-Dichloroethene, Total	1				0		0.0784	0.0851	

Reagents:

40L12DNP_00010

Amount Added: 100.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC01.D

Injection Date: 15-Mar-2017 14:36:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L1

Worklist Smp#: 3

Client ID:

Purge Vol: 500.000 mL

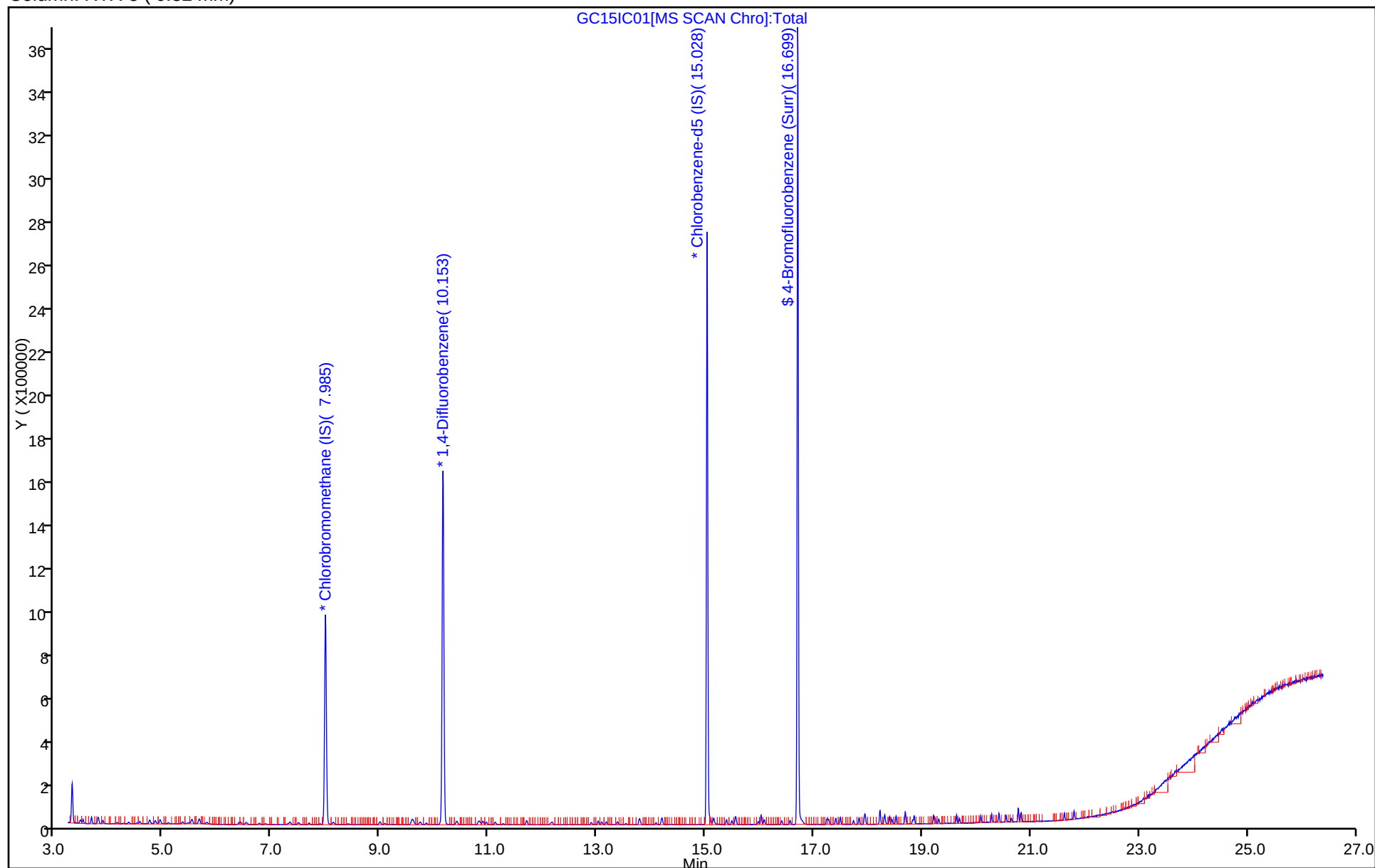
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC01.D

Injection Date: 15-Mar-2017 14:36:30

Instrument ID: MG

Lims ID: IC L1

Client ID:

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 3

Purge Vol: 500.000 mL

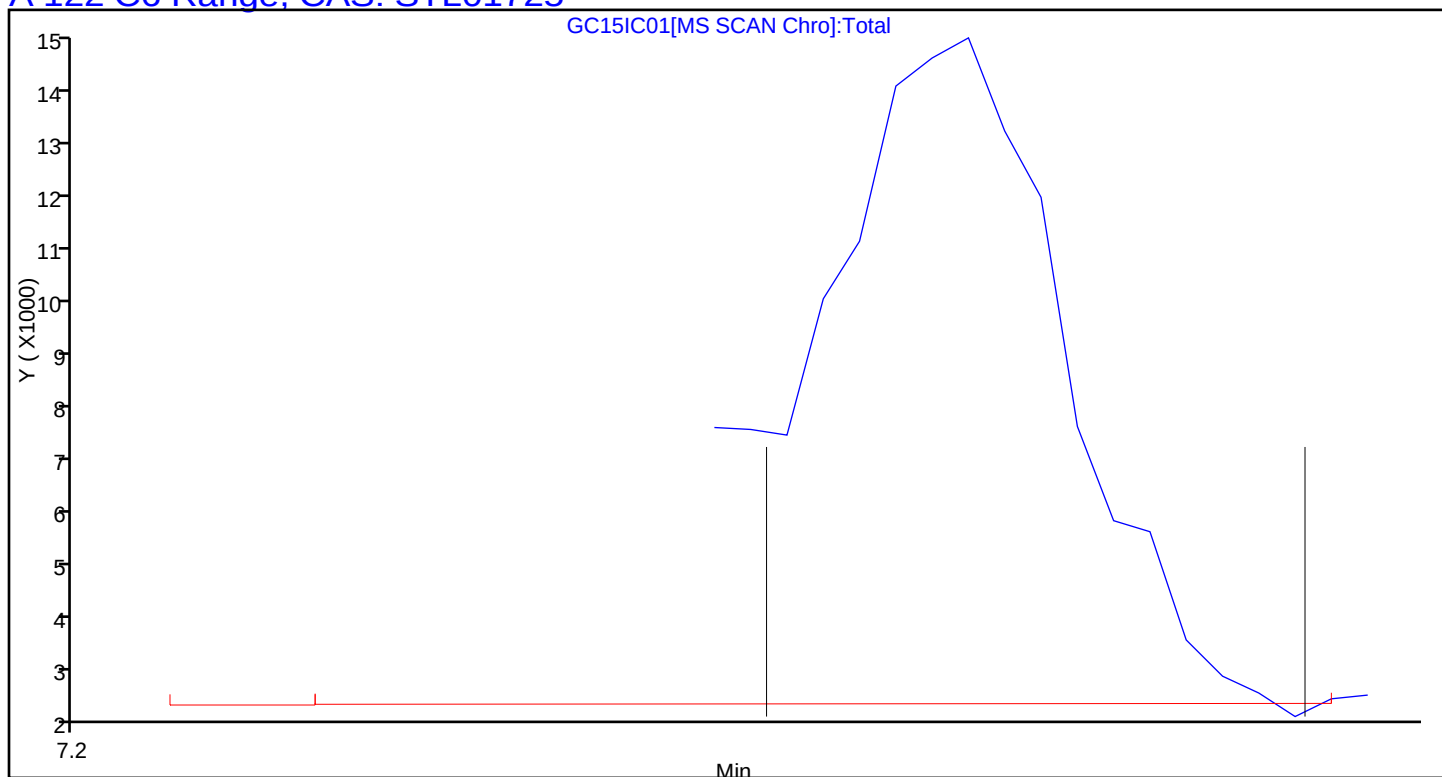
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC01.D

Injection Date: 15-Mar-2017 14:36:30

Instrument ID: MG

Lims ID: IC L1

Client ID:

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 3

Purge Vol: 500.000 mL

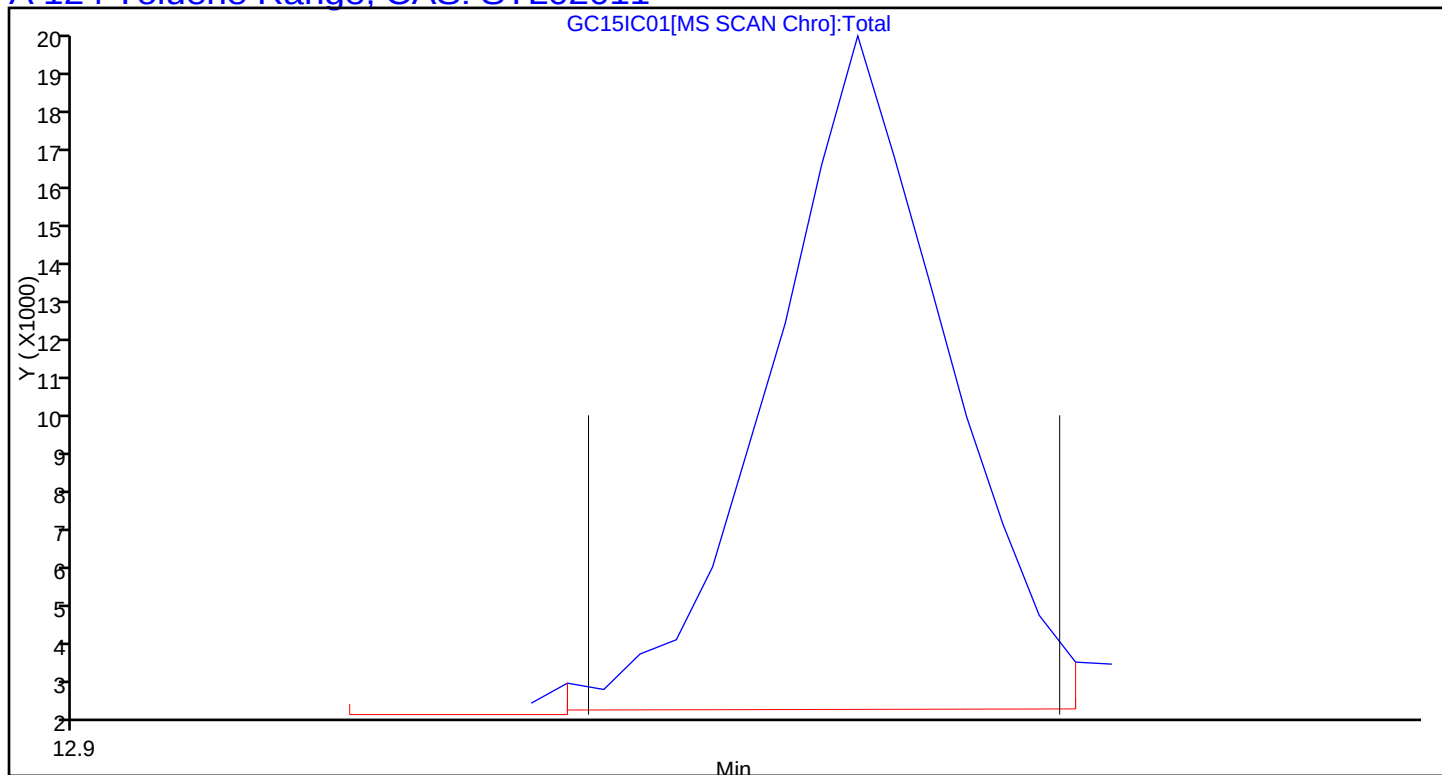
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 124 Toluene Range, CAS: STL02011

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC02.D
 Lims ID: IC L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 15-Mar-2017 15:20:30 ALS Bottle#: 1 Worklist Smp#: 4
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-004
 Misc. Info.: 083683
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:08:32 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: barlozhetskayaa

Date: 15-Mar-2017 16:12:16

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	7.985	7.993	-0.008	82	322451	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.153	10.161	-0.008	95	1571472	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.028	15.034	-0.006	88	1507586	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.699	16.705	-0.006	93	1181326	4.00	3.97	
6 Chlorodifluoromethane	67	3.461	3.457	0.004	97	3314	0.0784	0.0924	
7 Propene	41	3.461	3.466	-0.005	96	7827	0.0784	0.0918	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	29295	0.0784	0.0858	
9 Chloromethane	52	3.655	3.659	-0.004	60	2797	0.0784	0.1218	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.666	3.669	-0.003	92	17176	0.0784	0.0846	
11 Acetaldehyde	44	3.785	3.786	-0.001	86	22772	0.3921	0.8447	
12 Vinyl chloride	62	3.795	3.803	-0.008	99	8251	0.0784	0.0875	
13 Butadiene	54	3.876	3.876	0.000	68	5498	0.0784	0.0875	
14 Butane	43	3.876	3.879	-0.003	85	11940	0.0784	0.0893	
15 Bromomethane	94	4.140	4.141	-0.001	95	8019	0.0784	0.0860	
16 Chloroethane	64	4.254	4.258	-0.004	91	4085	0.0784	0.0895	
17 Ethanol	31	4.345	4.357	-0.012	97	15059	0.3921	0.4642	
18 Vinyl bromide	106	4.507	4.511	-0.004	96	7724	0.0784	0.0874	
19 2-Methylbutane	43	4.561	4.560	0.001	94	8230	0.0784	0.0911	
21 Acrolein	56	4.744	4.742	0.002	28	965	0.0784	0.0731	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	99	28467	0.0784	0.0838	
22 Acetonitrile	40	4.788	4.793	-0.005	89	2730	0.0784	0.0973	
23 Acetone	58	4.836	4.835	0.001	99	12083	0.2303	0.3816	
25 Pentane	72	4.933	4.937	-0.004	87	1458	0.0784	0.0888	
24 Isopropyl alcohol	45	4.917	4.939	-0.022	92	27125	0.2303	0.2477	
26 Ethyl ether	31	5.079	5.075	0.004	90	6464	0.0784	0.0868	
27 1,1-Dichloroethene	96	5.348	5.354	-0.006	96	7104	0.0784	0.0827	
28 Acrylonitrile	53	5.429	5.435	-0.006	93	3507	0.0784	0.0895	
29 2-Methyl-2-propanol	59	5.456	5.467	-0.011	95	10717	0.0784	0.0819	
30 1,1,2-Trichloro-1,2,2-trif	101	5.515	5.521	-0.006	91	16256	0.0784	0.0820	
31 Methylene Chloride	84	5.650	5.656	-0.006	89	12473	0.0784	0.1609	

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	5.666	5.673	-0.007	91	7519	0.0784	0.0902	
33 Carbon disulfide	76	5.790	5.797	-0.007	99	18351	0.0784	0.0838	
34 trans-1,2-Dichloroethene	96	6.384	6.393	-0.009	95	6871	0.0784	0.0818	
35 2-Methylpentane	43	6.427	6.426	0.001	92	14498	0.0784	0.0879	
36 Methyl tert-butyl ether	73	6.518	6.513	0.005	95	20954	0.0784	0.0840	
37 1,1-Dichloroethane	63	6.761	6.771	-0.010	99	13865	0.0784	0.0845	
38 Vinyl acetate	43	6.880	6.881	-0.001	100	15406	0.0784	0.0818	
39 2-Butanone (MEK)	72	7.279	7.283	-0.004	97	3344	0.0784	0.0911	
40 Hexane	56	7.327	7.336	-0.009	80	5624	0.0784	0.0883	
41 Isopropyl ether	45	7.484	7.483	0.001	92	19499	0.0784	0.0832	
42 cis-1,2-Dichloroethene	96	7.678	7.691	-0.013	96	7618	0.0784	0.0854	
43 Ethyl acetate	43	7.877	7.880	-0.003	98	12954	0.0784	0.0834	
44 Chloroform	83	8.007	8.019	-0.012	92	19380	0.0784	0.0857	
45 Tert-butyl ethyl ether	59	8.120	8.122	-0.002	95	19417	0.0784	0.0824	
46 Tetrahydrofuran	42	8.395	8.387	0.008	87	7320	0.0784	0.0889	
47 1,1,1-Trichloroethane	97	8.994	8.997	-0.003	95	21875	0.0784	0.0836	
48 1,2-Dichloroethane	62	9.074	9.087	-0.013	99	13373	0.0784	0.0843	
49 Benzene	78	9.571	9.582	-0.011	96	22286	0.0784	0.0835	
50 Cyclohexane	69	9.592	9.590	0.002	78	3909	0.0784	0.0870	
52 n-Butanol	31	9.619	9.606	0.013	47	2238	0.0784	0.0783	
51 Carbon tetrachloride	117	9.603	9.611	-0.008	97	21497	0.0784	0.0771	
53 2,3-Dimethylpentane	71	9.738	9.740	-0.002	89	5321	0.0784	0.0866	
54 Thiophene	84	9.846	9.855	-0.009	94	12315	0.0784	0.0826	
55 Tert-amyl methyl ether	73	10.104	10.100	0.004	96	18607	0.0784	0.0760	
56 Isooctane	57	10.412	10.414	-0.002	96	33610	0.0784	0.0848	
57 n-Heptane	71	10.805	10.816	-0.011	90	8485	0.0784	0.0857	
58 1,2-Dichloropropane	63	10.838	10.846	-0.008	87	7985	0.0784	0.0881	
59 Trichloroethene	130	10.892	10.897	-0.005	94	11638	0.0784	0.0805	
60 Dibromomethane	93	10.951	10.961	-0.010	94	9448	0.0784	0.0784	
61 Dichlorobromomethane	83	11.113	11.126	-0.013	98	16938	0.0784	0.0732	
62 1,4-Dioxane	88	11.156	11.152	0.004	73	3011	0.0784	0.0833	
63 Methyl methacrylate	41	11.258	11.260	-0.002	93	8221	0.0784	0.0821	
64 Methylcyclohexane	83	11.701	11.704	-0.003	95	17005	0.0784	0.0818	
65 4-Methyl-2-pentanone (MIBK)	43	12.132	12.133	-0.001	96	12195	0.0784	0.0795	
66 cis-1,3-Dichloropropene	75	12.164	12.174	-0.010	97	13530	0.0784	0.0806	
67 trans-1,3-Dichloropropene	75	12.892	12.897	-0.005	97	12488	0.0784	0.0773	
68 Toluene	91	13.016	13.021	-0.005	93	25094	0.0784	0.0836	
69 1,1,2-Trichloroethane	83	13.081	13.091	-0.010	96	7631	0.0784	0.0848	
70 2-Methylthiophene	97	13.167	13.173	-0.006	97	20438	0.0784	0.0811	
71 3-Methylthiophene	97	13.372	13.381	-0.009	99	20142	0.0784	0.0807	
72 2-Hexanone	58	13.523	13.519	0.004	94	5612	0.0784	0.0781	
73 n-Octane	85	13.777	13.780	-0.003	89	8683	0.0784	0.0800	
74 Chlorodibromomethane	129	13.793	13.803	-0.010	96	14707	0.0784	0.0655	
75 Ethylene Dibromide	107	14.084	14.092	-0.008	98	13045	0.0784	0.0740	
76 Tetrachloroethene	129	14.192	14.195	-0.003	92	11152	0.0784	0.0812	
77 Chlorobenzene	112	15.076	15.082	-0.006	91	20374	0.0784	0.0802	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	92	23134	0.0784	0.0900	
79 Ethylbenzene	91	15.389	15.393	-0.004	99	33624	0.0784	0.0801	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	26097	0.0784	0.0790	
81 m-Xylene & p-Xylene	91	15.556	15.559	-0.003	99	53439	0.1568	0.1577	
82 Bromoform	173	15.977	15.979	-0.002	92	12722	0.0784	0.0566	
83 Styrene	104	16.020	16.027	-0.007	96	14764	0.0784	0.0660	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.025	16.029	-0.004	87	15404	0.0784	0.0836	
85 o-Xylene	91	16.079	16.088	-0.009	97	28796	0.0784	0.0831	
86 1,1,2,2-Tetrachloroethane	83	16.403	16.411	-0.008	96	17347	0.0784	0.0794	
87 1,2,3-Trichloropropane	110	16.559	16.565	-0.006	96	6401	0.0784	0.0801	
88 Isopropylbenzene	105	16.688	16.692	-0.004	95	40591	0.0784	0.0807	
89 N-Propylbenzene	120	17.238	17.246	-0.008	99	9702	0.0784	0.0735	
90 2-Chlorotoluene	126	17.271	17.278	-0.007	94	9858	0.0784	0.0801	
91 4-Ethyltoluene	105	17.400	17.409	-0.009	98	36409	0.0784	0.0768	
92 1,3,5-Trimethylbenzene	120	17.481	17.490	-0.009	91	16770	0.0784	0.0755	
93 Alpha Methyl Styrene	118	17.729	17.734	-0.005	85	10756	0.0784	0.0621	
94 n-Decane	57	17.832	17.837	-0.005	94	19120	0.0784	0.0847	
95 tert-Butylbenzene	119	17.934	17.939	-0.005	91	36058	0.0784	0.0770	
96 1,2,4-Trimethylbenzene	105	17.950	17.953	-0.003	96	32090	0.0784	0.0754	
98 sec-Butylbenzene	105	18.220	18.223	-0.003	97	45958	0.0784	0.0767	
97 1,3-Dichlorobenzene	146	18.220	18.223	-0.003	95	22698	0.0784	0.0707	
99 Benzyl chloride	91	18.295	18.303	-0.008	97	28105	0.0784	0.0700	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	92	22839	0.0784	0.0728	
101 4-Isopropyltoluene	119	18.398	18.400	-0.002	96	40574	0.0784	0.0767	
102 1,2,3-Trimethylbenzene	105	18.441	18.445	-0.004	98	25342	0.0784	0.0798	
103 Butylcyclohexane	83	18.516	18.520	-0.004	92	24915	0.0784	0.0795	
104 1,2-Dichlorobenzene	146	18.684	18.689	-0.005	90	22069	0.0784	0.0721	
105 2,3-Dihydroindene	117	18.689	18.693	-0.004	92	27938	0.0784	0.0721	
106 Indene	116	18.824	18.827	-0.003	90	19511	0.0784	0.0689	
107 n-Butylbenzene	91	18.851	18.854	-0.003	98	38334	0.0784	0.0775	
108 Undecane	57	19.207	19.209	-0.002	95	23261	0.0784	0.0878	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.234	19.239	-0.005	96	28961	0.0784	0.0733	
110 1,2-Dibromo-3-Chloropropan	157	19.304	19.308	-0.004	88	8417	0.0784	0.0642	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.634	-0.001	96	34855	0.0784	0.0734	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	93	22523	0.0784	0.0789	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	96	28869	0.0784	0.0740	
114 Dodecane	57	20.280	20.280	0.000	93	21541	0.0784	0.0917	
115 1,2,4-Trichlorobenzene	180	20.420	20.418	0.002	93	19622	0.0784	0.0729	
116 Naphthalene	128	20.544	20.545	-0.001	98	43374	0.0784	0.0769	
117 Benzo(b)thiophene	134	20.641	20.645	-0.004	99	25544	0.0784	0.0779	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	91	20064	0.0784	0.0756	
119 1,2,3-Trichlorobenzene	180	20.824	20.825	-0.001	94	20740	0.0784	0.0816	
120 2-Methylnaphthalene	142	21.622	21.623	-0.001	98	24114	0.2372	0.2059	
121 1-Methylnaphthalene	142	21.800	21.801	-0.001	98	26609	0.2372	0.2281	
A 122 C6 Range	1	7.337	(7.297-7.377)		0	78271	0.0784	0.1259	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	63520	0.0784	0.0846	
S 126 Xylenes, Total	100				0		0.2353	0.2408	
S 127 1,2-Dichloroethene, Total	1				0		0.1568	0.1671	

Reagents:

40L12DNP_00010

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC02.D

Injection Date: 15-Mar-2017 15:20:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L2

Worklist Smp#: 4

Client ID:

Purge Vol: 500.000 mL

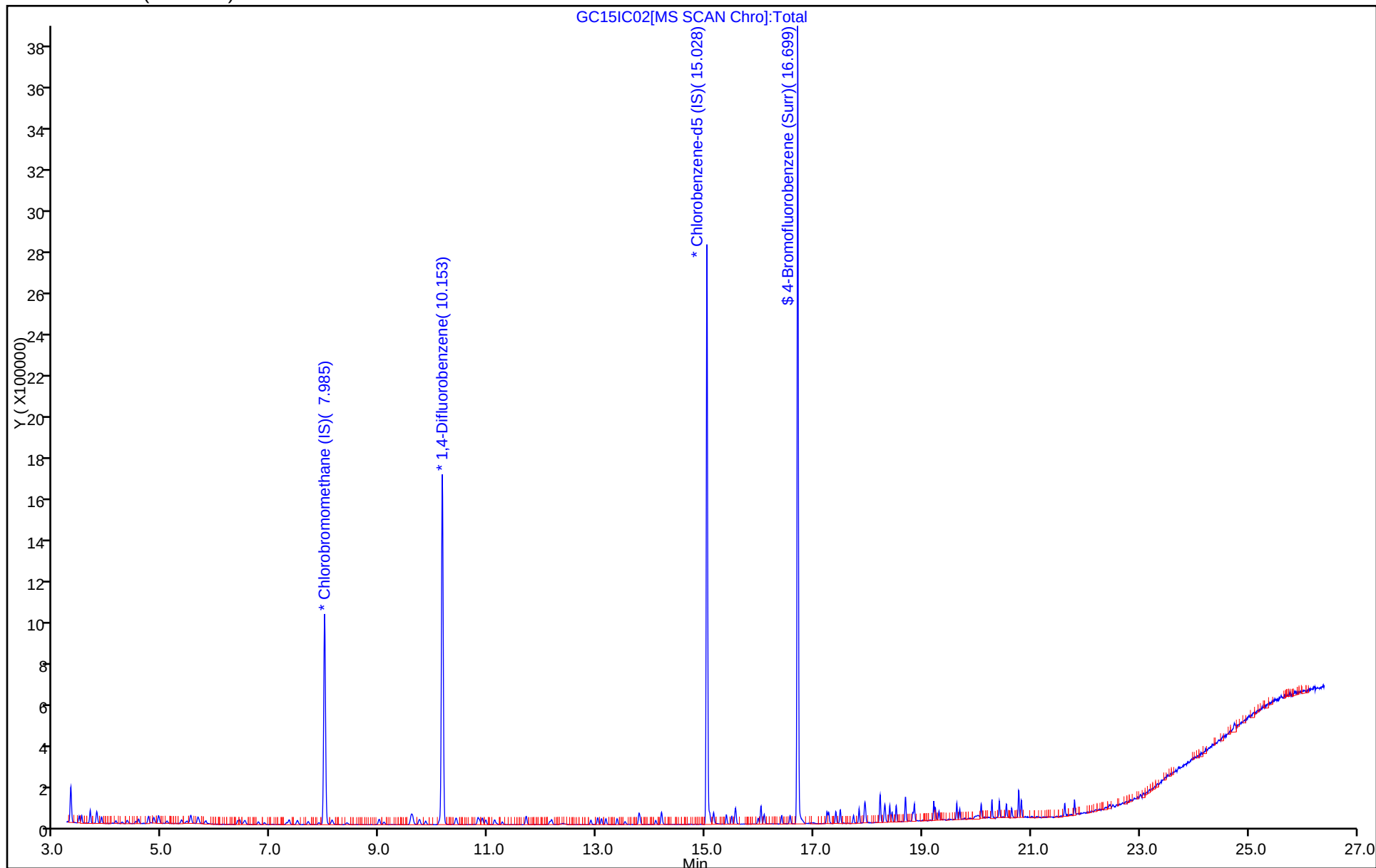
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC02.D

Injection Date: 15-Mar-2017 15:20:30

Instrument ID: MG

Lims ID: IC L2

Client ID:

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 4

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

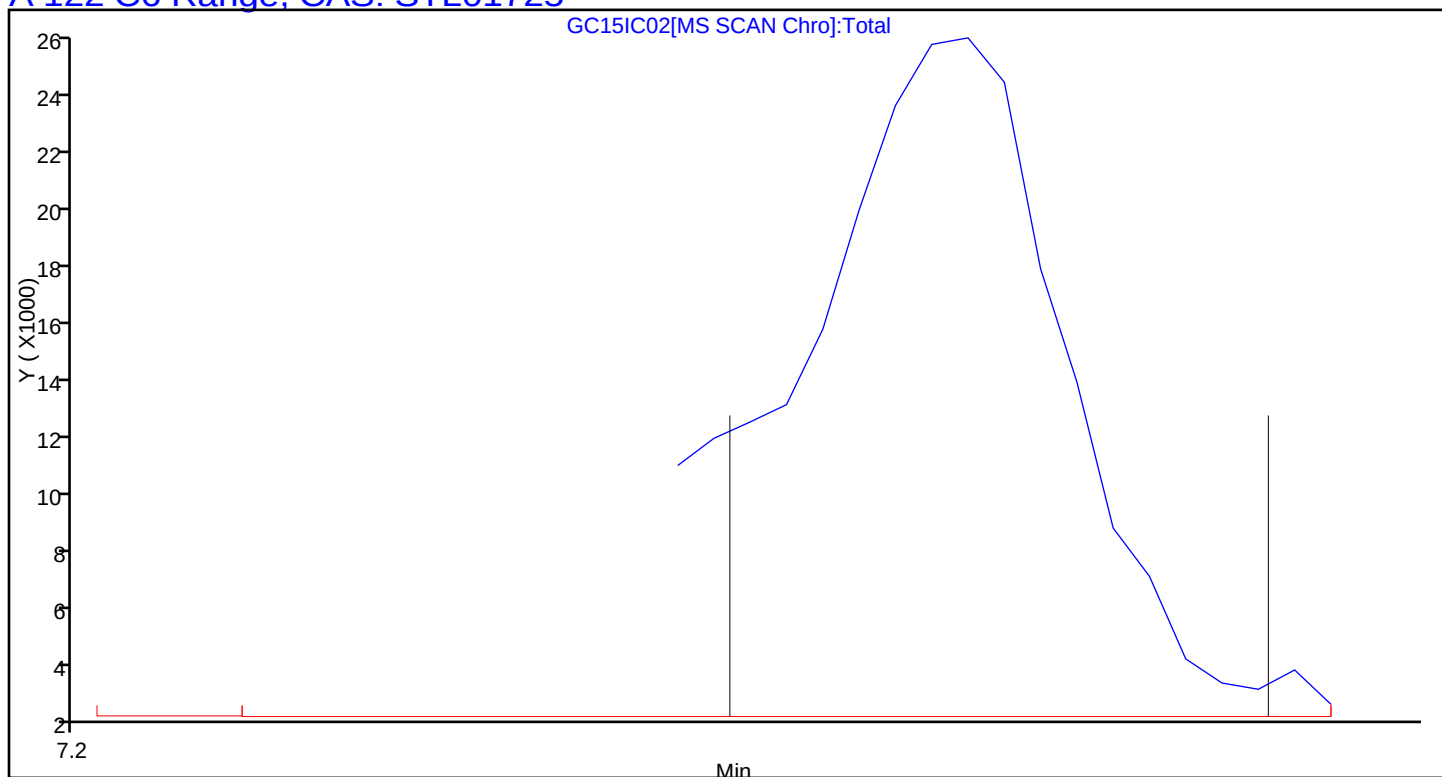
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC02.D

Injection Date: 15-Mar-2017 15:20:30

Instrument ID: MG

Lims ID: IC L2

Client ID:

Operator ID: 7126

ALS Bottle#: 1

Worklist Smp#: 4

Purge Vol: 500.000 mL

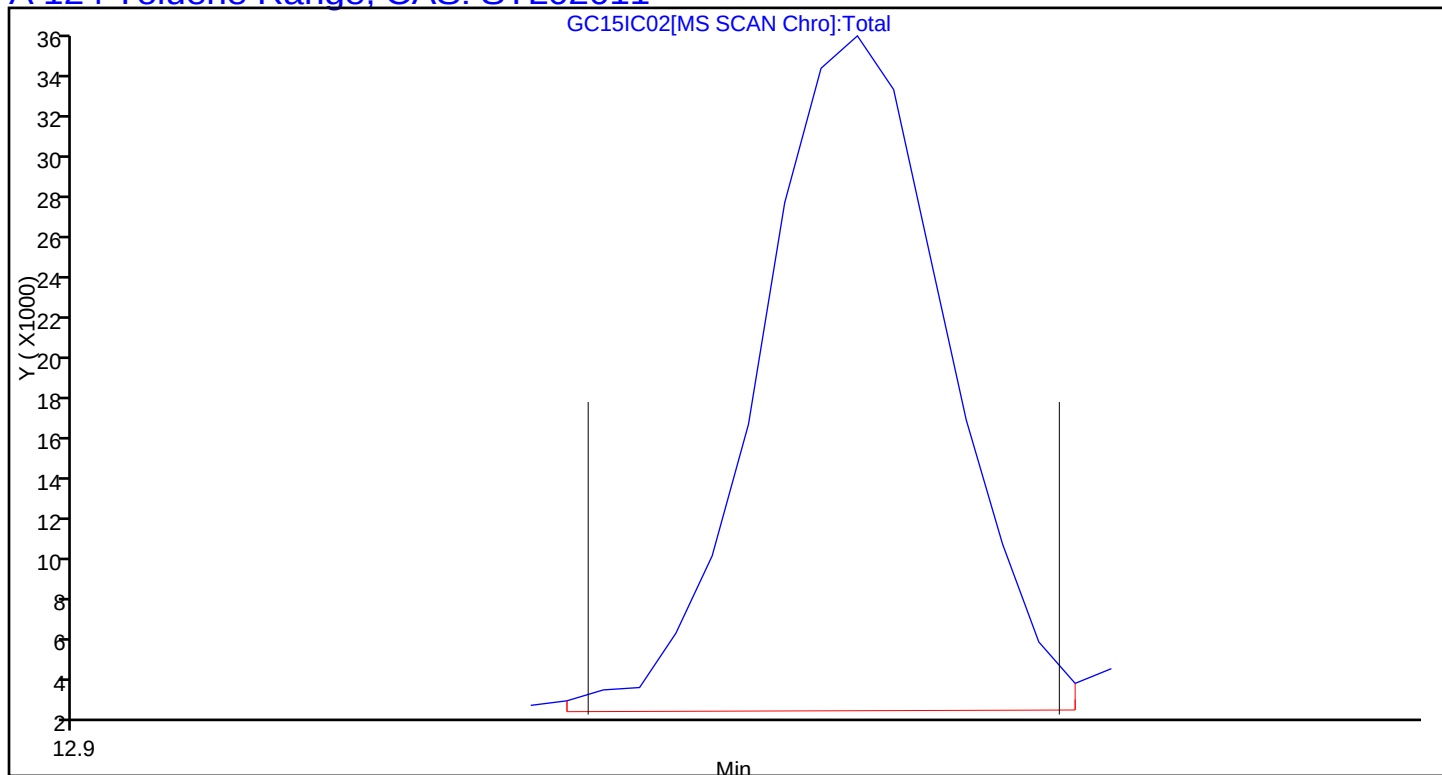
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC03.D
 Lims ID: IC L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 15-Mar-2017 16:02:30 ALS Bottle#: 2 Worklist Smp#: 5
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-005
 Misc. Info.: 083682
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:10:00 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: barlozhetskayaa

Date: 15-Mar-2017 17:05:43

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	7.985	7.993	-0.008	83	334641	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.153	10.161	-0.008	95	1663587	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.028	15.034	-0.006	88	1578082	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.699	16.705	-0.006	93	1216766	4.00	3.90	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	97	6330	0.1587	0.1701	
7 Propene	41	3.466	3.466	0.000	97	15226	0.1587	0.1720	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	58308	0.1587	0.1646	
9 Chloromethane	52	3.661	3.659	0.002	52	4662	0.1587	0.1957	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.669	0.002	91	34069	0.1587	0.1616	
11 Acetaldehyde	44	3.785	3.786	-0.001	86	38119	0.7935	1.36	
12 Vinyl chloride	62	3.801	3.803	-0.002	100	17041	0.1587	0.1741	
13 Butadiene	54	3.876	3.876	0.000	67	11030	0.1587	0.1692	
14 Butane	43	3.876	3.879	-0.003	85	24164	0.1587	0.1742	
15 Bromomethane	94	4.140	4.141	-0.001	97	15909	0.1587	0.1645	
16 Chloroethane	64	4.254	4.258	-0.004	89	7956	0.1587	0.1679	
17 Ethanol	31	4.345	4.357	-0.012	99	28920	0.7935	0.8589	
18 Vinyl bromide	106	4.507	4.511	-0.004	97	15245	0.1587	0.1663	
19 2-Methylbutane	43	4.561	4.560	0.001	89	15685	0.1587	0.1674	
21 Acrolein	56	4.739	4.742	-0.003	28	2011	0.1587	0.1467	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	100	55895	0.1587	0.1585	
22 Acetonitrile	40	4.788	4.793	-0.005	97	5595	0.1587	0.1992	
23 Acetone	58	4.836	4.835	0.001	100	21667	0.4660	0.6594	
25 Pentane	72	4.939	4.937	0.002	94	2803	0.1587	0.1645	
24 Isopropyl alcohol	45	4.917	4.939	-0.022	95	57055	0.4660	0.5020	
26 Ethyl ether	31	5.079	5.075	0.004	92	12398	0.1587	0.1604	
27 1,1-Dichloroethene	96	5.348	5.354	-0.006	97	14330	0.1587	0.1607	
28 Acrylonitrile	53	5.435	5.435	0.000	94	7063	0.1587	0.1737	
29 2-Methyl-2-propanol	59	5.445	5.467	-0.022	94	23609	0.1587	0.1738	
30 1,1,2-Trichloro-1,2,2-trif	101	5.516	5.521	-0.005	94	32632	0.1587	0.1586	
31 Methylene Chloride	84	5.650	5.656	-0.006	87	18584	0.1587	0.2309	

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	5.667	5.673	-0.006	91	13978	0.1587	0.1616	
33 Carbon disulfide	76	5.791	5.797	-0.006	100	36441	0.1587	0.1604	
34 trans-1,2-Dichloroethene	96	6.384	6.393	-0.009	95	13700	0.1587	0.1571	
35 2-Methylpentane	43	6.421	6.426	-0.005	93	28701	0.1587	0.1677	
36 Methyl tert-butyl ether	73	6.519	6.513	0.005	96	42292	0.1587	0.1633	
37 1,1-Dichloroethane	63	6.767	6.771	-0.004	100	27828	0.1587	0.1635	
38 Vinyl acetate	43	6.880	6.881	-0.001	99	30561	0.1587	0.1563	
39 2-Butanone (MEK)	72	7.279	7.283	-0.004	98	6361	0.1587	0.1670	
40 Hexane	56	7.333	7.336	-0.003	81	10820	0.1587	0.1637	
41 Isopropyl ether	45	7.484	7.483	0.001	93	40414	0.1587	0.1662	
42 cis-1,2-Dichloroethene	96	7.689	7.691	-0.002	95	14847	0.1587	0.1603	
43 Ethyl acetate	43	7.872	7.880	-0.008	98	26514	0.1587	0.1644	
44 Chloroform	83	8.012	8.019	-0.007	95	37079	0.1587	0.1580	
45 Tert-butyl ethyl ether	59	8.120	8.122	-0.002	96	39200	0.1587	0.1604	
46 Tetrahydrofuran	42	8.390	8.387	0.003	86	13762	0.1587	0.1611	
47 1,1,1-Trichloroethane	97	8.988	8.997	-0.009	94	43037	0.1587	0.1585	
48 1,2-Dichloroethane	62	9.074	9.087	-0.013	99	27277	0.1587	0.1624	
49 Benzene	78	9.576	9.582	-0.006	97	44171	0.1587	0.1563	
50 Cyclohexane	69	9.587	9.590	-0.003	95	7351	0.1587	0.1545	
52 n-Butanol	31	9.603	9.606	-0.003	62	5160	0.1587	0.1706	
51 Carbon tetrachloride	117	9.603	9.611	-0.008	96	42733	0.1587	0.1447	
53 2,3-Dimethylpentane	71	9.738	9.740	-0.002	89	10219	0.1587	0.1571	
54 Thiophene	84	9.846	9.855	-0.009	94	25238	0.1587	0.1598	
55 Tert-amyl methyl ether	73	10.099	10.100	-0.001	97	39025	0.1587	0.1506	
56 Isooctane	57	10.412	10.414	-0.002	96	67131	0.1587	0.1600	
57 n-Heptane	71	10.811	10.816	-0.005	90	16529	0.1587	0.1577	
58 1,2-Dichloropropane	63	10.838	10.846	-0.008	82	15995	0.1587	0.1666	
59 Trichloroethene	130	10.892	10.897	-0.005	93	23332	0.1587	0.1524	
60 Dibromomethane	93	10.956	10.961	-0.005	95	18824	0.1587	0.1476	
61 Dichlorobromomethane	83	11.118	11.126	-0.008	98	35557	0.1587	0.1452	
62 1,4-Dioxane	88	11.151	11.152	-0.001	96	6069	0.1587	0.1586	
63 Methyl methacrylate	41	11.258	11.260	-0.002	93	16201	0.1587	0.1528	
64 Methylcyclohexane	83	11.695	11.704	-0.009	95	34804	0.1587	0.1581	
65 4-Methyl-2-pentanone (MIBK)	43	12.132	12.133	-0.001	95	26186	0.1587	0.1613	
66 cis-1,3-Dichloropropene	75	12.170	12.174	-0.004	96	26770	0.1587	0.1506	
67 trans-1,3-Dichloropropene	75	12.892	12.897	-0.005	97	26814	0.1587	0.1586	
68 Toluene	91	13.016	13.021	-0.005	93	49691	0.1587	0.1581	
69 1,1,2-Trichloroethane	83	13.081	13.091	-0.010	95	15096	0.1587	0.1602	
70 2-Methylthiophene	97	13.167	13.173	-0.006	97	41117	0.1587	0.1558	
71 3-Methylthiophene	97	13.378	13.381	-0.003	99	40017	0.1587	0.1532	
72 2-Hexanone	58	13.518	13.519	-0.001	94	11715	0.1587	0.1557	
73 n-Octane	85	13.777	13.780	-0.003	89	18002	0.1587	0.1585	
74 Chlorodibromomethane	129	13.798	13.803	-0.005	97	31316	0.1587	0.1332	
75 Ethylene Dibromide	107	14.089	14.092	-0.003	98	26740	0.1587	0.1449	
76 Tetrachloroethene	129	14.192	14.195	-0.003	91	21668	0.1587	0.1507	
77 Chlorobenzene	112	15.076	15.082	-0.006	92	41319	0.1587	0.1553	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	91	44892	0.1587	0.1668	
79 Ethylbenzene	91	15.389	15.393	-0.004	99	69301	0.1587	0.1578	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	52367	0.1587	0.1514	
81 m-Xylene & p-Xylene	91	15.556	15.559	-0.003	100	110203	0.3174	0.3107	
82 Bromoform	173	15.971	15.979	-0.008	93	27441	0.1587	0.1166	
83 Styrene	104	16.025	16.027	-0.002	93	31773	0.1587	0.1358	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.025	16.029	-0.004	89	32630	0.1587	0.1693	
85 o-Xylene	91	16.085	16.088	-0.003	97	56948	0.1587	0.1570	
86 1,1,2,2-Tetrachloroethane	83	16.403	16.411	-0.008	98	33152	0.1587	0.1450	
87 1,2,3-Trichloropropane	110	16.559	16.565	-0.006	96	12888	0.1587	0.1541	
88 Isopropylbenzene	105	16.689	16.692	-0.003	96	82210	0.1587	0.1561	
89 N-Propylbenzene	120	17.244	17.246	-0.002	98	20666	0.1587	0.1496	
90 2-Chlorotoluene	126	17.276	17.278	-0.002	97	19395	0.1587	0.1505	
91 4-Ethyltoluene	105	17.406	17.409	-0.003	98	74487	0.1587	0.1502	
92 1,3,5-Trimethylbenzene	120	17.487	17.490	-0.003	91	33353	0.1587	0.1434	
93 Alpha Methyl Styrene	118	17.729	17.734	-0.005	88	22891	0.1587	0.1263	
94 n-Decane	57	17.832	17.837	-0.005	93	38214	0.1587	0.1617	
95 tert-Butylbenzene	119	17.934	17.939	-0.005	91	72279	0.1587	0.1475	
96 1,2,4-Trimethylbenzene	105	17.945	17.953	-0.008	96	66195	0.1587	0.1486	
98 sec-Butylbenzene	105	18.220	18.223	-0.003	98	92643	0.1587	0.1477	
97 1,3-Dichlorobenzene	146	18.220	18.223	-0.003	96	46148	0.1587	0.1373	
99 Benzyl chloride	91	18.295	18.303	-0.008	97	61054	0.1587	0.1453	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	93	46292	0.1587	0.1409	
101 4-Isopropyltoluene	119	18.398	18.400	-0.002	97	83608	0.1587	0.1509	
102 1,2,3-Trimethylbenzene	105	18.441	18.445	-0.004	98	50998	0.1587	0.1533	
103 Butylcyclohexane	83	18.517	18.520	-0.003	94	52392	0.1587	0.1596	
104 1,2-Dichlorobenzene	146	18.684	18.689	-0.005	91	43975	0.1587	0.1373	
105 2,3-Dihydroindene	117	18.689	18.693	-0.004	93	58519	0.1587	0.1442	
106 Indene	116	18.824	18.827	-0.003	92	39915	0.1587	0.1346	
107 n-Butylbenzene	91	18.851	18.854	-0.003	97	80658	0.1587	0.1557	
108 Undecane	57	19.207	19.209	-0.002	93	44209	0.1587	0.1594	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.234	19.239	-0.005	96	59995	0.1587	0.1451	
110 1,2-Dibromo-3-Chloropropan	157	19.304	19.308	-0.004	88	16001	0.1587	0.1165	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.634	-0.001	96	70829	0.1587	0.1426	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	94	42400	0.1587	0.1418	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	96	58175	0.1587	0.1425	
114 Dodecane	57	20.280	20.280	0.000	93	39684	0.1587	0.1613	
115 1,2,4-Trichlorobenzene	180	20.415	20.418	-0.003	94	35767	0.1587	0.1269	
116 Naphthalene	128	20.544	20.545	-0.001	98	78779	0.1587	0.1334	
117 Benzo(b)thiophene	134	20.641	20.645	-0.004	98	46547	0.1587	0.1355	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	92	37819	0.1587	0.1361	
119 1,2,3-Trichlorobenzene	180	20.824	20.825	-0.001	94	35163	0.1587	0.1322	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	99	46113	0.4801	0.3761	
121 1-Methylnaphthalene	142	21.800	21.801	-0.001	98	44542	0.4801	0.3648	
A 122 C6 Range	1	7.334	(7.303-7.383)		0	107367	0.1587	0.1640	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	124912	0.1587	0.1569	
S 126 Xylenes, Total	100				0		0.4761	0.4678	
S 127 1,2-Dichloroethene, Total	1				0		0.3174	0.3174	

