

**AUTO REPAIR SHOP
223-20 BRADDOCK AVENUE
QUEENS VILLAGE, NEW YORK 11428
BLOCK 10757, LOT 32**

SUBSURFACE INVESTIGATION REPORT

SUBMITTED TO:



New York State Department of Environmental Conservation
Region 2
47-70 21st Street
Long Island City, NY 11101

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PWGC Project Number: MHD1801

MAY 2020



**SUBSURFACE INVESTIGATION REPORT
223-20 BRADDOCK AVENUE
QUEENS VILLAGE, NEW YORK 11428**

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CERTIFICATION

I, Jennifer Lewis, PG, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Remedial Investigation Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

I certify that all information and statements in this certification are true. I understand that a false statement made herein is punishable as Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

Signature _____

_____ Date

It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.



1.0 INTRODUCTION

P.W. Grosser Consulting, Inc. (PWGC) has prepared the following Subsurface Investigation Report (SIR) on behalf of 223-20 Braddock Avenue Corp. to document the results of the Subsurface Investigation conducted in March 2020 at 223-20 Braddock Avenue in Queens Village, NY. This work was conducted in accordance with a Subsurface Investigation Work Plan (SIWP) submitted to the New York State Department of Environmental Conservation (NYSDEC) in June 2019 and approved by the NYSDEC on July 31, 2019. The scope of the workplan included an evaluation of soil vapor, sub-slab vapor, and indoor air and an evaluation of soil particle sizes in the event that a soil vapor mitigation system would be necessary.

2.0 SITE DESCRIPTION AND HISTORY

2.1 Site Description

The Site is located at 223-20 Braddock Avenue in the Queens Village section of Queens, New York and is identified as Block 10757 and Lot 32 on the New York City Tax Map. The Site is approximately 2,400-square feet and is bounded by Braddock Avenue to the north, 91st Road to the south, Moline Street to the east, and residential properties to the west. Currently, the Site is an auto body repair shop improved with a 1,204 square foot slab on grade building and an asphalt parking lot with a sheet metal awning extending from the building over the parking lot.

A Vicinity Map is included as **Figure 1**. A Site Plan is included as **Figure 2**.

2.2 Site History

The following is a recent history of events and activities associated with the Site:

- On August 5, 2016, Island Pump and Tank (IPT) personnel were on-site to remove an underground storage tank (UST). The UST system closure activities included the removal of one 285-gallon fiberglass waste oil UST. Following the removal of the former UST, observed petroleum impacts were present within the soil at the bottom of the excavation. Elevated PID readings, greater than 500 parts per million (ppm), were also encountered within the base of the excavation. At this time, IPT notified the New York State Department of Environmental Conservation (NYSDEC) Spills Hotline; Spill Number 16-04577 and Spill Case Manager, Mr. Hiralkumar Patel, were assigned to the site. Due to the observed petroleum impacts and elevated PID readings, soils were excavated from the base of the former UST excavation to the extent feasible. Excavation activities ensued until the structural integrity of the surrounding building and sidewalk were threatened and deemed unsafe to continue. IPT collected a total of five soil samples ranging from 5.5-6 feet below ground surface (bgs) on the sidewalls and to 10 feet bgs on the bottom of the excavation. Several volatile organic compounds (VOCs) were detected which included petroleum related compounds and tetrachloroethylene (PCE) which contained the highest detection at 360,000 µg/kg in the eastern sidewall sample. Elevated concentrations of PCE were also detected in the north sidewall and bottom samples. The western sidewall sample contained a concentration of PCE of only 2.6 µg/kg.
- In March 2018, IPT conducted a subsurface investigation at the Site which included the collection of eight soil samples from four soil borings along the eastern portion of the site, around the former UST location, and within the former UST excavation. The 15 to 20 feet bgs sample collected from within the excavation contained the highest concentration of VOCs, including PCE at 72,000 µg/kg. The deeper sample collected from 35 to 40 feet bgs was non-detect.

2.3 Site Geology/Hydrogeology

Regionally, groundwater flows north-northwest toward Little Neck Bay. The depth to groundwater beneath the site is estimated at 48 feet bgs. The approximate ground surface elevation is about 90 feet above mean sea level.

3.0 OBJECTIVES, SCOPE AND RATIONALE

3.1 Subsurface Investigation Procedure

The primary objectives of the work detailed in this report was to collect the information and field data necessary to address data gaps pertaining to on-site issues. The Scope of Work included the following tasks:

1. Soil vapor sampling
2. Soil characterization for sieve analysis

3.2 Soil Vapor Sampling

A total of four soil vapor samples were collected from the proposed locations on the Sampling Location Map (**Figure 3**). Samples were collected in accordance with the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH, October 2006). The subsurface sampling locations were installed on March 12, 2020 and air samples were collected on March 13, 2020.

Installation of the subsurface vapor samples was conducted by IPT. One of the samples was collected beneath the building and was installed as a sub-slab soil vapor sample (SS001). The sub-slab vapor sample was installed within 2 inches of the bottom of the concrete slab and was installed with a core drill. The remaining soil vapor samples were set at a depth of approximately 6 feet bgs to correspond to the estimated depth of the basement at the neighboring residential property to the west (SV001, SV002, SV003). The vapor implants were installed using a Geoprobe® direct-push drill rig. Sample points were constructed with a stainless-steel screen implant in the sampling zone with dedicated polyethylene tubing to grade. The annulus around the vapor implant was filled with inert material (clean sand) and sealed with bentonite grout.

One indoor air sample (IA001) and one ambient air sample (OA001) were also collected. The ambient air sample was placed on the property within the paved parking area on the up-wind side. The indoor air sample was placed in the office of the auto repair shop. Both samples were placed a minimum of 3 feet off the ground.

Approximately 24 hours following soil vapor probe installation, a tracer gas (helium) was used in accordance with NYSDOH protocols to serve as a quality assurance/quality control (QA/QC) device to verify the integrity of the soil vapor probe seals. One to three implant volumes were then purged prior to the collection of the soil-gas samples. Flow rate for both purging and sampling did not exceed 0.2 L/min. Samples were collected in 2.7 L Summa canisters that were certified clean by the laboratory. Summa canisters were connected to the sampling ports and run continuously for a duration of approximately 8 hours. The soil vapor, indoor air, and ambient air sampling log is located in **Appendix A**.

3.3 Soil Sampling

A potential remedial option for the soil vapor, if warranted, is the installation of a soil vapor extraction system. For design purposes, soil samples were collected for sieve analysis to determine the permeability of the subsurface soils.

PWGC oversaw installation of three soil borings (SB001, SB002, SB003) at the Site, as shown on **Figure 4**. Soil borings were advanced to a depth of 9 feet below grade at SB001 and SB003 and to a depth of 10 feet



below grade at SB002 using direct-push drilling methods. Soil was collected continuously to the boring termination depth with a macro-core sampler in 3- or 5-foot increments using disposable acetate sleeves. Each sample was screened for organic vapors with a photo-ionization detector (PID) and evaluated for visual and olfactory indications of environmental impacts. Prior to using the PID for soil screening, the equipment was calibrated following the manufacturer standard operating procedure, including a zeroing of the instrument and a span calibration with 100 parts per million (ppm) isobutylene. The maximum PID reading was 0.5 ppm in SB001. Soil descriptions are recorded in boring logs included as **Appendix B**. One soil sample was collected from the deepest 2-foot interval from each boring and submitted to the laboratory for sieve analysis.

3.4 Laboratory Analysis

Samples were submitted under proper chain-of-custody procedures to Alpha Analytical Laboratories (a New York State Department of Health Environmental Laboratory Approval Program certified laboratory) for analysis. Soil vapor, indoor air, and ambient air samples were analyzed for VOCs by United States Environmental Protection Agency (USEPA) method TO-15 and the sieve analyses for the soil samples was conducted using the American Society for Testing and Materials (ASTM) D-422 method.

4.0 ANALYTICAL RESULTS

4.1 Soil Vapor, Indoor Air, and Ambient Air Sampling Results

The primary method for the evaluation of soil vapor and indoor air data in New York is the use of Soil Vapor / Indoor Air Matrices provided in the NYSDOH Guidance document. The matrices incorporate both soil vapor concentrations and their corresponding indoor air concentrations in a table to formulate an appropriate action for a sampling site. Matrices have been developed for 1,1-dichloroethene, cis-1,2-dichloroethene (DCE), vinyl chloride (VC), tetrachloroethene (PCE), trichloroethene (TCE), 1,1,1-Trichloroethane, and carbon tetrachloride. Although matrices have not yet been developed for other compounds, consideration is given to the comparisons between the soil vapor and indoor air concentrations to determine if vapor intrusion is occurring.

A comparison of PCE concentrations between the one sub-slab vapor sample (SS001 at 307 $\mu\text{g}/\text{m}^3$) and the indoor air sample (IA001 at 1.62 $\mu\text{g}/\text{m}^3$) indicates that no further action is necessary. The remainder of the compounds on the matrices were not detected in both the sub-slab or indoor air sample. Of the remaining compounds from the NYSDOH matrices, IA001 contained a detectable concentration of carbon tetrachloride (0.384 $\mu\text{g}/\text{m}^3$). The outdoor air sample (OA001) contains a similar concentration of 0.39 $\mu\text{g}/\text{m}^3$. The detection of carbon tetrachloride is likely indicative of background concentrations.

SV002 contained the highest concentration of chlorinated compounds and is located near the former UST location on the eastern side of the property. Concentrations of PCE and its breakdown products are as follows: PCE at 2,170 $\mu\text{g}/\text{m}^3$, TCE at 72.6 $\mu\text{g}/\text{m}^3$, DCE at 238 $\mu\text{g}/\text{m}^3$, and less than the detection limit for VC. This sample is the only sample that contained detectable concentrations of TCE and DCE. The compounds 1,1,1-trichloroethane, 1,1-dichloroethene, methylene chloride, and vinyl chloride were not detected at concentrations greater than detection limits in any of the samples.

SV001 is located closest to the residential properties on the western side of the property and contained a PCE concentration of 78.7 $\mu\text{g}/\text{m}^3$, indicating that soil vapor is not significantly migrating towards the residential property.

Analytical results are detailed in **Table 1** and the complete laboratory analytical report is included as **Appendix C**.

4.2 Soil Sieve Analysis Report

A sieve analysis was conducted by the ASTM D-422 procedure. The samples were collected from the deepest 2-foot interval of each boring. SB001 consisted mostly of larger grain materials (gravel and medium- to coarse-grained sand), SB002 consisted of approximately half fine-grained materials and half larger-grained materials, and SB003 consisted mostly of smaller grained materials (fine-grained sands and fines). Analytical results are detailed in **Table 2** and the complete laboratory analytical report is included in **Appendix C**.

4.3 Data Usability Summary Report

Analytical data packages obtained from Alpha for each sampling event were sent to Laboratory Data Consultants, Inc (LDC) of Carlsbad, CA to undergo a systematic data validation to provide assurance that the data was adequate for its intended use. All data was deemed acceptable by the data validator,



incorporating data qualifiers as appropriate. Validation consisted of an evaluation of the following criteria:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (CG/MS) Tunes
- Initial and counting Calibrations
- Blanks
- Laboratory Duplicate Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Quantization Limits and Data Assessment
- Sample Quantization and Compound Identification

A copy of LDC's data usability summary reports during this reporting period is included as **Appendix D**. **Table 1** was updated, as appropriate, based upon the data validator's review.



5.0 CONCLUSIONS AND RECOMMENDATIONS

A subsurface investigation was conducted at the site in March 2020. Four subsurface vapor samples, an indoor air sample, and an outdoor air sample were collected. Analytical results from this investigation indicated that there does not appear to be significant vapor migration off-site and a comparison of the indoor air sample to the sub-slab sample indicated that no further action is warranted. Elevated concentrations of chlorinated compounds were detected in the soil vapor sample collected closest to the former tank location; PCE was the highest compound detected at a concentration of 2,170 $\mu\text{g}/\text{m}^3$.

Although the sub-slab and indoor air sample indicate that no further action is necessary, PWGC does recommend the installation of a passive soil vapor mitigation system, consisting of a vertical screened well installed in the former location of the UST, to reduce the potential for future intrusion into the on-site building.



6.0 REFERENCES

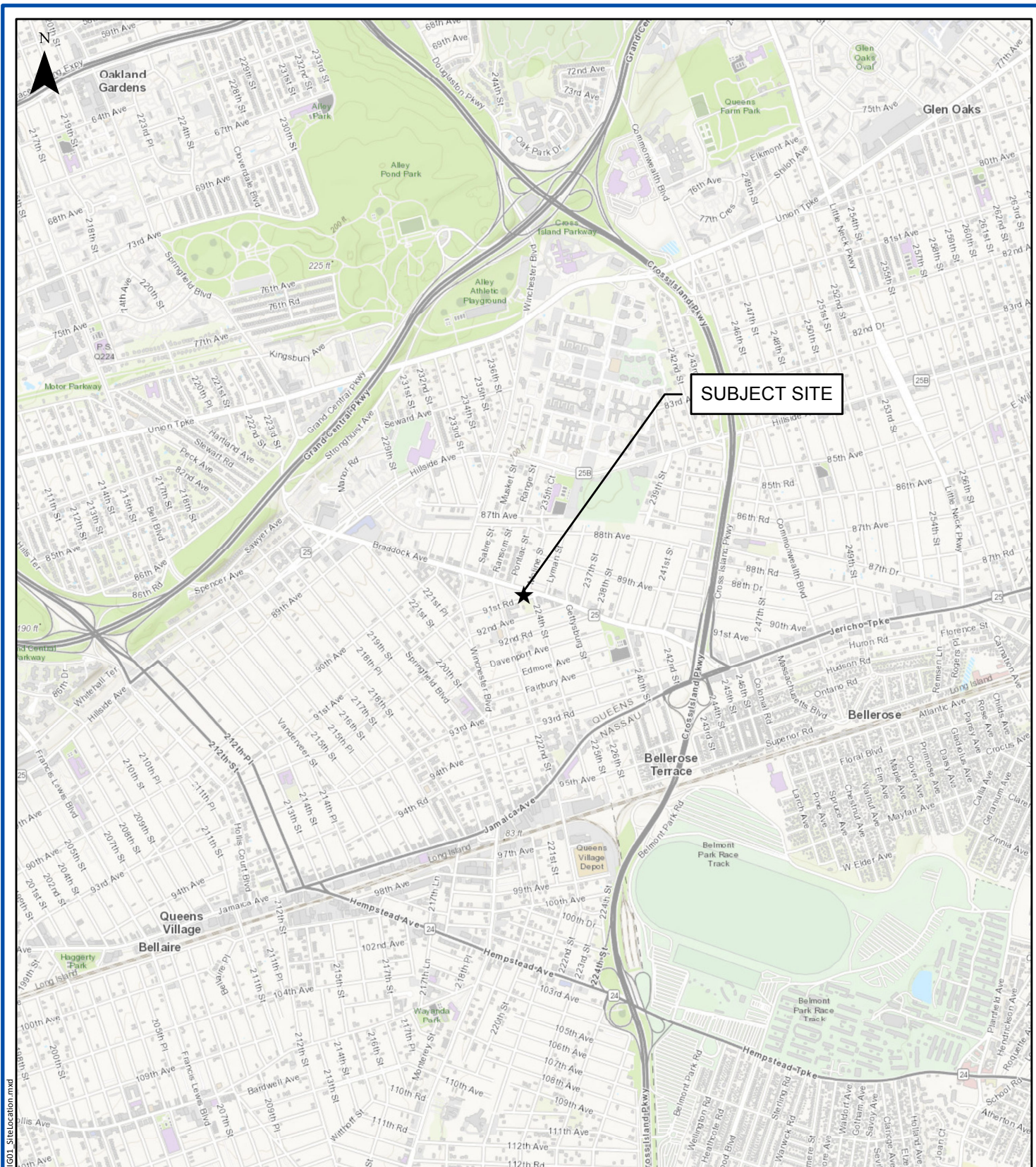
NYSDEC, Division of Environmental Restoration, 6 NYCRR Part 375 Subpart 6, Remedial Program Soil Cleanup Objectives.

NYSDEC, Division of Environmental Remediation, May 2012, Draft DER-10, Technical Guidance for Site Investigation and Remediation.

NYSDOH, October 2006, Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York.



FIGURES



Document Path: W:\Projects\M-R\MHD\1801\Maps\FIG01_SiteLocation.mxd



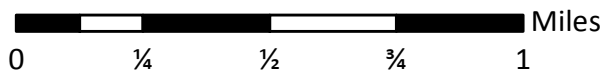
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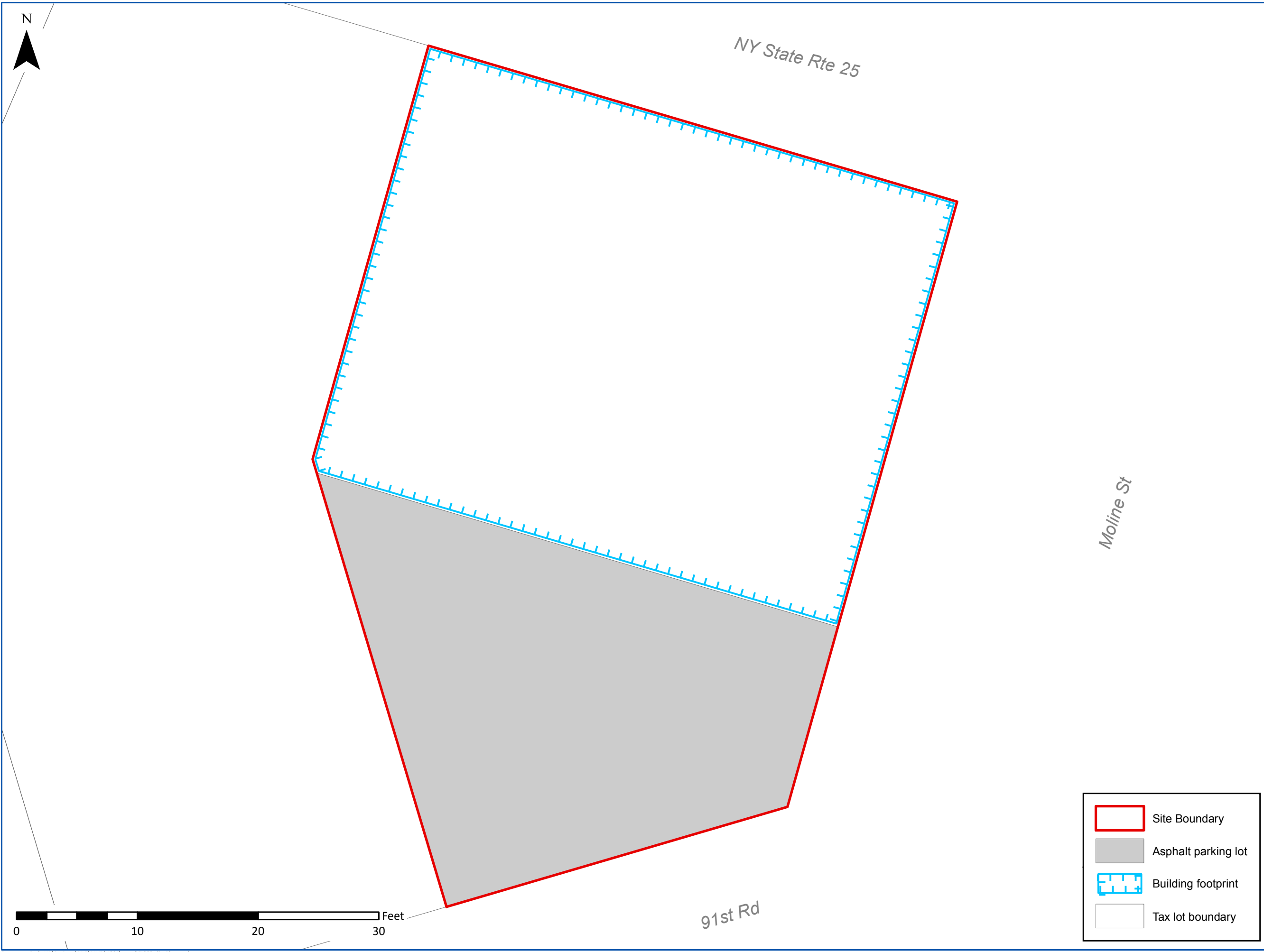
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SITE LOCATION

223-20 Braddock Ave
Queens Village, NY



Project:	MHD1801
Date:	4/12/2019
Designed by:	JL
Drawn by:	TS
Approved by:	JL
Figure No:	1



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Date:	4/12/2019	Drawn by:	TS
Scale:	AS SHOWN	Approved by:	JL

SITE PLAN

223-20 Braddock Ave
Queens Village, NY

FIGURE NO:

2



Sample Type

- Soil Vapor
- Indoor Air
- Outdoor Air
- Former UST Location
- Site Boundary
- Asphalt parking lot
- Building footprint
- Office
- Tax lot boundary


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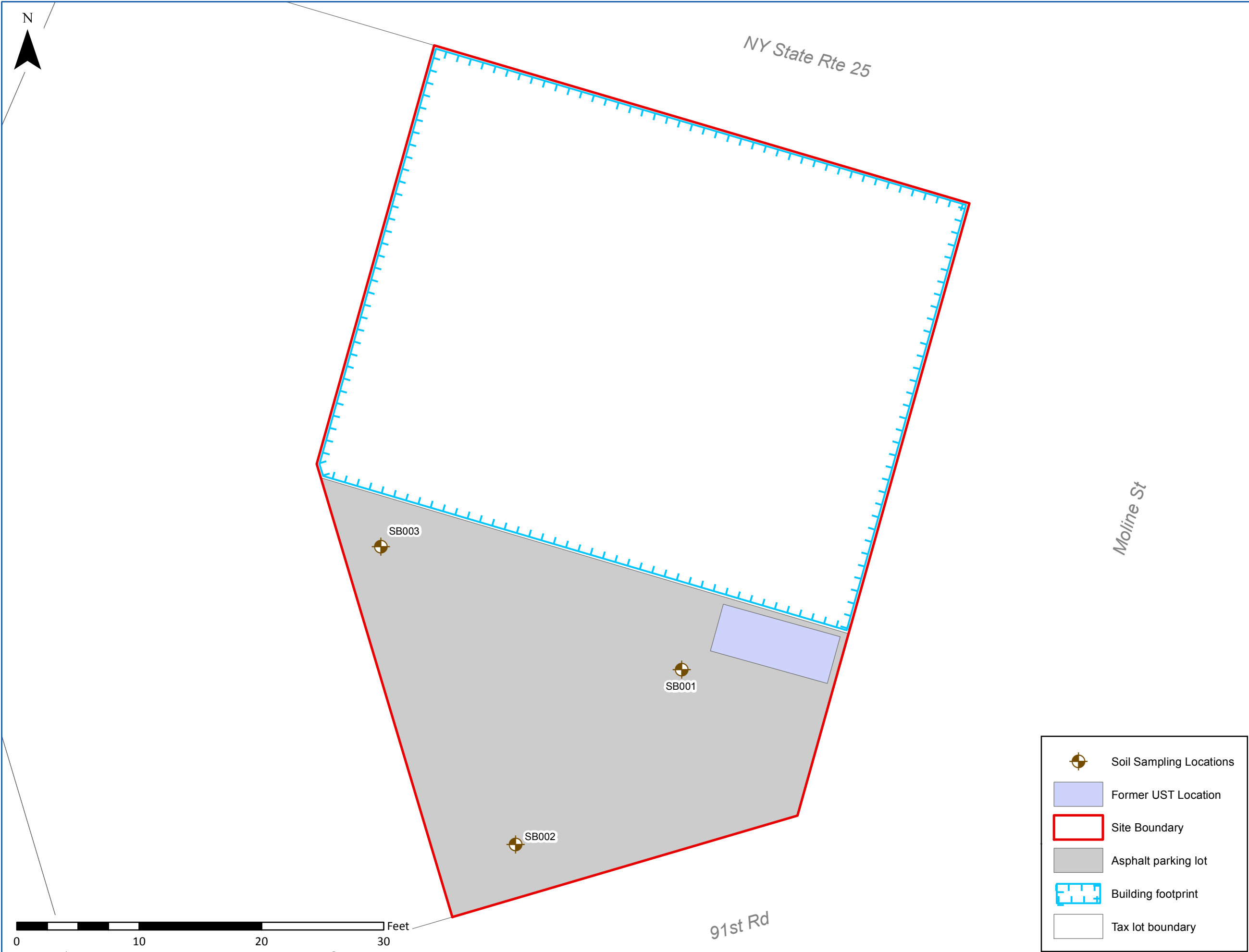
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Date:	4/29/2020	Drawn by:	TS
Scale:	AS SHOWN	Approved by:	JL

SOIL VAPOR
SAMPLING LOCATIONS

223-20 Braddock Ave
Jamaica, NY

FIGURE NO:
3



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Date:	3/23/2020	Drawn by:	TS
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**SOIL SAMPLING
LOCATIONS**

223-20 Braddock Ave
Jamaica, NY

FIGURE NO:

4



TABLES

Table 1
Soil Vapor Results Summary
223-20 Braddock Avenue, Queens Village, NY

Client Sample ID:	SS001		SV001		SV002		SV003		OA001		IA001	
Laboratory ID:	L2011723-01		L2011723-02		L2011723-03		L2011723-04		L2011723-05		L2011723-06	
Sampling Date:	3/13/2020		3/13/2020		3/13/2020		3/13/2020		3/13/2020		3/13/2020	
Volatile Organics in Air by USEPA method TO-15 in µg/m3												
1,1,1-Trichloroethane	1.09	U	3.64	U	6.82	U	2.73	U	0.109	U	0.109	U
1,1,2,2-Tetrachloroethane	1.37	U	4.58	U	8.58	U	3.43	U	1.37	U	1.37	U
1,1,2-Trichloroethane	1.09	U	3.64	U	6.82	U	2.73	U	1.09	U	1.09	U
1,1-Dichloroethane	0.809	U	2.7	U	5.06	U	2.02	U	0.809	U	0.809	U
1,1-Dichloroethene	0.793	U	2.64	U	4.96	U	1.98	U	0.079	U	0.079	U
1,2,4-Trichlorobenzene	1.48	U	4.95	U	9.28	U	3.71	U	1.48	UJ	1.48	UJ
1,2,4-Trimethylbenzene	11		14.6		8.9		3.78		1.22		26.3	
1,2-Dibromoethane	1.54	U	5.13	U	9.61	U	3.84	U	1.54	U	1.54	U
1,2-Dichlorobenzene	1.2	U	4.01	U	7.52	U	3.01	U	1.2	U	1.2	U
1,2-Dichloroethane	0.809	U	2.7	U	5.06	U	2.02	U	0.809	U	0.809	U
1,2-Dichloropropane	0.924	U	3.08	U	5.78	U	2.31	U	0.924	U	0.924	U
1,3,5-Trimethylbenzene	3.79		3.85		6.15	U	2.46	U	0.983	U	6.88	
1,3-Butadiene	1.84		1.48	U	2.77	U	9.98		0.442	U	3.27	
1,3-Dichlorobenzene	1.2	U	4.01	U	7.52	U	3.01	U	1.2	U	1.2	U
1,4-Dichlorobenzene	1.2	U	4.01	U	7.52	U	3.01	U	1.2	U	1.2	U
1,4-Dioxane	0.721	U	2.4	U	4.5	U	1.8	U	0.721	U	0.721	U
2,2,4-Trimethylpentane	24.5		3.12	U	5.84	U	2.34	U	1.72		24.9	
2-Butanone	15.1		139		82.6		188		1.47	U	3.3	
2-Hexanone	11.8		33.1		36.6		58.6		0.82	UJ	0.82	UJ
3-Chloropropene	0.626	U	2.09	U	3.91	U	1.57	U	0.626	U	0.626	U
4-Ethyltoluene	3.62		3.28	U	6.15	U	2.46	U	0.983	U	5.21	
4-Methyl-2-pentanone	2.42		9.26		12.8	U	5.12	U	2.05	U	2.81	
Acetone	94.8		1880		1020		1770		12.1		37.5	
Benzene	10.7		4.03		3.99	U	3.39		1.34		21.5	
Benzyl chloride	1.04	U	3.45	U	6.47	U	2.59	U	1.04	U	1.04	U
Bromodichloromethane	35.1		4.47	U	8.37	U	3.35	U	1.34	U	1.34	U
Bromoform	2.07	U	6.9	U	12.9	U	5.17	U	2.07	U	2.07	U
Bromomethane	0.777	U	2.59	U	4.85	U	1.94	U	0.777	U	0.777	U
Carbon disulfide	4.48		2.55		3.89	U	1.56	U	0.623	U	0.623	U
Carbon tetrachloride	1.26	U	4.2	U	7.86	U	3.15	U	0.39		0.384	
Chlorobenzene	0.921	U	3.07	U	5.76	U	2.3	U	0.921	U	0.921	U
Chloroethane	0.528	U	1.76	U	3.3	U	1.32	U	0.528	U	0.528	U
Chloroform	338		3.26	U	50.8		2.5		0.977	U	0.977	U
Chloromethane	0.535		1.38	U	2.58	U	1.03	U	1.34		1.67	
cis-1,2-Dichloroethene	0.793	U	2.64	U	238		1.98	U	0.079	U	0.079	U
cis-1,3-Dichloropropene	0.908	U	3.03	U	5.67	U	2.27	U	0.908	U	0.908	U
Cyclohexane	49.9		5.89		4.3	U	1.72	U	4.27		85.4	
Dibromochloromethane	1.7	U	5.68	U	10.6	U	4.26	U	1.7	U	1.7	U
Dichlorodifluoromethane	2.02		3.3	U	6.18	U	2.47	U	2.31		2.32	
Ethanol	20.3		31.5	U	58.8	U	28.8		31.1		228	
Ethyl Acetate	1.8	U	6.02	U	11.2	U	4.5	U	1.8	U	1.8	U
Ethylbenzene	16.6		7.21		12.5		3.93		1.17		18.9	
Freon-113	1.53	U	5.11	U	9.58	U	3.83	U	1.53	U	1.53	U
Freon-114	1.4	U	4.66	U	8.74	U	3.49	U	1.4	U	1.4	U
Heptane	21.7		45.1		10.3		9.67		2.54		32.7	
Hexachlorobutadiene	2.13	U	7.11	U	13.3	U	5.33	U	2.13	U	2.13	U
Isopropanol	4.03		32.9		16		22.1		8.06		42.5	
Methyl tert butyl ether	0.721	U	2.4	U	4.51	U	1.8	U	0.721	U	0.721	U
Methylene chloride	1.74	U	5.8	U	10.8	U	4.34	U	1.74	U	1.74	U
n-Hexane	114		11.3		4.41	U	5.25		10.2		203	
o-Xylene	19.2		10.6		14.1		3.91		1.5		26.5	
p/m-Xylene	44.3		29.2		41.3		12.1		4.23		68.2	
Styrene	0.864		2.84	U	5.32	U	2.13	U	0.852	U	1.34	
Tertiary butyl Alcohol	6.18		27.2		14.6		25.8		1.52	U	1.52	U
Tetrachloroethene	307		78.7		2170		231		0.278		1.62	
Tetrahydrofuran	9.02		23.1		13.7		21		1.47	U	1.47	U
Toluene	70.5		51.3		37		26.2		8.14		98.4	
trans-1,2-Dichloroethene	0.793	U	2.64	U	4.96	U	1.98	U	0.793	U	0.793	U
trans-1,3-Dichloropropene	0.908	U	3.03	U	5.67	U	2.27	U	0.908	U	0.908	U
Trichloroethene	1.07	U	3.58	U	72.6		2.69	U	0.107	U	0.107	U
Trichlorofluoromethane	1.17		3.75	U	7.02	U	2.81	U	1.34		1.33	
Vinyl bromide	0.874	U	2.92	U	5.47	U	2.19	U	0.874	U	0.874	U
Vinyl chloride	0.511	U	1.71	U	3.2	U	1.28	U	0.051	U	0.051	U
Total CVOCs	307.0		78.7		2,481		231.0		0.3		1.6	
Total VOCs	1,244		2,409		3,839		2,426		93.2		943.9	

Notes:

U⁻ Indicates that the analyte was not detected above the laboratory MDL

J Indicates an estimated value

Total CVOCs consists of the sum of PCE, TCE, DCE, and VC

Highlighted values indicate detectable concentration of compound

Table 2
Soil Sieve Analysis Summary
223-20 Braddock Avenue, Queens Village, NY

Client Sample ID:	SB001	SB002	SB003
Sample Depth:	7-9'	8-10'	7-9'
Laboratory ID:	L2011250-01	L2011250-02	L2011250-03
Sampling Date:	3/12/2020	3/12/2020	3/12/2020
Sieve Analysis by %			
Cobbles	ND	ND	ND
% Coarse Gravel	ND	14	ND
% Fine Gravel	31.3	16.3	6.6
% Total Gravel	31.3	29.9	6.6
% Coarse Sand	9.3	4.6	7
% Medium Sand	22.9	15	22.3
% Fine Sand	30.6	15.4	16.8
% Total Sand	62.8	35	46.1
% Total Fines	5.9	35.1	47.3

Notes:

ND - No detection of particle size.



APPENDIX A

Air Sampling Logs

223-20 Braddock Avenue, Queens Village, NY

Soil Vapor Sampling Log

Sample ID	Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Canister ID	Regulator ID
SS001	3/13/2020	9:20	16:25	-30.12	-7.35	2181	01286
SV001	3/13/2020	9:35	16:26	-29.92	-7.86	3097	01395
SV002	3/13/2020	9:47	16:27	-29.93	-8.48	3169	01151
SV003	3/13/2020	10:05	16:28	-29.92	-8.52	3196	0340
OA001	3/13/2020	10:15	16:29	-29.94	-9.20	2951	01803
IA001	3/13/2020	10:20	16:30	-30.35	-11.59	3184	0774



APPENDIX B

Soil Boring Logs

PROJECT #:		MHD1801					
SITE ADDRESS:		223-20 Braddock Ave, Jamaica, NY					
BORING ID:		SB001		BORING DEPTH (FT):		CORE LENGTH (FT):	
				9		3	
WELL ID:		N/A		BORING DIAMETER (IN):		WELL DIAMETER (IN):	
				2		N/A	
DRILLING CONTRACTOR:		Island Pump and Tank, Corp.		DATE STARTED:		DATE FINISHED:	
				03/12/2020		03/12/2020	
DRILLING METHOD:		Direct Push		TIME STARTED:		TIME FINISHED:	
				11:15		11:31	
DRILLING EQUIPMENT:		Geoprobe 7720DT		LATITUDE:		LONGITUDE:	
				N/A		N/A	
SAMPLING METHOD:		Macrocore		PROJECT MANAGER:		LOGGED BY:	
				Jennifer Lewis		C. Precht	

DEPTH (feet)	SAMPLE INTERVAL	USCS KEY	RECOVERY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0				Concrete, dry, no odor	0	0	
1				Asphalt, brick, gravel, dry, no odor	0	1	
2			2	WELL GRADED SAND (SW): dark brown, dry, fine sand, some gravel, no odor	0.5	2	
3				Concrete, dry, no odor	0	3	
4			2	WELL GRADED SAND (SW): medium brown, moist, fine to medium sand, gravel/pebbles, no odor	0.3	4	
5					0.3	5	
6					0.3	6	
7			2.5	WELL GRADED SAND (SW): light brown, dry, fine to medium sand, some rock fragments, no odor	0.4	7	
8				WELL GRADED SAND (SW): medium brown, moist, fine to medium sand, gravel/pebbles, no odor	0.5	8	
9						9	

P.W. Grosser Consulting		End of Boring Depth (feet): 9	Water Table Symbol: ▼	Page 1 of 1

PROJECT #:		MHD1801					
SITE ADDRESS:		223-20 Braddock Ave, Jamaica, NY					
BORING ID:		SB002		BORING DEPTH (FT):		CORE LENGTH (FT):	
				10		5	
WELL ID:		N/A		BORING DIAMETER (IN):		WELL DIAMETER (IN):	
				2		N/A	
DRILLING CONTRACTOR:		Island Pump and Tank, Corp.		DATE STARTED:		DATE FINISHED:	
				03/12/2020		03/12/2020	
DRILLING METHOD:		Direct Push		TIME STARTED:		TIME FINISHED:	
				11:40		12:00	
DRILLING EQUIPMENT:		Geoprobe 7720DT		LATITUDE:		LONGITUDE:	
				N/A		N/A	
SAMPLING METHOD:		Macrocore		PROJECT MANAGER:		LOGGED BY:	
				Jennifer Lewis		C. Precht	

DEPTH (feet)	SAMPLE INTERVAL	USCS KEY	RECOVERY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0				Concrete, dry, no odor	0	0	
1				Asphalt, brick, rock fragments, dry, no odor	0	1	
2			2.5	POORLY GRADED SAND (SP): dark brown, moist, fine sand, no odor	0	2	
3						3	
4						4	
5				WELL GRADED SAND (SW): medium brown, moist, fine to medium sand, gravel/pebbles, no odor	0.1	5	
6					0	6	
7			3	LEAN CLAY (CL): light brown, moist, clay, no odor	0.1	7	
8						8	
9				WELL GRADED SAND (SW): medium brown, moist, fine to medium sand, gravel/pebbles, no odor	0	9	
10						10	

P.W. Grosser Consulting		End of Boring Depth (feet): 10	Water Table Symbol: ▼	Page 1 of 1

PROJECT #:		MHD1801					
SITE ADDRESS:		223-20 Braddock Ave, Jamaica, NY					
BORING ID:		SB003		BORING DEPTH (FT):		CORE LENGTH (FT):	
				9		3	
WELL ID:		N/A		BORING DIAMETER (IN):		WELL DIAMETER (IN):	
				2		N/A	
DRILLING CONTRACTOR:		Island Pump and Tank, Corp.		DATE STARTED:		DATE FINISHED:	
				03/12/2020		03/12/2020	
DRILLING METHOD:		Direct Push		TIME STARTED:		TIME FINISHED:	
				14:15		14:35	
DRILLING EQUIPMENT:		Geoprobe 7720DT		LATITUDE:		LONGITUDE:	
				N/A		N/A	
SAMPLING METHOD:		Macrocore		PROJECT MANAGER:		LOGGED BY:	
				Jennifer Lewis		C. Precht	

DEPTH (feet)	SAMPLE INTERVAL	USCS KEY	RECOVERY (feet)	DESCRIPTION NAME (USCS): color, moist, plasticity, gravel, odor	PID Reading (ppm)	DEPTH (feet)	WELL CONSTRUCTION DETAILS AND/OR DRILLING REMARKS
0				Concrete, dry, no odor	0	0	
1			2	WELL GRADED SAND (SW): dark brown, moist, fine sand, some gravel/pebbles, no odor	0	1	
2			2	WELL GRADED SAND (SW): medium brown, moist, fine to medium sand, trace gravel, no odor	0.2	2	
3						3	
4						4	
5						5	
6						6	
7			2.5	LEAN CLAY (CL): light brown/gray, moist, clay, no odor	0.1	7	
8				WELL GRADED SAND (SW): medium brown, moist, fine to medium sand, trace gravel, no odor	0	8	
9						9	

P.W. Grosser Consulting		End of Boring Depth (feet): 9		Water Table Symbol: ▼		Page 1 of 1	



APPENDIX C

Laboratory Data Reports



ANALYTICAL REPORT

Lab Number:	L2011250
Client:	P. W. Grosser 630 Johnson Avenue Suite 7 Bohemia, NY 11716
ATTN:	Jennifer Lewis
Phone:	(631) 589-6353
Project Name:	MHD1801
Project Number:	MHD1801
Report Date:	03/18/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: MHD1801**Project Number:** MHD1801**Lab Number:** L2011250**Report Date:** 03/18/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2011250-01	SB001	SOIL	223-20 BRADDOCK AVE	03/12/20 11:45	03/12/20
L2011250-02	SB002	SOIL	223-20 BRADDOCK AVE	03/12/20 12:30	03/12/20
L2011250-03	SB003	SOIL	223-20 BRADDOCK AVE	03/12/20 14:45	03/12/20

Project Name: MHD1801
Project Number: MHD1801

Lab Number: L2011250
Report Date: 03/18/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: MHD1801**Lab Number:** L2011250**Project Number:** MHD1801**Report Date:** 03/18/20**Case Narrative (continued)****Report Submission**

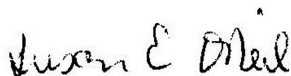
All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Grain Size Analysis

The WG1351138-1 Laboratory Duplicate RPDs for % fine gravel (32%), % total gravel (32%) and % total fines (70%), performed on L2011250-01, are outside the acceptance criteria. The elevated RPDs have been attributed to the non-homogeneous nature of the native sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Susan O'Neil

Title: Technical Director/Representative

Date: 03/18/20

INORGANICS & MISCELLANEOUS

Project Name: MHD1801

Project Number: MHD1801

Lab Number: L2011250

Report Date: 03/18/20

SAMPLE RESULTS

Lab ID: L2011250-01

Client ID: SB001

Sample Location: 223-20 BRADDOCK AVE

Date Collected: 03/12/20 11:45

Date Received: 03/12/20

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size Analysis - Mansfield Lab										
Cobbles	ND		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Coarse Gravel	ND		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Fine Gravel	31.3		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Total Gravel	31.3		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Coarse Sand	9.30		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Medium Sand	22.9		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Fine Sand	30.6		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Total Sand	62.8		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Total Fines	5.90		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP



Project Name: MHD1801

Project Number: MHD1801

Lab Number: L2011250

Report Date: 03/18/20

SAMPLE RESULTS

Lab ID: L2011250-02

Client ID: SB002

Sample Location: 223-20 BRADDOCK AVE

Date Collected: 03/12/20 12:30

Date Received: 03/12/20

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size Analysis - Mansfield Lab										
Cobbles	ND		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Coarse Gravel	13.6		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Fine Gravel	16.3		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Total Gravel	29.9		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Coarse Sand	4.60		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Medium Sand	15.0		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Fine Sand	15.4		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Total Sand	35.0		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Total Fines	35.1		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP



Project Name: MHD1801
Project Number: MHD1801

Lab Number: L2011250
Report Date: 03/18/20

SAMPLE RESULTS

Lab ID: L2011250-03
Client ID: SB003
Sample Location: 223-20 BRADDOCK AVE

Date Collected: 03/12/20 14:45
Date Received: 03/12/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size Analysis - Mansfield Lab										
Cobbles	ND		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Coarse Gravel	ND		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Fine Gravel	6.60		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Total Gravel	6.60		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Coarse Sand	7.00		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Medium Sand	22.3		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Fine Sand	16.8		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Total Sand	46.1		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP
% Total Fines	47.3		%	0.100	NA	1	-	03/14/20 18:54	12,D6913/D7928	SP



Lab Duplicate Analysis

Batch Quality Control

Project Name: MHD1801

Project Number: MHD1801

Lab Number: L2011250

Report Date: 03/18/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Grain Size Analysis - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1351138-1 QC Sample: L2011250-01 Client ID: SB001						
Cobbles	ND	ND	%	NC		20
% Coarse Gravel	ND	ND	%	NC		20
% Fine Gravel	31.3	22.7	%	32	Q	20
% Total Gravel	31.3	22.7	%	32	Q	20
% Coarse Sand	9.30	9.20	%	1		20
% Medium Sand	22.9	25.6	%	11		20
% Fine Sand	30.6	30.2	%	1		20
% Total Sand	62.8	65.0	%	3		20
% Total Fines	5.90	12.3	%	70	Q	20

Project Name: MHD1801**Lab Number:** L2011250**Project Number:** MHD1801**Report Date:** 03/18/20**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2011250-01A	Plastic 8oz unpreserved for Grain Size	A	NA		2.6	Y	Absent		A2-HYDRO-TFINE(),A2-HYDRO-CGRAVEL(),A2-HYDRO-FSAND(),A2-HYDRO-MSAND(),A2-HYDRO-TGRAVEL(),A2-HYDRO-CSAND(),A2-HYDRO-TSAND(),A2-HYDRO-COBBLER(),A2-HYDRO-FGRAVEL()
L2011250-02A	Plastic 8oz unpreserved for Grain Size	A	NA		2.6	Y	Absent		A2-HYDRO-TFINE(),A2-HYDRO-CGRAVEL(),A2-HYDRO-FSAND(),A2-HYDRO-MSAND(),A2-HYDRO-TGRAVEL(),A2-HYDRO-CSAND(),A2-HYDRO-TSAND(),A2-HYDRO-COBBLER(),A2-HYDRO-FGRAVEL()
L2011250-03A	Plastic 8oz unpreserved for Grain Size	A	NA		2.6	Y	Absent		A2-HYDRO-TFINE(),A2-HYDRO-CGRAVEL(),A2-HYDRO-FSAND(),A2-HYDRO-MSAND(),A2-HYDRO-TGRAVEL(),A2-HYDRO-CSAND(),A2-HYDRO-TSAND(),A2-HYDRO-COBBLER(),A2-HYDRO-FGRAVEL()

Project Name: MHD1801**Lab Number:** L2011250**Project Number:** MHD1801**Report Date:** 03/18/20

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCS D	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers

Project Name: MHD1801
Project Number: MHD1801

Lab Number: L2011250
Report Date: 03/18/20

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration

Report Format: DU Report with 'J' Qualifiers



Project Name: MHD1801**Lab Number:** L2011250**Project Number:** MHD1801**Report Date:** 03/18/20**Data Qualifiers**

Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Project Name: MHD1801
Project Number: MHD1801

Lab Number: L2011250
Report Date: 03/18/20

REFERENCES

- 12 Annual Book of ASTM Standards. (American Society for Testing and Materials) ASTM International.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Serial_No:03182010:51

ASTM D6913/D7928

GRAIN SIZE ANALYSIS

Particle Size Distribution Report

Serial No: 03182010:51

% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	31.3	9.3	22.9	30.6	5.9	

LL	PL	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
		14.3695	2.1769	0.8130	0.3516	0.2195	0.1602	0.35	13.59

Material Description	USCS	AASHTO

Project No. **Client:**

Project:

Source of Sample: SB001 **Sample Number:** L2011250-01

Alpha Analytical

Mansfield, MA

Remarks:

GRAIN SIZE DISTRIBUTION TEST DATA

3/17/2020

Location: SB001

Sample Number: L2011250-01

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 119.00

Tare Wt. = 0.00

Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
119.00	0.00	3"	0.00	0.00	100.0
		2"	0.00	0.00	100.0
		1"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		0.50	24.25	0.00	79.6
		0.375	0.00	0.00	79.6
		#4	12.95	0.00	68.7
		#10	11.13	0.00	59.4
		#20	10.45	0.00	50.6
		#40	16.75	0.00	36.5
		#60	21.69	0.00	18.3
		#140	13.11	0.00	7.3
		#200	1.62	0.00	5.9

Serial_No:03182010:51

Fractional Components

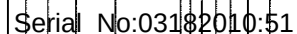
Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	31.3	31.3	9.3	22.9	30.6	62.8			5.9

D ₅	D ₁₀	D ₁₅	D ₂₀	D ₃₀	D ₄₀	D ₅₀	D ₆₀	D ₈₀	D ₈₅	D ₉₀	D ₉₅
	0.1602	0.2195	0.2645	0.3516	0.4793	0.8130	2.1769	12.8661	14.3695	15.6254	16.9975

Fineness Modulus	C _u	C _c
3.58	13.59	0.35

Alpha Analytical

PERCENT FINER



○

0

GRAIN SIZE DISTRIBUTION TEST DATA

3/17/2020

Location: SB001

Sample Number: WG1351138-1

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 119.17
 Tare Wt. = 0.00
 Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
119.17	0.00	3"	0.00	0.00	100.0
		2"	0.00	0.00	100.0
		1"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		0.50	5.57	0.00	95.3
		0.375	14.60	0.00	83.1
		#4	6.91	0.00	77.3
		#10	10.97	0.00	68.1
		#20	11.77	0.00	58.2
		#40	18.76	0.00	42.5
		#60	21.28	0.00	24.6
		#140	12.92	0.00	13.8
		#200	1.79	0.00	12.3

Serial_No:03182010:51

Fractional Components

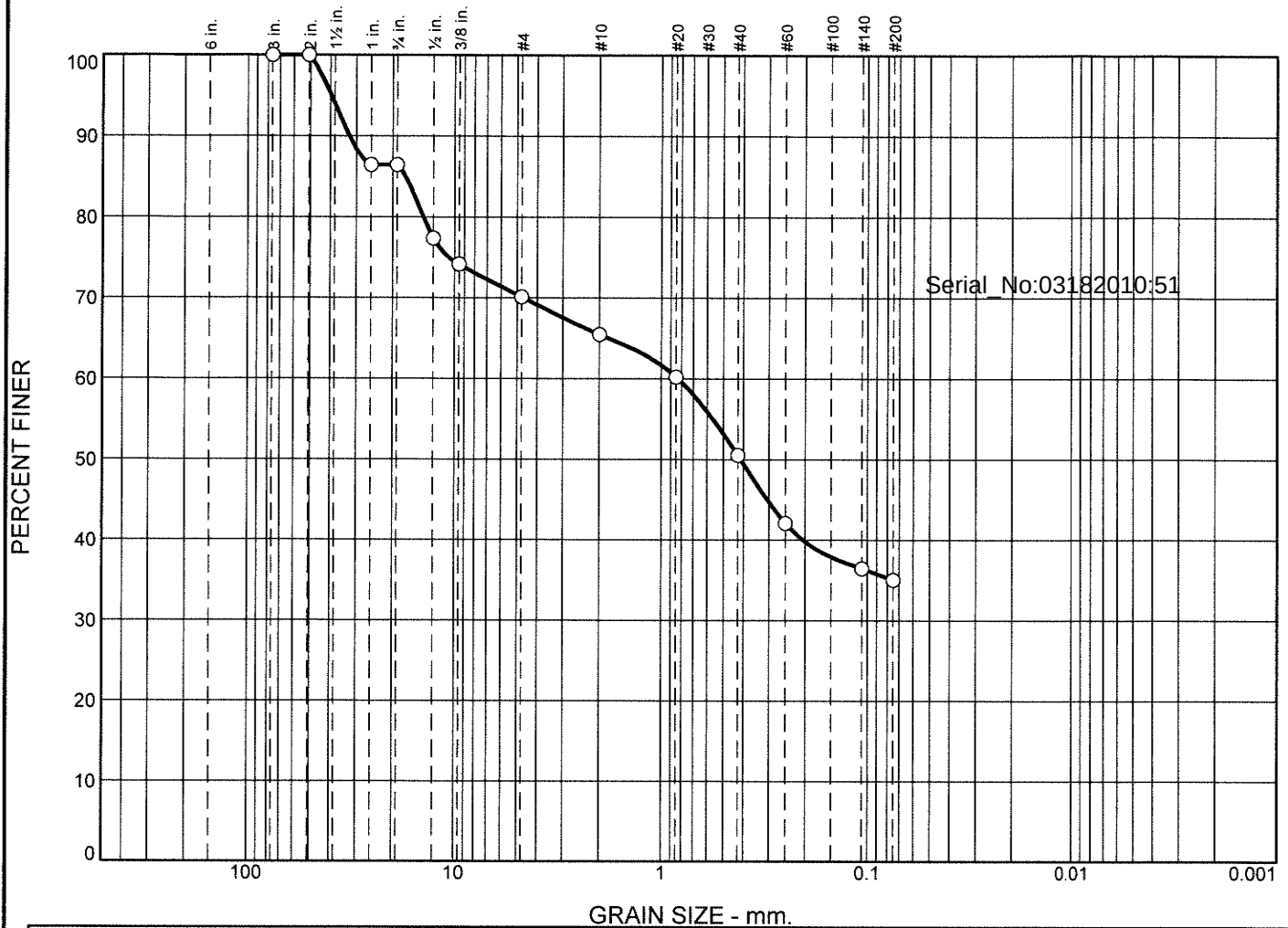
Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	22.7	22.7	9.2	25.6	30.2	65.0			12.3

D ₅	D ₁₀	D ₁₅	D ₂₀	D ₃₀	D ₄₀	D ₅₀	D ₆₀	D ₈₀	D ₈₅	D ₉₀	D ₉₅
		0.1334	0.2044	0.2973	0.3949	0.5553	0.9695	6.4484	9.9972	11.1646	12.5806

Fineness Modulus
3.09

Alpha Analytical

Particle Size Distribution Report



GRAIN SIZE - mm.									
% +3"	% Gravel		% Sand			% Fines			
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay		
0.0	13.6	16.3	4.6	15.0	15.4	35.1			
LL	PL	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
		17.3031	0.8313	0.4122					

Material Description							USCS	AASHTO

Project No. Project: ○ Source of Sample: SB002 Sample Number: L2011250-02	Client: Alpha Analytical Mansfield, MA	Remarks: Figure

GRAIN SIZE DISTRIBUTION TEST DATA

3/17/2020

Location: SB002

Sample Number: L2011250-02

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 248.20
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
248.20	0.00	3"	0.00	0.00	100.0
		2"	0.00	0.00	100.0
		1"	33.69	0.00	86.4
		0.75	0.00	0.00	86.4
		0.50	22.51	0.00	77.4
		0.375	7.93	0.00	74.2
		#4	10.04	0.00	70.1
		#10	11.54	0.00	65.5
		#20	13.01	0.00	60.2
		#40	24.09	0.00	50.5
		#60	20.91	0.00	42.1
		#140	13.95	0.00	36.5
		#200	3.51	0.00	35.1

Serial_No:03182010:51

Fractional Components

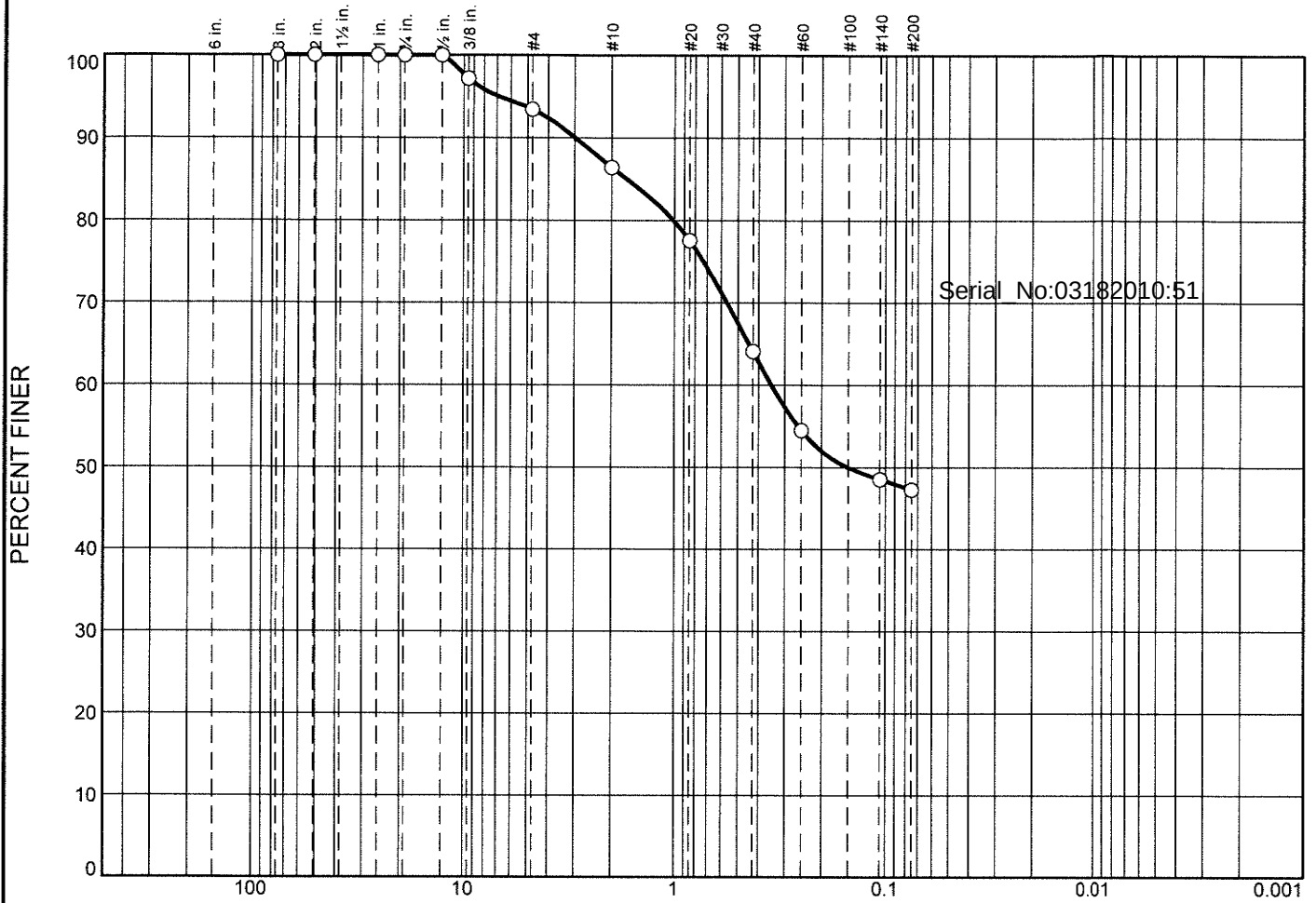
Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	13.6	16.3	29.9	4.6	15.0	15.4	35.0			35.1

D ₅	D ₁₀	D ₁₅	D ₂₀	D ₃₀	D ₄₀	D ₅₀	D ₆₀	D ₈₀	D ₈₅	D ₉₀	D ₉₅
					0.2049	0.4122	0.8313	14.1896	17.3031	32.4109	39.6193

Fineness Modulus
3.08

Alpha Analytical

Particle Size Distribution Report



GRAIN SIZE - mm.