Reagents:

40L3DNP_00011

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC03.D

Injection Date: 15-Mar-2017 16:02:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L3

Worklist Smp#: 5

Client ID:

Purge Vol: 500.000 mL

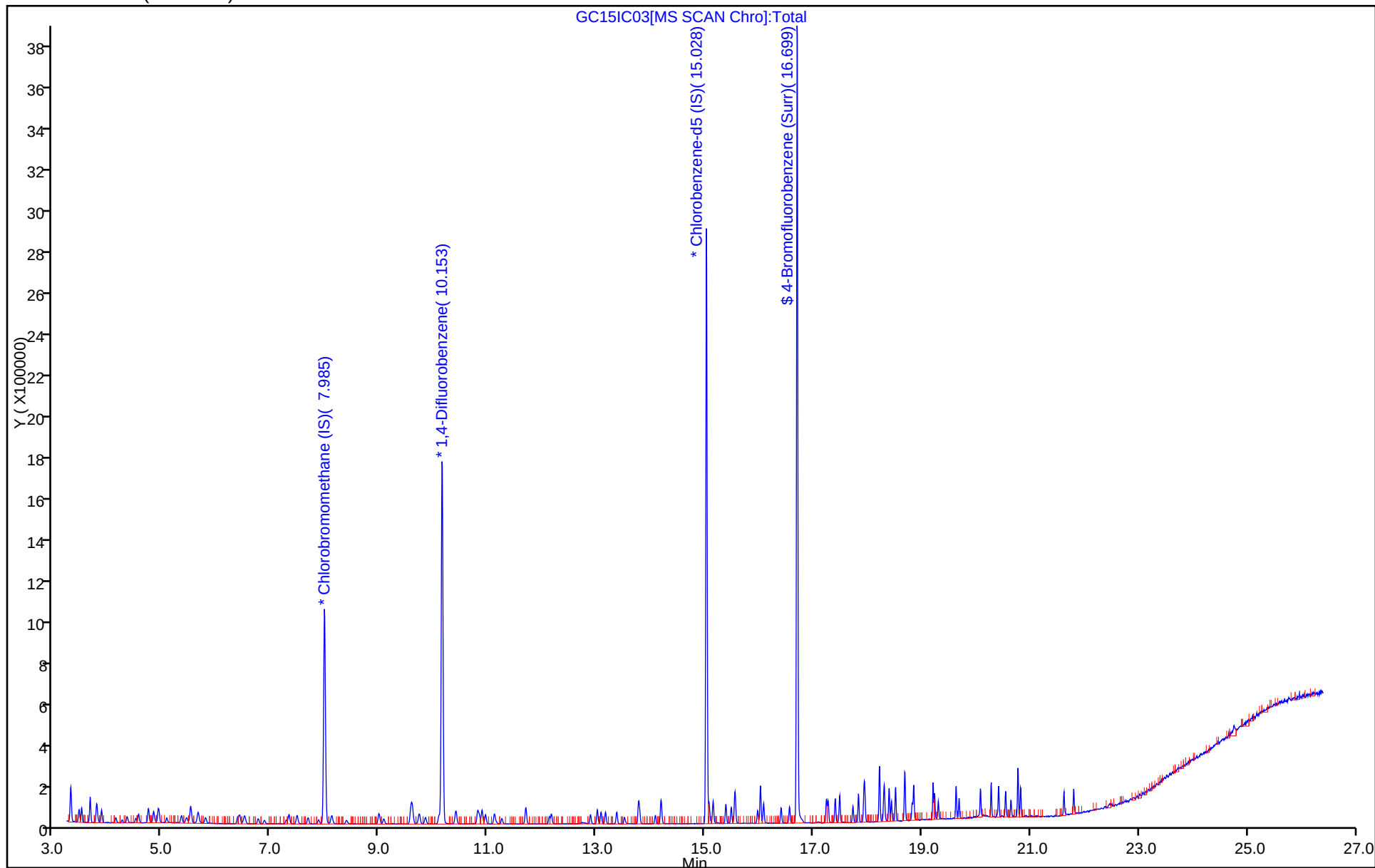
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC03.D

Injection Date: 15-Mar-2017 16:02:30

Instrument ID: MG

Lims ID: IC L3

Client ID:

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 5

Purge Vol: 500.000 mL

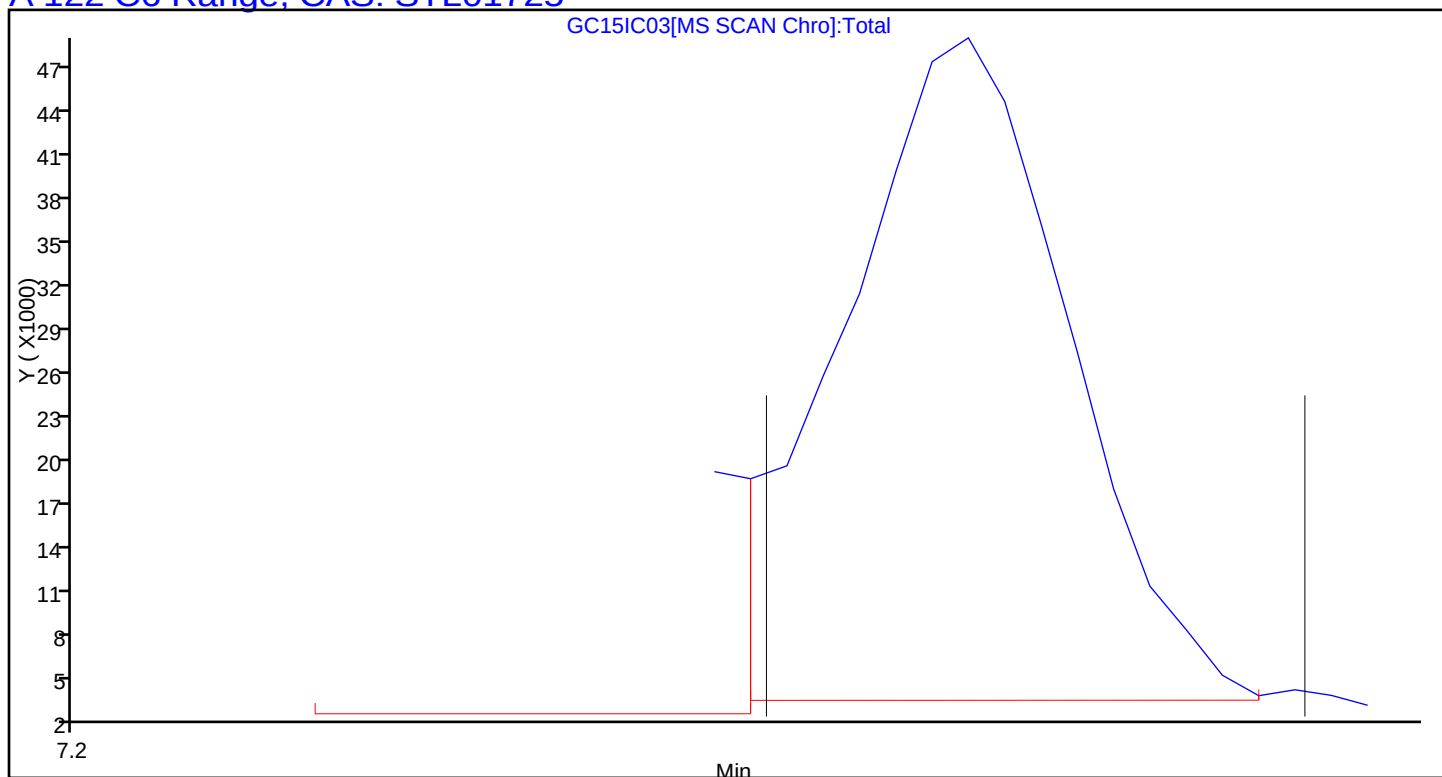
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC03.D

Injection Date: 15-Mar-2017 16:02:30

Instrument ID: MG

Lims ID: IC L3

Client ID:

Operator ID: 7126

ALS Bottle#: 2

Worklist Smp#: 5

Purge Vol: 500.000 mL

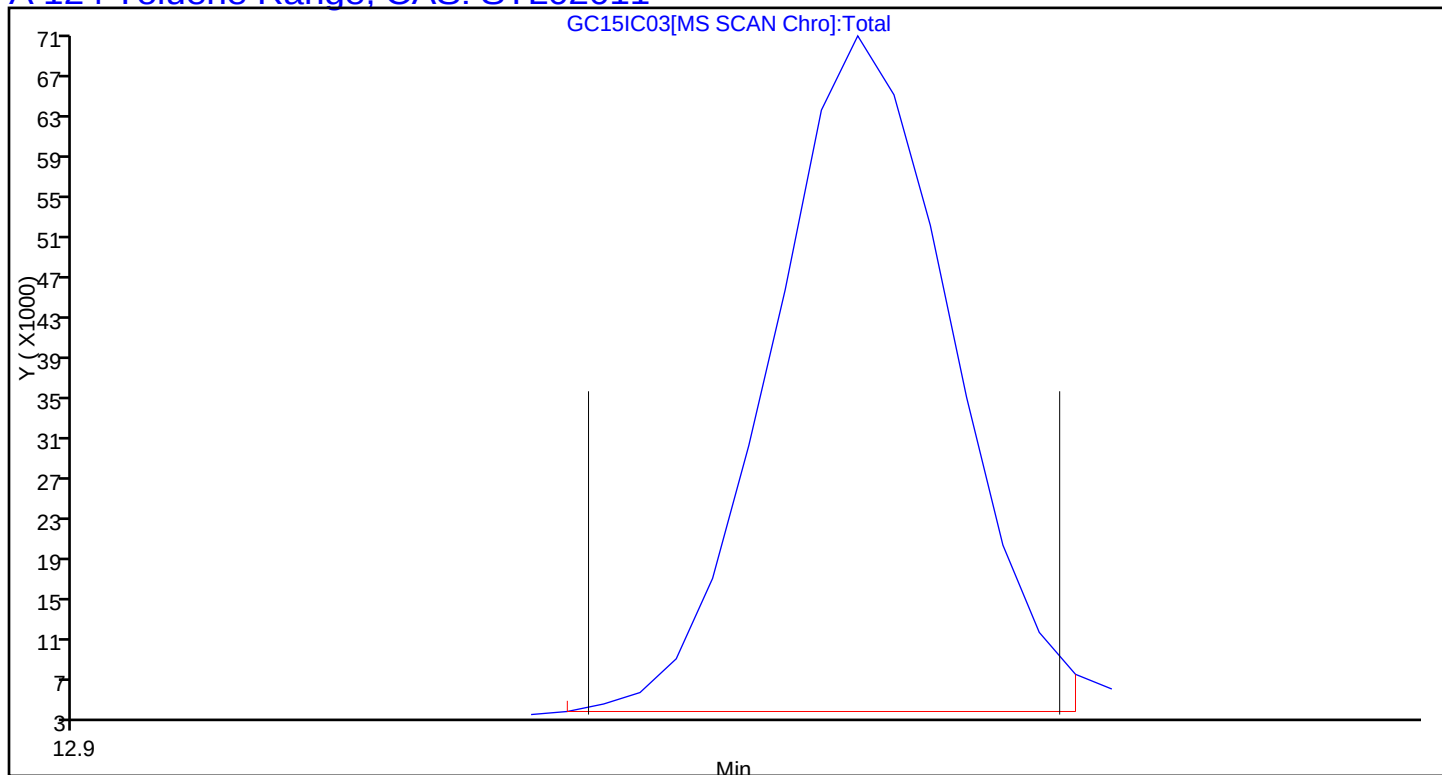
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC04.D
 Lims ID: IC L4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 15-Mar-2017 16:45:30 ALS Bottle#: 3 Worklist Smp#: 6
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-006
 Misc. Info.: 083681
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:11:31 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: barlozhetskayaa

Date: 15-Mar-2017 17:56:08

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	7.985	7.993	-0.008	82	343423	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.153	10.161	-0.008	95	1710584	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.028	15.034	-0.006	88	1638521	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.699	16.705	-0.006	94	1296737	4.00	4.00	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	97	16118	0.4001	0.4221	
7 Propene	41	3.466	3.466	0.000	98	38073	0.4001	0.4191	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	147329	0.4001	0.4053	
9 Chloromethane	52	3.661	3.659	0.002	98	10845	0.4001	0.4435	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.666	3.669	-0.003	92	85416	0.4001	0.3948	
11 Acetaldehyde	44	3.785	3.786	-0.001	88	72210	2.00	2.51	
12 Vinyl chloride	62	3.801	3.803	-0.002	99	41537	0.4001	0.4135	
13 Butadiene	54	3.871	3.876	-0.005	68	28287	0.4001	0.4228	
14 Butane	43	3.876	3.879	-0.003	86	59701	0.4001	0.4194	
15 Bromomethane	94	4.141	4.141	0.000	97	39896	0.4001	0.4019	
16 Chloroethane	64	4.254	4.258	-0.004	92	19908	0.4001	0.4095	
17 Ethanol	31	4.345	4.357	-0.012	98	69923	2.00	2.02	
18 Vinyl bromide	106	4.507	4.511	-0.004	97	37848	0.4001	0.4023	
19 2-Methylbutane	43	4.556	4.560	-0.004	88	38853	0.4001	0.4040	
21 Acrolein	56	4.734	4.742	-0.008	28	4862	0.4001	0.3456	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	99	144284	0.4001	0.3986	
22 Acetonitrile	40	4.788	4.793	-0.005	94	12605	0.4001	0.4373	
23 Acetone	58	4.831	4.835	-0.004	99	46214	1.17	1.37	
25 Pentane	72	4.933	4.937	-0.004	96	6934	0.4001	0.3964	
24 Isopropyl alcohol	45	4.917	4.939	-0.022	93	159557	1.17	1.37	
26 Ethyl ether	31	5.068	5.075	-0.007	92	32090	0.4001	0.4045	
27 1,1-Dichloroethene	96	5.348	5.354	-0.006	98	36376	0.4001	0.3974	
28 Acrylonitrile	53	5.429	5.435	-0.006	97	16558	0.4001	0.3967	
29 2-Methyl-2-propanol	59	5.451	5.467	-0.016	95	55009	0.4001	0.3945	
30 1,1,2-Trichloro-1,2,2-trif	101	5.516	5.521	-0.005	94	84505	0.4001	0.4002	
31 Methylene Chloride	84	5.645	5.656	-0.011	89	36046	0.4001	0.4365	

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	5.667	5.673	-0.006	93	34533	0.4001	0.3890	
33 Carbon disulfide	76	5.791	5.797	-0.006	99	91859	0.4001	0.3939	
34 trans-1,2-Dichloroethene	96	6.384	6.393	-0.009	95	34363	0.4001	0.3840	
35 2-Methylpentane	43	6.422	6.426	-0.004	92	71301	0.4001	0.4061	
36 Methyl tert-butyl ether	73	6.508	6.513	-0.005	95	105435	0.4001	0.3966	
37 1,1-Dichloroethane	63	6.767	6.771	-0.004	100	69127	0.4001	0.3957	
38 Vinyl acetate	43	6.874	6.881	-0.007	99	79405	0.4001	0.3958	
39 2-Butanone (MEK)	72	7.273	7.283	-0.010	99	15082	0.4001	0.3859	
40 Hexane	56	7.333	7.336	-0.003	84	27547	0.4001	0.4062	
41 Isopropyl ether	45	7.473	7.483	-0.010	93	101005	0.4001	0.4047	
42 cis-1,2-Dichloroethene	96	7.683	7.691	-0.008	95	36823	0.4001	0.3874	
43 Ethyl acetate	43	7.872	7.880	-0.008	98	66315	0.4001	0.4007	
44 Chloroform	83	8.007	8.019	-0.012	95	95787	0.4001	0.3976	
45 Tert-butyl ethyl ether	59	8.115	8.122	-0.007	95	99212	0.4001	0.3955	
46 Tetrahydrofuran	42	8.379	8.387	-0.008	92	35542	0.4001	0.4054	
47 1,1,1-Trichloroethane	97	8.994	8.997	-0.003	94	108746	0.4001	0.3902	
48 1,2-Dichloroethane	62	9.080	9.087	-0.007	99	67175	0.4001	0.3890	
49 Benzene	78	9.576	9.582	-0.006	97	110029	0.4001	0.3786	
50 Cyclohexane	69	9.587	9.590	-0.003	89	19497	0.4001	0.3986	
52 n-Butanol	31	9.598	9.606	-0.008	66	12296	0.4001	0.3953	
51 Carbon tetrachloride	117	9.608	9.611	-0.003	98	113747	0.4001	0.3745	
53 2,3-Dimethylpentane	71	9.738	9.740	-0.002	89	26444	0.4001	0.3953	
54 Thiophene	84	9.851	9.855	-0.004	95	63320	0.4001	0.3900	
55 Tert-amyl methyl ether	73	10.094	10.100	-0.006	98	107357	0.4001	0.4030	
56 Isooctane	57	10.406	10.414	-0.008	97	172066	0.4001	0.3989	
57 n-Heptane	71	10.811	10.816	-0.005	91	40968	0.4001	0.3802	
58 1,2-Dichloropropane	63	10.838	10.846	-0.008	84	39466	0.4001	0.3998	
59 Trichloroethene	130	10.892	10.897	-0.005	94	58508	0.4001	0.3717	
60 Dibromomethane	93	10.956	10.961	-0.005	94	49152	0.4001	0.3747	
61 Dichlorobromomethane	83	11.118	11.126	-0.008	98	95415	0.4001	0.3789	
62 1,4-Dioxane	88	11.151	11.152	-0.001	94	15307	0.4001	0.3891	
63 Methyl methacrylate	41	11.253	11.260	-0.007	93	40539	0.4001	0.3718	
64 Methylcyclohexane	83	11.701	11.704	-0.003	95	87846	0.4001	0.3880	
65 4-Methyl-2-pentanone (MIBK)	43	12.121	12.133	-0.012	97	64835	0.4001	0.3884	
66 cis-1,3-Dichloropropene	75	12.170	12.174	-0.004	95	69133	0.4001	0.3783	
67 trans-1,3-Dichloropropene	75	12.892	12.897	-0.005	97	68241	0.4001	0.3888	
68 Toluene	91	13.016	13.021	-0.005	93	126815	0.4001	0.3885	
69 1,1,2-Trichloroethane	83	13.086	13.091	-0.005	97	37911	0.4001	0.3874	
70 2-Methylthiophene	97	13.167	13.173	-0.006	98	107989	0.4001	0.3941	
71 3-Methylthiophene	97	13.372	13.381	-0.009	99	105015	0.4001	0.3872	
72 2-Hexanone	58	13.512	13.519	-0.007	93	29914	0.4001	0.3829	
73 n-Octane	85	13.777	13.780	-0.003	90	45217	0.4001	0.3833	
74 Chlorodibromomethane	129	13.798	13.803	-0.005	97	85348	0.4001	0.3496	
75 Ethylene Dibromide	107	14.084	14.092	-0.008	96	72403	0.4001	0.3778	
76 Tetrachloroethene	129	14.192	14.195	-0.003	94	54718	0.4001	0.3665	
77 Chlorobenzene	112	15.076	15.082	-0.006	92	106057	0.4001	0.3839	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	91	114675	0.4001	0.4103	
79 Ethylbenzene	91	15.389	15.393	-0.004	99	175356	0.4001	0.3846	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	139782	0.4001	0.3892	
81 m-Xylene & p-Xylene	91	15.551	15.559	-0.008	100	284366	0.8002	0.7722	
82 Bromoform	173	15.971	15.979	-0.008	94	77559	0.4001	0.3174	
83 Styrene	104	16.020	16.027	-0.007	97	87701	0.4001	0.3610	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.025	16.029	-0.004	88	80602	0.4001	0.4027	
85 o-Xylene	91	16.085	16.088	-0.003	98	144970	0.4001	0.3850	
86 1,1,2,2-Tetrachloroethane	83	16.403	16.411	-0.008	98	90906	0.4001	0.3830	
87 1,2,3-Trichloropropane	110	16.559	16.565	-0.006	96	32782	0.4001	0.3774	
88 Isopropylbenzene	105	16.689	16.692	-0.003	98	207127	0.4001	0.3788	
89 N-Propylbenzene	120	17.244	17.246	-0.002	99	54076	0.4001	0.3770	
90 2-Chlorotoluene	126	17.271	17.278	-0.007	97	49412	0.4001	0.3692	
91 4-Ethyltoluene	105	17.406	17.409	-0.003	98	193325	0.4001	0.3754	
92 1,3,5-Trimethylbenzene	120	17.487	17.490	-0.003	92	89762	0.4001	0.3717	
93 Alpha Methyl Styrene	118	17.729	17.734	-0.005	86	63304	0.4001	0.3364	
94 n-Decane	57	17.832	17.837	-0.005	93	100736	0.4001	0.4105	
95 tert-Butylbenzene	119	17.934	17.939	-0.005	90	186533	0.4001	0.3667	
96 1,2,4-Trimethylbenzene	105	17.950	17.953	-0.003	96	173218	0.4001	0.3744	
98 sec-Butylbenzene	105	18.220	18.223	-0.003	98	243244	0.4001	0.3734	
97 1,3-Dichlorobenzene	146	18.215	18.223	-0.008	96	120087	0.4001	0.3442	
99 Benzyl chloride	91	18.295	18.303	-0.008	97	161617	0.4001	0.3703	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	94	120739	0.4001	0.3540	
101 4-Isopropyltoluene	119	18.398	18.400	-0.002	97	214236	0.4001	0.3724	
102 1,2,3-Trimethylbenzene	105	18.441	18.445	-0.004	98	130876	0.4001	0.3790	
103 Butylcyclohexane	83	18.517	18.520	-0.003	94	134750	0.4001	0.3954	
104 1,2-Dichlorobenzene	146	18.684	18.689	-0.005	92	115468	0.4001	0.3473	
105 2,3-Dihydroindene	117	18.689	18.693	-0.004	93	150042	0.4001	0.3560	
106 Indene	116	18.824	18.827	-0.003	91	108215	0.4001	0.3514	
107 n-Butylbenzene	91	18.851	18.854	-0.003	98	207014	0.4001	0.3850	
108 Undecane	57	19.207	19.209	-0.002	94	117141	0.4001	0.4068	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.239	19.239	0.000	97	157840	0.4001	0.3676	
110 1,2-Dibromo-3-Chloropropan	157	19.304	19.308	-0.004	92	46413	0.4001	0.3255	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.634	-0.001	96	189973	0.4001	0.3683	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	94	114039	0.4001	0.3674	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	96	153792	0.4001	0.3629	
114 Dodecane	57	20.280	20.280	0.000	93	100417	0.4001	0.3931	
115 1,2,4-Trichlorobenzene	180	20.415	20.418	-0.003	93	94904	0.4001	0.3243	
116 Naphthalene	128	20.544	20.545	-0.001	99	208260	0.4001	0.3397	
117 Benzo(b)thiophene	134	20.641	20.645	-0.004	99	123697	0.4001	0.3469	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	93	98425	0.4001	0.3411	
119 1,2,3-Trichlorobenzene	180	20.819	20.825	-0.006	94	91350	0.4001	0.3308	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	99	105461	1.21	0.8284	
121 1-Methylnaphthalene	142	21.801	21.801	0.000	100	100155	1.21	0.7901	
A 122 C6 Range	1	7.343	(7.303-7.383)		0	265311	0.4001	0.3940	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	317115	0.4001	0.3874	
S 126 Xylenes, Total	100				0		1.20	1.16	
S 127 1,2-Dichloroethene, Total	1				0		0.8002	0.7713	

Reagents:

40L4DNP_00010

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC04.D

Injection Date: 15-Mar-2017 16:45:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L4

Worklist Smp#: 6

Client ID:

Purge Vol: 500.000 mL

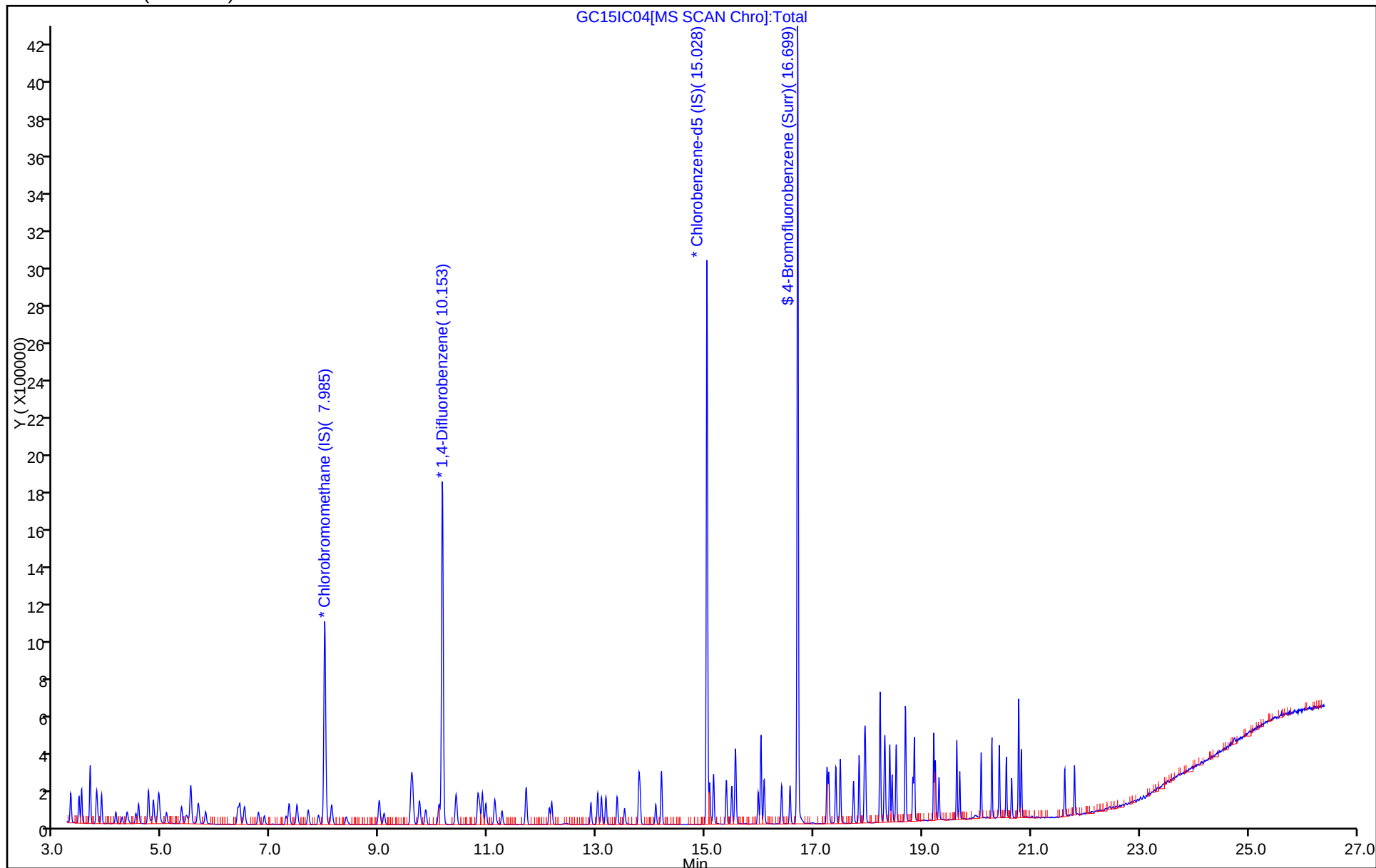
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC04.D

Injection Date: 15-Mar-2017 16:45:30

Instrument ID: MG

Lims ID: IC L4

Client ID:

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 6

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

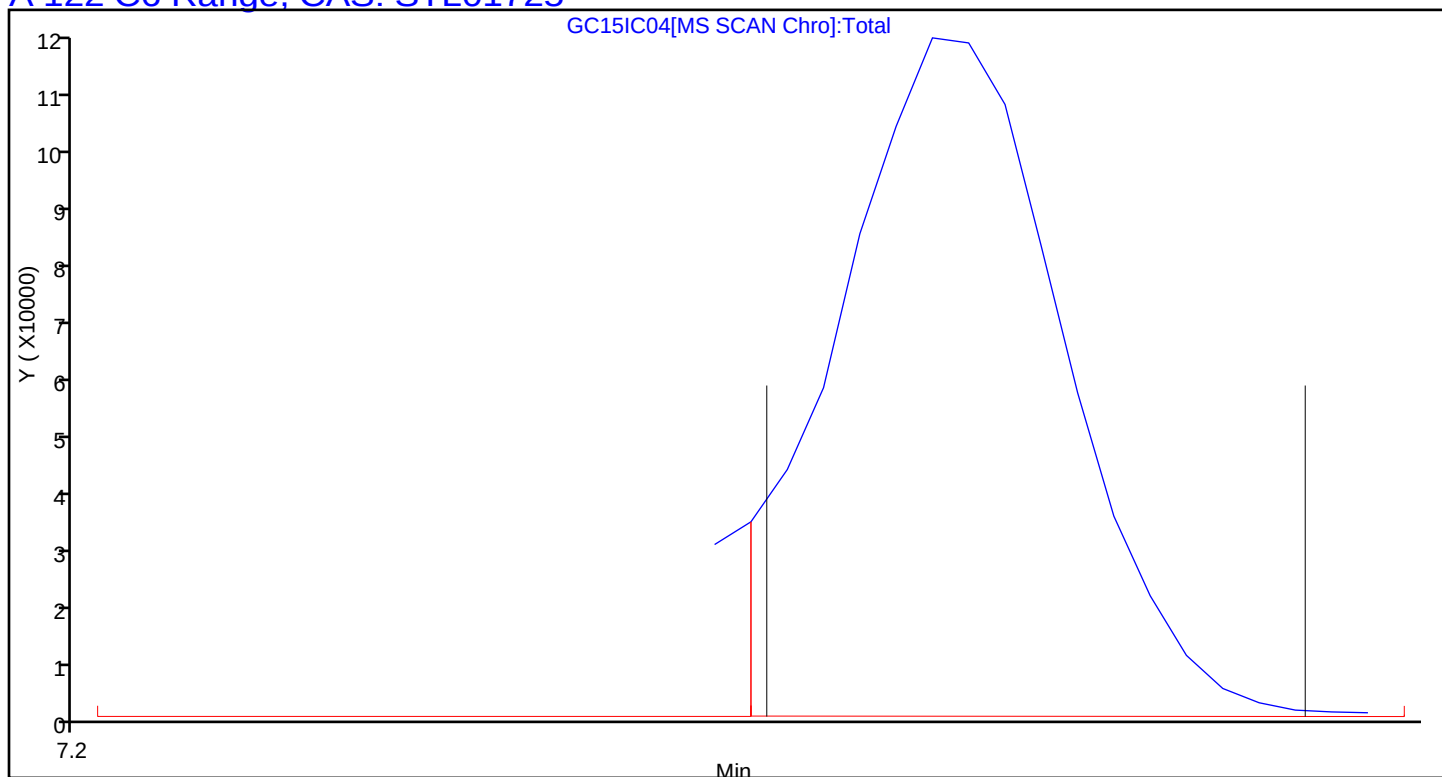
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC04.D

Injection Date: 15-Mar-2017 16:45:30

Instrument ID: MG

Lims ID: IC L4

Client ID:

Operator ID: 7126

ALS Bottle#: 3

Worklist Smp#: 6

Purge Vol: 500.000 mL

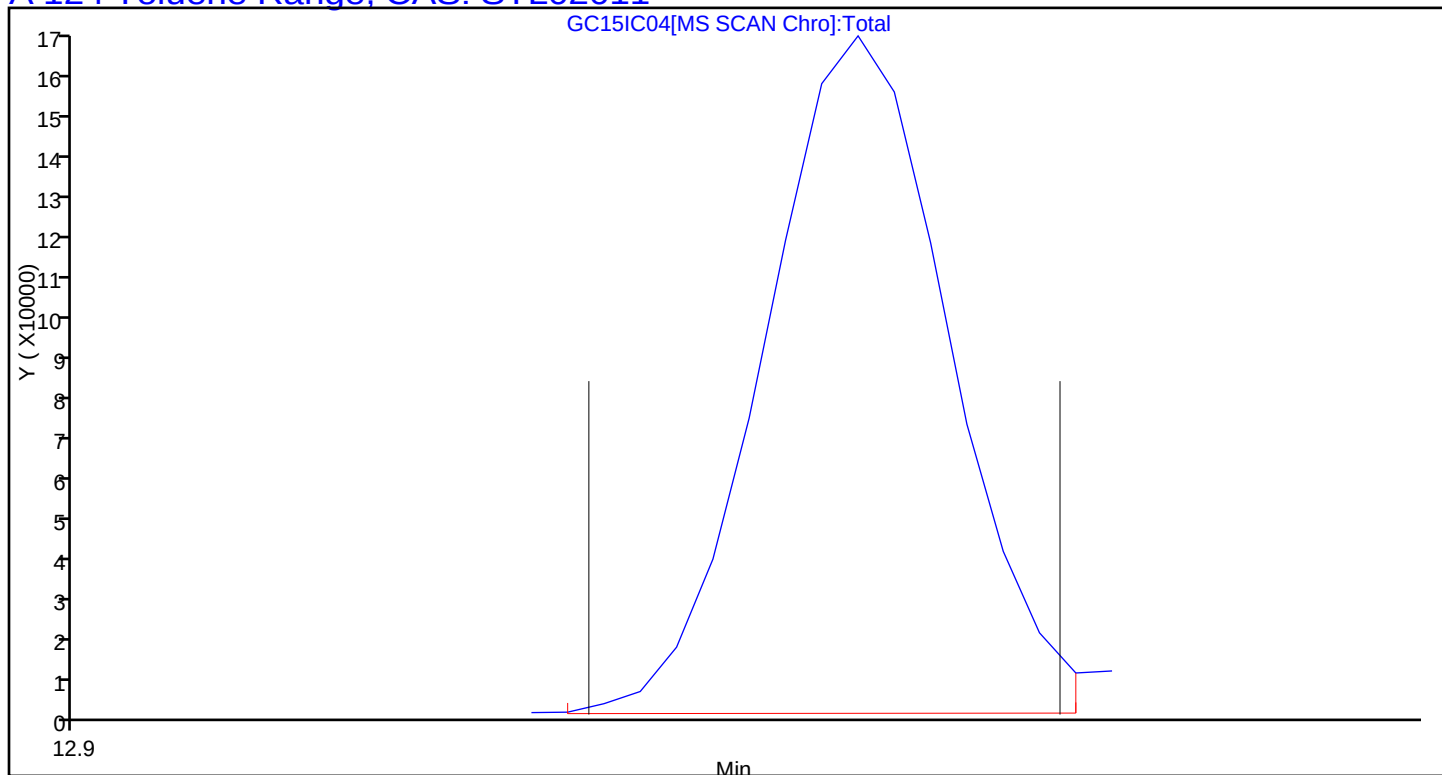
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC05.D
 Lims ID: IC L5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 15-Mar-2017 17:29:30 ALS Bottle#: 4 Worklist Smp#: 7
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-007
 Misc. Info.: 083680
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:12:36 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: barlozhetskayaa

Date: 16-Mar-2017 09:26:11

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	7.985	7.993	-0.008	82	336824	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.158	10.161	-0.003	95	1711373	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.028	15.034	-0.006	88	1669250	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.705	16.705	0.000	95	1347272	4.00	4.08	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	97	38106	1.00	1.02	
7 Propene	41	3.466	3.466	0.000	97	93889	1.00	1.05	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	367220	1.00	1.03	
9 Chloromethane	52	3.661	3.659	0.002	97	25770	1.00	1.07	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.666	3.669	-0.003	92	208904	1.00	0.9845	
11 Acetaldehyde	44	3.779	3.786	-0.007	88	165163	5.01	5.86	
12 Vinyl chloride	62	3.801	3.803	-0.002	99	100829	1.00	1.02	
13 Butadiene	54	3.871	3.876	-0.005	70	68804	1.00	1.05	
14 Butane	43	3.876	3.879	-0.003	85	142250	1.00	1.02	
15 Bromomethane	94	4.135	4.141	-0.006	98	99093	1.00	1.02	
16 Chloroethane	64	4.254	4.258	-0.004	93	49038	1.00	1.03	
17 Ethanol	31	4.340	4.357	-0.017	97	174754	5.01	5.16	
18 Vinyl bromide	106	4.507	4.511	-0.004	97	92859	1.00	1.01	
19 2-Methylbutane	43	4.556	4.560	-0.004	89	95489	1.00	1.01	
21 Acrolein	56	4.734	4.742	-0.008	28	12471	1.00	0.9040	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	99	358635	1.00	1.01	
22 Acetonitrile	40	4.782	4.793	-0.011	96	31325	1.00	1.11	
23 Acetone	58	4.825	4.835	-0.010	99	107750	2.94	3.26	
25 Pentane	72	4.933	4.937	-0.004	98	17688	1.00	1.03	
24 Isopropyl alcohol	45	4.912	4.939	-0.027	98	343901	2.94	3.01	
26 Ethyl ether	31	5.063	5.075	-0.012	92	82779	1.00	1.06	
27 1,1-Dichloroethene	96	5.348	5.354	-0.006	97	89728	1.00	1.00	
28 Acrylonitrile	53	5.424	5.435	-0.011	95	42053	1.00	1.03	
29 2-Methyl-2-propanol	59	5.435	5.467	-0.032	95	138675	1.00	1.01	
30 1,1,2-Trichloro-1,2,2-trif	101	5.516	5.521	-0.005	93	209870	1.00	1.01	
31 Methylene Chloride	84	5.650	5.656	-0.006	89	81013	1.00	1.00	

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	5.667	5.673	-0.006	93	87550	1.00	1.01	
33 Carbon disulfide	76	5.791	5.797	-0.006	100	229458	1.00	1.00	
34 trans-1,2-Dichloroethene	96	6.389	6.393	-0.004	97	88680	1.00	1.01	
35 2-Methylpentane	43	6.421	6.426	-0.005	93	177996	1.00	1.03	
36 Methyl tert-butyl ether	73	6.502	6.513	-0.011	95	273536	1.00	1.05	
37 1,1-Dichloroethane	63	6.767	6.771	-0.004	100	173008	1.00	1.01	
38 Vinyl acetate	43	6.869	6.881	-0.012	99	207726	1.00	1.06	
39 2-Butanone (MEK)	72	7.268	7.283	-0.015	99	39027	1.00	1.02	
40 Hexane	56	7.333	7.336	-0.003	85	67446	1.00	1.01	
41 Isopropyl ether	45	7.468	7.483	-0.015	94	262185	1.00	1.07	
42 cis-1,2-Dichloroethene	96	7.683	7.691	-0.008	96	92674	1.00	0.99	
43 Ethyl acetate	43	7.867	7.880	-0.013	98	171642	1.00	1.06	
44 Chloroform	83	8.012	8.019	-0.007	96	243090	1.00	1.03	
45 Tert-butyl ethyl ether	59	8.109	8.122	-0.013	95	259723	1.00	1.06	
46 Tetrahydrofuran	42	8.374	8.387	-0.013	89	89552	1.00	1.04	
47 1,1,1-Trichloroethane	97	8.988	8.997	-0.009	94	276845	1.00	1.01	
48 1,2-Dichloroethane	62	9.080	9.087	-0.007	99	172041	1.00	1.00	
49 Benzene	78	9.576	9.582	-0.006	96	279122	1.00	0.9601	
50 Cyclohexane	69	9.581	9.590	-0.009	92	48328	1.00	0.9876	
52 n-Butanol	31	9.587	9.606	-0.019	66	29171	1.00	0.9374	
51 Carbon tetrachloride	117	9.608	9.611	-0.003	97	296576	1.00	0.9761	
53 2,3-Dimethylpentane	71	9.732	9.740	-0.008	90	67650	1.00	1.01	
54 Thiophene	84	9.851	9.855	-0.004	95	161878	1.00	1.00	
55 Tert-amyl methyl ether	73	10.088	10.100	-0.012	98	277565	1.00	1.04	
56 Isooctane	57	10.406	10.414	-0.008	97	433667	1.00	1.00	
57 n-Heptane	71	10.811	10.816	-0.005	91	106290	1.00	0.9861	
58 1,2-Dichloropropane	63	10.843	10.846	-0.003	83	97796	1.00	0.99	
59 Trichloroethene	130	10.892	10.897	-0.005	95	150217	1.00	0.9539	
60 Dibromomethane	93	10.956	10.961	-0.005	95	127996	1.00	0.9753	
61 Dichlorobromomethane	83	11.124	11.126	-0.002	98	253630	1.00	1.01	
62 1,4-Dioxane	88	11.134	11.152	-0.018	94	39782	1.00	1.01	
63 Methyl methacrylate	41	11.248	11.260	-0.012	93	108599	1.00	1.00	
64 Methylcyclohexane	83	11.701	11.704	-0.003	95	227011	1.00	1.00	
65 4-Methyl-2-pentanone (MIBK)	43	12.121	12.133	-0.012	97	170118	1.00	1.02	
66 cis-1,3-Dichloropropene	75	12.170	12.174	-0.004	96	184126	1.00	1.01	
67 trans-1,3-Dichloropropene	75	12.892	12.897	-0.005	97	178625	1.00	1.00	
68 Toluene	91	13.016	13.021	-0.005	94	329471	1.00	0.99	
69 1,1,2-Trichloroethane	83	13.086	13.091	-0.005	98	98117	1.00	0.9842	
70 2-Methylthiophene	97	13.167	13.173	-0.006	98	280205	1.00	1.00	
71 3-Methylthiophene	97	13.378	13.381	-0.003	99	279432	1.00	1.01	
72 2-Hexanone	58	13.507	13.519	-0.012	93	78752	1.00	0.9894	
73 n-Octane	85	13.777	13.780	-0.003	89	121262	1.00	1.01	
74 Chlorodibromomethane	129	13.798	13.803	-0.005	97	249183	1.00	1.00	
75 Ethylene Dibromide	107	14.089	14.092	-0.003	97	197523	1.00	1.01	
76 Tetrachloroethene	129	14.192	14.195	-0.003	95	148601	1.00	0.9769	
77 Chlorobenzene	112	15.076	15.082	-0.006	92	274196	1.00	0.9743	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	91	291234	1.00	1.02	
79 Ethylbenzene	91	15.389	15.393	-0.004	99	465478	1.00	1.00	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	370649	1.00	1.01	
81 m-Xylene & p-Xylene	91	15.556	15.559	-0.003	100	752459	2.00	2.01	
82 Bromoform	173	15.977	15.979	-0.002	95	241462	1.00	0.9699	
83 Styrene	104	16.020	16.027	-0.007	97	258497	1.00	1.04	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.025	16.029	-0.004	89	214597	1.00	1.05	
85 o-Xylene	91	16.085	16.088	-0.003	98	382052	1.00	1.00	
86 1,1,2,2-Tetrachloroethane	83	16.408	16.411	-0.003	98	256086	1.00	1.06	
87 1,2,3-Trichloropropane	110	16.559	16.565	-0.006	96	89439	1.00	1.01	
88 Isopropylbenzene	105	16.689	16.692	-0.003	98	556209	1.00	1.00	
89 N-Propylbenzene	120	17.244	17.246	-0.002	99	146598	1.00	1.00	
90 2-Chlorotoluene	126	17.271	17.278	-0.007	96	135063	1.00	0.99	
91 4-Ethyltoluene	105	17.406	17.409	-0.003	98	533550	1.00	1.02	
92 1,3,5-Trimethylbenzene	120	17.487	17.490	-0.003	92	251859	1.00	1.02	
93 Alpha Methyl Styrene	118	17.729	17.734	-0.005	87	199600	1.00	1.04	
94 n-Decane	57	17.832	17.837	-0.005	93	269524	1.00	1.08	
95 tert-Butylbenzene	119	17.934	17.939	-0.005	90	522916	1.00	1.01	
96 1,2,4-Trimethylbenzene	105	17.950	17.953	-0.003	96	479730	1.00	1.02	
98 sec-Butylbenzene	105	18.220	18.223	-0.003	97	678287	1.00	1.02	
97 1,3-Dichlorobenzene	146	18.220	18.223	-0.003	97	340580	1.00	0.9581	
99 Benzyl chloride	91	18.301	18.303	-0.002	98	452529	1.00	1.02	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	95	337505	1.00	0.9714	
101 4-Isopropyltoluene	119	18.398	18.400	-0.002	97	607035	1.00	1.04	
102 1,2,3-Trimethylbenzene	105	18.441	18.445	-0.004	98	366844	1.00	1.04	
103 Butylcyclohexane	83	18.517	18.520	-0.003	95	365451	1.00	1.05	
104 1,2-Dichlorobenzene	146	18.684	18.689	-0.005	95	328983	1.00	0.9712	
105 2,3-Dihydroindene	117	18.689	18.693	-0.004	93	433789	1.00	1.01	
106 Indene	116	18.824	18.827	-0.003	91	318543	1.00	1.02	
107 n-Butylbenzene	91	18.851	18.854	-0.003	98	573821	1.00	1.05	
108 Undecane	57	19.207	19.209	-0.002	93	330016	1.00	1.13	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.239	19.239	0.000	97	457261	1.00	1.05	
110 1,2-Dibromo-3-Chloropropan	157	19.304	19.308	-0.004	94	149226	1.00	1.03	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.634	-0.001	96	562520	1.00	1.07	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	94	340236	1.00	1.08	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	96	471400	1.00	1.09	
114 Dodecane	57	20.280	20.280	0.000	93	328197	1.00	1.26	
115 1,2,4-Trichlorobenzene	180	20.415	20.418	-0.003	94	323309	1.00	1.08	
116 Naphthalene	128	20.544	20.545	-0.001	99	693914	1.00	1.11	
117 Benzo(b)thiophene	134	20.647	20.645	0.002	99	408835	1.00	1.13	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	94	327761	1.00	1.11	
119 1,2,3-Trichlorobenzene	180	20.824	20.825	-0.001	94	318023	1.00	1.13	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	100	379553	3.03	2.93	
121 1-Methylnaphthalene	142	21.801	21.801	-0.001	99	379039	3.03	2.94	
A 122 C6 Range	1	7.343	(7.303-7.383)		0	680124	1.00	1.01	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	825588	1.00	1.01	
S 126 Xylenes, Total	100				0		3.01	3.00	
S 127 1,2-Dichloroethene, Total	1				0		2.00	2.00	

Reagents:

40L5DNP_00010

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC05.D

Injection Date: 15-Mar-2017 17:29:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L5

Worklist Smp#: 7

Client ID:

Purge Vol: 500.000 mL

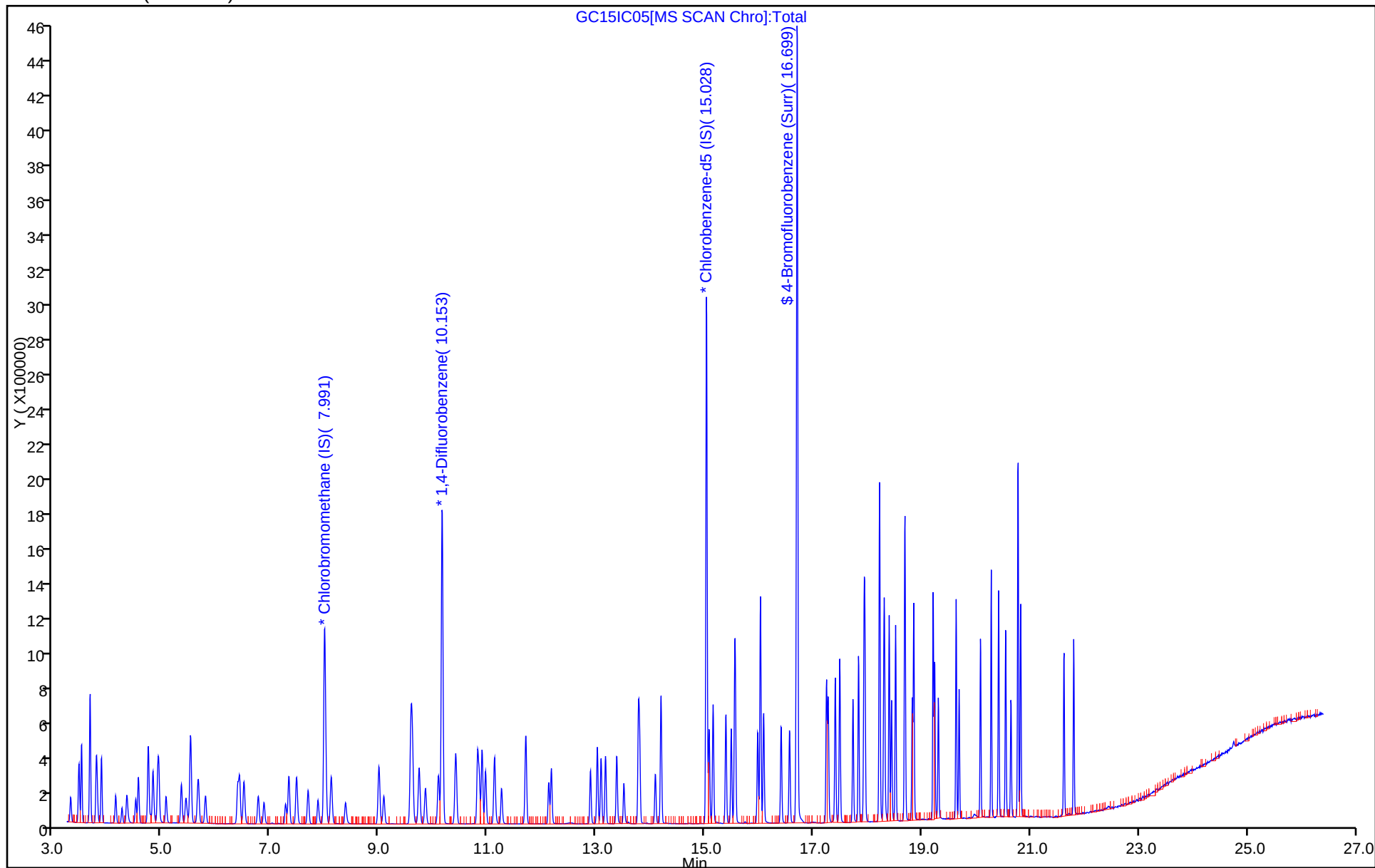
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC05.D

Injection Date: 15-Mar-2017 17:29:30

Instrument ID: MG

Lims ID: IC L5

Client ID:

Operator ID: 7126

ALS Bottle#: 4

Worklist Smp#: 7

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

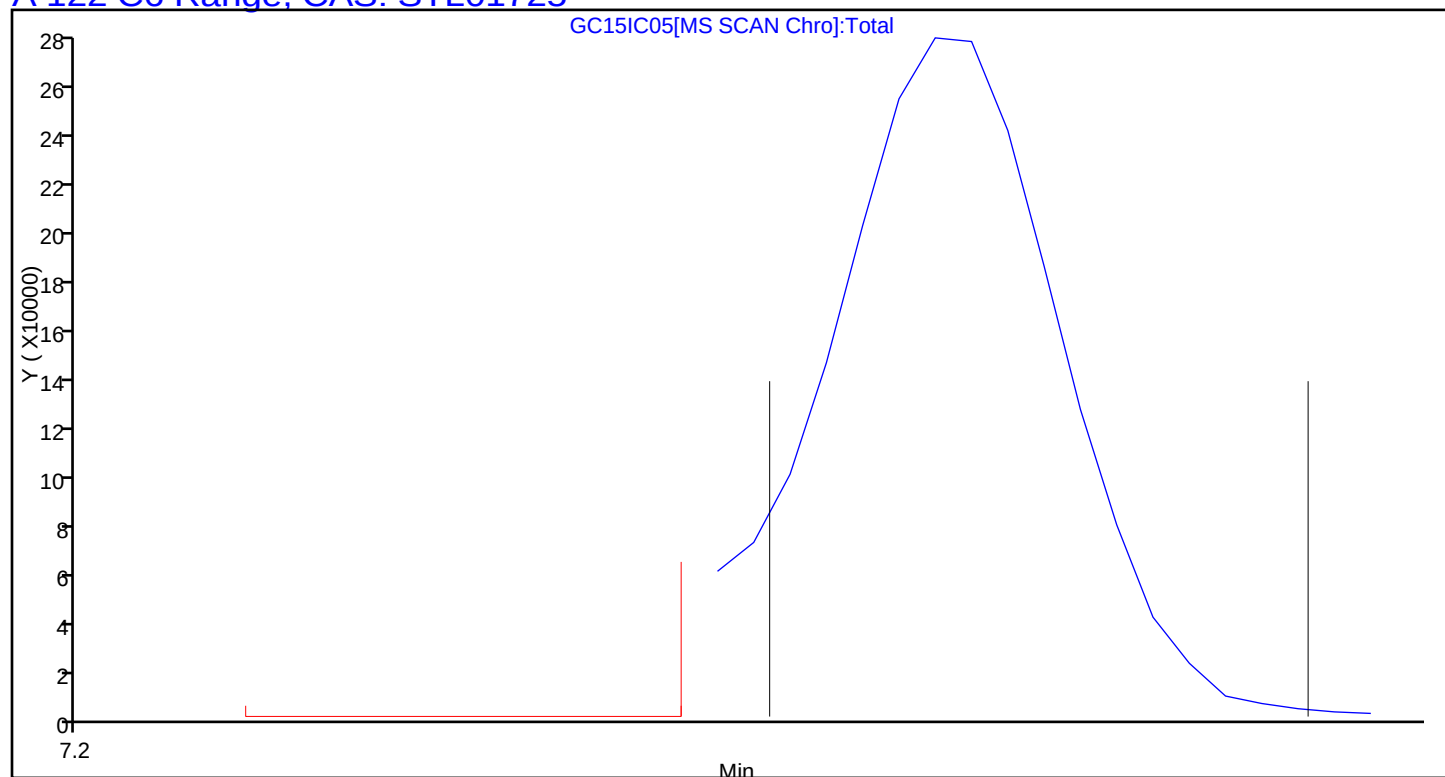
Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC05.D

Injection Date: 15-Mar-2017 17:29:30

Instrument ID: MG

Lims ID: IC L5

Client ID:

Operator ID: 7126

ALS Bottle#:

4

Worklist Smp#:

7

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MG_TO15

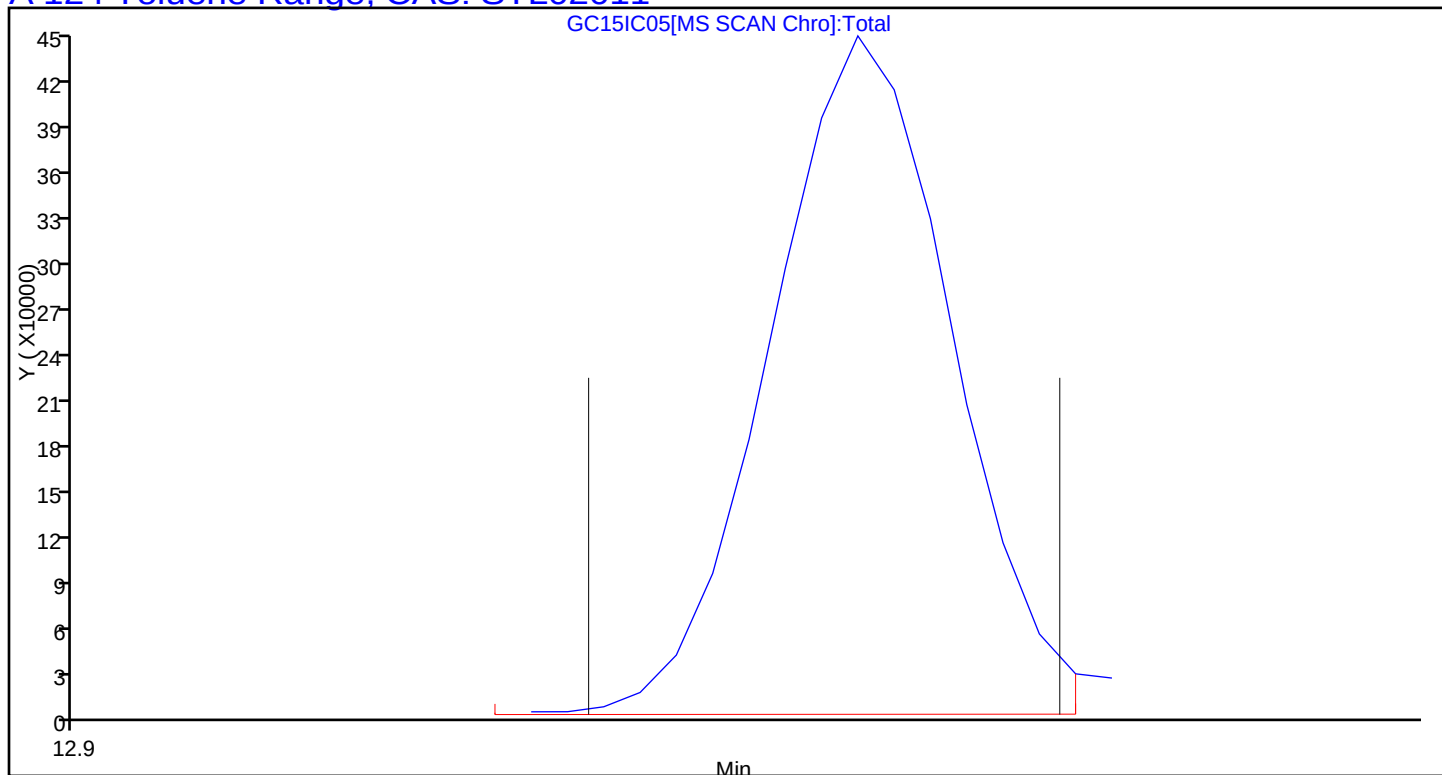
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

A 124 Toluene Range, CAS: STL02011

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC06.D
 Lims ID: ICIS L6
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 15-Mar-2017 18:13:30 ALS Bottle#: 5 Worklist Smp#: 8
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-008
 Misc. Info.: 083679
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:38:36 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: barlozhetskayaa

Date: 16-Mar-2017 14:38:36

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	7.991	7.993	-0.002	82	356237	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.158	10.161	-0.003	95	1693700	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.033	15.034	-0.001	88	1673092	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.705	16.705	0.000	96	1311298	4.00	3.97	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	96	79923	2.00	2.02	
7 Propene	41	3.466	3.466	0.000	97	186431	2.00	1.98	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	749517	2.00	1.99	
9 Chloromethane	52	3.655	3.659	-0.004	97	51943	2.00	2.05	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.666	3.669	-0.003	91	436402	2.00	1.94	
11 Acetaldehyde	44	3.785	3.786	-0.001	89	313096	9.99	10.5	
12 Vinyl chloride	62	3.801	3.803	-0.002	99	210834	2.00	2.02	
13 Butadiene	54	3.876	3.876	0.000	85	143038	2.00	2.06	
14 Butane	43	3.876	3.879	-0.003	94	293638	2.00	1.99	
15 Bromomethane	94	4.141	4.141	-0.001	98	204127	2.00	1.98	
16 Chloroethane	64	4.254	4.258	-0.004	91	98257	2.00	1.95	
17 Ethanol	31	4.345	4.357	-0.012	97	345378	9.99	9.64	
18 Vinyl bromide	106	4.507	4.511	-0.004	97	194576	2.00	1.99	
19 2-Methylbutane	43	4.556	4.560	-0.004	89	196053	2.00	1.97	
21 Acrolein	56	4.739	4.742	-0.003	28	30056	2.00	2.06	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	99	743344	2.00	1.98	
22 Acetonitrile	40	4.788	4.793	-0.005	98	61466	2.00	2.06	
23 Acetone	58	4.825	4.835	-0.010	99	208378	5.87	5.96	
25 Pentane	72	4.933	4.937	-0.004	98	37027	2.00	2.04	
24 Isopropyl alcohol	45	4.922	4.939	-0.017	98	695832	5.87	5.75	
26 Ethyl ether	31	5.068	5.075	-0.007	92	162376	2.00	1.97	
27 1,1-Dichloroethene	96	5.354	5.354	0.000	98	187192	2.00	1.97	
28 Acrylonitrile	53	5.429	5.435	-0.006	95	84597	2.00	1.95	
29 2-Methyl-2-propanol	59	5.445	5.467	-0.022	95	283850	2.00	1.96	
30 1,1,2-Trichloro-1,2,2-trif	101	5.521	5.521	0.000	94	432242	2.00	1.97	
31 Methylene Chloride	84	5.656	5.656	0.000	89	158311	2.00	1.85	

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	5.672	5.673	-0.001	93	177955	2.00	1.93	
33 Carbon disulfide	76	5.796	5.797	-0.001	100	478845	2.00	1.98	
34 trans-1,2-Dichloroethene	96	6.389	6.393	-0.004	97	182249	2.00	1.96	
35 2-Methylpentane	43	6.421	6.426	-0.005	92	357751	2.00	1.96	
36 Methyl tert-butyl ether	73	6.502	6.513	-0.011	95	546952	2.00	1.98	
37 1,1-Dichloroethane	63	6.772	6.771	0.001	100	354630	2.00	1.96	
38 Vinyl acetate	43	6.874	6.881	-0.007	99	426758	2.00	2.05	
39 2-Butanone (MEK)	72	7.273	7.283	-0.010	99	79660	2.00	1.97	
40 Hexane	56	7.333	7.336	-0.003	85	138819	2.00	1.97	
41 Isopropyl ether	45	7.473	7.483	-0.010	94	526080	2.00	2.03	
42 cis-1,2-Dichloroethene	96	7.689	7.691	-0.002	95	196676	2.00	1.99	
43 Ethyl acetate	43	7.872	7.880	-0.008	98	346406	2.00	2.02	
44 Chloroform	83	8.018	8.019	-0.001	96	494799	2.00	1.98	
45 Tert-butyl ethyl ether	59	8.115	8.122	-0.007	95	525778	2.00	2.02	
46 Tetrahydrofuran	42	8.374	8.387	-0.013	88	177245	2.00	1.95	
47 1,1,1-Trichloroethane	97	8.994	8.997	-0.003	94	568413	2.00	1.97	
48 1,2-Dichloroethane	62	9.085	9.087	-0.002	99	350677	2.00	2.05	
49 Benzene	78	9.581	9.582	-0.001	96	572098	2.00	1.99	
50 Cyclohexane	69	9.587	9.590	-0.003	93	99763	2.00	2.06	
52 n-Butanol	31	9.576	9.606	-0.030	70	63344	2.00	2.06	
51 Carbon tetrachloride	117	9.608	9.611	-0.003	97	624502	2.00	2.08	
53 2,3-Dimethylpentane	71	9.738	9.740	-0.002	89	136123	2.00	2.06	
54 Thiophene	84	9.851	9.855	-0.004	95	332092	2.00	2.07	
55 Tert-amyl methyl ether	73	10.088	10.100	-0.012	98	556050	2.00	2.11	
56 Isooctane	57	10.412	10.414	-0.002	97	874389	2.00	2.05	
57 n-Heptane	71	10.811	10.816	-0.005	91	220272	2.00	2.06	
58 1,2-Dichloropropane	63	10.843	10.846	-0.003	84	201269	2.00	2.06	
59 Trichloroethene	130	10.897	10.897	0.000	95	315722	2.00	2.03	
60 Dibromomethane	93	10.956	10.961	-0.005	94	267885	2.00	2.06	
61 Dichlorobromomethane	83	11.124	11.126	-0.002	98	529608	2.00	2.12	
62 1,4-Dioxane	88	11.134	11.152	-0.018	90	83850	2.00	2.15	
63 Methyl methacrylate	41	11.253	11.260	-0.007	93	229984	2.00	2.13	
64 Methylcyclohexane	83	11.701	11.704	-0.003	95	465979	2.00	2.08	
65 4-Methyl-2-pentanone (MIBK)	43	12.121	12.133	-0.012	97	348265	2.00	2.11	
66 cis-1,3-Dichloropropene	75	12.170	12.174	-0.004	95	379694	2.00	2.10	
67 trans-1,3-Dichloropropene	75	12.892	12.897	-0.005	97	373664	2.00	2.09	
68 Toluene	91	13.016	13.021	-0.005	93	676247	2.00	2.03	
69 1,1,2-Trichloroethane	83	13.092	13.091	0.001	98	206257	2.00	2.06	
70 2-Methylthiophene	97	13.173	13.173	0.000	97	580302	2.00	2.07	
71 3-Methylthiophene	97	13.378	13.381	-0.003	99	571930	2.00	2.06	
72 2-Hexanone	58	13.507	13.519	-0.012	94	174060	2.00	2.18	
73 n-Octane	85	13.777	13.780	-0.003	88	249240	2.00	2.07	
74 Chlorodibromomethane	129	13.798	13.803	-0.005	97	534023	2.00	2.14	
75 Ethylene Dibromide	107	14.089	14.092	-0.003	98	416730	2.00	2.13	
76 Tetrachloroethene	129	14.192	14.195	-0.003	95	310406	2.00	2.04	
77 Chlorobenzene	112	15.082	15.082	0.000	93	575122	2.00	2.04	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	90	577752	2.00	2.02	
79 Ethylbenzene	91	15.389	15.393	-0.004	99	954045	2.00	2.05	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	772778	2.00	2.11	
81 m-Xylene & p-Xylene	91	15.556	15.559	-0.003	99	1555433	4.00	4.14	
82 Bromoform	173	15.977	15.979	-0.002	96	503085	2.00	2.15	
83 Styrene	104	16.025	16.027	-0.002	97	554081	2.00	2.23	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.025	16.029	-0.004	89	424281	2.00	2.08	
85 o-Xylene	91	16.085	16.088	-0.003	98	789853	2.00	2.05	
86 1,1,2,2-Tetrachloroethane	83	16.408	16.411	-0.003	98	522069	2.00	2.15	
87 1,2,3-Trichloropropane	110	16.565	16.565	0.000	96	184265	2.00	2.08	
88 Isopropylbenzene	105	16.689	16.692	-0.003	97	1134088	2.00	2.03	
89 N-Propylbenzene	120	17.244	17.246	-0.002	99	308856	2.00	2.11	
90 2-Chlorotoluene	126	17.276	17.278	-0.002	97	279105	2.00	2.04	
91 4-Ethyltoluene	105	17.406	17.409	-0.003	98	1105029	2.00	2.10	
92 1,3,5-Trimethylbenzene	120	17.487	17.490	-0.003	92	521704	2.00	2.12	
93 Alpha Methyl Styrene	118	17.735	17.734	0.001	87	435119	2.00	2.19	
94 n-Decane	57	17.837	17.837	0.000	93	533364	2.00	2.13	
95 tert-Butylbenzene	119	17.940	17.939	0.001	92	1088441	2.00	2.10	
96 1,2,4-Trimethylbenzene	105	17.950	17.953	-0.003	96	993298	2.00	2.10	
97 1,3-Dichlorobenzene	146	18.220	18.223	-0.003	97	730798	2.00	2.05	
98 sec-Butylbenzene	105	18.225	18.225	0.000	98	1415485	2.00	2.13	
99 Benzyl chloride	91	18.301	18.303	-0.002	98	961111	2.00	2.16	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	94	714901	2.00	2.05	
101 4-Isopropyltoluene	119	18.398	18.402	-0.004	97	1259395	2.00	2.14	
102 1,2,3-Trimethylbenzene	105	18.441	18.445	-0.004	98	749546	2.00	2.13	
103 Butylcyclohexane	83	18.517	18.520	-0.003	95	729918	2.00	2.10	
104 1,2-Dichlorobenzene	146	18.689	18.689	0.000	94	701112	2.00	2.07	
105 2,3-Dihydroindene	117	18.689	18.693	-0.004	93	908631	2.00	2.11	
106 Indene	116	18.824	18.827	-0.003	91	670154	2.00	2.13	
107 n-Butylbenzene	91	18.851	18.854	-0.003	98	1164905	2.00	2.12	
108 Undecane	57	19.207	19.209	-0.002	92	622503	2.00	2.12	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.239	19.239	0.000	97	931315	2.00	2.12	
110 1,2-Dibromo-3-Chloropropan	157	19.309	19.308	0.001	99	302962	2.00	2.08	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.635	-0.002	96	1160795	2.00	2.20	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	94	687501	2.00	2.17	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	96	955751	2.00	2.21	
114 Dodecane	57	20.280	20.280	0.000	93	556303	2.00	2.13	
115 1,2,4-Trichlorobenzene	180	20.420	20.418	0.002	94	668939	2.00	2.24	
116 Naphthalene	128	20.544	20.546	-0.002	99	1395111	2.00	2.23	
117 Benzo(b)thiophene	134	20.647	20.645	0.002	99	820908	2.00	2.25	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	95	640650	2.00	2.17	
119 1,2,3-Trichlorobenzene	180	20.825	20.825	-0.001	95	640410	2.00	2.27	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	99	852913	6.04	6.56	
121 1-Methylnaphthalene	142	21.801	21.801	0.000	100	834902	6.04	6.45	
A 122 C6 Range	1	7.343	(7.303-7.383)		0	1313930	2.00	2.03	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	1704710	2.00	2.10	
S 126 Xylenes, Total	100				0		5.99	6.19	
S 127 1,2-Dichloroethene, Total	1				0		4.00	3.96	

Reagents:

40L6DNP_00011

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC06.D

Injection Date: 15-Mar-2017 18:13:30

Instrument ID: MG

Operator ID: 7126

Lims ID: ICIS L6

Worklist Smp#: 8

Client ID:

Purge Vol: 500.000 mL

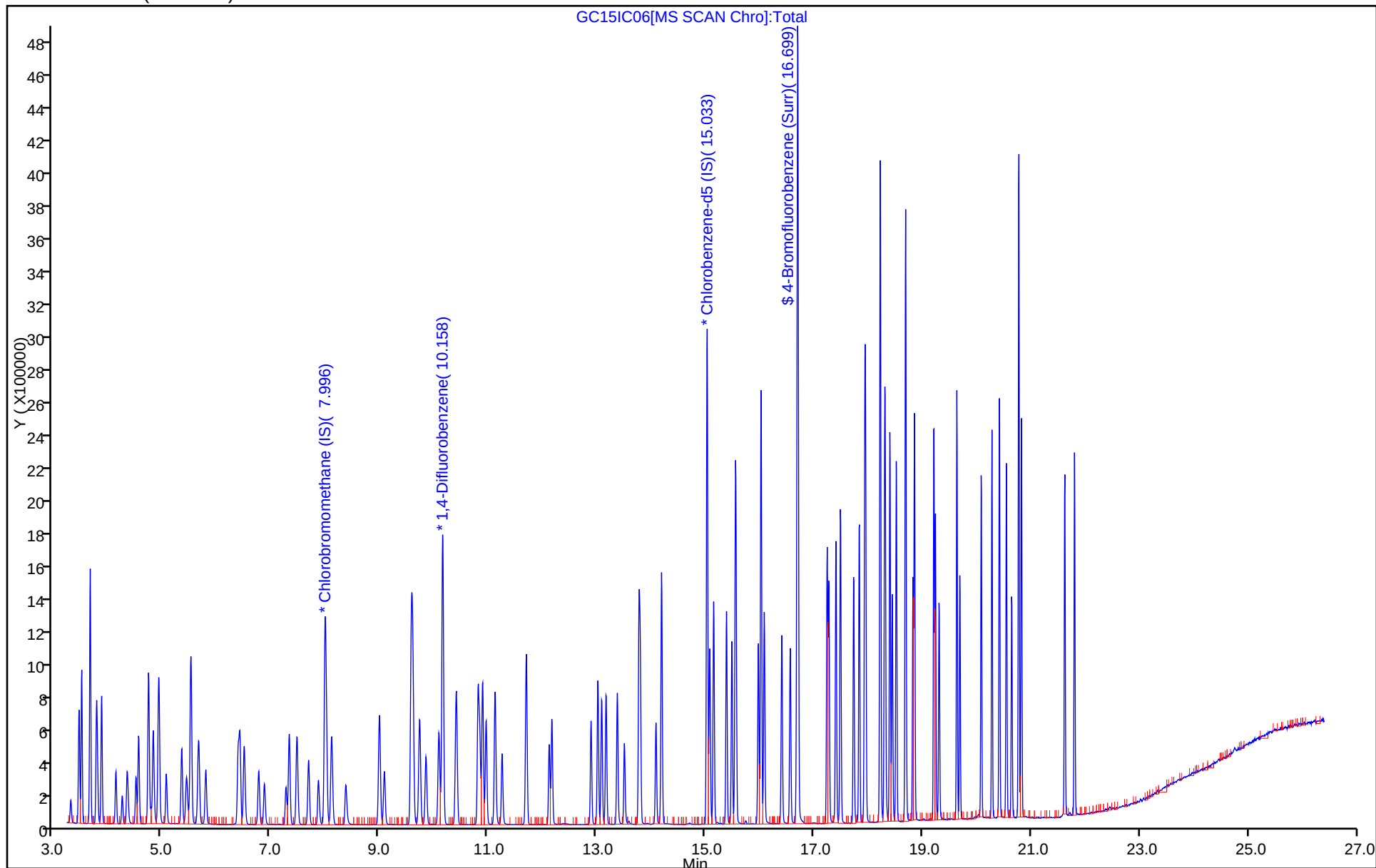
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC06.D

Injection Date: 15-Mar-2017 18:13:30

Instrument ID: MG

Lims ID: ICIS L6

Client ID:

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 8

Purge Vol: 500.000 mL

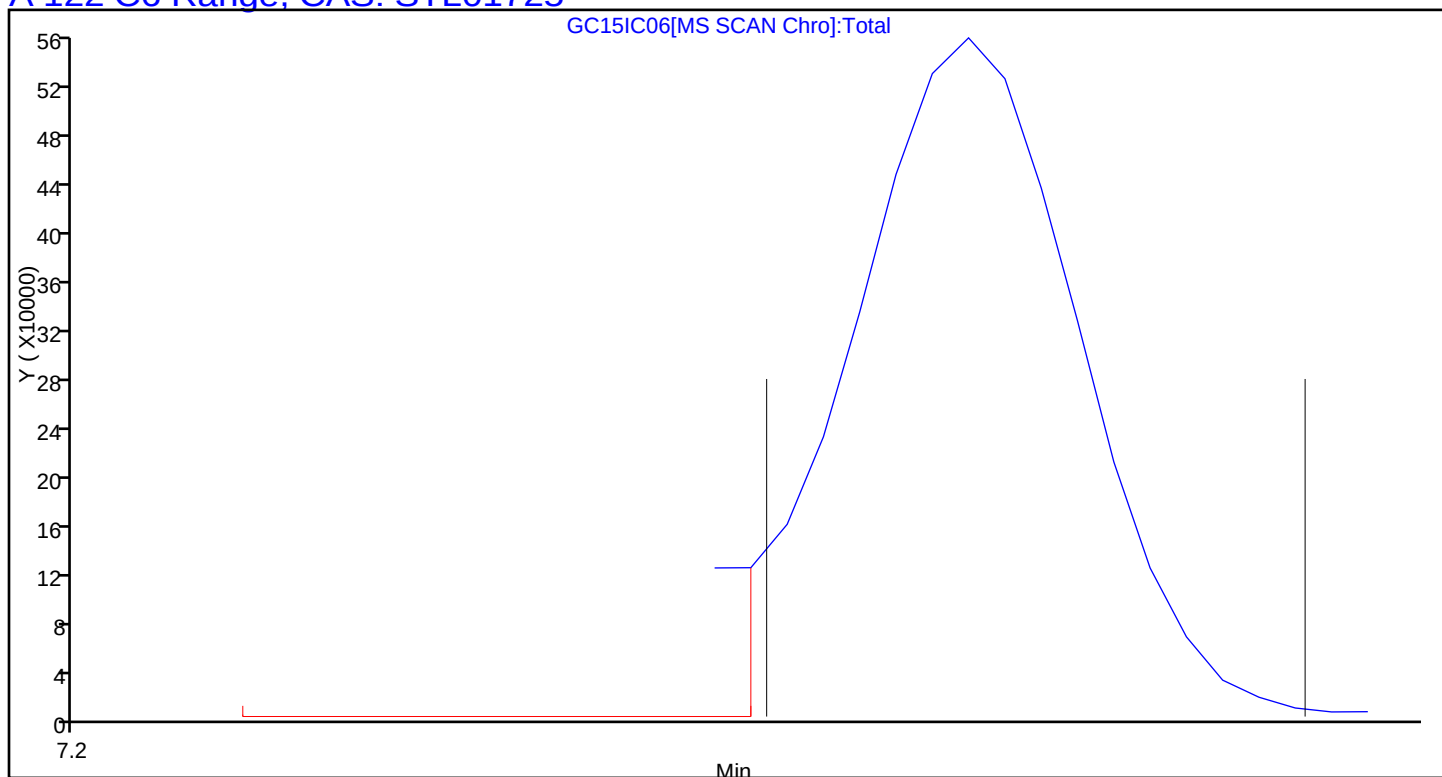
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC06.D

Injection Date: 15-Mar-2017 18:13:30

Instrument ID: MG

Lims ID: ICIS L6

Client ID:

Operator ID: 7126

ALS Bottle#: 5

Worklist Smp#: 8

Purge Vol: 500.000 mL

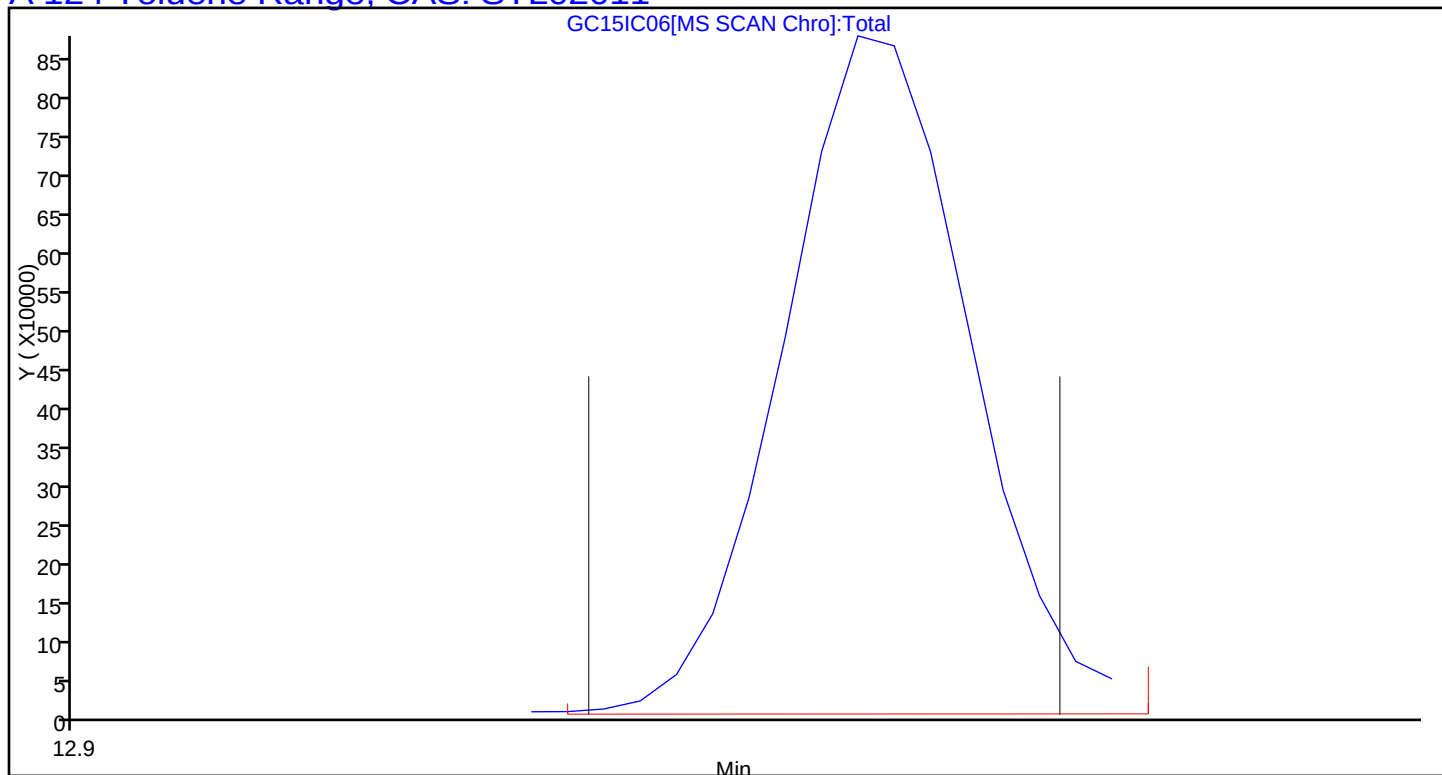
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC07.D
 Lims ID: IC L7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 15-Mar-2017 18:56:30 ALS Bottle#: 6 Worklist Smp#: 9
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-009
 Misc. Info.: 083678
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:22:47 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: tajh

Date: 16-Mar-2017 11:56:48

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	7.996	7.993	0.003	84	379572	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.164	10.161	0.003	94	1825436	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.039	15.034	0.005	87	1827873	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.710	16.705	0.005	95	1443792	4.00	4.00	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	96	161083	4.00	3.82	
7 Propene	41	3.466	3.466	0.000	97	366636	4.00	3.65	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	1518249	4.00	3.78	
9 Chloromethane	52	3.661	3.659	0.002	97	102473	4.00	3.79	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.669	0.002	91	925480	4.00	3.87	
11 Acetaldehyde	44	3.785	3.786	-0.001	89	595674	20.0	18.8	
12 Vinyl chloride	62	3.806	3.803	0.003	99	414360	4.00	3.73	
13 Butadiene	54	3.876	3.876	0.000	70	283835	4.00	3.84	
14 Butane	43	3.882	3.879	0.003	85	583059	4.00	3.71	
15 Bromomethane	94	4.141	4.141	0.000	98	425627	4.00	3.88	
16 Chloroethane	64	4.259	4.258	0.001	92	204064	4.00	3.80	
17 Ethanol	31	4.356	4.357	-0.001	98	707984	20.0	18.5	
18 Vinyl bromide	106	4.513	4.511	0.002	96	403357	4.00	3.88	
19 2-Methylbutane	43	4.561	4.560	0.001	89	399830	4.00	3.76	
21 Acrolein	56	4.739	4.742	-0.003	96	69764	4.00	4.49	
20 Trichlorofluoromethane	101	4.744	4.743	0.001	99	1532462	4.00	3.83	
22 Acetonitrile	40	4.793	4.793	0.000	98	123503	4.00	3.88	
23 Acetone	58	4.831	4.835	-0.004	99	417742	11.7	11.2	
25 Pentane	72	4.939	4.937	0.002	95	74522	4.00	3.85	
24 Isopropyl alcohol	45	4.939	4.939	0.000	93	1433726	11.7	11.1	
26 Ethyl ether	31	5.068	5.075	-0.007	92	331731	4.00	3.78	
27 1,1-Dichloroethene	96	5.354	5.354	0.000	98	387339	4.00	3.83	
28 Acrylonitrile	53	5.435	5.435	0.000	95	176062	4.00	3.82	
29 2-Methyl-2-propanol	59	5.462	5.467	-0.005	95	610004	4.00	3.96	
30 1,1,2-Trichloro-1,2,2-trif	101	5.521	5.521	0.000	94	891000	4.00	3.82	
31 Methylene Chloride	84	5.661	5.656	0.005	88	319885	4.00	3.50	