	% +3"		% Gravel		% Sand			% Fines		
			Coarse	Fine	Coarse	Medium	Fine	Silt		Clay
○	0.0		0.0	6.6	7.0	22.3	16.8	47.3		
⊗	LL	PL	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
○			1.6938	0.3473	0.1503					

Material Description						USCS	AASHTO

Project No. Project: ○ Source of Sample: SB003 Sample Number: L2011250-03	Remarks:
Alpha Analytical Mansfield, MA	

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

3/17/2020

Location: SB003

Sample Number: L2011250-03

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 169.55
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
169.55	0.00	3"	0.00	0.00	100.0
		2"	0.00	0.00	100.0
		1"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		0.50	0.00	0.00	100.0
		0.375	4.79	0.00	97.2
		#4	6.33	0.00	93.4
		#10	11.92	0.00	86.4
		#20	15.00	0.00	77.6
		#40	22.86	0.00	64.1
		#60	16.29	0.00	54.5
		#140	10.04	0.00	48.6
		#200	2.18	0.00	47.3

Serial_No:03182010:51

Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	6.6	6.6	7.0	22.3	16.8	46.1			47.3

D ₅	D ₁₀	D ₁₅	D ₂₀	D ₃₀	D ₄₀	D ₅₀	D ₆₀	D ₈₀	D ₈₅	D ₉₀	D ₉₅
						0.1503	0.3473	1.0146	1.6938	2.9775	6.8793

Fineness Modulus
1.61

Alpha Analytical

Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 16

Published Date: 2/17/2020 10:46:05 AM

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624/624.1:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

EPA TO-12 Non-methane organics**EPA 3C** Fixed gases**Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.**EPA 522.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1** Hg.**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

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Laboratory Code: 11148

SDG Number: L2011723

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STD1.0 Injected on: 03/12/20 13:44	741
STD5.0 Injected on: 03/12/20 14:23	746
STD010 Injected on: 03/12/20 15:04	751
STD020 Injected on: 03/12/20 15:41	756
STD050 Injected on: 03/12/20 16:20	761
ICV Summary	767
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ICAL Sequence for AIRPIANO3 on 12-MAR-2020 00:00 ICAL16593	817
Sequence Log	819

Project Name: MHD1801
Project Number: MHD1801

Lab Number: L2011723
Report Date: 03/23/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2011723-01	SS001	SOIL_VAPOR	223-20 BRADDOCK AVE, JAMAICA, NY	03/13/20 16:25	03/16/20
L2011723-02	SV001	SOIL_VAPOR	223-20 BRADDOCK AVE, JAMAICA, NY	03/13/20 16:26	03/16/20
L2011723-03	SV002	SOIL_VAPOR	223-20 BRADDOCK AVE, JAMAICA, NY	03/13/20 16:27	03/16/20
L2011723-04	SV003	SOIL_VAPOR	223-20 BRADDOCK AVE, JAMAICA, NY	03/13/20 16:28	03/16/20
L2011723-05	OA001	AIR	223-20 BRADDOCK AVE, JAMAICA, NY	03/13/20 16:29	03/16/20
L2011723-06	IA001	AIR	223-20 BRADDOCK AVE, JAMAICA, NY	03/13/20 16:30	03/16/20

Project Name: MHD1801
Project Number: MHD1801

Lab Number: L2011723
Report Date: 03/23/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: MHD1801
Project Number: MHD1801

Lab Number: L2011723
Report Date: 03/23/20

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on March 12, 2020. The canister certification results are provided as an addendum.

L2011723-02 through -04: The samples have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the samples.

The WG1353541-3 LCS recovery for pentane (139%), 2-hexanone (140%), 1,2,4-trichlorobenzene (138%) and hexachlorobutadiene (146%) is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of these analytes.

Sample Receipt

The canister ID number for the sample designated SV003 (L2011723-04) is listed on the CoC as 3196 but should be 3176. The flow controller ID number for the sample designated OA001 (L2011723-05) is listed on the CoC as 01803 but should be 01808.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Report Date: 03/23/20

Title: Technical Director/Representative

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCS D	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: Data Usability Report



Project Name: MHD1801
Project Number: MHD1801

Lab Number: L2011723
Report Date: 03/23/20

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.

Report Format: Data Usability Report



Project Name: MHD1801
Project Number: MHD1801

Lab Number: L2011723
Report Date: 03/23/20

Data Qualifiers

- RE** - Analytical results are from sample re-extraction.
S - Analytical results are from modified screening analysis.
ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report





Volatile Organics Instruments

Volatile Organics:

Instrument: Agilent 7890 GC/5975C MSD
 Trap: Supelco K Trap (VOACARB 3000)
 Concentrator: EST Encon (or equivalent)
 Autosampler: EST Centurion (or equivalent)
 Purge time: 11 min

Columns (length x ID x df):
 RTX-VMS 20m x 0.18mm x 1um
 RTX-VMS 30m x 0.25mm x 1.4um
 RTX-502.2 40m x 0.18mm x 1um

Volatile Organics: VPH

Instrument: Agilent 6890 (or equivalent)
 Trap: Supelco K Trap (VOACARB 3000)
 Concentrator: EST Encon (or equivalent)
 Autosampler: EST Centurion (or equivalent)

Column Type: Restek RTX 502.2
 Column Length: 105 Meters
 df: 3.00 um
 ID: 0.53mm

Volatile Organics: PIANO

Instrument: Agilent 7890 GC/5975C MSD
 Trap: Supelco K Trap (VOACARB 3000)
 Concentrator: Tekmar Velocity / EST Encon
 Autosampler: Varian Archon / EST Centurion
 Purge time: 11 min

Column Type: DB-VRX
 Column Length: 60 Meters
 df: 1.40 um
 ID: 0.25 mm
 Desorb: 1 min

Volatile Organics: Dissolved Gas

Instrument: Agilent 7890 (or equivalent) with FID/TCD

Column Type: Haysep S Column
 Column Length: 2 Meters packed
 (100/200 mesh)

Autosampler: LEAP Headspace

Purge time: 0.6 min

Volatile Organics in Air Instruments

Volatile Organics in Air:

Instruments: Agilent 6890 GC / 5975 MSD Shimadzu QP2010-SE / QP2020

Concentrator: Entech 7100A or 7200
 Autosampler: Entech 7016CA or 7016D

Column Type: Restek RTX-1
 Column Length: 60 Meters
 df: 1.00 um
 ID: 0.25 mm or 0.32 mm

Trap 1: Glass Bead: manufacturer-Entech: 20 cm packing material

Trap 2: Tenax: manufacturer-Entech: 20 cm packing material



Semivolatile Organics Instruments - Westborough

Semivolatile Organics (Acid/Base/Neutral Extractables):

Instrument: Agilent 5973N MSD	Injection volume: 1 μ L; 2 μ L LVI
Column Type: Restek RXI-5SILMS	df: 0.32 μ m
Column Length: 30 Meters	ID: 0.25 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM:

Instrument: Agilent 5973 MSD	Injection volume: 1 μ L; 2 μ L LVI
Column Type: Restek RXI-5SILMS	df: 0.25 μ m
Column Length: 30 Meters	ID: 0.25 mm

Pesticides/PCB/Herbicides:

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1 μ L
Column A: Restek RTX-CL/STX-CL	df: 0.32
Column B: Restek RTX/STX-CLP Pesticide II	df: 0.25
Column Length: 30 Meters	ID: 0.32 mm

Petroleum/EPH:

Instrument: Agilent 6890 w/FID / HP 5890 w/ FID	Injection Volume: 1 μ L
Column: Restek RTX 5	df: 0.25
Column Length: 30 Meters	
ID: 0.32 mm	



Semivolatile Organic Instruments - Mansfield

Semivolatile Organics (ALK-PAH Extractables):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 1 ul
Column Type: ZB-5	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

Semivolatile Organics (8270):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 2 ul
Column Type: ZB-Semivolatiles	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Semivolatile Organics (8270 SIM):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 3 ul
Column Type: ZB-5	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Semivolatile Organics (1,4-Dioxane):

Instrument: Agilent 5973N / 5975 / 5977 MSD	Injection volume: 3 ul
Column Type: RTX-5	df: 0.25um, 0.18 um
Column Length: 30 Meters	ID: 0.25um, 0.18 mm

Semivolatile Organics (209 Congener):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 3 ul
Column Type: RTX-5, RTX-PCB	df: 0.25um, 0.18 um
Column Length: 60 Meters	ID: 0.25um, 0.18 mm

Semivolatile Organics (8081):

Instrument: Agilent 6890 / 7890	Injection volume: 1 ul
Column Type: RTX-5 / RTX-CLP II	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

Semivolatile Organics (8082):

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column A: Restek RTX-CL/STX-CL	df: 0.32
Column B: Restek RTX/STX-CLPPesticide II	df: 0.25
Column Length: 30 Meters	ID: 0.32 mm

Semivolatile Organics (SHC Extractables):

Instrument: Agilent 6890	Injection volume: 1 ul
Column Type: RTX-5	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm



Sample Delivery Group Summary

Alpha Job Number : L2011723

Received : 16-MAR-2020

Reviewer : Dylan Snook

Account Name : P. W. Grosser

Project Number : MHD1801

Project Name : MHD1801

Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
NA	Present/Intact/NA			

Condition Information

1) All samples on COC received?	YES
2) Extra samples received?	NO
3) Are there any sample container discrepancies?	NO
4) Are there any discrepancies between sample labels & COC? L2011723-04: Can ID #3196 vs. Can ID #3176 L2011723-05: FC ID #01803 vs. FC ID #01808	YES
5) Are samples in appropriate containers for requested analysis?	YES
6) Are samples properly preserved for requested analysis?	YES
7) Are samples within holding time for requested analysis?	YES
8) All sampling equipment returned?	YES

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	NA

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Mar 27 2020, 05:02 pm

Login Number: L2011723

Account: PWGROSSER P. W. GrosserProject: MHD1801

Received: 16MAR20 Due Date: 23MAR20

Sample #	Client ID	Mat PR Collected
L2011723-01 SS001		11 S0 13MAR20 16:25
ASP-B Package Due Date: 03/30/20		
ASP-B,CAN-RENT,FLOW-RENT,T015-LL		
L2011723-02 SV001		11 S0 13MAR20 16:26
Package Due Date: 03/30/20		
CAN-RENT,FLOW-RENT,T015-LL		
L2011723-03 SV002		11 S0 13MAR20 16:27
Package Due Date: 03/30/20		
CAN-RENT,FLOW-RENT,T015-LL		
L2011723-04 SV003		11 S0 13MAR20 16:28
Package Due Date: 03/30/20		
CAN-RENT,FLOW-RENT,T015-LL		
L2011723-05 OA001		10 S0 13MAR20 16:29
Need SIM for 7 NYS DMCs Package Due Date: 03/30/20		
CAN-RENT,FLOW-RENT,T015-LL,T015-SIM		
L2011723-06 IA001		10 S0 13MAR20 16:30
Need SIM for 7 NYS DMCs Package Due Date: 03/30/20		
CAN-RENT,FLOW-RENT,T015-LL,T015-SIM		

Page 1

Logged By: Ethan Leighton

Supporting Documentation

Project Name: MHD1801

Lab Number: L2011723

Project Number: MHD1801

Report Date: 03/23/20

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2011723-01	SS001	01286	Flow 5	03/12/20	316616		-	-	-	Pass	4.5	4.8	6
L2011723-01	SS001	2181	2.7L Can	03/12/20	316616	L2009139-04	Pass	-29.1	-7.3	-	-	-	-
L2011723-02	SV001	01395	Flow 5	03/12/20	316616		-	-	-	Pass	4.5	5.0	11
L2011723-02	SV001	3097	2.7L Can	03/12/20	316616	L2009139-04	Pass	-29.1	-7.7	-	-	-	-
L2011723-03	SV002	01131	Flow 5	03/12/20	316616		-	-	-	Pass	4.5	4.8	6
L2011723-03	SV002	3169	2.7L Can	03/12/20	316616	L2009139-04	Pass	-29.1	-8.7	-	-	-	-
L2011723-04	SV003	0340	Flow 5	03/12/20	316616		-	-	-	Pass	4.5	4.8	6
L2011723-04	SV003	3176	2.7L Can	03/12/20	316616	L2009139-04	Pass	-29.4	-9.0	-	-	-	-
L2011723-05	OA001	01808	Flow 4	03/13/20	316773		-	-	-	Pass	4.5	4.5	0
L2011723-05	OA001	2591	2.7L Can	03/13/20	316773	L2009139-05	Pass	-29.1	-9.1	-	-	-	-
L2011723-06	IA001	0774	Flow 5	03/12/20	316616		-	-	-	Pass	4.5	4.7	4
L2011723-06	IA001	3184	2.7L Can	03/12/20	316616	L2009139-04	Pass	-29.1	-10.9	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2009139
Report Date: 03/23/20

Air Canister Certification Results

Lab ID: L2009139-04
 Client ID: CAN 528 SHELF 3
 Sample Location:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 03/07/20 18:51
 Analyst: GP

Date Collected: 03/05/20 16:00
 Date Received: 03/06/20
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2009139
Report Date: 03/23/20

Air Canister Certification Results

Lab ID: L2009139-04
Client ID: CAN 528 SHELF 3
Sample Location:

Date Collected: 03/05/20 16:00
Date Received: 03/06/20
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2009139
Report Date: 03/23/20

Air Canister Certification Results

Lab ID: L2009139-04
Client ID: CAN 528 SHELF 3
Sample Location:

Date Collected: 03/05/20 16:00
Date Received: 03/06/20
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2009139
Report Date: 03/23/20

Air Canister Certification Results

Lab ID: L2009139-04
 Client ID: CAN 528 SHELF 3
 Sample Location:

Date Collected: 03/05/20 16:00
 Date Received: 03/06/20
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air								
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2009139
Report Date: 03/23/20

Air Canister Certification Results

Lab ID: L2009139-04
Client ID: CAN 528 SHELF 3
Sample Location:

Date Collected: 03/05/20 16:00
Date Received: 03/06/20
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	111		60-140
Bromochloromethane	112		60-140
chlorobenzene-d5	116		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2009139
Report Date: 03/23/20

Air Canister Certification Results

Lab ID: L2009139-04
Client ID: CAN 528 SHELF 3
Sample Location:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 03/07/20 18:51
Analyst: GP

Date Collected: 03/05/20 16:00
Date Received: 03/06/20
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2009139
Report Date: 03/23/20

Air Canister Certification Results

Lab ID: L2009139-04
 Client ID: CAN 528 SHELF 3
 Sample Location:

Date Collected: 03/05/20 16:00
 Date Received: 03/06/20
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2009139
Report Date: 03/23/20

Air Canister Certification Results

Lab ID: L2009139-04
Client ID: CAN 528 SHELF 3
Sample Location:

Date Collected: 03/05/20 16:00
Date Received: 03/06/20
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM								
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	108		60-140
bromochloromethane	109		60-140
chlorobenzene-d5	115		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2009139
Report Date: 03/23/20

Air Canister Certification Results

Lab ID: L2009139-05
Client ID: CAN 2341 SHELF 4
Sample Location:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 03/07/20 19:30
Analyst: GP

Date Collected: 03/05/20 16:00
Date Received: 03/06/20
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2009139
Report Date: 03/23/20

Air Canister Certification Results

Lab ID: L2009139-05
 Client ID: CAN 2341 SHELF 4
 Sample Location:

Date Collected: 03/05/20 16:00
 Date Received: 03/06/20
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2009139
Report Date: 03/23/20

Air Canister Certification Results

Lab ID: L2009139-05
Client ID: CAN 2341 SHELF 4
Sample Location:

Date Collected: 03/05/20 16:00
Date Received: 03/06/20
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2009139
Report Date: 03/23/20

Air Canister Certification Results

Lab ID: L2009139-05
Client ID: CAN 2341 SHELF 4
Sample Location:

Date Collected: 03/05/20 16:00
Date Received: 03/06/20
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air								
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2009139
Report Date: 03/23/20

Air Canister Certification Results

Lab ID: L2009139-05
Client ID: CAN 2341 SHELF 4
Sample Location:

Date Collected: 03/05/20 16:00
Date Received: 03/06/20
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	113		60-140
Bromochloromethane	114		60-140
chlorobenzene-d5	121		60-140



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2009139
Report Date: 03/23/20

Air Canister Certification Results

Lab ID: L2009139-05
Client ID: CAN 2341 SHELF 4
Sample Location:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 03/07/20 19:30
Analyst: GP

Date Collected: 03/05/20 16:00
Date Received: 03/06/20
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2009139
Report Date: 03/23/20

Air Canister Certification Results

Lab ID: L2009139-05
 Client ID: CAN 2341 SHELF 4
 Sample Location:

Date Collected: 03/05/20 16:00
 Date Received: 03/06/20
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2009139
Report Date: 03/23/20

Air Canister Certification Results

Lab ID: L2009139-05
Client ID: CAN 2341 SHELF 4
Sample Location:

Date Collected: 03/05/20 16:00
Date Received: 03/06/20
Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM								
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	109		60-140
bromochloromethane	112		60-140
chlorobenzene-d5	119		60-140



Organics

Volatile Organics in Air TO-15 Low Level

Volatiles QC Summary

Lab Duplicate Sample Summary

Form 3

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Client Sample ID : IA001
 Lab Sample ID : L2011723-06
 Lab File ID : R38759
 Dup Sample ID : WG1353541-5

Lab Number : L2011723
 Project Number : MHD1801
 Matrix : AIR
 Analysis Date : 03/20/20 18:16
 DUP File ID : r38760
 DUP Analysis Date : 03/20/20 19:03

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Dichlorodifluoromethane	0.469	0.440	6	25
Chloromethane	0.808	0.813	1	25
Freon-114	ND	ND	NC	25
1,3-Butadiene	1.48	1.43	3	25
Bromomethane	ND	ND	NC	25
Chloroethane	ND	ND	NC	25
Ethanol	121	112	8	25
Vinyl bromide	ND	ND	NC	25
Acetone	15.8	14.6	8	25
Trichlorofluoromethane	0.237	0.207	14	25
Isopropanol	17.3	15.6	10	25
Tertiary butyl Alcohol	ND	ND	NC	25
Methylene chloride	ND	ND	NC	25
3-Chloropropene	ND	ND	NC	25
Carbon disulfide	ND	ND	NC	25
Freon-113	ND	ND	NC	25
trans-1,2-Dichloroethene	ND	ND	NC	25
1,1-Dichloroethane	ND	ND	NC	25
Methyl tert butyl ether	ND	ND	NC	25
2-Butanone	1.12	1.10	2	25
Ethyl Acetate	ND	ND	NC	25
Chloroform	ND	ND	NC	25
Tetrahydrofuran	ND	ND	NC	25
1,2-Dichloroethane	ND	ND	NC	25
n-Hexane	57.7	55.6	4	25

Lab Duplicate Sample Summary

Form 3

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Client Sample ID : IA001
 Lab Sample ID : L2011723-06
 Lab File ID : R38759
 Dup Sample ID : WG1353541-5

Lab Number : L2011723
 Project Number : MHD1801
 Matrix : AIR
 Analysis Date : 03/20/20 18:16
 DUP File ID : r38760
 DUP Analysis Date : 03/20/20 19:03

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Benzene	6.72	6.68	1	25
Cyclohexane	24.8	23.9	4	25
1,2-Dichloropropane	ND	ND	NC	25
Bromodichloromethane	ND	ND	NC	25
1,4-Dioxane	ND	ND	NC	25
2,2,4-Trimethylpentane	5.34	5.14	4	25
Heptane	7.98	7.70	4	25
cis-1,3-Dichloropropene	ND	ND	NC	25
4-Methyl-2-pentanone	0.686	0.666	3	25
trans-1,3-Dichloropropene	ND	ND	NC	25
1,1,2-Trichloroethane	ND	ND	NC	25
Toluene	26.1	25.0	4	25
2-Hexanone	ND	ND	NC	25
Dibromochloromethane	ND	ND	NC	25
1,2-Dibromoethane	ND	ND	NC	25
Chlorobenzene	ND	ND	NC	25
Ethylbenzene	4.35	4.18	4	25
p/m-Xylene	15.7	14.8	6	25
Bromoform	ND	ND	NC	25
Styrene	0.315	0.314	0	25
1,1,2,2-Tetrachloroethane	ND	ND	NC	25
o-Xylene	6.09	5.80	5	25
4-Ethyltoluene	1.06	0.984	7	25
1,3,5-Trimethylbenzene	1.40	1.35	4	25
1,2,4-Trimethylbenzene	5.34	5.21	2	25

Lab Duplicate Sample Summary

Form 3

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Client Sample ID : IA001
 Lab Sample ID : L2011723-06
 Lab File ID : R38759
 Dup Sample ID : WG1353541-5

Lab Number : L2011723
 Project Number : MHD1801
 Matrix : AIR
 Analysis Date : 03/20/20 18:16
 DUP File ID : r38760
 DUP Analysis Date : 03/20/20 19:03

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Benzyl chloride	ND	ND	NC	25
1,3-Dichlorobenzene	ND	ND	NC	25
1,4-Dichlorobenzene	ND	ND	NC	25
1,2-Dichlorobenzene	ND	ND	NC	25
1,2,4-Trichlorobenzene	ND	ND	NC	25
Hexachlorobutadiene	ND	ND	NC	25

Form 3

Air Volatiles

Lab Number : L2011723

Project Number : MHD1801

Project Number: 141121001

File ID : r38754

File ID :

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R			
Dichlorodifluoromethane	10	10.6	106				-	70-130	-
Chloromethane	10	11.9	119				-	70-130	-
Freon-114	10	11.8	118				-	70-130	-
Vinyl chloride	10	11.5	115				-	70-130	-
1,3-Butadiene	10	10.7	107				-	70-130	-
Bromomethane	10	12.0	120				-	70-130	-
Chloroethane	10	12.1	121				-	70-130	-
Ethanol	50	50.0	100				-	40-160	-
Vinyl bromide	10	11.8	118				-	70-130	-
Acetone	50	57.9	116				-	40-160	-
Trichlorofluoromethane	10	12.3	123				-	70-130	-
Isopropanol	25	31.3	125				-	40-160	-
1,1-Dichloroethene	10	10.8	108				-	70-130	-
Tertiary butyl Alcohol	10	9.35	94				-	70-130	-
Methylene chloride	10	11.0	110				-	70-130	-
3-Chloropropene	10	12.6	126				-	70-130	-
Carbon disulfide	10	9.59	96				-	70-130	-
Freon-113	10	11.0	110				-	70-130	-
trans-1,2-Dichloroethene	10	10.8	108				-	70-130	-
1,1-Dichloroethane	10	11.6	116				-	70-130	-
Methyl tert butyl ether	10	10.6	106				-	70-130	-
2-Butanone	10	12.0	120				-	70-130	-
cis-1,2-Dichloroethene	10	11.5	115				-	70-130	-
Ethyl Acetate	10	11.7	117				-	70-130	-
Chloroform	10	10.2	102				-	70-130	-
Tetrahydrofuran	10	11.7	117				-	70-130	-



Form 3

Air Volatiles

File ID :

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R			
1,2-Dichloroethane	10	11.2	112				-	70-130	-
n-Hexane	10	10.3	103				-	70-130	-
1,1,1-Trichloroethane	10	11.3	113				-	70-130	-
Benzene	10	9.73	97				-	70-130	-
Carbon tetrachloride	10	10.8	108				-	70-130	-
Cyclohexane	10	10.1	101				-	70-130	-
1,2-Dichloropropane	10	12.3	123				-	70-130	-
Bromodichloromethane	10	9.88	99				-	70-130	-
1,4-Dioxane	10	11.0	110				-	70-130	-
Trichloroethene	10	12.0	120				-	70-130	-
2,2,4-Trimethylpentane	10	10.6	106				-	70-130	-
Heptane	10	12.3	123				-	70-130	-
cis-1,3-Dichloropropene	10	11.1	111				-	70-130	-
4-Methyl-2-pentanone	10	12.8	128				-	70-130	-
trans-1,3-Dichloropropene	10	9.58	96				-	70-130	-
1,1,2-Trichloroethane	10	11.5	115				-	70-130	-
Toluene	10	12.0	120				-	70-130	-
2-Hexanone	10	14.0	140 Q				-	70-130	-
Dibromochloromethane	10	12.9	129				-	70-130	-
1,2-Dibromoethane	10	11.2	112				-	70-130	-
Tetrachloroethene	10	11.5	115				-	70-130	-
Chlorobenzene	10	11.4	114				-	70-130	-
Ethylbenzene	10	12.2	122				-	70-130	-
p/m-Xylene	20	24.8	124				-	70-130	-
Bromoform	10	11.9	119				-	70-130	-
Styrene	10	11.5	115				-	70-130	-

Laboratory Control Sample Summary

Form 3

Air Volatiles

Client	: P. W. Grosser	Lab Number	: L2011723
Project Name	: MHD1801	Project Number	: MHD1801
Matrix	: AIR		
LCS Sample ID	: WG1353541-3	Analysis Date	: 03/20/20 13:32
LCSD Sample ID	:	File ID	: r38754
		Analysis Date	:
		File ID	:

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R			
1,1,2,2-Tetrachloroethane	10	12.4	124				-	70-130	-
o-Xylene	10	12.9	129				-	70-130	-
4-Ethyltoluene	10	11.5	115				-	70-130	-
1,3,5-Trimethylbenzene	10	12.1	121				-	70-130	-
1,2,4-Trimethylbenzene	10	13.0	130				-	70-130	-
Benzyl chloride	10	12.6	126				-	70-130	-
1,3-Dichlorobenzene	10	12.1	121				-	70-130	-
1,4-Dichlorobenzene	10	12.1	121				-	70-130	-
1,2-Dichlorobenzene	10	12.1	121				-	70-130	-
1,2,4-Trichlorobenzene	10	13.8	138 Q				-	70-130	-
Hexachlorobutadiene	10	14.6	146 Q				-	70-130	-

Form 3

Air Volatiles

File ID :

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R			
Dichlorodifluoromethane	10	8.90	89				-	70-130	-
Chloromethane	10	9.47	95				-	70-130	-
Freon-114	10	10.3	103				-	70-130	-
Vinyl chloride	10	9.96	100				-	70-130	-
1,3-Butadiene	10	9.94	99				-	70-130	-
Bromomethane	10	9.72	97				-	70-130	-
Chloroethane	10	10.1	101				-	70-130	-
Ethanol	50	37.8	76				-	40-160	-
Vinyl bromide	10	9.12	91				-	70-130	-
Acetone	50	45.6	91				-	40-160	-
Trichlorofluoromethane	10	9.61	96				-	70-130	-
Isopropanol	25	23.2	93				-	40-160	-
1,1-Dichloroethene	10	10.9	109				-	70-130	-
Tertiary butyl Alcohol	10	9.81	98				-	70-130	-
Methylene chloride	10	9.69	97				-	70-130	-
3-Chloropropene	10	13.0	130				-	70-130	-
Carbon disulfide	10	10.3	103				-	70-130	-
Freon-113	10	10.6	106				-	70-130	-
trans-1,2-Dichloroethene	10	10.8	108				-	70-130	-
1,1-Dichloroethane	10	11.0	110				-	70-130	-
Methyl tert butyl ether	10	9.54	95				-	70-130	-
2-Butanone	10	11.2	112				-	70-130	-
cis-1,2-Dichloroethene	10	11.3	113				-	70-130	-
Ethyl Acetate	10	12.4	124				-	70-130	-
Chloroform	10	10.2	102				-	70-130	-
Tetrahydrofuran	10	11.5	115				-	70-130	-

Form 3

Air Volatiles

File ID :

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R			
1,2-Dichloroethane	10	9.26	93				-	70-130	-
n-Hexane	10	10.0	100				-	70-130	-
1,1,1-Trichloroethane	10	7.92	79				-	70-130	-
Benzene	10	9.60	96				-	70-130	-
Carbon tetrachloride	10	8.66	87				-	70-130	-
Cyclohexane	10	10.3	103				-	70-130	-
1,2-Dichloropropane	10	10.4	104				-	70-130	-
Bromodichloromethane	10	9.25	92				-	70-130	-
1,4-Dioxane	10	10.7	107				-	70-130	-
Trichloroethene	10	9.60	96				-	70-130	-
2,2,4-Trimethylpentane	10	10.4	104				-	70-130	-
Heptane	10	10.1	101				-	70-130	-
cis-1,3-Dichloropropene	10	9.79	98				-	70-130	-
4-Methyl-2-pentanone	10	10.4	104				-	70-130	-
trans-1,3-Dichloropropene	10	7.91	79				-	70-130	-
1,1,2-Trichloroethane	10	9.74	97				-	70-130	-
Toluene	10	10.8	108				-	70-130	-
2-Hexanone	10	11.9	119				-	70-130	-
Dibromochloromethane	10	10.8	108				-	70-130	-
1,2-Dibromoethane	10	10.8	108				-	70-130	-
Tetrachloroethene	10	11.3	113				-	70-130	-
Chlorobenzene	10	11.8	118				-	70-130	-
Ethylbenzene	10	10.8	108				-	70-130	-
p/m-Xylene	20	21.5	108				-	70-130	-
Bromoform	10	11.0	110				-	70-130	-
Styrene	10	10.8	108				-	70-130	-

Form 3

Air Volatiles

Client	: P. W. Grosser	Lab Number	: L2011723
Project Name	: MHD1801	Project Number	: MHD1801
Matrix	: AIR		
LCS Sample ID	: WG1353556-3	Analysis Date	: 03/20/20 12:51
LCS Sample ID	:	File ID	: r193191
		Analysis Date	:
		File ID	:

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R			
1,1,2,2-Tetrachloroethane	10	12.0	120				-	70-130	-
o-Xylene	10	10.7	107				-	70-130	-
4-Ethyltoluene	10	10.7	107				-	70-130	-
1,3,5-Trimethylbenzene	10	10.4	104				-	70-130	-
1,2,4-Trimethylbenzene	10	10.6	106				-	70-130	-
Benzyl chloride	10	10.9	109				-	70-130	-
1,3-Dichlorobenzene	10	11.6	116				-	70-130	-
1,4-Dichlorobenzene	10	11.3	113				-	70-130	-
1,2-Dichlorobenzene	10	11.3	113				-	70-130	-
1,2,4-Trichlorobenzene	10	12.5	125				-	70-130	-
Hexachlorobutadiene	10	10.6	106				-	70-130	-



Method Blank Summary
Form 4
Air Volatiles

Client : P. W. Grosser
Project Name : MHD1801
Lab Sample ID : WG1353556-4
Instrument ID : AIRLAB19
Matrix : AIR

Lab Number : L2011723
Project Number : MHD1801
Lab File ID : r193194
Analysis Date : 03/20/20 15:55

Client Sample No.	Lab Sample ID	Analysis Date
WG1353556-3LCS	WG1353556-3	03/20/20 12:51
25P-IAS-20200312DUP	WG1353556-5	03/20/20 19:17
SS001	L2011723-01	03/21/20 01:52
SV001	L2011723-02D	03/21/20 02:28
SV002	L2011723-03D	03/21/20 03:04
SV003	L2011723-04D	03/21/20 03:40

Method Blank Summary
Form 4
Air Volatiles

Client : P. W. Grosser
Project Name : MHD1801
Lab Sample ID : WG1353541-4
Instrument ID : AIRPIANO3
Matrix : AIR

Lab Number : L2011723
Project Number : MHD1801
Lab File ID : r38757
Analysis Date : 03/20/20 16:20

Client Sample No.	Lab Sample ID	Analysis Date
WG1353541-3LCS	WG1353541-3	03/20/20 13:32
OA001	L2011723-05	03/20/20 17:35
IA001	L2011723-06	03/20/20 18:16
IA001DUP	WG1353541-5	03/20/20 19:03

Instrument Performance Check (Tune) Summary

Form 5

Air Volatiles

Bromofluorobenzene (BFB)

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRLAB19
 Tune Standard : WG1344146-1

Lab Number : L2011723
 Project Number : MHD1801
 Analysis Date : 02/25/20 00:05
 Tune File ID : r192618_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	11.8
75	30.0 - 66.0% of mass 95	33
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.4 (.5)1
174	50.0 - 120.0% of mass 95	78
175	4.0 - 9.0% of mass 174	5.4 (7)1
176	93.0 - 101% of mass 174	77.4 (99.3)1
177	5.0 - 9.0% of mass 176	5 (6.5)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD0.2	R1287788-1	R192622	02/25/20 02:44
STD0.5	R1287788-2	R192623	02/25/20 03:24
STD1.0	R1287788-3	R192624	02/25/20 04:06
STD5.0	R1287788-4	R192625	02/25/20 04:46
STD010	R1287788-5	R192626	02/25/20 05:28
STD020	R1287788-6	R192627	02/25/20 06:07
STD050	R1287788-7	R192628	02/25/20 06:46
STD100	R1287788-8	R192629	02/25/20 07:28
ICV QUANT	R1287788-9	R192632	02/25/20 10:32



Instrument Performance Check (Tune) Summary

Form 5

Air Volatiles

Bromofluorobenzene (BFB)

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRLAB19
 Tune Standard : WG1353556-1

Lab Number : L2011723
 Project Number : MHD1801
 Analysis Date : 03/20/20 11:27
 Tune File ID : r193189_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	10
75	30.0 - 66.0% of mass 95	30.2
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.3 (.4)1
174	50.0 - 120.0% of mass 95	78.1
175	4.0 - 9.0% of mass 174	5.4 (6.9)1
176	93.0 - 101% of mass 174	77.8 (99.7)1
177	5.0 - 9.0% of mass 176	5.2 (6.6)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1353556-2CCAL	WG1353556-2	R193190	03/20/20 12:08
WG1353556-3LCS	WG1353556-3	R193191	03/20/20 12:51
WG1353556-4BLANK	WG1353556-4	R193194	03/20/20 15:55
WG1353556-5DUP	WG1353556-5	R193198	03/20/20 19:17
SS001	L2011723-01	R193208	03/21/20 01:52
SV001	L2011723-02D	R193209	03/21/20 02:28
SV002	L2011723-03D	R193210	03/21/20 03:04
SV003	L2011723-04D	R193211	03/21/20 03:40

Instrument Performance Check (Tune) Summary

Form 5

Air Volatiles

Bromofluorobenzene (BFB)

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRPIANO3
 Tune Standard : WG1350408-1

Lab Number : L2011723
 Project Number : MHD1801
 Analysis Date : 03/12/20 09:50
 Tune File ID : r38588_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	14.5
75	30.0 - 66.0% of mass 95	39.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.8 (1.1)1
174	50.0 - 120.0% of mass 95	75.2
175	4.0 - 9.0% of mass 174	5.6 (7.4)1
176	93.0 - 101% of mass 174	71.7 (95.4)1
177	5.0 - 9.0% of mass 176	4.9 (6.8)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD0.2	R1293583-1	R38592	03/12/20 12:25
STD0.5	R1293583-2	R38593	03/12/20 13:03
STD1.0	R1293583-3	R38594	03/12/20 13:44
STD5.0	R1293583-4	R38595	03/12/20 14:23
STD010	R1293583-5	R38596	03/12/20 15:04
STD020	R1293583-6	R38597	03/12/20 15:41
STD050	R1293583-7	R38598	03/12/20 16:20
STD100	R1293583-8	R38599	03/12/20 17:00
ICV Quant	R1293583-9	R38602	03/13/20 00:06

Instrument Performance Check (Tune) Summary

Form 5

Air Volatiles

Bromofluorobenzene (BFB)

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRPIANO3
 Tune Standard : WG1353541-1

Lab Number : L2011723
 Project Number : MHD1801
 Analysis Date : 03/20/20 12:51
 Tune File ID : r38753_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	13.2
75	30.0 - 66.0% of mass 95	36.4
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.6 (.9)1
174	50.0 - 120.0% of mass 95	71.1
175	4.0 - 9.0% of mass 174	5 (7.1)1
176	93.0 - 101% of mass 174	67.3 (94.6)1
177	5.0 - 9.0% of mass 176	4.5 (6.7)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1353541-2CCAL	WG1353541-2	R38754	03/20/20 13:32
WG1353541-3LCS	WG1353541-3	R38754	03/20/20 13:32
WG1353541-4BLANK	WG1353541-4	R38757	03/20/20 16:20
OA001	L2011723-05	R38758	03/20/20 17:35
IA001	L2011723-06	R38759	03/20/20 18:16
WG1353541-5DUP	WG1353541-5	R38760	03/20/20 19:03



Internal Standard Area and RT Summary

Form 8a

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRLAB19
 Sample No : WG1353556-2

Lab Number : L2011723
 Project Number : MHD1801
 Analysis Date : 03/20/20 12:08
 Lab File ID : R193190

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	RT	Area	RT	Area	RT
WG1353556-2	288364	8.78	940727	10.75	108860	14.88
Upper Limit	403710	9.11	1317018	11.08	152404	15.21
Lower Limit	173018	8.45	564436	10.42	65316	14.55
Sample ID						
WG1353556-3 LCS	291035	8.78	946102	10.75	108034	14.88
WG1353556-4 BLANK	293906	8.78	909254	10.76	110058	14.88
25P-IAS-20200312 DUP	350711	8.79	1038160	10.75	131953	14.88
SS001	351122	8.78	1066245	10.74	134903	14.88
SV001	320561	8.78	1004362	10.74	120197	14.88
SV002	296033	8.78	913325	10.75	112218	14.88
SV003	324356	8.78	995276	10.74	122231	14.88

Area Upper Limit = +40% of internal standard area
 Area Lower Limit = - 40% of internal standard area

RT Upper Limit = +0.33 minutes of internal standard RT
 RT Lower Limit = -0.33 minutes of internal standard RT

* Values outside of QC limits



Internal Standard Area and RT Summary

Form 8a

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRPIANO3
 Sample No : WG1353541-2

Lab Number : L2011723
 Project Number : MHD1801
 Analysis Date : 03/20/20 13:32
 Lab File ID : R38754

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	RT	Area	RT	Area	RT
WG1353541-2	353543	9.58	970632	11.85	139948	16.57
Upper Limit	494960	9.91	1358885	12.18	195927	16.90
Lower Limit	212126	9.25	582379	11.52	83969	16.24
Sample ID						
WG1353541-3 LCS	353543	9.58	970632	11.85	139948	16.57
WG1353541-4 BLANK	347721	9.58	944639	11.85	123905	16.53
OA001	344464	9.58	937731	11.85	131212	16.57
IA001	357016	9.58	960052	11.85	137219	16.58
IA001 DUP	387385	9.58	1015739	11.85	143702	16.57

Area Upper Limit = +40% of internal standard area
 Area Lower Limit = - 40% of internal standard area

RT Upper Limit = +0.33 minutes of internal standard RT
 RT Lower Limit = -0.33 minutes of internal standard RT

* Values outside of QC limits





Date Created: 11/22/19
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File: PM7756-1
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Volatile Organics in Air: TO-15 (AIR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,1,1-Trichloroethane	71-55-6	0.2	0.0501	ppbV	70-130			25	25			
1,1,2,2-Tetrachloroethane	79-34-5	0.2	0.0614	ppbV	70-130			25	25			
1,1,2-Trichloroethane	79-00-5	0.2	0.067	ppbV	70-130			25	25			
1,1-Dichloroethane	75-34-3	0.2	0.0628	ppbV	70-130			25	25			
1,1-Dichloroethene	75-35-4	0.2	0.0643	ppbV	70-130			25	25			
1,2,3-Trimethylbenzene	526-73-8	0.2	0.0576	ppbV	70-130			25	25			
1,2,4-Trichlorobenzene	120-82-1	0.2	0.0674	ppbV	70-130			25	25			
1,2,4-Trimethylbenzene	95-63-6	0.2	0.0368	ppbV	70-130			25	25			
1,2,4,5-Tetramethylbenzene	95-93-2	0.2	0.0604	ppbV	70-130			25	25			
1,2-Dibromoethane	106-93-4	0.2	0.0561	ppbV	70-130			25	25			
1,2-Dichlorobenzene	95-50-1	0.2	0.0628	ppbV	70-130			25	25			
1,2-Dichloroethane	107-06-2	0.2	0.0602	ppbV	70-130			25	25			
1,2-Dichloropropane	78-87-5	0.2	0.061	ppbV	70-130			25	25			
1,3,5-Trimethylbenzene	108-67-8	0.2	0.0675	ppbV	70-130			25	25			
1,3-Butadiene	106-99-0	0.2	0.067	ppbV	70-130			25	25			
1,3-Dichlorobenzene	541-73-1	0.2	0.0627	ppbV	70-130			25	25			
1,4-Dichlorobenzene	106-46-7	0.2	0.0636	ppbV	70-130			25	25			
1,4-Dioxane	123-91-1	0.2	0.0805	ppbV	70-130			25	25			
2,2,4-Trimethylpentane	540-84-1	0.2	0.0361	ppbV	70-130			25	25			
2-Butanone	78-93-3	0.5	0.0482	ppbV	70-130			25	25			
2-Hexanone	591-78-6	0.2	0.0648	ppbV	70-130			25	25			
2-Methylthiophene	554-14-3	0.2	0.0524	ppbV	70-130			25	25			
3-Methylthiophene	616-44-4	0.2	0.0393	ppbV	70-130			25	25			
3-Chloropropene	107-05-1	0.2	0.0585	ppbV	70-130			25	25			
2-Ethylthiophene	872-55-9	0.2	0.0407	ppbV	70-130			25	25			
4-Ethyltoluene	622-96-8	0.2	0.037	ppbV	70-130			25	25			
Acetone	67-64-1	1	0.689	ppbV	40-160			25	25			
Benzene	71-43-2	0.2	0.0487	ppbV	70-130			25	25			
Benzyl chloride	100-44-7	0.2	0.0482	ppbV	70-130			25	25			
Benzothiophene	95-15-8	0.5	0.077	ppbV	70-130			25	25			
Bromodichloromethane	75-27-4	0.2	0.0504	ppbV	70-130			25	25			
Bromoform	75-25-2	0.2	0.0641	ppbV	70-130			25	25			
Bromomethane	74-83-9	0.2	0.0773	ppbV	70-130			25	25			
Carbon disulfide	75-15-0	0.2	0.0559	ppbV	70-130			25	25			
Carbon tetrachloride	56-23-5	0.2	0.0499	ppbV	70-130			25	25			
Chlorobenzene	108-90-7	0.2	0.0624	ppbV	70-130			25	25			
Chloroethane	75-00-3	0.2	0.0805	ppbV	70-130			25	25			
Chloroform	67-66-3	0.2	0.0633	ppbV	70-130			25	25			
Chloromethane	74-87-3	0.2	0.0689	ppbV	70-130			25	25			
cis-1,2-Dichloroethene	156-59-2	0.2	0.117	ppbV	70-130			25	25			
cis-1,3-Dichloropropene	10061-01-5	0.2	0.0409	ppbV	70-130			25	25			
Cyclohexane	110-82-7	0.2	0.0368	ppbV	70-130			25	25			

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.



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Volatile Organics in Air: TO-15 (AIR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Dibromochloromethane	124-48-1	0.2	0.0614	ppbV	70-130			25	25			
Dichlorodifluoromethane	75-71-8	0.2	0.0583	ppbV	70-130			25	25			
Ethyl Alcohol	64-17-5	5	0.733	ppbV	40-160			25	25			
Ethyl Acetate	141-78-6	0.5	0.122	ppbV	70-130			25	25			
Ethylbenzene	100-41-4	0.2	0.0432	ppbV	70-130			25	25			
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	0.2	0.0656	ppbV	70-130			25	25			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	0.2	0.0591	ppbV	70-130			25	25			
Hexachlorobutadiene	87-68-3	0.2	0.0529	ppbV	70-130			25	25			
iso-Propyl Alcohol	67-63-0	0.5	0.478	ppbV	40-160			25	25			
Methylene chloride	75-09-2	0.5	0.134	ppbV	70-130			25	25			
4-Methyl-2-pentanone	108-10-1	0.5	0.0421	ppbV	70-130			25	25			
Methyl tert butyl ether	1634-04-4	0.2	0.0525	ppbV	70-130			25	25			
Methyl Methacrylate	80-62-6	0.5	0.0697	ppbV	40-160			25	25			
p/m-Xylene	179601-23-1	0.4	0.091	ppbV	70-130			25	25			
o-Xylene	95-47-6	0.2	0.0453	ppbV	70-130			25	25			
Xylene (Total)	1330-20-7	0.2	0.0453	ppbV	70-130			25	25			
Heptane	142-82-5	0.2	0.047	ppbV	70-130			25	25			
n-Heptane	142-82-5	0.2	0.047	ppbV	70-130			25	25			
n-Hexane	110-54-3	0.2	0.0364	ppbV	70-130			25	25			
Propylene	115-07-1	0.5	0.0599	ppbV	70-130			25	25			
Styrene	100-42-5	0.2	0.0434	ppbV	70-130			25	25			
Tetrachloroethene	127-18-4	0.2	0.0655	ppbV	70-130			25	25			
Thiophene	110-02-1	0.2	0.0389	ppbV	70-130			25	25			
Tetrahydrofuran	109-99-9	0.5	0.0568	ppbV	70-130			25	25			
Toluene	108-88-3	0.2	0.052	ppbV	70-130			25	25			
trans-1,2-Dichloroethene	156-60-5	0.2	0.0643	ppbV	70-130			25	25			
1,2-Dichloroethene (total)	540-59-0	0.2	0.0643	ppbV	70-130			25	25			
trans-1,3-Dichloropropene	10061-02-6	0.2	0.0436	ppbV	70-130			25	25			
1,3-Dichloropropene, Total	542-75-6	0.2	0.0409	ppbV	70-130			25	25			
Trichloroethene	79-01-6	0.2	0.0505	ppbV	70-130			25	25			
Trichlorofluoromethane	75-69-4	0.2	0.0686	ppbV	70-130			25	25			
Vinyl acetate	108-05-4	1	0.0479	ppbV	70-130			25	25			
Vinyl bromide	593-60-2	0.2	0.0717	ppbV	70-130			25	25			
Vinyl chloride	75-01-4	0.2	0.0627	ppbV	70-130			25	25			
Naphthalene	91-20-3	0.2	0.0885	ppbV	70-130			25	25			
Total HC As Hexane	NONE	10	0.0364	ppbV	70-130			25	25			
Total VOCs As Toluene	NONE	10	0.052	ppbV	70-130			25	25			
Propane	74-98-6	0.5	0.132	ppbV	70-130			25	25			
Acrylonitrile	107-13-1	0.5	0.0555	ppbV	70-130			25	25			
Acrolein	107-02-8	0.5	0.0596	ppbV	70-130			25	25			
1,1,1,2-Tetrachloroethane	630-20-6	0.2	0.0561	ppbV	70-130			25	25			
Isopropylbenzene	98-82-8	0.2	0.0491	ppbV	70-130			25	25			

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.



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Date Created: 11/22/19
Created By: Jason Hebert
File: PM7756-1
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Volatile Organics in Air: TO-15 (AIR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,2,3-Trichloropropane	96-18-4	0.2	0.061	ppbV	70-130			25	25			
Acetonitrile	75-05-8	0.2	0.082	ppbV	70-130			25	25			
Bromobenzene	108-86-1	0.2	0.0613	ppbV	70-130			25	25			
Chlorodifluoromethane	75-45-6	0.2	0.0584	ppbV	70-130			25	25			
Dichlorofluoromethane	75-43-4	0.2	0.0807	ppbV	70-130			25	25			
Dibromomethane	74-95-3	0.2	0.0563	ppbV	70-130			25	25			
Pentane	109-66-0	0.2	0.0659	ppbV	70-130			25	25			
Octane	111-65-9	0.2	0.0445	ppbV	70-130			25	25			
Tertiary-Amyl Methyl Ether	994-05-8	0.2	0.0476	ppbV	70-130			25	25			
o-Chlorotoluene	95-49-8	0.2	0.0486	ppbV	70-130			25	25			
p-Chlorotoluene	106-43-4	0.2	0.056	ppbV	70-130			25	25			
2,2-Dichloropropane	594-20-7	0.2	0.0458	ppbV	70-130			25	25			
1,1-Dichloropropene	563-58-6	0.2	0.0457	ppbV	70-130			25	25			
Isopropyl Ether	108-20-3	0.2	0.0621	ppbV	70-130			25	25			
Ethyl-Tert-Butyl-Ether	637-92-3	0.2	0.0422	ppbV	70-130			25	25			
1,2,3-Trichlorobenzene	87-61-6	0.2	0.0715	ppbV	70-130			25	25			
Ethyl ether	60-29-7	0.2	0.0737	ppbV	70-130			25	25			
n-Butylbenzene	104-51-8	0.2	0.044	ppbV	70-130			25	25			
sec-Butylbenzene	135-98-8	0.2	0.0429	ppbV	70-130			25	25			
tert-Butylbenzene	98-06-6	0.2	0.042	ppbV	70-130			25	25			
1,2-Dibromo-3-chloropropane	96-12-8	0.2	0.0495	ppbV	70-130			25	25			
p-Isopropyltoluene	99-87-6	0.2	0.052	ppbV	70-130			25	25			
n-Propylbenzene	103-65-1	0.2	0.0419	ppbV	70-130			25	25			
1,3-Dichloropropane	142-28-9	0.2	0.106	ppbV	70-130			25	25			
Methanol	67-56-1	5	1.84	ppbV	70-130			25	25			
Acetaldehyde	75-07-0	2.5	0.444	ppbV	70-130			25	25			
Butane	106-97-8	0.2	0.0646	ppbV	70-130			25	25			
Nonane (C9)	111-84-2	0.2	0.0463	ppbV	70-130			25	25			
Decane (C10)	124-18-5	0.2	0.0404	ppbV	70-130			25	25			
Undecane	1120-21-4	0.2	0.0427	ppbV	70-130			25	25			
Indane	496-11-7	0.2	0.0507	ppbV	70-130			25	25			
Indene	95-13-6	0.2	0.0433	ppbV	70-130			25	25			
1-Methylnaphthalene	90-12-0	1	0.466	ppbV	70-130			25	25			
Dodecane (C12)	112-40-3	0.2	0.0658	ppbV	70-130			25	25			
Butyl Acetate	123-86-4	0.5	0.126	ppbV	70-130			25	25			
tert-Butyl Alcohol	75-65-0	0.5	0.0466	ppbV	70-130			25	25			
2-Methylnaphthalene	91-57-6	1	0.393	ppbV	70-130			25	25			
1,2-Dichloroethane-d4	17060-07-0									70-130		
Toluene-d8	2037-26-5									70-130		
Bromofluorobenzene	460-00-4									70-130		

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Sol/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.