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	5.677	5.673	0.004	93	358922	4.00	3.66	
33 Carbon disulfide	76	5.801	5.797	0.004	100	979418	4.00	3.80	
34 trans-1,2-Dichloroethene	96	6.395	6.393	0.002	98	385716	4.00	3.90	
35 2-Methylpentane	43	6.427	6.426	0.001	92	714141	4.00	3.68	
36 Methyl tert-butyl ether	73	6.508	6.513	-0.005	95	1134810	4.00	3.86	
37 1,1-Dichloroethane	63	6.777	6.771	0.006	100	724800	4.00	3.75	
38 Vinyl acetate	43	6.880	6.881	-0.001	99	894260	4.00	4.03	
39 2-Butanone (MEK)	72	7.279	7.283	-0.004	99	166968	4.00	3.87	
40 Hexane	56	7.338	7.336	0.002	85	281421	4.00	3.75	
41 Isopropyl ether	45	7.478	7.483	-0.005	93	1079183	4.00	3.91	
42 cis-1,2-Dichloroethene	96	7.694	7.691	0.003	96	407485	4.00	3.88	
43 Ethyl acetate	43	7.877	7.880	-0.003	98	713928	4.00	3.90	
44 Chloroform	83	8.023	8.019	0.004	96	1012011	4.00	3.80	
45 Tert-butyl ethyl ether	59	8.120	8.122	-0.002	94	1073194	4.00	3.87	
46 Tetrahydrofuran	42	8.379	8.387	-0.008	89	365105	4.00	3.77	
47 1,1,1-Trichloroethane	97	8.999	8.997	0.002	94	1184348	4.00	3.85	
48 1,2-Dichloroethane	62	9.091	9.087	0.004	99	713806	4.00	3.87	
49 Benzene	78	9.581	9.582	-0.001	96	1173319	4.00	3.78	
50 Cyclohexane	69	9.592	9.590	0.002	93	203651	4.00	3.90	
52 n-Butanol	31	9.587	9.606	-0.019	70	136613	4.00	4.12	
51 Carbon tetrachloride	117	9.614	9.611	0.003	98	1329349	4.00	4.10	
53 2,3-Dimethylpentane	71	9.738	9.740	-0.002	89	282206	4.00	3.95	
54 Thiophene	84	9.856	9.855	0.001	95	686171	4.00	3.96	
55 Tert-amyl methyl ether	73	10.094	10.100	-0.006	98	1157370	4.00	4.07	
56 Isooctane	57	10.412	10.414	-0.002	97	1779183	4.00	3.87	
57 n-Heptane	71	10.816	10.816	0.000	90	450272	4.00	3.92	
58 1,2-Dichloropropane	63	10.849	10.846	0.003	87	408812	4.00	3.88	
59 Trichloroethene	130	10.897	10.897	0.000	95	664844	4.00	3.96	
60 Dibromomethane	93	10.962	10.961	0.001	93	556851	4.00	3.98	
61 Dichlorobromomethane	83	11.129	11.126	0.003	98	1122661	4.00	4.18	
62 1,4-Dioxane	88	11.145	11.152	-0.007	89	171415	4.00	4.08	
63 Methyl methacrylate	41	11.258	11.260	-0.002	93	487379	4.00	4.19	
64 Methylcyclohexane	83	11.706	11.704	0.002	94	959276	4.00	3.97	
65 4-Methyl-2-pentanone (MIBK)	43	12.127	12.133	-0.006	97	733481	4.00	4.12	
66 cis-1,3-Dichloropropene	75	12.175	12.174	0.001	95	790238	4.00	4.05	
67 trans-1,3-Dichloropropene	75	12.898	12.897	0.001	97	789307	4.00	4.03	
68 Toluene	91	13.022	13.021	0.001	94	1420544	4.00	3.90	
69 1,1,2-Trichloroethane	83	13.092	13.091	0.001	98	426290	4.00	3.90	
70 2-Methylthiophene	97	13.173	13.173	0.000	97	1212899	4.00	3.97	
71 3-Methylthiophene	97	13.383	13.381	0.002	99	1202168	4.00	3.97	
72 2-Hexanone	58	13.512	13.519	-0.007	94	373275	4.00	4.28	
73 n-Octane	85	13.782	13.780	0.002	87	522104	4.00	3.97	
74 Chlorodibromomethane	129	13.804	13.803	0.001	97	1217195	4.00	4.47	
75 Ethylene Dibromide	107	14.095	14.092	0.003	97	890944	4.00	4.17	
76 Tetrachloroethene	129	14.197	14.195	0.002	95	660677	4.00	3.97	
77 Chlorobenzene	112	15.082	15.082	0.000	93	1217110	4.00	3.95	
78 2,3-Dimethylheptane	43	15.157	15.155	0.002	88	1160951	4.00	3.72	
79 Ethylbenzene	91	15.394	15.393	0.001	98	2020166	4.00	3.97	
80 2-Ethylthiophene	97	15.491	15.491	0.000	98	1634721	4.00	4.08	
81 m-Xylene & p-Xylene	91	15.562	15.559	0.003	99	3265060	8.00	7.95	
82 Bromoform	173	15.982	15.979	0.003	97	1302027	4.00	4.78	
83 Styrene	104	16.031	16.027	0.004	97	1208558	4.00	4.46	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.031	16.029	0.002	88	848900	4.00	3.80	
85 o-Xylene	91	16.090	16.088	0.002	98	1652204	4.00	3.93	
86 1,1,2,2-Tetrachloroethane	83	16.414	16.411	0.003	99	1097235	4.00	4.14	
87 1,2,3-Trichloropropane	110	16.570	16.565	0.005	96	385852	4.00	3.98	
88 Isopropylbenzene	105	16.694	16.692	0.002	97	2402575	4.00	3.94	
89 N-Propylbenzene	120	17.249	17.246	0.003	99	660707	4.00	4.13	
90 2-Chlorotoluene	126	17.282	17.278	0.004	96	602879	4.00	4.04	
91 4-Ethyltoluene	105	17.411	17.409	0.002	98	2357742	4.00	4.10	
92 1,3,5-Trimethylbenzene	120	17.492	17.490	0.002	92	1116920	4.00	4.15	
93 Alpha Methyl Styrene	118	17.735	17.734	0.001	88	987378	4.00	4.70	
94 n-Decane	57	17.837	17.837	0.000	94	1089510	4.00	3.98	
95 tert-Butylbenzene	119	17.940	17.939	0.001	93	2353545	4.00	4.15	
96 1,2,4-Trimethylbenzene	105	17.956	17.953	0.003	95	2134348	4.00	4.14	
98 sec-Butylbenzene	105	18.225	18.223	0.002	97	3068495	4.00	4.22	
97 1,3-Dichlorobenzene	146	18.225	18.223	0.002	98	1666142	4.00	4.28	
99 Benzyl chloride	91	18.306	18.303	0.003	98	2087808	4.00	4.29	
100 1,4-Dichlorobenzene	146	18.317	18.316	0.001	97	1576716	4.00	4.14	
101 4-Isopropyltoluene	119	18.403	18.400	0.003	97	2688329	4.00	4.19	
102 1,2,3-Trimethylbenzene	105	18.447	18.445	0.001	97	1558491	4.00	4.05	
103 Butylcyclohexane	83	18.522	18.520	0.002	96	1513686	4.00	3.98	
104 1,2-Dichlorobenzene	146	18.689	18.689	0.000	95	1579523	4.00	4.26	
105 2,3-Dihydroindene	117	18.695	18.693	0.002	94	1987507	4.00	4.23	
106 Indene	116	18.829	18.827	0.002	92	1470712	4.00	4.28	
107 n-Butylbenzene	91	18.856	18.854	0.002	97	2406878	4.00	4.01	
108 Undecane	57	19.212	19.209	0.003	91	1224656	4.00	3.81	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.239	19.239	0.000	97	1953205	4.00	4.08	
110 1,2-Dibromo-3-Chloropropan	157	19.309	19.308	0.001	99	710910	4.00	4.47	
111 1,2,4,5-Tetramethylbenzene	119	19.638	19.634	0.004	96	2396674	4.00	4.16	
112 1,2,3,5-Tetramethylbenzene	119	19.692	19.689	0.003	95	1394400	4.00	4.03	
113 1,2,3,4-Tetramethylbenzene	119	20.086	20.083	0.003	96	1927205	4.00	4.08	
114 Dodecane	57	20.280	20.280	0.000	93	1015546	4.00	3.56	
115 1,2,4-Trichlorobenzene	180	20.420	20.418	0.002	94	1358330	4.00	4.16	
116 Naphthalene	128	20.550	20.545	0.005	99	2902807	4.00	4.24	
117 Benzo(b)thiophene	134	20.647	20.645	0.002	99	1724284	4.00	4.33	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	96	1288187	4.00	4.00	
119 1,2,3-Trichlorobenzene	180	20.825	20.825	0.000	95	1263910	4.00	4.10	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	100	2020346	12.1	14.2	
121 1-Methylnaphthalene	142	21.801	21.801	0.000	100	2020334	12.1	14.3	
A 122 C6 Range	1	7.348	(7.308-7.388)		0	2723811	4.00	3.79	
A 124 Toluene Range	1	13.017	(12.982-13.052)		0	3522873	4.00	4.03	
S 126 Xylenes, Total	100				0		12.0	11.9	
S 127 1,2-Dichloroethene, Total	1				0		8.00	7.78	

Reagents:

40L7DNP_00010

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 16-Mar-2017 14:22:48

Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC07.D

Injection Date: 15-Mar-2017 18:56:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L7

Worklist Smp#: 9

Client ID:

Purge Vol: 500.000 mL

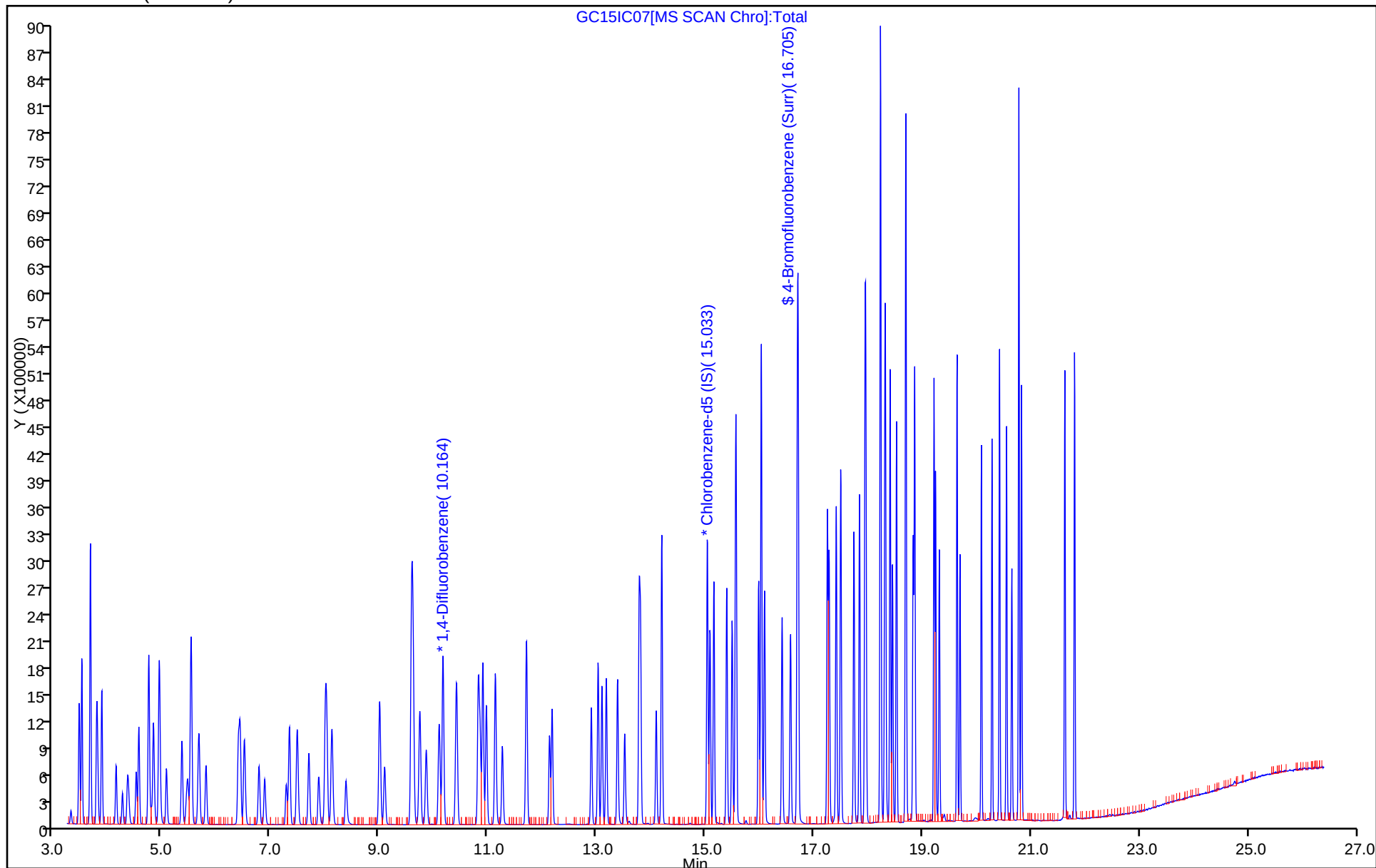
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC07.D

Injection Date: 15-Mar-2017 18:56:30

Instrument ID: MG

Lims ID: IC L7

Client ID:

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 9

Purge Vol: 500.000 mL

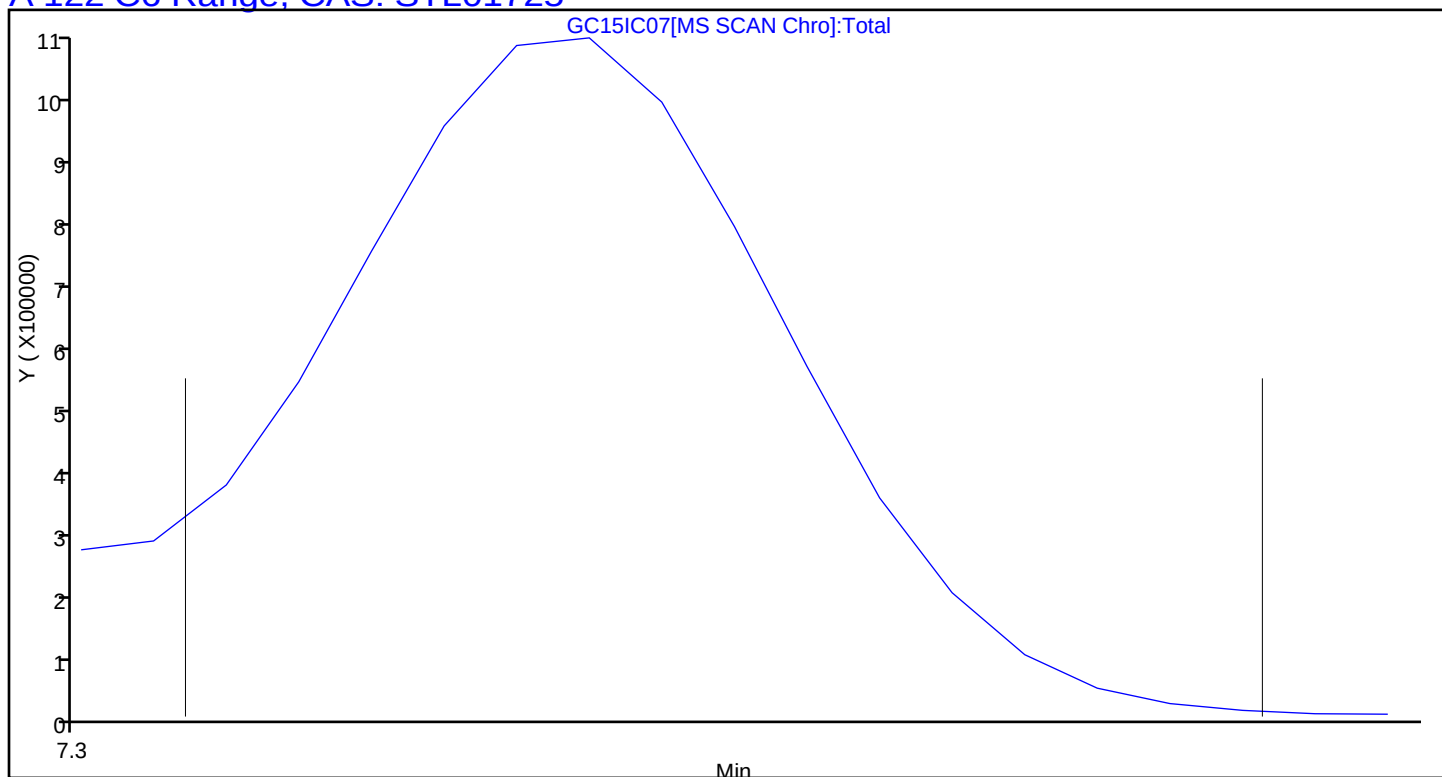
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC07.D

Injection Date: 15-Mar-2017 18:56:30

Instrument ID: MG

Lims ID: IC L7

Client ID:

Operator ID: 7126

ALS Bottle#: 6

Worklist Smp#: 9

Purge Vol: 500.000 mL

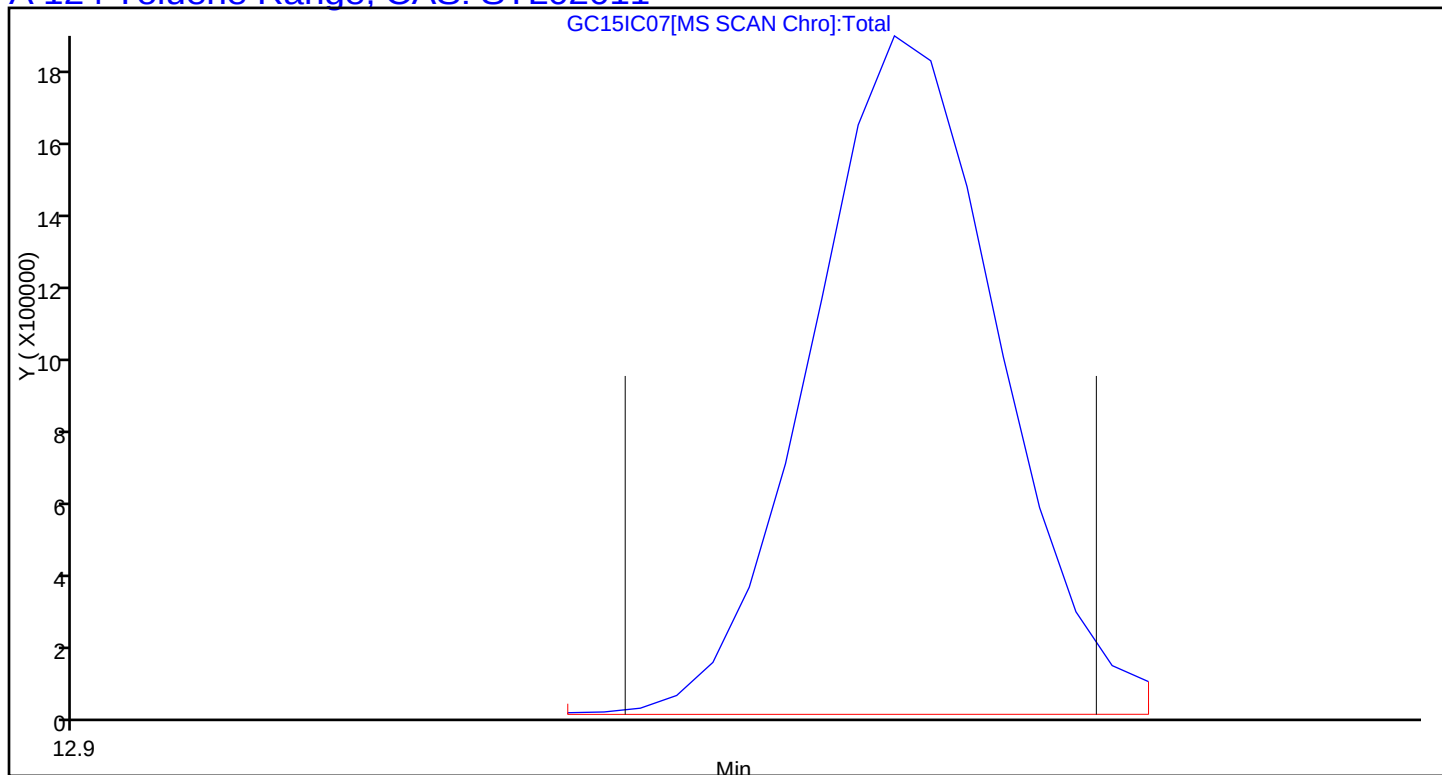
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC08.D
 Lims ID: IC L8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 15-Mar-2017 19:39:30 ALS Bottle#: 7 Worklist Smp#: 10
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-010
 Misc. Info.: 083677
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:24:45 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: tajh

Date: 16-Mar-2017 08:39:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.002	7.993	0.009	82	401002	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.169	10.161	0.008	94	1924493	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.039	15.034	0.005	87	1944152	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.710	16.705	0.005	95	1558022	4.00	4.06	
6 Chlorodifluoromethane	67	3.461	3.457	0.004	96	317499	8.00	7.12	
7 Propene	41	3.467	3.466	0.001	97	715294	8.00	6.74	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	100	3065573	8.00	7.22	
9 Chloromethane	52	3.661	3.659	0.002	100	195522	8.00	6.85	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.669	0.002	89	1944481	8.00	7.70	
11 Acetaldehyde	44	3.785	3.786	-0.001	90	1132144	40.0	33.8	
12 Vinyl chloride	62	3.806	3.803	0.003	99	808059	8.00	6.89	
13 Butadiene	54	3.876	3.876	0.000	71	549398	8.00	7.03	
14 Butane	43	3.882	3.879	0.003	84	1092508	8.00	6.57	
15 Bromomethane	94	4.141	4.141	0.000	98	850291	8.00	7.34	
16 Chloroethane	64	4.259	4.258	0.001	93	409306	8.00	7.21	
17 Ethanol	31	4.372	4.357	0.015	98	1409489	40.0	34.9	
18 Vinyl bromide	106	4.518	4.511	0.007	96	817628	8.00	7.44	
19 2-Methylbutane	43	4.561	4.560	0.001	89	786537	8.00	7.00	
21 Acrolein	56	4.739	4.742	-0.003	99	133516	8.00	8.13	
20 Trichlorofluoromethane	101	4.745	4.743	0.001	99	3119354	8.00	7.38	
22 Acetonitrile	40	4.798	4.793	0.005	98	247919	8.00	7.37	
23 Acetone	58	4.836	4.835	0.001	99	841477	23.5	21.4	
25 Pentane	72	4.939	4.937	0.002	96	151563	8.00	7.42	
24 Isopropyl alcohol	45	4.960	4.939	0.021	97	2844607	23.5	20.9	
26 Ethyl ether	31	5.073	5.075	-0.002	92	672373	8.00	7.26	
27 1,1-Dichloroethene	96	5.359	5.354	0.005	99	797692	8.00	7.46	
28 Acrylonitrile	53	5.440	5.435	0.005	95	356803	8.00	7.32	
29 2-Methyl-2-propanol	59	5.483	5.467	0.016	95	1241041	8.00	7.62	
30 1,1,2-Trichloro-1,2,2-trif	101	5.526	5.521	0.005	92	1855781	8.00	7.53	
31 Methylene Chloride	84	5.661	5.656	0.005	87	646443	8.00	6.70	

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	5.677	5.673	0.004	92	711970	8.00	6.87	
33 Carbon disulfide	76	5.801	5.797	0.004	100	1984338	8.00	7.29	
34 trans-1,2-Dichloroethene	96	6.400	6.393	0.007	98	803766	8.00	7.69	
35 2-Methylpentane	43	6.427	6.426	0.001	91	1428051	8.00	6.96	
36 Methyl tert-butyl ether	73	6.508	6.513	-0.005	95	2321003	8.00	7.48	
37 1,1-Dichloroethane	63	6.777	6.771	0.006	100	1462691	8.00	7.17	
38 Vinyl acetate	43	6.885	6.881	0.004	99	1793080	8.00	7.65	
39 2-Butanone (MEK)	72	7.284	7.283	0.001	99	344230	8.00	7.54	
40 Hexane	56	7.338	7.336	0.002	84	560820	8.00	7.08	
41 Isopropyl ether	45	7.484	7.483	0.001	93	2148000	8.00	7.37	
42 cis-1,2-Dichloroethene	96	7.700	7.691	0.009	95	845905	8.00	7.62	
43 Ethyl acetate	43	7.883	7.880	0.003	98	1449886	8.00	7.50	
44 Chloroform	83	8.028	8.019	0.009	96	2066202	8.00	7.35	
45 Tert-butyl ethyl ether	59	8.126	8.122	0.004	94	2202848	8.00	7.52	
46 Tetrahydrofuran	42	8.384	8.387	-0.003	88	742637	8.00	7.25	
47 1,1,1-Trichloroethane	97	9.004	8.997	0.007	94	2454172	8.00	7.54	
48 1,2-Dichloroethane	62	9.096	9.087	0.009	99	1447194	8.00	7.45	
49 Benzene	78	9.592	9.582	0.010	96	2421461	8.00	7.41	
50 Cyclohexane	69	9.592	9.590	0.002	95	407285	8.00	7.40	
52 n-Butanol	31	9.608	9.606	0.002	70	273762	8.00	7.82	
51 Carbon tetrachloride	117	9.619	9.611	0.008	98	2797102	8.00	8.19	
53 2,3-Dimethylpentane	71	9.743	9.740	0.003	88	569652	8.00	7.57	
54 Thiophene	84	9.862	9.855	0.007	94	1402526	8.00	7.68	
55 Tert-amyl methyl ether	73	10.099	10.100	-0.001	98	2396229	8.00	7.99	
56 Isooctane	57	10.417	10.414	0.003	97	3578687	8.00	7.37	
57 n-Heptane	71	10.822	10.816	0.006	88	916791	8.00	7.56	
58 1,2-Dichloropropane	63	10.854	10.846	0.008	83	823056	8.00	7.41	
59 Trichloroethene	130	10.903	10.897	0.006	97	1460218	8.00	8.25	
60 Dibromomethane	93	10.973	10.961	0.012	91	1171750	8.00	7.94	
61 Dichlorobromomethane	83	11.134	11.126	0.008	98	2343991	8.00	8.27	
62 1,4-Dioxane	88	11.151	11.152	-0.001	89	354151	8.00	8.00	
63 Methyl methacrylate	41	11.264	11.260	0.004	94	988227	8.00	8.06	
64 Methylcyclohexane	83	11.706	11.704	0.002	94	1980430	8.00	7.77	
65 4-Methyl-2-pentanone (MIBK)	43	12.137	12.133	0.004	96	1511574	8.00	8.05	
66 cis-1,3-Dichloropropene	75	12.181	12.174	0.007	94	1637962	8.00	7.97	
67 trans-1,3-Dichloropropene	75	12.903	12.897	0.006	97	1645268	8.00	7.90	
68 Toluene	91	13.027	13.021	0.006	94	2972164	8.00	7.67	
69 1,1,2-Trichloroethane	83	13.097	13.091	0.006	98	890354	8.00	7.67	
70 2-Methylthiophene	97	13.178	13.173	0.005	97	2514496	8.00	7.73	
71 3-Methylthiophene	97	13.388	13.381	0.007	99	2520669	8.00	7.83	
72 2-Hexanone	58	13.518	13.519	-0.001	94	769096	8.00	8.30	
73 n-Octane	85	13.782	13.780	0.002	85	1089002	8.00	7.78	
74 Chlorodibromomethane	129	13.809	13.803	0.006	97	2716554	8.00	9.38	
75 Ethylene Dibromide	107	14.100	14.092	0.008	98	1908708	8.00	8.39	
76 Tetrachloroethene	129	14.197	14.195	0.002	95	1442699	8.00	8.14	
77 Chlorobenzene	112	15.087	15.082	0.005	94	2618941	8.00	7.99	
78 2,3-Dimethylheptane	43	15.157	15.155	0.002	86	2286470	8.00	6.90	
79 Ethylbenzene	91	15.400	15.393	0.007	98	4239909	8.00	7.84	
80 2-Ethylthiophene	97	15.497	15.491	0.006	97	3415104	8.00	8.01	
81 m-Xylene & p-Xylene	91	15.567	15.559	0.008	99	6914176	16.0	15.8	
82 Bromoform	173	15.988	15.979	0.009	98	3110131	8.00	10.7	
83 Styrene	104	16.031	16.027	0.004	97	2643863	8.00	9.17	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.036	16.029	0.007	85	1702072	8.00	7.17	
85 o-Xylene	91	16.095	16.088	0.007	98	3451230	8.00	7.73	
86 1,1,2,2-Tetrachloroethane	83	16.419	16.411	0.008	99	2243454	8.00	7.97	
87 1,2,3-Trichloropropane	110	16.575	16.565	0.010	96	819612	8.00	7.95	
88 Isopropylbenzene	105	16.699	16.692	0.007	96	5091349	8.00	7.85	
89 N-Propylbenzene	120	17.249	17.246	0.003	100	1438960	8.00	8.46	
90 2-Chlorotoluene	126	17.282	17.278	0.004	97	1300045	8.00	8.19	
91 4-Ethyltoluene	105	17.417	17.409	0.008	98	5056909	8.00	8.28	
92 1,3,5-Trimethylbenzene	120	17.497	17.490	0.007	93	2423508	8.00	8.46	
93 Alpha Methyl Styrene	118	17.740	17.734	0.006	89	2181723	8.00	9.77	
94 n-Decane	57	17.843	17.837	0.006	94	2139210	8.00	7.35	
95 tert-Butylbenzene	119	17.945	17.939	0.006	92	5188127	8.00	8.59	
96 1,2,4-Trimethylbenzene	105	17.961	17.953	0.008	95	4611406	8.00	8.40	
98 sec-Butylbenzene	105	18.231	18.223	0.008	98	6810067	8.00	8.81	
97 1,3-Dichlorobenzene	146	18.231	18.223	0.008	97	3893907	8.00	9.41	
99 Benzyl chloride	91	18.312	18.303	0.009	99	4505667	8.00	8.70	
100 1,4-Dichlorobenzene	146	18.322	18.316	0.006	96	3654606	8.00	9.03	
101 4-Isopropyltoluene	119	18.409	18.400	0.009	97	5874319	8.00	8.61	
102 1,2,3-Trimethylbenzene	105	18.452	18.445	0.007	97	3285785	8.00	8.02	
103 Butylcyclohexane	83	18.522	18.520	0.002	96	3168620	8.00	7.84	
104 1,2-Dichlorobenzene	146	18.695	18.689	0.006	96	3656010	8.00	9.27	
105 2,3-Dihydroindene	117	18.700	18.693	0.007	93	4472405	8.00	8.94	
106 Indene	116	18.829	18.827	0.002	92	3210332	8.00	8.79	
107 n-Butylbenzene	91	18.856	18.854	0.002	97	5130283	8.00	8.04	
108 Undecane	57	19.212	19.209	0.003	90	2502915	8.00	7.33	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.245	19.239	0.006	97	4317337	8.00	8.47	
110 1,2-Dibromo-3-Chloropropan	157	19.315	19.308	0.007	97	1636568	8.00	9.67	
111 1,2,4,5-Tetramethylbenzene	119	19.638	19.634	0.004	96	5566375	8.00	9.09	
112 1,2,3,5-Tetramethylbenzene	119	19.692	19.689	0.003	95	3139429	8.00	8.53	
113 1,2,3,4-Tetramethylbenzene	119	20.086	20.083	0.003	97	4503997	8.00	8.96	
114 Dodecane	57	20.280	20.280	0.000	92	2482191	8.00	8.19	
115 1,2,4-Trichlorobenzene	180	20.420	20.418	0.002	93	3616219	8.00	10.4	
116 Naphthalene	128	20.550	20.545	0.005	99	6639288	8.00	9.13	
117 Benzo(b)thiophene	134	20.647	20.645	0.002	99	3862788	8.00	9.13	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	96	3465632	8.00	10.1	
119 1,2,3-Trichlorobenzene	180	20.825	20.825	0.000	96	3268537	8.00	9.98	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	99	5256646	24.2	34.8	
121 1-Methylnaphthalene	142	21.806	21.801	0.005	99	5132440	24.2	34.1	
A 122 C6 Range	1	7.348	(7.308-7.388)		0	5679805	8.00	7.50	
A 124 Toluene Range	1	13.022	(12.987-13.057)		0	7223375	8.00	7.84	
S 126 Xylenes, Total	100				0		24.0	23.5	
S 127 1,2-Dichloroethene, Total	1				0		16.0	15.3	

Reagents:

40L8DNP_00010

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC08.D

Injection Date: 15-Mar-2017 19:39:30

Instrument ID: MG

Operator ID: 7126

Lims ID: IC L8

Worklist Smp#: 10

Client ID:

Purge Vol: 500.000 mL

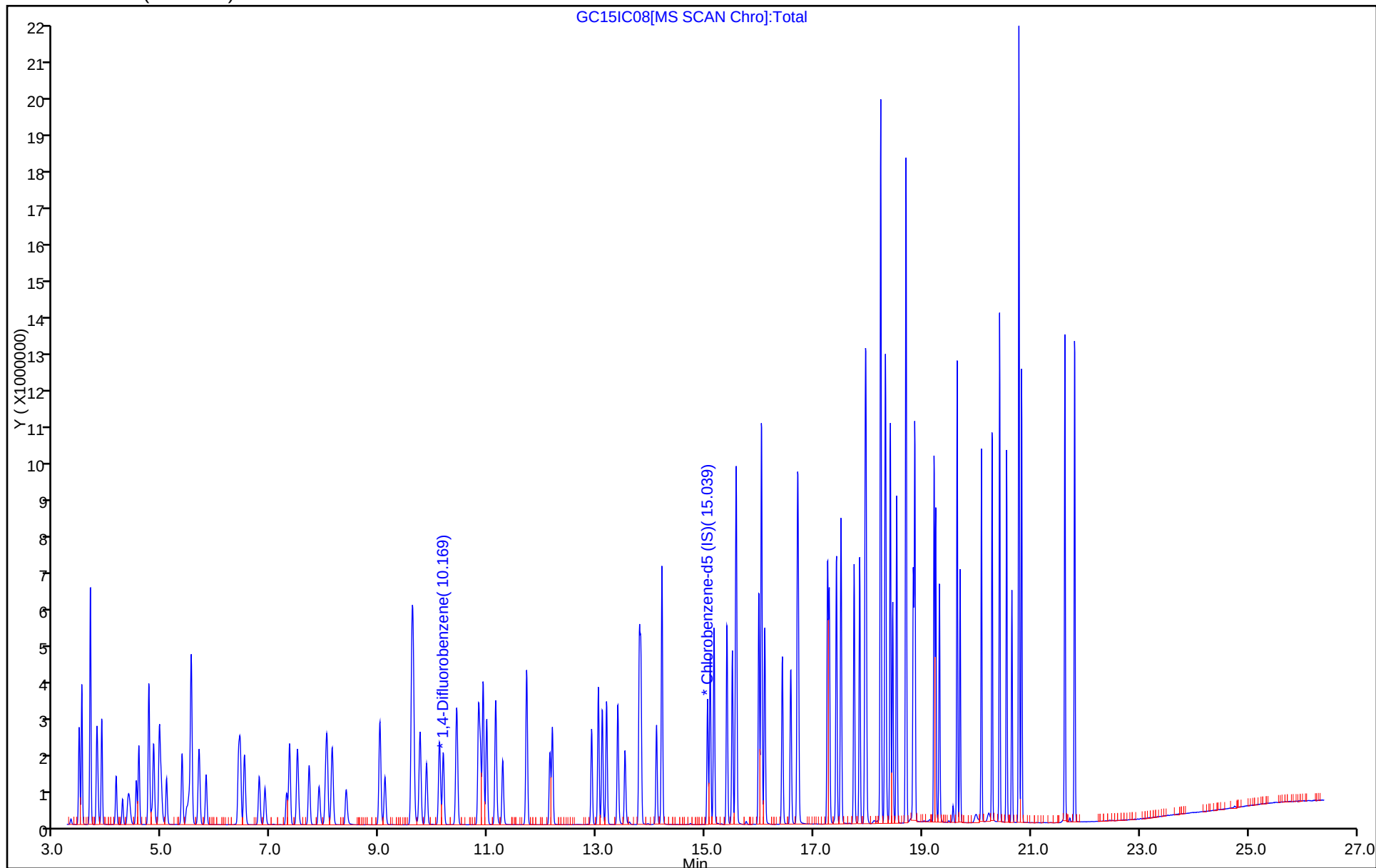
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



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Injection Date: 15-Mar-2017 19:39:30

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Purge Vol: 500.000 mL

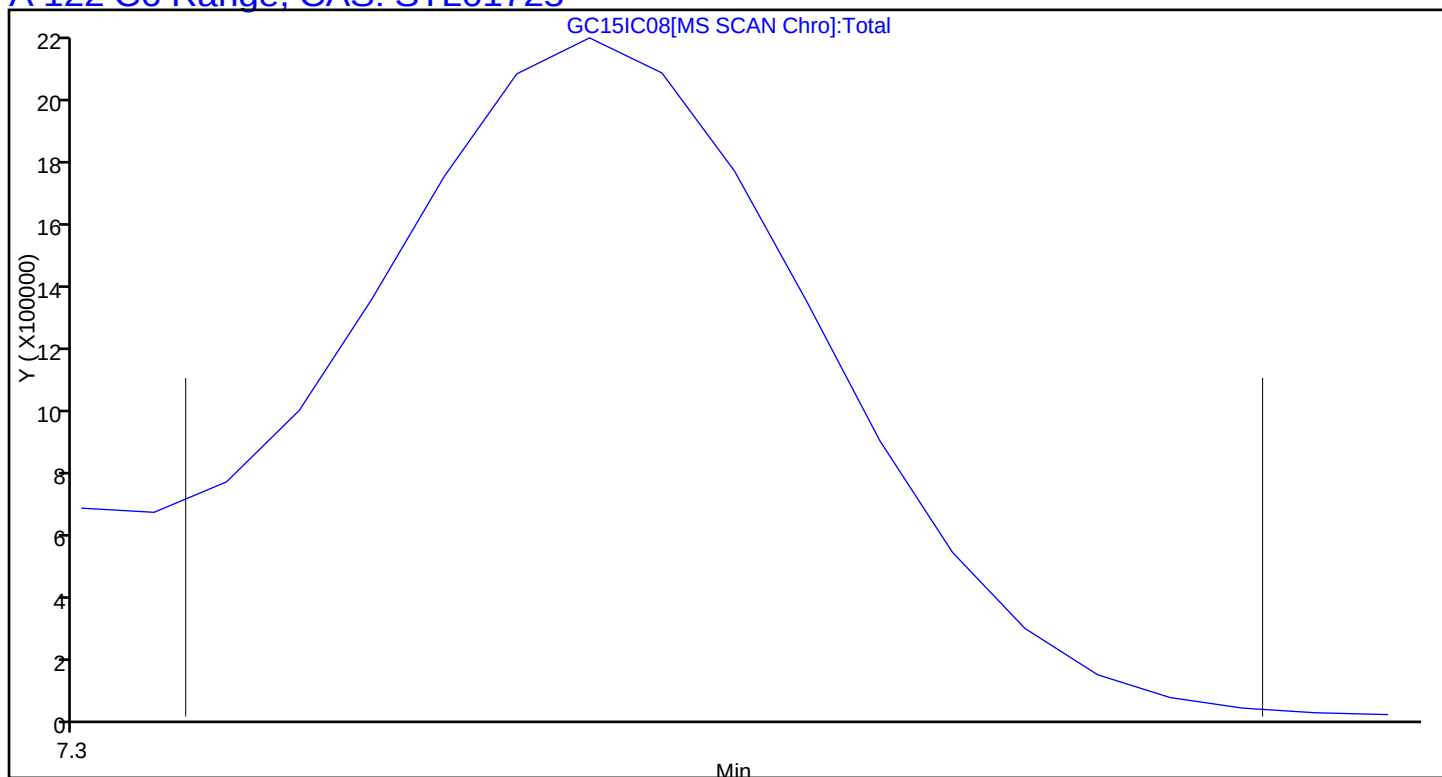
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

A 122 C6 Range, CAS: STL01725

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Purge Vol: 500.000 mL

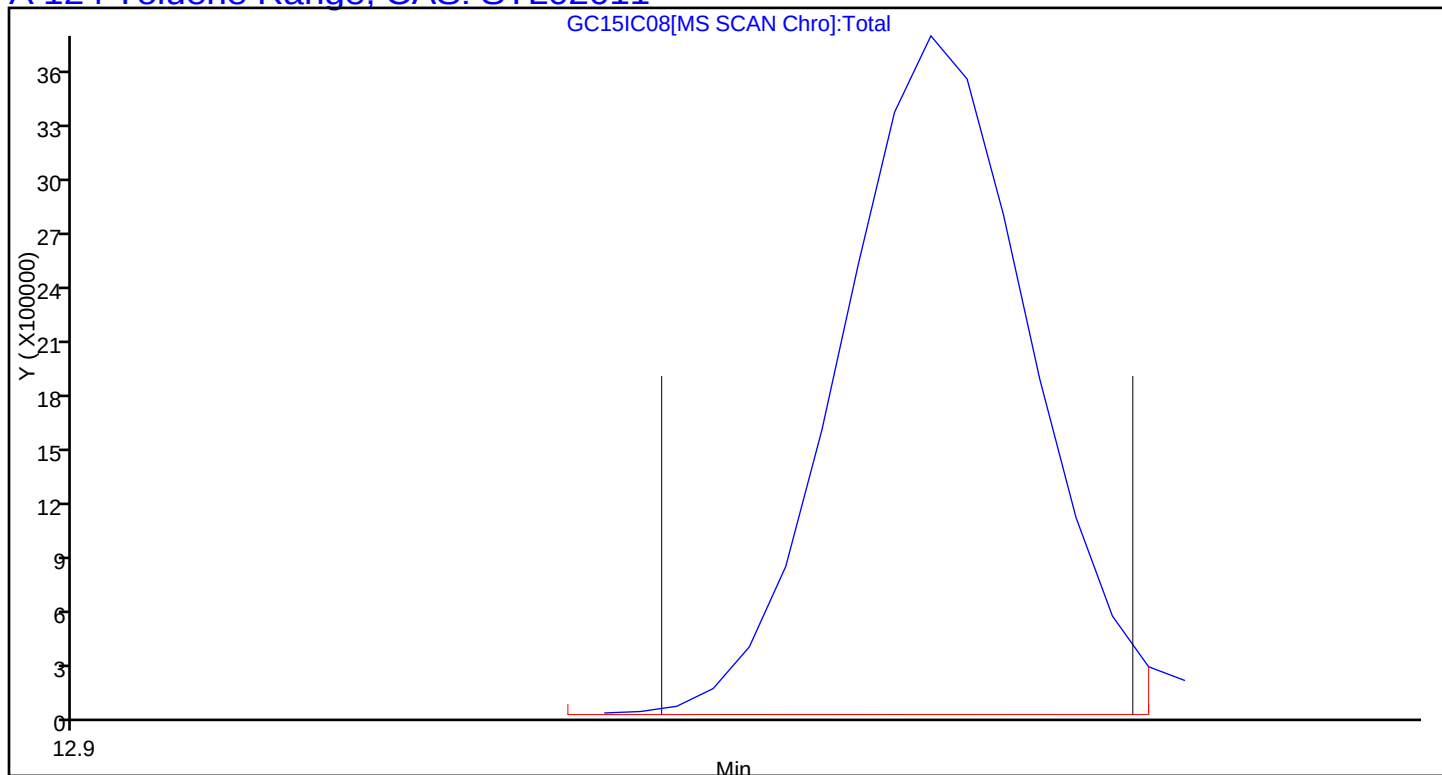
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Lims ID: IC L9
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 15-Mar-2017 20:21:30 ALS Bottle#: 8 Worklist Smp#: 11
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-011
 Misc. Info.: 083675
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 11-Apr-2017 10:07:15 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK028

First Level Reviewer: barlozhetskayaa

Date: 16-Mar-2017 14:32:37

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	8.023	7.993	0.030	87	442071	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.191	10.161	0.030	94	2104470	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.055	15.034	0.021	88	2112068	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.721	16.705	0.016	95	1689695	4.00	4.05	
6 Chlorodifluoromethane	67	3.461	3.457	0.004	96	648102	16.0	13.2	
7 Propene	41	3.472	3.466	0.006	97	1334692	16.0	11.4	
8 Dichlorodifluoromethane	85	3.515	3.510	0.005	99	6309639	16.0	13.5	
9 Chloromethane	52	3.666	3.659	0.007	97	381523	16.0	12.1	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.677	3.669	0.008	88	4340354	16.0	15.6	
11 Acetaldehyde	44	3.801	3.786	0.015	90	2180620	80.0	59.0	
12 Vinyl chloride	62	3.812	3.803	0.009	99	1585259	16.0	12.3	
13 Butadiene	54	3.887	3.876	0.011	71	1072769	16.0	12.5	
14 Butane	43	3.887	3.879	0.008	83	2112304	16.0	11.5	
15 Bromomethane	94	4.151	4.141	0.010	98	1772157	16.0	13.9	
16 Chloroethane	64	4.275	4.258	0.017	93	830849	16.0	13.3	
17 Ethanol	31	4.410	4.357	0.053	98	2735400	80.0	61.5	
18 Vinyl bromide	106	4.529	4.511	0.018	96	1728343	16.0	14.3	
19 2-Methylbutane	43	4.572	4.560	0.012	88	1595022	16.0	12.9	
21 Acrolein	56	4.761	4.742	0.019	82	330540	16.0	18.3	
20 Trichlorofluoromethane	101	4.761	4.743	0.018	99	6686372	16.0	14.3	
22 Acetonitrile	40	4.820	4.793	0.027	98	523809	16.0	14.1	
23 Acetone	58	4.852	4.835	0.017	99	1728119	47.0	39.8	
25 Pentane	72	4.955	4.937	0.018	97	323924	16.0	14.4	
24 Isopropyl alcohol	45	5.036	4.939	0.097	98	6495368	47.0	43.3	
26 Ethyl ether	31	5.090	5.075	0.015	85	1560739	16.0	15.3	
27 1,1-Dichloroethene	96	5.375	5.354	0.021	100	1773303	16.0	15.1	
28 Acrylonitrile	53	5.467	5.435	0.032	95	774315	16.0	14.4	
29 2-Methyl-2-propanol	59	5.559	5.467	0.092	95	2500383	16.0	13.9	
30 1,1,2-Trichloro-1,2,2-trif	101	5.543	5.521	0.022	91	4102363	16.0	15.1	
31 Methylene Chloride	84	5.683	5.656	0.027	86	1389569	16.0	13.1	

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	5.694	5.673	0.021	95	1527575	16.0	13.4	
33 Carbon disulfide	76	5.818	5.797	0.021	100	4378380	16.0	14.6	
34 trans-1,2-Dichloroethene	96	6.416	6.393	0.023	97	1798426	16.0	15.6	
35 2-Methylpentane	43	6.443	6.426	0.017	91	2917758	16.0	12.9	
36 Methyl tert-butyl ether	73	6.524	6.513	0.011	93	4996692	16.0	14.6	
37 1,1-Dichloroethane	63	6.799	6.771	0.028	100	3131504	16.0	13.9	
38 Vinyl acetate	43	6.907	6.881	0.026	99	3848118	16.0	14.9	
39 2-Butanone (MEK)	72	7.317	7.283	0.034	98	734059	16.0	14.6	
40 Hexane	56	7.354	7.336	0.018	92	1158063	16.0	13.3	
41 Isopropyl ether	45	7.511	7.483	0.028	93	4485105	16.0	14.0	
42 cis-1,2-Dichloroethene	96	7.721	7.691	0.030	93	1869513	16.0	15.3	
43 Ethyl acetate	43	7.910	7.880	0.030	98	3038641	16.0	14.3	
44 Chloroform	83	8.050	8.019	0.031	95	4480470	16.0	14.4	
45 Tert-butyl ethyl ether	59	8.147	8.122	0.025	94	4640558	16.0	14.4	
46 Tetrahydrofuran	42	8.401	8.387	0.014	89	1562956	16.0	13.8	
47 1,1,1-Trichloroethane	97	9.021	8.997	0.024	93	5396460	16.0	15.0	
48 1,2-Dichloroethane	62	9.118	9.087	0.031	99	3085614	16.0	14.5	
49 Benzene	78	9.608	9.582	0.026	95	5257486	16.0	14.7	
50 Cyclohexane	69	9.608	9.590	0.018	75	863041	16.0	14.3	
52 n-Butanol	31	9.673	9.606	0.067	84	591245	16.0	15.5	
51 Carbon tetrachloride	117	9.635	9.611	0.024	98	6365119	16.0	17.0	
53 2,3-Dimethylpentane	71	9.759	9.740	0.019	88	1206293	16.0	14.7	
54 Thiophene	84	9.884	9.855	0.029	93	2998594	16.0	15.0	
55 Tert-amyl methyl ether	73	10.126	10.100	0.026	98	5052003	16.0	15.4	
56 Isooctane	57	10.434	10.414	0.020	97	7435991	16.0	14.0	
57 n-Heptane	71	10.838	10.816	0.022	87	1934212	16.0	14.6	
58 1,2-Dichloropropane	63	10.876	10.846	0.030	82	1721134	16.0	14.2	
59 Trichloroethene	130	10.924	10.897	0.027	98	3208650	16.0	16.6	
60 Dibromomethane	93	10.989	10.961	0.028	89	2546424	16.0	15.8	
61 Dichlorobromomethane	83	11.156	11.126	0.030	97	5078012	16.0	16.4	
62 1,4-Dioxane	88	11.178	11.152	0.026	88	711143	16.0	14.7	
63 Methyl methacrylate	41	11.291	11.260	0.031	95	2072888	16.0	15.5	
64 Methylcyclohexane	83	11.722	11.704	0.018	92	4285973	16.0	15.4	
65 4-Methyl-2-pentanone (MIBK)	43	12.164	12.133	0.031	95	3039224	16.0	14.8	
66 cis-1,3-Dichloropropene	75	12.197	12.174	0.023	97	3479031	16.0	15.5	
67 trans-1,3-Dichloropropene	75	12.925	12.897	0.028	97	3558024	16.0	15.7	
68 Toluene	91	13.043	13.021	0.022	94	6568341	16.0	15.6	
69 1,1,2-Trichloroethane	83	13.119	13.091	0.028	97	1930179	16.0	15.3	
70 2-Methylthiophene	97	13.194	13.173	0.021	97	5571008	16.0	15.8	
71 3-Methylthiophene	97	13.405	13.381	0.024	99	5522937	16.0	15.8	
72 2-Hexanone	58	13.545	13.519	0.026	95	1588026	16.0	15.8	
73 n-Octane	85	13.798	13.780	0.018	83	2331636	16.0	15.3	
74 Chlorodibromomethane	129	13.831	13.803	0.028	97	6180157	16.0	19.6	
75 Ethylene Dibromide	107	14.117	14.092	0.024	98	4223710	16.0	17.1	
76 Tetrachloroethene	129	14.214	14.195	0.019	96	3341461	16.0	17.4	
77 Chlorobenzene	112	15.103	15.082	0.021	95	5872788	16.0	16.5	
78 2,3-Dimethylheptane	43	15.168	15.155	0.013	84	4561552	16.0	12.7	
79 Ethylbenzene	91	15.411	15.393	0.018	98	9378439	16.0	16.0	
80 2-Ethylthiophene	97	15.513	15.491	0.022	97	7482070	16.0	16.2	
81 m-Xylene & p-Xylene	91	15.578	15.559	0.019	98	15254685	32.0	32.1	
82 Bromoform	173	15.998	15.979	0.019	98	7554567	16.0	25.6	
83 Styrene	104	16.047	16.027	0.020	96	5980940	16.0	19.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.047	16.029	0.018	83	3451826	16.0	13.4	
85 o-Xylene	91	16.106	16.088	0.018	98	7495466	16.0	15.4	
86 1,1,2,2-Tetrachloroethane	83	16.430	16.411	0.019	98	4930342	16.0	16.1	
87 1,2,3-Trichloropropane	110	16.586	16.565	0.021	95	1792574	16.0	16.0	
88 Isopropylbenzene	105	16.710	16.692	0.018	96	11190142	16.0	15.9	
89 N-Propylbenzene	120	17.266	17.246	0.020	100	3302547	16.0	17.9	
90 2-Chlorotoluene	126	17.293	17.278	0.015	96	2937732	16.0	17.0	
91 4-Ethyltoluene	105	17.427	17.409	0.018	98	11212261	16.0	16.9	
92 1,3,5-Trimethylbenzene	120	17.508	17.490	0.018	93	5491943	16.0	17.6	
93 Alpha Methyl Styrene	118	17.751	17.734	0.017	90	4952983	16.0	19.7	
94 n-Decane	57	17.853	17.837	0.016	94	4265576	16.0	13.5	
95 tert-Butylbenzene	119	17.956	17.939	0.017	94	11616984	16.0	17.7	
96 1,2,4-Trimethylbenzene	105	17.972	17.953	0.019	95	10291549	16.0	17.3	
97 1,3-Dichlorobenzene	146	18.236	18.223	0.013	97	8814211	16.0	19.6	
99 Benzyl chloride	91	18.323	18.303	0.020	99	9733935	16.0	17.3	
100 1,4-Dichlorobenzene	146	18.333	18.316	0.017	97	8414582	16.0	19.1	
102 1,2,3-Trimethylbenzene	105	18.463	18.445	0.018	98	7156186	16.0	16.1	
103 Butylcyclohexane	83	18.533	18.520	0.013	96	6495136	16.0	14.8	
104 1,2-Dichlorobenzene	146	18.705	18.689	0.016	97	8346220	16.0	19.5	
105 2,3-Dihydroindene	117	18.705	18.693	0.012	94	10165330	16.0	18.7	
106 Indene	116	18.840	18.827	0.013	92	7281318	16.0	18.3	
107 n-Butylbenzene	91	18.867	18.854	0.013	97	10638853	16.0	15.3	
108 Undecane	57	19.218	19.209	0.009	89	4746027	16.0	12.8	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.250	19.239	0.011	97	9283464	16.0	16.8	
110 1,2-Dibromo-3-Chloropropan	157	19.320	19.308	0.012	94	3651422	16.0	19.9	
112 1,2,3,5-Tetramethylbenzene	119	19.698	19.689	0.009	95	6557823	16.0	16.4	
113 1,2,3,4-Tetramethylbenzene	119	20.091	20.083	0.008	97	8848915	16.0	16.2	
114 Dodecane	57	20.285	20.280	0.005	92	3238859	16.0	9.84	
115 1,2,4-Trichlorobenzene	180	20.426	20.418	0.008	93	6264846	16.0	16.6	
117 Benzo(b)thiophene	134	20.652	20.645	0.007	99	6618484	16.0	14.4	
118 Hexachlorobutadiene	225	20.781	20.776	0.005	93	5626941	16.0	15.1	
119 1,2,3-Trichlorobenzene	180	20.830	20.825	0.005	96	4303288	16.0	12.1	
120 2-Methylnaphthalene	142	21.623	21.623	0.000	100	932756	48.4	5.68	
121 1-Methylnaphthalene	142	21.801	21.801	0.000	100	649010	48.4	3.97	
A 122 C6 Range	1	7.364	(7.324-7.404)		0	15062569	16.0	18.7	
A 124 Toluene Range	1	13.038	(13.003-13.073)		0	15867496	16.0	15.8	
S 126 Xylenes, Total	100				0		48.0	47.6	
S 127 1,2-Dichloroethene, Total	1				0		32.0	30.9	

Reagents:

40L9DNP_00013

Amount Added: 200.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 11-Apr-2017 10:07:16

Chrom Revision: 2.2 10-Apr-2017 06:51:18

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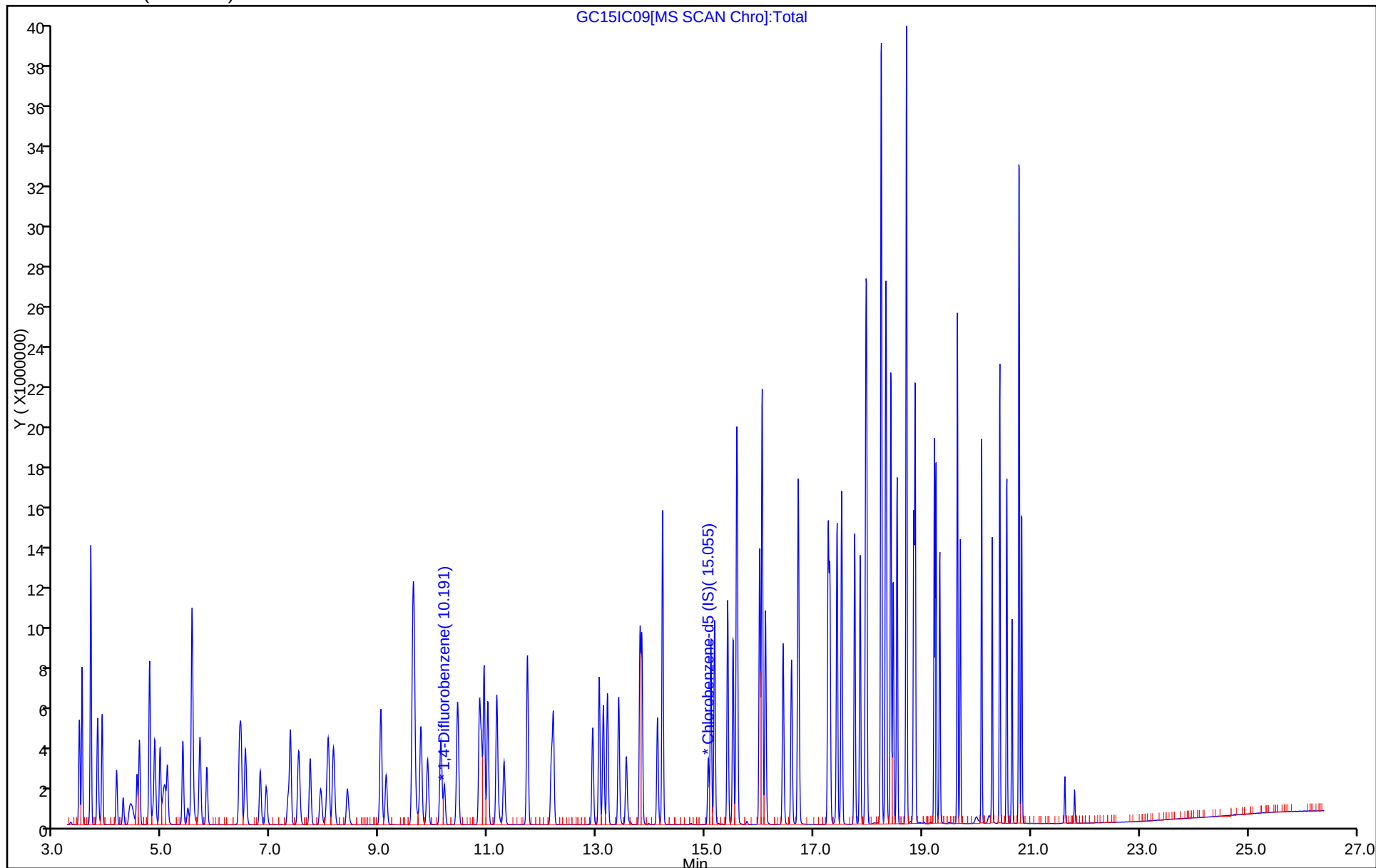
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



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Dil. Factor: 1.0000

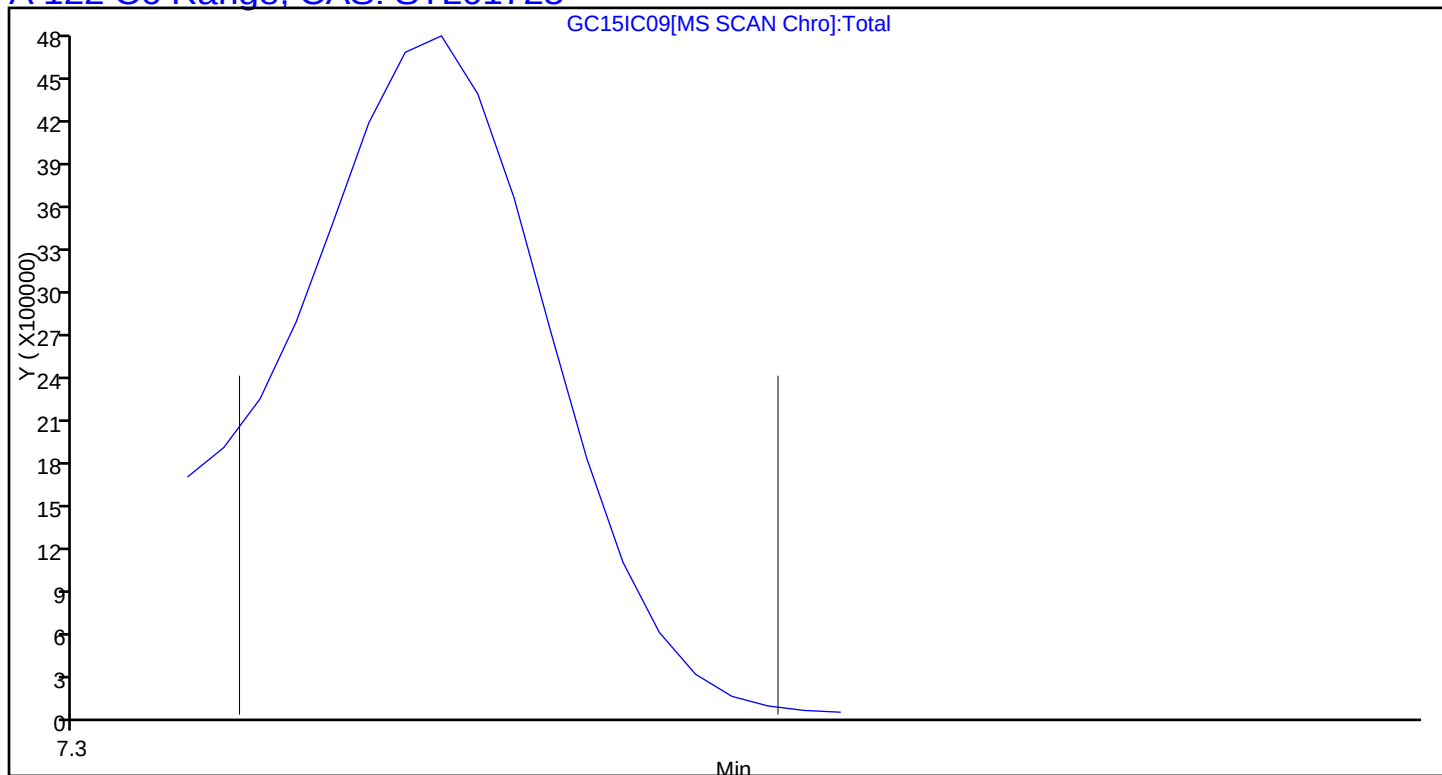
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Detector: MS SCAN

A 122 C6 Range, CAS: STL01725



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ALS Bottle#: 8

Worklist Smp#: 11

Purge Vol: 500.000 mL

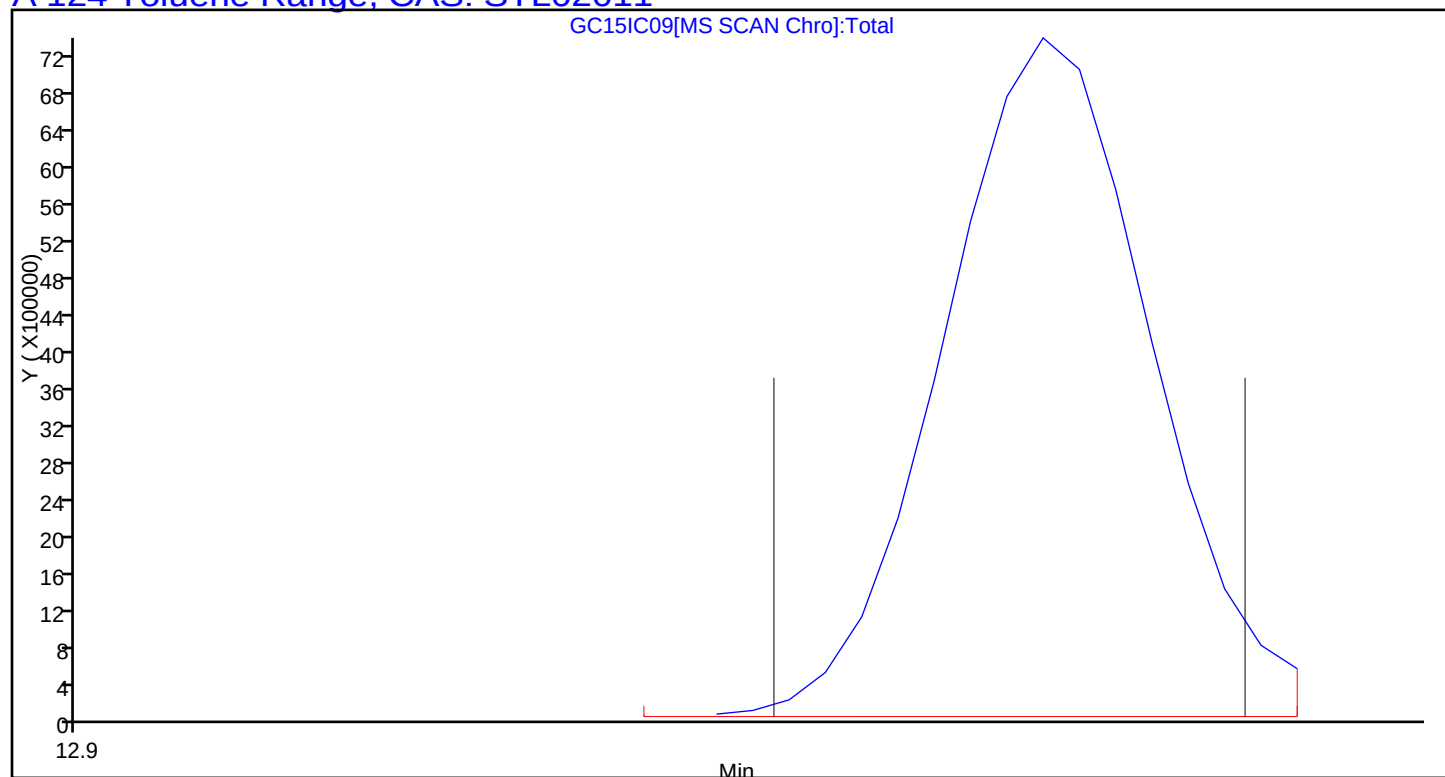
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

[A 124 Toluene Range, CAS: STL02011](#)

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Lab Sample ID: ICV 140-9482/13 Calibration Date: 03/15/2017 21:46
 Instrument ID: MG Calib Start Date: 03/15/2017 14:36
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/15/2017 20:21
 Lab File ID: GICVC15.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	0.4447	0.4195		1.89	2.00	-5.7	35.0
Propene	Ave	1.058	0.9888		1.87	2.00	-6.5	35.0
Dichlorodifluoromethane	Ave	4.233	4.005		1.89	2.00	-5.4	35.0
Chloromethane	Ave	0.2848	0.2718		1.91	2.00	-4.6	35.0
1,2-Dichlorotetrafluoroethane	Ave	2.520	2.459		1.95	2.00	-2.4	35.0
Acetaldehyde	Ave	0.3344	0.2828		8.46	10.0	-15.4	35.0
Vinyl chloride	Ave	1.170	1.152		1.97	2.00	-1.6	35.0
1,3-Butadiene	Ave	0.7793	0.7583		1.95	2.00	-2.7	35.0
Butane	Ave	1.658	1.586		1.91	2.00	-4.3	35.0
Bromomethane	Ave	1.156	1.113		1.92	2.00	-3.8	35.0
Chloroethane	Ave	0.5663	0.5570		1.97	2.00	-1.6	35.0
Ethanol	Ave	0.4025	0.3613		8.98	10.0	-10.2	35.0
Vinyl bromide	Ave	1.096	1.145		2.09	2.00	4.5	35.0
2-Methylbutane	Ave	1.120	1.090		1.95	2.00	-2.7	35.0
Acrolein	Ave	0.1638	0.1720		2.10	2.00	5.0	35.0
Trichlorofluoromethane	Ave	4.216	3.908		1.85	2.00	-7.3	35.0
Acetonitrile	Ave	0.3357	0.2765		1.65	2.00	-17.6	35.0
Acetone	Ave	0.3928	0.2866		4.38	6.00	-27.0	35.0
Isopropyl alcohol	Ave	1.359	0.9130		4.03	6.00	-32.8	35.0
Pentane	Ave	0.2037	0.2013		1.98	2.00	-1.2	35.0
Ethyl ether	Ave	0.9241	0.7238		1.57	2.00	-21.7	35.0
1,1-Dichloroethene	Ave	1.066	1.018		1.91	2.00	-4.5	35.0
Acrylonitrile	Ave	0.4861	0.4093		1.68	2.00	-15.8	35.0
t-Butyl alcohol	Ave	1.624	1.441		1.77	2.00	-11.3	35.0
1,1,2-Trichlorotrifluoroethane	Ave	2.459	2.373		1.93	2.00	-3.5	35.0
Methylene Chloride	Ave	0.9619	0.8705		1.81	2.00	-9.5	35.0
3-Chloropropene	Ave	1.034	0.9533		1.84	2.00	-7.8	35.0
Carbon disulfide	Ave	2.716	2.579		1.90	2.00	-5.1	35.0
trans-1,2-Dichloroethene	Ave	1.042	1.038		1.99	2.00	-0.4	35.0
2-Methylpentane	Ave	2.045	2.174		2.13	2.00	6.3	35.0
Methyl tert-butyl ether	Ave	3.096	2.652		1.71	2.00	-14.3	35.0
1,1-Dichloroethane	Ave	2.035	1.947		1.91	2.00	-4.3	35.0
Vinyl acetate	Ave	2.337	2.078		1.78	2.00	-11.1	35.0
2-Butanone	Ave	0.4552	0.3871		1.70	2.00	-15.0	35.0
Hexane	Ave	0.7899	0.7696		1.95	2.00	-2.6	35.0
Isopropyl ether	Ave	2.907	2.543		1.75	2.00	-12.5	35.0
cis-1,2-Dichloroethene	Ave	1.107	1.110		2.00	2.00	0.2	35.0
Ethyl acetate	Ave	1.927	1.556		1.61	2.00	-19.3	35.0
Chloroform	Ave	2.806	2.675		1.91	2.00	-4.7	35.0
Tert-butyl ethyl ether	Ave	2.922	2.660		1.82	2.00	-9.0	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Lab Sample ID: ICV 140-9482/13 Calibration Date: 03/15/2017 21:46
 Instrument ID: MG Calib Start Date: 03/15/2017 14:36
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/15/2017 20:21
 Lab File ID: GICVC15.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	1.021	0.8506		1.67	2.00	-16.7	35.0
1,1,1-Trichloroethane	Ave	3.246	3.062		1.89	2.00	-5.7	35.0
1,2-Dichloroethane	Ave	0.4038	0.3835		1.90	2.00	-5.0	35.0
Benzene	Ave	0.6795	0.6694		1.97	2.00	-1.5	35.0
1-Butanol	Ave	0.0727	0.0709		1.95	2.00	-2.5	35.0
Cyclohexane	Ave	0.1144	0.1156		2.02	2.00	1.0	35.0
Carbon tetrachloride	Ave	0.7102	0.6979		1.97	2.00	-1.7	35.0
2,3-Dimethylpentane	Ave	0.1564	0.1474		1.88	2.00	-5.8	35.0
Thiophene	Ave	0.3797	0.4001		2.11	2.00	5.4	35.0
Tert-amyl methyl ether	Ave	0.6230	0.5616		1.80	2.00	-9.9	35.0
2,2,4-Trimethylpentane	Ave	1.009	1.009		2.00	2.00	0.0	35.0
Heptane	Ave	0.2519	0.2479		1.97	2.00	-1.6	35.0
1,2-Dichloropropane	Ave	0.2308	0.2192		1.90	2.00	-5.0	35.0
Trichloroethene	Ave	0.3681	0.3977		2.16	2.00	8.0	35.0
Dibromomethane	Ave	0.3067	0.3038		1.98	2.00	-1.0	35.0
Bromodichloromethane	Ave	0.5888	0.5946		2.02	2.00	1.0	35.0
1,4-Dioxane	Ave	0.0920	0.0826		1.80	2.00	-10.2	35.0
Methyl methacrylate	Ave	0.2550	0.2190		1.72	2.00	-14.1	35.0
Methylcyclohexane	Ave	0.5294	0.4319		1.63	2.00	-18.4	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3903	0.3266		1.67	2.00	-16.3	35.0
cis-1,3-Dichloropropene	Ave	0.4274	0.4321		2.02	2.00	1.1	35.0
trans-1,3-Dichloropropene	Ave	0.4284	0.4207		1.96	2.00	-1.8	35.0
Toluene	Ave	0.7969	0.7662		1.92	2.00	-3.9	35.0
1,1,2-Trichloroethane	Ave	0.2389	0.2248		1.88	2.00	-5.9	35.0
2-Methylthiophene	Ave	0.6689	0.6855		2.05	2.00	2.5	35.0
3-Methylthiophene	Ave	0.6622	0.7015		2.12	2.00	5.9	35.0
2-Hexanone	Ave	0.1907	0.1692		1.77	2.00	-11.3	35.0
Octane	Ave	0.2880	0.2951		2.05	2.00	2.5	35.0
Dibromochloromethane	Ave	0.5960	0.6258		2.10	2.00	5.0	35.0
1,2-Dibromoethane	Ave	0.4679	0.4673		2.00	2.00	-0.1	35.0
Tetrachloroethene	Ave	0.3645	0.3606		1.98	2.00	-1.1	35.0
Chlorobenzene	Ave	0.6744	0.6601		1.96	2.00	-2.1	35.0
2,3-Dimethylheptane	Ave	0.6822	0.6877		2.02	2.00	0.8	35.0
Ethylbenzene	Ave	1.113	0.9942		1.79	2.00	-10.7	35.0
2-Ethylthiophene	Ave	0.8768	0.8035		1.83	2.00	-8.4	35.0
m-Xylene & p-Xylene	Ave	0.8990	0.8022		3.57	4.00	-10.8	35.0
Bromoform	Ave	0.5594	0.6080		2.17	2.00	8.7	35.0
Nonane	Ave	0.4886	0.4940		2.02	2.00	1.1	35.0
Styrene	Ave	0.5931	0.5871		1.98	2.00	-1.0	35.0
o-Xylene	Ave	0.9191	0.8040		1.75	2.00	-12.5	35.0
1,1,2,2-Tetrachloroethane	Ave	0.5794	0.5324		1.84	2.00	-8.1	35.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Lab Sample ID: ICV 140-9482/13 Calibration Date: 03/15/2017 21:46
 Instrument ID: MG Calib Start Date: 03/15/2017 14:36
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/15/2017 20:21
 Lab File ID: GICVC15.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	0.2120	0.1848		1.74	2.00	-12.9	35.0
Isopropylbenzene	Ave	1.335	1.181		1.77	2.00	-11.6	35.0
Propylbenzene	Ave	0.3502	0.3227		1.84	2.00	-7.8	35.0
2-Chlorotoluene	Ave	0.3267	0.3097		1.90	2.00	-5.2	35.0
4-Ethyltoluene	Ave	1.257	1.076		1.71	2.00	-14.4	35.0
1,3,5-Trimethylbenzene	Ave	0.5895	0.5364		1.82	2.00	-9.0	35.0
Alpha Methyl Styrene	Ave	0.4751	0.4525		1.90	2.00	-4.8	35.0
Decane	Ave	0.5991	0.5941		1.98	2.00	-0.8	35.0
tert-Butylbenzene	Ave	1.242	1.099		1.77	2.00	-11.5	35.0
1,2,4-Trimethylbenzene	Ave	1.129	1.005		1.78	2.00	-11.0	35.0
1,3-Dichlorobenzene	Ave	0.8518	0.7863		1.85	2.00	-7.7	35.0
sec-Butylbenzene	Ave	1.590	1.436		1.81	2.00	-9.7	35.0
Benzyl chloride	Ave	1.065	0.9701		1.82	2.00	-8.9	35.0
1,4-Dichlorobenzene	Ave	0.8325	0.7695		1.85	2.00	-7.6	35.0
4-Isopropyltoluene	Ave	1.404	1.253		1.78	2.00	-10.8	35.0
1,2,3-Trimethylbenzene	Ave	0.8430	0.8126		1.93	2.00	-3.6	35.0
Butylcyclohexane	Ave	0.8320	0.7981		1.92	2.00	-4.1	35.0
1,2-Dichlorobenzene	Ave	0.8117	0.7324		1.80	2.00	-9.8	35.0
Indane	Ave	1.029	0.8707		1.69	2.00	-15.4	35.0
Indene	Ave	0.7517	0.8606		2.29	2.00	14.5	35.0
Butylbenzene	Ave	1.313	1.174		1.79	2.00	-10.6	35.0
Undecane	Ave	0.7029	0.6633		1.89	2.00	-5.6	35.0
1,2-Dimethyl-4-Ethylbenzene	Ave	1.048	1.175		2.24	2.00	12.1	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.3481	0.2673		1.54	2.00	-23.2	35.0
1,2,4,5-Tetramethylbenzene	Ave	1.259	1.269		2.02	2.00	0.8	35.0
1,2,3,5-Tetramethylbenzene	Ave	0.7577	0.7776		2.05	2.00	2.6	35.0
1,2,3,4-Tetramethylbenzene	Ave	1.035	1.033		2.00	2.00	-0.2	35.0
Dodecane	Ave	0.6236	0.5937		1.90	2.00	-4.8	35.0
1,2,4-Trichlorobenzene	Ave	0.7144	0.7323		2.05	2.00	2.5	35.0
Naphthalene	Ave	1.497	1.474		1.97	2.00	-1.5	35.0
Benzo (b) thiophene	Ave	0.8706	0.9324		2.14	2.00	7.1	35.0
Hexachlorobutadiene	Ave	0.7045	0.6788		1.93	2.00	-3.6	35.0
1,2,3-Trichlorobenzene	Ave	0.6741	0.7177		2.13	2.00	6.5	35.0
2-Methylnaphthalene	Ave	0.3108	0.2469		4.97	6.25	-20.6	50.0
1-Methylnaphthalene	Ave	0.3095	0.2503		5.06	6.25	-19.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7905	0.7720		3.91	4.00	-2.3	35.0

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GICVC15.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 15-Mar-2017 21:46:30 ALS Bottle#: 9 Worklist Smp#: 13
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004323-013
 Misc. Info.: 083671
 Operator ID: 7126 Instrument ID: MG
 Sublist:
 Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 16-Mar-2017 14:43:35 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: barlozhetskayaa

Date: 16-Mar-2017 14:45:52

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	7.991	7.993	-0.002	81	414852	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.158	10.161	-0.003	94	2002906	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.033	15.034	-0.001	87	1960813	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.705	16.705	0.000	95	1513670	4.00	3.91	
6 Chlorodifluoromethane	67	3.456	3.457	-0.001	96	87006	2.00	1.89	
7 Propene	41	3.466	3.466	0.000	98	205110	2.00	1.87	
8 Dichlorodifluoromethane	85	3.510	3.510	0.000	99	830764	2.00	1.89	
9 Chloromethane	52	3.660	3.659	0.001	97	56384	2.00	1.91	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.666	3.669	-0.003	91	510128	2.00	1.95	
11 Acetaldehyde	44	3.785	3.786	-0.001	88	293266	10.0	8.46	
12 Vinyl chloride	62	3.801	3.803	-0.002	99	238858	2.00	1.97	
13 Butadiene	54	3.876	3.876	0.000	85	157294	2.00	1.95	
14 Butane	43	3.876	3.879	-0.003	94	328986	2.00	1.91	
15 Bromomethane	94	4.140	4.141	-0.001	98	230800	2.00	1.92	
16 Chloroethane	64	4.254	4.258	-0.004	93	115537	2.00	1.97	
17 Ethanol	31	4.345	4.357	-0.012	98	374711	10.0	8.98	
18 Vinyl bromide	106	4.507	4.511	-0.004	97	237558	2.00	2.09	
19 2-Methylbutane	43	4.556	4.560	-0.004	88	226177	2.00	1.95	
21 Acrolein	56	4.734	4.742	-0.008	29	35670	2.00	2.10	
20 Trichlorofluoromethane	101	4.739	4.743	-0.004	99	810646	2.00	1.85	
22 Acetonitrile	40	4.788	4.793	-0.005	98	57349	2.00	1.65	
23 Acetone	58	4.825	4.835	-0.010	99	178365	6.00	4.38	
25 Pentane	72	4.933	4.937	-0.004	95	41761	2.00	1.98	
24 Isopropyl alcohol	45	4.922	4.939	-0.017	94	568170	6.00	4.03	
26 Ethyl ether	31	5.068	5.075	-0.007	92	150139	2.00	1.57	
27 1,1-Dichloroethene	96	5.354	5.354	0.000	98	211079	2.00	1.91	
28 Acrylonitrile	53	5.429	5.435	-0.006	94	84890	2.00	1.68	
29 2-Methyl-2-propanol	59	5.445	5.467	-0.022	94	298931	2.00	1.77	
30 1,1,2-Trichloro-1,2,2-trif	101	5.521	5.521	0.000	93	492319	2.00	1.93	
31 Methylene Chloride	84	5.656	5.656	0.000	87	180559	2.00	1.81	

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	5.666	5.673	-0.007	93	197747	2.00	1.84	
33 Carbon disulfide	76	5.796	5.797	-0.001	100	534876	2.00	1.90	
34 trans-1,2-Dichloroethene	96	6.389	6.393	-0.004	98	215378	2.00	1.99	
35 2-Methylpentane	43	6.421	6.426	-0.005	93	450992	2.00	2.13	
36 Methyl tert-butyl ether	73	6.502	6.513	-0.011	95	550186	2.00	1.71	
37 1,1-Dichloroethane	63	6.772	6.771	0.001	100	403782	2.00	1.91	
38 Vinyl acetate	43	6.874	6.881	-0.007	99	431077	2.00	1.78	
39 2-Butanone (MEK)	72	7.273	7.283	-0.010	99	80291	2.00	1.70	
40 Hexane	56	7.333	7.336	-0.003	87	159634	2.00	1.95	
41 Isopropyl ether	45	7.478	7.483	-0.005	94	527483	2.00	1.75	
42 cis-1,2-Dichloroethene	96	7.689	7.691	-0.002	95	230210	2.00	2.00	
43 Ethyl acetate	43	7.872	7.880	-0.008	98	322802	2.00	1.61	
44 Chloroform	83	8.018	8.019	-0.001	97	554919	2.00	1.91	
45 Tert-butyl ethyl ether	59	8.115	8.122	-0.007	94	551783	2.00	1.82	
46 Tetrahydrofuran	42	8.373	8.387	-0.014	90	176435	2.00	1.67	
47 1,1,1-Trichloroethane	97	8.994	8.997	-0.003	94	635165	2.00	1.89	
48 1,2-Dichloroethane	62	9.085	9.087	-0.002	99	384058	2.00	1.90	
49 Benzene	78	9.576	9.582	-0.006	96	670379	2.00	1.97	
50 Cyclohexane	69	9.592	9.590	0.002	94	115721	2.00	2.02	
52 n-Butanol	31	9.581	9.606	-0.025	61	70993	2.00	1.95	
51 Carbon tetrachloride	117	9.614	9.611	0.003	97	698916	2.00	1.97	
53 2,3-Dimethylpentane	71	9.732	9.740	-0.008	89	147657	2.00	1.88	
54 Thiophene	84	9.851	9.855	-0.004	95	400715	2.00	2.11	
55 Tert-amyl methyl ether	73	10.094	10.100	-0.006	98	562460	2.00	1.80	
56 Isooctane	57	10.412	10.414	-0.002	97	1010798	2.00	2.00	
57 n-Heptane	71	10.816	10.816	0.000	90	248245	2.00	1.97	
58 1,2-Dichloropropane	63	10.843	10.846	-0.003	84	219508	2.00	1.90	
59 Trichloroethene	130	10.897	10.897	0.000	97	398239	2.00	2.16	
60 Dibromomethane	93	10.962	10.961	0.001	94	304219	2.00	1.98	
61 Dichlorobromomethane	83	11.124	11.126	-0.002	98	595437	2.00	2.02	
62 1,4-Dioxane	88	11.140	11.152	-0.012	90	82734	2.00	1.80	
63 Methyl methacrylate	41	11.253	11.260	-0.007	94	219347	2.00	1.72	
64 Methylcyclohexane	83	11.701	11.704	-0.003	95	432488	2.00	1.63	
65 4-Methyl-2-pentanone (MIBK)	43	12.121	12.133	-0.012	96	327042	2.00	1.67	
66 cis-1,3-Dichloropropene	75	12.175	12.174	0.001	95	432682	2.00	2.02	
67 trans-1,3-Dichloropropene	75	12.892	12.897	-0.005	97	412484	2.00	1.96	
68 Toluene	91	13.022	13.021	0.001	94	751169	2.00	1.92	
69 1,1,2-Trichloroethane	83	13.092	13.091	0.001	99	220432	2.00	1.88	
70 2-Methylthiophene	97	13.173	13.173	0.000	97	672059	2.00	2.05	
71 3-Methylthiophene	97	13.378	13.381	-0.003	99	687752	2.00	2.12	
72 2-Hexanone	58	13.507	13.519	-0.012	94	165901	2.00	1.77	
73 n-Octane	85	13.777	13.780	-0.003	89	289336	2.00	2.05	
74 Chlorodibromomethane	129	13.798	13.803	-0.005	97	613573	2.00	2.10	
75 Ethylene Dibromide	107	14.089	14.092	-0.003	98	458135	2.00	2.00	
76 Tetrachloroethene	129	14.192	14.195	-0.003	95	353576	2.00	1.98	
77 Chlorobenzene	112	15.082	15.082	0.000	93	647192	2.00	1.96	
78 2,3-Dimethylheptane	43	15.152	15.155	-0.003	89	674189	2.00	2.02	
79 Ethylbenzene	91	15.389	15.393	-0.004	99	974667	2.00	1.79	
80 2-Ethylthiophene	97	15.486	15.491	-0.005	98	787782	2.00	1.83	
81 m-Xylene & p-Xylene	91	15.556	15.559	-0.003	99	1572879	4.00	3.57	
82 Bromoform	173	15.977	15.979	-0.002	96	596040	2.00	2.17	
83 Styrene	104	16.025	16.027	-0.002	98	575572	2.00	1.98	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.025	16.029	-0.004	88	484291	2.00	2.02	
85 o-Xylene	91	16.085	16.088	-0.003	98	788290	2.00	1.75	
86 1,1,2,2-Tetrachloroethane	83	16.408	16.411	-0.003	99	521988	2.00	1.84	
87 1,2,3-Trichloropropane	110	16.564	16.565	-0.001	97	181130	2.00	1.74	
88 Isopropylbenzene	105	16.688	16.692	-0.004	96	1157421	2.00	1.77	
89 N-Propylbenzene	120	17.244	17.246	-0.002	99	316400	2.00	1.84	
90 2-Chlorotoluene	126	17.276	17.278	-0.002	97	303603	2.00	1.90	
91 4-Ethyltoluene	105	17.406	17.409	-0.003	98	1054948	2.00	1.71	
92 1,3,5-Trimethylbenzene	120	17.487	17.490	-0.003	92	525880	2.00	1.82	
93 Alpha Methyl Styrene	118	17.735	17.734	0.001	88	443671	2.00	1.90	
94 n-Decane	57	17.837	17.837	0.000	93	582480	2.00	1.98	
95 tert-Butylbenzene	119	17.939	17.939	0.000	94	1077330	2.00	1.77	
96 1,2,4-Trimethylbenzene	105	17.950	17.953	-0.003	96	985498	2.00	1.78	
97 1,3-Dichlorobenzene	146	18.220	18.223	-0.003	98	770930	2.00	1.85	
98 sec-Butylbenzene	105	18.225	18.225	0.000	98	1407422	2.00	1.81	
99 Benzyl chloride	91	18.301	18.303	-0.002	98	951071	2.00	1.82	
100 1,4-Dichlorobenzene	146	18.312	18.316	-0.004	95	754441	2.00	1.85	
101 4-Isopropyltoluene	119	18.398	18.402	-0.004	97	1228683	2.00	1.78	
102 1,2,3-Trimethylbenzene	105	18.446	18.445	0.001	98	796705	2.00	1.93	
103 Butylcyclohexane	83	18.516	18.520	-0.004	96	782474	2.00	1.92	
104 1,2-Dichlorobenzene	146	18.689	18.689	0.000	95	718038	2.00	1.80	
105 2,3-Dihydroindene	117	18.694	18.693	0.001	93	853643	2.00	1.69	
106 Indene	116	18.824	18.827	-0.003	95	843748	2.00	2.29	
107 n-Butylbenzene	91	18.851	18.854	-0.003	98	1150538	2.00	1.79	
108 Undecane	57	19.212	19.209	0.003	92	650345	2.00	1.89	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.239	19.239	0.000	97	1152241	2.00	2.24	
110 1,2-Dibromo-3-Chloropropan	157	19.309	19.308	0.001	97	262104	2.00	1.54	
111 1,2,4,5-Tetramethylbenzene	119	19.633	19.635	-0.002	96	1244340	2.00	2.02	
112 1,2,3,5-Tetramethylbenzene	119	19.687	19.689	-0.002	95	762366	2.00	2.05	
113 1,2,3,4-Tetramethylbenzene	119	20.080	20.083	-0.003	96	1012561	2.00	2.00	
114 Dodecane	57	20.280	20.280	0.000	94	582064	2.00	1.90	
115 1,2,4-Trichlorobenzene	180	20.420	20.418	0.002	94	717902	2.00	2.05	
116 Naphthalene	128	20.544	20.546	-0.002	99	1444732	2.00	1.97	
117 Benzo(b)thiophene	134	20.646	20.645	0.001	99	914096	2.00	2.14	
118 Hexachlorobutadiene	225	20.776	20.776	0.000	95	665473	2.00	1.93	
119 1,2,3-Trichlorobenzene	180	20.824	20.825	-0.001	95	703642	2.00	2.13	
120 2-Methylnaphthalene	142	21.622	21.623	-0.001	100	756538	6.25	4.97	
121 1-Methylnaphthalene	142	21.800	21.801	-0.001	100	767056	6.25	5.06	
A 122 C6 Range	1	7.343	(7.303-7.383)		0	1488733	2.00	1.94	
A 124 Toluene Range	1	13.011	(12.976-13.046)		0	1863072	2.00	1.94	
S 126 Xylenes, Total	100				0		6.00	5.32	
S 127 1,2-Dichloroethene, Total	1				0		4.00	4.00	