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Volatiles Sample Data

Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-01
 Client ID : SS001
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R193208
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:25
 Date Received : 03/16/20
 Date Analyzed : 03/21/20 01:52
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.409	0.200	--	2.02	0.989	--	
74-87-3	Chloromethane	0.259	0.200	--	0.535	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	0.830	0.200	--	1.84	0.442	--	
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	10.8	5.00	--	20.3	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	39.9	1.00	--	94.8	2.38	--	
75-69-4	Trichlorofluoromethane	0.208	0.200	--	1.17	1.12	--	
67-63-0	Isopropanol	1.64	0.500	--	4.03	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	2.04	0.500	--	6.18	1.52	--	
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	1.44	0.200	--	4.48	0.623	--	
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	5.11	0.500	--	15.1	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	69.2	0.200	--	338	0.977	--	
109-99-9	Tetrahydrofuran	3.06	0.500	--	9.02	1.47	--	



Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-01
 Client ID : SS001
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R193208
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:25
 Date Received : 03/16/20
 Date Analyzed : 03/21/20 01:52
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	32.4	0.200	--	114	0.705	--	
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	3.34	0.200	--	10.7	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	14.5	0.200	--	49.9	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	5.24	0.200	--	35.1	1.34	--	
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	5.24	0.200	--	24.5	0.934	--	
142-82-5	Heptane	5.29	0.200	--	21.7	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	0.590	0.500	--	2.42	2.05	--	
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	18.7	0.200	--	70.5	0.754	--	
591-78-6	2-Hexanone	2.89	0.200	--	11.8	0.820	--	
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	45.3	0.200	--	307	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	3.82	0.200	--	16.6	0.869	--	
179601-23-1	p/m-Xylene	10.2	0.400	--	44.3	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	0.203	0.200	--	0.864	0.852	--	



Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-01
 Client ID : SS001
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R193208
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:25
 Date Received : 03/16/20
 Date Analyzed : 03/21/20 01:52
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	4.43	0.200	--	19.2	0.869	--	
622-96-8	4-Ethyltoluene	0.737	0.200	--	3.62	0.983	--	
108-67-8	1,3,5-Trimethylbenzene	0.770	0.200	--	3.79	0.983	--	
95-63-6	1,2,4-Trimethylbenzene	2.23	0.200	--	11.0	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary Form 1 Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-02D
 Client ID : SV001
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R193209
 Sample Amount : 75.0 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:26
 Date Received : 03/16/20
 Date Analyzed : 03/21/20 02:28
 Dilution Factor : 3.333
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	ND	0.667	--	ND	3.30	--	U
74-87-3	Chloromethane	ND	0.667	--	ND	1.38	--	U
76-14-2	Freon-114	ND	0.667	--	ND	4.66	--	U
75-01-4	Vinyl chloride	ND	0.667	--	ND	1.71	--	U
106-99-0	1,3-Butadiene	ND	0.667	--	ND	1.48	--	U
74-83-9	Bromomethane	ND	0.667	--	ND	2.59	--	U
75-00-3	Chloroethane	ND	0.667	--	ND	1.76	--	U
64-17-5	Ethanol	ND	16.7	--	ND	31.5	--	U
593-60-2	Vinyl bromide	ND	0.667	--	ND	2.92	--	U
67-64-1	Acetone	793	3.33	--	1880	7.91	--	
75-69-4	Trichlorofluoromethane	ND	0.667	--	ND	3.75	--	U
67-63-0	Isopropanol	13.4	1.67	--	32.9	4.10	--	
75-35-4	1,1-Dichloroethene	ND	0.667	--	ND	2.64	--	U
75-65-0	Tertiary butyl Alcohol	8.96	1.67	--	27.2	5.06	--	
75-09-2	Methylene chloride	ND	1.67	--	ND	5.80	--	U
107-05-1	3-Chloropropene	ND	0.667	--	ND	2.09	--	U
75-15-0	Carbon disulfide	0.820	0.667	--	2.55	2.08	--	
76-13-1	Freon-113	ND	0.667	--	ND	5.11	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.667	--	ND	2.64	--	U
75-34-3	1,1-Dichloroethane	ND	0.667	--	ND	2.70	--	U
1634-04-4	Methyl tert butyl ether	ND	0.667	--	ND	2.40	--	U
78-93-3	2-Butanone	47.1	1.67	--	139	4.93	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.667	--	ND	2.64	--	U
141-78-6	Ethyl Acetate	ND	1.67	--	ND	6.02	--	U
67-66-3	Chloroform	ND	0.667	--	ND	3.26	--	U
109-99-9	Tetrahydrofuran	7.82	1.67	--	23.1	4.93	--	



Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-02D
 Client ID : SV001
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R193209
 Sample Amount : 75.0 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:26
 Date Received : 03/16/20
 Date Analyzed : 03/21/20 02:28
 Dilution Factor : 3.333
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.667	--	ND	2.70	--	U
110-54-3	n-Hexane	3.20	0.667	--	11.3	2.35	--	
71-55-6	1,1,1-Trichloroethane	ND	0.667	--	ND	3.64	--	U
71-43-2	Benzene	1.26	0.667	--	4.03	2.13	--	
56-23-5	Carbon tetrachloride	ND	0.667	--	ND	4.20	--	U
110-82-7	Cyclohexane	1.71	0.667	--	5.89	2.30	--	
78-87-5	1,2-Dichloropropane	ND	0.667	--	ND	3.08	--	U
75-27-4	Bromodichloromethane	ND	0.667	--	ND	4.47	--	U
123-91-1	1,4-Dioxane	ND	0.667	--	ND	2.40	--	U
79-01-6	Trichloroethene	ND	0.667	--	ND	3.58	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.667	--	ND	3.12	--	U
142-82-5	Heptane	11.0	0.667	--	45.1	2.73	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.667	--	ND	3.03	--	U
108-10-1	4-Methyl-2-pentanone	2.26	1.67	--	9.26	6.84	--	
10061-02-6	trans-1,3-Dichloropropene	ND	0.667	--	ND	3.03	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.667	--	ND	3.64	--	U
108-88-3	Toluene	13.6	0.667	--	51.3	2.51	--	
591-78-6	2-Hexanone	8.08	0.667	--	33.1	2.73	--	
124-48-1	Dibromochloromethane	ND	0.667	--	ND	5.68	--	U
106-93-4	1,2-Dibromoethane	ND	0.667	--	ND	5.13	--	U
127-18-4	Tetrachloroethene	11.6	0.667	--	78.7	4.52	--	
108-90-7	Chlorobenzene	ND	0.667	--	ND	3.07	--	U
100-41-4	Ethylbenzene	1.66	0.667	--	7.21	2.90	--	
179601-23-1	p/m-Xylene	6.72	1.33	--	29.2	5.78	--	
75-25-2	Bromoform	ND	0.667	--	ND	6.90	--	U
100-42-5	Styrene	ND	0.667	--	ND	2.84	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-02D
 Client ID : SV001
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R193209
 Sample Amount : 75.0 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:26
 Date Received : 03/16/20
 Date Analyzed : 03/21/20 02:28
 Dilution Factor : 3.333
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.667	--	ND	4.58	--	U
95-47-6	o-Xylene	2.44	0.667	--	10.6	2.90	--	
622-96-8	4-Ethyltoluene	ND	0.667	--	ND	3.28	--	U
108-67-8	1,3,5-Trimethylbenzene	0.783	0.667	--	3.85	3.28	--	
95-63-6	1,2,4-Trimethylbenzene	2.97	0.667	--	14.6	3.28	--	
100-44-7	Benzyl chloride	ND	0.667	--	ND	3.45	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.667	--	ND	4.01	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.667	--	ND	4.01	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.667	--	ND	4.01	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.667	--	ND	4.95	--	U
87-68-3	Hexachlorobutadiene	ND	0.667	--	ND	7.11	--	U

Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-03D
 Client ID : SV002
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R193210
 Sample Amount : 40.0 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:27
 Date Received : 03/16/20
 Date Analyzed : 03/21/20 03:04
 Dilution Factor : 6.25
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	ND	1.25	--	ND	6.18	--	U
74-87-3	Chloromethane	ND	1.25	--	ND	2.58	--	U
76-14-2	Freon-114	ND	1.25	--	ND	8.74	--	U
75-01-4	Vinyl chloride	ND	1.25	--	ND	3.20	--	U
106-99-0	1,3-Butadiene	ND	1.25	--	ND	2.77	--	U
74-83-9	Bromomethane	ND	1.25	--	ND	4.85	--	U
75-00-3	Chloroethane	ND	1.25	--	ND	3.30	--	U
64-17-5	Ethanol	ND	31.2	--	ND	58.8	--	U
593-60-2	Vinyl bromide	ND	1.25	--	ND	5.47	--	U
67-64-1	Acetone	428	6.25	--	1020	14.8	--	
75-69-4	Trichlorofluoromethane	ND	1.25	--	ND	7.02	--	U
67-63-0	Isopropanol	6.52	3.12	--	16.0	7.67	--	
75-35-4	1,1-Dichloroethene	ND	1.25	--	ND	4.96	--	U
75-65-0	Tertiary butyl Alcohol	4.80	3.12	--	14.6	9.46	--	
75-09-2	Methylene chloride	ND	3.12	--	ND	10.8	--	U
107-05-1	3-Chloropropene	ND	1.25	--	ND	3.91	--	U
75-15-0	Carbon disulfide	ND	1.25	--	ND	3.89	--	U
76-13-1	Freon-113	ND	1.25	--	ND	9.58	--	U
156-60-5	trans-1,2-Dichloroethene	ND	1.25	--	ND	4.96	--	U
75-34-3	1,1-Dichloroethane	ND	1.25	--	ND	5.06	--	U
1634-04-4	Methyl tert butyl ether	ND	1.25	--	ND	4.51	--	U
78-93-3	2-Butanone	28.0	3.12	--	82.6	9.20	--	
156-59-2	cis-1,2-Dichloroethene	60.0	1.25	--	238	4.96	--	
141-78-6	Ethyl Acetate	ND	3.12	--	ND	11.2	--	U
67-66-3	Chloroform	10.4	1.25	--	50.8	6.10	--	
109-99-9	Tetrahydrofuran	4.63	3.12	--	13.7	9.20	--	



Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-03D
 Client ID : SV002
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R193210
 Sample Amount : 40.0 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:27
 Date Received : 03/16/20
 Date Analyzed : 03/21/20 03:04
 Dilution Factor : 6.25
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	1.25	--	ND	5.06	--	U
110-54-3	n-Hexane	ND	1.25	--	ND	4.41	--	U
71-55-6	1,1,1-Trichloroethane	ND	1.25	--	ND	6.82	--	U
71-43-2	Benzene	ND	1.25	--	ND	3.99	--	U
56-23-5	Carbon tetrachloride	ND	1.25	--	ND	7.86	--	U
110-82-7	Cyclohexane	ND	1.25	--	ND	4.30	--	U
78-87-5	1,2-Dichloropropane	ND	1.25	--	ND	5.78	--	U
75-27-4	Bromodichloromethane	ND	1.25	--	ND	8.37	--	U
123-91-1	1,4-Dioxane	ND	1.25	--	ND	4.50	--	U
79-01-6	Trichloroethene	13.5	1.25	--	72.6	6.72	--	
540-84-1	2,2,4-Trimethylpentane	ND	1.25	--	ND	5.84	--	U
142-82-5	Heptane	2.52	1.25	--	10.3	5.12	--	
10061-01-5	cis-1,3-Dichloropropene	ND	1.25	--	ND	5.67	--	U
108-10-1	4-Methyl-2-pentanone	ND	3.12	--	ND	12.8	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	1.25	--	ND	5.67	--	U
79-00-5	1,1,2-Trichloroethane	ND	1.25	--	ND	6.82	--	U
108-88-3	Toluene	9.82	1.25	--	37.0	4.71	--	
591-78-6	2-Hexanone	8.93	1.25	--	36.6	5.12	--	
124-48-1	Dibromochloromethane	ND	1.25	--	ND	10.6	--	U
106-93-4	1,2-Dibromoethane	ND	1.25	--	ND	9.61	--	U
127-18-4	Tetrachloroethene	320	1.25	--	2170	8.48	--	
108-90-7	Chlorobenzene	ND	1.25	--	ND	5.76	--	U
100-41-4	Ethylbenzene	2.88	1.25	--	12.5	5.43	--	
179601-23-1	p/m-Xylene	9.51	2.50	--	41.3	10.9	--	
75-25-2	Bromoform	ND	1.25	--	ND	12.9	--	U
100-42-5	Styrene	ND	1.25	--	ND	5.32	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-03D
 Client ID : SV002
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R193210
 Sample Amount : 40.0 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:27
 Date Received : 03/16/20
 Date Analyzed : 03/21/20 03:04
 Dilution Factor : 6.25
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.25	--	ND	8.58	--	U
95-47-6	o-Xylene	3.24	1.25	--	14.1	5.43	--	
622-96-8	4-Ethyltoluene	ND	1.25	--	ND	6.15	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	1.25	--	ND	6.15	--	U
95-63-6	1,2,4-Trimethylbenzene	1.81	1.25	--	8.90	6.15	--	
100-44-7	Benzyl chloride	ND	1.25	--	ND	6.47	--	U
541-73-1	1,3-Dichlorobenzene	ND	1.25	--	ND	7.52	--	U
106-46-7	1,4-Dichlorobenzene	ND	1.25	--	ND	7.52	--	U
95-50-1	1,2-Dichlorobenzene	ND	1.25	--	ND	7.52	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	1.25	--	ND	9.28	--	U
87-68-3	Hexachlorobutadiene	ND	1.25	--	ND	13.3	--	U

Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-04D
 Client ID : SV003
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R193211
 Sample Amount : 100 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:28
 Date Received : 03/16/20
 Date Analyzed : 03/21/20 03:40
 Dilution Factor : 2.5
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	ND	0.500	--	ND	2.47	--	U
74-87-3	Chloromethane	ND	0.500	--	ND	1.03	--	U
76-14-2	Freon-114	ND	0.500	--	ND	3.49	--	U
75-01-4	Vinyl chloride	ND	0.500	--	ND	1.28	--	U
106-99-0	1,3-Butadiene	4.51	0.500	--	9.98	1.11	--	
74-83-9	Bromomethane	ND	0.500	--	ND	1.94	--	U
75-00-3	Chloroethane	ND	0.500	--	ND	1.32	--	U
64-17-5	Ethanol	15.3	12.5	--	28.8	23.6	--	
593-60-2	Vinyl bromide	ND	0.500	--	ND	2.19	--	U
67-64-1	Acetone	745	2.50	--	1770	5.94	--	
75-69-4	Trichlorofluoromethane	ND	0.500	--	ND	2.81	--	U
67-63-0	Isopropanol	9.00	1.25	--	22.1	3.07	--	
75-35-4	1,1-Dichloroethene	ND	0.500	--	ND	1.98	--	U
75-65-0	Tertiary butyl Alcohol	8.52	1.25	--	25.8	3.79	--	
75-09-2	Methylene chloride	ND	1.25	--	ND	4.34	--	U
107-05-1	3-Chloropropene	ND	0.500	--	ND	1.57	--	U
75-15-0	Carbon disulfide	ND	0.500	--	ND	1.56	--	U
76-13-1	Freon-113	ND	0.500	--	ND	3.83	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.500	--	ND	1.98	--	U
75-34-3	1,1-Dichloroethane	ND	0.500	--	ND	2.02	--	U
1634-04-4	Methyl tert butyl ether	ND	0.500	--	ND	1.80	--	U
78-93-3	2-Butanone	63.6	1.25	--	188	3.69	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.500	--	ND	1.98	--	U
141-78-6	Ethyl Acetate	ND	1.25	--	ND	4.50	--	U
67-66-3	Chloroform	0.512	0.500	--	2.50	2.44	--	
109-99-9	Tetrahydrofuran	7.13	1.25	--	21.0	3.69	--	



Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-04D
 Client ID : SV003
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R193211
 Sample Amount : 100 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:28
 Date Received : 03/16/20
 Date Analyzed : 03/21/20 03:40
 Dilution Factor : 2.5
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.500	--	ND	2.02	--	U
110-54-3	n-Hexane	1.49	0.500	--	5.25	1.76	--	
71-55-6	1,1,1-Trichloroethane	ND	0.500	--	ND	2.73	--	U
71-43-2	Benzene	1.06	0.500	--	3.39	1.60	--	
56-23-5	Carbon tetrachloride	ND	0.500	--	ND	3.15	--	U
110-82-7	Cyclohexane	ND	0.500	--	ND	1.72	--	U
78-87-5	1,2-Dichloropropane	ND	0.500	--	ND	2.31	--	U
75-27-4	Bromodichloromethane	ND	0.500	--	ND	3.35	--	U
123-91-1	1,4-Dioxane	ND	0.500	--	ND	1.80	--	U
79-01-6	Trichloroethene	ND	0.500	--	ND	2.69	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.500	--	ND	2.34	--	U
142-82-5	Heptane	2.36	0.500	--	9.67	2.05	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.500	--	ND	2.27	--	U
108-10-1	4-Methyl-2-pentanone	ND	1.25	--	ND	5.12	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.500	--	ND	2.27	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.500	--	ND	2.73	--	U
108-88-3	Toluene	6.96	0.500	--	26.2	1.88	--	
591-78-6	2-Hexanone	14.3	0.500	--	58.6	2.05	--	
124-48-1	Dibromochloromethane	ND	0.500	--	ND	4.26	--	U
106-93-4	1,2-Dibromoethane	ND	0.500	--	ND	3.84	--	U
127-18-4	Tetrachloroethene	34.0	0.500	--	231	3.39	--	
108-90-7	Chlorobenzene	ND	0.500	--	ND	2.30	--	U
100-41-4	Ethylbenzene	0.905	0.500	--	3.93	2.17	--	
179601-23-1	p/m-Xylene	2.78	1.00	--	12.1	4.34	--	
75-25-2	Bromoform	ND	0.500	--	ND	5.17	--	U
100-42-5	Styrene	ND	0.500	--	ND	2.13	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-04D
 Client ID : SV003
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R193211
 Sample Amount : 100 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:28
 Date Received : 03/16/20
 Date Analyzed : 03/21/20 03:40
 Dilution Factor : 2.5
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.500	--	ND	3.43	--	U
95-47-6	o-Xylene	0.900	0.500	--	3.91	2.17	--	
622-96-8	4-Ethyltoluene	ND	0.500	--	ND	2.46	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.500	--	ND	2.46	--	U
95-63-6	1,2,4-Trimethylbenzene	0.768	0.500	--	3.78	2.46	--	
100-44-7	Benzyl chloride	ND	0.500	--	ND	2.59	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.500	--	ND	3.01	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.500	--	ND	3.01	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.500	--	ND	3.01	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.500	--	ND	3.71	--	U
87-68-3	Hexachlorobutadiene	ND	0.500	--	ND	5.33	--	U

Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-05
 Client ID : OA001
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R38758
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:29
 Date Received : 03/16/20
 Date Analyzed : 03/20/20 17:35
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.467	0.200	--	2.31	0.989	--	
74-87-3	Chloromethane	0.648	0.200	--	1.34	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	16.5	5.00	--	31.1	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	5.09	1.00	--	12.1	2.38	--	
75-69-4	Trichlorofluoromethane	0.238	0.200	--	1.34	1.12	--	
67-63-0	Isopropanol	3.28	0.500	--	8.06	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	2.89	0.200	--	10.2	0.705	--	
71-43-2	Benzene	0.421	0.200	--	1.34	0.639	--	



Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-05
 Client ID : OA001
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R38758
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:29
 Date Received : 03/16/20
 Date Analyzed : 03/20/20 17:35
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
110-82-7	Cyclohexane	1.24	0.200	--	4.27	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	0.368	0.200	--	1.72	0.934	--	
142-82-5	Heptane	0.619	0.200	--	2.54	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	2.16	0.200	--	8.14	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.269	0.200	--	1.17	0.869	--	
179601-23-1	p/m-Xylene	0.974	0.400	--	4.23	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.345	0.200	--	1.50	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	0.249	0.200	--	1.22	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-05
 Client ID : OA001
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R38758
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:29
 Date Received : 03/16/20
 Date Analyzed : 03/20/20 17:35
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-06
 Client ID : IA001
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R38759
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:30
 Date Received : 03/16/20
 Date Analyzed : 03/20/20 18:16
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.469	0.200	--	2.32	0.989	--	
74-87-3	Chloromethane	0.808	0.200	--	1.67	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	1.48	0.200	--	3.27	0.442	--	
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	121	5.00	--	228	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	15.8	1.00	--	37.5	2.38	--	
75-69-4	Trichlorofluoromethane	0.237	0.200	--	1.33	1.12	--	
67-63-0	Isopropanol	17.3	0.500	--	42.5	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	1.12	0.500	--	3.30	1.47	--	
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	57.7	0.200	--	203	0.705	--	
71-43-2	Benzene	6.72	0.200	--	21.5	0.639	--	



Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-06
 Client ID : IA001
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R38759
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:30
 Date Received : 03/16/20
 Date Analyzed : 03/20/20 18:16
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
110-82-7	Cyclohexane	24.8	0.200	--	85.4	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	5.34	0.200	--	24.9	0.934	--	
142-82-5	Heptane	7.98	0.200	--	32.7	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	0.686	0.500	--	2.81	2.05	--	
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	26.1	0.200	--	98.4	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	4.35	0.200	--	18.9	0.869	--	
179601-23-1	p/m-Xylene	15.7	0.400	--	68.2	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	0.315	0.200	--	1.34	0.852	--	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	6.09	0.200	--	26.5	0.869	--	
622-96-8	4-Ethyltoluene	1.06	0.200	--	5.21	0.983	--	
108-67-8	1,3,5-Trimethylbenzene	1.40	0.200	--	6.88	0.983	--	
95-63-6	1,2,4-Trimethylbenzene	5.34	0.200	--	26.3	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-06
 Client ID : IA001
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R38759
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:30
 Date Received : 03/16/20
 Date Analyzed : 03/20/20 18:16
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : WG1353541-4
 Client ID : WG1353541-4BLANK
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R38757
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/20/20 16:20
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--	U
74-87-3	Chloromethane	ND	0.200	--	ND	0.413	--	U
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	ND	5.00	--	ND	9.42	--	U
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	ND	1.00	--	ND	2.38	--	U
75-69-4	Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	U
67-63-0	Isopropanol	ND	0.500	--	ND	1.23	--	U
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : WG1353541-4
 Client ID : WG1353541-4BLANK
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R38757
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/20/20 16:20
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	ND	0.200	--	ND	0.754	--	U
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	ND	0.200	--	ND	1.36	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : WG1353541-4
 Client ID : WG1353541-4BLANK
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R38757
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/20/20 16:20
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : WG1353541-5
 Client ID : IA001DUP
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R38760
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:30
 Date Received : 03/16/20
 Date Analyzed : 03/20/20 19:03
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.440	0.200	--	2.18	0.989	--	
74-87-3	Chloromethane	0.813	0.200	--	1.68	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	1.43	0.200	--	3.16	0.442	--	
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	112	5.00	--	211	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	14.6	1.00	--	34.7	2.38	--	
75-69-4	Trichlorofluoromethane	0.207	0.200	--	1.16	1.12	--	
67-63-0	Isopropanol	15.6	0.500	--	38.3	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	1.10	0.500	--	3.24	1.47	--	
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	55.6	0.200	--	196	0.705	--	
71-43-2	Benzene	6.68	0.200	--	21.3	0.639	--	



Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : WG1353541-5
 Client ID : IA001DUP
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R38760
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:30
 Date Received : 03/16/20
 Date Analyzed : 03/20/20 19:03
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
110-82-7	Cyclohexane	23.9	0.200	--	82.3	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	5.14	0.200	--	24.0	0.934	--	
142-82-5	Heptane	7.70	0.200	--	31.6	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	0.666	0.500	--	2.73	2.05	--	
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	25.0	0.200	--	94.2	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	4.18	0.200	--	18.2	0.869	--	
179601-23-1	p/m-Xylene	14.8	0.400	--	64.3	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	0.314	0.200	--	1.34	0.852	--	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	5.80	0.200	--	25.2	0.869	--	
622-96-8	4-Ethyltoluene	0.984	0.200	--	4.84	0.983	--	
108-67-8	1,3,5-Trimethylbenzene	1.35	0.200	--	6.64	0.983	--	
95-63-6	1,2,4-Trimethylbenzene	5.21	0.200	--	25.6	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : WG1353541-5
 Client ID : IA001DUP
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R38760
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:30
 Date Received : 03/16/20
 Date Analyzed : 03/20/20 19:03
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : WG1353556-4
 Client ID : WG1353556-4BLANK
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R193194
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/20/20 15:55
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--	U
74-87-3	Chloromethane	ND	0.200	--	ND	0.413	--	U
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	ND	5.00	--	ND	9.42	--	U
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	ND	1.00	--	ND	2.38	--	U
75-69-4	Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	U
67-63-0	Isopropanol	ND	0.500	--	ND	1.23	--	U
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : WG1353556-4
 Client ID : WG1353556-4BLANK
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R193194
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/20/20 15:55
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	ND	0.200	--	ND	0.754	--	U
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	ND	0.200	--	ND	1.36	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : WG1353556-4
 Client ID : WG1353556-4BLANK
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R193194
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/20/20 15:55
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38758.D
 Acq On : 20 Mar 2020 5:35 PM
 Operator : AIRPIAN03:EW
 Sample : L2011723-05,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 18:10:57 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320T\r38754.D
 Sub List : T015-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.583	49	344464	10.000	ppbV	0.03
Standard Area = 353543			Recovery =		97.43%	
43) 1,4-difluorobenzene	11.847	114	937731	10.000	ppbV	0.03
Standard Area = 970632			Recovery =		96.61%	
67) chlorobenzene-D5	16.567	54	131212	10.000	ppbV	0.02
Standard Area = 139948			Recovery =		93.76%	

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	4.006	85	14529	0.467	ppbV	100
6) chloromethane	4.186	50	9270	0.648	ppbV	95
7) Freon-114	4.312		0	N.D.		
10) 1,3-butadiene	4.612		0	N.D.		
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.326	31	221303	16.493	ppbV #	82
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.897	43	113709M6	5.089	ppbV	
21) trichlorofluoromethane	6.097	101	5785	0.238	ppbV	100
22) isopropyl alcohol	6.227	45	93823	3.284	ppbV #	96
27) tertiary butyl alcohol	6.972	59	2070	0.060	ppbV #	47
28) methylene chloride	7.038	49	2895	0.135	ppbV	97
29) 3-chloropropene	0.000		0	N.D.	d	
30) carbon disulfide	0.000		0	N.D.	d	
31) Freon 113	7.362	101	2252	0.068	ppbV	90
32) trans-1,2-dichloroethene	0.000		0	N.D.		
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	0.000		0	N.D.	d	
36) 2-butanone	8.900	43	15499	0.366	ppbV	95
38) Ethyl Acetate	9.708	61	3340	0.472	ppbV	86
39) chloroform	0.000		0	N.D.	d	
40) Tetrahydrofuran	10.225	42	1743	0.066	ppbV #	89
42) 1,2-dichloroethane	10.592		0	N.D.		
44) hexane	9.658	57	100486	2.889	ppbV #	49
50) benzene	11.413	78	28608	0.421	ppbV	99
53) cyclohexane	11.727	56	46645	1.238	ppbV	93

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38758.D
 Acq On : 20 Mar 2020 5:35 PM
 Operator : AIRPIAN03:EW
 Sample : L2011723-05,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 18:10:57 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320T\r38754.D
 Sub List : T015-NY-7-SIM - .

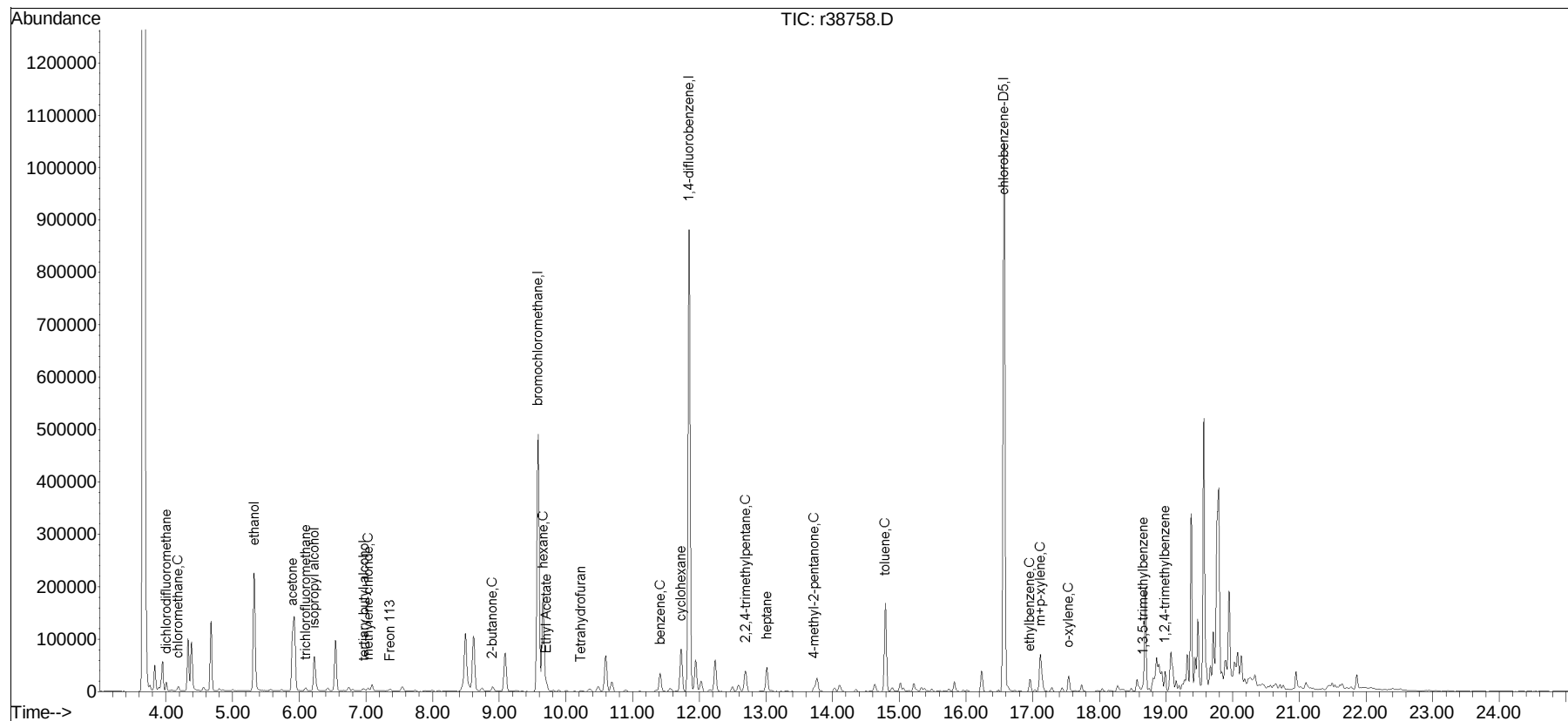
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,2-dichloropropane	0.000		0	N.D.		
57) bromodichloromethane	0.000		0	N.D.	d	
58) 1,4-dioxane	0.000		0	N.D.		
60) 2,2,4-trimethylpentane	12.693	57	40782	0.368	ppbV #	86
62) heptane	13.013	43	26930	0.619	ppbV	93
63) cis-1,3-dichloropropene	0.000		0	N.D.		
64) 4-methyl-2-pentanone	13.725	43	5307	0.108	ppbV	91
65) trans-1,3-dichloropropene	0.000		0	N.D.		
66) 1,1,2-trichloroethane	0.000		0	N.D.		
68) toluene	14.792	91	143719	2.158	ppbV	100
72) 2-hexanone	0.000		0	N.D.	d	
74) dibromochloromethane	0.000		0	N.D.		
75) 1,2-dibromoethane	0.000		0	N.D.		
80) chlorobenzene	0.000		0	N.D.	d	
81) ethylbenzene	16.958	91	21330	0.269	ppbV	92
83) m+p-xylene	17.117	91	63247	0.974	ppbV	88
84) bromoform	0.000		0	N.D.		
85) styrene	17.442		0	N.D.		
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.	d	
87) o-xylene	17.542	91	21924	0.345	ppbV	89
96) 4-ethyl toluene	18.592		0	N.D.		
97) 1,3,5-trimethylbenzene	18.658	105	5480	0.066	ppbV #	96
99) 1,2,4-trimethylbenzene	18.983	105	19325	0.249	ppbV #	58
101) Benzyl Chloride	0.000		0	N.D.	d	
102) 1,3-dichlorobenzene	0.000		0	N.D.	d	
103) 1,4-dichlorobenzene	19.175		0	N.D.		
107) 1,2-dichlorobenzene	0.000		0	N.D.		
115) 1,2,4-trichlorobenzene	0.000		0	N.D.	d	
119) hexachlorobutadiene	0.000		0	N.D.		

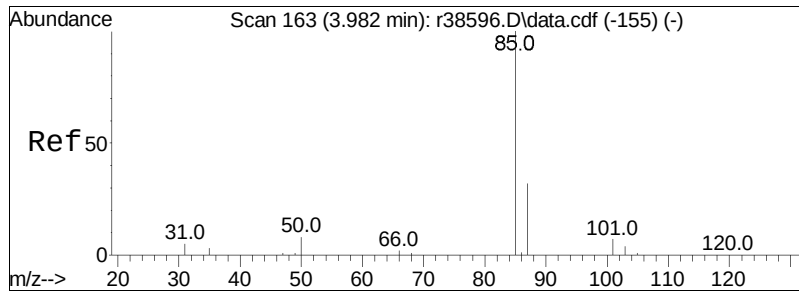
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : T015-NY-7-SIM - .\Airpiano3\2020\03\200320T\r38754.D

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
Data File : r38758.D
Acq On : 20 Mar 2020 5:35 PM
Operator : AIRPIANO3:EW
Sample : L2011723-05,3,250,250
Misc : WG1353541,ICAL16594
ALS Vial : 0 Sample Multiplier: 1

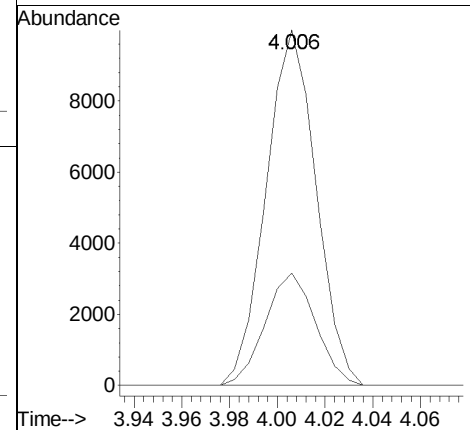
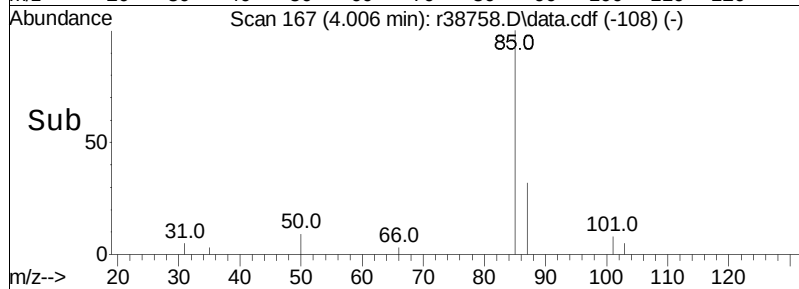
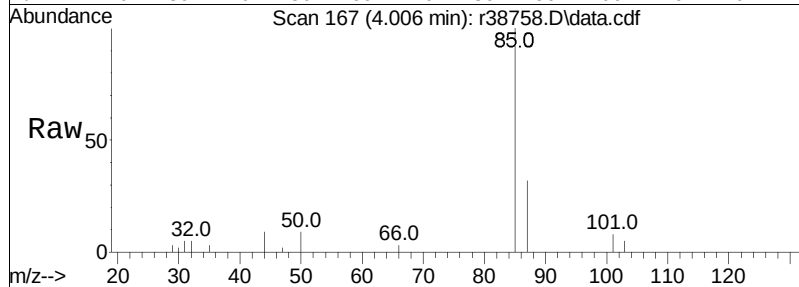
Quant Time: Mar 21 18:10:57 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Mar 12 17:27:58 2020
Response via : Initial Calibration

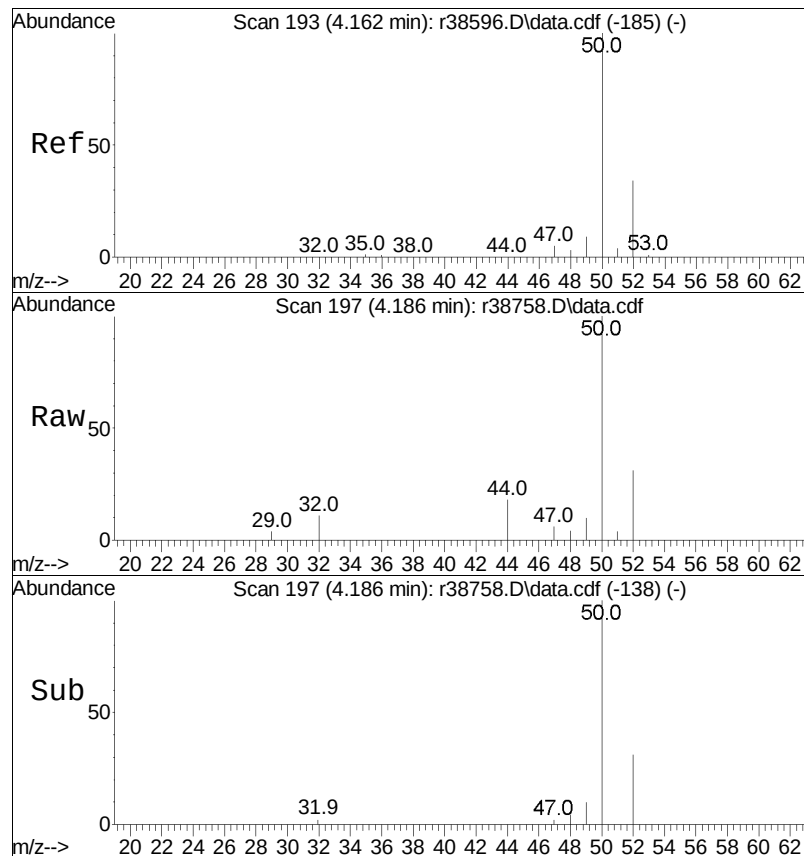




#5
dichlorodifluoromethane
Concen: 0.47 ppbV
RT: 4.006 min Scan# 167
Delta R.T. 0.024 min
Lab File: r38758.D
Acq: 20 Mar 2020 5:35 PM

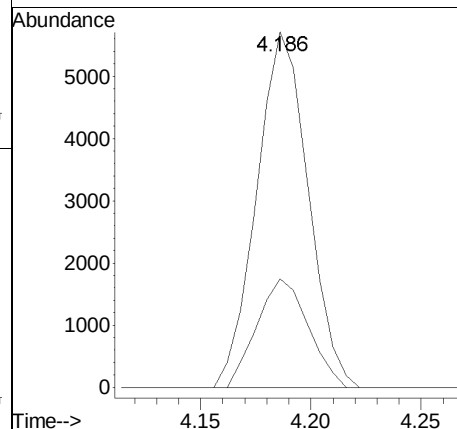
Tgt Ion: 85 Resp: 14529
Ion Ratio Lower Upper
85 100
87 31.6 25.4 38.0

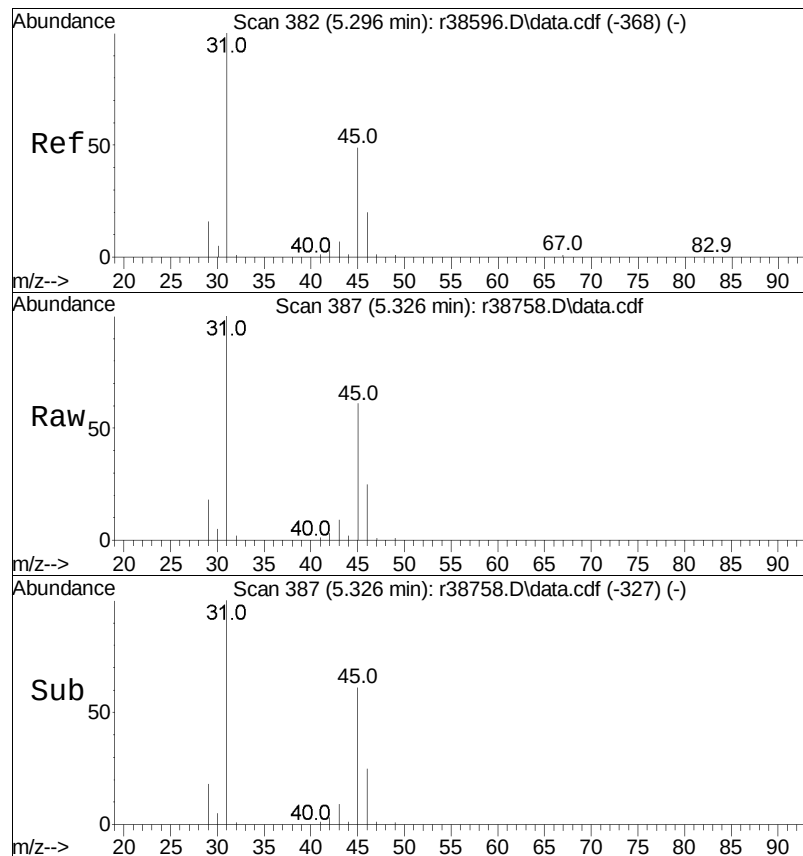




#6
 chloromethane
 Concen: 0.65 ppbV
 RT: 4.186 min Scan# 197
 Delta R.T. 0.024 min
 Lab File: r38758.D
 Acq: 20 Mar 2020 5:35 PM

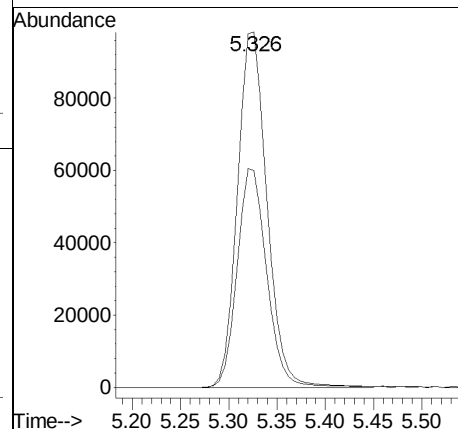
Tgt	Ion: 50	Resp:	9270
Ion	Ratio	Lower	Upper
50	100		
52	30.6	26.9	40.3

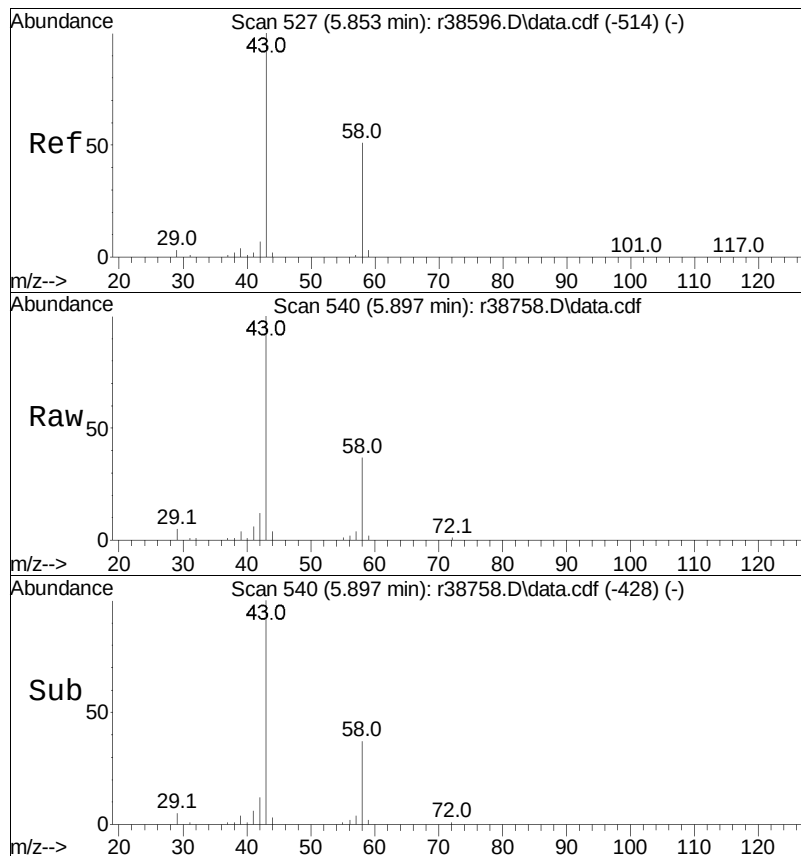




#15
 ethanol
 Concen: 16.49 ppbV
 RT: 5.326 min Scan# 387
 Delta R.T. 0.030 min
 Lab File: r38758.D
 Acq: 20 Mar 2020 5:35 PM

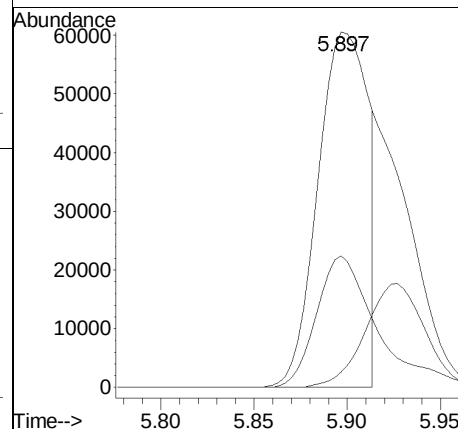
Tgt Ion:	31	Resp:	221303
Ion Ratio	Lower	Upper	
31	100		
45	61.1	39.0	58.4#

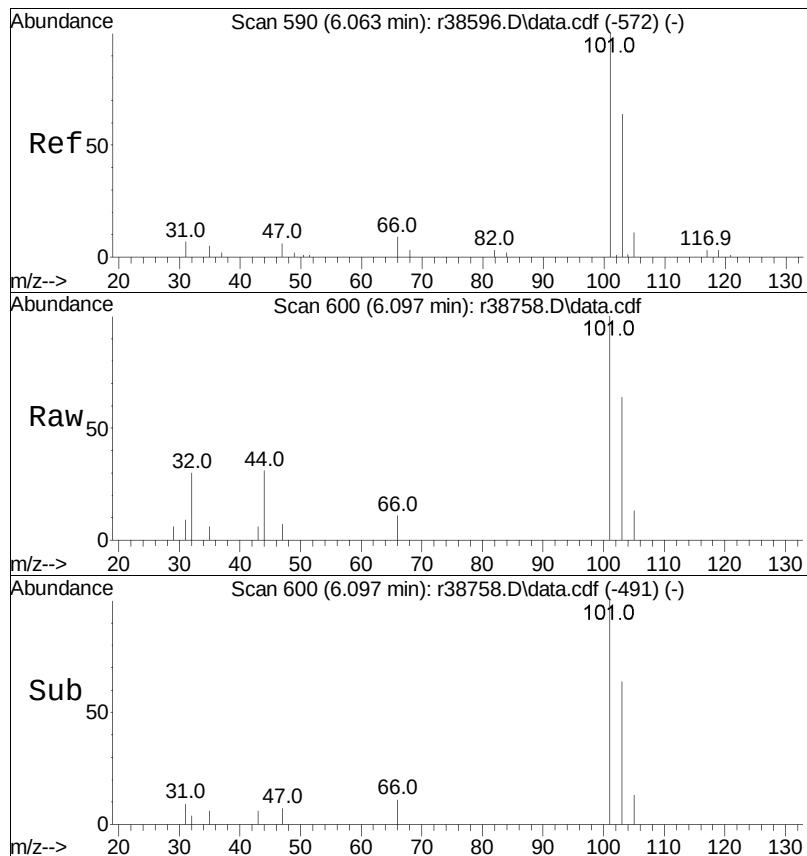




#19
acetone
Concen: 5.09 ppbV m
RT: 5.897 min Scan# 540
Delta R.T. 0.043 min
Lab File: r38758.D
Acq: 20 Mar 2020 5:35 PM

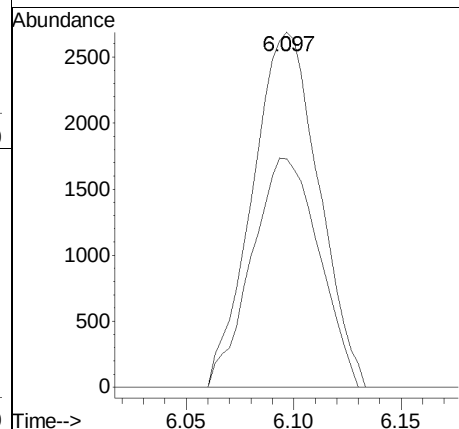
Tgt	Ion	Ratio	Lower	Upper
43	100			
58	37.0	40.6	60.8#	
57	4.3	1.0	1.6#	

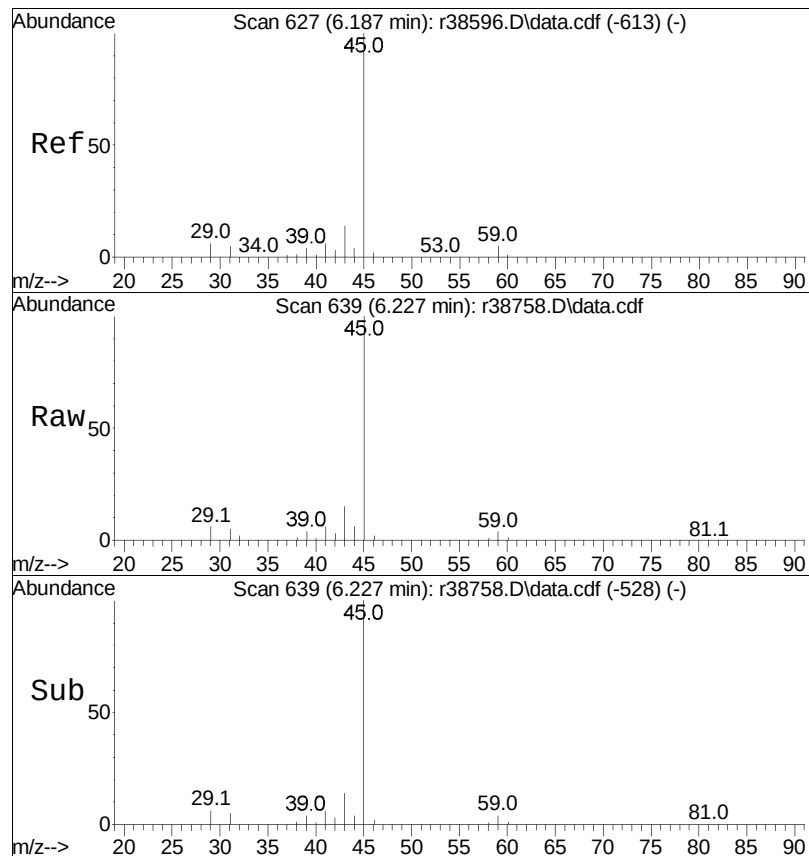




#21
 trichlorofluoromethane
 Concen: 0.24 ppbV
 RT: 6.097 min Scan# 600
 Delta R.T. 0.033 min
 Lab File: r38758.D
 Acq: 20 Mar 2020 5:35 PM

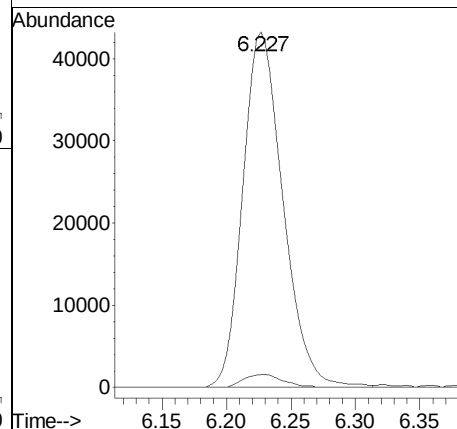
Tgt	Ion	Ratio	Lower	Upper
101	101	100		
103	64.3	51.4	77.0	

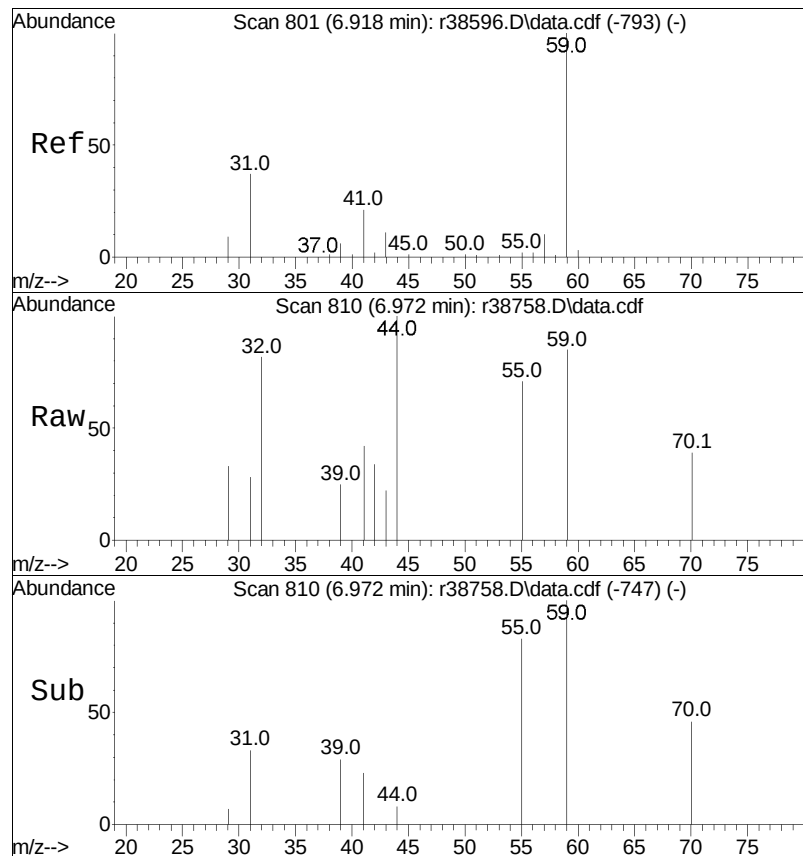




#22
 isopropyl alcohol
 Concen: 3.28 ppbV
 RT: 6.227 min Scan# 639
 Delta R.T. 0.040 min
 Lab File: r38758.D
 Acq: 20 Mar 2020 5:35 PM

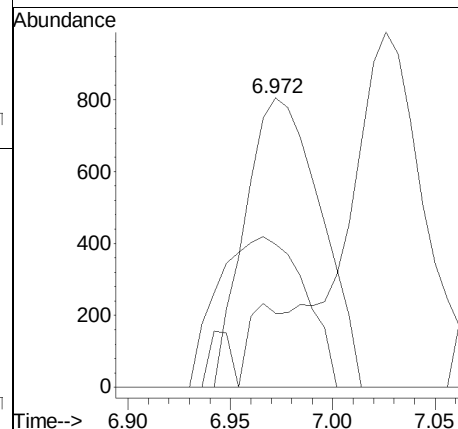
Tgt	Ion	Ratio	Lower	Upper
45	100			
59	3.6		3.9	5.9#

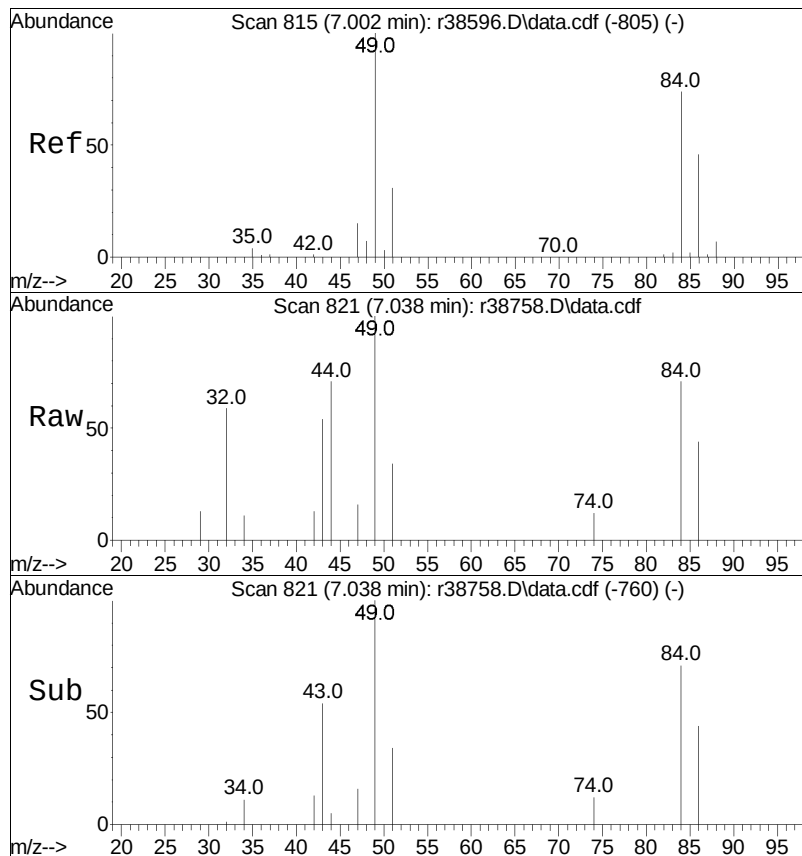




#27
 tertiary butyl alcohol
 Concen: 0.06 ppbV
 RT: 6.972 min Scan# 810
 Delta R.T. 0.054 min
 Lab File: r38758.D
 Acq: 20 Mar 2020 5:35 PM

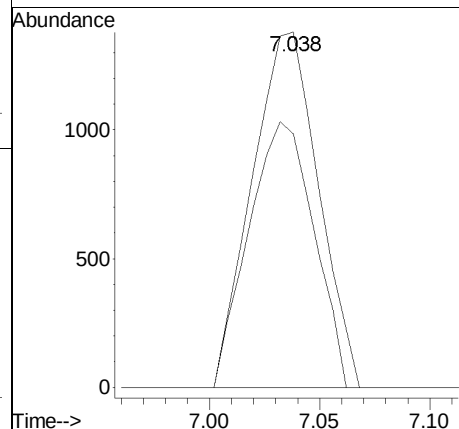
Tgt Ion:	59	Resp:	2070
Ion Ratio	Lower	Upper	
59	100		
41	49.4	16.9	25.3#
43	25.6	8.9	13.3#

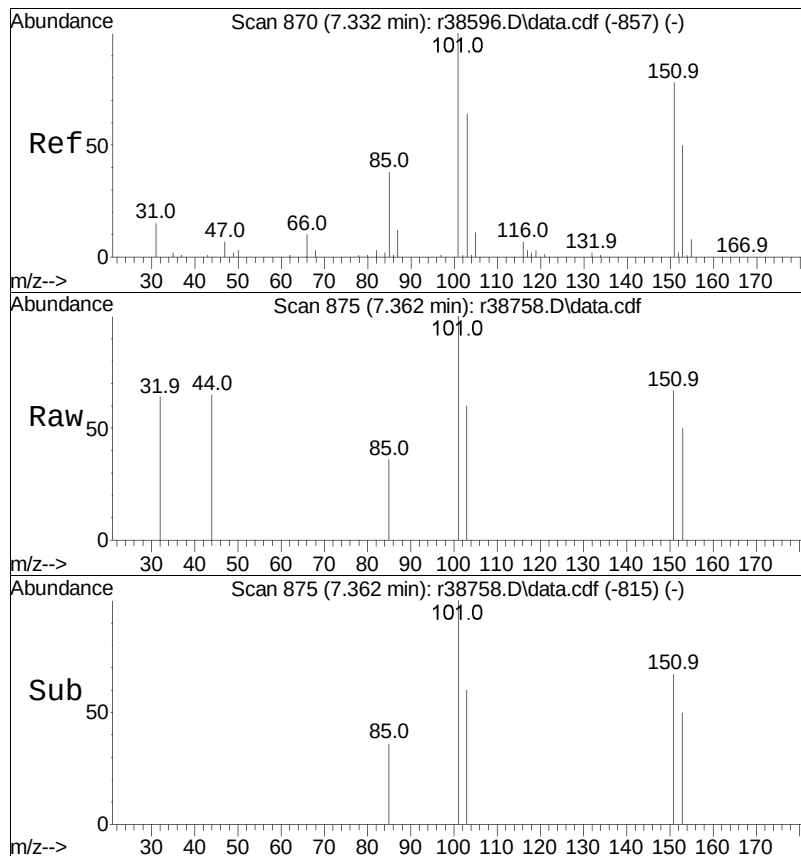




#28
 methylene chloride
 Concen: 0.13 ppbV
 RT: 7.038 min Scan# 821
 Delta R.T. 0.036 min
 Lab File: r38758.D
 Acq: 20 Mar 2020 5:35 PM

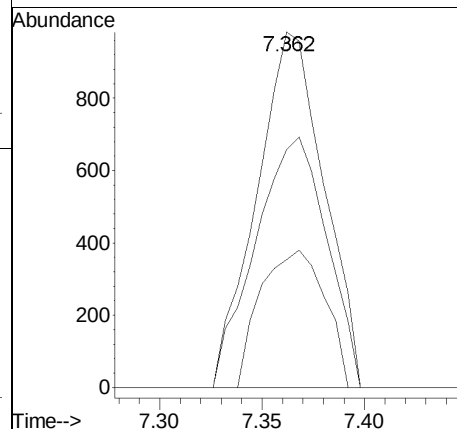
Tgt Ion:	49	Resp:	2895
Ion Ratio	Lower	Upper	
49	100		
84	71.4	59.3	88.9