Reagents:

40CV101S_00036

Amount Added: 100.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GICVC15.D

Injection Date: 15-Mar-2017 21:46:30

Instrument ID: MG

Operator ID: 7126

Lims ID: ICV

Worklist Smp#: 13

Client ID:

Purge Vol: 500.000 mL

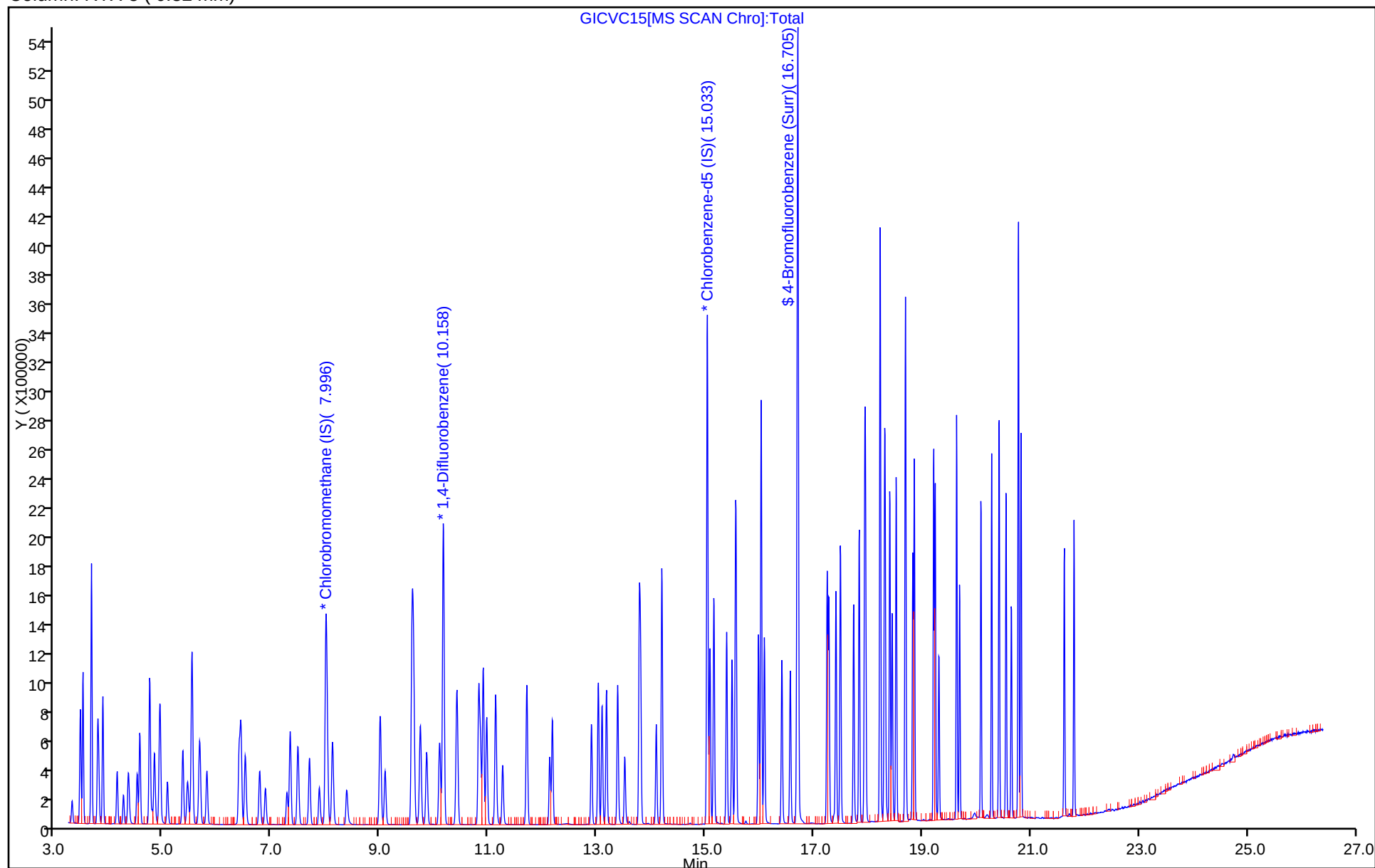
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MG_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.: 140-7831-1

SDG No.: _____

Lab Sample ID: CCVIS 140-10584/2 Calibration Date: 04/20/2017 09:46

Instrument ID: MG Calib Start Date: 03/15/2017 14:36

GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/15/2017 20:21

Lab File ID: GCCVD20.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	0.4447	0.5374		2.42	2.00	20.8	30.0
Propene	Ave	1.058	0.7102		1.34	2.00	-32.9*	30.0
Dichlorodifluoromethane	Ave	4.233	4.942		2.34	2.00	16.7	30.0
Chloromethane	Ave	0.2848	0.1963		1.38	2.00	-31.1*	30.0
1,2-Dichlorotetrafluoroethane	Ave	2.520	2.830		2.25	2.00	12.3	30.0
Acetaldehyde	Ave	0.3344	0.2131		6.38	10.0	-36.3*	30.0
Vinyl chloride	Ave	1.170	0.9837		1.68	2.00	-15.9	30.0
1,3-Butadiene	Ave	0.7793	0.5712		1.47	2.00	-26.7	30.0
Butane	Ave	1.658	1.179		1.42	2.00	-28.9	30.0
Bromomethane	Ave	1.156	1.202		2.08	2.00	3.9	30.0
Chloroethane	Ave	0.5663	0.4915		1.74	2.00	-13.2	30.0
Ethanol	Ave	0.4025	0.2668		6.63	10.0	-33.7*	30.0
Vinyl bromide	Ave	1.096	1.211		2.21	2.00	10.5	30.0
2-Methylbutane	Ave	1.120	0.8601		1.54	2.00	-23.2	30.0
Acrolein	Ave	0.1638	0.1396		1.71	2.00	-14.8	30.0
Trichlorofluoromethane	Ave	4.216	5.157		2.45	2.00	22.3	30.0
Acetonitrile	Ave	0.3357	0.2395		1.43	2.00	-28.7	30.0
Acetone	Ave	0.3928	0.3043		4.55	5.88	-22.5	30.0
Isopropyl alcohol	Ave	1.359	0.9716		4.20	5.88	-28.5	30.0
Pentane	Ave	0.2037	0.2187		2.15	2.00	7.3	30.0
Ethyl ether	Ave	0.9241	0.7284		1.58	2.00	-21.2	30.0
1,1-Dichloroethene	Ave	1.066	1.210		2.27	2.00	13.5	30.0
Acrylonitrile	Ave	0.4861	0.3708		1.53	2.00	-23.7	30.0
t-Butyl alcohol	Ave	1.624	1.409		1.74	2.00	-13.3	30.0
1,1,2-Trichlorotrifluoroethane	Ave	2.459	2.995		2.44	2.00	21.8	30.0
Methylene Chloride	Ave	0.9619	1.046		2.18	2.00	8.7	30.0
3-Chloropropene	Ave	1.034	0.9742		1.89	2.00	-5.8	30.0
Carbon disulfide	Ave	2.716	3.076		2.27	2.00	13.2	30.0
trans-1,2-Dichloroethene	Ave	1.042	1.078		2.07	2.00	3.4	30.0
2-Methylpentane	Ave	2.045	1.454		1.42	2.00	-28.9	30.0
Methyl tert-butyl ether	Ave	3.096	2.968		1.92	2.00	-4.1	30.0
1,1-Dichloroethane	Ave	2.035	1.782		1.75	2.00	-12.4	30.0
Vinyl acetate	Ave	2.337	1.656		1.42	2.00	-29.1	30.0
2-Butanone	Ave	0.4552	0.3631		1.60	2.00	-20.2	30.0
Hexane	Ave	0.7899	0.5954		1.51	2.00	-24.6	30.0
Isopropyl ether	Ave	2.907	1.948		1.34	2.00	-33.0*	30.0
cis-1,2-Dichloroethene	Ave	1.107	1.105		2.00	2.00	-0.2	30.0
Ethyl acetate	Ave	1.927	1.333		1.38	2.00	-30.8*	30.0
Chloroform	Ave	2.806	3.125		2.23	2.00	11.4	30.0
Tert-butyl ethyl ether	Ave	2.922	2.404		1.65	2.00	-17.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-10584/2 Calibration Date: 04/20/2017 09:46
 Instrument ID: MG Calib Start Date: 03/15/2017 14:36
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/15/2017 20:21
 Lab File ID: GCCVD20.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	1.021	0.6459		1.27	2.00	-36.8*	30.0
1,1,1-Trichloroethane	Ave	3.246	3.976		2.45	2.00	22.5	30.0
1,2-Dichloroethane	Ave	0.4038	0.4412		2.19	2.00	9.3	30.0
Benzene	Ave	0.6795	0.6325		1.86	2.00	-6.9	30.0
Cyclohexane	Ave	0.1144	0.1089		1.91	2.00	-4.8	30.0
Carbon tetrachloride	Ave	0.7102	0.9066		2.56	2.00	27.7	30.0
1-Butanol	Ave	0.0727	0.0469		1.29	2.00	-35.6*	30.0
2,3-Dimethylpentane	Ave	0.1564	0.1425		1.82	2.00	-8.9	30.0
Thiophene	Ave	0.3797	0.3622		1.91	2.00	-4.6	30.0
Tert-amyl methyl ether	Ave	0.6230	0.5983		1.92	2.00	-4.0	30.0
2,2,4-Trimethylpentane	Ave	1.009	0.7973		1.58	2.00	-21.0	30.0
Heptane	Ave	0.2519	0.2309		1.83	2.00	-8.4	30.0
1,2-Dichloropropane	Ave	0.2308	0.1940		1.68	2.00	-15.9	30.0
Trichloroethene	Ave	0.3681	0.3813		2.07	2.00	3.6	30.0
Dibromomethane	Ave	0.3067	0.3366		2.20	2.00	9.7	30.0
Bromodichloromethane	Ave	0.5888	0.6887		2.34	2.00	17.0	30.0
1,4-Dioxane	Ave	0.0920	0.0767		1.67	2.00	-16.6	30.0
Methyl methacrylate	Ave	0.2550	0.2019		1.58	2.00	-20.8	30.0
Methylcyclohexane	Ave	0.5294	0.5219		1.97	2.00	-1.4	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3903	0.2817		1.44	2.00	-27.8	30.0
cis-1,3-Dichloropropene	Ave	0.4274	0.4285		2.01	2.00	0.3	30.0
trans-1,3-Dichloropropene	Ave	0.4284	0.4230		1.98	2.00	-1.3	30.0
Toluene	Ave	0.7969	0.7769		1.95	2.00	-2.5	30.0
1,1,2-Trichloroethane	Ave	0.2389	0.2296		1.92	2.00	-3.9	30.0
2-Methylthiophene	Ave	0.6689	0.6790		2.03	2.00	1.5	30.0
3-Methylthiophene	Ave	0.6622	0.6785		2.05	2.00	2.5	30.0
2-Hexanone	Ave	0.1907	0.1348		1.41	2.00	-29.3	30.0
Octane	Ave	0.2880	0.2851		1.98	2.00	-1.0	30.0
Dibromochloromethane	Ave	0.5960	0.7166		2.41	2.00	20.2	30.0
1,2-Dibromoethane	Ave	0.4679	0.5161		2.21	2.00	10.3	30.0
Tetrachloroethene	Ave	0.3645	0.3938		2.16	2.00	8.0	30.0
Chlorobenzene	Ave	0.6744	0.6850		2.03	2.00	1.6	30.0
2,3-Dimethylheptane	Ave	0.6822	0.5203		1.53	2.00	-23.7	30.0
Ethylbenzene	Ave	1.113	1.124		2.02	2.00	1.0	30.0
2-Ethylthiophene	Ave	0.8768	0.9379		2.14	2.00	7.0	30.0
m-Xylene & p-Xylene	Ave	0.8990	0.9166		4.08	4.00	1.9	30.0
Bromoform	Ave	0.5594	0.5381		1.93	2.00	-3.8	30.0
Styrene	Ave	0.5931	0.6532		2.20	2.00	10.1	30.0
Nonane	Ave	0.4886	0.4124		1.69	2.00	-15.6	30.0
o-Xylene	Ave	0.9191	0.9371		2.04	2.00	1.9	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5794	0.5674		1.96	2.00	-2.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-10584/2 Calibration Date: 04/20/2017 09:46
 Instrument ID: MG Calib Start Date: 03/15/2017 14:36
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 03/15/2017 20:21
 Lab File ID: GCCVD20.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	0.2120	0.2281		2.15	2.00	7.6	30.0
Isopropylbenzene	Ave	1.335	1.416		2.12	2.00	6.1	30.0
Propylbenzene	Ave	0.3502	0.3524		2.01	2.00	0.7	30.0
2-Chlorotoluene	Ave	0.3267	0.3334		2.04	2.00	2.1	30.0
4-Ethyltoluene	Ave	1.257	1.313		2.09	2.00	4.4	30.0
1,3,5-Trimethylbenzene	Ave	0.5895	0.6004		2.04	2.00	1.9	30.0
Alpha Methyl Styrene	Ave	0.4751	0.5149		2.17	2.00	8.4	30.0
Decane	Ave	0.5991	0.4995		1.67	2.00	-16.6	30.0
tert-Butylbenzene	Ave	1.242	1.313		2.12	2.00	5.7	30.0
1,2,4-Trimethylbenzene	Ave	1.129	1.203		2.13	2.00	6.5	30.0
1,3-Dichlorobenzene	Ave	0.8518	0.8369		1.97	2.00	-1.8	30.0
sec-Butylbenzene	Ave	1.590	1.700		2.14	2.00	6.9	30.0
Benzyl chloride	Ave	1.065	1.101		2.07	2.00	3.4	30.0
1,4-Dichlorobenzene	Ave	0.8325	0.8245		1.98	2.00	-1.0	30.0
4-Isopropyltoluene	Ave	1.404	1.489		2.12	2.00	6.0	30.0
1,2,3-Trimethylbenzene	Ave	0.8430	0.8788		2.09	2.00	4.2	30.0
Butylcyclohexane	Ave	0.8320	0.8290		1.99	2.00	-0.4	30.0
1,2-Dichlorobenzene	Ave	0.8117	0.8013		1.98	2.00	-1.3	30.0
Indane	Ave	1.029	1.079		2.10	2.00	4.8	30.0
Indene	Ave	0.7517	0.7676		2.04	2.00	2.1	30.0
Butylbenzene	Ave	1.313	1.345		2.05	2.00	2.4	30.0
Undecane	Ave	0.7029	0.5513		1.57	2.00	-21.6	30.0
1,2-Dimethyl-4-Ethylbenzene	Ave	1.048	1.078		2.06	2.00	2.8	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.3481	0.2918		1.68	2.00	-16.2	30.0
1,2,4,5-Tetramethylbenzene	Ave	1.259	1.334		2.12	2.00	5.9	30.0
1,2,3,5-Tetramethylbenzene	Ave	0.7577	0.7985		2.11	2.00	5.4	30.0
1,2,3,4-Tetramethylbenzene	Ave	1.035	1.073		2.08	2.00	3.7	30.0
Dodecane	Ave	0.6236	0.3335		1.07	2.00	-46.5*	30.0
1,2,4-Trichlorobenzene	Ave	0.7144	0.5834		1.63	2.00	-18.3	30.0
Naphthalene	Ave	1.497	1.416		1.89	2.00	-5.4	30.0
Benzo (b) thiophene	Ave	0.8706	0.7986		1.84	2.00	-8.3	30.0
Hexachlorobutadiene	Ave	0.7045	0.4797		1.36	2.00	-31.9*	30.0
1,2,3-Trichlorobenzene	Ave	0.6741	0.4854		1.44	2.00	-28.0	30.0
2-Methylnaphthalene	Ave	0.3108	0.1437		2.80	6.06	-53.8*	50.0
1-Methylnaphthalene	Ave	0.3095	0.1427		2.79	6.06	-53.9*	50.0
4-Bromofluorobenzene (Surr)	Ave	0.7905	0.8576		4.34	4.00	8.5	30.0

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GCCVD20.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 20-Apr-2017 09:46:30 ALS Bottle#: 15 Worklist Smp#: 2
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004683-002
 Misc. Info.: P34
 Operator ID: 7126 Instrument ID: MG
 Sublist: chrom-MG_TO15*sub5
 Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 20-Apr-2017 13:34:03 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK017

First Level Reviewer: tajh

Date: 20-Apr-2017 11:11:34

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	7.969	7.969	0.000	68	287854	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.131	10.131	0.000	92	1428849	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.006	15.006	0.000	82	1413484	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.678	16.678	0.000	82	1212259	4.00	4.34	
6 Chlorodifluoromethane	67	3.461	3.461	0.000	71	77402	2.00	2.42	
7 Propene	41	3.472	3.472	0.000	76	102293	2.00	1.34	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	711795	2.00	2.34	
9 Chloromethane	52	3.660	3.660	0.000	52	28280	2.00	1.38	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.671	0.000	89	407606	2.00	2.25	
11 Acetaldehyde	44	3.790	3.790	0.000	83	153443	10.0	6.38	
12 Vinyl chloride	62	3.806	3.806	0.000	98	141688	2.00	1.68	
13 Butadiene	54	3.876	3.876	0.000	74	82274	2.00	1.47	
14 Butane	43	3.882	3.882	0.000	81	169753	2.00	1.42	
15 Bromomethane	94	4.140	4.140	0.000	98	173116	2.00	2.08	
16 Chloroethane	64	4.259	4.259	0.000	92	70787	2.00	1.74	
17 Ethanol	31	4.356	4.356	0.000	95	192120	10.0	6.63	
18 Vinyl bromide	106	4.507	4.507	0.000	95	174401	2.00	2.21	
19 2-Methylbutane	43	4.556	4.556	0.000	85	123888	2.00	1.54	
21 Acrolein	56	4.734	4.734	0.000	6	20113	2.00	1.71	
20 Trichlorofluoromethane	101	4.739	4.739	0.000	98	742746	2.00	2.45	
22 Acetonitrile	40	4.787	4.787	0.000	97	34492	2.00	1.43	
23 Acetone	58	4.825	4.825	0.000	83	128719	5.88	4.55	
24 Isopropyl alcohol	45	4.933	4.933	0.000	71	410956	5.88	4.20	
25 Pentane	72	4.933	4.933	0.000	84	31498	2.00	2.15	
26 Ethyl ether	31	5.062	5.062	0.000	88	104914	2.00	1.58	
27 1,1-Dichloroethene	96	5.343	5.343	0.000	99	174218	2.00	2.27	
28 Acrylonitrile	53	5.424	5.424	0.000	82	53413	2.00	1.53	
29 2-Methyl-2-propanol	59	5.456	5.456	0.000	55	202893	2.00	1.74	
30 1,1,2-Trichloro-1,2,2-trif	101	5.510	5.510	0.000	96	431363	2.00	2.44	
31 Methylene Chloride	84	5.639	5.639	0.000	81	150640	2.00	2.18	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.661	5.661	0.000	84	140325	2.00	1.89	
33 Carbon disulfide	76	5.780	5.780	0.000	99	443043	2.00	2.27	
34 trans-1,2-Dichloroethene	96	6.373	6.373	0.000	96	155296	2.00	2.07	
35 2-Methylpentane	43	6.411	6.411	0.000	86	209441	2.00	1.42	
36 Methyl tert-butyl ether	73	6.491	6.491	0.000	85	427562	2.00	1.92	
37 1,1-Dichloroethane	63	6.750	6.750	0.000	98	256679	2.00	1.75	
38 Vinyl acetate	43	6.858	6.858	0.000	98	238475	2.00	1.42	
39 2-Butanone (MEK)	72	7.252	7.252	0.000	96	52300	2.00	1.60	
40 Hexane	56	7.317	7.317	0.000	77	85753	2.00	1.51	
41 Isopropyl ether	45	7.457	7.457	0.000	88	280587	2.00	1.34	
42 cis-1,2-Dichloroethene	96	7.667	7.667	0.000	93	159206	2.00	2.00	
43 Ethyl acetate	43	7.850	7.850	0.000	97	192024	2.00	1.38	
44 Chloroform	83	7.996	7.996	0.000	95	450141	2.00	2.23	
45 Tert-butyl ethyl ether	59	8.098	8.098	0.000	93	346274	2.00	1.65	
46 Tetrahydrofuran	42	8.352	8.352	0.000	78	93028	2.00	1.27	
47 1,1,1-Trichloroethane	97	8.967	8.967	0.000	93	572668	2.00	2.45	
48 1,2-Dichloroethane	62	9.058	9.058	0.000	97	315445	2.00	2.19	
49 Benzene	78	9.554	9.554	0.000	95	452217	2.00	1.86	
50 Cyclohexane	69	9.560	9.560	0.000	71	77882	2.00	1.91	
51 Carbon tetrachloride	117	9.581	9.581	0.000	98	648179	2.00	2.56	
52 n-Butanol	31	9.587	9.587	0.000	10	33504	2.00	1.29	
53 2,3-Dimethylpentane	71	9.705	9.705	0.000	84	101843	2.00	1.82	
54 Thiophene	84	9.824	9.824	0.000	92	258945	2.00	1.91	
55 Tert-amyl methyl ether	73	10.067	10.067	0.000	83	427757	2.00	1.92	
56 Isooctane	57	10.385	10.385	0.000	95	569998	2.00	1.58	
57 n-Heptane	71	10.784	10.784	0.000	81	165076	2.00	1.83	
58 1,2-Dichloropropane	63	10.816	10.816	0.000	64	138714	2.00	1.68	
59 Trichloroethene	130	10.870	10.870	0.000	92	272618	2.00	2.07	
60 Dibromomethane	93	10.929	10.929	0.000	78	240635	2.00	2.20	
61 Dichlorobromomethane	83	11.097	11.097	0.000	97	492358	2.00	2.34	
62 1,4-Dioxane	88	11.113	11.113	0.000	30	54851	2.00	1.67	
63 Methyl methacrylate	41	11.231	11.231	0.000	94	144363	2.00	1.58	
64 Methylcyclohexane	83	11.674	11.674	0.000	91	373135	2.00	1.97	
65 4-Methyl-2-pentanone (MIBK)	43	12.100	12.100	0.000	95	201374	2.00	1.44	
66 cis-1,3-Dichloropropene	75	12.143	12.143	0.000	95	306368	2.00	2.01	
67 trans-1,3-Dichloropropene	75	12.865	12.865	0.000	96	299145	2.00	1.98	
68 Toluene	91	12.995	12.995	0.000	91	549501	2.00	1.95	
69 1,1,2-Trichloroethane	83	13.065	13.065	0.000	88	162414	2.00	1.92	
70 2-Methylthiophene	97	13.146	13.146	0.000	97	480238	2.00	2.03	
71 3-Methylthiophene	97	13.351	13.351	0.000	99	479882	2.00	2.05	
72 2-Hexanone	58	13.491	13.491	0.000	94	95337	2.00	1.41	
73 n-Octane	85	13.755	13.755	0.000	78	201624	2.00	1.98	
74 Chlorodibromomethane	129	13.771	13.771	0.000	95	506833	2.00	2.41	
75 Ethylene Dibromide	107	14.062	14.062	0.000	95	364986	2.00	2.21	
76 Tetrachloroethene	129	14.165	14.165	0.000	88	278517	2.00	2.16	
77 Chlorobenzene	112	15.055	15.055	0.000	76	484476	2.00	2.03	
78 2,3-Dimethylheptane	43	15.130	15.130	0.000	81	368015	2.00	1.53	
79 Ethylbenzene	91	15.362	15.362	0.000	99	795318	2.00	2.02	
80 2-Ethylthiophene	97	15.464	15.464	0.000	78	663311	2.00	2.14	
81 m-Xylene & p-Xylene	91	15.534	15.534	0.000	100	1296499	4.00	4.08	
82 Bromoform	173	15.950	15.950	0.000	91	380597	2.00	1.93	
83 Styrene	104	15.998	15.998	0.000	91	461956	2.00	2.20	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 n-Nonane	57	16.004	16.004	0.000	84	291656	2.00	1.69	
85 o-Xylene	91	16.063	16.063	0.000	73	662752	2.00	2.04	
86 1,1,2,2-Tetrachloroethane	83	16.386	16.386	0.000	97	401310	2.00	1.96	
87 1,2,3-Trichloropropane	110	16.537	16.537	0.000	94	161308	2.00	2.15	
88 Isopropylbenzene	105	16.667	16.667	0.000	96	1001533	2.00	2.12	
89 N-Propylbenzene	120	17.222	17.222	0.000	99	249269	2.00	2.01	
90 2-Chlorotoluene	126	17.249	17.249	0.000	97	235817	2.00	2.04	
91 4-Ethyltoluene	105	17.384	17.384	0.000	98	928316	2.00	2.09	
92 1,3,5-Trimethylbenzene	120	17.465	17.465	0.000	91	424676	2.00	2.04	
93 Alpha Methyl Styrene	118	17.708	17.708	0.000	84	364146	2.00	2.17	
94 n-Decane	57	17.815	17.815	0.000	94	353290	2.00	1.67	
95 tert-Butylbenzene	119	17.913	17.913	0.000	86	928522	2.00	2.12	
96 1,2,4-Trimethylbenzene	105	17.929	17.929	0.000	92	851018	2.00	2.13	
97 1,3-Dichlorobenzene	146	18.198	18.198	0.000	73	591877	2.00	1.97	
98 sec-Butylbenzene	105	18.204	18.204	0.000	98	1202665	2.00	2.14	
99 Benzyl chloride	91	18.279	18.279	0.000	97	778881	2.00	2.07	
100 1,4-Dichlorobenzene	146	18.290	18.290	0.000	92	583147	2.00	1.98	
101 4-Isopropyltoluene	119	18.376	18.376	0.000	89	1053098	2.00	2.12	
102 1,2,3-Trimethylbenzene	105	18.419	18.419	0.000	69	621547	2.00	2.09	
103 Butylcyclohexane	83	18.495	18.495	0.000	95	586345	2.00	1.99	
104 1,2-Dichlorobenzene	146	18.662	18.662	0.000	91	566723	2.00	1.98	
105 2,3-Dihydroindene	117	18.667	18.667	0.000	89	762846	2.00	2.10	
106 Indene	116	18.802	18.802	0.000	90	542915	2.00	2.04	
107 n-Butylbenzene	91	18.829	18.829	0.000	96	951156	2.00	2.05	
108 Undecane	57	19.190	19.190	0.000	87	389894	2.00	1.57	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.217	19.217	0.000	93	762468	2.00	2.06	
110 1,2-Dibromo-3-Chloropropan	157	19.288	19.288	0.000	96	206390	2.00	1.68	
111 1,2,4,5-Tetramethylbenzene	119	19.611	19.611	0.000	95	943634	2.00	2.12	
112 1,2,3,5-Tetramethylbenzene	119	19.665	19.665	0.000	93	564737	2.00	2.11	
113 1,2,3,4-Tetramethylbenzene	119	20.064	20.064	0.000	96	758949	2.00	2.08	
114 Dodecane	57	20.264	20.264	0.000	88	235860	2.00	1.07	
115 1,2,4-Trichlorobenzene	180	20.398	20.398	0.000	92	412599	2.00	1.63	
116 Naphthalene	128	20.522	20.522	0.000	98	1001466	2.00	1.89	
117 Benzo(b)thiophene	134	20.619	20.619	0.000	99	564836	2.00	1.84	
118 Hexachlorobutadiene	225	20.754	20.754	0.000	68	339263	2.00	1.36	
119 1,2,3-Trichlorobenzene	180	20.803	20.803	0.000	90	343304	2.00	1.44	
120 2-Methylnaphthalene	142	21.595	21.595	0.000	98	307399	6.06	2.80	
121 1-Methylnaphthalene	142	21.779	21.779	0.000	98	305403	6.06	2.79	
A 122 C6 Range	1	7.327	(7.287-7.367)		0	893714	2.00	1.63	
A 124 Toluene Range	1	12.990	(12.955-13.025)		0	1370788	2.00	2.00	
S 126 Xylenes, Total	100				0		6.00	6.12	
S 127 1,2-Dichloroethene, Total	1				0		4.00	4.07	

Reagents:

40CV101P_00034

Amount Added: 100.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GCCVD20.D

Injection Date: 20-Apr-2017 09:46:30

Instrument ID: MG

Operator ID: 7126

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 500.000 mL

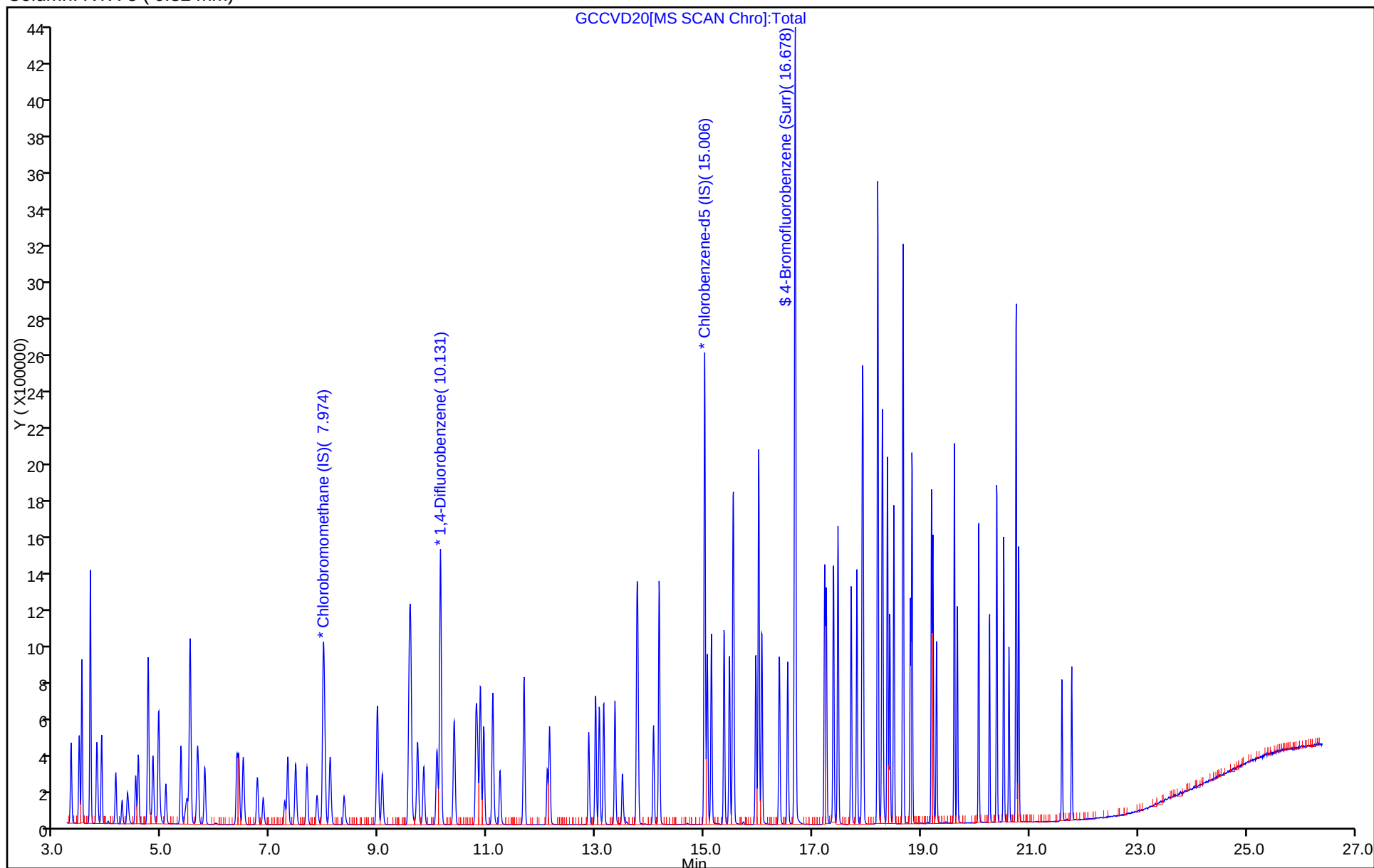
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GBFBC15.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 15-Mar-2017 14:04:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0004323-001
Misc. Info.: BFB
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 16-Mar-2017 12:19:31 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: tajh

Date: 16-Mar-2017 12:19:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags

\$ 5 BFB	95	4.717	4.717	0.000	0	1116686	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

40MXSUR_00001

Amount Added: 40.00

Units: mL

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GBFBC15.D

Injection Date: 15-Mar-2017 14:04:30

Instrument ID: MG

Lims ID: BFB

Client ID:

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 1

Injection Vol: 500.0 mL

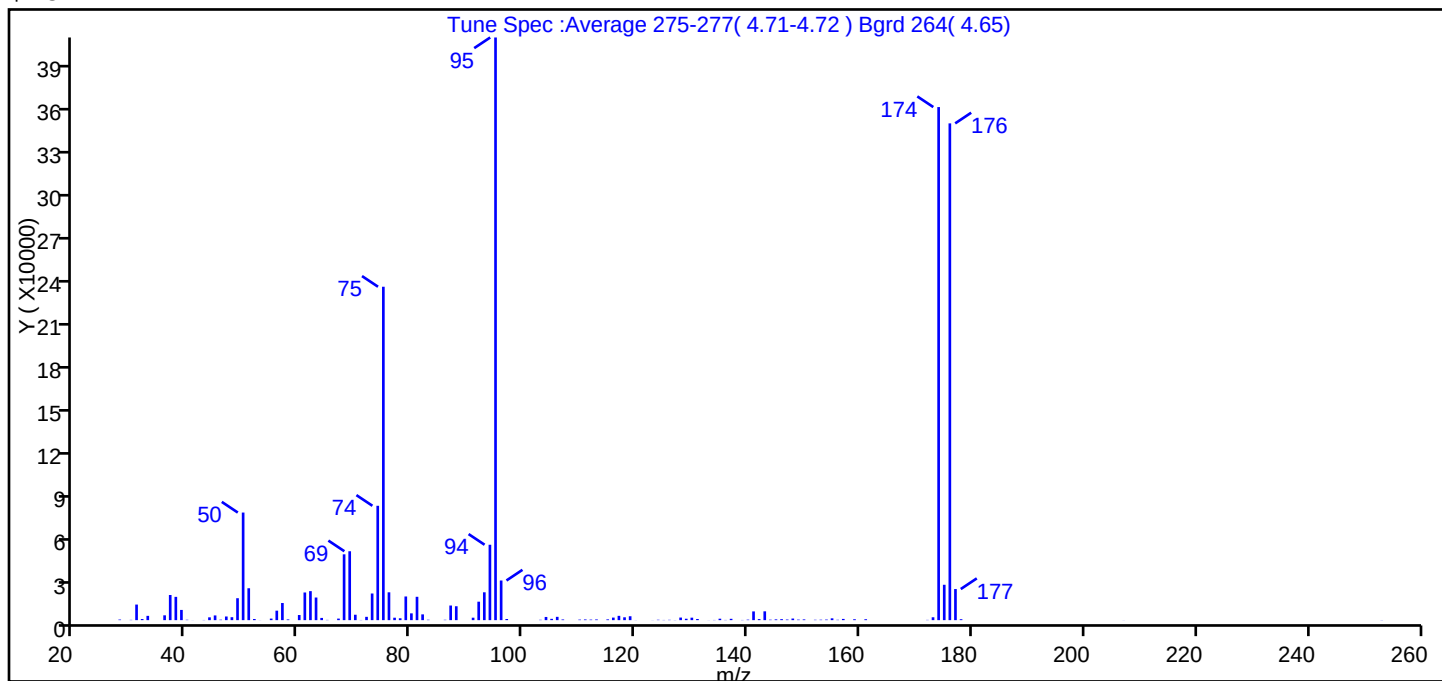
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Tune Method: BFB Method 8260

\$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.5
75	30 to 60% of m/z 95	57.2
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.5 (0.6)
174	50 to 120% of m/z 95	88.1
175	5 to 9% of m/z 174	6.1 (6.9)
176	Greater than 95% but less than 101% of m/z 174	85.3 (96.8)
177	5 to 9% of m/z 176	5.3 (6.3)

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GBFBC15.D\MG_TO15.rslt\spectra.d
Injection Date: 15-Mar-2017 14:04:30
Spectrum: Tune Spec :Average 275-277(4.71-4.72) Bgrd 264(4.65)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 117

m/z	Y	m/z	Y	m/z	Y	m/z	Y
28.00	409	64.00	1536	104.00	2199	141.00	6035
30.00	188	65.00	166	105.00	907	142.00	723
31.00	10758	67.00	1069	106.00	2285	143.00	6088
32.00	766	68.00	45464	107.00	469	144.00	319
33.00	2961	69.00	47584	110.00	375	145.00	537
36.00	3330	70.00	3735	111.00	475	146.00	686
37.00	17360	71.00	120	112.00	373	147.00	417
38.00	16084	72.00	2290	113.00	485	148.00	1105
39.00	7056	73.00	18408	115.00	536	149.00	367
40.00	266	74.00	78984	116.00	1763	150.00	513
41.00	40	75.00	230272	117.00	2969	152.00	258
43.00	124	76.00	19224	118.00	1965	153.00	307
44.00	1942	77.00	1681	119.00	2695	154.00	401
45.00	3252	78.00	1293	120.00	60	155.00	1247
46.00	314	79.00	16348	123.00	52	156.00	242
47.00	2522	80.00	4690	124.00	273	157.00	846
48.00	2030	81.00	16127	125.00	134	159.00	624
49.00	15149	82.00	3989	126.00	226	161.00	624
50.00	74312	83.00	279	127.00	86	172.00	178
51.00	22024	86.00	248	128.00	1782	173.00	1987
52.00	791	87.00	10097	129.00	968	174.00	354368
53.00	50	88.00	9600	130.00	1708	175.00	24432
55.00	1070	91.00	1693	131.00	775	176.00	343104
56.00	6545	92.00	12747	133.00	52	177.00	21480
57.00	11828	93.00	19232	134.00	131	178.00	635
58.00	499	94.00	52072	135.00	989	207.00	46
60.00	3534	95.00	402432	136.00	138	253.00	102
61.00	19104	96.00	27384	137.00	918		
62.00	20032	97.00	791	139.00	127		
63.00	15625	103.00	237	140.00	350		

Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GBFBC15.D

Injection Date: 15-Mar-2017 14:04:30

Instrument ID: MG

Operator ID: 7126

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 500.0 mL

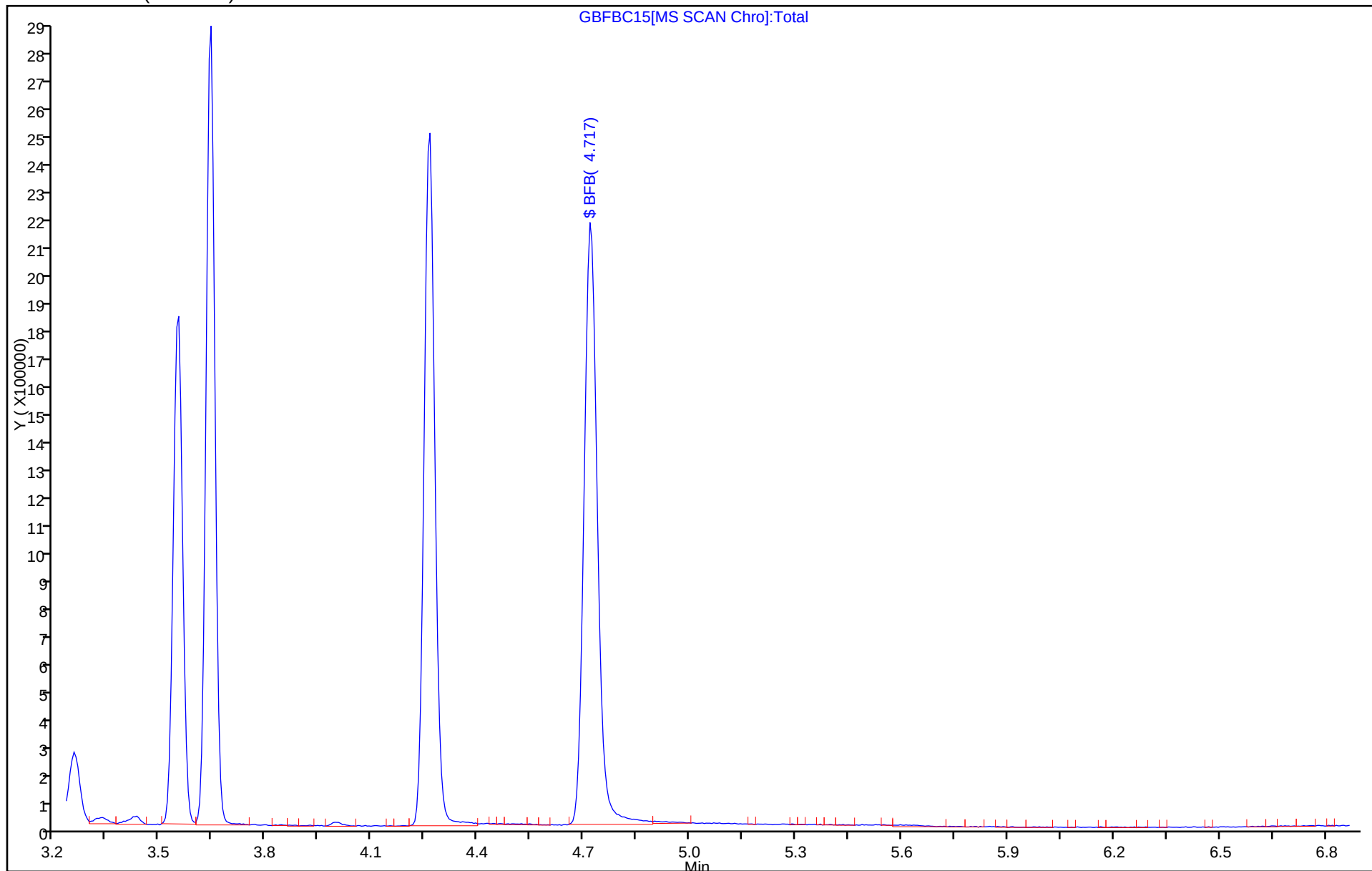
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GBFBD20.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 20-Apr-2017 09:13:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0004683-001
Misc. Info.: BFB
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 20-Apr-2017 13:34:01 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK017

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags

\$ 5 BFB	95	4.734	4.734	0.000	0	1322143	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

40MXSUR_00001

Amount Added: 40.00

Units: mL

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GBFBD20.D

Injection Date: 20-Apr-2017 09:13:30

Instrument ID: MG

Lims ID: BFB

Client ID:

Operator ID: 7126

ALS Bottle#: 16

Worklist Smp#: 1

Injection Vol: 500.0 mL

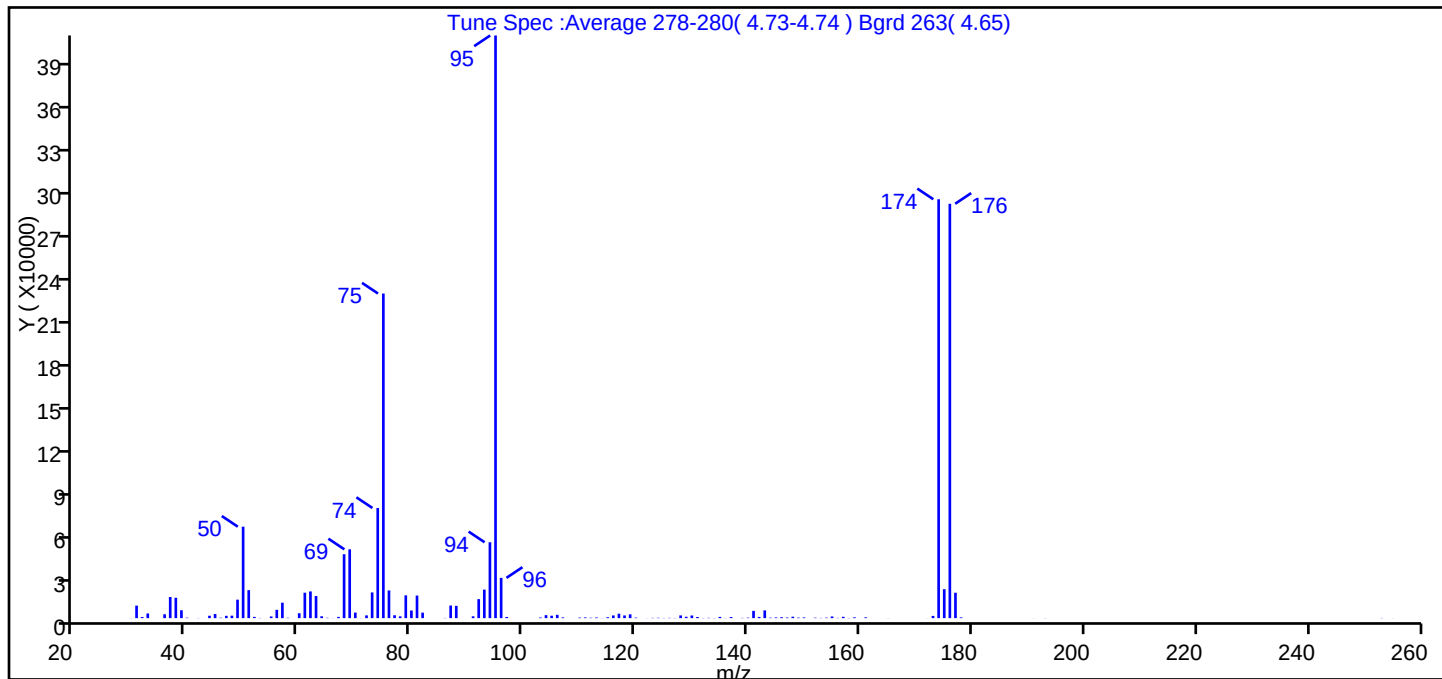
Dil. Factor: 1.0000

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Tune Method: BFB Method 8260

\$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.7
75	30 to 60% of m/z 95	55.7
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	71.9
175	5 to 9% of m/z 174	5.0 (6.9)
176	Greater than 95% but less than 101% of m/z 174	71.1 (98.9)
177	5 to 9% of m/z 176	4.4 (6.1)

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GBFBD20.D\MG_TO15.rslt\spectra.d
Injection Date: 20-Apr-2017 09:13:30
Spectrum: Tune Spec :Average 278-280(4.73-4.74) Bgrd 263(4.65)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 123

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	8	66.00	53	107.00	519	142.00	841
30.00	65	67.00	872	110.00	375	143.00	5389
31.00	8715	68.00	44432	111.00	497	144.00	318
32.00	781	69.00	47832	112.00	278	145.00	500
33.00	3248	70.00	3857	113.00	454	146.00	661
36.00	2693	71.00	62	114.00	67	147.00	426
37.00	14680	72.00	1934	115.00	622	148.00	1009
38.00	14173	73.00	17872	116.00	1879	149.00	360
39.00	5492	74.00	76576	117.00	3068	150.00	476
40.00	320	75.00	225664	118.00	1891	152.00	321
42.00	111	76.00	19256	119.00	2642	153.00	160
44.00	1675	77.00	2027	120.00	374	154.00	330
45.00	2852	78.00	1229	122.00	66	155.00	1161
46.00	278	79.00	15849	123.00	192	156.00	172
47.00	1615	80.00	5319	124.00	270	157.00	928
48.00	1723	81.00	15697	125.00	142	158.00	119
49.00	12856	82.00	3821	126.00	212	159.00	563
50.00	63576	86.00	132	127.00	132	161.00	553
51.00	19448	87.00	8772	128.00	1897	165.00	65
52.00	880	88.00	8533	129.00	954	172.00	51
53.00	129	91.00	1266	130.00	1848	173.00	1544
55.00	1163	92.00	13211	131.00	783	174.00	291200
56.00	5777	93.00	19848	132.00	118	175.00	20136
57.00	10735	94.00	52760	133.00	228	176.00	288064
58.00	242	95.00	405056	134.00	102	177.00	17672
60.00	3408	96.00	28000	135.00	868	178.00	527
61.00	17680	97.00	814	136.00	66	191.00	53
62.00	18576	103.00	446	137.00	749	193.00	71
63.00	15404	104.00	2075	139.00	178	253.00	133
64.00	1304	105.00	1688	140.00	328	255.00	56
65.00	236	106.00	2314	141.00	5040		

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GBFBD20.D

Injection Date: 20-Apr-2017 09:13:30

Instrument ID: MG

Operator ID: 7126

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 500.0 mL

Dil. Factor: 1.0000

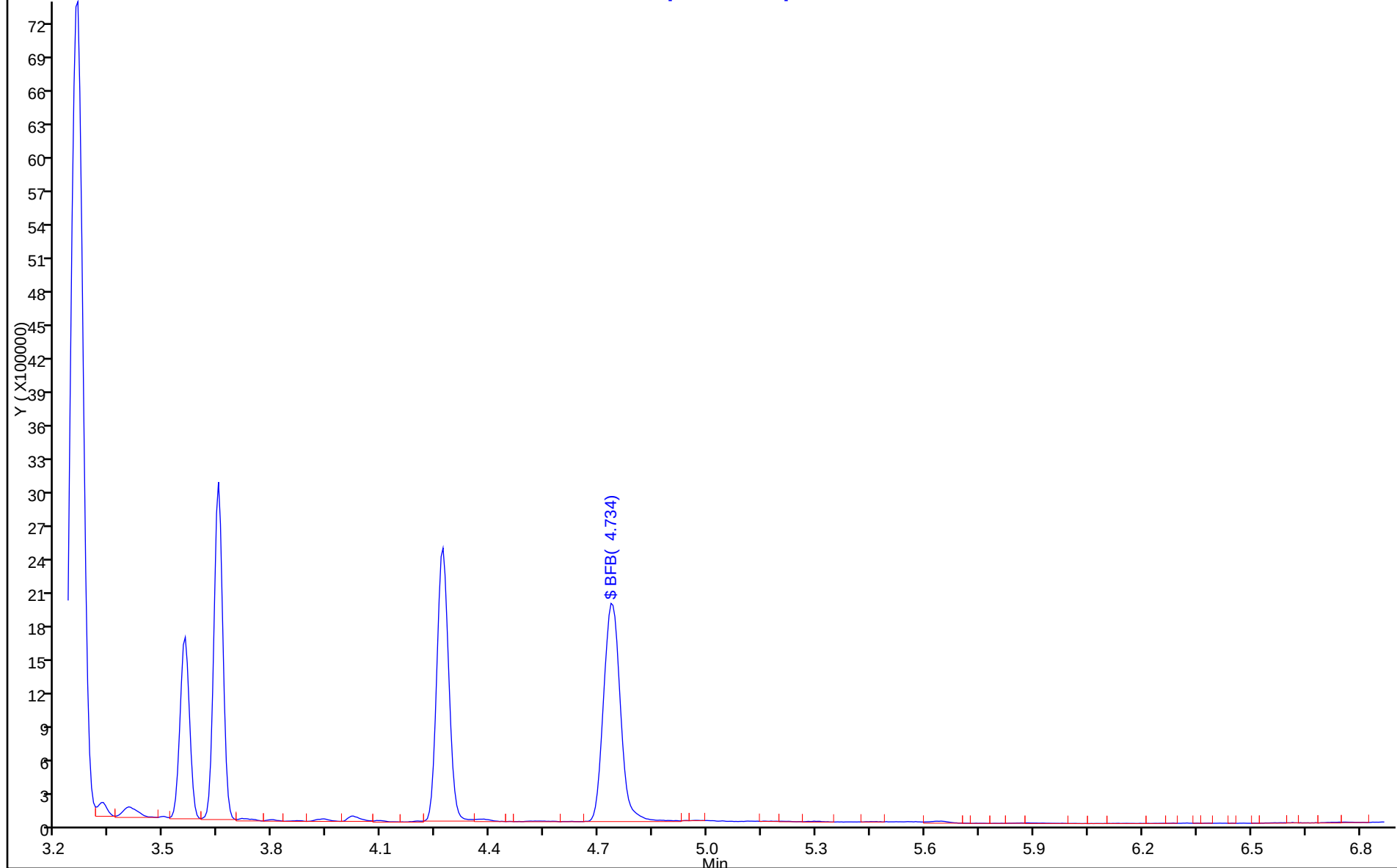
ALS Bottle#: 16

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

GBFBD20[MS SCAN Chro]:Total



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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-10584/4
 Matrix: Air Lab File ID: GMB500D20.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 12:11
 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.: 10584 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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-10584/4
 Matrix: Air Lab File ID: GMB500D20.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 12:11
 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.: 10584 Units: ppb v/v

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-10584/4
 Matrix: Air Lab File ID: GMB500D20.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 12:11
 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.: 10584 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.: 140-7831-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-10584/4
 Matrix: Air Lab File ID: GMB500D20.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 12:11
 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.: 10584 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	
64-17-5	Ethanol	46.07	ND		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	ND		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.21	
75-69-4	Trichlorofluoromethane	137.37	ND		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	104		60-140

TestAmerica Knoxville
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GMB500D20.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 20-Apr-2017 12:11:30 ALS Bottle#: 16 Worklist Smp#: 4
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004683-004
 Misc. Info.: 500ML BLK
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 20-Apr-2017 13:34:03 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK017

First Level Reviewer: tajh

Date: 20-Apr-2017 13:09:33

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	7.958	7.969	-0.011	68	256855	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.121	10.131	-0.010	94	1252605	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.001	15.006	-0.005	88	1249896	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.672	16.678	-0.006	83	1023422	4.00	4.14	
31 Methylene Chloride	84	5.634	5.639	-0.005	79	6450		0.1044	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GMB500D20.D

Injection Date: 20-Apr-2017 12:11:30

Instrument ID: MG

Operator ID: 7126

Lims ID: MB

Worklist Smp#: 4

Client ID:

Purge Vol: 500.000 mL

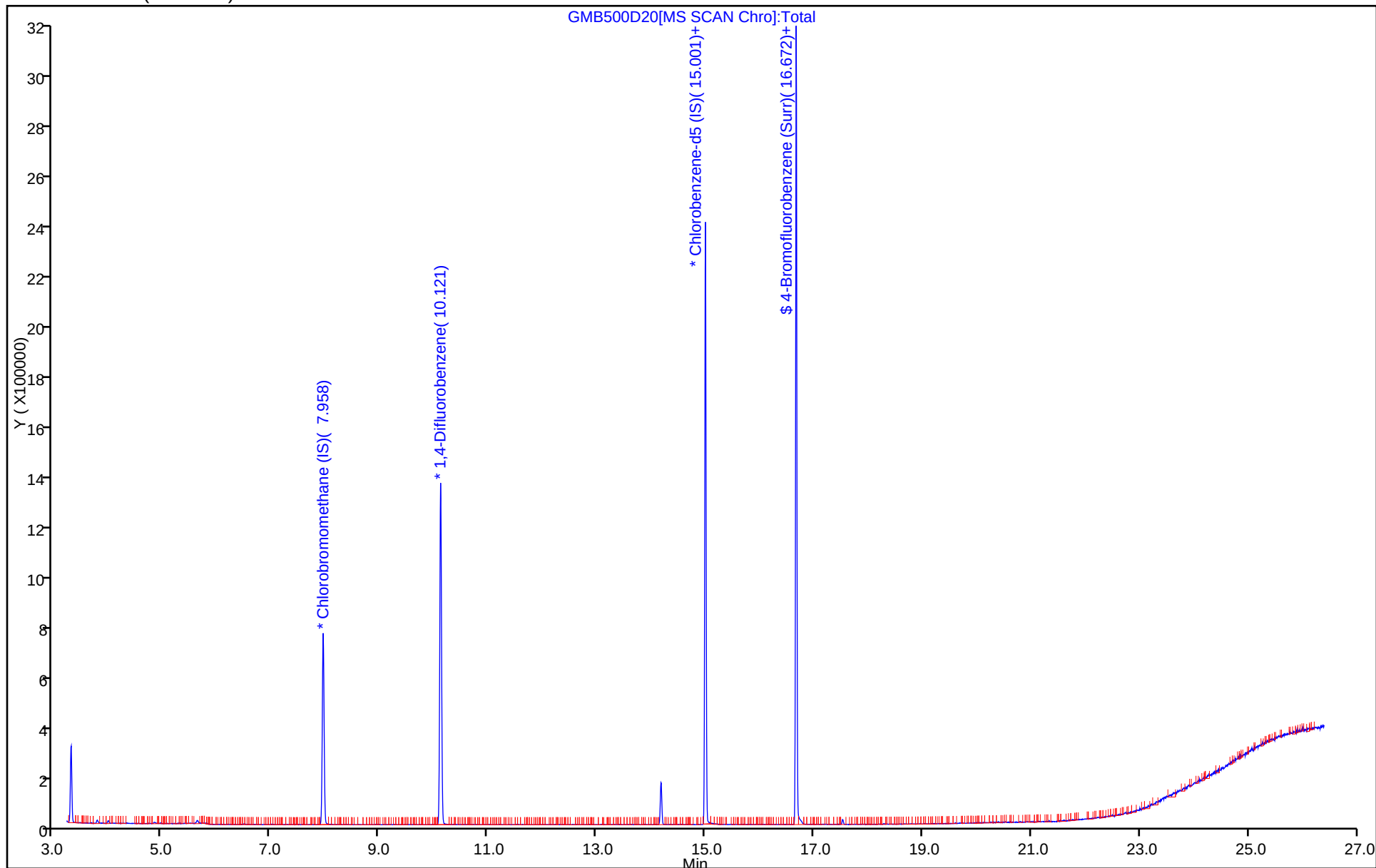
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Knoxville
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GMB500D20.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 20-Apr-2017 12:11:30 ALS Bottle#: 16 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004683-004
Misc. Info.: 500ML BLK
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 20-Apr-2017 13:34:03 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: tajh

Date: 20-Apr-2017 13:09:33

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.14	103.58

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 140-10584/1002
 Matrix: Air Lab File ID: GCCVD20-LCS.d
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 09:46
 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.: 10584 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	2.45		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.96		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	1.92		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	2.44		0.080	
75-34-3	1,1-Dichloroethane	98.96	1.75		0.080	
75-35-4	1,1-Dichloroethene	96.94	2.27		0.080	
120-82-1	1,2,4-Trichlorobenzene	181.45	1.63		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	2.13		0.080	
106-93-4	1,2-Dibromoethane	187.87	2.21		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	1.98		0.080	
107-06-2	1,2-Dichloroethane	98.96	2.19		0.080	
78-87-5	1,2-Dichloropropane	112.99	1.68		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.25		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	2.04		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	1.97		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	1.98		0.080	
123-91-1	1,4-Dioxane	88.11	1.67		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	1.58		0.20	
78-93-3	2-Butanone	72.11	1.60		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.44		0.20	
71-43-2	Benzene	78.11	1.86		0.080	
100-44-7	Benzyl chloride	126.58	2.07		0.16	
75-27-4	Bromodichloromethane	163.83	2.34		0.080	
75-25-2	Bromoform	252.75	1.93		0.080	
74-83-9	Bromomethane	94.94	2.08		0.080	
56-23-5	Carbon tetrachloride	153.81	2.56		0.040	
108-90-7	Chlorobenzene	112.56	2.03		0.080	
75-00-3	Chloroethane	64.52	1.74		0.080	
67-66-3	Chloroform	119.38	2.23		0.080	
74-87-3	Chloromethane	50.49	1.38		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	2.00		0.080	
10061-01-5	cis-1,3-Dichloropropene	110.97	2.01		0.080	
110-82-7	Cyclohexane	84.16	1.91		0.20	

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

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 140-10584/1002
 Matrix: Air Lab File ID: GCCVD20-LCS.d
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 04/20/2017 09:46
 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.: 10584 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	2.41		0.080	
75-71-8	Dichlorodifluoromethane	120.91	2.34		0.080	
64-17-5	Ethanol	46.07	6.63		2.0	
100-41-4	Ethylbenzene	106.17	2.02		0.080	
87-68-3	Hexachlorobutadiene	260.76	1.36		0.080	
110-54-3	Hexane	86.17	1.51		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	1.92		0.16	
75-09-2	Methylene Chloride	84.93	2.18		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	4.08		0.080	
95-47-6	o-Xylene	106.17	2.04		0.080	
100-42-5	Styrene	104.15	2.20		0.080	
75-65-0	t-Butyl alcohol	74.12	1.74		0.32	
127-18-4	Tetrachloroethene	165.83	2.16		0.080	
108-88-3	Toluene	92.14	1.95		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	2.07		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	1.98		0.080	
79-01-6	Trichloroethene	131.39	2.07		0.040	
75-69-4	Trichlorofluoromethane	137.37	2.45		0.080	
75-01-4	Vinyl chloride	62.50	1.68		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	108		60-140

TestAmerica Laboratories
Target Compound Quantitation Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GCCVD20-LCS.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 20-Apr-2017 09:46:30 ALS Bottle#: 15 Worklist Smp#: 1002
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004683-002
 Misc. Info.: P34
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 20-Apr-2017 13:34:03 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK017

First Level Reviewer: tajh

Date: 20-Apr-2017 11:11:34

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	7.969	7.969	0.000	68	287854	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.131	10.131	0.000	92	1428849	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.006	15.006	0.000	82	1413484	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.678	16.678	0.000	82	1212259	4.00	4.34	
6 Chlorodifluoromethane	67	3.461	3.461	0.000	71	77402	2.00	2.42	
7 Propene	41	3.472	3.472	0.000	76	102293	2.00	1.34	
8 Dichlorodifluoromethane	85	3.515	3.515	0.000	99	711795	2.00	2.34	
9 Chloromethane	52	3.660	3.660	0.000	52	28280	2.00	1.38	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.671	3.671	0.000	89	407606	2.00	2.25	
11 Acetaldehyde	44	3.790	3.790	0.000	83	153443	10.0	6.38	
12 Vinyl chloride	62	3.806	3.806	0.000	98	141688	2.00	1.68	
13 Butadiene	54	3.876	3.876	0.000	74	82274	2.00	1.47	
14 Butane	43	3.882	3.882	0.000	81	169753	2.00	1.42	
15 Bromomethane	94	4.140	4.140	0.000	98	173116	2.00	2.08	
16 Chloroethane	64	4.259	4.259	0.000	92	70787	2.00	1.74	
17 Ethanol	31	4.356	4.356	0.000	95	192120	10.0	6.63	
18 Vinyl bromide	106	4.507	4.507	0.000	95	174401	2.00	2.21	
19 2-Methylbutane	43	4.556	4.556	0.000	85	123888	2.00	1.54	
21 Acrolein	56	4.734	4.734	0.000	6	20113	2.00	1.71	
20 Trichlorofluoromethane	101	4.739	4.739	0.000	98	742746	2.00	2.45	
22 Acetonitrile	40	4.787	4.787	0.000	97	34492	2.00	1.43	
23 Acetone	58	4.825	4.825	0.000	83	128719	5.88	4.55	
24 Isopropyl alcohol	45	4.933	4.933	0.000	71	410956	5.88	4.20	
25 Pentane	72	4.933	4.933	0.000	84	31498	2.00	2.15	
26 Ethyl ether	31	5.062	5.062	0.000	88	104914	2.00	1.58	
27 1,1-Dichloroethene	96	5.343	5.343	0.000	99	174218	2.00	2.27	
28 Acrylonitrile	53	5.424	5.424	0.000	82	53413	2.00	1.53	
29 2-Methyl-2-propanol	59	5.456	5.456	0.000	55	202893	2.00	1.74	
30 1,1,2-Trichloro-1,2,2-trif	101	5.510	5.510	0.000	96	431363	2.00	2.44	
31 Methylene Chloride	84	5.639	5.639	0.000	81	150640	2.00	2.18	
32 3-Chloro-1-propene	39	5.661	5.661	0.000	84	140325	2.00	1.89	

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	5.780	5.780	0.000	99	443043	2.00	2.27	
34 trans-1,2-Dichloroethene	96	6.373	6.373	0.000	96	155296	2.00	2.07	
35 2-Methylpentane	43	6.411	6.411	0.000	86	209441	2.00	1.42	
36 Methyl tert-butyl ether	73	6.491	6.491	0.000	85	427562	2.00	1.92	
37 1,1-Dichloroethane	63	6.750	6.750	0.000	98	256679	2.00	1.75	
38 Vinyl acetate	43	6.858	6.858	0.000	98	238475	2.00	1.42	
39 2-Butanone (MEK)	72	7.252	7.252	0.000	96	52300	2.00	1.60	
40 Hexane	56	7.317	7.317	0.000	77	85753	2.00	1.51	
41 Isopropyl ether	45	7.457	7.457	0.000	88	280587	2.00	1.34	
42 cis-1,2-Dichloroethene	96	7.667	7.667	0.000	93	159206	2.00	2.00	
43 Ethyl acetate	43	7.850	7.850	0.000	97	192024	2.00	1.38	
44 Chloroform	83	7.996	7.996	0.000	95	450141	2.00	2.23	
45 Tert-butyl ethyl ether	59	8.098	8.098	0.000	93	346274	2.00	1.65	
46 Tetrahydrofuran	42	8.352	8.352	0.000	78	93028	2.00	1.27	
47 1,1,1-Trichloroethane	97	8.967	8.967	0.000	93	572668	2.00	2.45	
48 1,2-Dichloroethane	62	9.058	9.058	0.000	97	315445	2.00	2.19	
49 Benzene	78	9.554	9.554	0.000	95	452217	2.00	1.86	
50 Cyclohexane	69	9.560	9.560	0.000	71	77882	2.00	1.91	
51 Carbon tetrachloride	117	9.581	9.581	0.000	98	648179	2.00	2.56	
52 n-Butanol	31	9.587	9.587	0.000	10	33504	2.00	1.29	
53 2,3-Dimethylpentane	71	9.705	9.705	0.000	84	101843	2.00	1.82	
54 Thiophene	84	9.824	9.824	0.000	92	258945	2.00	1.91	
55 Tert-amyl methyl ether	73	10.067	10.067	0.000	83	427757	2.00	1.92	
56 Isooctane	57	10.385	10.385	0.000	95	569998	2.00	1.58	
57 n-Heptane	71	10.784	10.784	0.000	81	165076	2.00	1.83	
58 1,2-Dichloropropane	63	10.816	10.816	0.000	64	138714	2.00	1.68	
59 Trichloroethene	130	10.870	10.870	0.000	92	272618	2.00	2.07	
60 Dibromomethane	93	10.929	10.929	0.000	78	240635	2.00	2.20	
61 Dichlorobromomethane	83	11.097	11.097	0.000	97	492358	2.00	2.34	
62 1,4-Dioxane	88	11.113	11.113	0.000	30	54851	2.00	1.67	
63 Methyl methacrylate	41	11.231	11.231	0.000	94	144363	2.00	1.58	
64 Methylcyclohexane	83	11.674	11.674	0.000	91	373135	2.00	1.97	
65 4-Methyl-2-pentanone (MIBK)	43	12.100	12.100	0.000	95	201374	2.00	1.44	
66 cis-1,3-Dichloropropene	75	12.143	12.143	0.000	95	306368	2.00	2.01	
67 trans-1,3-Dichloropropene	75	12.865	12.865	0.000	96	299145	2.00	1.98	
68 Toluene	91	12.995	12.995	0.000	91	549501	2.00	1.95	
69 1,1,2-Trichloroethane	83	13.065	13.065	0.000	88	162414	2.00	1.92	
70 2-Methylthiophene	97	13.146	13.146	0.000	97	480238	2.00	2.03	
71 3-Methylthiophene	97	13.351	13.351	0.000	99	479882	2.00	2.05	
72 2-Hexanone	58	13.491	13.491	0.000	94	95337	2.00	1.41	
73 n-Octane	85	13.755	13.755	0.000	78	201624	2.00	1.98	
74 Chlorodibromomethane	129	13.771	13.771	0.000	95	506833	2.00	2.41	
75 Ethylene Dibromide	107	14.062	14.062	0.000	95	364986	2.00	2.21	
76 Tetrachloroethene	129	14.165	14.165	0.000	88	278517	2.00	2.16	
77 Chlorobenzene	112	15.055	15.055	0.000	76	484476	2.00	2.03	
78 2,3-Dimethylheptane	43	15.130	15.130	0.000	81	368015	2.00	1.53	
79 Ethylbenzene	91	15.362	15.362	0.000	99	795318	2.00	2.02	
80 2-Ethylthiophene	97	15.464	15.464	0.000	78	663311	2.00	2.14	
81 m-Xylene & p-Xylene	91	15.534	15.534	0.000	100	1296499	4.00	4.08	
82 Bromoform	173	15.950	15.950	0.000	91	380597	2.00	1.93	
83 Styrene	104	15.998	15.998	0.000	91	461956	2.00	2.20	
84 n-Nonane	57	16.004	16.004	0.000	84	291656	2.00	1.69	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 o-Xylene	91	16.063	16.063	0.000	73	662752	2.00	2.04	
86 1,1,2,2-Tetrachloroethane	83	16.386	16.386	0.000	97	401310	2.00	1.96	
87 1,2,3-Trichloropropane	110	16.537	16.537	0.000	94	161308	2.00	2.15	
88 Isopropylbenzene	105	16.667	16.667	0.000	96	1001533	2.00	2.12	
89 N-Propylbenzene	120	17.222	17.222	0.000	99	249269	2.00	2.01	
90 2-Chlorotoluene	126	17.249	17.249	0.000	97	235817	2.00	2.04	
91 4-Ethyltoluene	105	17.384	17.384	0.000	98	928316	2.00	2.09	
92 1,3,5-Trimethylbenzene	120	17.465	17.465	0.000	91	424676	2.00	2.04	
93 Alpha Methyl Styrene	118	17.708	17.708	0.000	84	364146	2.00	2.17	
94 n-Decane	57	17.815	17.815	0.000	94	353290	2.00	1.67	
95 tert-Butylbenzene	119	17.913	17.913	0.000	86	928522	2.00	2.12	
96 1,2,4-Trimethylbenzene	105	17.929	17.929	0.000	92	851018	2.00	2.13	
97 1,3-Dichlorobenzene	146	18.198	18.198	0.000	73	591877	2.00	1.97	
98 sec-Butylbenzene	105	18.204	18.204	0.000	98	1202665	2.00	2.14	
99 Benzyl chloride	91	18.279	18.279	0.000	97	778881	2.00	2.07	
100 1,4-Dichlorobenzene	146	18.290	18.290	0.000	92	583147	2.00	1.98	
101 4-Isopropyltoluene	119	18.376	18.376	0.000	89	1053098	2.00	2.12	
102 1,2,3-Trimethylbenzene	105	18.419	18.419	0.000	69	621547	2.00	2.09	
103 Butylcyclohexane	83	18.495	18.495	0.000	95	586345	2.00	1.99	
104 1,2-Dichlorobenzene	146	18.662	18.662	0.000	91	566723	2.00	1.98	
105 2,3-Dihydroindene	117	18.667	18.667	0.000	89	762846	2.00	2.10	
106 Indene	116	18.802	18.802	0.000	90	542915	2.00	2.04	
107 n-Butylbenzene	91	18.829	18.829	0.000	96	951156	2.00	2.05	
108 Undecane	57	19.190	19.190	0.000	87	389894	2.00	1.57	
109 1,2-Dimethyl-4-Ethylbenzen	119	19.217	19.217	0.000	93	762468	2.00	2.06	
110 1,2-Dibromo-3-Chloropropan	157	19.288	19.288	0.000	96	206390	2.00	1.68	
111 1,2,4,5-Tetramethylbenzene	119	19.611	19.611	0.000	95	943634	2.00	2.12	
112 1,2,3,5-Tetramethylbenzene	119	19.665	19.665	0.000	93	564737	2.00	2.11	
113 1,2,3,4-Tetramethylbenzene	119	20.064	20.064	0.000	96	758949	2.00	2.08	
114 Dodecane	57	20.264	20.264	0.000	88	235860	2.00	1.07	
115 1,2,4-Trichlorobenzene	180	20.398	20.398	0.000	92	412599	2.00	1.63	
116 Naphthalene	128	20.522	20.522	0.000	98	1001466	2.00	1.89	
117 Benzo(b)thiophene	134	20.619	20.619	0.000	99	564836	2.00	1.84	
118 Hexachlorobutadiene	225	20.754	20.754	0.000	68	339263	2.00	1.36	
119 1,2,3-Trichlorobenzene	180	20.803	20.803	0.000	90	343304	2.00	1.44	
120 2-Methylnaphthalene	142	21.595	21.595	0.000	98	307399	6.06	2.80	
121 1-Methylnaphthalene	142	21.779	21.779	0.000	98	305403	6.06	2.79	
A 122 C6 Range	1	7.327	(7.287-7.367)		0	893714	2.00	1.63	
A 124 Toluene Range	1	12.990	(12.955-13.025)		0	1370788	2.00	2.00	
S 126 Xylenes, Total	100				0		6.00	6.12	
S 127 1,2-Dichloroethene, Total	1				0		4.00	4.07	

Reagents:

40CV101P_00034

Amount Added: 100.00

Units: mL

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Laboratories

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GCCVD20-LCS.d

Injection Date: 20-Apr-2017 09:46:30

Instrument ID: MG

Operator ID: 7126

Lims ID: LCS

Worklist Smp#: 1002

Client ID:

Purge Vol: 500.000 mL

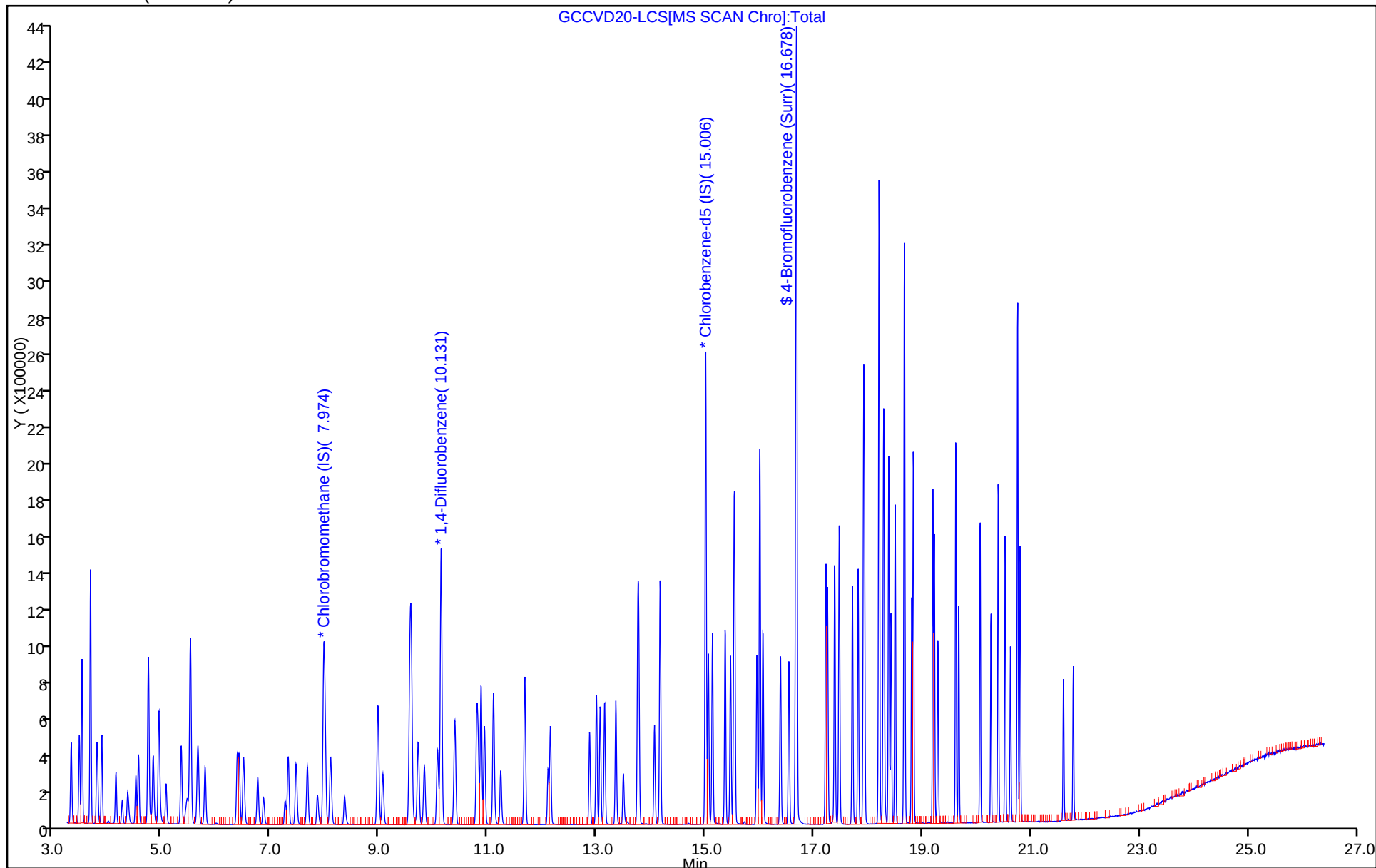
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Laboratories
Recovery Report

Data File: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\GCCVD20-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 20-Apr-2017 09:46:30 ALS Bottle#: 15 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0004683-002
Misc. Info.: P34
Operator ID: 7126 Instrument ID: MG
Method: \\ChromNA\Knoxville\ChromData\MG\20170418-4683.b\MG_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 20-Apr-2017 13:34:03 Calib Date: 15-Mar-2017 20:21:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: tajh

Date: 20-Apr-2017 11:11:34

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.34	108.50

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Knoxville Job No.: 140-7831-1

SDG No.: _____

Instrument ID: MG Start Date: 03/15/2017 14:04Analysis Batch Number: 9482 End Date: 03/15/2017 21:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-9482/1		03/15/2017 14:04	1	GBFBC15.D	RTX-5 0.32 (mm)
IC 140-9482/3		03/15/2017 14:36	1	GC15IC01.D	RTX-5 0.32 (mm)
IC 140-9482/4		03/15/2017 15:20	1	GC15IC02.D	RTX-5 0.32 (mm)
IC 140-9482/5		03/15/2017 16:02	1	GC15IC03.D	RTX-5 0.32 (mm)
IC 140-9482/6		03/15/2017 16:45	1	GC15IC04.D	RTX-5 0.32 (mm)
IC 140-9482/7		03/15/2017 17:29	1	GC15IC05.D	RTX-5 0.32 (mm)
ICIS 140-9482/8		03/15/2017 18:13	1	GC15IC06.D	RTX-5 0.32 (mm)
IC 140-9482/9		03/15/2017 18:56	1	GC15IC07.D	RTX-5 0.32 (mm)
IC 140-9482/10		03/15/2017 19:39	1	GC15IC08.D	RTX-5 0.32 (mm)
IC 140-9482/11		03/15/2017 20:21	1	GC15IC09.D	RTX-5 0.32 (mm)
ICV 140-9482/13		03/15/2017 21:46	1	GICVC15.D	RTX-5 0.32 (mm)

170315.ZZZ

TA-Knoxville
TO-14 Autosampler Log

Sample	Position/Volume	psia	Date	Time
BFB	16 - 101 mL	34.3	3/15/2017	2:04:08 PM
ICAL01	1 - 101 mL	35.6	3/15/2017	2:36:45 PM
ICAL02	1 - 201 mL	35.4	3/15/2017	3:20:37 PM
ICAL03	2 - 201 mL	34.7	3/15/2017	4:02:35 PM
ICAL04	3 - 201 mL	34.9	3/15/2017	4:45:20 PM
ICAL05	4 - 201 mL	35	3/15/2017	5:29:49 PM
ICAL06	5 - 201 mL	34.9	3/15/2017	6:13:24 PM
ICAL07	6 - 201 mL	33.2	3/15/2017	6:56:24 PM
ICAL08	7 - 201 mL	31.1	3/15/2017	7:39:21 PM
ICAL09	8 - 201 mL	34.7	3/15/2017	8:21:54 PM
PRIME	9 - 51 mL	33.8	3/15/2017	9:03:56 PM
ICV	9 - 101 mL	33.1	3/15/2017	9:45:59 PM
PRIME	15 - 52 mL	33.8	3/15/2017	10:28:06 PM
LCS	15 - 101 mL	33.5	3/15/2017	11:10:25 PM
MB	16 - 500 mL	33.6	3/15/2017	11:56:20 PM
MB	16 - 500 mL	32.9	3/16/2017	12:42:02 AM
MDL	1 - 50 mL	35.4	3/16/2017	1:24:20 AM

MG WL 4323

TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 17 & KNOX-MS-0023, Rev 2

Analysis Date:	3/15/17	Instrument:	HG	Chrom WL #:	4323	TALS Batch & Event #	TO14/15: 9482 962	AFCEE: 9503 / 965	
							DOD: 9502 / 964	OHIO: 9501 / 963	
Chrom/Worklist Review						1 st	Comments		
1. Re-read each Limit Group [method editor-limit groups]						/			
2. Verify LODV in Chrom [method editor -> edit -> LODV]						/			
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]						/	#98, #101, #111, #116		
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]						/	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?						/	C6, to 1, (no C8)		
MLG Review						TO-	AFC	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1& 2 methylnaphthalene ≤ 50% [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 - icv]						/	/	/	IPA 62%
22. Analyst/Date:						2nd Level Reviewer/Date:			
Comments:						3/15/17			
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 issue>						/	/	/	/
30. Checklist & Entech report scanned, attached & assigned properly?						/	/	/	/
Analyst:						2nd Level Reviewer:			
Comments: UR8 (5) 5-ethylbenz., 4 FPHD.						Date: 3/16/17			
1M5THBE, N4PL.									

MS017r41, 5/25/2016

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica KnoxvilleJob No.: 140-7831-1

SDG No.: _____

Instrument ID: MGStart Date: 04/20/2017 09:13Analysis Batch Number: 10584End Date: 04/21/2017 09:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-10584/1		04/20/2017 09:13	1	GBFBD20.D	RTX-5 0.32 (mm)
CCVIS 140-10584/2		04/20/2017 09:46	1	GCCVD20.D	RTX-5 0.32 (mm)
LCS 140-10584/1002		04/20/2017 09:46	1	GCCVD20-LCS.d	RTX-5 0.32 (mm)
MB 140-10584/4		04/20/2017 12:11	1	GMB500D20.D	RTX-5 0.32 (mm)
140-7831-1		04/20/2017 12:58	1	GD20P101.D	RTX-5 0.32 (mm)
140-7831-13		04/20/2017 13:44	1	GD20P102.D	RTX-5 0.32 (mm)
140-7831-14		04/20/2017 14:31	1	GD20P103.D	RTX-5 0.32 (mm)
140-7831-2		04/20/2017 15:17	1	GD20P104.D	RTX-5 0.32 (mm)
140-7831-3		04/20/2017 16:04	1	GD20P105.D	RTX-5 0.32 (mm)
140-7831-4		04/20/2017 16:51	1	GD20P106.D	RTX-5 0.32 (mm)
140-7831-5		04/20/2017 17:40	1	GD20P107.D	RTX-5 0.32 (mm)
140-7831-6		04/20/2017 18:27	1	GD20P108.D	RTX-5 0.32 (mm)
140-7831-7		04/20/2017 19:15	1	GD20P109.D	RTX-5 0.32 (mm)
140-7831-8		04/20/2017 20:02	1	GD20P110.D	RTX-5 0.32 (mm)
140-7831-9		04/20/2017 20:48	1	GD20P111.D	RTX-5 0.32 (mm)
140-7831-10		04/20/2017 21:36	1	GD20P112.D	RTX-5 0.32 (mm)
140-7831-11		04/20/2017 22:23	1	GD20P113.D	RTX-5 0.32 (mm)
140-7831-12		04/20/2017 23:09	1	GD20P114.D	RTX-5 0.32 (mm)
ZZZZZ		04/20/2017 23:57	1		RTX-5 0.32 (mm)
ZZZZZ		04/21/2017 02:01	1		RTX-5 0.32 (mm)
ZZZZZ		04/21/2017 02:44	22.45		RTX-5 0.32 (mm)
ZZZZZ		04/21/2017 04:17	4.51		RTX-5 0.32 (mm)
ZZZZZ		04/21/2017 06:41	1		RTX-5 0.32 (mm)
ZZZZZ		04/21/2017 09:35	33.06		RTX-5 0.32 (mm)

170420.ZZZ

TA-Knoxville
TO-14 Autosampler Log

Sample	Position/Volume	psia	Date	Time
BFB	16 - 101 mL	30.3	4/20/2017	9:13:40 AM
CCVIS	15 - 102 mL	21.7	4/20/2017	9:46:12 AM
DNULEAK	16 - 21 mL	30.4	4/20/2017	11:33:49 AM
BLANK	16 - 501 mL	29.8	4/20/2017	12:11:15 PM
7831-01	1 - 501 mL	4.5	4/20/2017	12:58:56 PM
7831-13	2 - 500 mL	7.5	4/20/2017	1:44:51 PM
7831-14	3 - 501 mL	4.3	4/20/2017	2:31:30 PM
7831-02	4 - 500 mL	6.5	4/20/2017	3:17:44 PM
7831-03	5 - 25 mL	9.1	4/20/2017	4:04:41 PM
7831-04	6 - 501 mL	5.1	4/20/2017	4:51:14 PM
7831-05	7 - 500 mL	6.6	4/20/2017	5:40:39 PM
7831-06	8 - 500 mL	6.3	4/20/2017	6:27:57 PM
7831-07	9 - 500 mL	10	4/20/2017	7:15:19 PM
7831-08	10 - 500 mL	7.1	4/20/2017	8:02:46 PM
7831-09	11 - 500 mL	5.4	4/20/2017	8:48:30 PM
7831-10	12 - 502 mL	6.5	4/20/2017	9:36:22 PM
7831-11	13 - 500 mL	10.8	4/20/2017	10:23:51 PM
7831-12	14 - 500 mL	8.3	4/20/2017	11:09:25 PM
7831-12	14 - 501 mL	6.3	4/20/2017	11:57:35 PM
77832-09	15 - 150 mL	8.4	4/21/2017	12:41:00 AM
DNULEAK	16 - 20 mL	30.1	4/21/2017	1:25:24 AM
BLANK	16 - 200 mL	29.7	4/21/2017	2:01:16 AM
7852-01	1 - 151 mL	13.5	4/21/2017	2:43:58 AM
7852-02	2 - 131 mL	13.5	4/21/2017	3:30:13 AM
7868-01	3 - 91 mL	13.5	4/21/2017	4:17:53 AM
7868-02	4 - 21 mL	14.1	4/21/2017	5:03:25 AM
7868-03	5 - 21 mL	14.3	4/21/2017	5:50:43 AM
LOT7866	6 - 500 mL	22.4	4/21/2017	6:41:56 AM
LOT7866	6 - 500 mL	21	4/21/2017	7:24:36 AM
7852-02	2 - 300 mL	11.6	4/21/2017	9:35:20 AM

MG WL 4683

TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 17 & KNOX-MS-0023, Rev 2

Page 1 of 2

Instrument/Date	UG 4/20/17	Routine	AFCEE	DOD	OHIO
CCAL Chrom WL #	4683	CCAL Batch #	10581		10659
ICAL Chrom WL #	433	ICAL Batch # / Event #	9452 962		9501 963
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] [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	ethanol Chloroform myg. <i>DAK</i>		☒ CCV - %D - LCS criteria met (NCM# 9452) ☐ 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:	Date: 4/21/17	2nd Level Reviewer: <i>[Signature]</i>	Date: 4/21/17		
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#) ☐ ICAL - Range Exceeded; Minimum Dilution		
Sample Reason Sample Reason					
15. Samples outside calibration range scheduled for 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?	/		/		
18. Obvious non-TPH peaks excluded?	/		/		

Page 2 of 2

Analyst:	Date:	2nd Level Reviewer :	Date:
Comments:		Comments:	
Example Calculation:			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			
7.025 + 110 mL x 20-45 = 525.7 x 12 x 0.00678 = 3.56			

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

Lab Name: TestAmerica Knoxville Job No.: 140-7405-1
 SDG No.: _____
 Client Sample ID: 11197 Lab Sample ID: 140-7405-7
 Matrix: Air Lab File ID: GC12LOT7405.D
 Analysis Method: TO 15 LL Date Collected: 03/11/2017 15:40
 Sample wt/vol: 500 (mL) Date Analyzed: 03/13/2017 02:45
 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.: 9266 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: <u>TestAmerica Knoxville</u>	Job No.: <u>140-7405-1</u>
SDG No.: _____	
Client Sample ID: <u>11197</u>	Lab Sample ID: <u>140-7405-7</u>
Matrix: <u>Air</u>	Lab File ID: <u>GC12LOT7405.D</u>
Analysis Method: <u>TO 15 LL</u>	Date Collected: <u>03/11/2017 15:40</u>
Sample wt/vol: <u>500 (mL)</u>	Date Analyzed: <u>03/13/2017 02:45</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>9266</u>	Units: <u>ppb v/v</u>

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		2.0	
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: <u>TestAmerica Knoxville</u>	Job No.: <u>140-7405-1</u>
SDG No.: _____	
Client Sample ID: <u>11197</u>	Lab Sample ID: <u>140-7405-7</u>
Matrix: <u>Air</u>	Lab File ID: <u>GC12LOT7405.D</u>
Analysis Method: <u>TO 15 LL</u>	Date Collected: <u>03/11/2017 15:40</u>
Sample wt/vol: <u>500 (mL)</u>	Date Analyzed: <u>03/13/2017 02:45</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>9266</u>	Units: <u>ppb v/v</u>

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.: 140-7405-1
SDG No.: _____
Client Sample ID: 11197 Lab Sample ID: 140-7405-7
Matrix: Air Lab File ID: GC12LOT7405.D
Analysis Method: TO 15 LL Date Collected: 03/11/2017 15:40
Sample wt/vol: 500 (mL) Date Analyzed: 03/13/2017 02:45
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.: 9266 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: \\ChromNA\Knoxville\ChromData\MG\20170308-4262.b\GC12LOT7405.D
 Lims ID: 140-7405-A-7
 Client ID: 11197
 Sample Type: Client
 Inject. Date: 13-Mar-2017 02:45:30 ALS Bottle#: 16 Worklist Smp#: 22
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004262-022
 Misc. Info.: 11197
 Operator ID: 403648 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170308-4262.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 13-Mar-2017 11:02:56 Calib Date: 02-Mar-2017 20:31:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170302-4202.b\GC02IC02R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK020

First Level Reviewer: barlozhetskayaa

Date: 13-Mar-2017 10:50:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.985	8.002	-0.017	83	321799	4.00	
* 2 1,4-Difluorobenzene	114	10.158	10.164	-0.006	95	1639274	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.033	15.039	-0.006	87	1565728	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.705	16.710	-0.005	94	1202356	4.12	
31 Methylene Chloride	84	5.650	5.656	-0.006	89	6142	0.0792	

Reagents:

40MXISSURP_00001 Amount Added: 40.00 Units: mL Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170308-4262.b\GC12LOT7405.D

Injection Date: 13-Mar-2017 02:45:30

Instrument ID: MG

Operator ID: 403648

Lims ID: 140-7405-A-7

Lab Sample ID: 140-7405-7

Worklist Smp#: 22

Client ID: 11197

Purge Vol: 500.000 mL

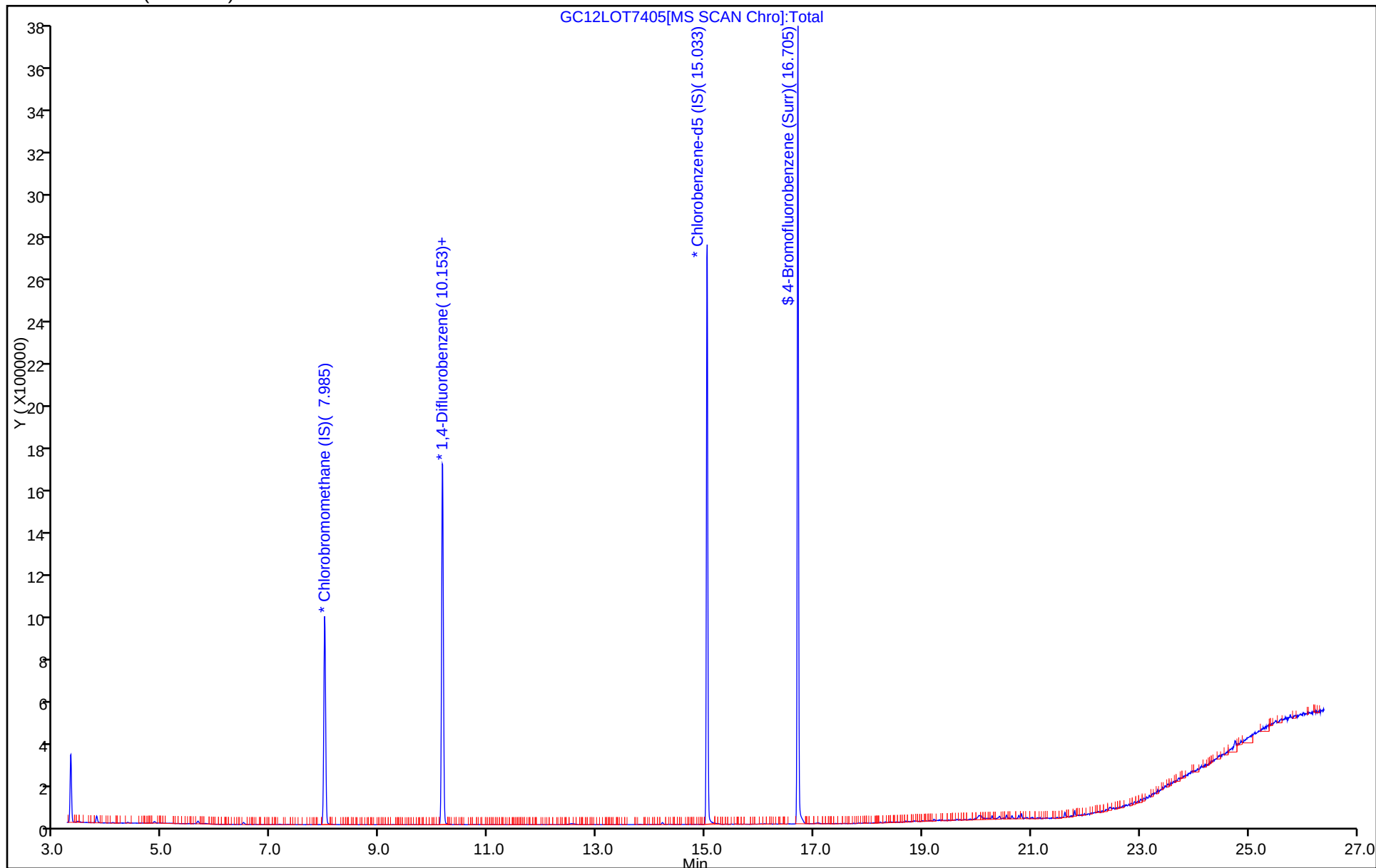
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MG_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.: 140-7415-1
 SDG No.: _____
 Client Sample ID: 10004 Lab Sample ID: 140-7415-1
 Matrix: Air Lab File ID: GC14LOT7415.D
 Analysis Method: TO 15 LL Date Collected: 03/13/2017 14:15
 Sample wt/vol: 500 (mL) Date Analyzed: 03/14/2017 14:19
 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.: 9377 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: <u>TestAmerica Knoxville</u>	Job No.: <u>140-7415-1</u>
SDG No.: _____	
Client Sample ID: <u>10004</u>	Lab Sample ID: <u>140-7415-1</u>
Matrix: <u>Air</u>	Lab File ID: <u>GC14LOT7415.D</u>
Analysis Method: <u>TO 15 LL</u>	Date Collected: <u>03/13/2017 14:15</u>
Sample wt/vol: <u>500 (mL)</u>	Date Analyzed: <u>03/14/2017 14:19</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>9377</u>	Units: <u>ppb v/v</u>

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		2.0	
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: <u>TestAmerica Knoxville</u>	Job No.: <u>140-7415-1</u>
SDG No.: _____	
Client Sample ID: <u>10004</u>	Lab Sample ID: <u>140-7415-1</u>
Matrix: <u>Air</u>	Lab File ID: <u>GC14LOT7415.D</u>
Analysis Method: <u>TO 15 LL</u>	Date Collected: <u>03/13/2017 14:15</u>
Sample wt/vol: <u>500 (mL)</u>	Date Analyzed: <u>03/14/2017 14:19</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>9377</u>	Units: <u>ppb v/v</u>

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.: 140-7415-1
SDG No.: _____
Client Sample ID: 10004 Lab Sample ID: 140-7415-1
Matrix: Air Lab File ID: GC14LOT7415.D
Analysis Method: TO 15 LL Date Collected: 03/13/2017 14:15
Sample wt/vol: 500 (mL) Date Analyzed: 03/14/2017 14:19
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.: 9377 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: \\ChromNA\Knoxville\ChromData\MG\20170312-4293.b\GC14LOT7415.D
 Lims ID: 140-7415-A-1
 Client ID: 10004
 Sample Type: Client
 Inject. Date: 14-Mar-2017 14:19:30 ALS Bottle#: 16 Worklist Smp#: 4
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004293-004
 Misc. Info.: 10004
 Operator ID: 403648 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170312-4293.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 14-Mar-2017 16:26:31 Calib Date: 02-Mar-2017 20:31:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170302-4202.b\GC02IC02R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: barlozhetskayaa

Date: 14-Mar-2017 16:29:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.991	7.996	-0.006	83	306501	4.00	
* 2 1,4-Difluorobenzene	114	10.158	10.164	-0.006	95	1540758	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.033	15.033	0.000	88	1521144	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.705	16.705	0.000	93	1189839	4.20	
6 Chlorodifluoromethane	67	3.461	3.456	0.005	93	783	0.0261	
31 Methylene Chloride	84	5.656	5.656	0.000	89	7959	0.1078	
40 Hexane	56	7.333	7.338	-0.005	86	824	0.0134	

Reagents:

40MXISSURP_00001 Amount Added: 40.00 Units: mL Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170312-4293.b\GC14LOT7415.D

Injection Date: 14-Mar-2017 14:19:30

Instrument ID: MG

Operator ID: 403648

Lims ID: 140-7415-A-1

Lab Sample ID: 140-7415-1

Worklist Smp#: 4

Client ID: 10004

Purge Vol: 500.000 mL

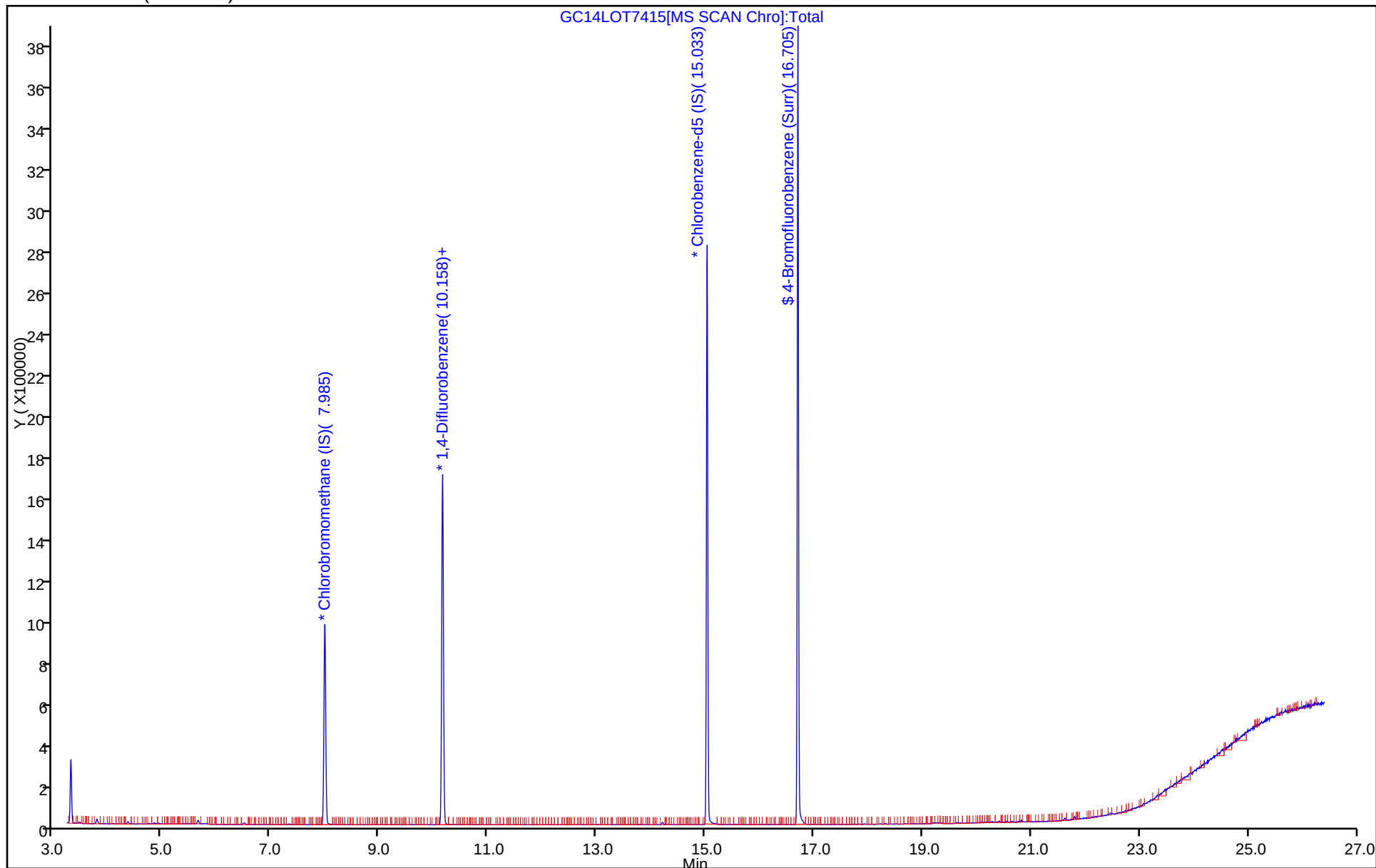
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MG_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.: 140-7662-1
 SDG No.: _____
 Client Sample ID: 10704 Lab Sample ID: 140-7662-11
 Matrix: Air Lab File ID: GD02lot7662.D
 Analysis Method: TO 15 LL Date Collected: 03/31/2017 07:35
 Sample wt/vol: 500 (mL) Date Analyzed: 04/03/2017 05:03
 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.: 10054 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: <u>TestAmerica Knoxville</u>	Job No.: <u>140-7662-1</u>
SDG No.: _____	
Client Sample ID: <u>10704</u>	Lab Sample ID: <u>140-7662-11</u>
Matrix: <u>Air</u>	Lab File ID: <u>GD02lot7662.D</u>
Analysis Method: <u>TO 15 LL</u>	Date Collected: <u>03/31/2017 07:35</u>
Sample wt/vol: <u>500 (mL)</u>	Date Analyzed: <u>04/03/2017 05:03</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>10054</u>	Units: <u>ppb v/v</u>

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		2.0	
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.: 140-7662-1
 SDG No.: _____
 Client Sample ID: 10704 Lab Sample ID: 140-7662-11
 Matrix: Air Lab File ID: GD02lot7662.D
 Analysis Method: TO 15 LL Date Collected: 03/31/2017 07:35
 Sample wt/vol: 500 (mL) Date Analyzed: 04/03/2017 05:03
 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.: 10054 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.: 140-7662-1
SDG No.: _____
Client Sample ID: 10704 Lab Sample ID: 140-7662-11
Matrix: Air Lab File ID: GD02lot7662.D
Analysis Method: TO 15 LL Date Collected: 03/31/2017 07:35
Sample wt/vol: 500 (mL) Date Analyzed: 04/03/2017 05:03
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.: 10054 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: \\ChromNA\Knoxville\ChromData\MG\20170329-4472.b\GD02lot7662.D
 Lims ID: 140-7662-A-11
 Client ID: 10704
 Sample Type: Client
 Inject. Date: 03-Apr-2017 05:03:30 ALS Bottle#: 1 Worklist Smp#: 24
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004472-024
 Misc. Info.: 10704
 Operator ID: 403648 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170329-4472.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 03-Apr-2017 13:47:23 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK030

First Level Reviewer: tajh

Date: 03-Apr-2017 13:44:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.975	7.985	-0.010	72	311169	4.00	
* 2 1,4-Difluorobenzene	114	10.142	10.153	-0.011	94	1565580	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.017	15.022	-0.005	88	1511570	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.689	16.694	-0.005	94	1193094	3.99	
31 Methylene Chloride	84	5.640	5.656	-0.016	85	8136	0.1087	

Reagents:

40MXISSURP_00001 Amount Added: 40.00 Units: mL Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170329-4472.b\GD02lot7662.D

Injection Date: 03-Apr-2017 05:03:30

Instrument ID: MG

Operator ID: 403648

Lims ID: 140-7662-A-11

Lab Sample ID: 140-7662-11

Worklist Smp#: 24

Client ID: 10704

Purge Vol: 500.000 mL

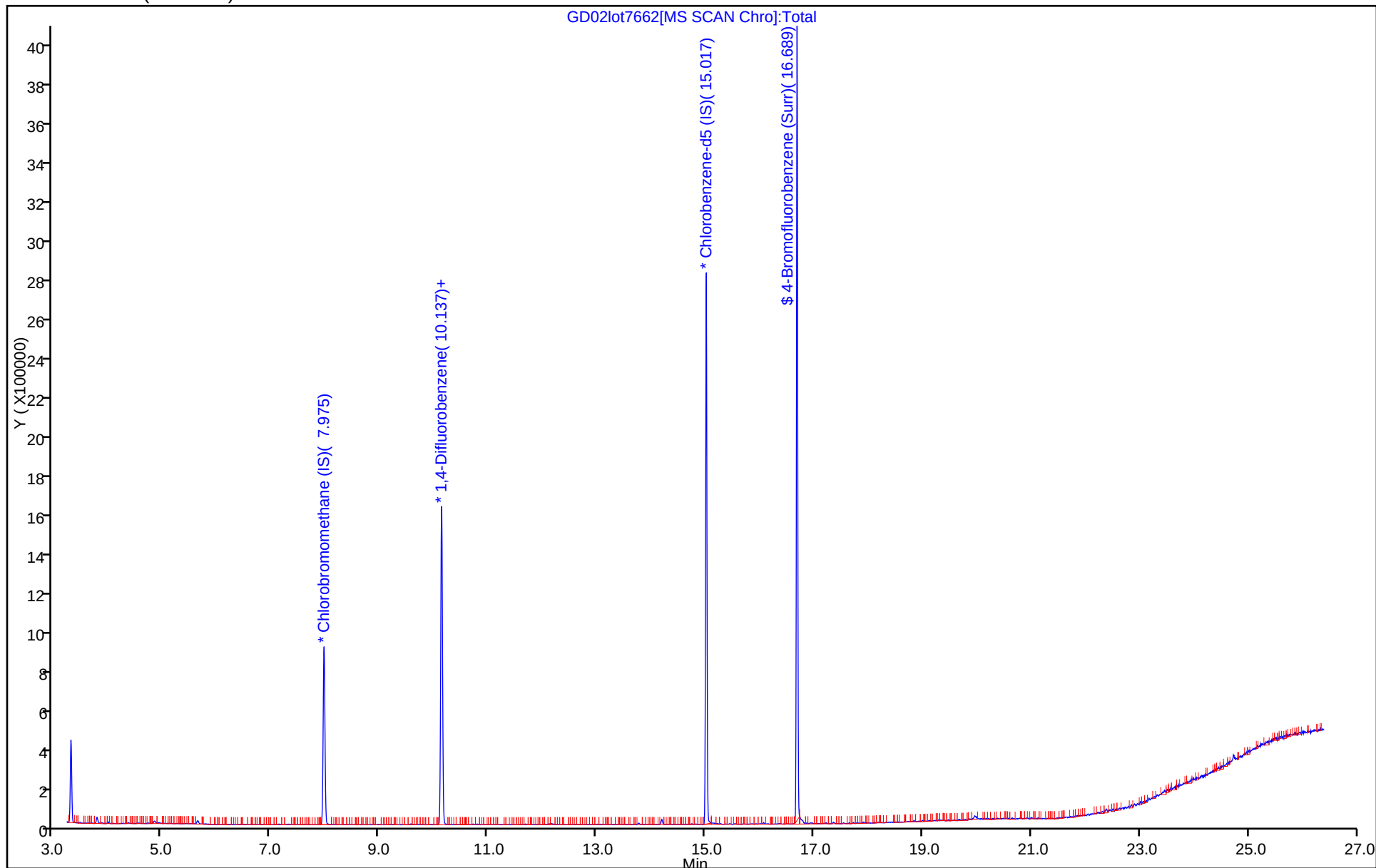
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MG_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.: 140-7689-1
 SDG No.: _____
 Client Sample ID: 10045 Lab Sample ID: 140-7689-14
 Matrix: Air Lab File ID: LOT7689.D
 Analysis Method: TO 15 LL Date Collected: 04/04/2017 06:30
 Sample wt/vol: 500 (mL) Date Analyzed: 04/05/2017 14:19
 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.: 10156 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: <u>TestAmerica Knoxville</u>	Job No.: <u>140-7689-1</u>
SDG No.: _____	
Client Sample ID: <u>10045</u>	Lab Sample ID: <u>140-7689-14</u>
Matrix: <u>Air</u>	Lab File ID: <u>LOT7689.D</u>
Analysis Method: <u>TO 15 LL</u>	Date Collected: <u>04/04/2017 06:30</u>
Sample wt/vol: <u>500 (mL)</u>	Date Analyzed: <u>04/05/2017 14:19</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>10156</u>	Units: <u>ppb v/v</u>

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		2.0	
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.: 140-7689-1
 SDG No.: _____
 Client Sample ID: 10045 Lab Sample ID: 140-7689-14
 Matrix: Air Lab File ID: LOT7689.D
 Analysis Method: TO 15 LL Date Collected: 04/04/2017 06:30
 Sample wt/vol: 500 (mL) Date Analyzed: 04/05/2017 14:19
 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.: 10156 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.: 140-7689-1
SDG No.: _____
Client Sample ID: 10045 Lab Sample ID: 140-7689-14
Matrix: Air Lab File ID: LOT7689.D
Analysis Method: TO 15 LL Date Collected: 04/04/2017 06:30
Sample wt/vol: 500 (mL) Date Analyzed: 04/05/2017 14:19
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.: 10156 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: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\LOT7689.D
 Lims ID: 140-7689-A-14
 Client ID: 10045
 Sample Type: Client
 Inject. Date: 05-Apr-2017 14:19:30 ALS Bottle#: 1 Worklist Smp#: 4
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0004509-004
 Misc. Info.: 10045
 Operator ID: 7126 Instrument ID: MG
 Method: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\MG_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 06-Apr-2017 09:57:45 Calib Date: 15-Mar-2017 20:21:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Knoxville\ChromData\MG\20170315-4323.b\GC15IC09.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: tajh

Date: 05-Apr-2017 14:59:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	7.969	7.980	-0.011	72	227001	4.00	
* 2 1,4-Difluorobenzene	114	10.137	10.148	-0.011	95	1048207	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.017	15.017	0.000	89	1069858	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	16.688	16.689	-0.001	93	876446	4.15	
14 Butane	43	3.876	3.882	-0.006	93	10850	0.1153	
19 2-Methylbutane	43	4.561	4.561	0.000	84	4236	0.0666	
25 Pentane	72	4.933	4.939	-0.006	93	382	0.0330	
31 Methylene Chloride	84	5.645	5.650	-0.005	84	6385	0.1170	

Reagents:

40MXISSURP_00001

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Knoxville

Data File: \\ChromNA\Knoxville\ChromData\MG\20170402-4509.b\LOT7689.D

Injection Date: 05-Apr-2017 14:19:30

Instrument ID: MG

Operator ID: 7126

Lims ID: 140-7689-A-14

Lab Sample ID: 140-7689-14

Worklist Smp#: 4

Client ID: 10045

Purge Vol: 500.000 mL

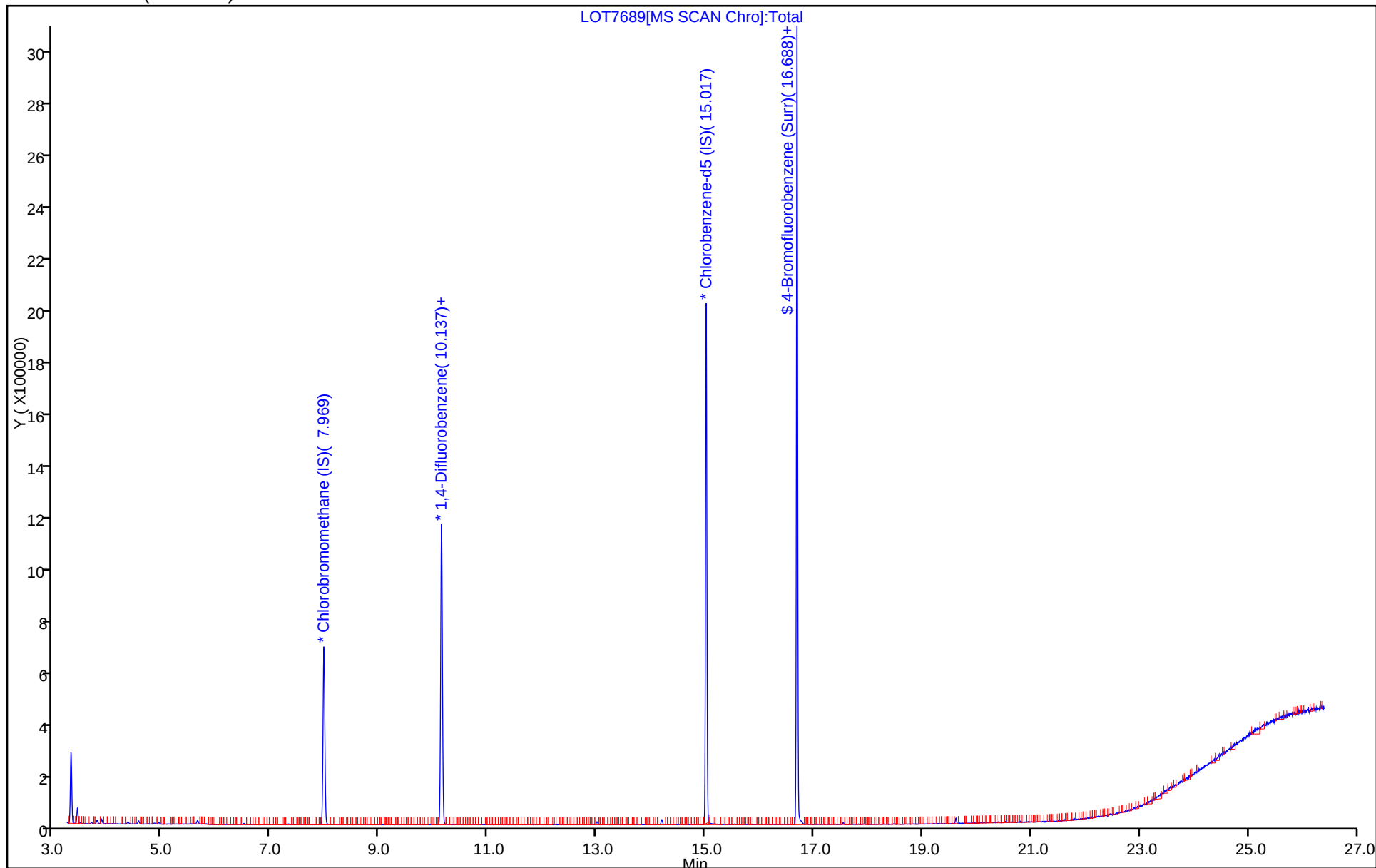
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MG_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Shipping and Receiving Documents

480501-Albany

TestAmerica Knoxville

5815 Middlebrook Pike

Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact Information		Project Manager: T. Giamichael / G. Priscott		Samples Collected By: Garth Barrett		COC No: 1 of 2 COCs	
Company Name: Aztech / NYSDEC		Phone: 518-337-7635					
Address: 5 McCreia Hill Rd.		Email: Tgiamichael@Aztechenv.com					
City/State/Zip: Ballston Spa, NY 12020							
Phone: 518-885-5383							
FAX:							
Project Name: Former Ithaca Gun Factory - Offsite		Analysis Turnaround Time					
Site/Location: Ithaca, NY		Standard (Specific): 10 Day					
P O Site #C755019A, Project#		Rush (Specific):					
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
H40-SS	4-10-17	08:25	07:58	-30	-7	7464	10319
H40-BA	4-10-17	08:26	07:58	-30	-6	7403	11032
H41A-SS	4-10-17	09:51	09:02	-30	-5	7068	09505
H41A-BA	4-10-17	09:52	09:03	-30	-10	7578	11207
H42-SS	4-10-17	10:23	10:02	-30	-7	7384	10720
H42-BA	4-10-17	10:22	10:03	-29	-6	8463	11172
H43-SS-1018	4-10-17	13:25	13:09	-30	-2	7577	11166
H43-BA-1018	4-10-17	13:27	13:08	-30	-6	7070	10694
H43-OA-1	4-10-17	13:13	13:06	-30	-5	7598	09965
H43-SS-1020	4-10-17	13:45	13:13	-30	-4	10535	10132
Sampled by:		Temperature (Fahrenheit)					
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TestAmerica Knoxville
5815 Middlebrook Pike

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

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

Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

TestAmerica Laboratories, Inc.

[illegible]

TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Log In Number:

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Are the shipping containers intact?	/			☐ Containers, Broken	
2. Were ambient air containers received intact?			/	☒ Checked in lab	
3. The coolers/containers custody seal if present, is it intact?	/			☐ Yes ☐ NA	
4. Is the cooler temperature within limits? (> freezing temp. of water to 6°C, VOST: 10°C) Thermometer ID : _____ Correction factor: _____		/		☐ Cooler Out of Temp, Client Contacted, Proceed/Cancel ☐ Cooler Out of Temp, Same Day Receipt	
5. Were all of the sample containers received intact?	/			☐ Containers, Broken	
6. Were samples received in appropriate containers?	/			☐ Containers, Improper; Client Contacted; Proceed/Cancel	
7. Do sample container labels match COC? (IDs, Dates, Times)	/			☐ COC & Samples Do Not Match ☐ COC Incorrect/Incomplete ☐ COC Not Received	
8. Were all of the samples listed on the COC received?	/			☐ Sample Received, Not on COC ☐ Sample on COC, Not Received	
9. Is the date/time of sample collection noted?	/			☐ COC; No Date/Time; Client Contacted	
10. Was the sampler identified on the COC?	/			☐ Sampler Not Listed on COC	
11. Is the client and project name/# identified?	/			☐ COC Incorrect/Incomplete	
12. Are tests/parameters listed for each sample?	/			☐ COC No tests on COC	
13. Is the matrix of the samples noted?	/			☐ COC Incorrect/Incomplete	
14. Was COC relinquished? (Signed/Dated/Timed)	/			☐ COC Incorrect/Incomplete	
15. Were samples received within holding time?	/			☐ Holding Time - Receipt	
16. Were samples received with correct chemical preservative (excluding Encore)?			/	☐ pH Adjusted, pH Included (See box 16A) ☐ Incorrect Preservative	
17. Were VOA samples received without headspace?			/	☐ Headspace (VOA only) ☐ Residual Chlorine	
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number: _____			/		
19. For 1613B water samples is pH<9?			/	☐ If no, lab will adjust	
20. For rad samples was sample activity info. Provided?			/	☐ Project missing info	
Project #: _____ PM Instructions: _____					
Sample Receiving Associate: <u>Raymond</u> Date: <u>4-17-17</u>					

Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative: _____	
Lot Number: _____	
Exp Date: _____	
Analyst: _____	
Date: _____	
Time: _____	

QA026R30.doc, 080916

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5
Date: 4/17/17

[illegible]

Attachment D – Data Validation Usability
Summary Report

Data Usability Summary Report

**Former Ithaca Gun Factory Offsite
Ithaca, New York**

**Soil Vapor Samples
Lot # C755019A
April 2017 Sampling**

May 2017

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

118 Rose Lane Terrace, Syracuse, NY 13219, (716) 907-2341

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. Sample results for several compounds were qualified based on deviations from continuing calibration criteria.

TABLE of CONTENTS

SECTION 1 - INTRODUCTION	1
1.1 Introduction	1
1.2 Analytical Methods	1
1.3 Validation Protocols	2
1.4 Data Qualifiers	3
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
140-7865-1	03/28/2017	Soil Vapor	H33-CS	140-7865-1
			H33-BA-1	140-7865-2
			H33-BA-2	140-7865-3
			H35-BA	140-7865-4
			FIELD DUP 1	140-7865-5
			H16-OA	140-7865-6
			H16-BA	140-7865-7
			H15-BA	140-7865-8
			H36-SS	140-7865-9
			H36-BA	140-7865-10
			H19-BA	140-7865-11
			H19-FF	140-7865-12
140-7698-1	03/28/2017	Soil Vapor	H-37-BA	140-7698-1
			H-37-FF	140-7698-2
			H-37-SS	140-7698-3
140-7831-1	04/12/2017	Soil Vapor	H40-SS	140-7831-1
			H40-BA	140-7831-2
			H41A-SS	140-7831-3
			H41A-BA	140-7831-4
			H42-SS	140-7831-5
			H42-BA	140-7831-6
			H43-SS-1018	140-7831-7
			H43-BA-1018	140-7831-8
			H43-OA-1	140-7831-9
			H43-SS-1020	140-7831-10
			H43-BA-1020	140-7831-11
			H44-SS	140-7831-12
			H44-BA	140-7831-13
			FIELD DUP 1	140-7831-14

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 twenty-nine 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
MG 04/04/2017 (12:01)	Bromoform	33.8 %	UJ	H33-CS H33-BA-1 H33-BA-2 H35-BA FIELD DUP 1 H16-OA H16-BA H15-BA H36-SS H36-BA H19-BA H19-FF
MG 04/20/2017 (09:46)	Chloromethane Ethanol Hexachlorobutadiene	-31.1 % -33.7 % -31.9 %	J, UJ J, UJ UJ	H40-SS H40-BA H41A-SS H41A-BA H42-SS H42-BA H43-SS-1018 H43-BA-1018 H43-OA-1 H43-SS-1020 H43-BA-1020 H44-SS H44-BA FIELD DUP 1

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. Sample results for several compounds were qualified based on deviations from continuing calibration criteria.

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 3.65 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?		X	
2.0	<u>Cover Letter, Narrative, and Data Reporting Forms</u>			
2.1	Is the Lab. Narrative and Cover Page Present?	X		
2.2	Is Case Number contained in the Narrative?	X		
2.3	Are the following Data Reporting Forms present?			
	Analysis Data Sheet [Form I/Equivalent]	X		
	Tentatively Identified Compounds [Form I-TIC]	X		
	Blank Summary [Form IV/Equivalent]	X		
	Laboratory Control Sample Data Sheet [Form III/Equivalent]	X		
	GC/MS Instrument Performance Check and Mass Calibration [Form V/Equivalent]	X		
	Initial Calibration [Form VI/Equivalent]	X		
	Continuing Calibration [Form VII/Equivalent]	X		
	Internal Standard Area and RT Summary [Form VIII/Equivalent]	X		
	Canister Certification [Form IX/Equivalent]	X		
3.0	<u>Canister Receipt/Log-in Sheet</u>			
3.1	Do all info items agree with each sample?	X		
4.0	<u>Traffic Reports and Laboratory Narrative</u>			
4.1	Are the Traffic Report Forms present for all samples?	X		
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?		X	
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?	X		
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?	X		
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.	X		

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?	<u> X </u>	<u> </u>	<u> </u>
	Did the laboratory tabulate the area response (Y) of the primary ions and the corresponding concentration for each compound and Internal Standard?	<u> X </u>	<u> </u>	<u> </u>
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?	<u> X </u>	<u> </u>	<u> </u>
15.5	Are all individual RRF and average RRFs ≥ 0.050 ?	<u> X </u>	<u> </u>	<u> </u>
15.6	Are the response factors (RF) stable i.e., % Relative Standard Deviation (%RSD) $\leq 40.0\%$?	<u> X </u>	<u> </u>	<u> </u>
15.7	Are there any transcription/calculation errors in the reporting of average response factors (RRFs) or %RSDs?	<u> </u>	<u> X </u>	<u> </u>
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?	<u> X </u>	<u> </u>	<u> </u>
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?	<u> X </u>	<u> </u>	<u> </u>
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?	<u> X </u>	<u> </u>	<u> </u>
16.3	Do any volatile compounds have a % Difference (%D) between the initial and daily RRFs which exceed the $\pm 30\%$ criteria?	<u> X </u>	<u> </u>	<u> </u>
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?	<u> </u>	<u> X </u>	<u> </u>
17.0	<u>Compound Quantitation and Reported Detection Limits</u>			
17.1	Are there any transcription/calculations errors in Form I results?	<u> </u>	<u> X </u>	<u> </u>
17.2	Are the reported detection limits adjusted to reflect sample dilutions?	<u> X </u>	<u> </u>	<u> </u>
17.3	Have any target compound concentrations exceeded the calibration range of the GC?	<u> </u>	<u> X </u>	<u> </u>
17.4	Was more than one method of quantitation used to calculate sample results within a batch or 24-hour analytical sequence?	<u> </u>	<u> X </u>	<u> </u>
17.5	Did the lab report the target compounds below CRQLs with the suffix "J"?	<u> </u>	<u> </u>	<u> X </u>
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?	<u> X </u>	<u> </u>	<u> </u>
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?	<u> X </u>	<u> </u>	<u> </u>
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?	<u> X </u>	<u> </u>	<u> </u>

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>