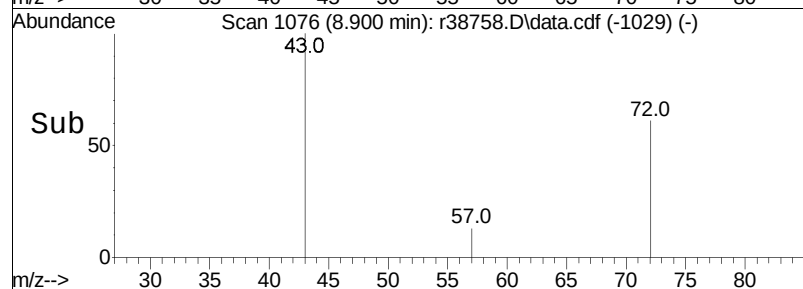
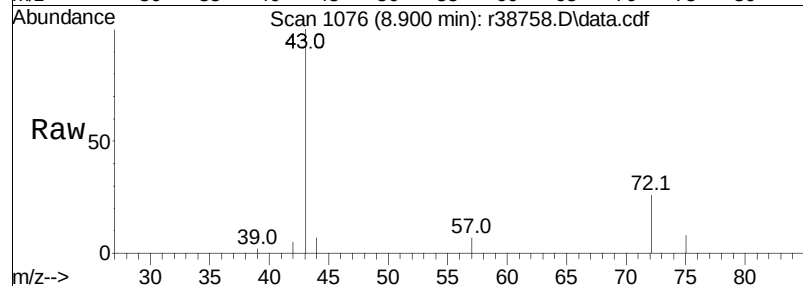
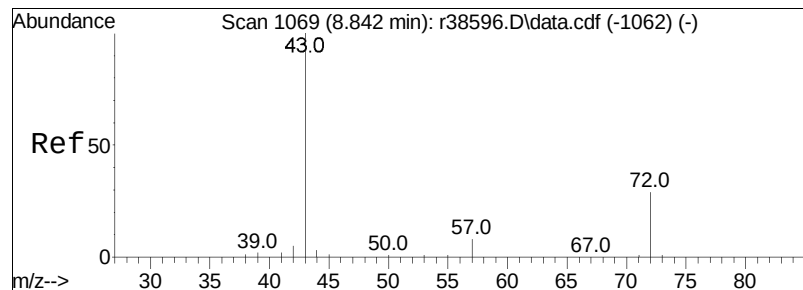




#31
 Freon 113
 Concen: 0.07 ppbV
 RT: 7.362 min Scan# 875
 Delta R.T. 0.030 min
 Lab File: r38758.D
 Acq: 20 Mar 2020 5:35 PM

Tgt Ion:	101	Resp:	2252
Ion Ratio	Lower	Upper	
101	100		
85	36.0	30.6	45.8
151	67.0	62.4	93.6





#36

2-butanone

Concen: 0.37 ppbV

RT: 8.900 min Scan# 1076

Delta R.T. 0.058 min

Lab File: r38758.D

Acq: 20 Mar 2020 5:35 PM

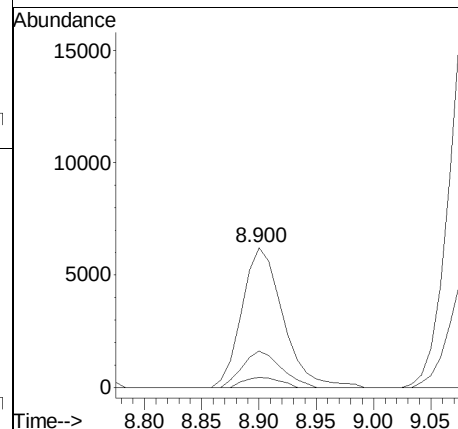
Tgt Ion: 43 Resp: 15499

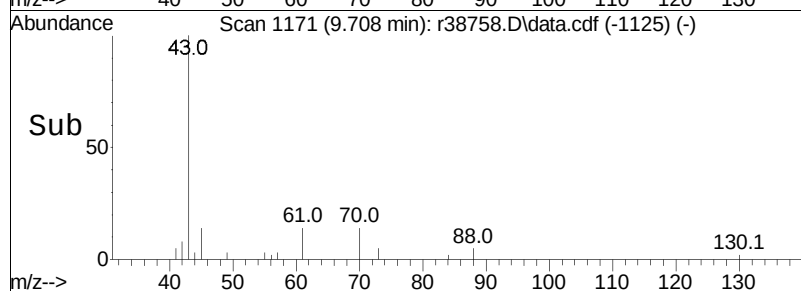
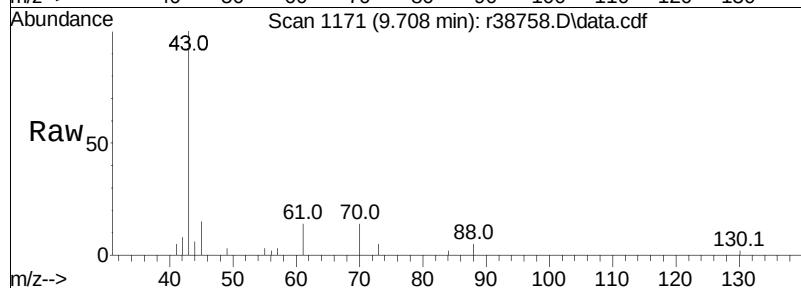
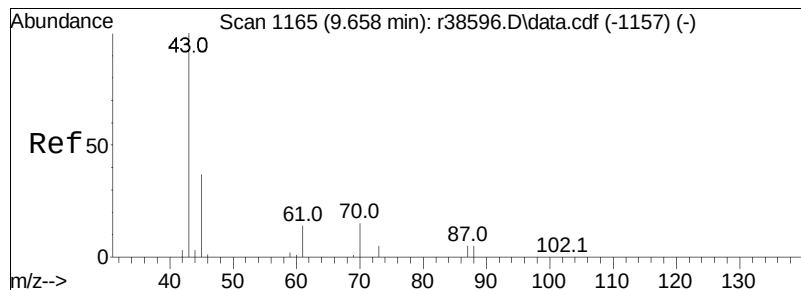
Ion Ratio Lower Upper

43 100

72 26.1 23.1 34.7

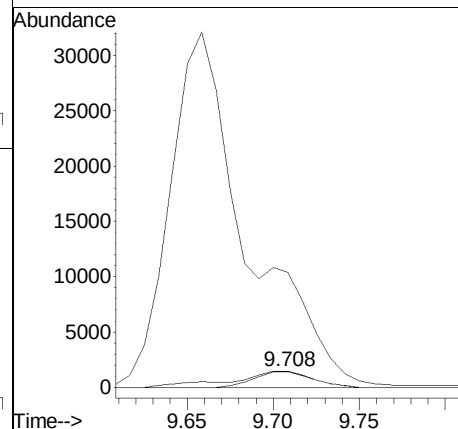
57 7.3 6.3 9.5

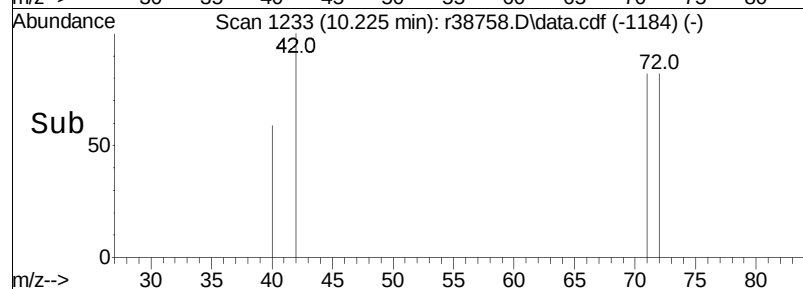
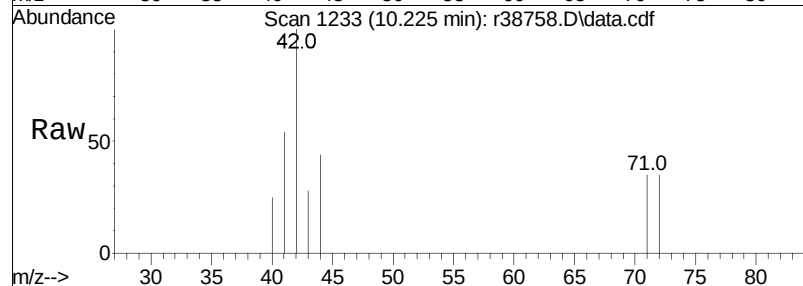
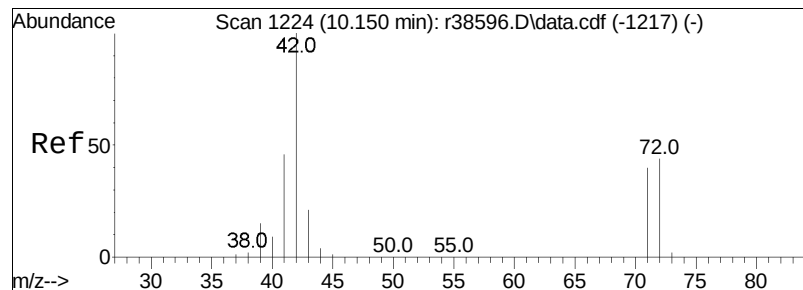




#38
Ethyl Acetate
Concen: 0.47 ppbV
RT: 9.708 min Scan# 1171
Delta R.T. 0.050 min
Lab File: r38758.D
Acq: 20 Mar 2020 5:35 PM

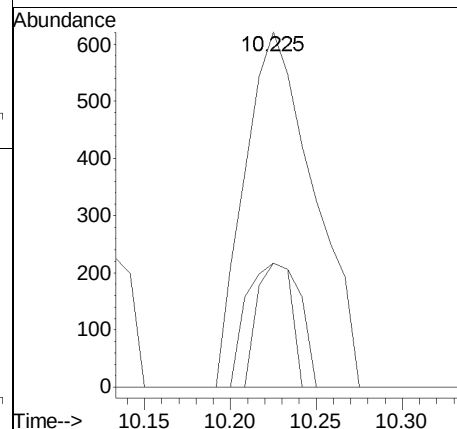
Tgt	Ion	Resp	Lower	Upper
61	100	3340		
70	103.9		85.8	128.6
43	732.6		631.4	947.2

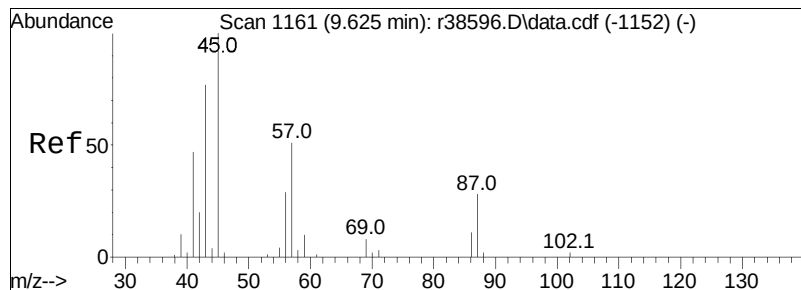




#40
Tetrahydrofuran
Concen: 0.07 ppbV
RT: 10.225 min Scan# 1233
Delta R.T. 0.075 min
Lab File: r38758.D
Acq: 20 Mar 2020 5:35 PM

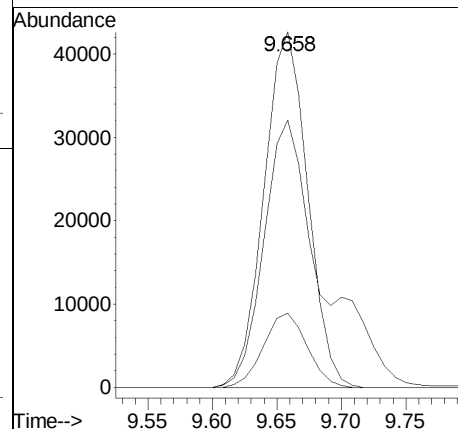
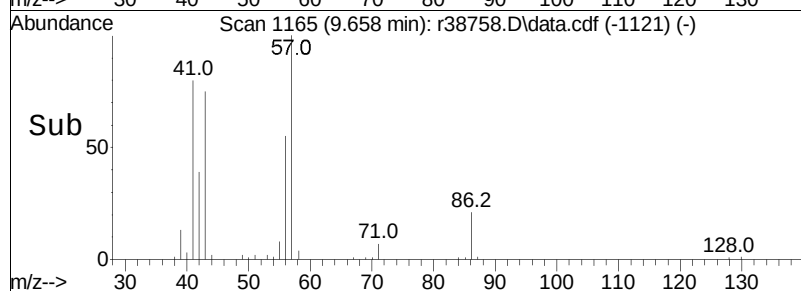
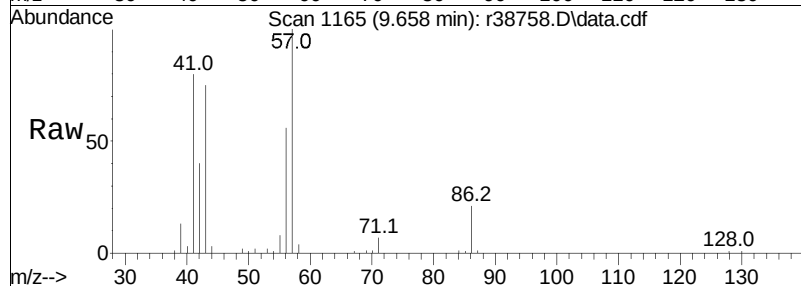
Tgt Ion	Ratio	Lower	Upper
42	100		
71	34.9	31.8	47.8
72	34.9	35.2	52.8

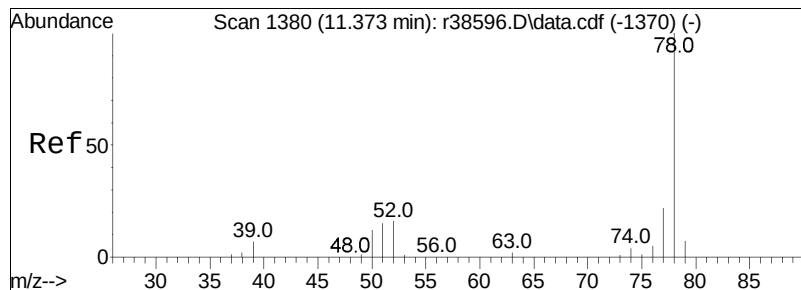




#44
hexane
Concen: 2.89 ppbV
RT: 9.658 min Scan# 1165
Delta R.T. 0.033 min
Lab File: r38758.D
Acq: 20 Mar 2020 5:35 PM

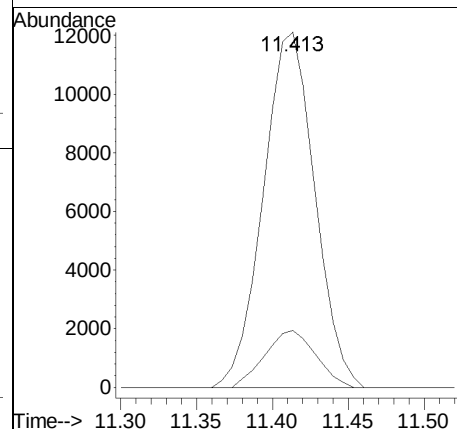
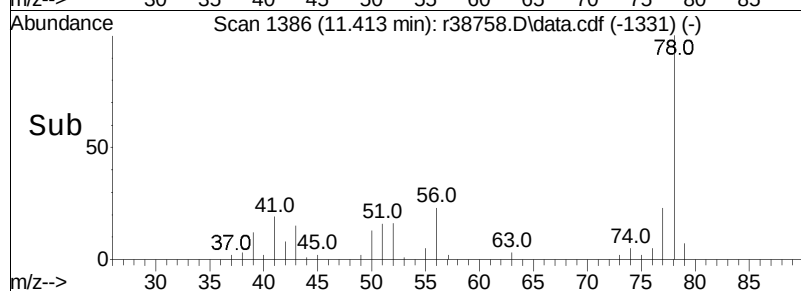
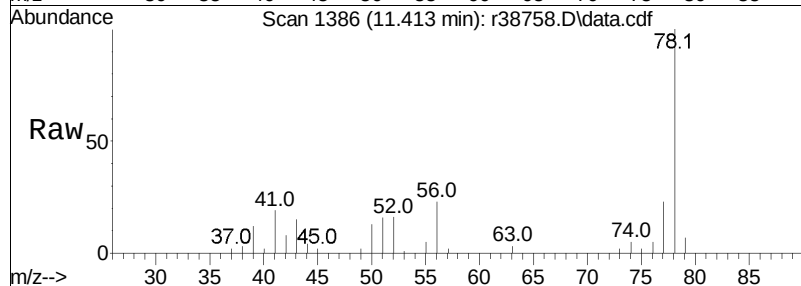
Tgt Ion	Ratio	Lower	Upper
57	100		
43	75.3	119.3	178.9#
86	20.9	17.0	25.6

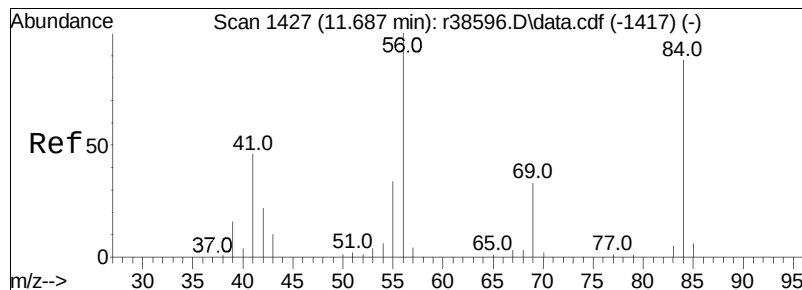




#50
benzene
Concen: 0.42 ppbV
RT: 11.413 min Scan# 1386
Delta R.T. 0.040 min
Lab File: r38758.D
Acq: 20 Mar 2020 5:35 PM

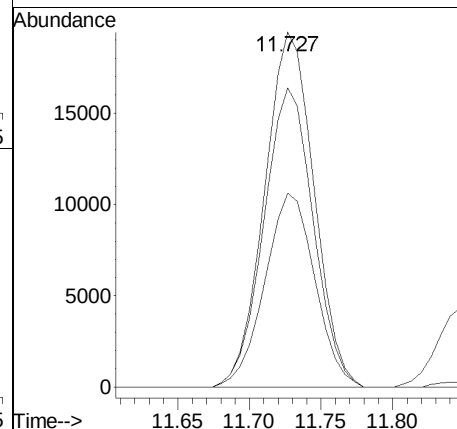
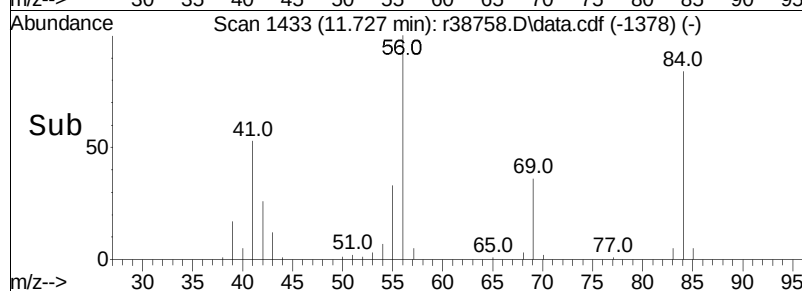
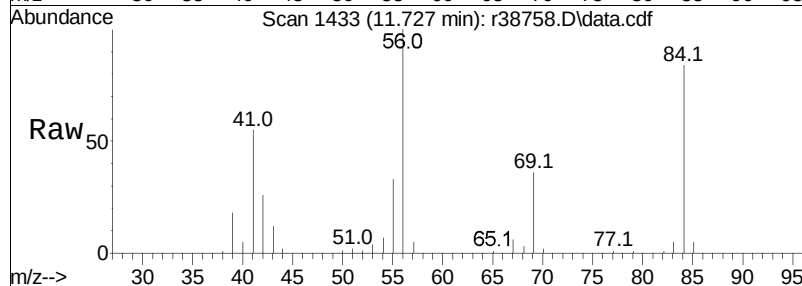
Tgt Ion	Ratio	Lower	Upper
78	100		
52	16.0	12.6	18.8

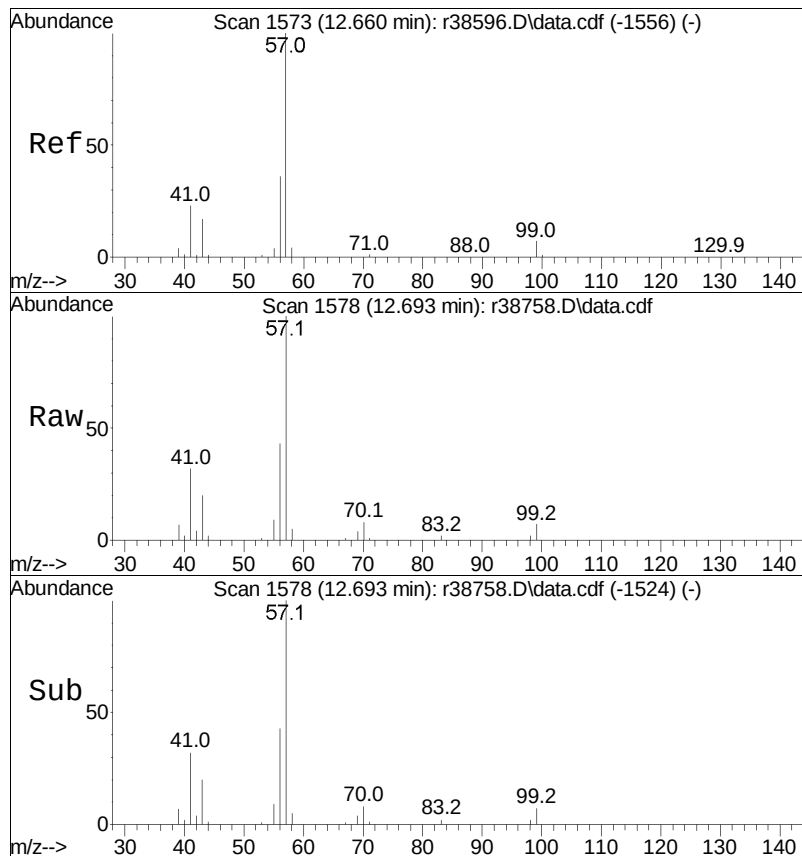




#53
cyclohexane
Concen: 1.24 ppbV
RT: 11.727 min Scan# 1433
Delta R.T. 0.040 min
Lab File: r38758.D
Acq: 20 Mar 2020 5:35 PM

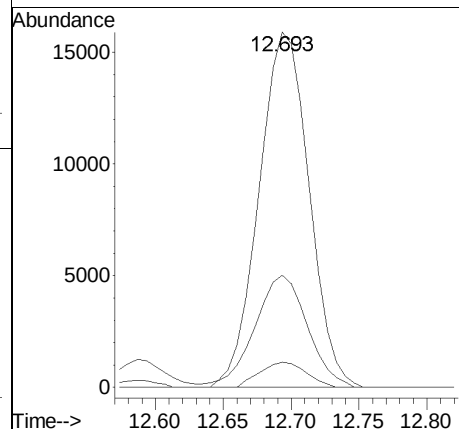
Tgt Ion	Ratio	Lower	Upper
56	100		
84	84.3	70.2	105.2
41	54.6	36.9	55.3

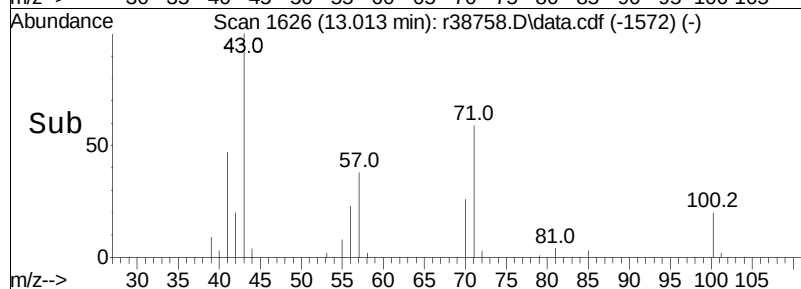
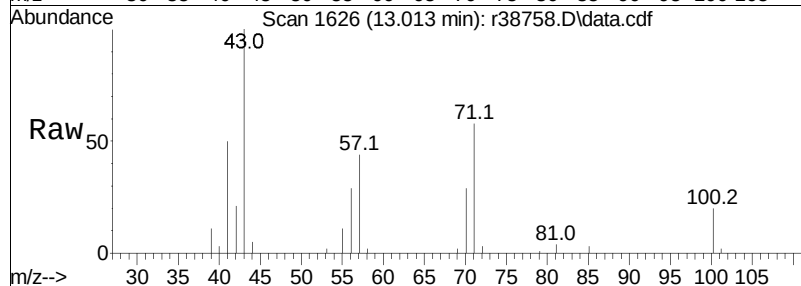
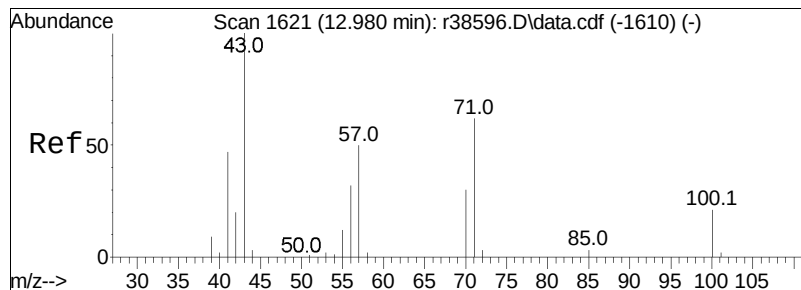




#60
 2,2,4-trimethylpentane
 Concen: 0.37 ppbV
 RT: 12.693 min Scan# 1578
 Delta R.T. 0.033 min
 Lab File: r38758.D
 Acq: 20 Mar 2020 5:35 PM

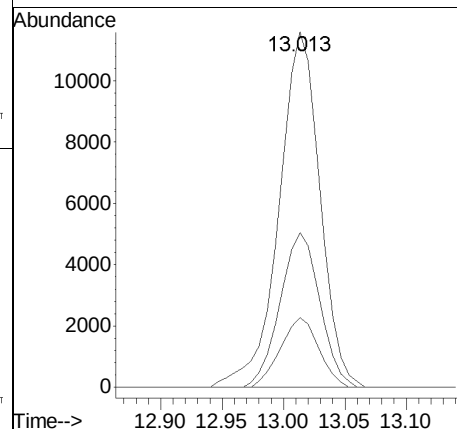
Tgt	Ion: 57	Resp:	40782
Ion	Ratio	Lower	Upper
57	100		
99	7.1	5.4	8.2
41	31.6	18.2	27.2#

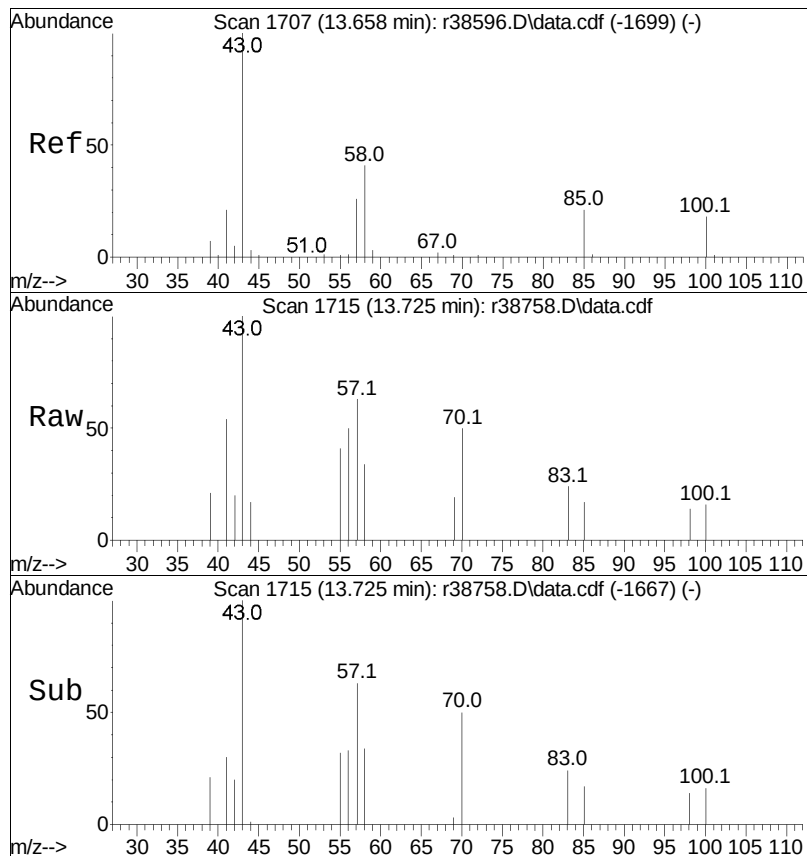




#62
heptane
Concen: 0.62 ppbV
RT: 13.013 min Scan# 1626
Delta R.T. 0.033 min
Lab File: r38758.D
Acq: 20 Mar 2020 5:35 PM

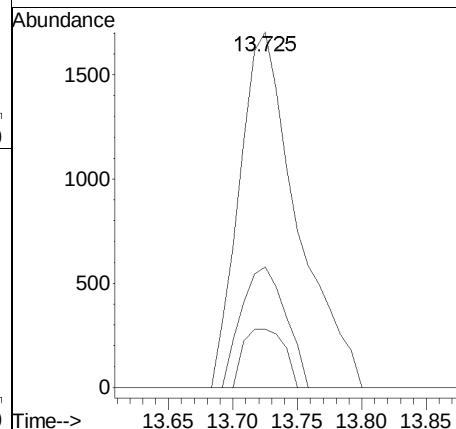
Tgt	Ion	Ratio	Lower	Upper
43	100			
57	43.6	39.8	59.6	
100	19.6	17.3	25.9	

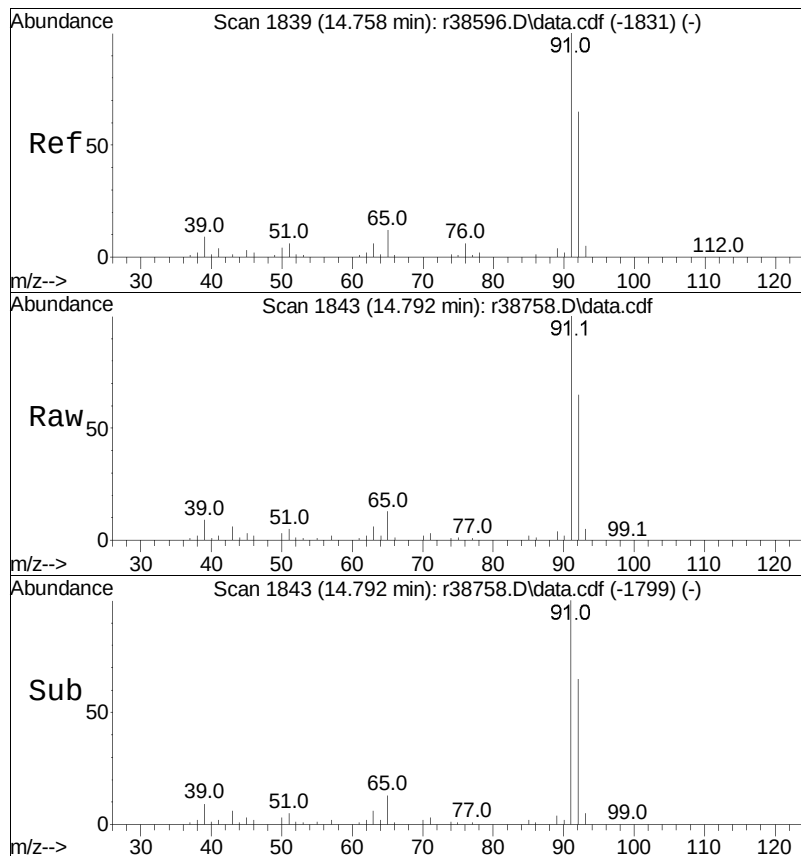




#64
 4-methyl-2-pentanone
 Concen: 0.11 ppbV
 RT: 13.725 min Scan# 1715
 Delta R.T. 0.067 min
 Lab File: r38758.D
 Acq: 20 Mar 2020 5:35 PM

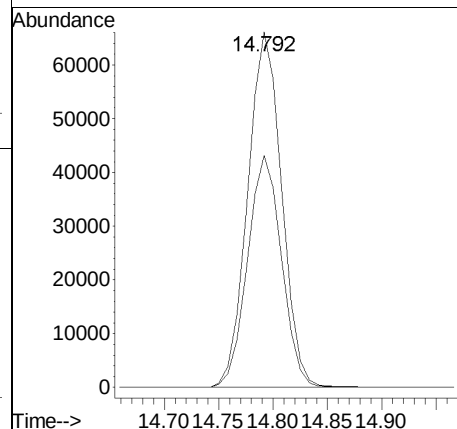
Tgt Ion:	43	Resp:	5307
Ion Ratio	Lower	Upper	
43	100		
58	33.9	32.5	48.7
100	16.4	14.7	22.1

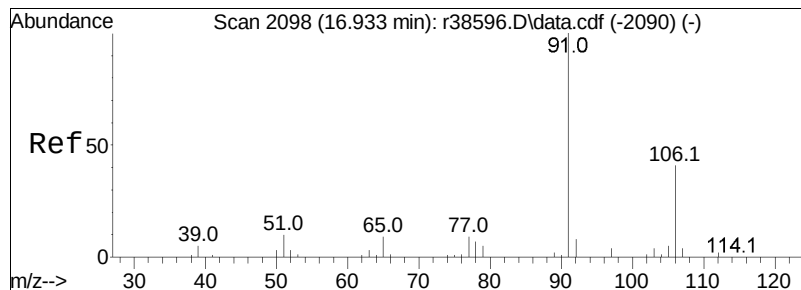




#68
 toluene
 Concen: 2.16 ppbV
 RT: 14.792 min Scan# 1843
 Delta R.T. 0.033 min
 Lab File: r38758.D
 Acq: 20 Mar 2020 5:35 PM

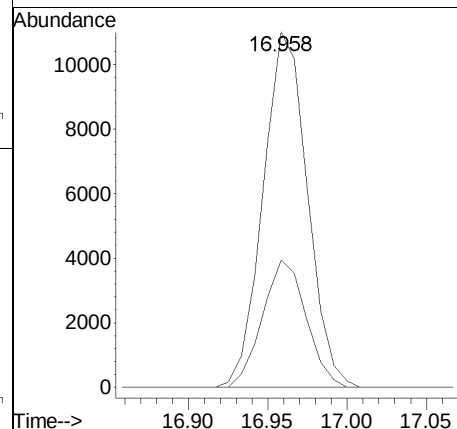
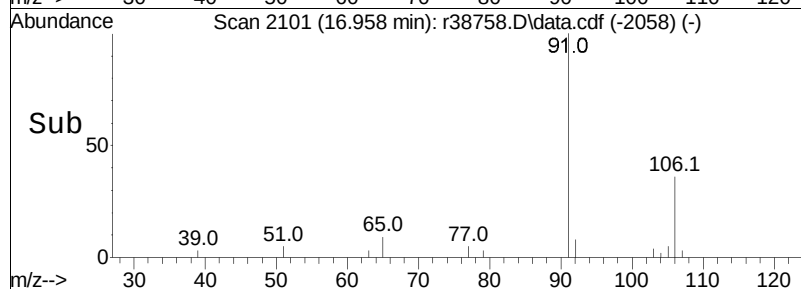
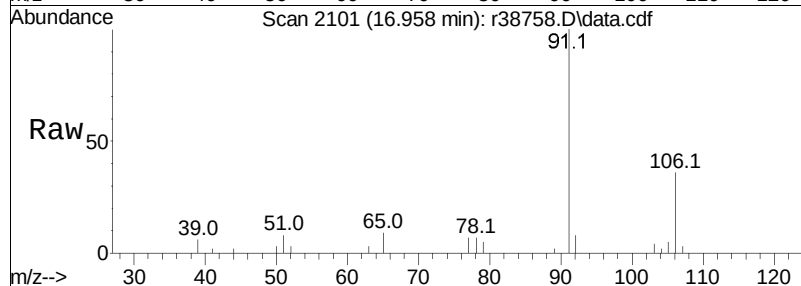
Tgt Ion	Ratio	Lower	Upper
91	100		
92	65.3	52.4	78.6

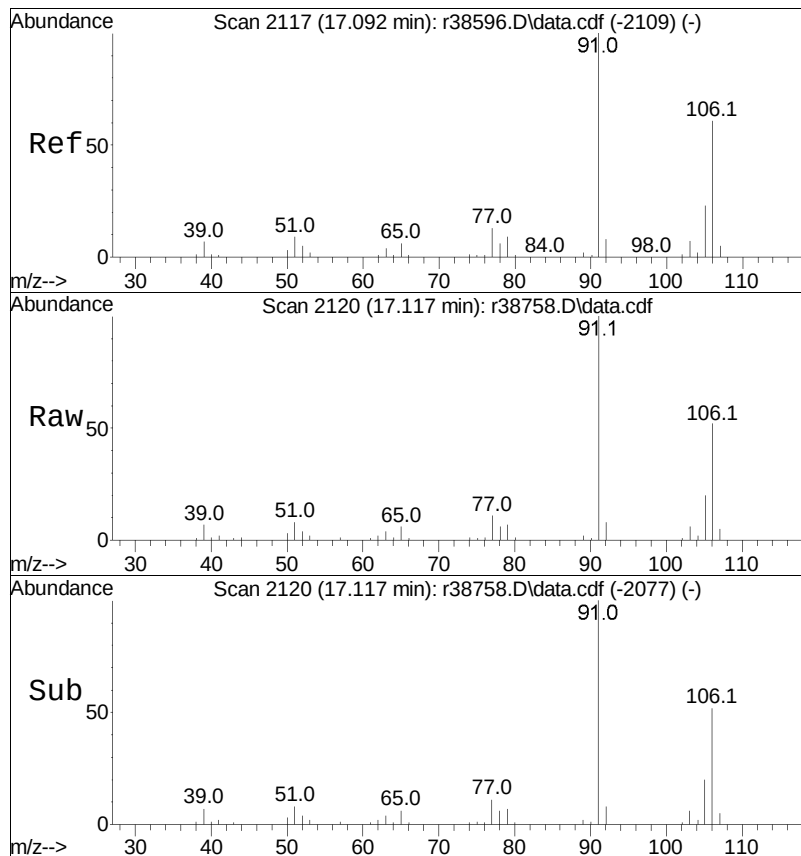




#81
ethylbenzene
Concen: 0.27 ppbV
RT: 16.958 min Scan# 2101
Delta R.T. 0.025 min
Lab File: r38758.D
Acq: 20 Mar 2020 5:35 PM

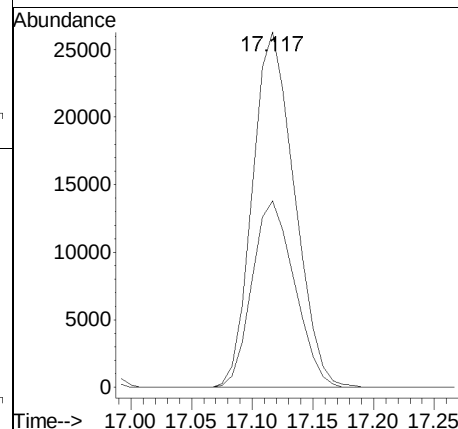
Tgt	Ion	Resp	Lower	Upper
91	100	21330		
106	35.8	32.6	48.8	

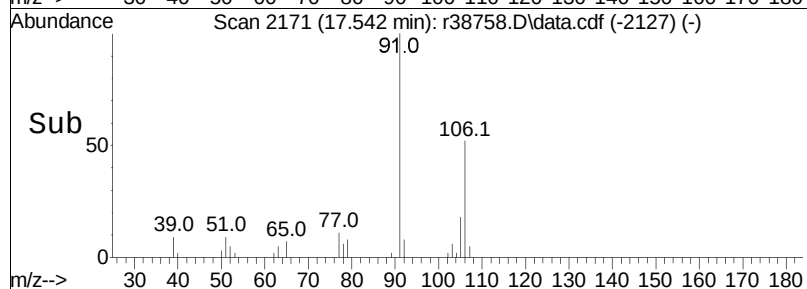
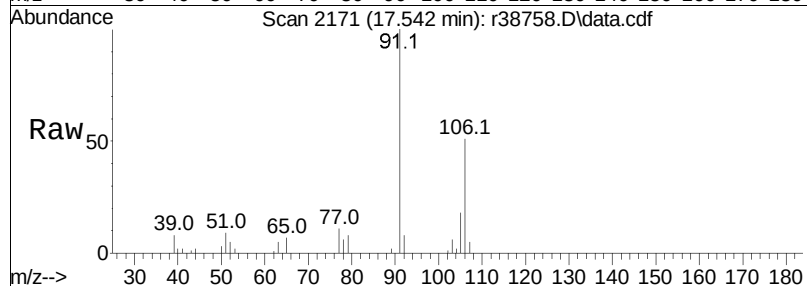
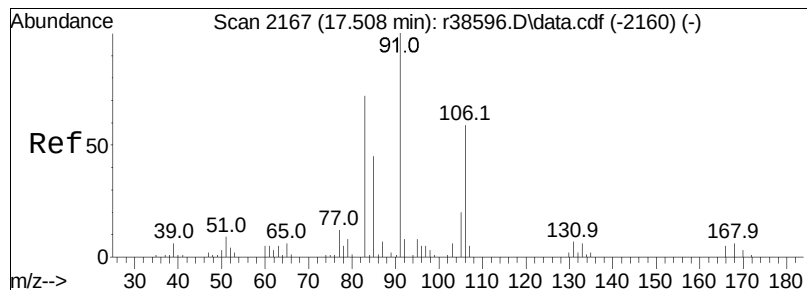




#83
 m+p-xylene
 Concen: 0.97 ppbV
 RT: 17.117 min Scan# 2120
 Delta R.T. 0.025 min
 Lab File: r38758.D
 Acq: 20 Mar 2020 5:35 PM

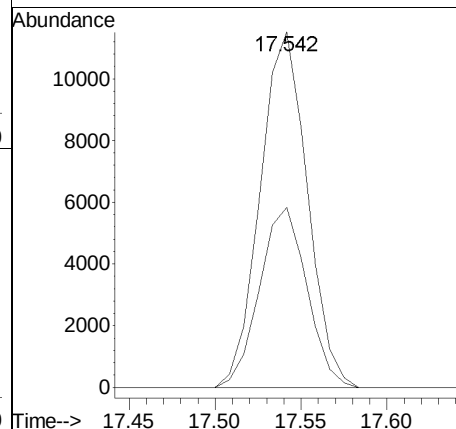
Tgt Ion	Ratio	Lower	Upper
91	100		
106	52.5	49.0	73.6

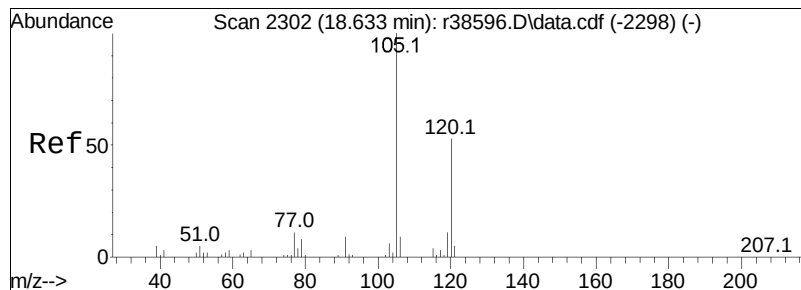




#87
o-xylene
Concen: 0.34 ppbV
RT: 17.542 min Scan# 2171
Delta R.T. 0.033 min
Lab File: r38758.D
Acq: 20 Mar 2020 5:35 PM

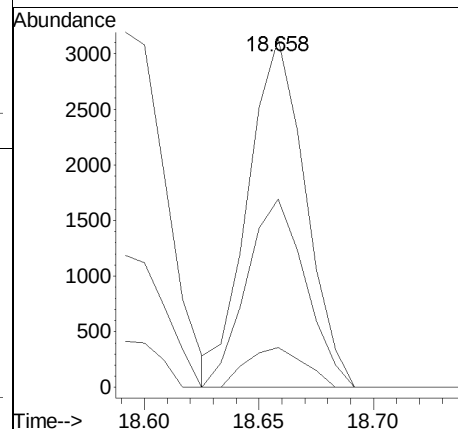
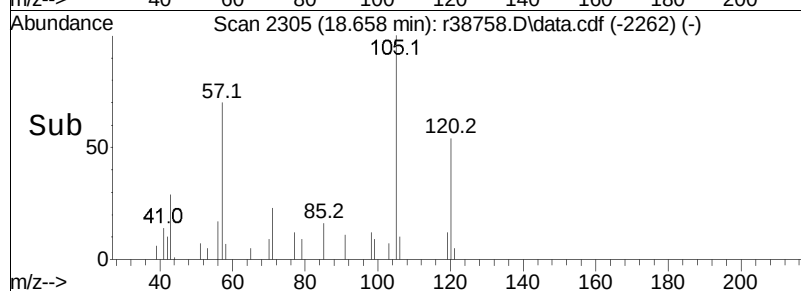
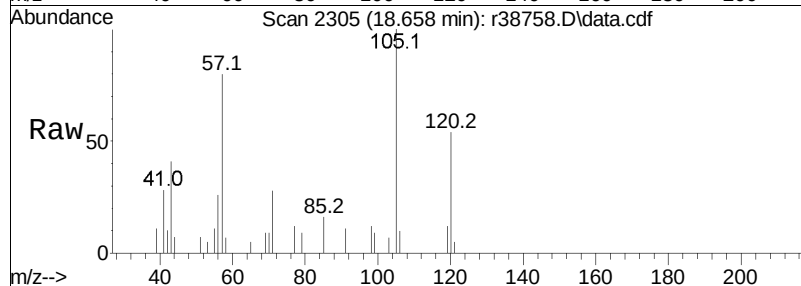
Tgt	Ion	Resp	Lower	Upper
91	100	21924		
106	50.7	47.4	71.0	

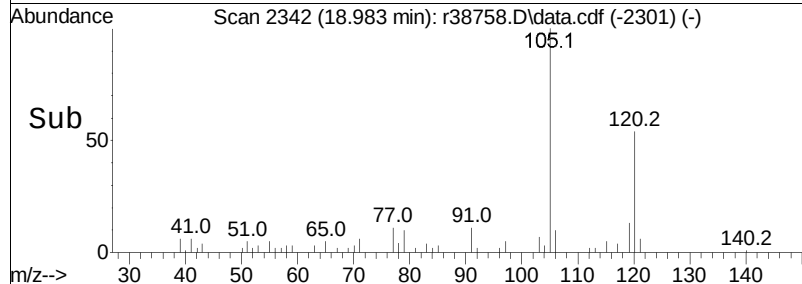
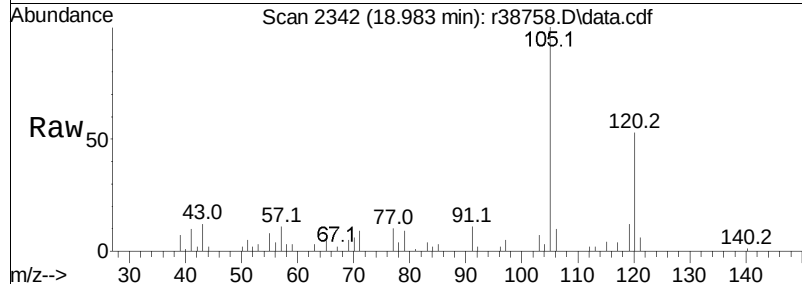
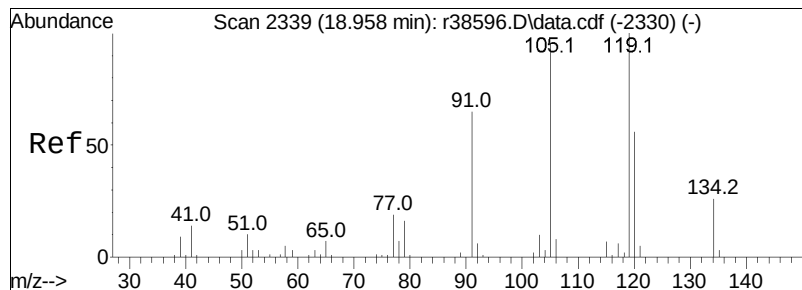




#97
 1,3,5-trimethylbenzene
 Concen: 0.07 ppbV
 RT: 18.658 min Scan# 2305
 Delta R.T. 0.025 min
 Lab File: r38758.D
 Acq: 20 Mar 2020 5:35 PM

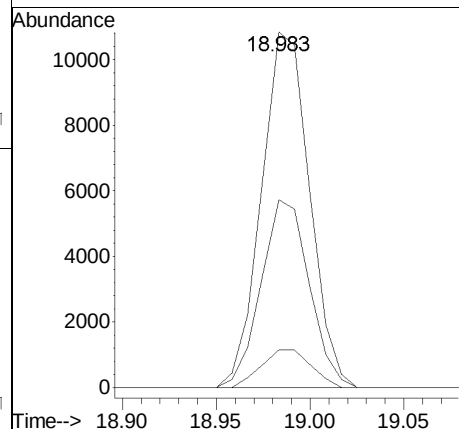
Tgt Ion	Ratio	Resp	Lower	Upper
105	100	5480		
120	54.0		41.6	62.4
91	11.5		7.0	10.4





#99
 1,2,4-trimethylbenzene
 Concen: 0.25 ppbV
 RT: 18.983 min Scan# 2342
 Delta R.T. 0.025 min
 Lab File: r38758.D
 Acq: 20 Mar 2020 5:35 PM

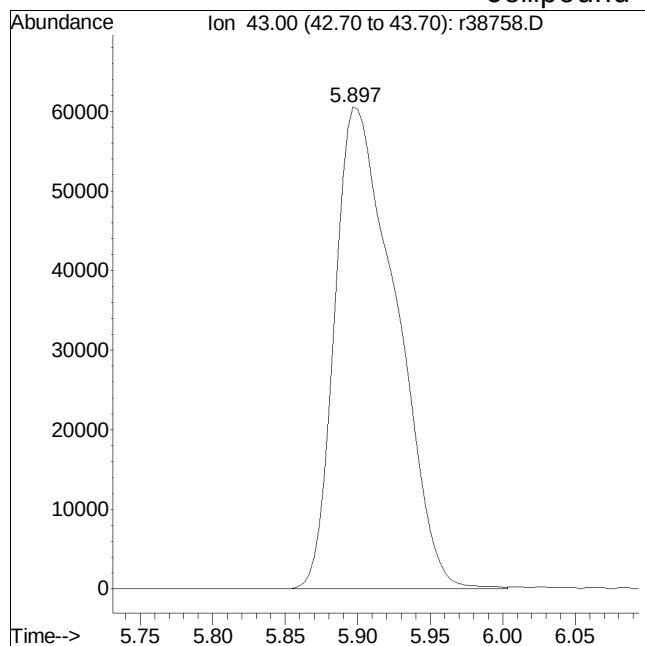
Tgt Ion:	105	Resp:	19325
Ion Ratio	Lower	Upper	
105	100		
120	52.8	47.1	70.7
91	10.6	55.0	82.6#



Manual Integration Report

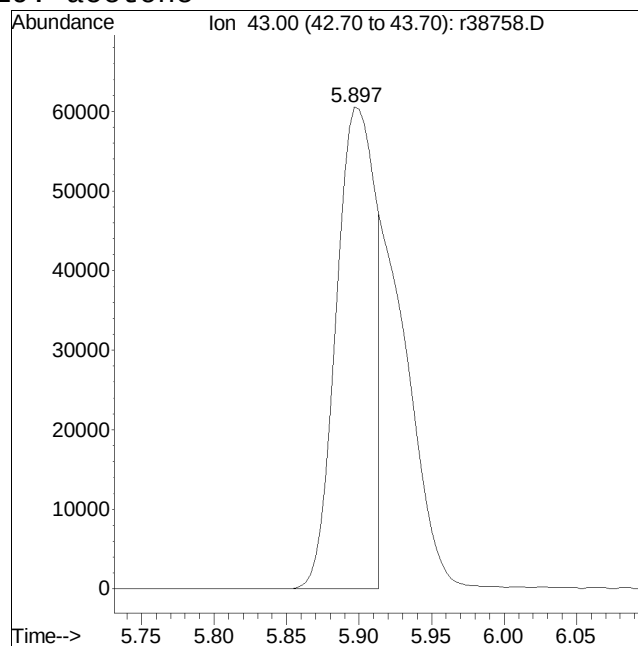
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200312.M
Data File : r38758.D Operator : AIRPIAN03:EW
Date Inj'd : 3/20/2020 0:5: 5 Instrument :
Sample : L2011723-05,3,250,250 Quant Date : 3/21/2020 8:04 am

Compound #19: acetone



Original Peak Response = 177016

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



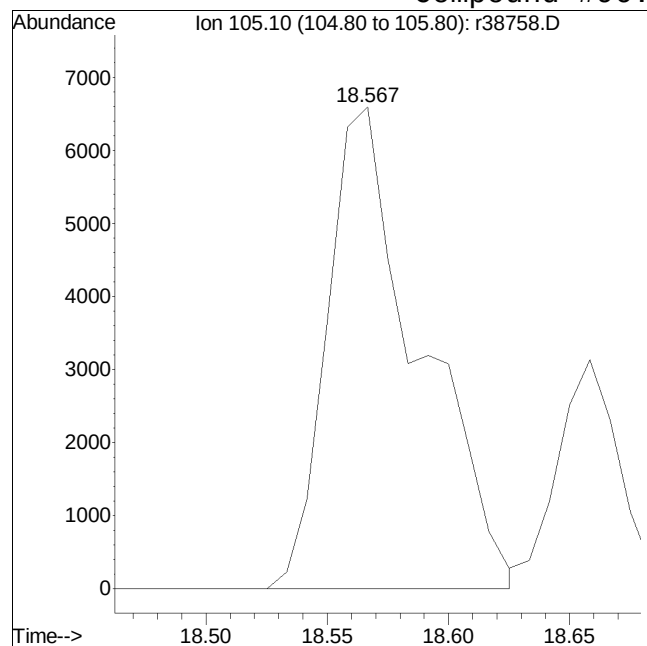
Manual Peak Response = 113709 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

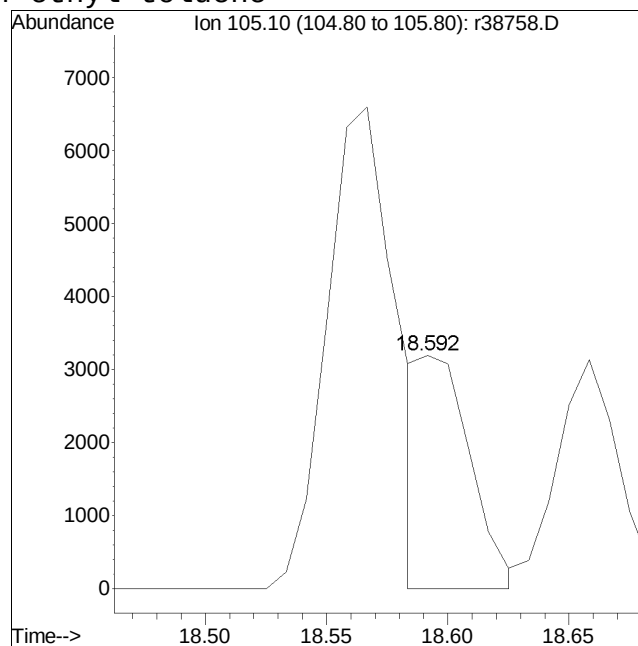
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200312.M
Data File : r38758.D Operator : AIRPIAN03:EW
Date Inj'd : 3/20/2020 0:5: 5 Instrument :
Sample : L2011723-05,3,250,250 Quant Date : 3/21/2020 8:04 am

Compound #96: 4-ethyl toluene



Original Peak Response = 17460

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 4646 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38759.D
 Acq On : 20 Mar 2020 6:16 PM
 Operator : AIRPIAN03:EW
 Sample : L2011723-06,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 18:12:50 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320T\r38754.D
 Sub List : T015-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.583	49	357016	10.000	ppbV	0.03
Standard Area = 353543			Recovery =	100.98%		
43) 1,4-difluorobenzene	11.847	114	960052	10.000	ppbV	0.03
Standard Area = 970632			Recovery =	98.91%		
67) chlorobenzene-D5	16.575	54	137219	10.000	ppbV	0.03
Standard Area = 139948			Recovery =	98.05%		

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	4.006	85	15118	0.469	ppbV	97
6) chloromethane	4.186	50	11986	0.808	ppbV	96
7) Freon-114	4.318		0	N.D.		
10) 1,3-butadiene	4.612	54	25671	1.480	ppbV	86
13) bromomethane	4.936		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.326	31	1688074	121.386	ppbV #	79
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.900	43	365985M6	15.803	ppbV	
21) trichlorofluoromethane	6.100	101	5960	0.237	ppbV	97
22) isopropyl alcohol	6.223	45	513424	17.339	ppbV #	97
27) tertiary butyl alcohol	6.972	59	3568	0.101	ppbV #	1
28) methylene chloride	7.038	49	3162	0.142	ppbV	93
29) 3-chloropropene	0.000		0	N.D.	d	
30) carbon disulfide	7.326		0	N.D.		
31) Freon 113	7.368	101	2303	0.067	ppbV	97
32) trans-1,2-dichloroethene	0.000		0	N.D.	d	
33) 1,1-dichloroethane	0.000		0	N.D.	d	
34) MTBE	0.000		0	N.D.	d	
36) 2-butanone	8.892	43	48987	1.115	ppbV	96
38) Ethyl Acetate	0.000		0	N.D.	d	
39) chloroform	9.750	83	2837	0.082	ppbV #	88
40) Tetrahydrofuran	10.208	42	12377	0.450	ppbV	92
42) 1,2-dichloroethane	0.000		0	N.D.	d	
44) hexane	9.658	57	2055152	57.709	ppbV #	48
50) benzene	11.413	78	467355	6.723	ppbV	100
53) cyclohexane	11.733	56	958925	24.858	ppbV	95

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38759.D
 Acq On : 20 Mar 2020 6:16 PM
 Operator : AIRPIAN03:EW
 Sample : L2011723-06,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 18:12:50 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

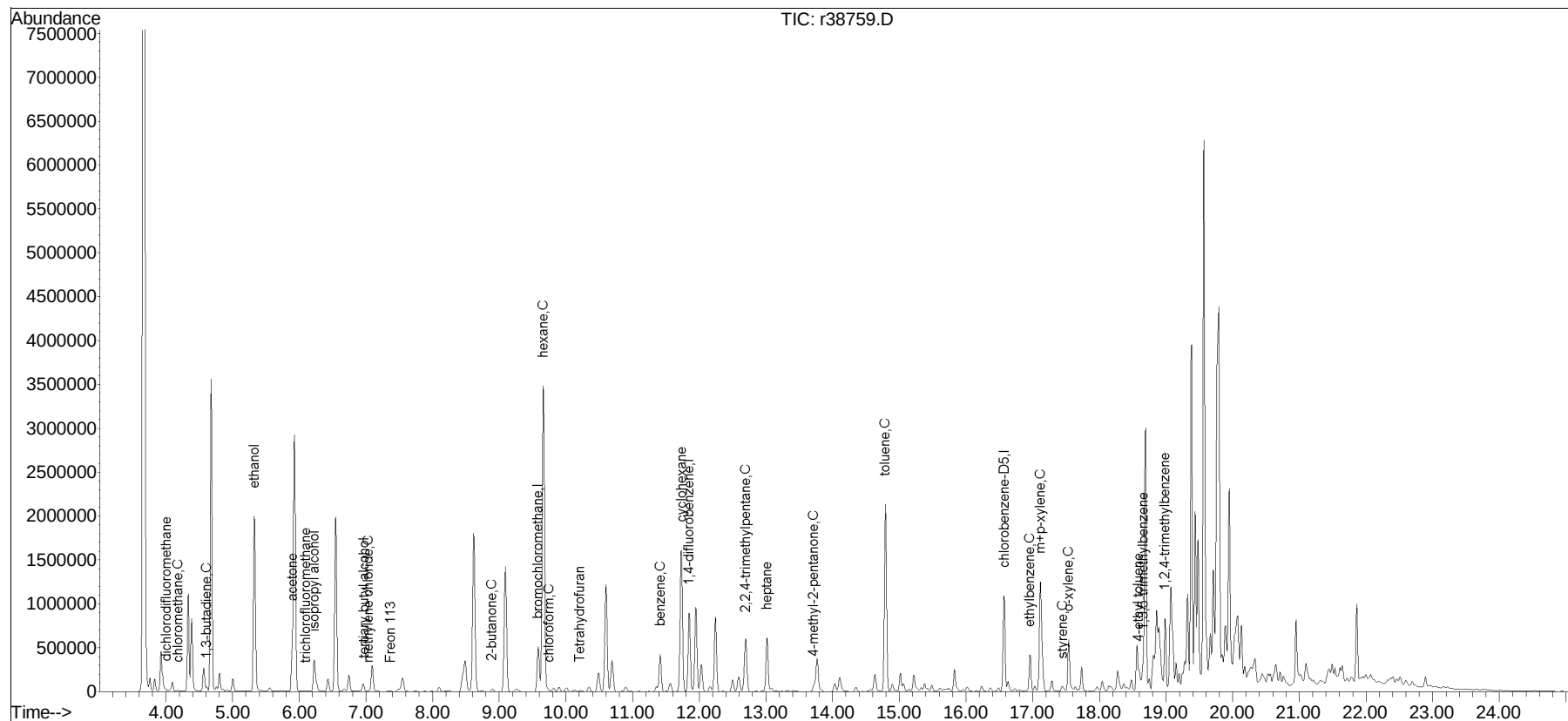
CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320T\r38754.D
 Sub List : T015-NY-7-SIM - .

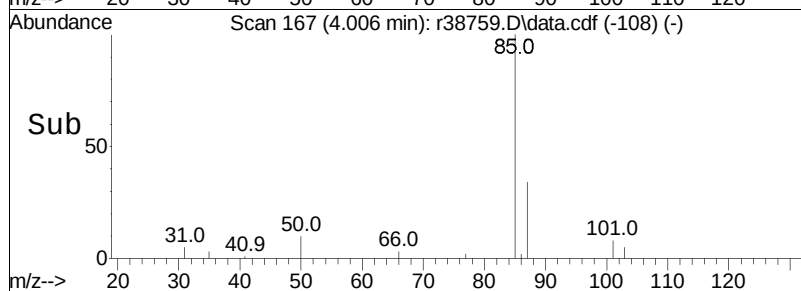
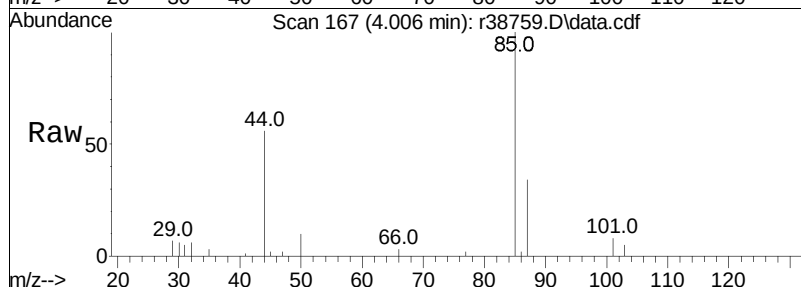
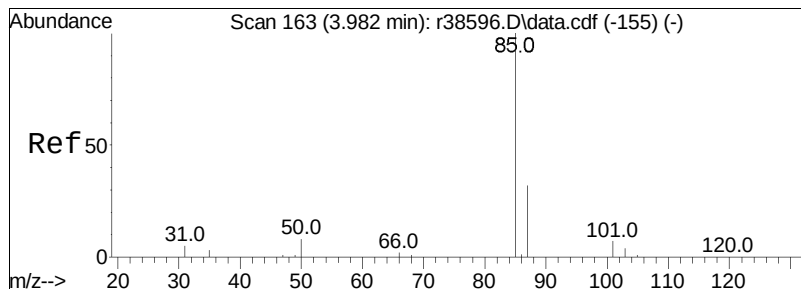
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
56) 1,2-dichloropropane	0.000		0	N.D.	d		
57) bromodichloromethane	0.000		0	N.D.	d		
58) 1,4-dioxane	0.000		0	N.D.	d		
60) 2,2,4-trimethylpentane	12.700	57	605165	5.340	ppbV #		88
62) heptane	13.013	43	355547	7.984	ppbV		91
63) cis-1,3-dichloropropene	0.000		0	N.D.			
64) 4-methyl-2-pentanone	13.717	43	34435	0.686	ppbV #		89
65) trans-1,3-dichloropropene	0.000		0	N.D.			
66) 1,1,2-trichloroethane	0.000		0	N.D.	d		
68) toluene	14.792	91	1818461	26.114	ppbV		99
72) 2-hexanone	0.000		0	N.D.	d		
74) dibromochloromethane	0.000		0	N.D.			
75) 1,2-dibromoethane	0.000		0	N.D.			
80) chlorobenzene	0.000		0	N.D.	d		
81) ethylbenzene	16.958	91	360980	4.353	ppbV		94
83) m+p-xylene	17.117	91	1067446	15.722	ppbV		93
84) bromoform	0.000		0	N.D.			
85) styrene	17.450	104	19109	0.315	ppbV		98
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.	d		
87) o-xylene	17.542	91	404889	6.086	ppbV		92
96) 4-ethyl toluene	18.592	105	113971M6	1.064	ppbV		
97) 1,3,5-trimethylbenzene	18.658	105	121959	1.400	ppbV		95
99) 1,2,4-trimethylbenzene	18.983	105	433251	5.345	ppbV #		57
101) Benzyl Chloride	0.000		0	N.D.	d		
102) 1,3-dichlorobenzene	0.000		0	N.D.	d		
103) 1,4-dichlorobenzene	19.167		0	N.D.			
107) 1,2-dichlorobenzene	0.000		0	N.D.			
115) 1,2,4-trichlorobenzene	20.908		0	N.D.			
119) hexachlorobutadiene	0.000		0	N.D.			

(#) = qualifier out of range (m) = manual integration (+) = signals summed

```
Data Path   : O:\Forensics\Data\Airpiano3\2020\03\200320T\
Data File  : r38759.D
Acq On     : 20 Mar 2020    6:16 PM
Operator   : AIRPIANO3:EW
Sample     : L2011723-06,3,250,250
Misc       : WG1353541,ICAL16594
ALS Vial   : 0    Sample Multiplier: 1
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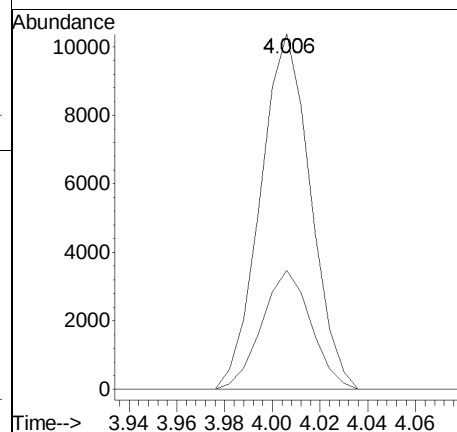
Quant Time: Mar 21 18:12:50 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Mar 12 17:27:58 2020
Response via : Initial Calibration

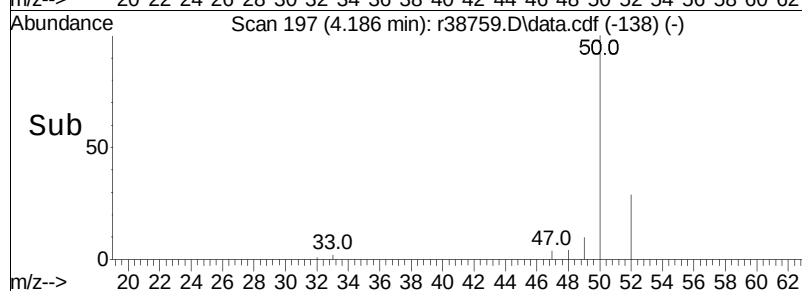
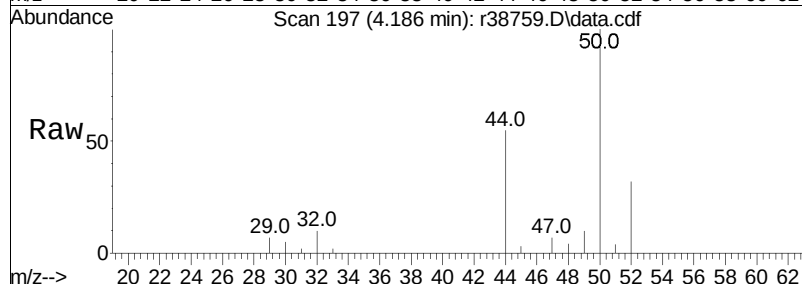
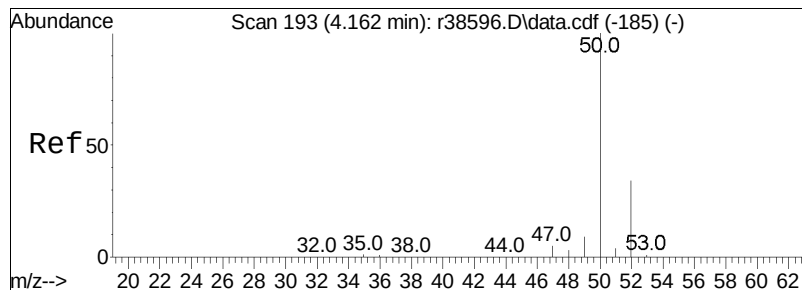




#5
 dichlorodifluoromethane
 Concen: 0.47 ppbV
 RT: 4.006 min Scan# 167
 Delta R.T. 0.024 min
 Lab File: r38759.D
 Acq: 20 Mar 2020 6:16 PM

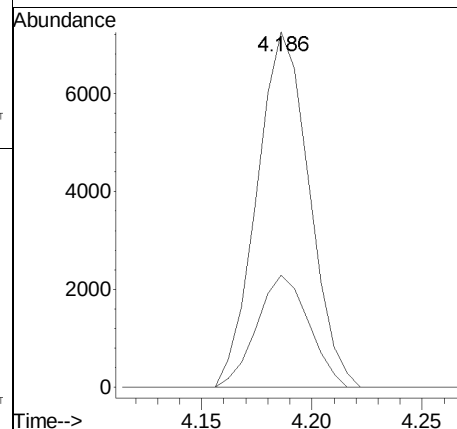
Tgt Ion	85	87	Ratio	100	Lower	Upper
Resp:	15118					
	33.6	25.4		38.0		

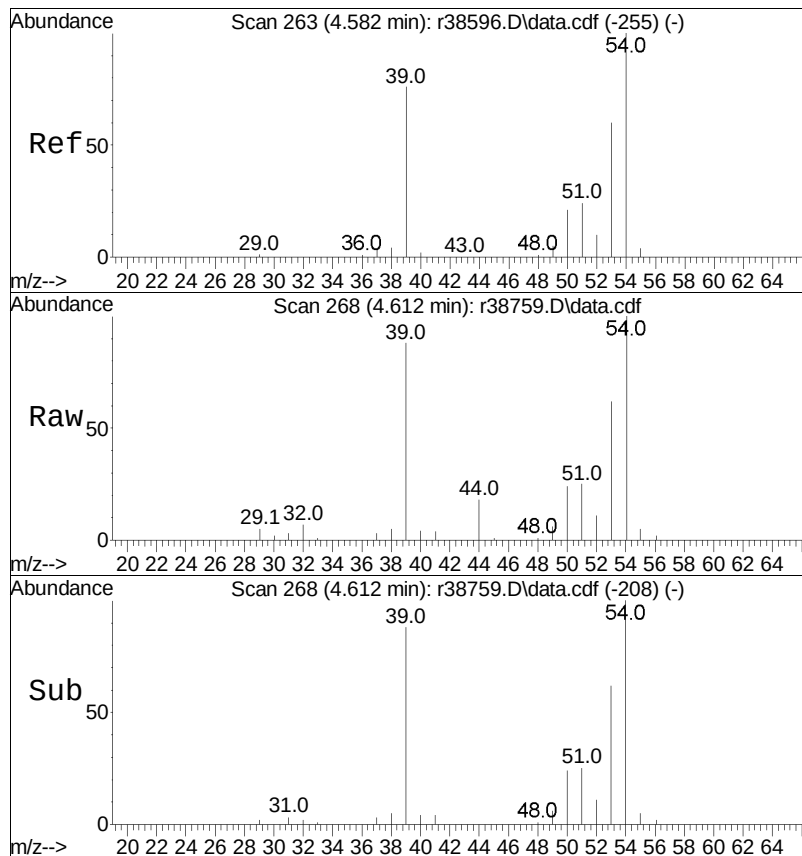




#6
 chloromethane
 Concen: 0.81 ppbV
 RT: 4.186 min Scan# 197
 Delta R.T. 0.024 min
 Lab File: r38759.D
 Acq: 20 Mar 2020 6:16 PM

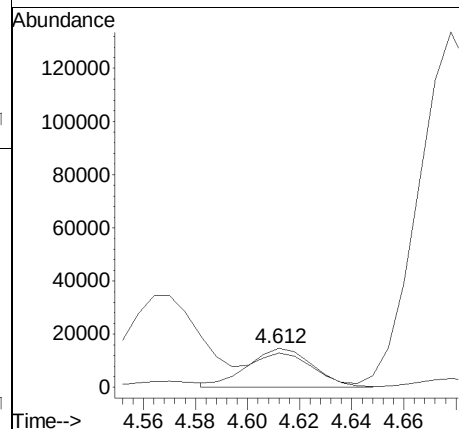
Tgt	Ion	Ratio	Lower	Upper
50	100			
52	31.6	26.9	40.3	

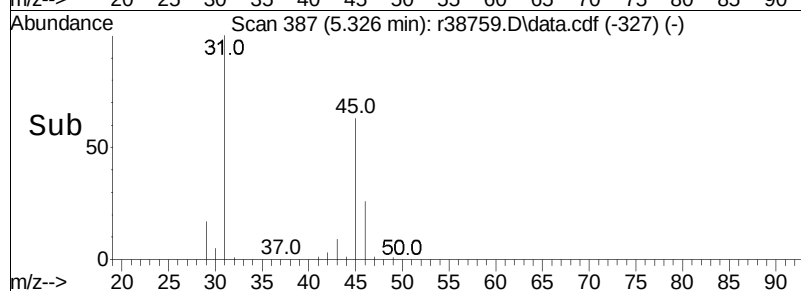
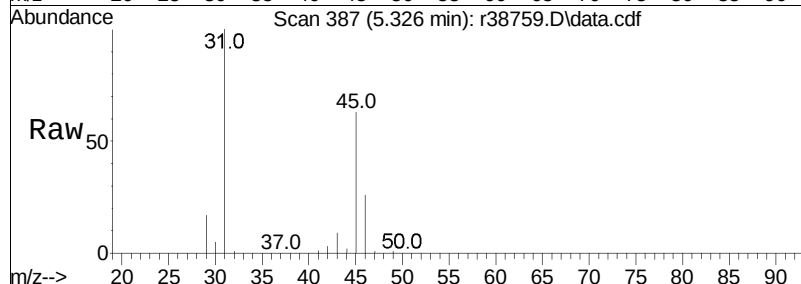
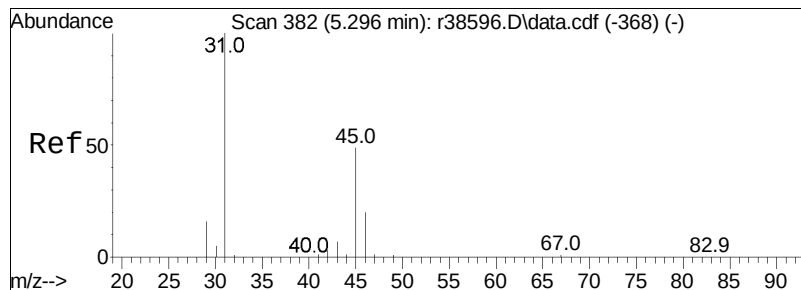




#10
 1,3-butadiene
 Concen: 1.48 ppbV
 RT: 4.612 min Scan# 268
 Delta R.T. 0.030 min
 Lab File: r38759.D
 Acq: 20 Mar 2020 6:16 PM

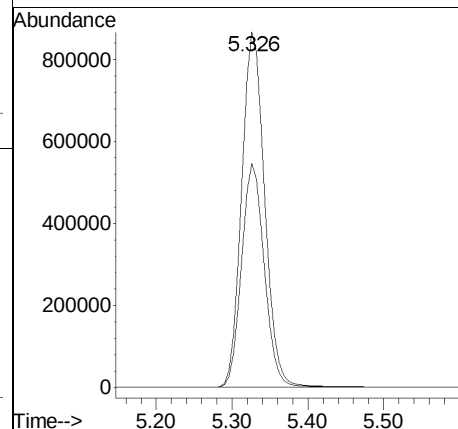
Tgt Ion	Ratio	Lower	Upper
54	100		
39	87.9	60.9	91.3

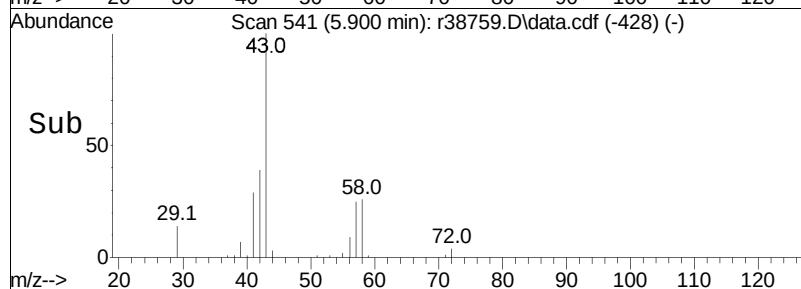
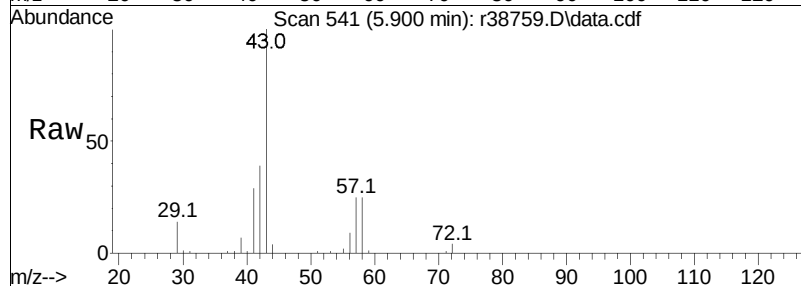
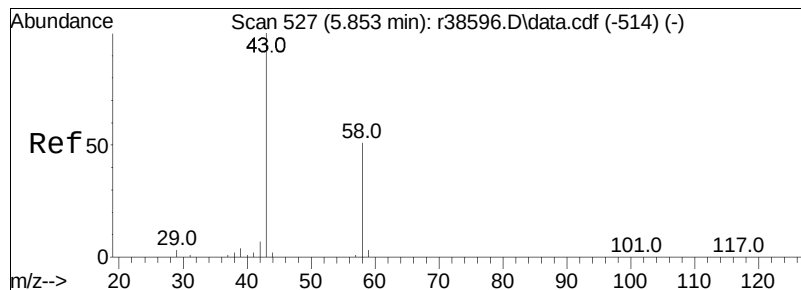




#15
ethanol
Concen: 121.39 ppbV
RT: 5.326 min Scan# 387
Delta R.T. 0.030 min
Lab File: r38759.D
Acq: 20 Mar 2020 6:16 PM

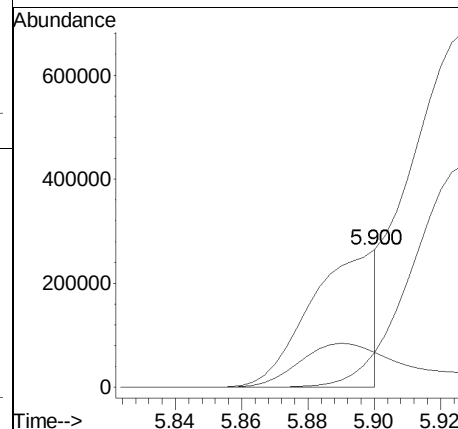
Tgt	Ion	Resp	Lower	Upper
31	100	1688074		
45	63.0		39.0	58.4#

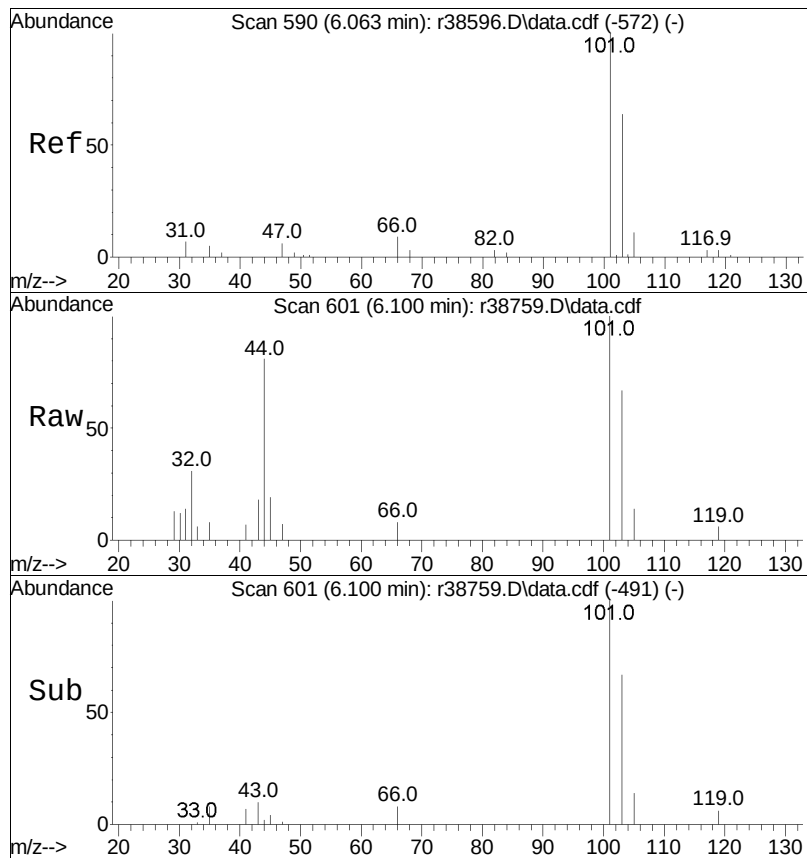




#19
acetone
Concen: 15.80 ppbV m
RT: 5.900 min Scan# 541
Delta R.T. 0.047 min
Lab File: r38759.D
Acq: 20 Mar 2020 6:16 PM

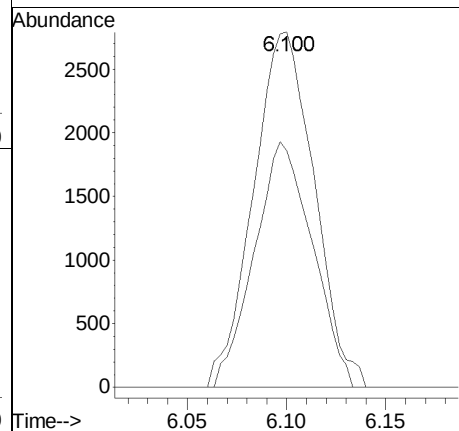
Tgt	Ion	Ratio	Lower	Upper
43	100			
58	25.5	40.6	60.8#	
57	25.1	1.0	1.6#	

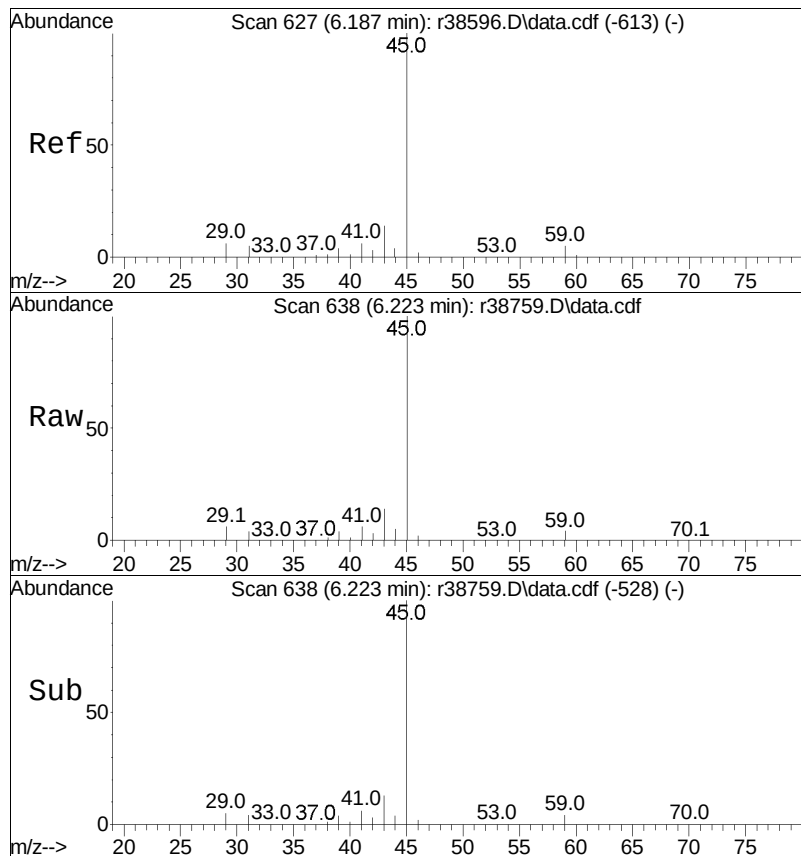




#21
 trichlorofluoromethane
 Concen: 0.24 ppbV
 RT: 6.100 min Scan# 601
 Delta R.T. 0.037 min
 Lab File: r38759.D
 Acq: 20 Mar 2020 6:16 PM

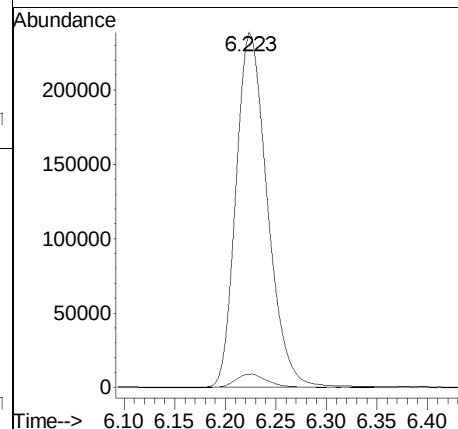
Tgt	Ion	Ratio	Resp	Lower	Upper
101	101	100	5960		
103	103	66.6		51.4	77.0

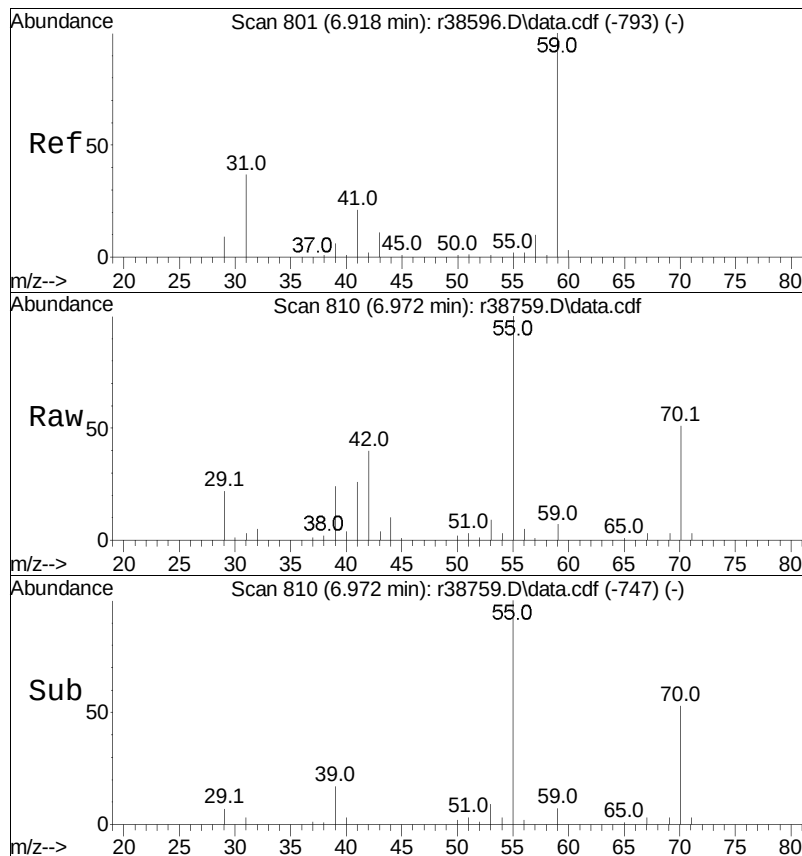




#22
 isopropyl alcohol
 Concen: 17.34 ppbV
 RT: 6.223 min Scan# 638
 Delta R.T. 0.037 min
 Lab File: r38759.D
 Acq: 20 Mar 2020 6:16 PM

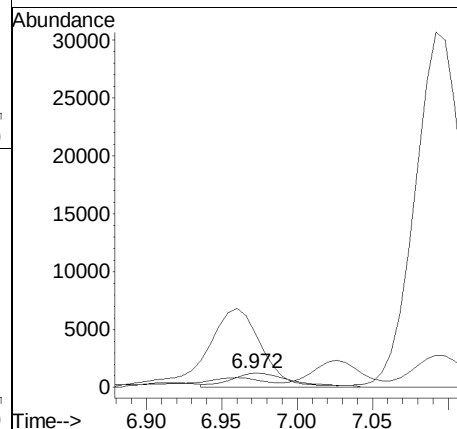
Tgt	Ion	Ratio	Lower	Upper
45	100			
59	3.8		3.9	5.9#

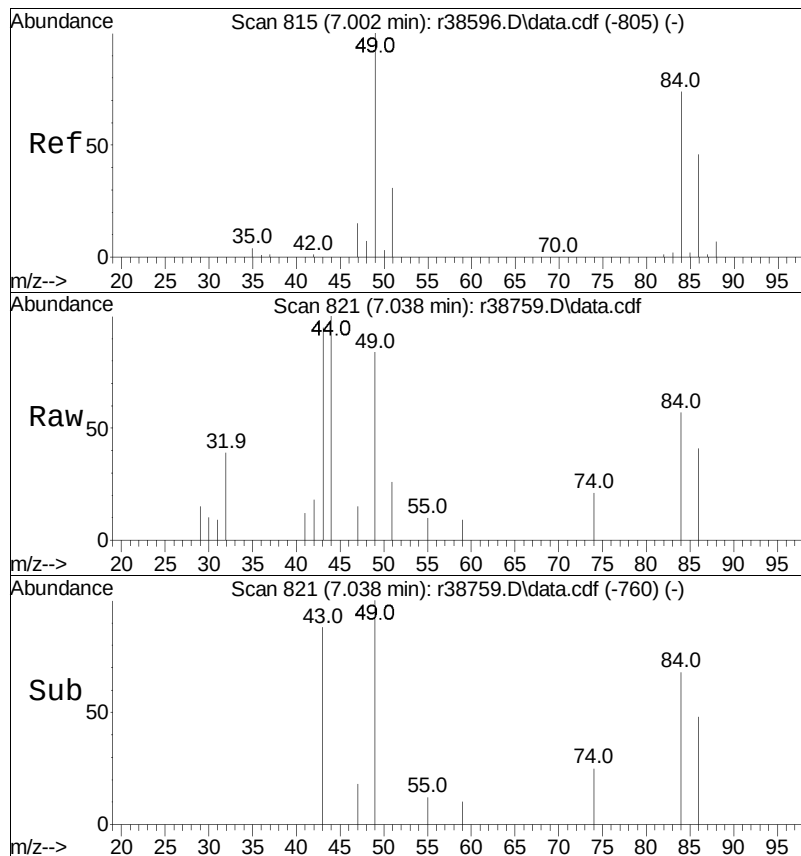




#27
 tertiary butyl alcohol
 Concen: 0.10 ppbV
 RT: 6.972 min Scan# 810
 Delta R.T. 0.054 min
 Lab File: r38759.D
 Acq: 20 Mar 2020 6:16 PM

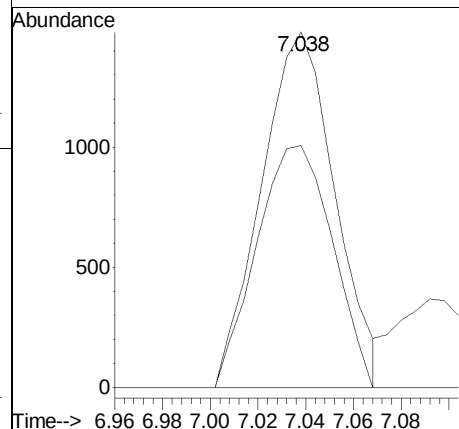
Tgt Ion:	59	Resp:	3568
Ion Ratio	Lower	Upper	
59	100		
41	379.6	16.9	25.3#
43	52.9	8.9	13.3#

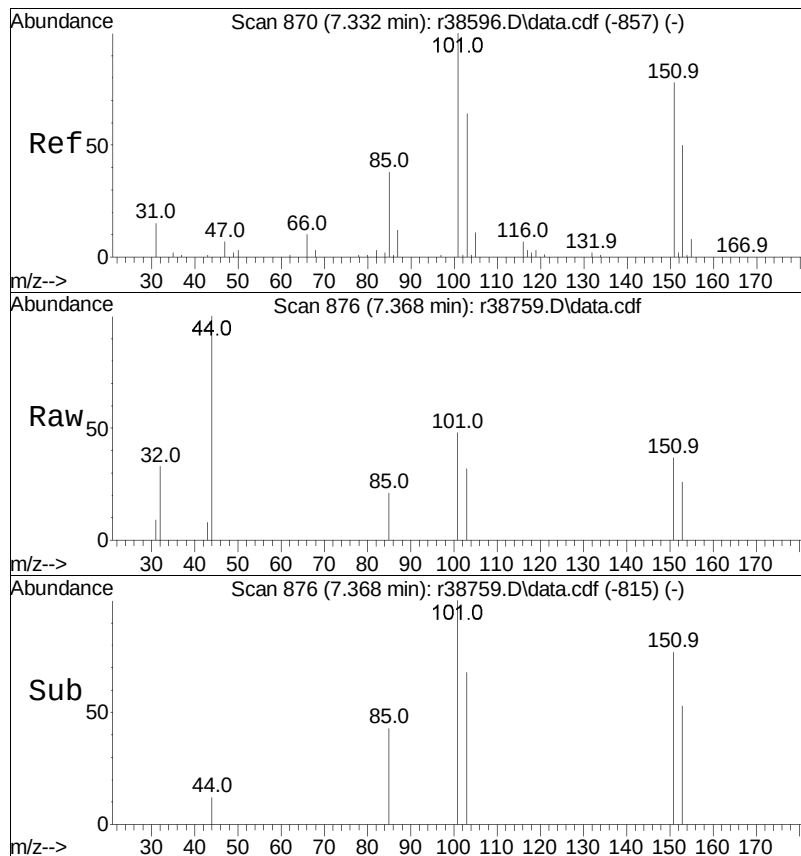




#28
 methylene chloride
 Concen: 0.14 ppbV
 RT: 7.038 min Scan# 821
 Delta R.T. 0.036 min
 Lab File: r38759.D
 Acq: 20 Mar 2020 6:16 PM

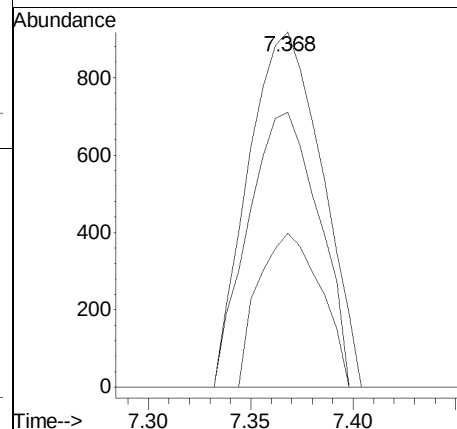
Tgt Ion:	49	84	Ratio	Lower	Upper
Resp:	3162				
Ion Ratio	100	68.1			
			59.3		88.9

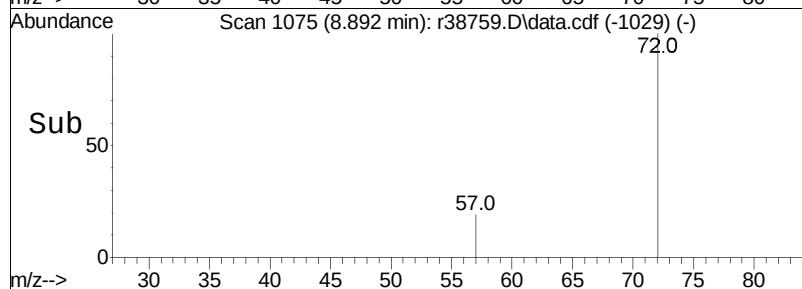
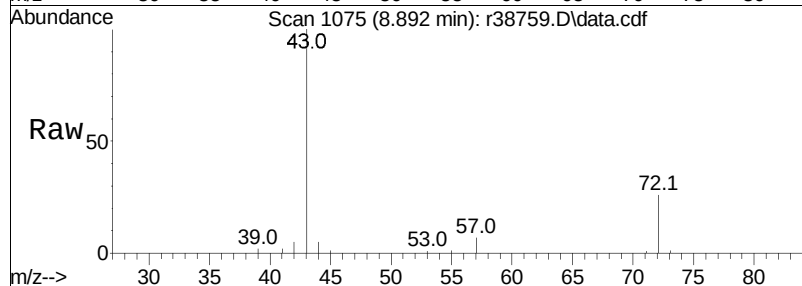
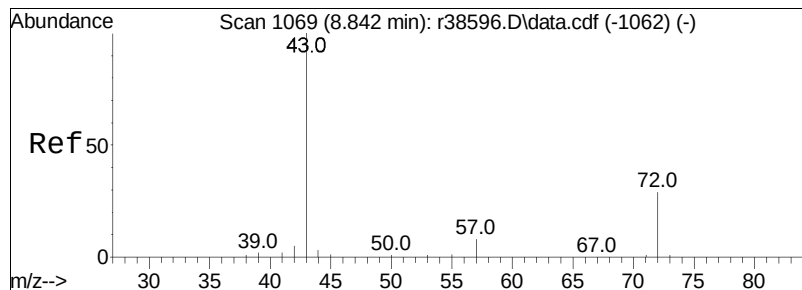




#31
 Freon 113
 Concen: 0.07 ppbV
 RT: 7.368 min Scan# 876
 Delta R.T. 0.036 min
 Lab File: r38759.D
 Acq: 20 Mar 2020 6:16 PM

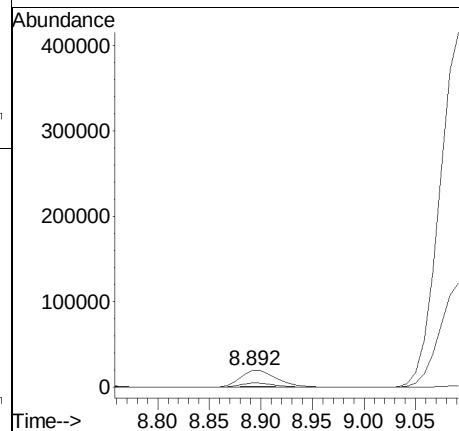
Tgt Ion	Ratio	Resp	Lower	Upper
101	100	2303		
85	43.4		30.6	45.8
151	77.5		62.4	93.6

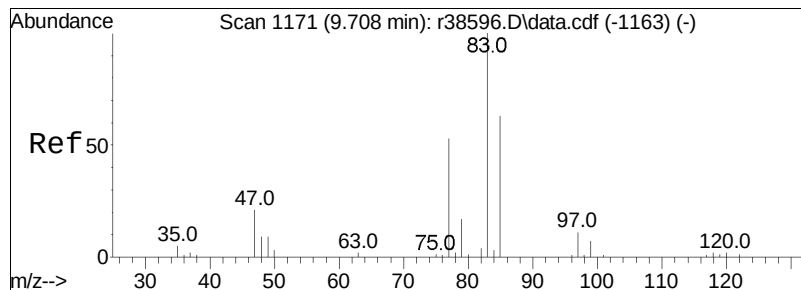




#36
2-butanone
Concen: 1.12 ppbV
RT: 8.892 min Scan# 1075
Delta R.T. 0.050 min
Lab File: r38759.D
Acq: 20 Mar 2020 6:16 PM

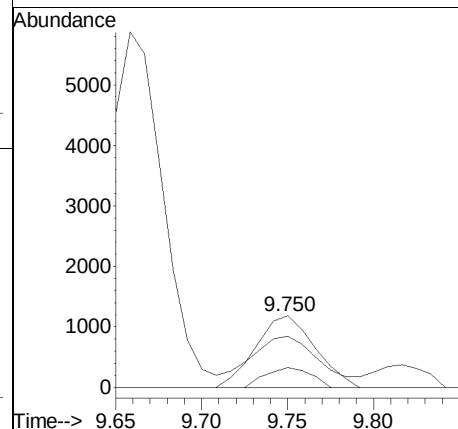
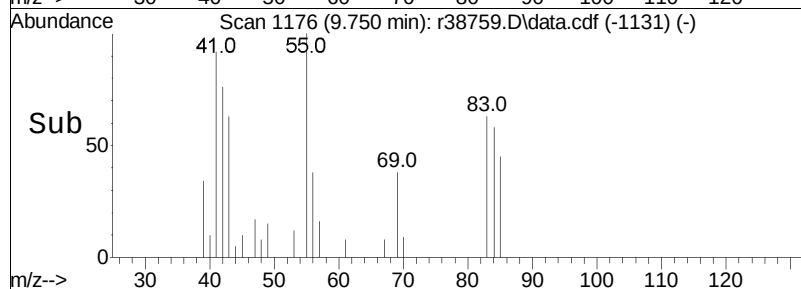
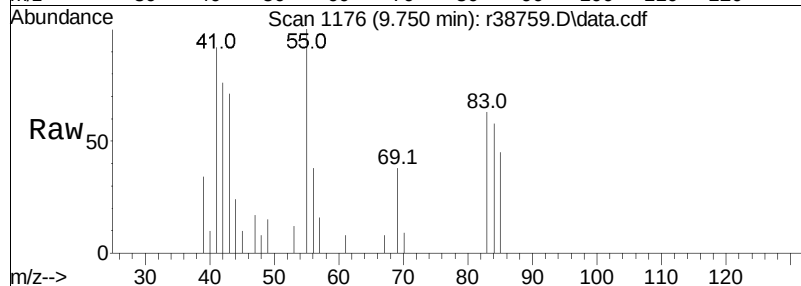
Tgt Ion:	43	Resp:	48987
Ion Ratio	Lower	Upper	
43	100		
72	26.3	23.1	34.7
57	6.9	6.3	9.5

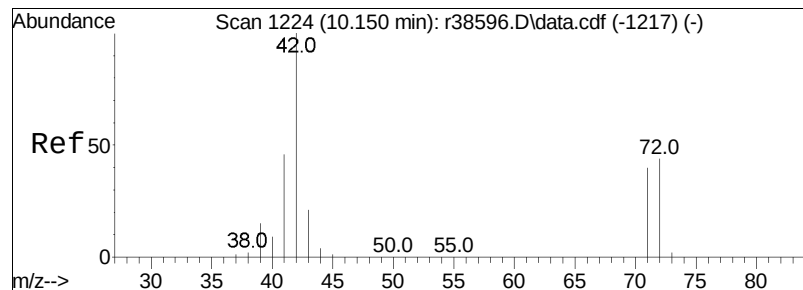




#39
chloroform
Concen: 0.08 ppbV
RT: 9.750 min Scan# 1176
Delta R.T. 0.042 min
Lab File: r38759.D
Acq: 20 Mar 2020 6:16 PM

Tgt Ion	Ratio	Resp	Lower	Upper
83	100	2837		
85	71.5		50.4	75.6
47	27.8		16.9	25.3





#40

Tetrahydrofuran

Concen: 0.45 ppbV

RT: 10.208 min Scan# 1231

Delta R.T. 0.058 min

Lab File: r38759.D

Acq: 20 Mar 2020 6:16 PM

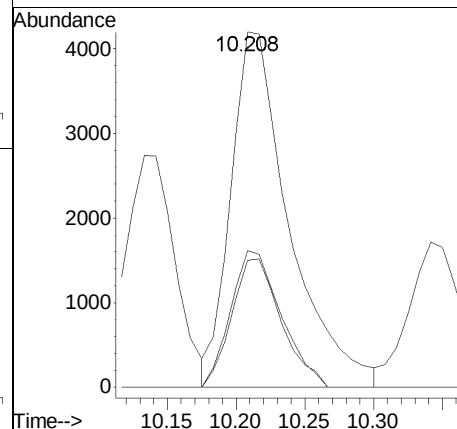
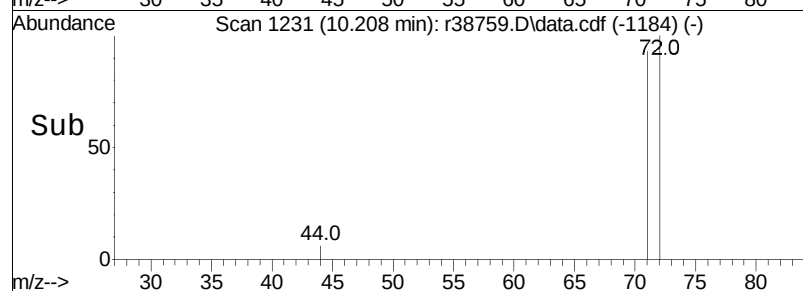
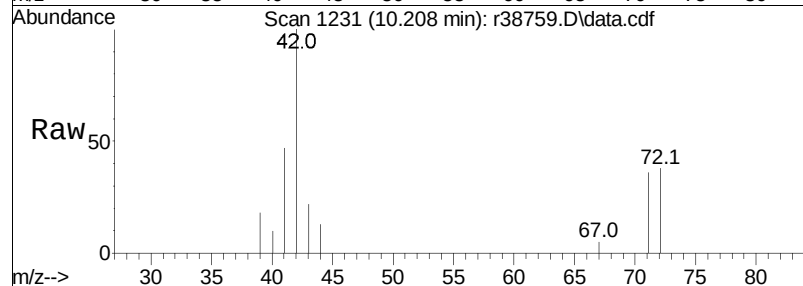
Tgt Ion: 42 Resp: 12377

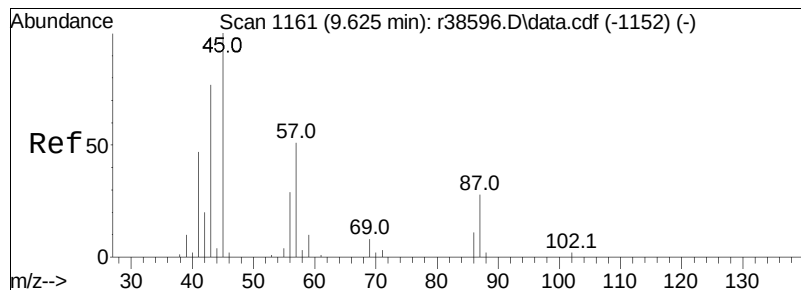
Ion Ratio Lower Upper

42 100

71 35.8 31.8 47.8

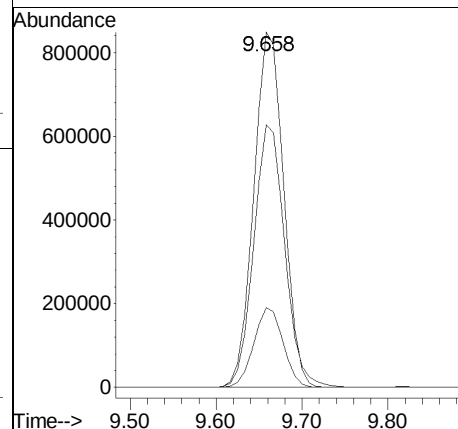
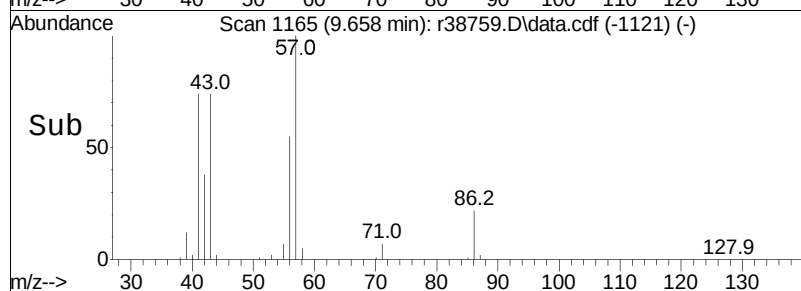
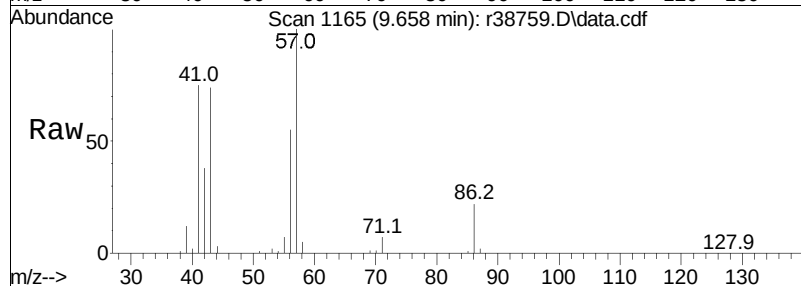
72 38.5 35.2 52.8

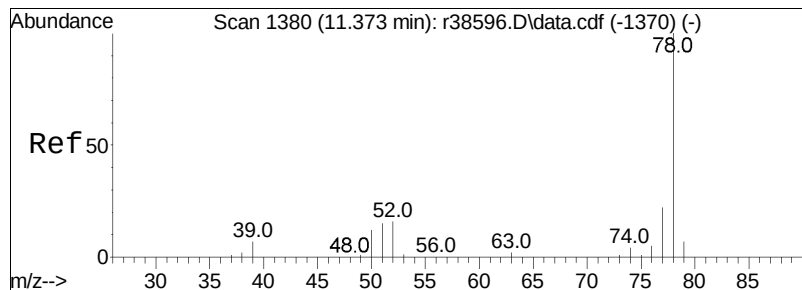




#44
hexane
Concen: 57.71 ppbV
RT: 9.658 min Scan# 1165
Delta R.T. 0.033 min
Lab File: r38759.D
Acq: 20 Mar 2020 6:16 PM

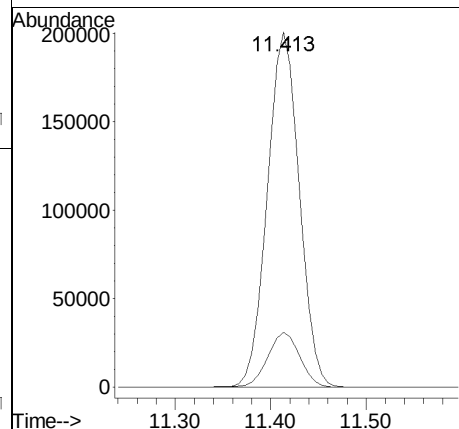
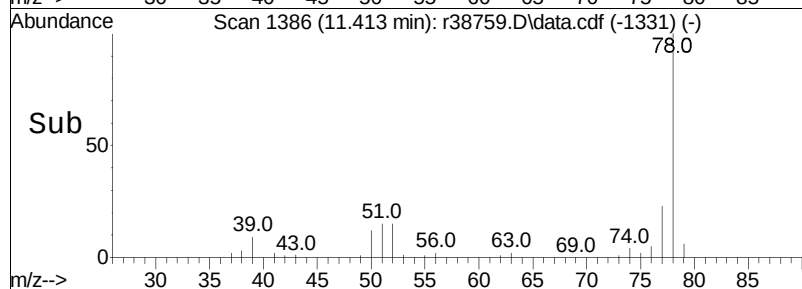
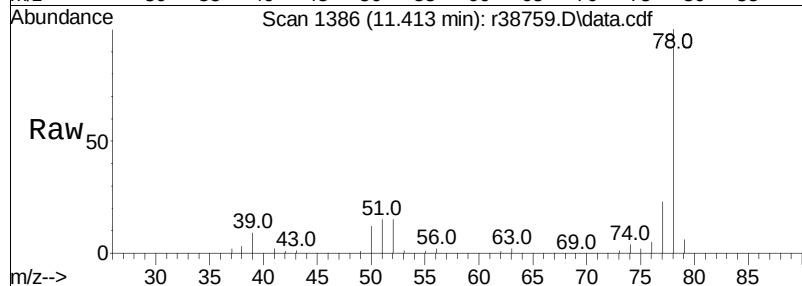
Tgt Ion	Ratio	Lower	Upper
57	100		
43	73.9	119.3	178.9#
86	22.5	17.0	25.6

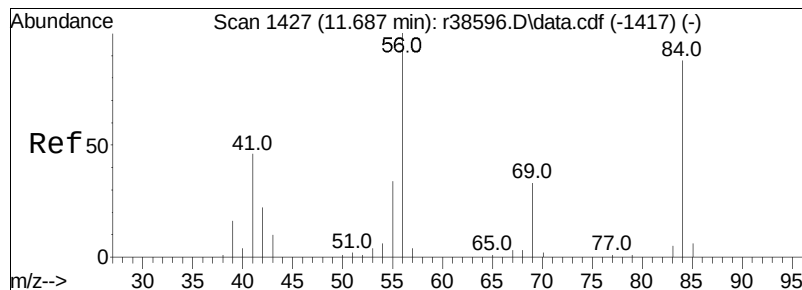




#50
benzene
Concen: 6.72 ppbV
RT: 11.413 min Scan# 1386
Delta R.T. 0.040 min
Lab File: r38759.D
Acq: 20 Mar 2020 6:16 PM

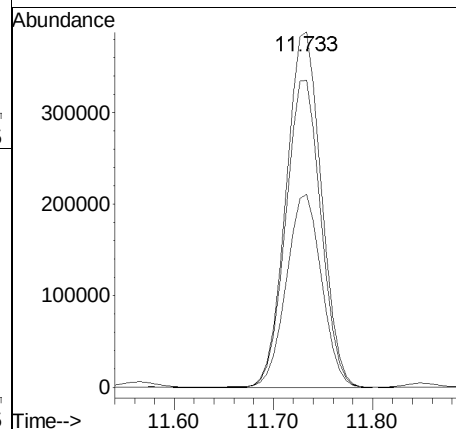
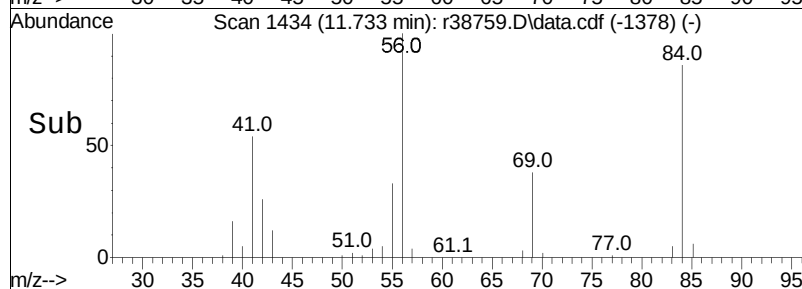
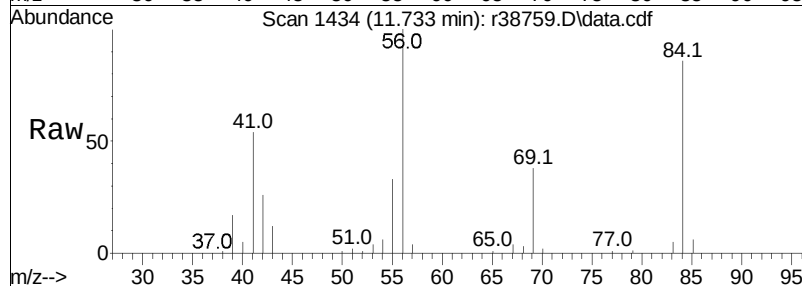
Tgt Ion	Ratio	Lower	Upper
78	100		
52	15.5	12.6	18.8

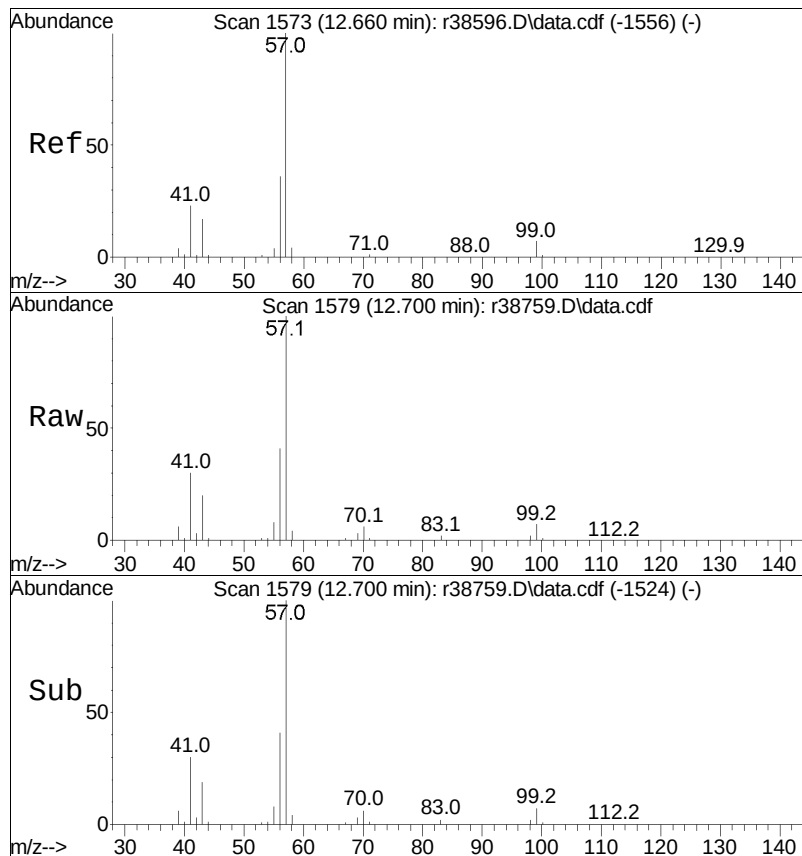




#53
cyclohexane
Concen: 24.86 ppbV
RT: 11.733 min Scan# 1434
Delta R.T. 0.047 min
Lab File: r38759.D
Acq: 20 Mar 2020 6:16 PM

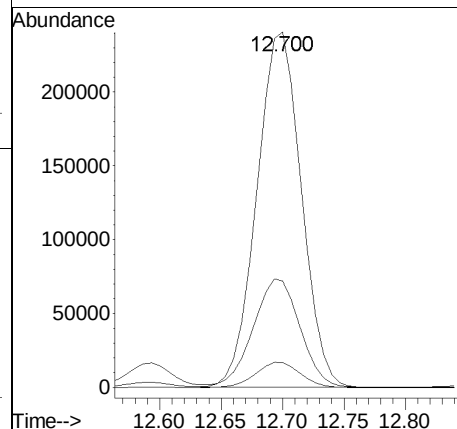
Tgt	Ion	Ratio	Lower	Upper
56	100			
84	86.4	70.2	105.2	
41	54.3	36.9	55.3	

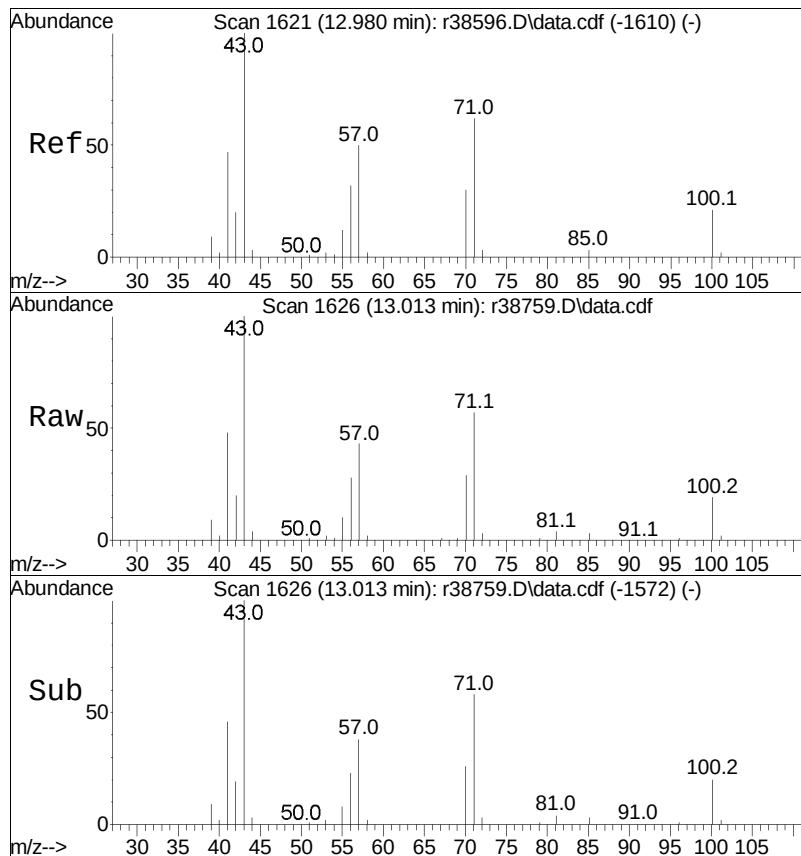




#60
 2,2,4-trimethylpentane
 Concen: 5.34 ppbV
 RT: 12.700 min Scan# 1579
 Delta R.T. 0.040 min
 Lab File: r38759.D
 Acq: 20 Mar 2020 6:16 PM

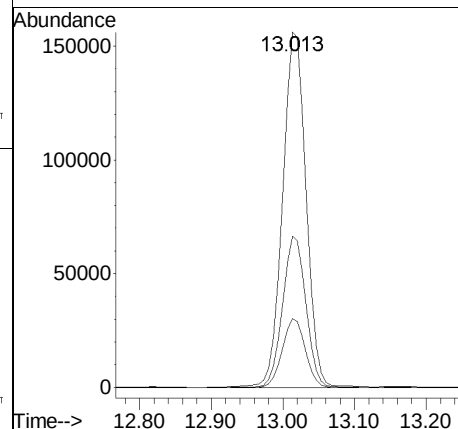
Tgt	Ion: 57	Resp: 605165
Ion	Ratio	Lower Upper
57	100	
99	7.0	5.4 8.2
41	29.9	18.2 27.2#

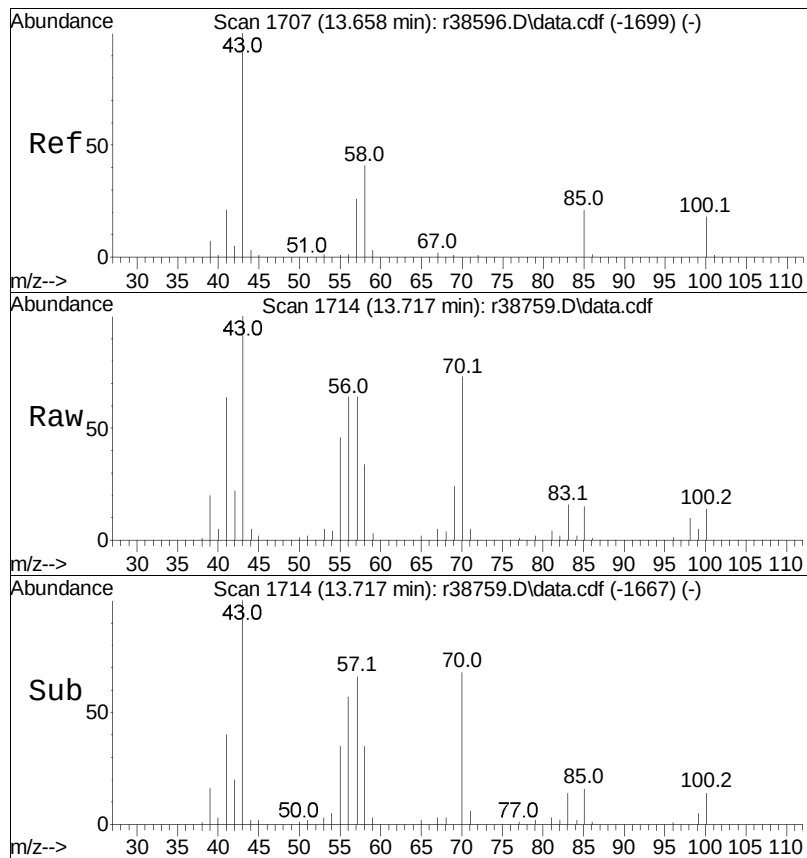




#62
 heptane
 Concen: 7.98 ppbV
 RT: 13.013 min Scan# 1626
 Delta R.T. 0.033 min
 Lab File: r38759.D
 Acq: 20 Mar 2020 6:16 PM

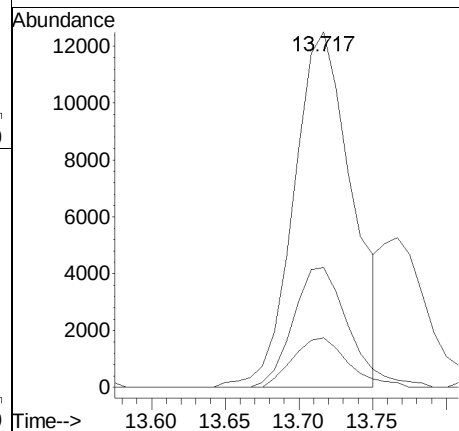
Tgt Ion:	43	Resp:	355547
Ion Ratio	Lower	Upper	
43	100		
57	42.6	39.8	59.6
100	19.4	17.3	25.9

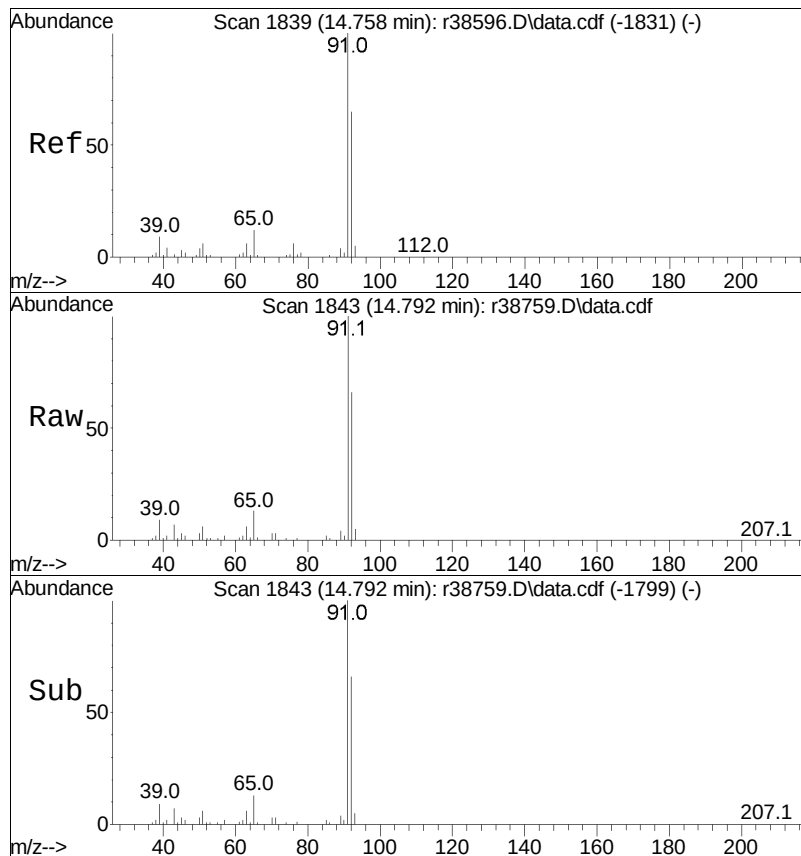




#64
 4-methyl-2-pentanone
 Concen: 0.69 ppbV
 RT: 13.717 min Scan# 1714
 Delta R.T. 0.058 min
 Lab File: r38759.D
 Acq: 20 Mar 2020 6:16 PM

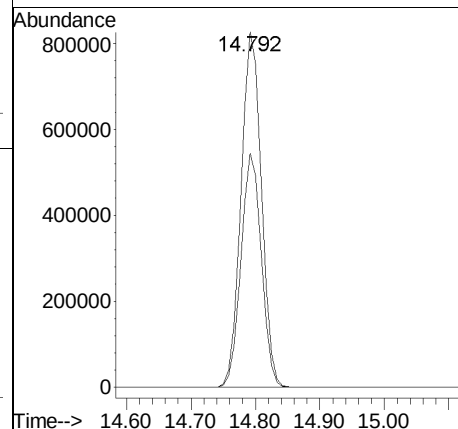
Tgt Ion:	43	Resp:	34435
Ion Ratio	Lower	Upper	
43	100		
58	33.7	32.5	48.7
100	14.0	14.7	22.1#

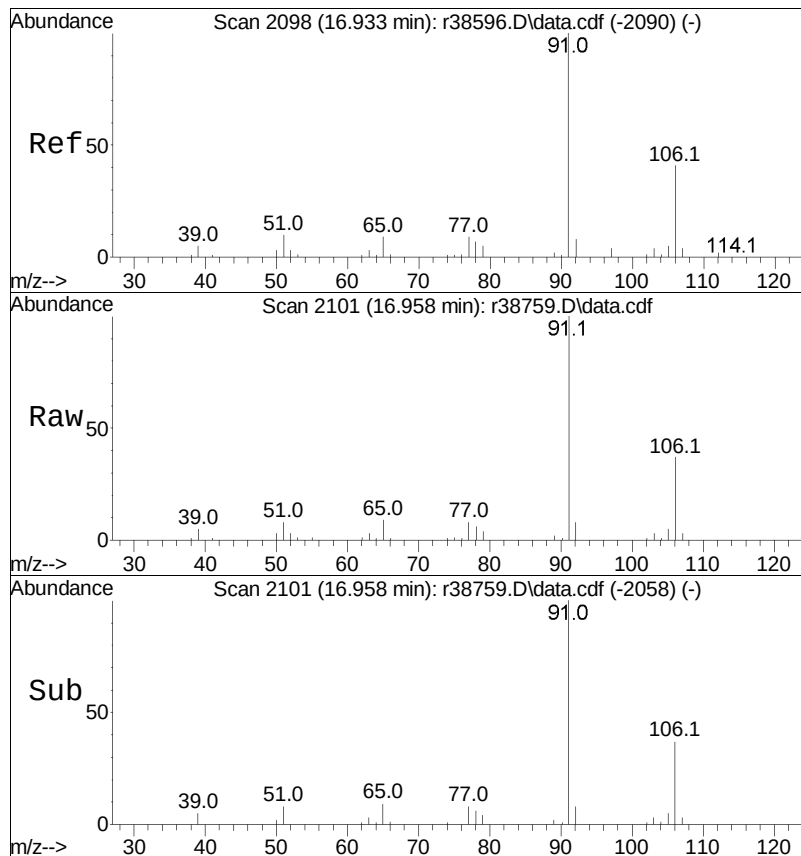




#68
 toluene
 Concen: 26.11 ppbV
 RT: 14.792 min Scan# 1843
 Delta R.T. 0.033 min
 Lab File: r38759.D
 Acq: 20 Mar 2020 6:16 PM

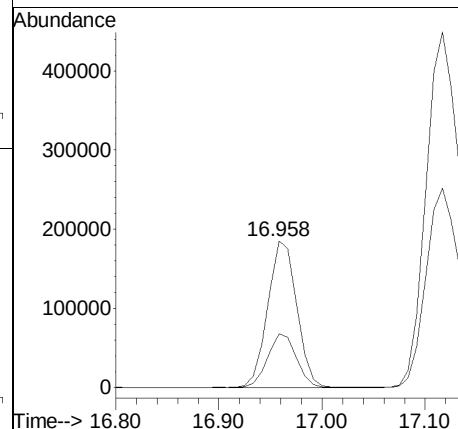
Tgt Ion	Ratio	Lower	Upper
91	100		
92	65.9	52.4	78.6

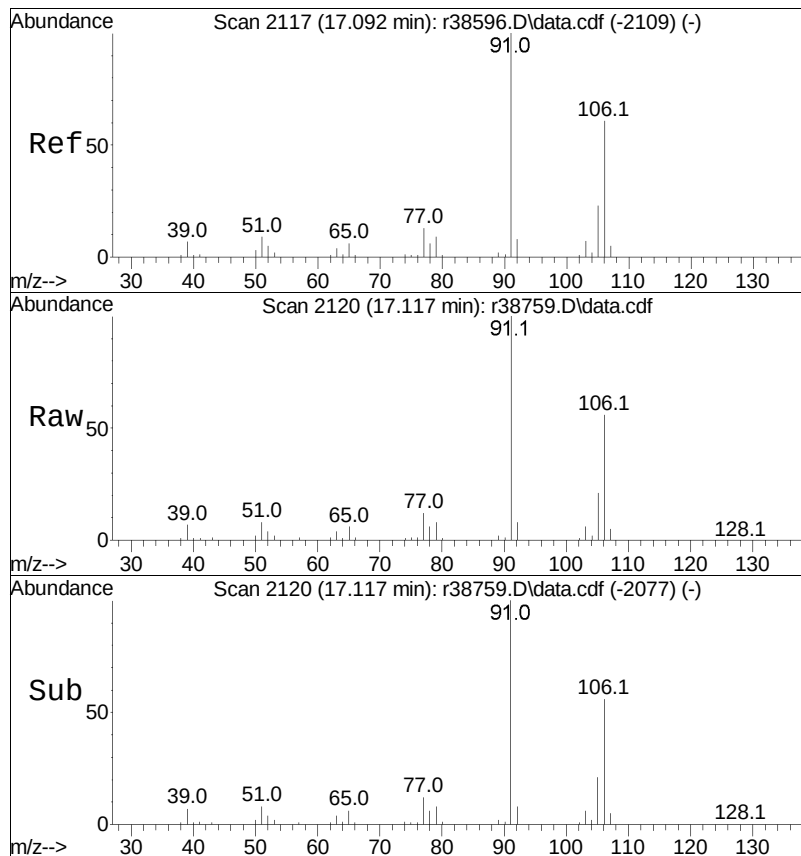




#81
ethylbenzene
Concen: 4.35 ppbV
RT: 16.958 min Scan# 2101
Delta R.T. 0.025 min
Lab File: r38759.D
Acq: 20 Mar 2020 6:16 PM

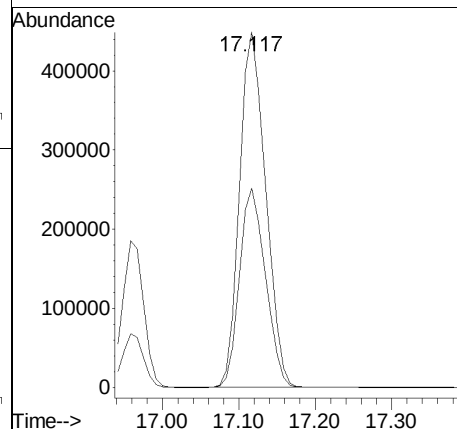
Tgt Ion	Ratio	Lower	Upper
91	100		
106	36.7	32.6	48.8

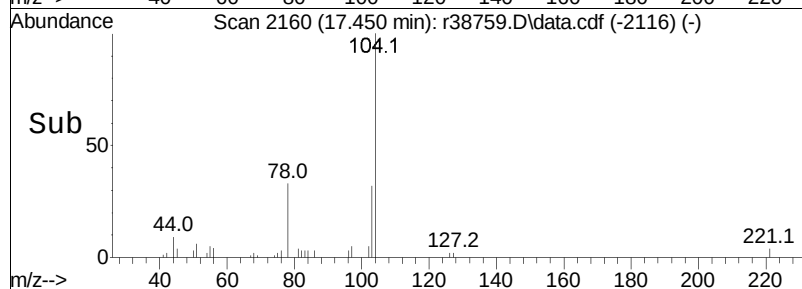
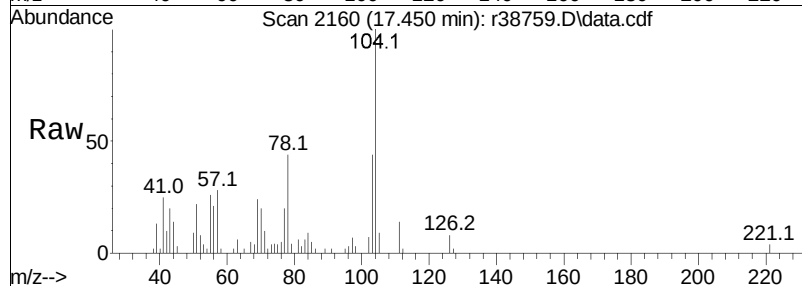
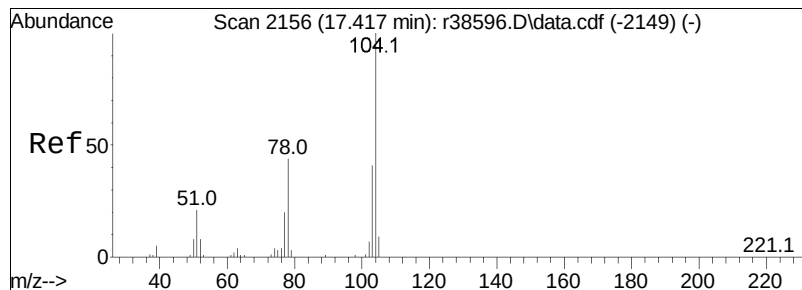




#83
 m+p-xylene
 Concen: 15.72 ppbV
 RT: 17.117 min Scan# 2120
 Delta R.T. 0.025 min
 Lab File: r38759.D
 Acq: 20 Mar 2020 6:16 PM

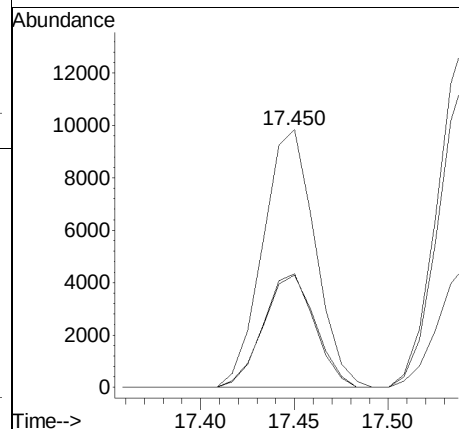
Tgt Ion	Ratio	Lower	Upper
91	100		
106	56.1	49.0	73.6

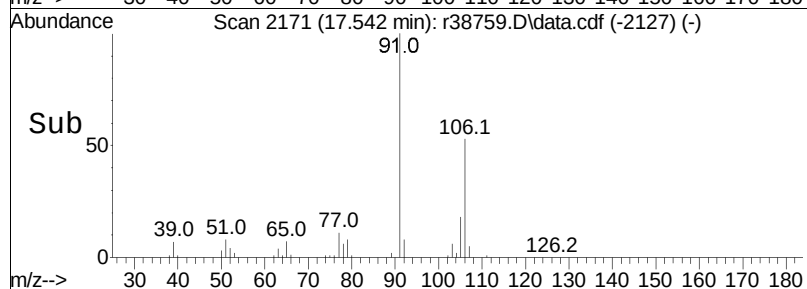
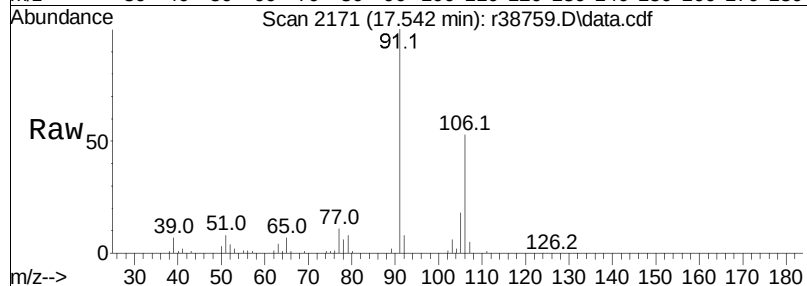
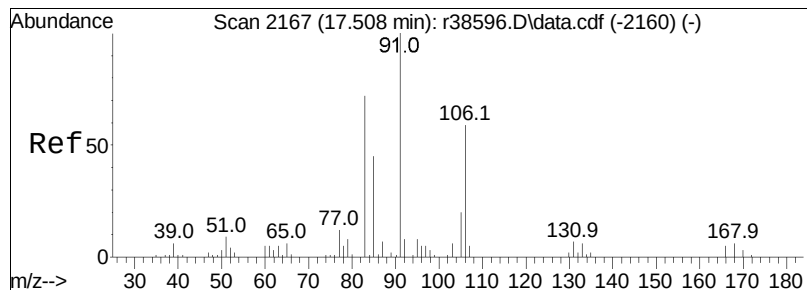




#85
styrene
Concen: 0.32 ppbV
RT: 17.450 min Scan# 2160
Delta R.T. 0.033 min
Lab File: r38759.D
Acq: 20 Mar 2020 6:16 PM

Tgt Ion	Ratio	Resp	Lower	Upper
104	100	19109		
103	44.1		33.1	49.7
78	43.6		35.0	52.6





#87

o-xylene

Concen: 6.09 ppbV

RT: 17.542 min Scan# 2171

Delta R.T. 0.033 min

Lab File: r38759.D

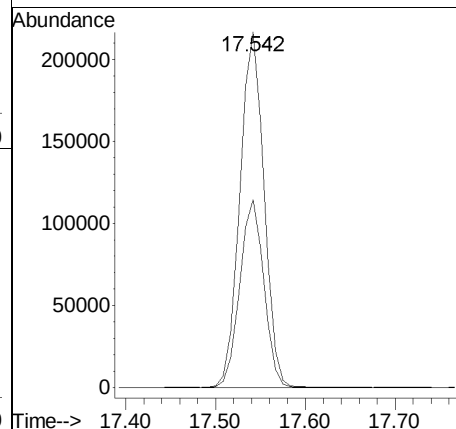
Acq: 20 Mar 2020 6:16 PM

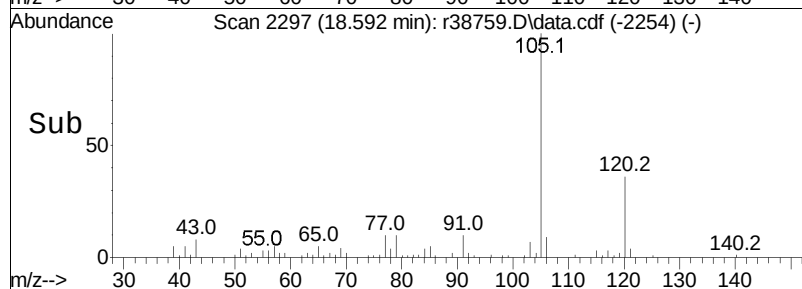
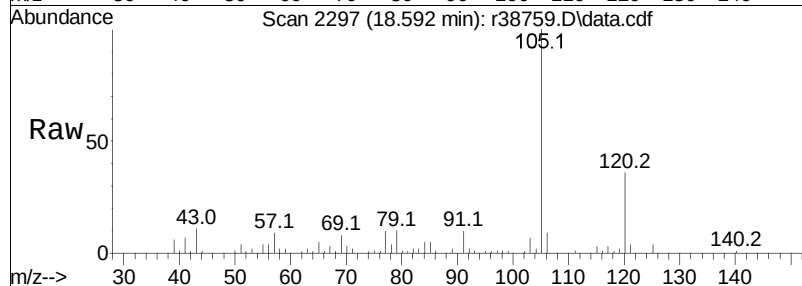
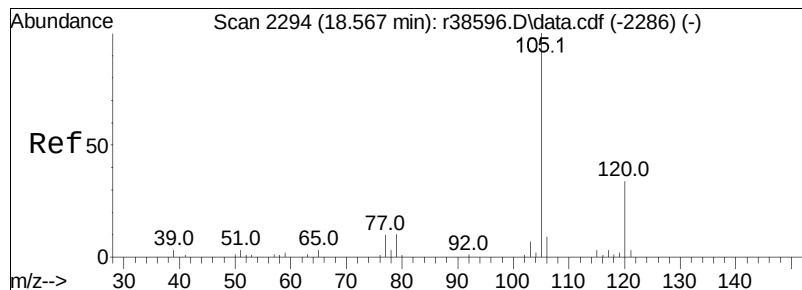
Tgt Ion: 91 Resp: 404889

Ion Ratio Lower Upper

91 100

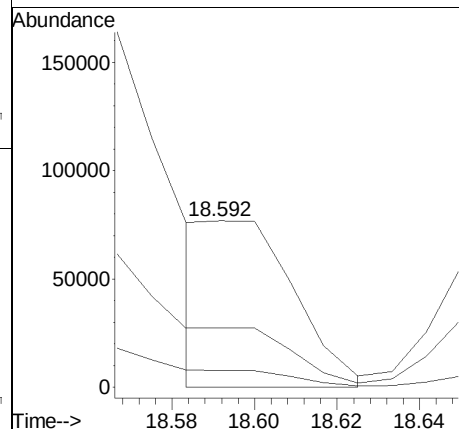
106 52.9 47.4 71.0

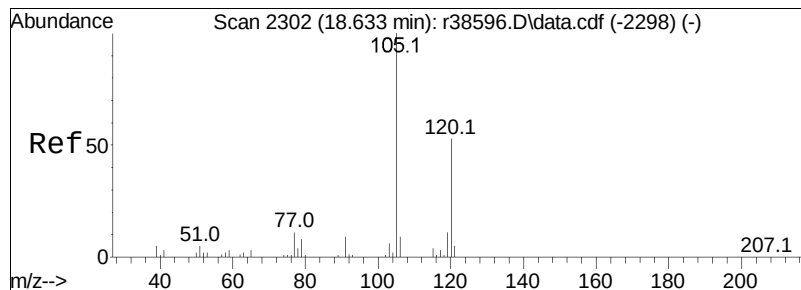




#96
 4-ethyl toluene
 Concen: 1.06 ppbV m
 RT: 18.592 min Scan# 2297
 Delta R.T. 0.025 min
 Lab File: r38759.D
 Acq: 20 Mar 2020 6:16 PM

Tgt Ion	Ratio	Lower	Upper
105	100		
120	35.9	27.0	40.4
91	10.0	7.4	11.0





#97

1,3,5-trimethylbenzene

Concen: 1.40 ppbV

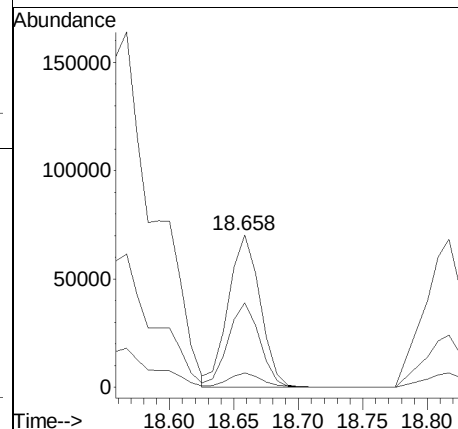
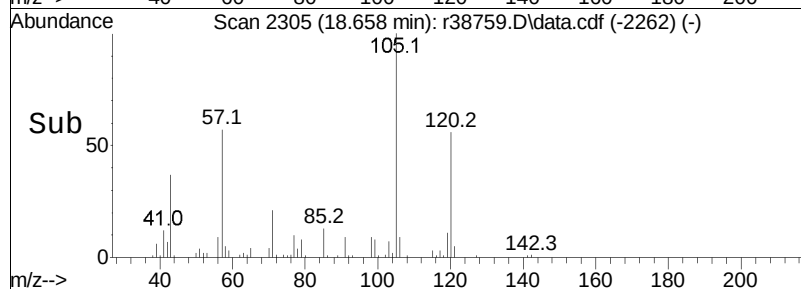
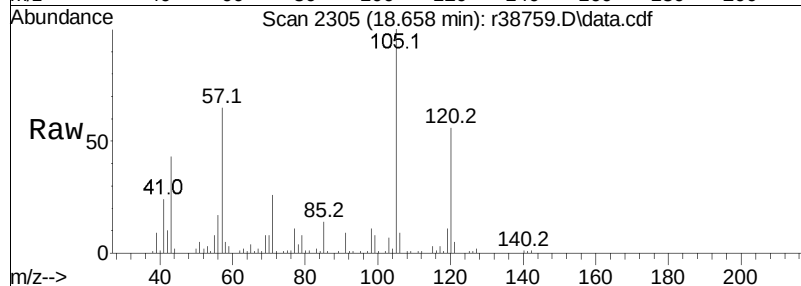
RT: 18.658 min Scan# 2305

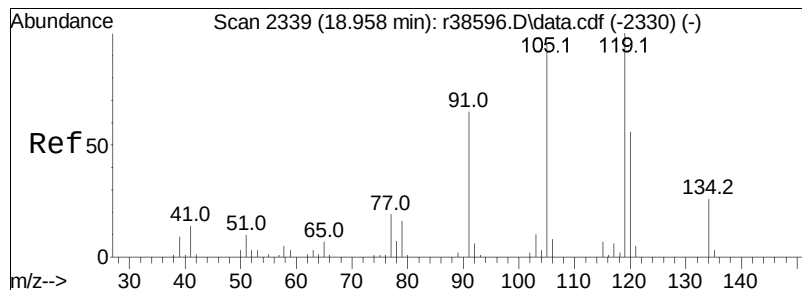
Delta R.T. 0.025 min

Lab File: r38759.D

Acq: 20 Mar 2020 6:16 PM

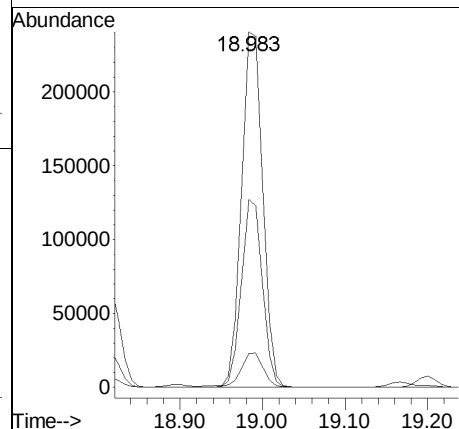
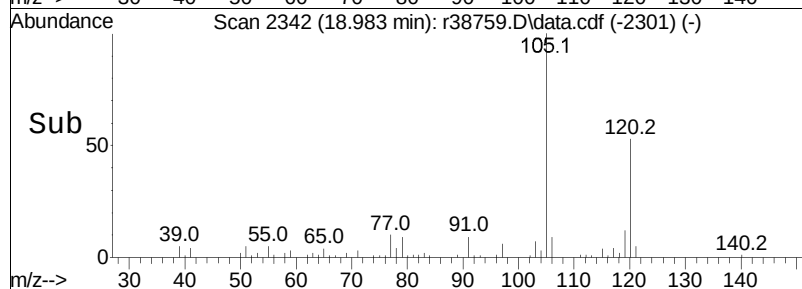
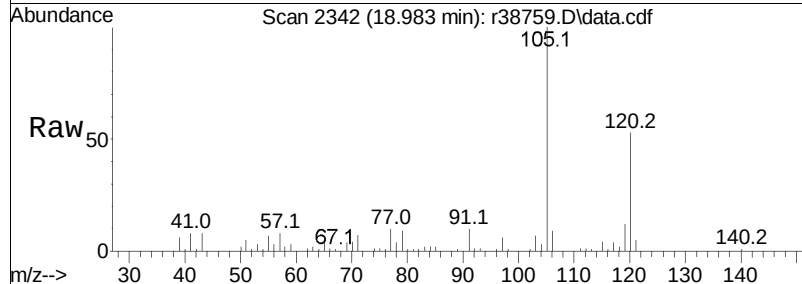
Tgt	Ion:105	Resp:	121959
Ion	Ratio	Lower	Upper
105	100		
120	55.5	41.6	62.4
91	9.5	7.0	10.4





#99
 1,2,4-trimethylbenzene
 Concen: 5.34 ppbV
 RT: 18.983 min Scan# 2342
 Delta R.T. 0.025 min
 Lab File: r38759.D
 Acq: 20 Mar 2020 6:16 PM

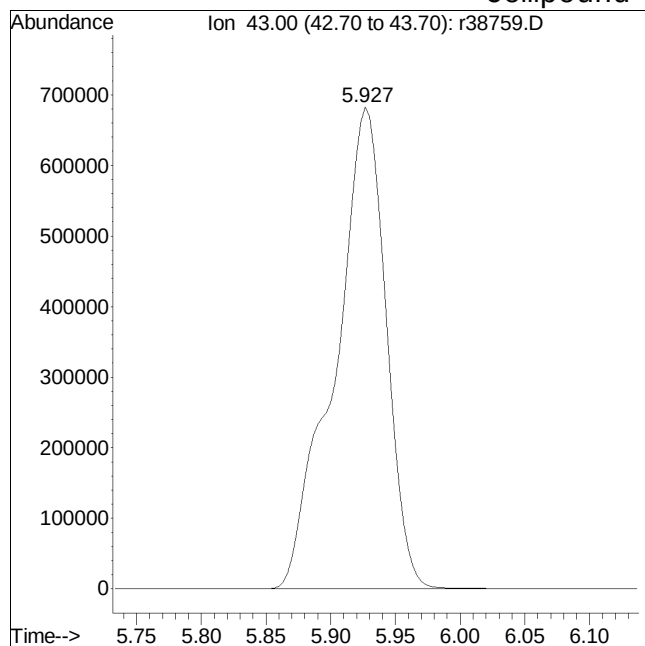
Tgt Ion	Ratio	Lower	Upper
105	100		
120	52.8	47.1	70.7
91	9.6	55.0	82.6#



Manual Integration Report

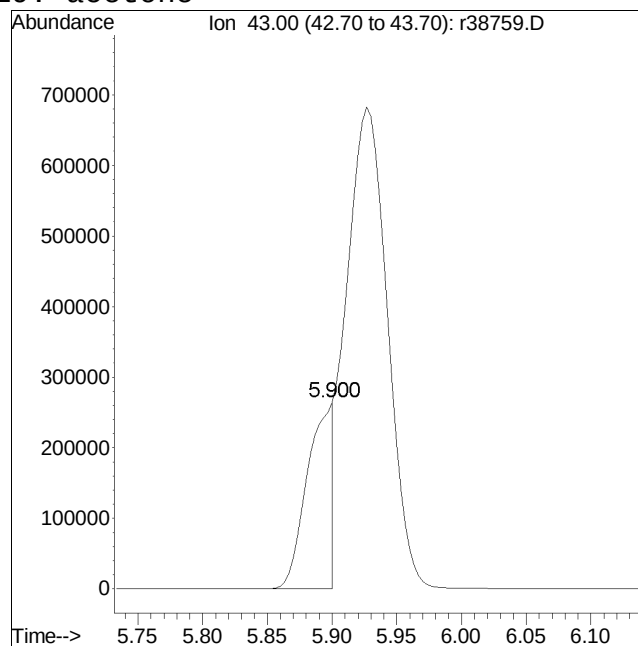
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200312.M
Data File : r38759.D Operator : AIRPIAN03:EW
Date Inj'd : 3/20/2020 0:6: 6 Instrument :
Sample : L2011723-06,3,250,250 Quant Date : 3/21/2020 8:04 am

Compound #19: acetone



Original Peak Response = 1877364

M6 = Misassignment of peak valley by



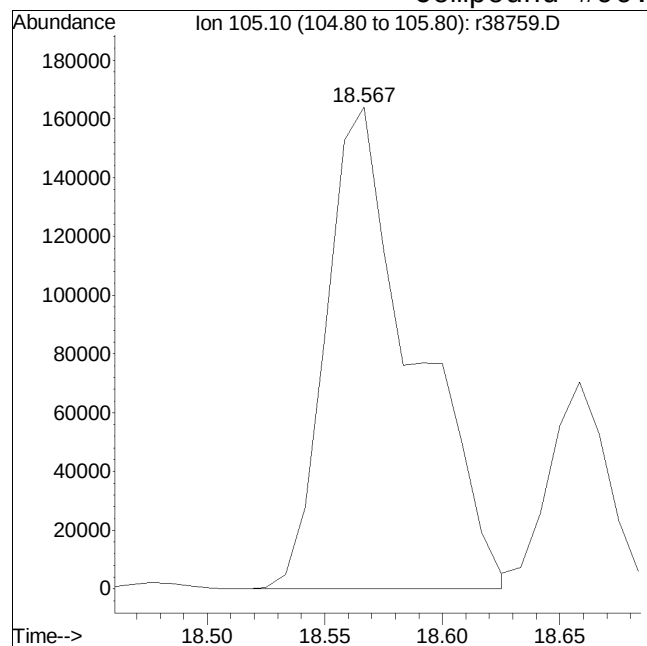
Manual Peak Response = 365985 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

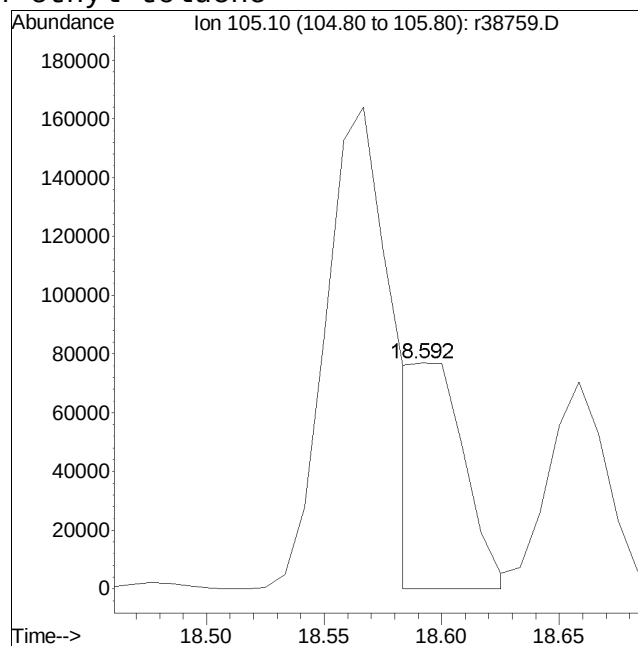
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200312.M
Data File : r38759.D Operator : AIRPIAN03:EW
Date Inj'd : 3/20/2020 0:6: 6 Instrument :
Sample : L2011723-06,3,250,250 Quant Date : 3/21/2020 8:04 am

Compound #96: 4-ethyl toluene



Original Peak Response = 427866

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 113971 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193208.D
 Acq On : 21 Mar 2020 1:52 AM
 Operator : AIRLAB19:EW
 Sample : L2011723-01,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 20:39:35 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\03\200320T\r193190.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	8.775	49	351122	10.000	ppbV	0.00
Standard Area = 288364			Recovery	=	121.76%	
43) 1,4-difluorobenzene	10.740	114	1066245	10.000	ppbV	0.00
Standard Area = 940727			Recovery	=	113.34%	
67) chlorobenzene-D5	14.875	54	134903	10.000	ppbV	0.00
Standard Area = 108860			Recovery	=	123.92%	

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	3.562	85	8056	0.409	ppbV	98
6) chloromethane	3.772	50	3260	0.259	ppbV	99
7) Freon-114	3.910		0	N.D.		
9) vinyl chloride	0.000		0	N.D.		
10) 1,3-butadiene	4.240	54	11175	0.830	ppbV	96
13) bromomethane	0.000		0	N.D.		
14) chloroethane	4.792		0	N.D.		
15) ethanol	4.930	31	111277	10.846	ppbV #	63
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.483	43	753012	39.937	ppbV #	100
21) trichlorofluoromethane	5.697	101	4308	0.208	ppbV	97
22) isopropyl alcohol	5.770	45	58862	1.643	ppbV	100
26) 1,1-dichloroethene	0.000		0	N.D.	d	
27) tertiary butyl alcohol	6.432	59	67138	2.044	ppbV #	95
28) methylene chloride	6.540	49	8130	0.353	ppbV	88
29) 3-chloropropene	0.000		0	N.D.	d	
30) carbon disulfide	6.846	76	92534	1.444	ppbV #	82
31) Freon 113	6.822	101	2249	0.067	ppbV	96
32) trans-1,2-dichloroethene	0.000		0	N.D.		
33) 1,1-dichloroethane	0.000		0	N.D.	d	
34) MTBE	0.000		0	N.D.	d	
36) 2-butanone	8.133	43	215839	5.107	ppbV	96
37) cis-1,2-dichloroethene	0.000		0	N.D.		
38) Ethyl Acetate	0.000		0	N.D.	d	
39) chloroform	8.908	83	2032881	69.225	ppbV	94
40) Tetrahydrofuran	9.308	42	87023	3.064	ppbV	99
42) 1,2-dichloroethane	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193208.D
 Acq On : 21 Mar 2020 1:52 AM
 Operator : AIRLAB19:EW
 Sample : L2011723-01,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 20:39:35 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\03\200320T\r193190.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
44) hexane	8.817	57	1267156	32.423	ppbV	#	16
48) 1,1,1-trichloroethane	0.000		0	N.D.			
50) benzene	10.393	78	257634	3.341	ppbV		99
52) carbon tetrachloride	10.553	117	1427	0.069	ppbV		86
53) cyclohexane	10.687	56	618830	14.476	ppbV		99
56) 1,2-dichloropropane	0.000		0	N.D.	d		
57) bromodichloromethane	11.440	83	176126	5.239	ppbV		98
58) 1,4-dioxane	0.000		0	N.D.			
59) trichloroethene	11.487		0	N.D.			
60) 2,2,4-trimethylpentane	11.513	57	646251	5.239	ppbV		94
62) heptane	11.780	43	252318	5.291	ppbV		97
63) cis-1,3-dichloropropene	0.000		0	N.D.			
64) 4-methyl-2-pentanone	12.417	43	30288	0.590	ppbV		96
65) trans-1,3-dichloropropene	0.000		0	N.D.			
66) 1,1,2-trichloroethane	0.000		0	N.D.	d		
68) toluene	13.367	91	1537209	18.713	ppbV		98
72) 2-hexanone	13.567	43	137889	2.889	ppbV	#	67
74) dibromochloromethane	13.750	129	5012	0.159	ppbV		95
75) 1,2-dibromoethane	0.000		0	N.D.			
78) tetrachloroethene	14.358	166	1635655	45.318	ppbV		99
80) chlorobenzene	0.000		0	N.D.	d		
81) ethylbenzene	15.192	91	376214	3.818	ppbV		99
83) m+p-xylene	15.317	91	788667	10.153	ppbV		99
84) bromoform	0.000		0	N.D.			
85) styrene	15.600	104	15270	0.203	ppbV		99
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.	d		
87) o-xylene	15.683	91	337741	4.432	ppbV		99
96) 4-ethyl toluene	16.608	105	95122M6	0.737	ppbV		
97) 1,3,5-trimethylbenzene	16.658	105	79878	0.770	ppbV		95
99) 1,2,4-trimethylbenzene	16.983	105	213713	2.227	ppbV	#	59
101) Benzyl Chloride	0.000		0	N.D.	d		
102) 1,3-dichlorobenzene	17.167		0	N.D.			
103) 1,4-dichlorobenzene	17.167		0	N.D.			
107) 1,2-dichlorobenzene	17.442		0	N.D.			
115) 1,2,4-trichlorobenzene	0.000		0	N.D.			
119) hexachlorobutadiene	0.000		0	N.D.			

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193208.D
 Acq On : 21 Mar 2020 1:52 AM
 Operator : AIRLAB19:EW
 Sample : L2011723-01,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 20:39:35 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\03\200320T\r193190.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Sub List : T015-NY - .s\Data\Airlab19\2020\03\200320T\r193190.D

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\

Data File : r193208.D

Acq On : 21 Mar 2020 1:52 AM

Operator : AIRLAB19:EW

Sample : L2011723-01,3,250,250

Misc : WG1353556,ICAL16553

ALS Vial : 0 Sample Multiplier: 1

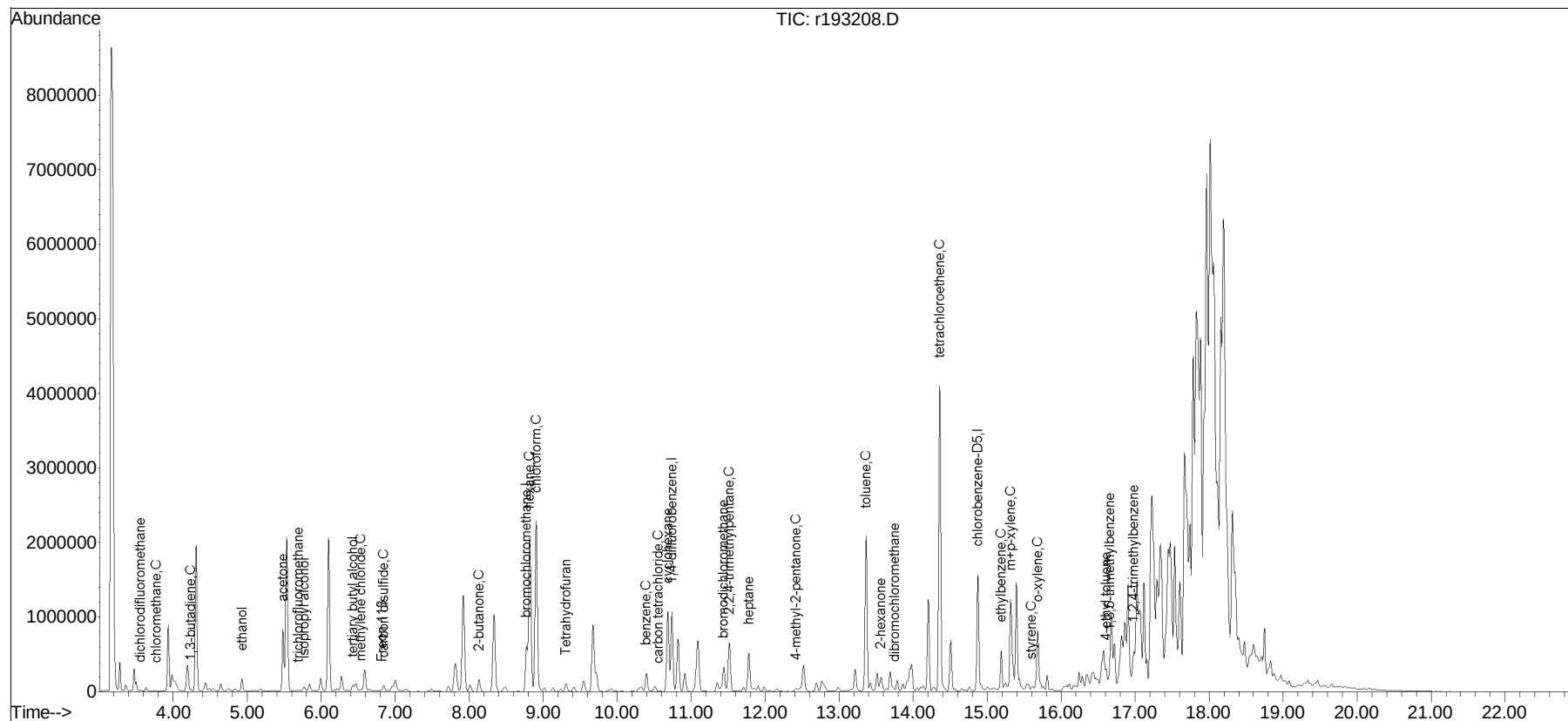
Quant Time: Mar 21 20:39:35 2020

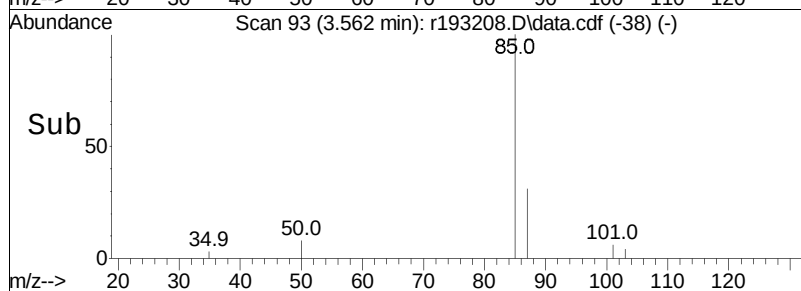
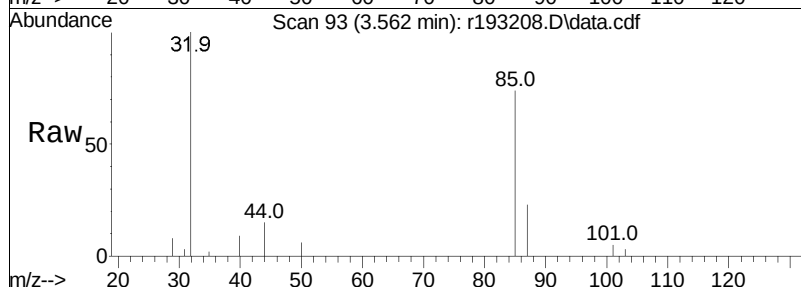
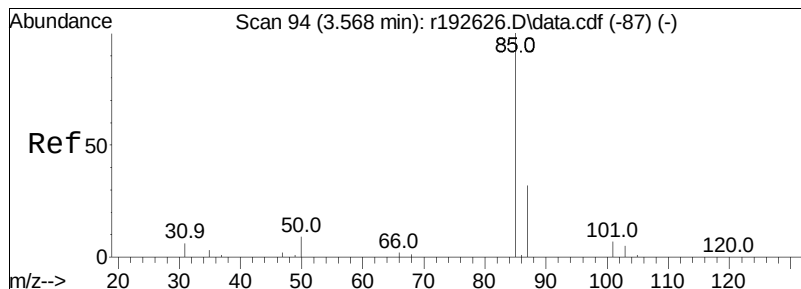
Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M

Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis

QLast Update : Tue Feb 25 10:21:40 2020

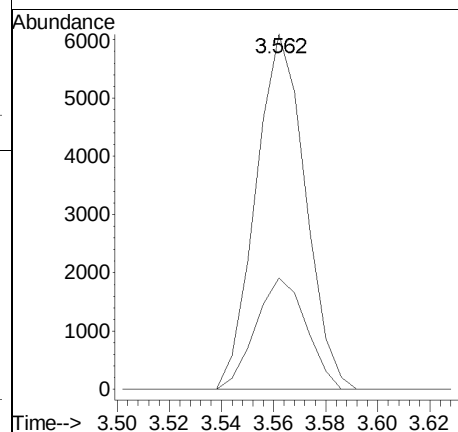
Response via : Initial Calibration

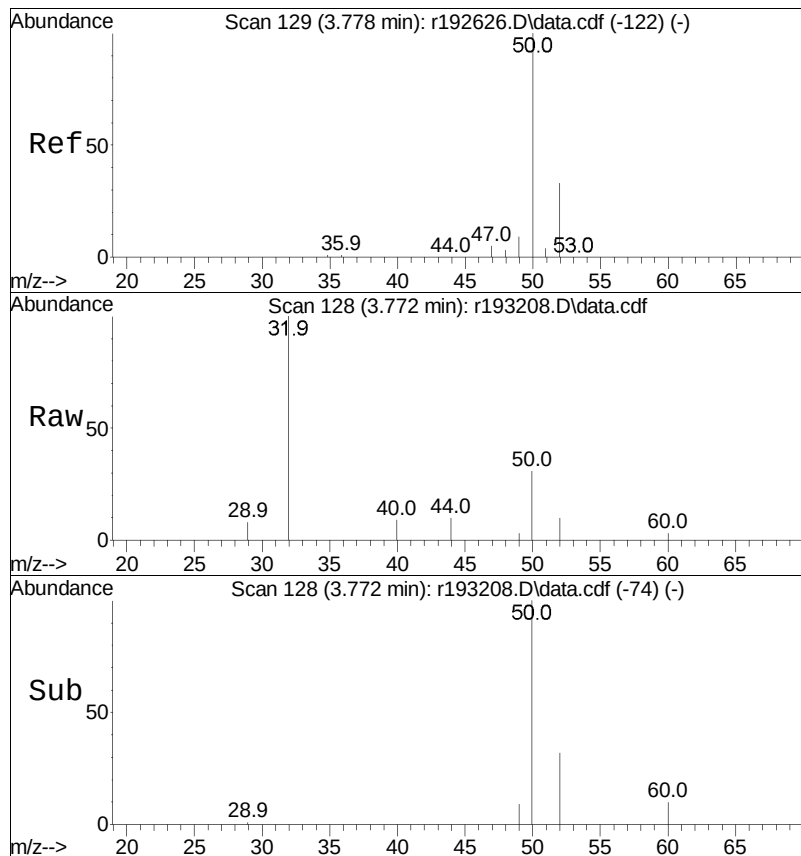




#5
 dichlorodifluoromethane
 Concen: 0.41 ppbV
 RT: 3.562 min Scan# 93
 Delta R.T. 0.000 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

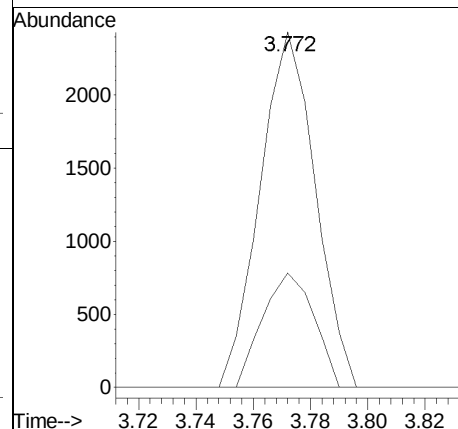
Tgt Ion: 85 Resp: 8056
 Ion Ratio Lower Upper
 85 100
 87 31.4 25.9 38.9

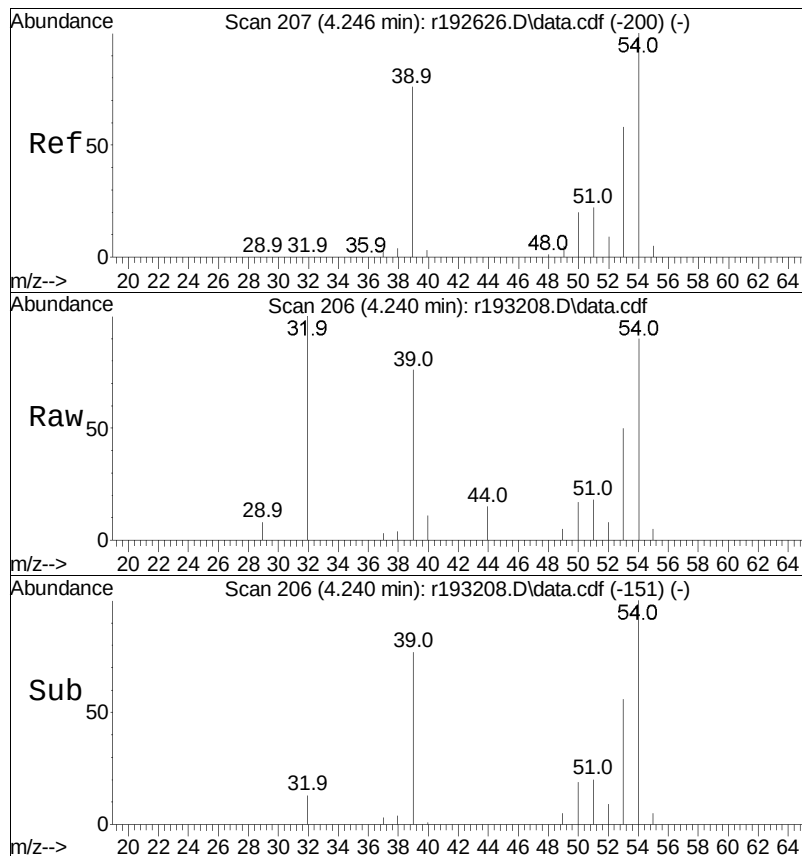




#6
 chloromethane
 Concen: 0.26 ppbV
 RT: 3.772 min Scan# 128
 Delta R.T. -0.006 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

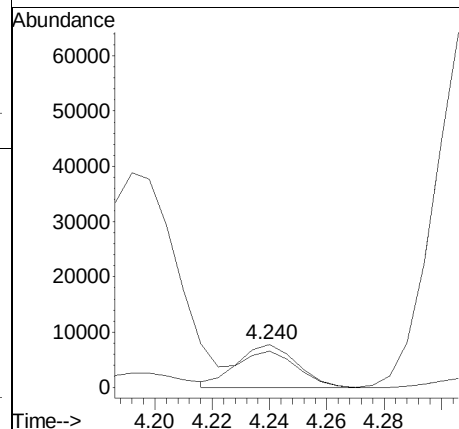
Tgt Ion	Ratio	Lower	Upper
50	100		
52	32.2	26.3	39.5

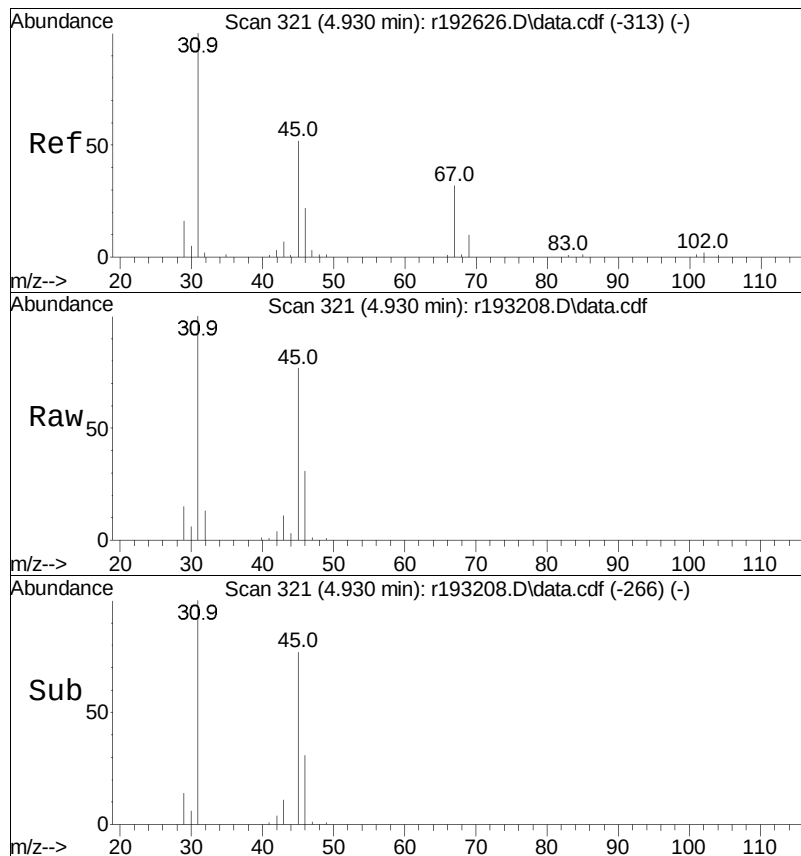




#10
 1,3-butadiene
 Concen: 0.83 ppbV
 RT: 4.240 min Scan# 206
 Delta R.T. 0.000 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

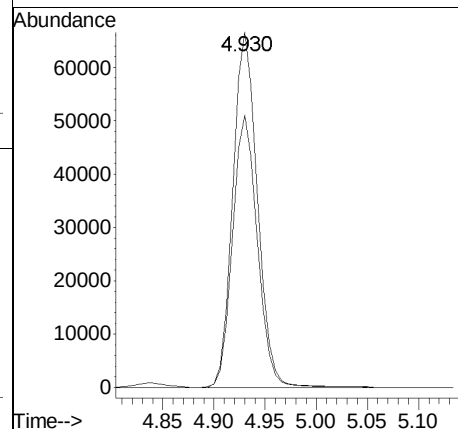
Tgt Ion	Ratio	Lower	Upper
54	100		
39	84.8	65.3	97.9

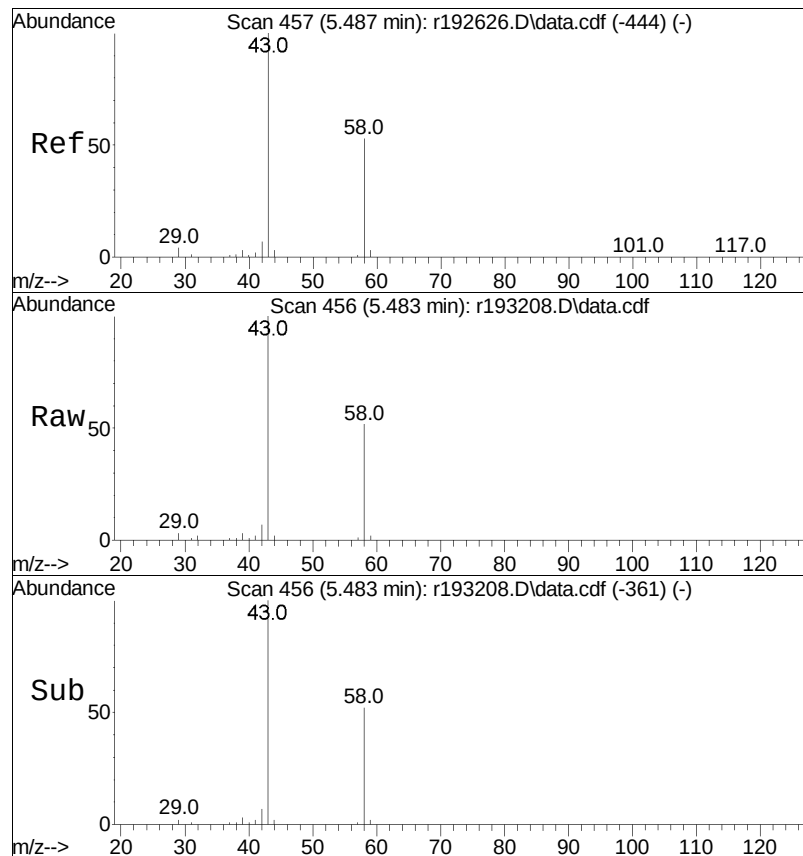




#15
ethanol
Concen: 10.85 ppbV
RT: 4.930 min Scan# 321
Delta R.T. 0.000 min
Lab File: r193208.D
Acq: 21 Mar 2020 1:52 AM

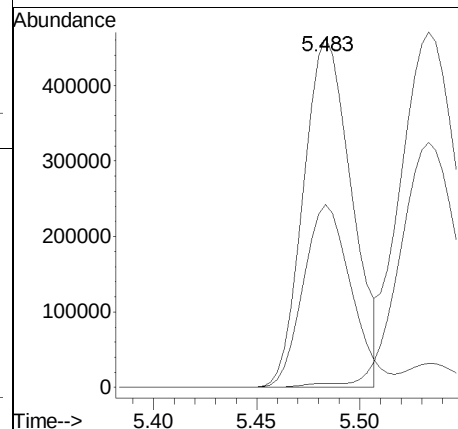
Tgt	Ion	Ratio	Lower	Upper
31	100			
45	76.7	40.6	60.8#	

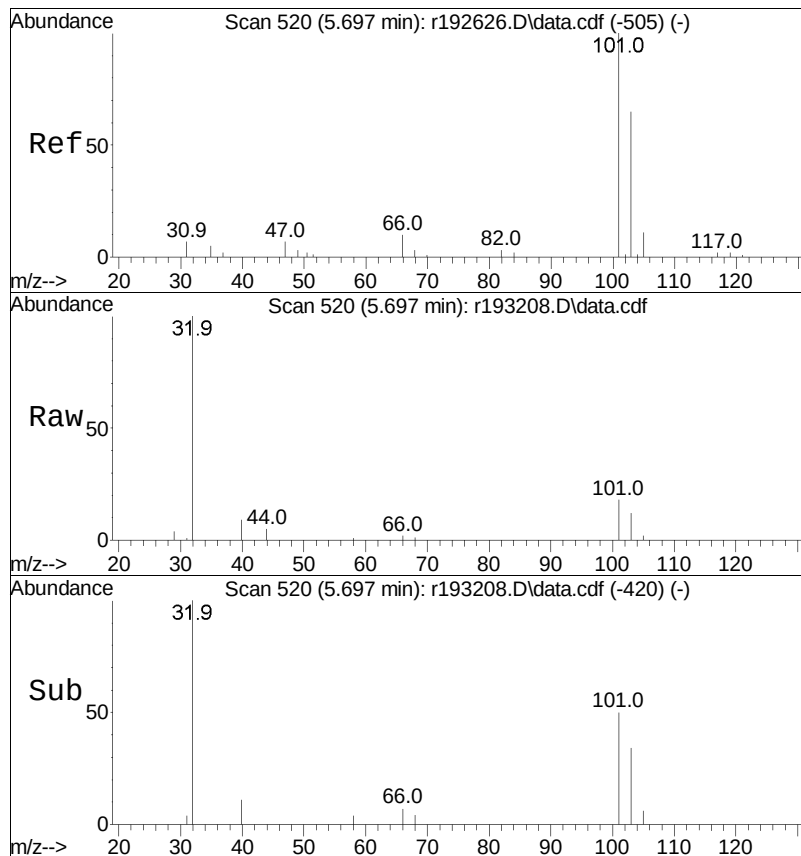




#19
 acetone
 Concen: 39.94 ppbV
 RT: 5.483 min Scan# 456
 Delta R.T. -0.013 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

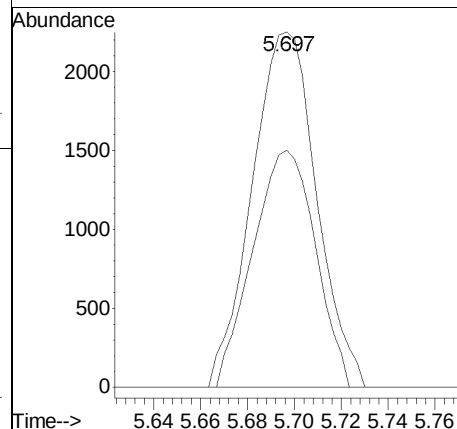
Tgt	Ion: 43	Resp: 753012
Ion	Ratio	Lower Upper
43	100	
58	52.3	42.0 63.0
57	1.2	1.4 2.0#

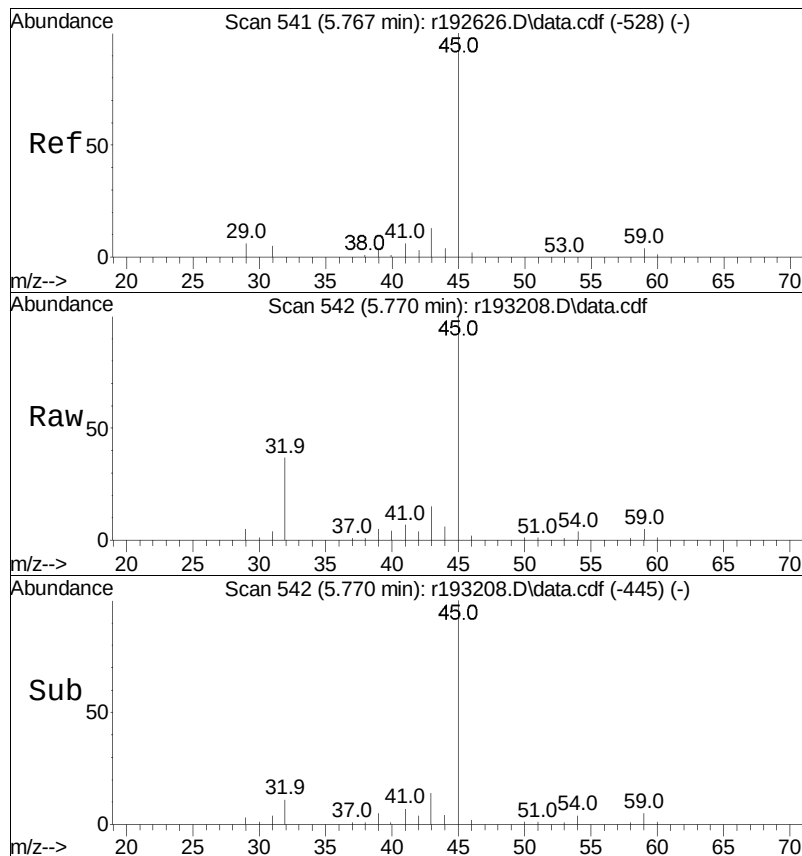




#21
trichlorofluoromethane
Concen: 0.21 ppbV
RT: 5.697 min Scan# 520
Delta R.T. 0.003 min
Lab File: r193208.D
Acq: 21 Mar 2020 1:52 AM

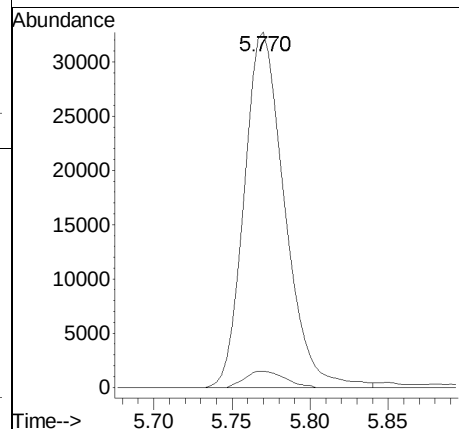
Tgt Ion	Ratio	Lower	Upper
101	100		
103	66.8	51.4	77.2

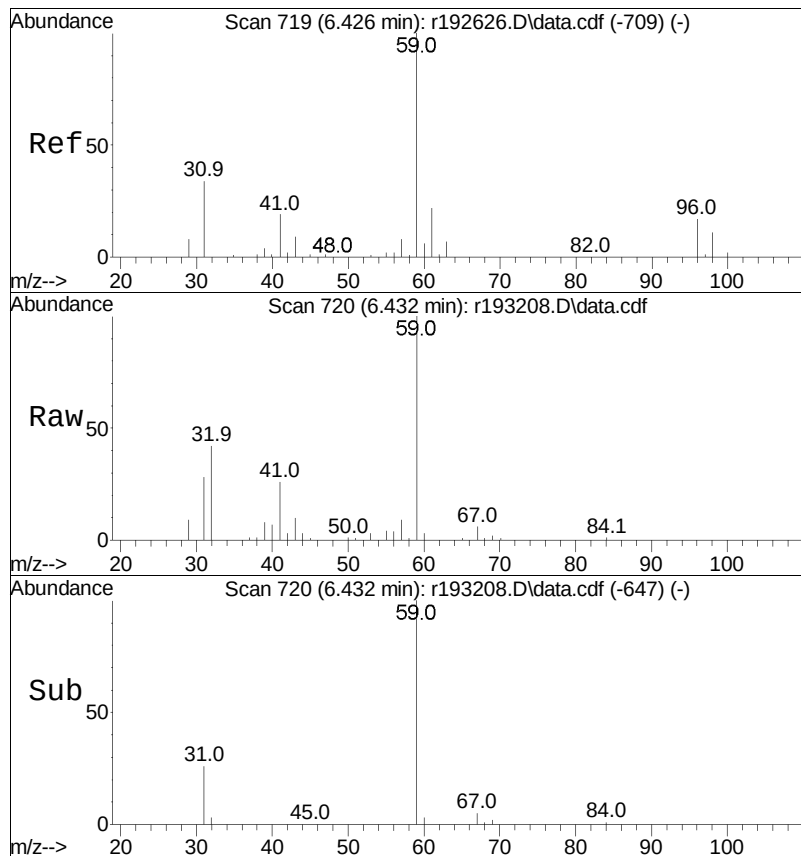




#22
 isopropyl alcohol
 Concen: 1.64 ppbV
 RT: 5.770 min Scan# 542
 Delta R.T. -0.007 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

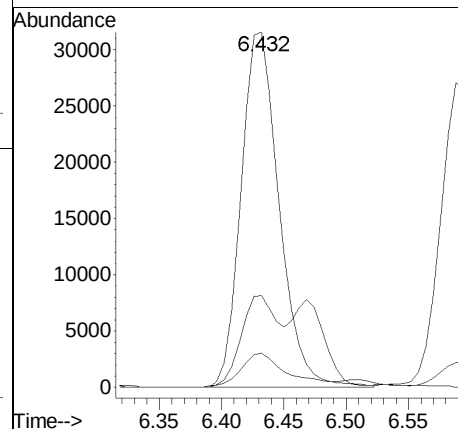
Tgt Ion	Ratio	Lower	Upper
45	100		
59	4.6	3.7	5.5

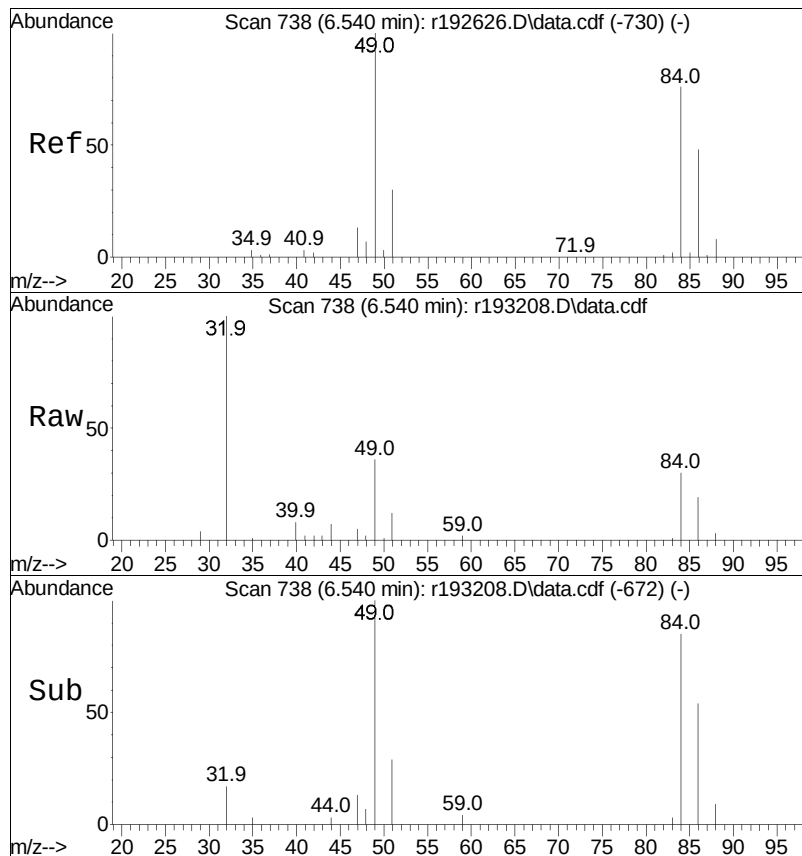




#27
 tertiary butyl alcohol
 Concen: 2.04 ppbV
 RT: 6.432 min Scan# 720
 Delta R.T. -0.018 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

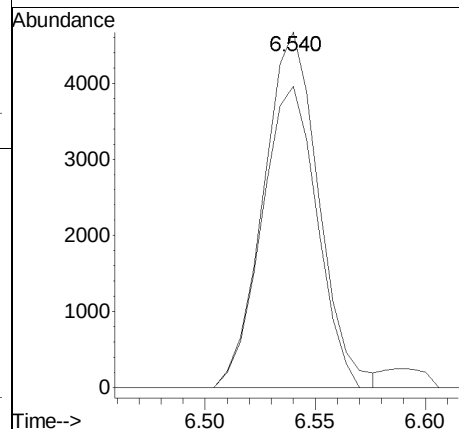
Tgt	Ion: 59	Resp:	67138
Ion	Ratio	Lower	Upper
59	100		
41	25.8	18.8	28.2
43	9.6	9.8	14.8#

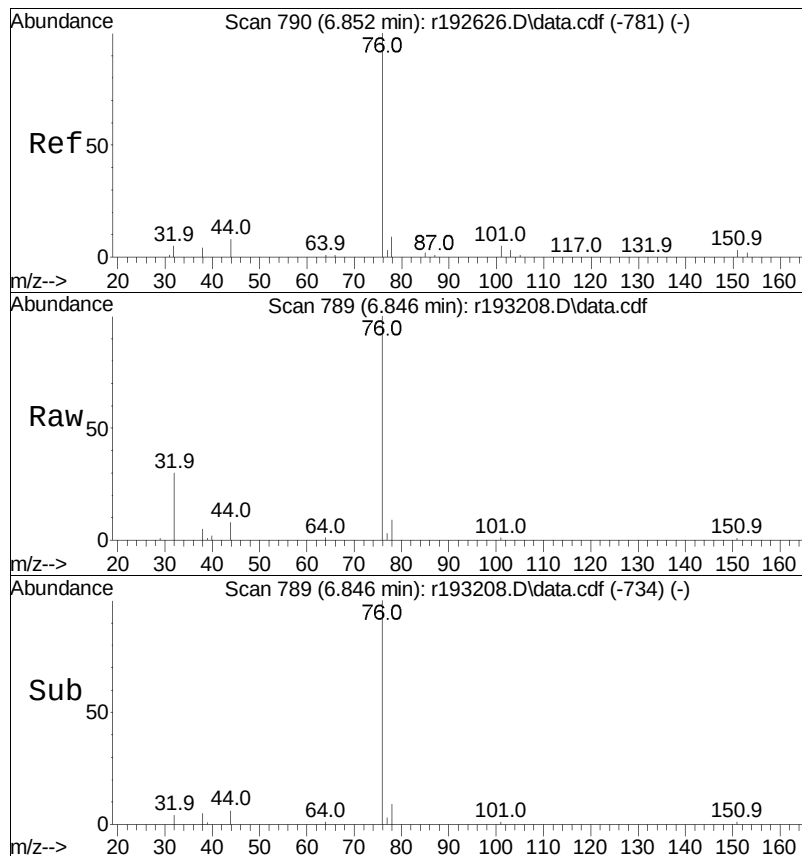




#28
 methylene chloride
 Concen: 0.35 ppbV
 RT: 6.540 min Scan# 738
 Delta R.T. 0.006 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

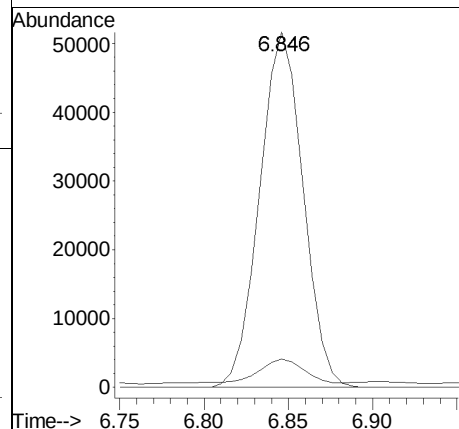
Tgt Ion:	49	Resp:	8130
Ion Ratio	Lower	Upper	
49	100		
84	84.7	59.8	89.6

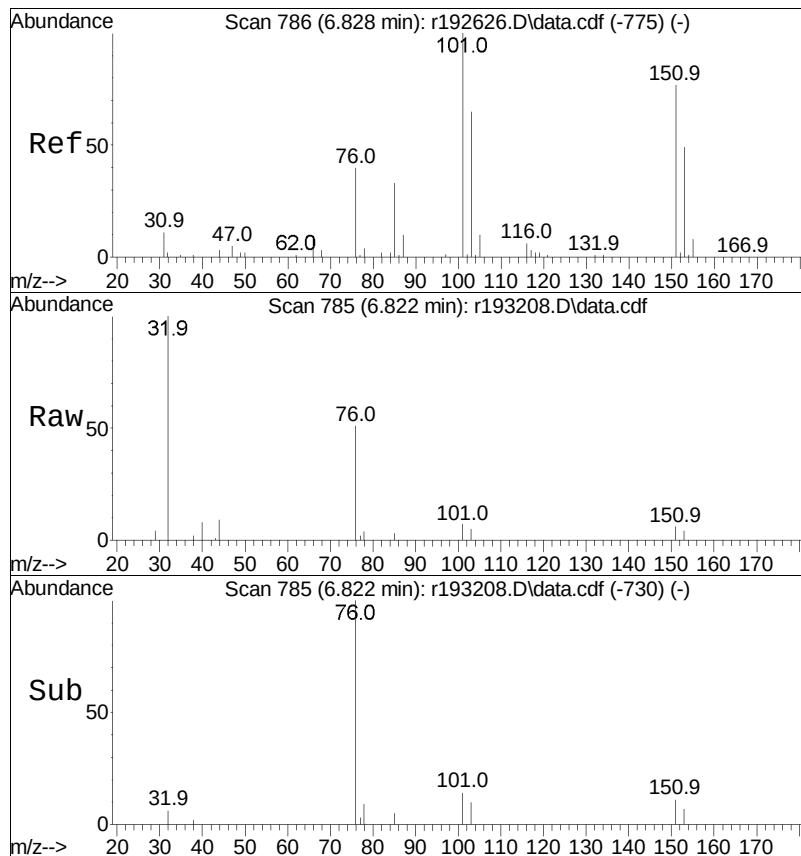




#30
 carbon disulfide
 Concen: 1.44 ppbV
 RT: 6.846 min Scan# 789
 Delta R.T. 0.000 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

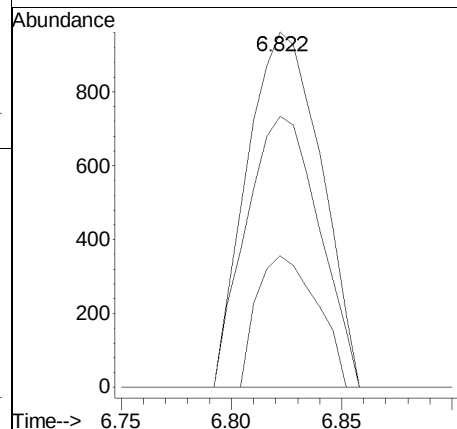
Tgt Ion	Ratio	Lower	Upper
76	100		
44	8.0	12.3	18.5#

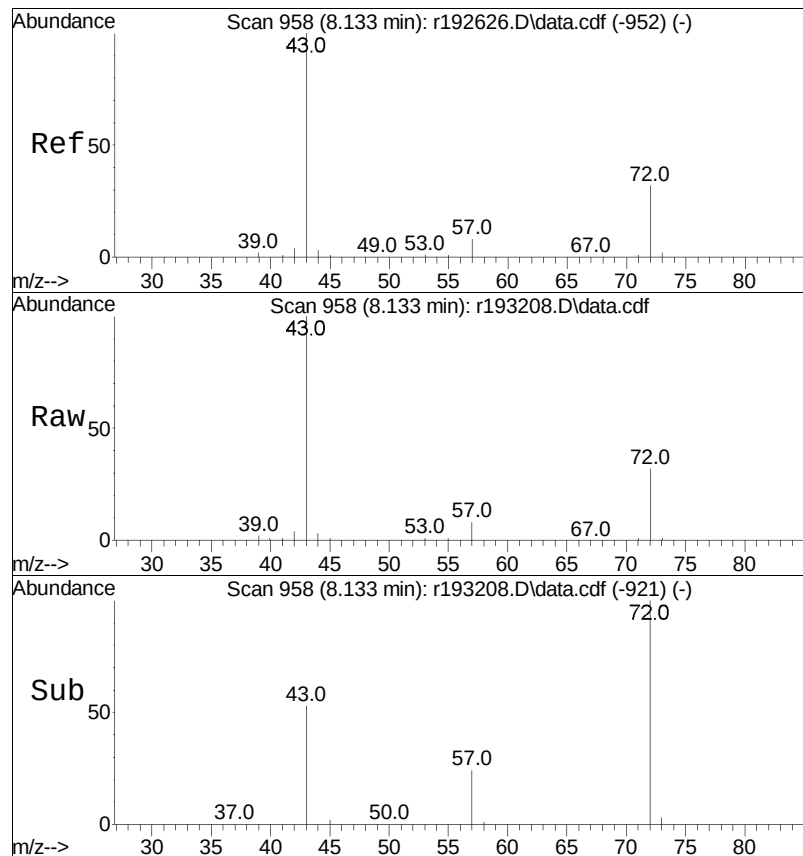




#31
 Freon 113
 Concen: 0.07 ppbV
 RT: 6.822 min Scan# 785
 Delta R.T. 0.000 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

Tgt Ion:	101	Resp:	2249
Ion Ratio	Lower	Upper	
101	100		
85	37.0	26.7	40.1
151	76.3	63.4	95.2





#36

2-butanone

Concen: 5.11 ppbV

RT: 8.133 min Scan# 958

Delta R.T. -0.025 min

Lab File: r193208.D

Acq: 21 Mar 2020 1:52 AM

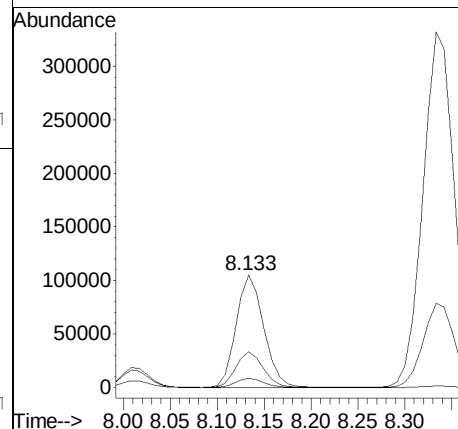
Tgt Ion: 43 Resp: 215839

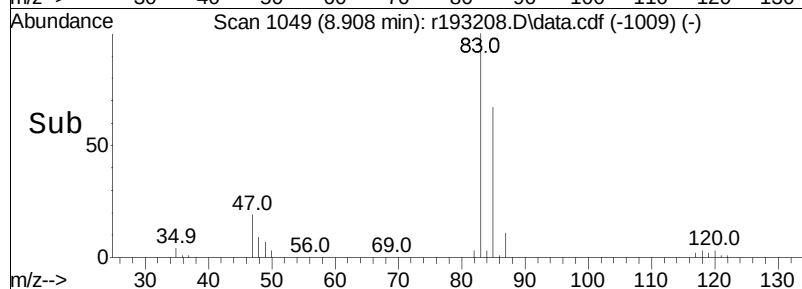
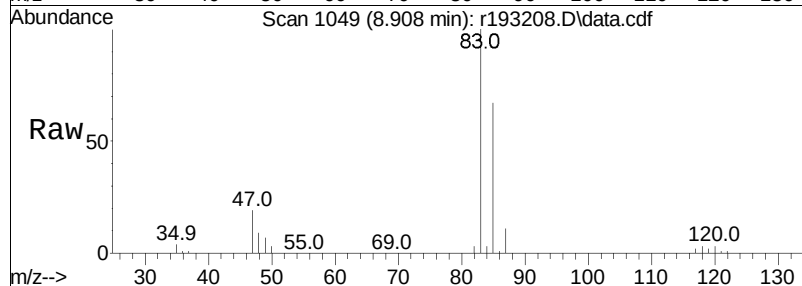
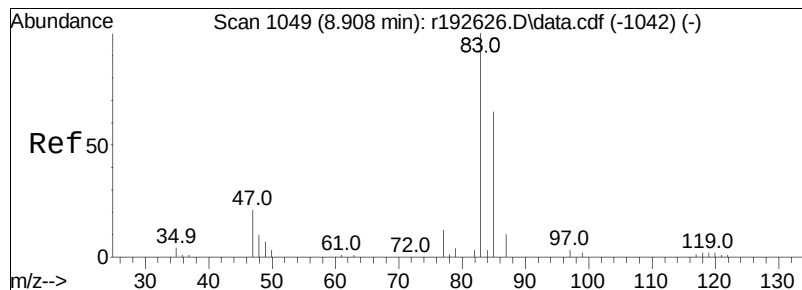
Ion Ratio Lower Upper

43 100

72 31.7 27.7 41.5

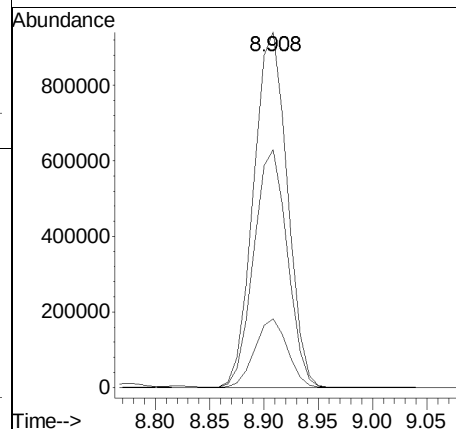
57 8.1 6.3 9.5

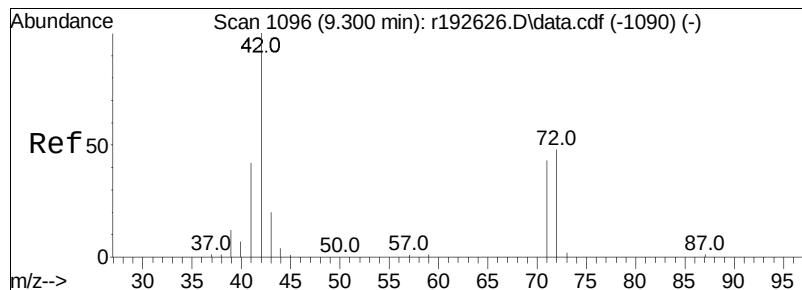




#39
chloroform
Concen: 69.23 ppbV
RT: 8.908 min Scan# 1049
Delta R.T. 0.000 min
Lab File: r193208.D
Acq: 21 Mar 2020 1:52 AM

Tgt Ion	Ratio	Lower	Upper
83	100		
85	66.9	50.1	75.1
47	19.3	17.6	26.4





#40

Tetrahydrofuran

Concen: 3.06 ppbV

RT: 9.308 min Scan# 1097

Delta R.T. -0.033 min

Lab File: r193208.D

Acq: 21 Mar 2020 1:52 AM

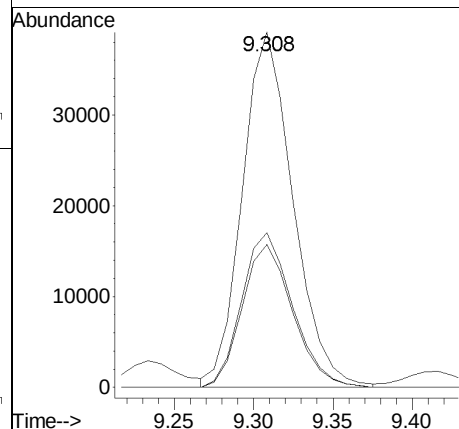
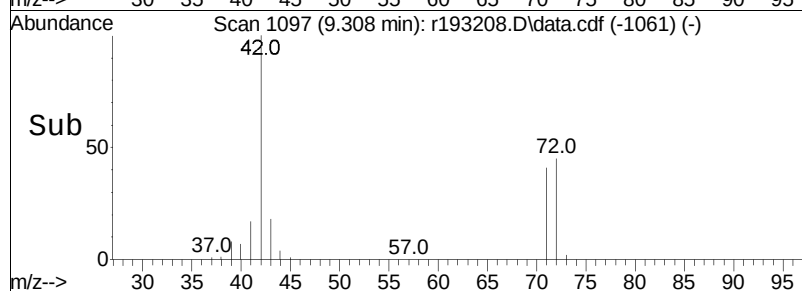
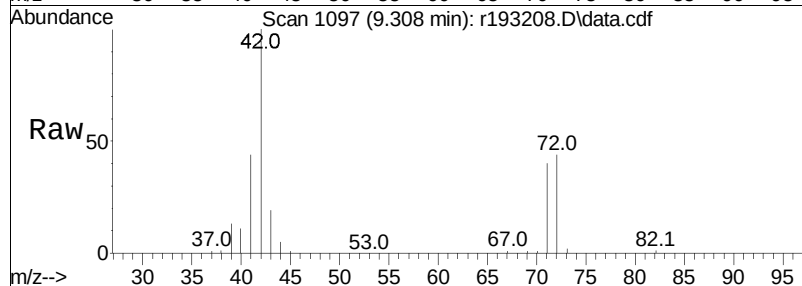
Tgt Ion: 42 Resp: 87023

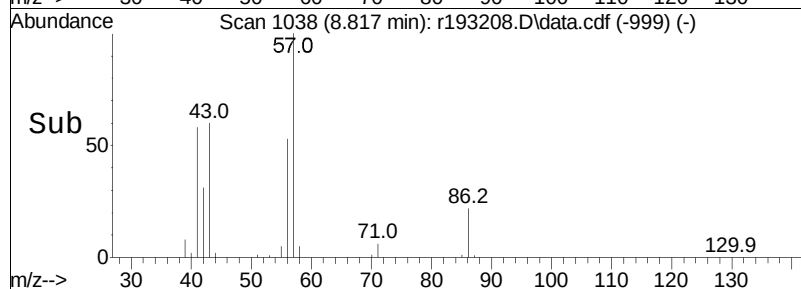
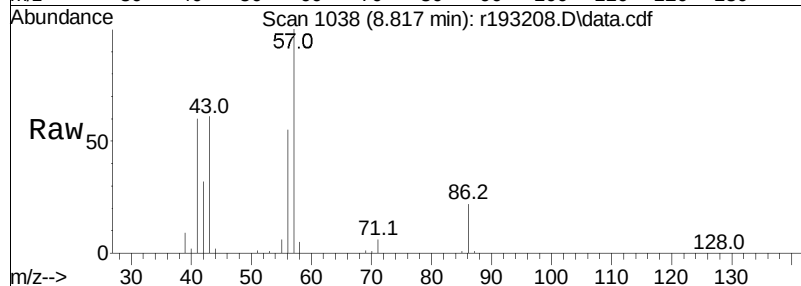
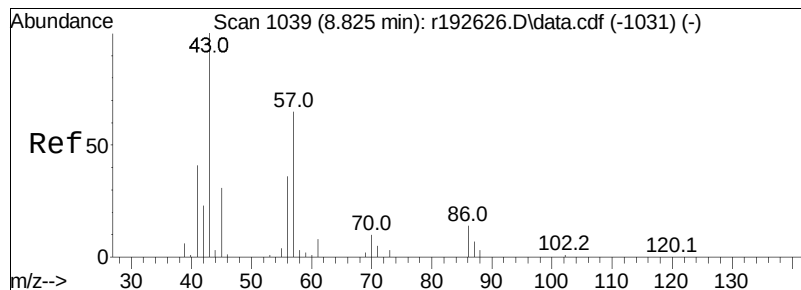
Ion Ratio Lower Upper

42 100

71 40.2 32.5 48.7

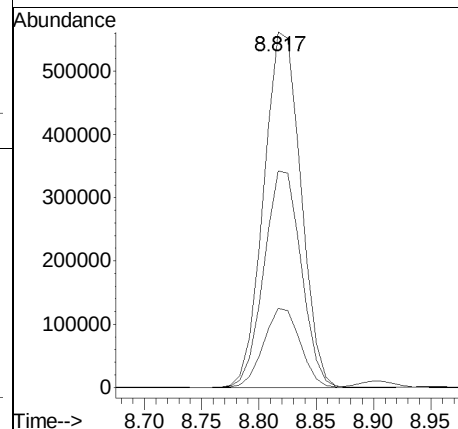
72 43.6 33.7 50.5

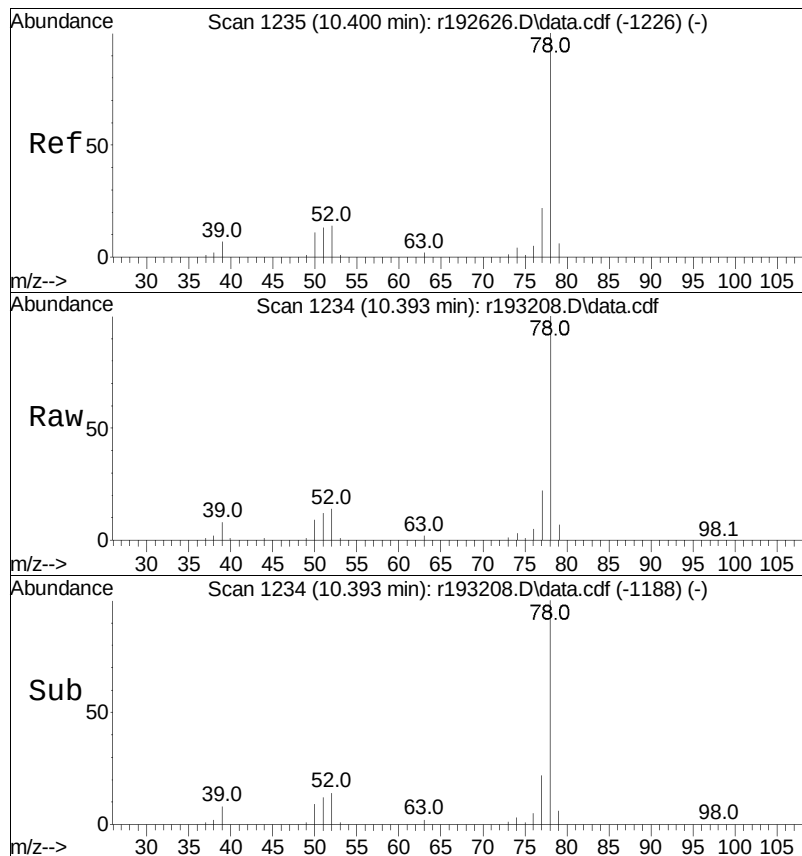




#44
hexane
Concen: 32.42 ppbV
RT: 8.817 min Scan# 1038
Delta R.T. -0.008 min
Lab File: r193208.D
Acq: 21 Mar 2020 1:52 AM

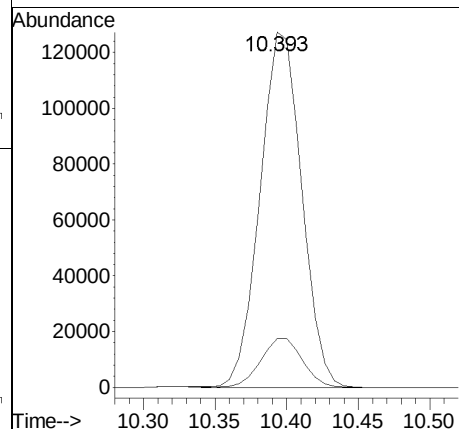
Tgt Ion	Ratio	Lower	Upper
57	100		
43	60.9	159.3	238.9#
86	22.3	15.7	23.5

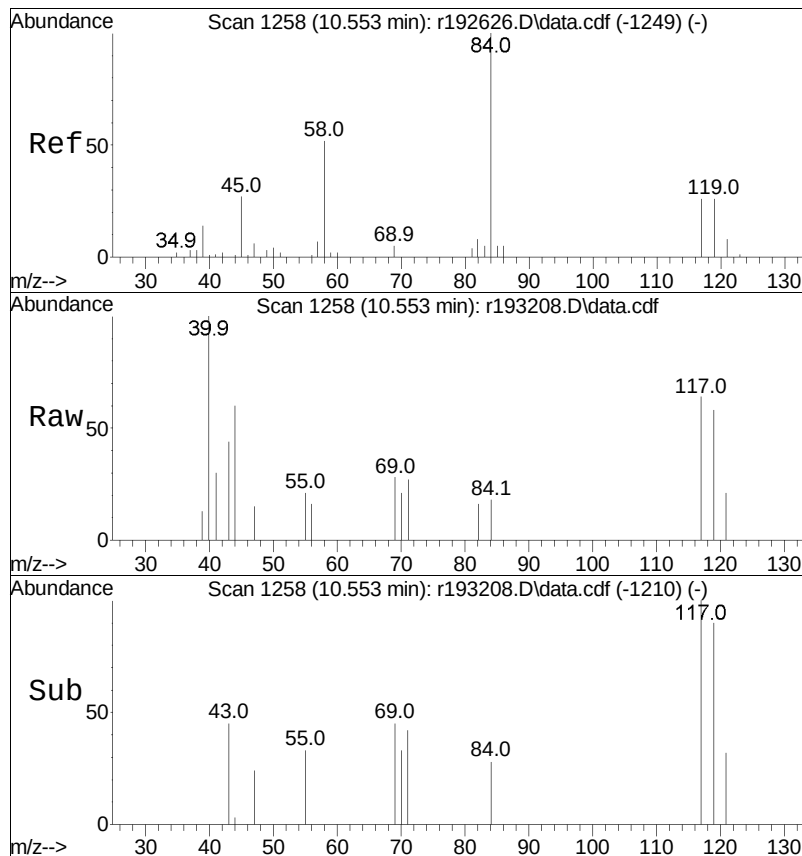




#50
benzene
Concen: 3.34 ppbV
RT: 10.393 min Scan# 1234
Delta R.T. -0.007 min
Lab File: r193208.D
Acq: 21 Mar 2020 1:52 AM

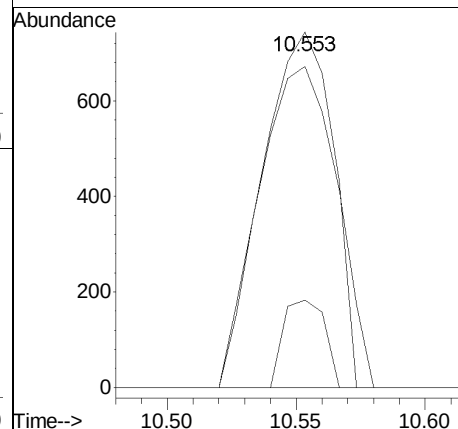
Tgt Ion	Ratio	Lower	Upper
78	100		
52	13.8	11.4	17.2

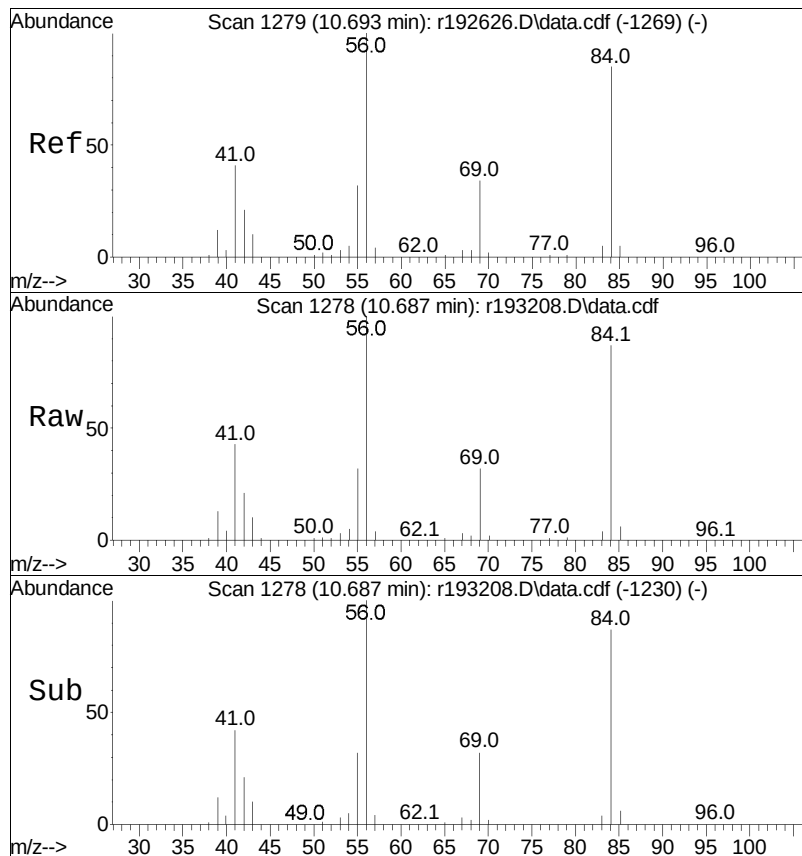




#52
carbon tetrachloride
Concen: 0.07 ppbV
RT: 10.553 min Scan# 1258
Delta R.T. -0.007 min
Lab File: r193208.D
Acq: 21 Mar 2020 1:52 AM

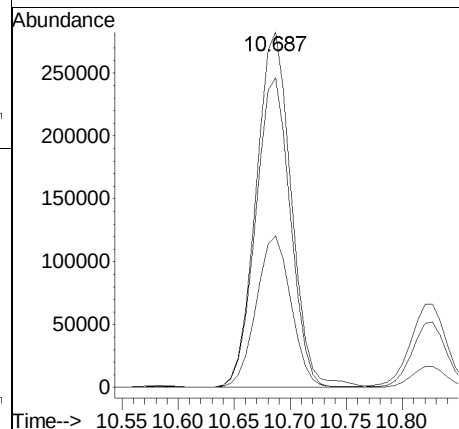
Tgt Ion	Ratio	Resp	Lower	Upper
117	100	1427		
119	90.3		85.4	128.2
82	24.6		22.6	33.8

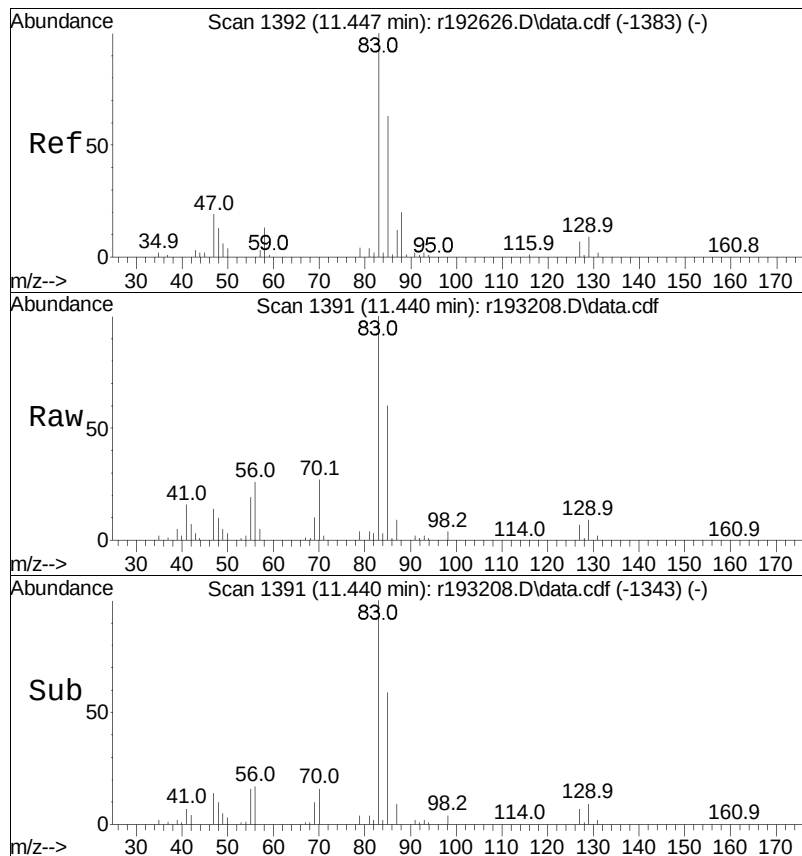




#53
 cyclohexane
 Concen: 14.48 ppbV
 RT: 10.687 min Scan# 1278
 Delta R.T. -0.007 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

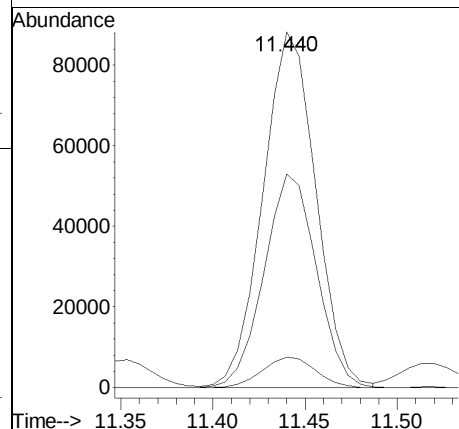
Tgt	Ion: 56	Resp: 618830
Ion	Ratio	Lower Upper
56	100	
84	87.1	69.8 104.6
41	42.6	32.1 48.1

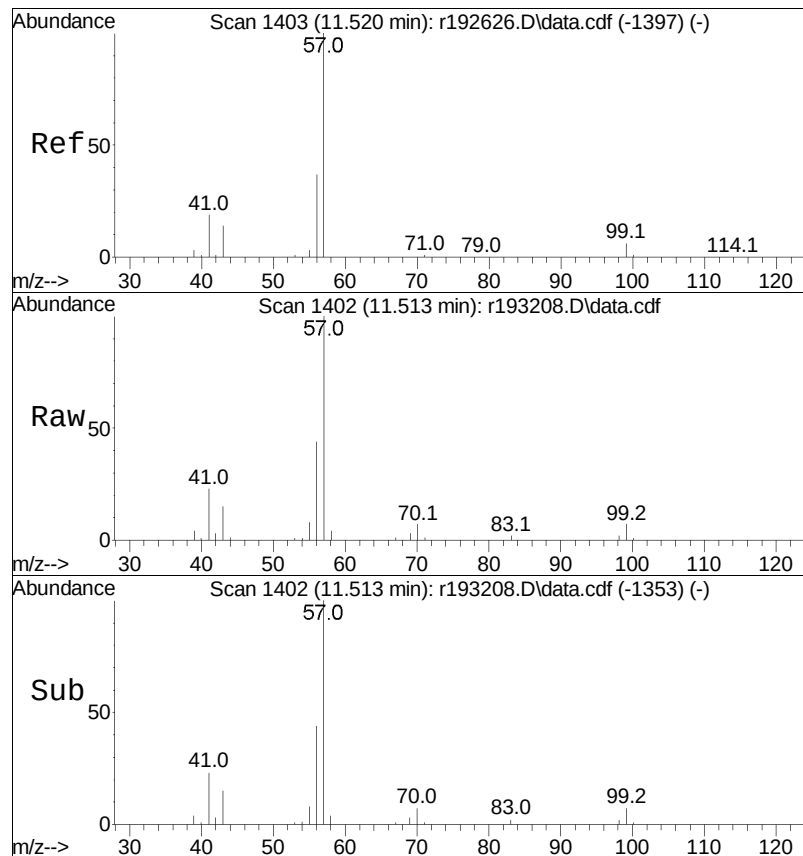




#57
 bromodichloromethane
 Concen: 5.24 ppbV
 RT: 11.440 min Scan# 1391
 Delta R.T. -0.007 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

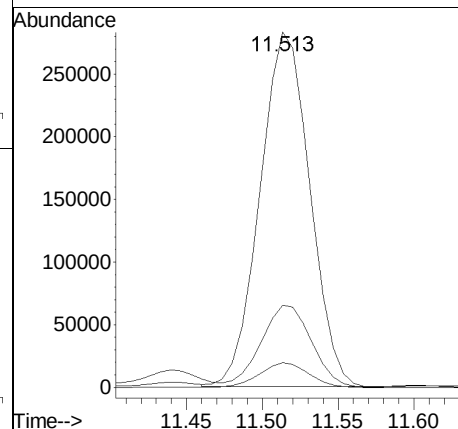
Tgt Ion	Ratio	Resp	Lower	Upper
83	100	176126		
85	60.1		49.1	73.7
129	8.5		7.8	11.6

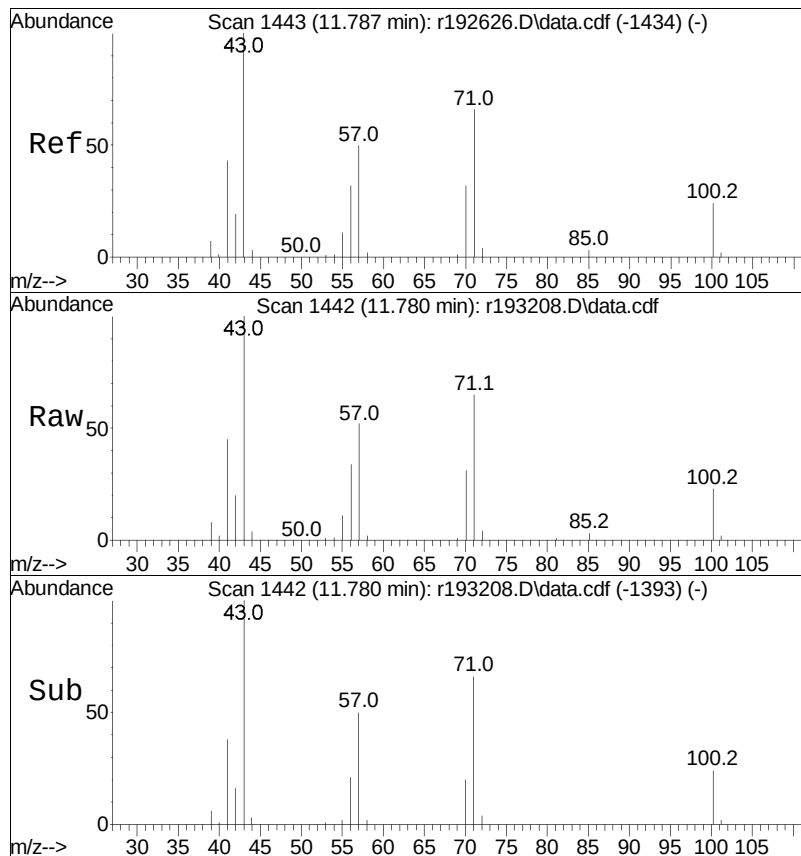




#60
 2,2,4-trimethylpentane
 Concen: 5.24 ppbV
 RT: 11.513 min Scan# 1402
 Delta R.T. -0.007 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

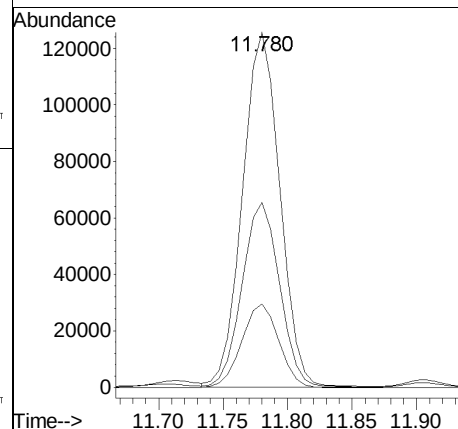
Tgt Ion:	57	Resp:	646251
Ion Ratio	Lower	Upper	
57	100		
99	7.0	6.0	9.0
41	23.1	15.6	23.4

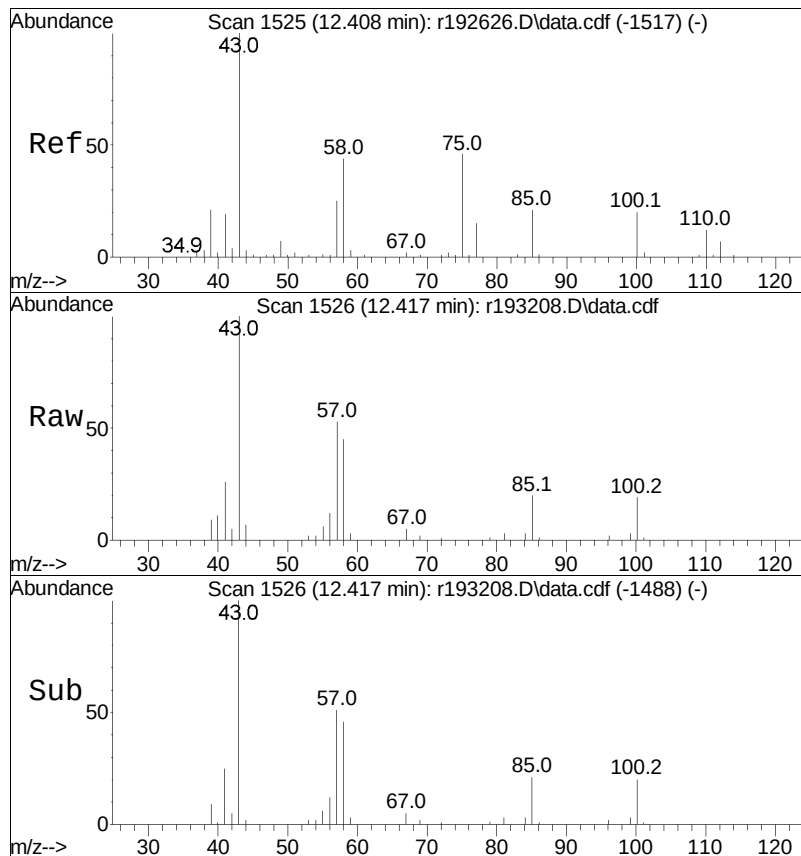




#62
 heptane
 Concen: 5.29 ppbV
 RT: 11.780 min Scan# 1442
 Delta R.T. 0.000 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

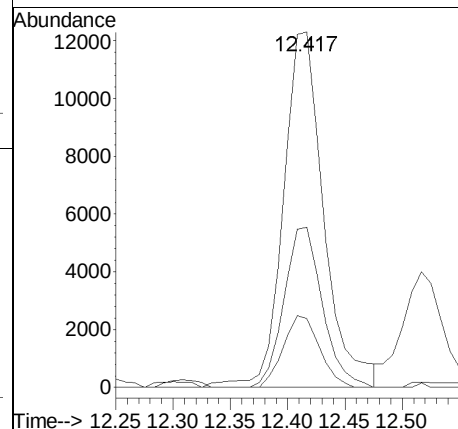
Tgt	Ion: 43	Resp: 252318
Ion	Ratio	Lower Upper
43	100	
57	52.1	41.0 61.6
100	23.5	21.4 32.2

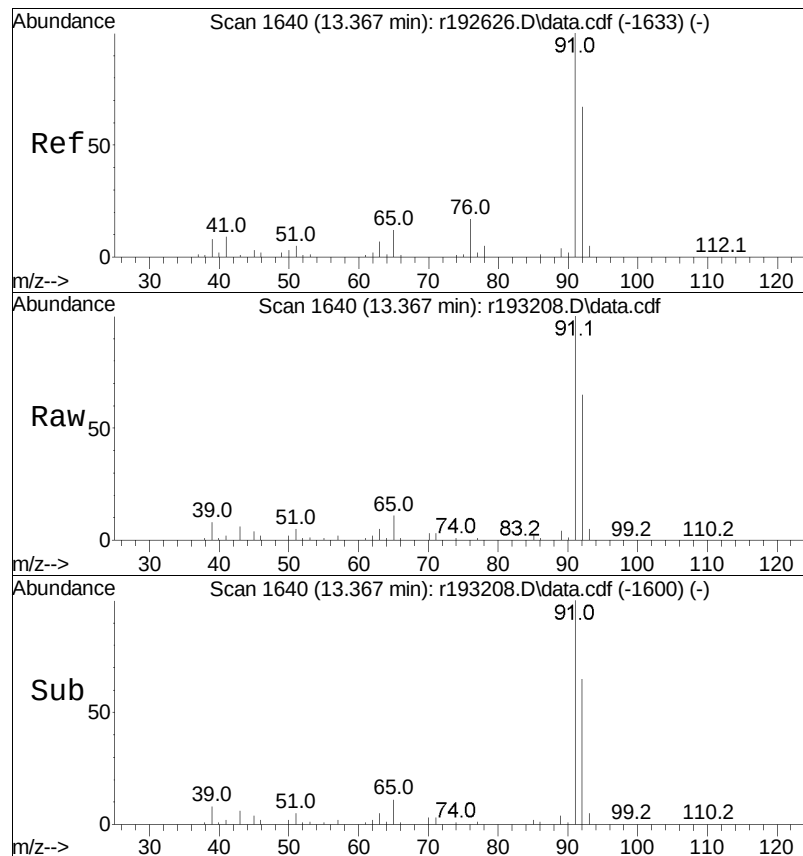




#64
 4-methyl-2-pentanone
 Concen: 0.59 ppbV
 RT: 12.417 min Scan# 1526
 Delta R.T. -0.017 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

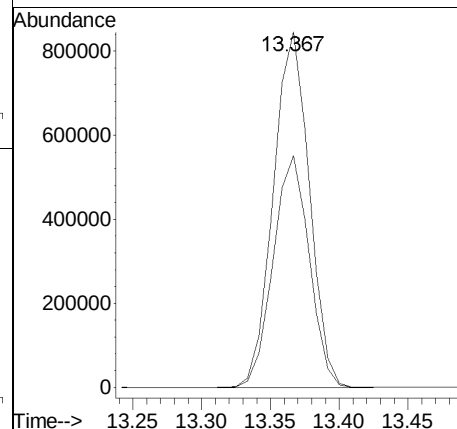
Tgt Ion:	43	Resp:	30288
Ion Ratio	Lower	Upper	
43	100		
58	45.1	32.9	49.3
100	19.4	15.4	23.2

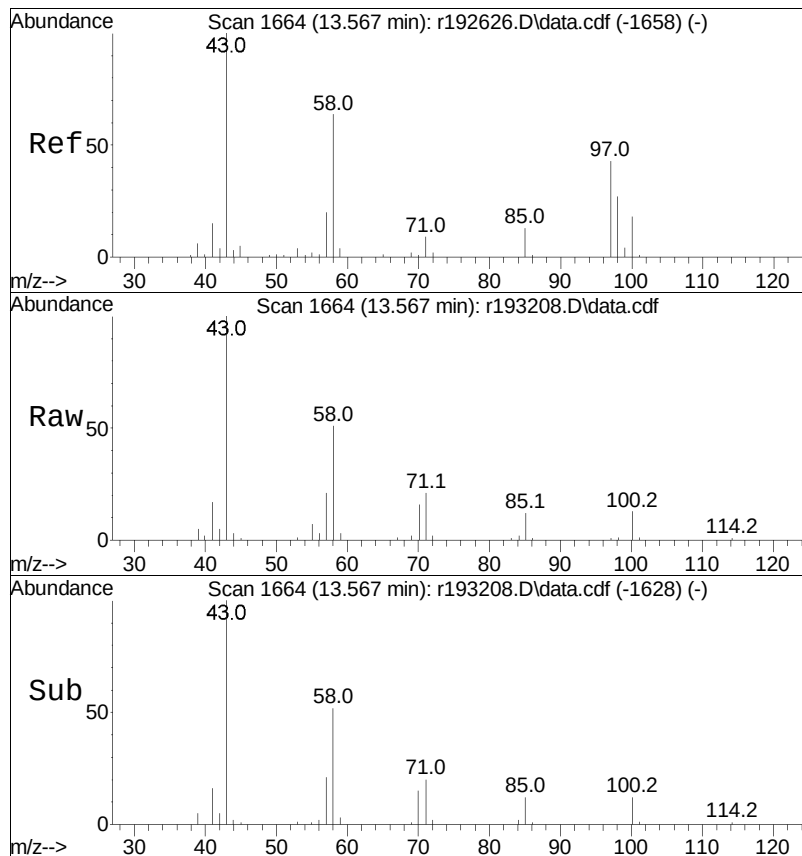




#68
toluene
Concen: 18.71 ppbV
RT: 13.367 min Scan# 1640
Delta R.T. 0.000 min
Lab File: r193208.D
Acq: 21 Mar 2020 1:52 AM

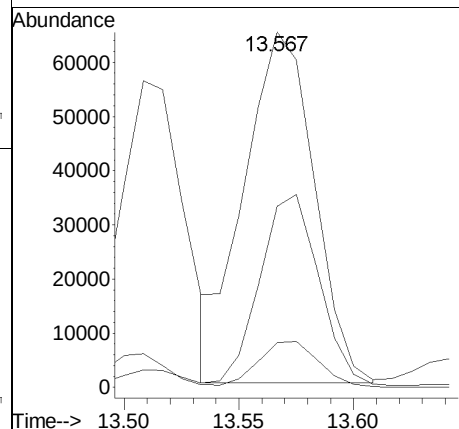
Tgt Ion: 91 Resp: 1537209
Ion Ratio Lower Upper
91 100
92 65.2 53.3 79.9

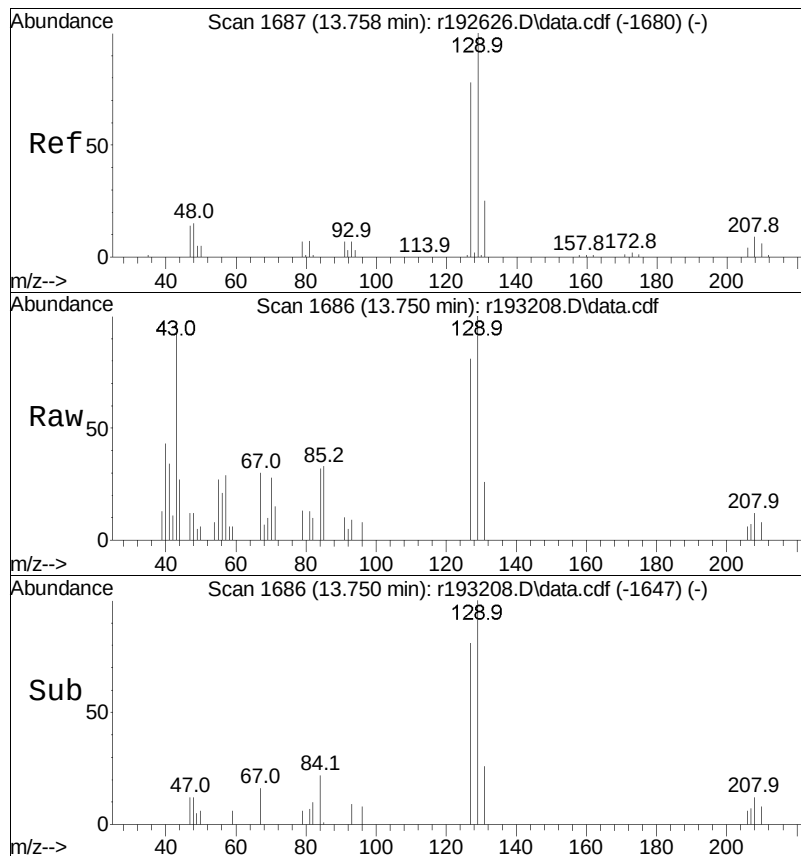




#72
 2-hexanone
 Concen: 2.89 ppbV
 RT: 13.567 min Scan# 1664
 Delta R.T. -0.033 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

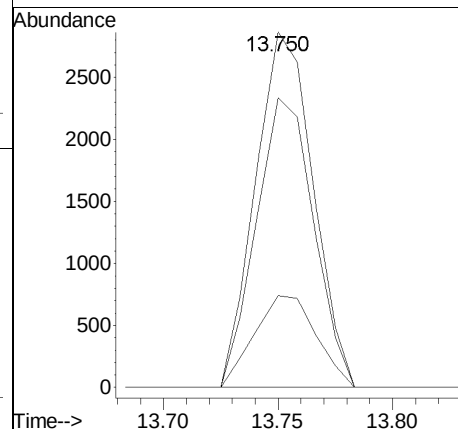
Tgt Ion	Ratio	Lower	Upper
43	100		
58	51.0	62.6	94.0#
100	12.6	26.5	39.7#

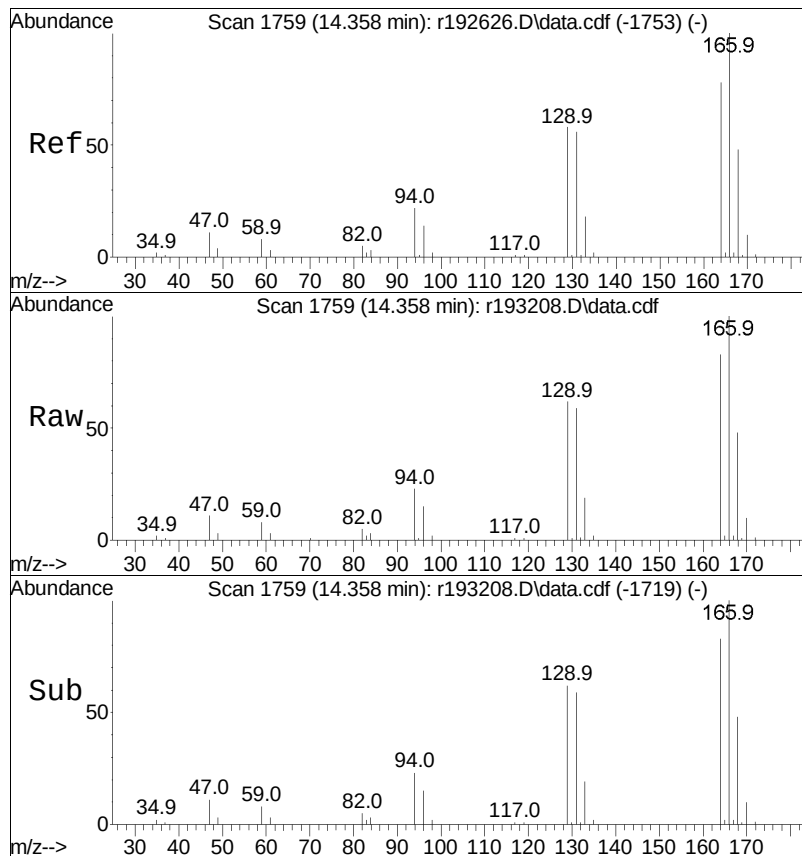




#74
 dibromochloromethane
 Concen: 0.16 ppbV
 RT: 13.750 min Scan# 1686
 Delta R.T. -0.008 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

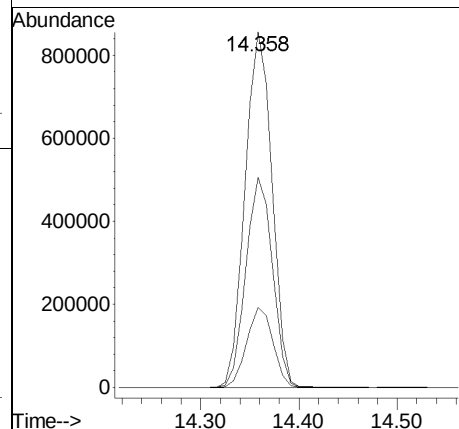
Tgt Ion:	129	Resp:	5012
Ion Ratio	Lower	Upper	
129	100		
127	81.5	60.9	91.3
131	25.8	19.7	29.5

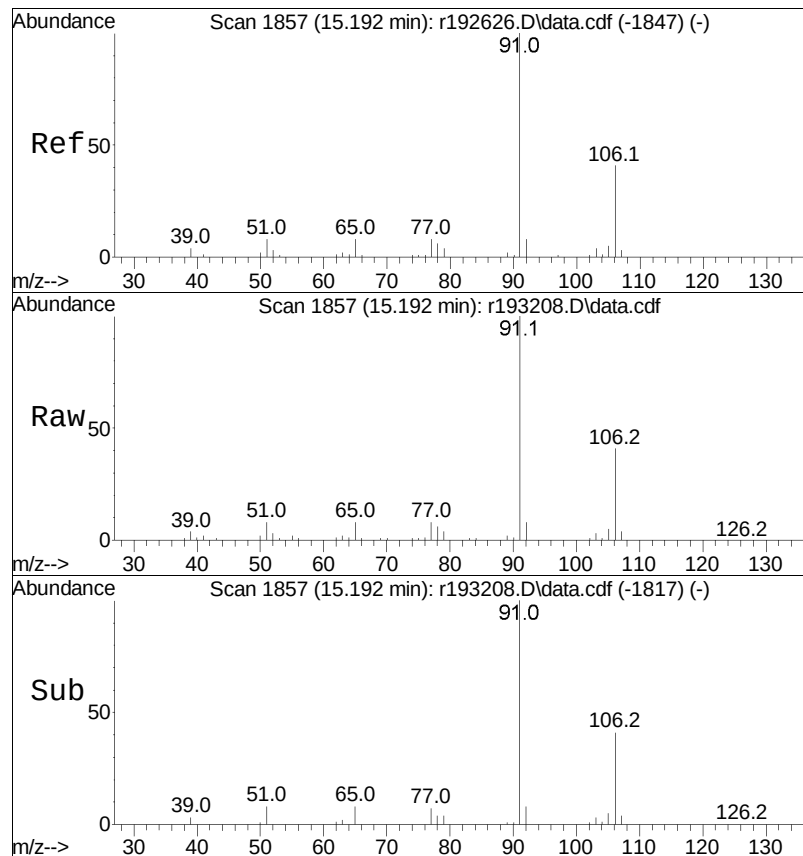




#78
 tetrachloroethene
 Concen: 45.32 ppbV
 RT: 14.358 min Scan# 1759
 Delta R.T. 0.000 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

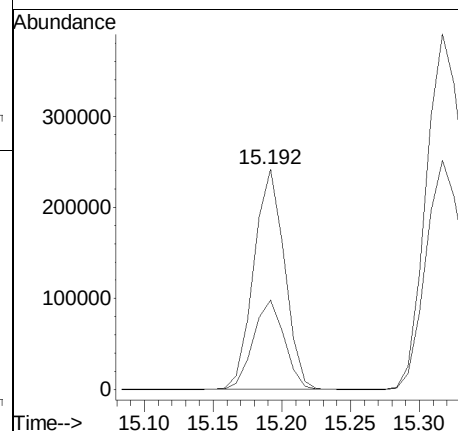
Tgt Ion	Ratio	Lower	Upper
166	100		
131	59.1	46.4	69.6
94	22.5	18.5	27.7

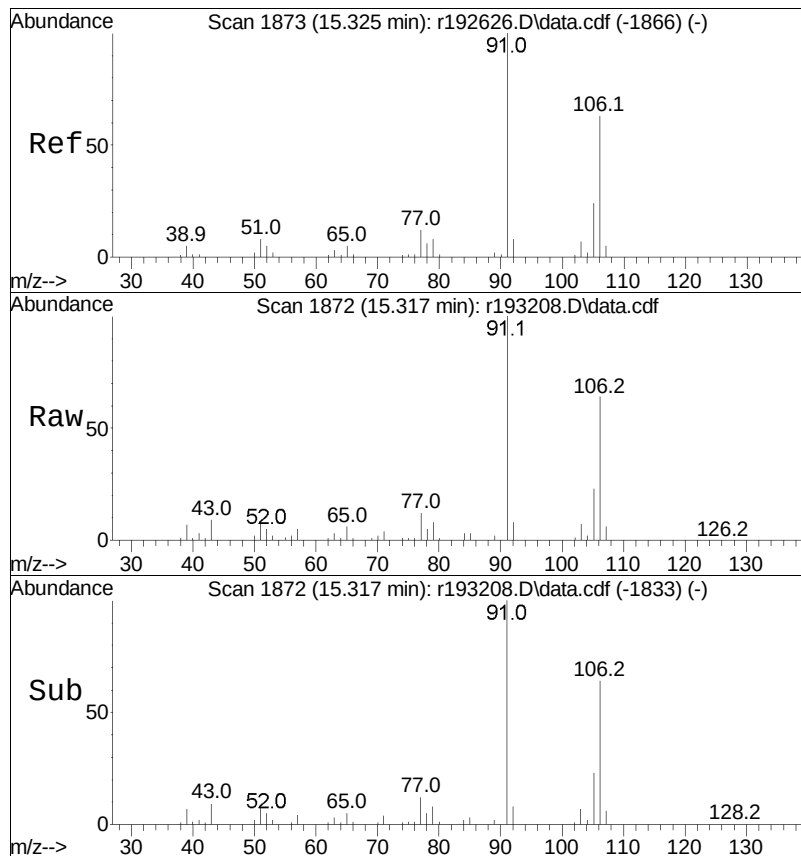




#81
ethylbenzene
Concen: 3.82 ppbV
RT: 15.192 min Scan# 1857
Delta R.T. 0.000 min
Lab File: r193208.D
Acq: 21 Mar 2020 1:52 AM

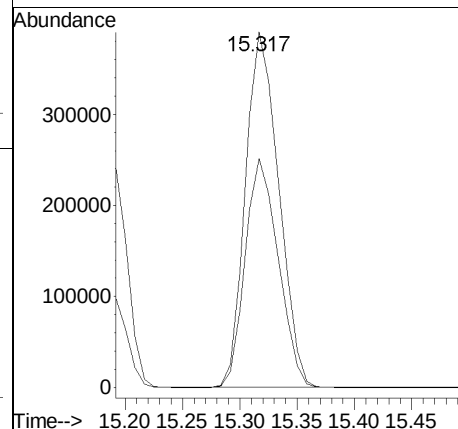
Tgt Ion	Ratio	Lower	Upper
91	100		
106	40.5	32.9	49.3

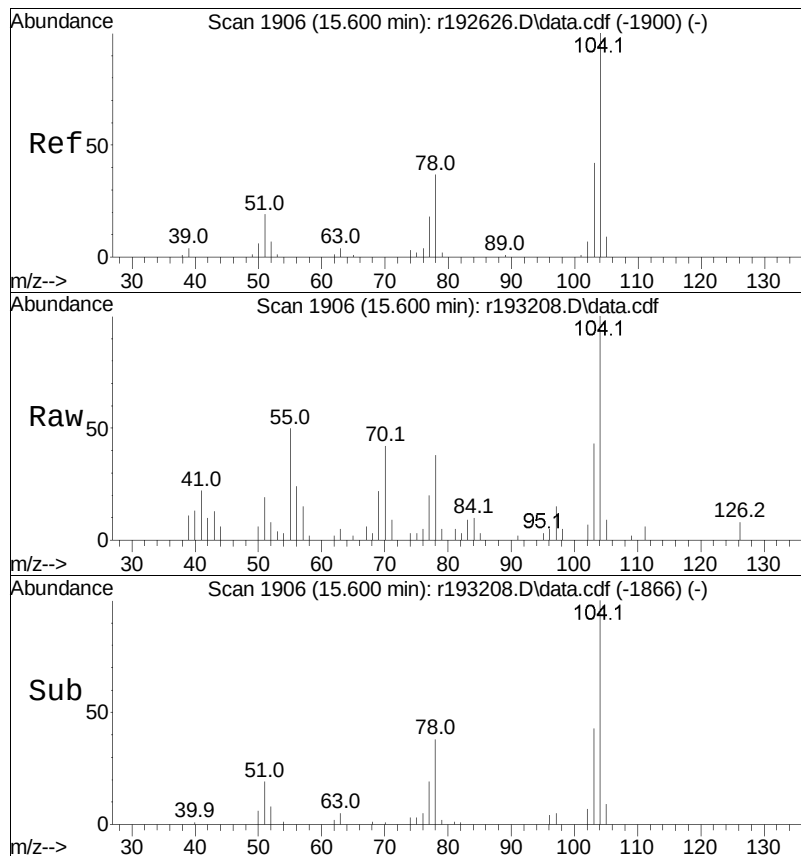




#83
 m+p-xylene
 Concen: 10.15 ppbV
 RT: 15.317 min Scan# 1872
 Delta R.T. -0.008 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

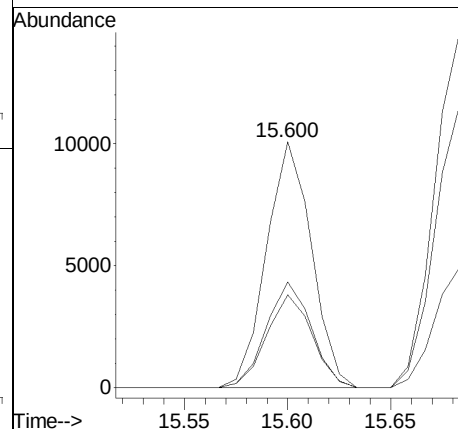
Tgt Ion	Ratio	Lower	Upper
91	100		
106	64.4	51.0	76.4

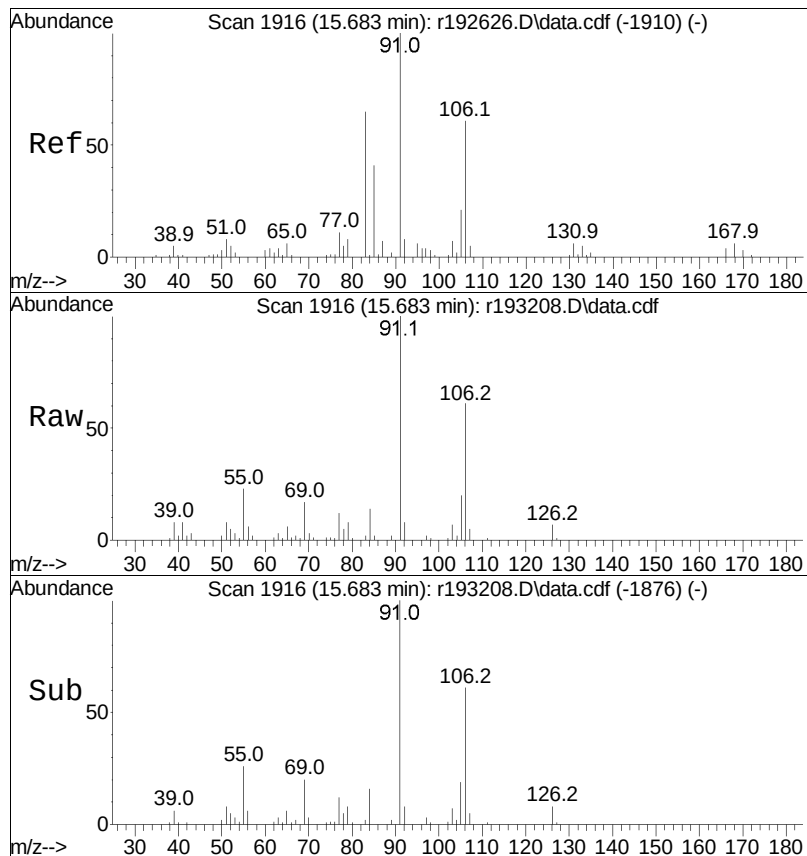




#85
 styrene
 Concen: 0.20 ppbV
 RT: 15.600 min Scan# 1906
 Delta R.T. 0.000 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

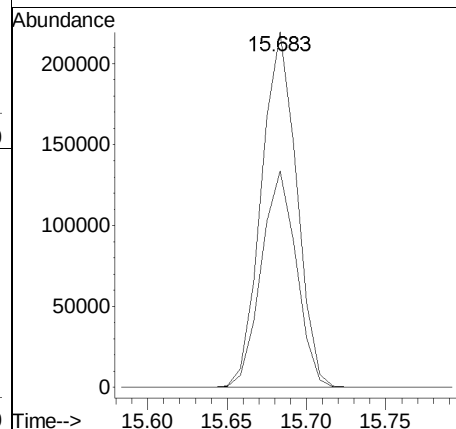
Tgt Ion:	104	Resp:	15270
Ion Ratio	Lower	Upper	
104	100		
103	42.9	33.4	50.0
78	37.7	30.6	46.0

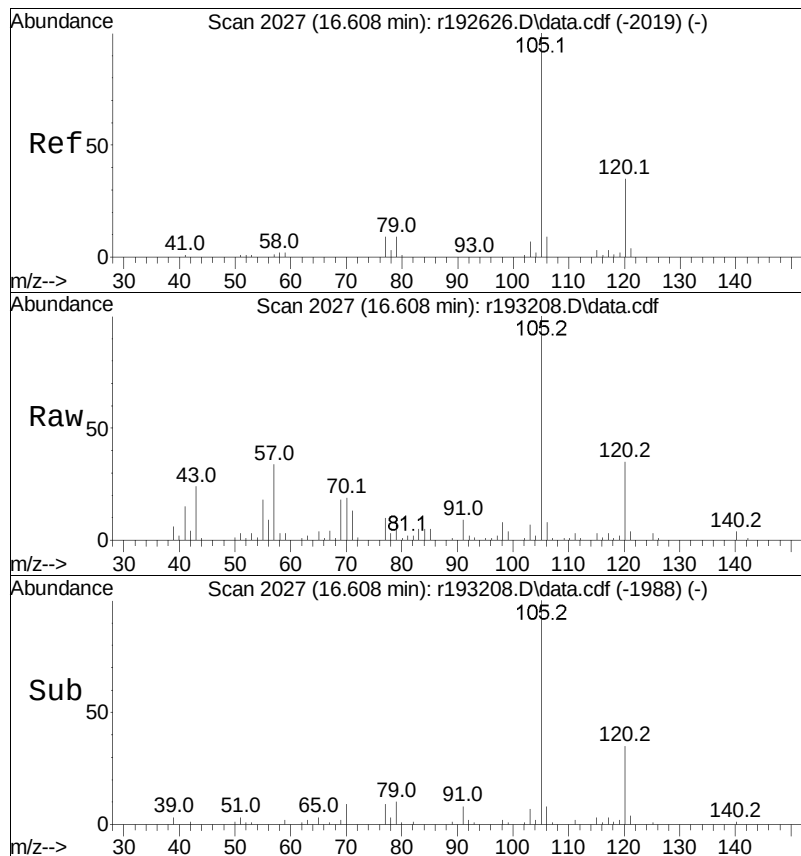




#87
 o-xylene
 Concen: 4.43 ppbV
 RT: 15.683 min Scan# 1916
 Delta R.T. 0.000 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

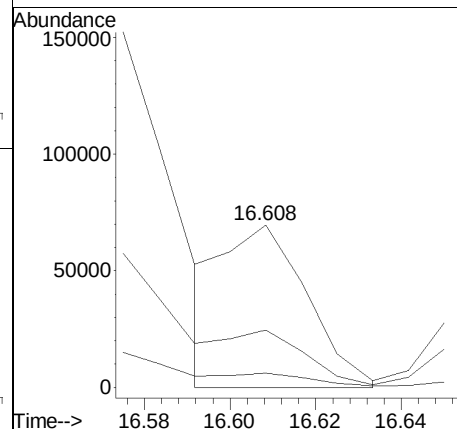
Tgt Ion:	91	Resp:	337741
Ion Ratio	Lower	Upper	
91	100		
106	60.9	47.8	71.8

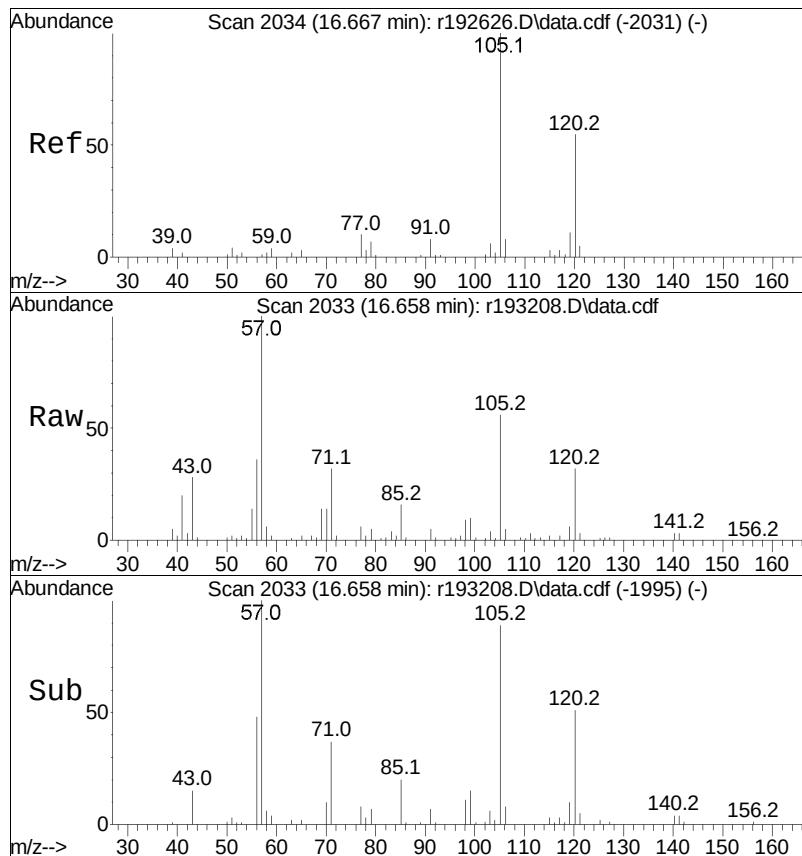




#96
 4-ethyl toluene
 Concen: 0.74 ppbV m
 RT: 16.608 min Scan# 2027
 Delta R.T. -0.008 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

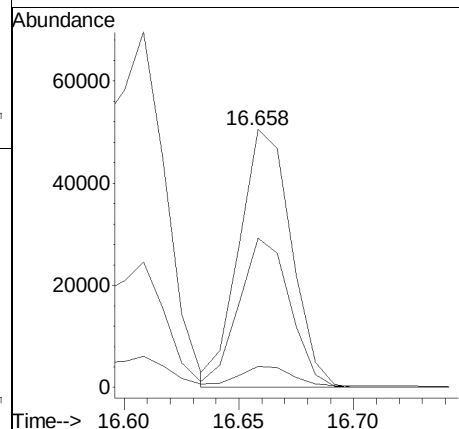
Tgt Ion	Ratio	Lower	Upper
105	100		
120	35.4	27.2	40.8
91	8.8	7.0	10.4

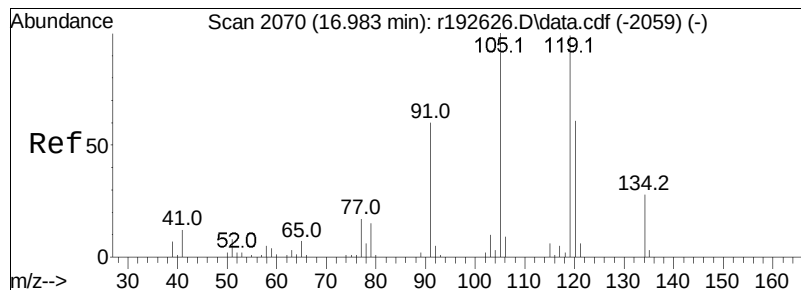




#97
 1,3,5-trimethylbenzene
 Concen: 0.77 ppbV
 RT: 16.658 min Scan# 2033
 Delta R.T. -0.017 min
 Lab File: r193208.D
 Acq: 21 Mar 2020 1:52 AM

Tgt Ion:	105	Resp:	79878
Ion Ratio	Lower	Upper	
105	100		
120	57.8	42.6	64.0
91	8.2	6.6	9.8





#99

1,2,4-trimethylbenzene

Concen: 2.23 ppbV

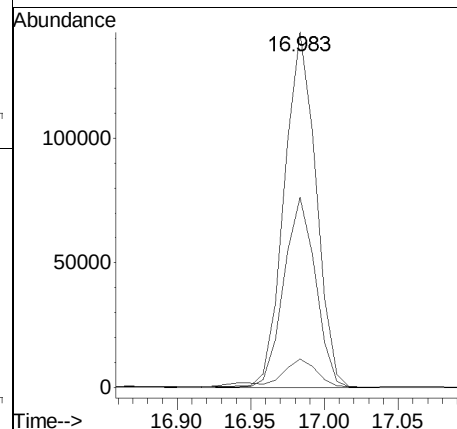
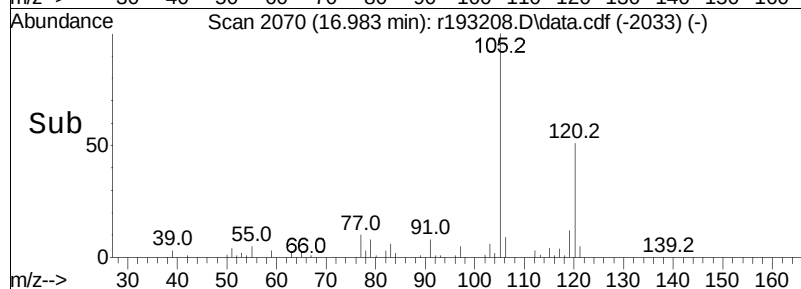
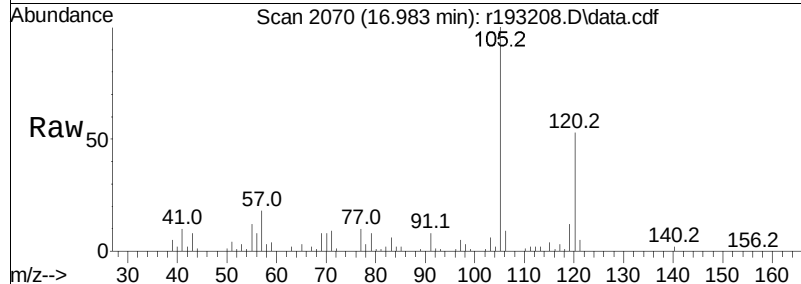
RT: 16.983 min Scan# 2070

Delta R.T. -0.008 min

Lab File: r193208.D

Acq: 21 Mar 2020 1:52 AM

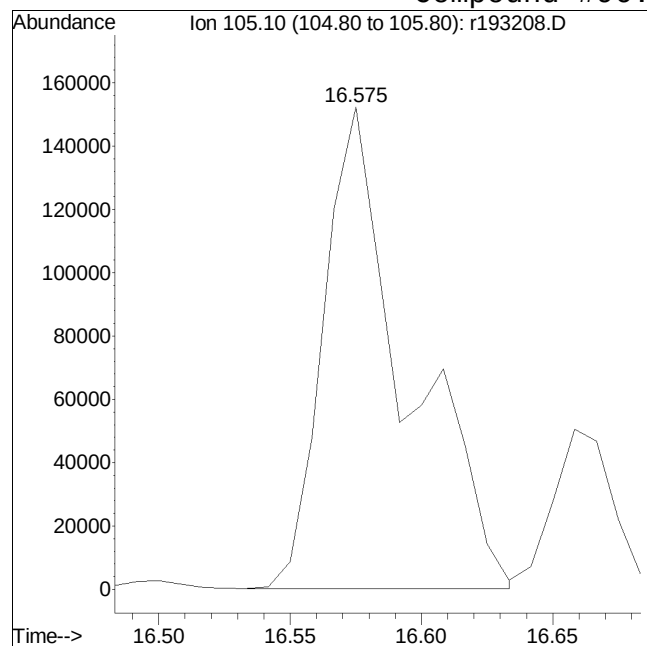
Tgt	Ion	Ratio	Resp	Lower	Upper
105	100		213713		
120	53.5	49.2		73.8	
91	8.0	49.9		74.9	



Manual Integration Report

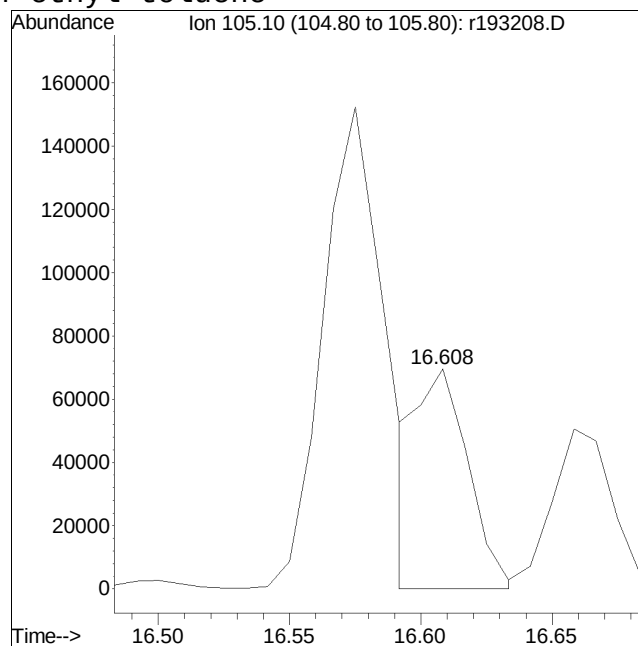
Data Path : 0:\Forensics\Data\Airlab19QMethod : TFS19_200224.M
Data File : r193208.D Operator : AIRLAB19:EW
Date Inj'd : 3/21/2020 0:1: 2 Instrument :
Sample : L2011723-01,3,250,250 Quant Date : 3/21/2020 7:57 am

Compound #96: 4-ethyl toluene



Original Peak Response = 337249

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 95122 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193209.D
 Acq On : 21 Mar 2020 2:28 AM
 Operator : AIRLAB19:EW
 Sample : L2011723-02D, 3, 75, 250
 Misc : WG1353556, ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 20:41:41 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\03\200320T\r193190.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	8.775	49	320561	10.000	ppbV	0.00
Standard Area = 288364			Recovery = 111.17%			
43) 1,4-difluorobenzene	10.740	114	1004362	10.000	ppbV	0.00
Standard Area = 940727			Recovery = 106.76%			
67) chlorobenzene-D5	14.875	54	120197	10.000	ppbV	0.00
Standard Area = 108860			Recovery = 110.41%			

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	3.562	85	2107	0.117	ppbV	100
6) chloromethane	3.772	50	702	0.061	ppbV	97
7) Freon-114	0.000		0	N.D.		
9) vinyl chloride	0.000		0	N.D.		
10) 1,3-butadiene	0.000		0	N.D.	d	
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	4.930	31	39666	4.235	ppbV #	62
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.483	43	4095854	237.941	ppbV #	98
21) trichlorofluoromethane	5.697	101	1026	0.054	ppbV	95
22) isopropyl alcohol	5.763	45	131205	4.012	ppbV	100
26) 1,1-dichloroethene	0.000		0	N.D.		
27) tertiary butyl alcohol	6.426	59	80562	2.687	ppbV #	97
28) methylene chloride	6.534		0	N.D.		
29) 3-chloropropene	0.000		0	N.D.	d	
30) carbon disulfide	6.846	76	14408	0.246	ppbV #	92
31) Freon 113	6.822		0	N.D.		
32) trans-1,2-dichloroethene	0.000		0	N.D.		
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	0.000		0	N.D.	d	
36) 2-butanone	8.125	43	545208	14.131	ppbV	95
37) cis-1,2-dichloroethene	0.000		0	N.D.		
38) Ethyl Acetate	0.000		0	N.D.	d	
39) chloroform	0.000		0	N.D.	d	
40) Tetrahydrofuran	9.308	42	60823	2.346	ppbV	98
42) 1,2-dichloroethane	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193209.D
 Acq On : 21 Mar 2020 2:28 AM
 Operator : AIRLAB19:EW
 Sample : L2011723-02D, 3, 75, 250
 Misc : WG1353556, ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 20:41:41 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\03\200320T\r193190.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
44) hexane	8.817	57	35356	0.960	ppbV	#	21
48) 1,1,1-trichloroethane	0.000		0	N.D.			
50) benzene	10.400	78	27359	0.377	ppbV		99
52) carbon tetrachloride	0.000		0	N.D.			
53) cyclohexane	10.687	56	20718	0.514	ppbV		98
56) 1,2-dichloropropane	0.000		0	N.D.	d		
57) bromodichloromethane	0.000		0	N.D.	d		
58) 1,4-dioxane	0.000		0	N.D.			
59) trichloroethene	0.000		0	N.D.			
60) 2,2,4-trimethylpentane	0.000		0	N.D.	d		
62) heptane	11.780	43	147899	3.293	ppbV		96
63) cis-1,3-dichloropropene	0.000		0	N.D.			
64) 4-methyl-2-pentanone	12.425	43	32766	0.678	ppbV		94
65) trans-1,3-dichloropropene	0.000		0	N.D.			
66) 1,1,2-trichloroethane	0.000		0	N.D.	d		
68) toluene	13.367	91	298677	4.081	ppbV		98
72) 2-hexanone	13.575	43	103089	2.424	ppbV	#	81
74) dibromochloromethane	0.000		0	N.D.			
75) 1,2-dibromoethane	0.000		0	N.D.			
78) tetrachloroethene	14.358	166	111593	3.470	ppbV		96
80) chlorobenzene	0.000		0	N.D.	d		
81) ethylbenzene	15.192	91	43794	0.499	ppbV		98
83) m+p-xylene	15.317	91	139441	2.015	ppbV		99
84) bromoform	0.000		0	N.D.			
85) styrene	15.600	104	3372	0.050	ppbV		100
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.	d		
87) o-xylene	15.683	91	49703	0.732	ppbV		100
96) 4-ethyl toluene	16.617	105	22527M6	0.196	ppbV		
97) 1,3,5-trimethylbenzene	16.667	105	21733	0.235	ppbV		96
99) 1,2,4-trimethylbenzene	16.983	105	76194	0.891	ppbV	#	61
101) Benzyl Chloride	0.000		0	N.D.	d		
102) 1,3-dichlorobenzene	0.000		0	N.D.	d		
103) 1,4-dichlorobenzene	0.000		0	N.D.	d		
107) 1,2-dichlorobenzene	17.442		0	N.D.			
115) 1,2,4-trichlorobenzene	0.000		0	N.D.			
119) hexachlorobutadiene	0.000		0	N.D.			

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193209.D
 Acq On : 21 Mar 2020 2:28 AM
 Operator : AIRLAB19:EW
 Sample : L2011723-02D,3,75,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 20:41:41 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\03\200320T\r193190.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Sub List : T015-NY - .s\Data\Airlab19\2020\03\200320T\r193190.D

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\

Data File : r193209.D

Acq On : 21 Mar 2020 2:28 AM

Operator : AIRLAB19:EW

Sample : L2011723-02D,3,75,250

Misc : WG1353556,ICAL16553

ALS Vial : 0 Sample Multiplier: 1

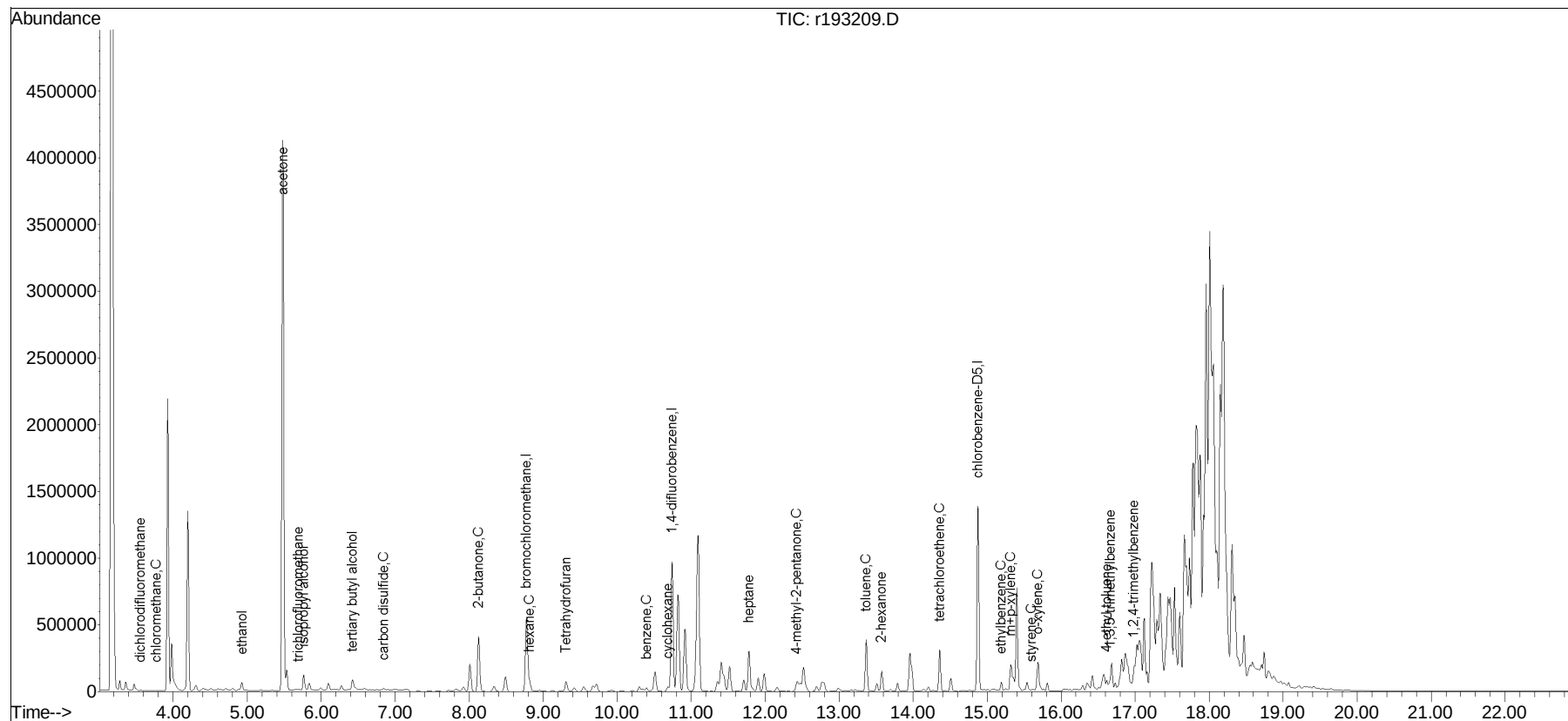
Quant Time: Mar 21 20:41:41 2020

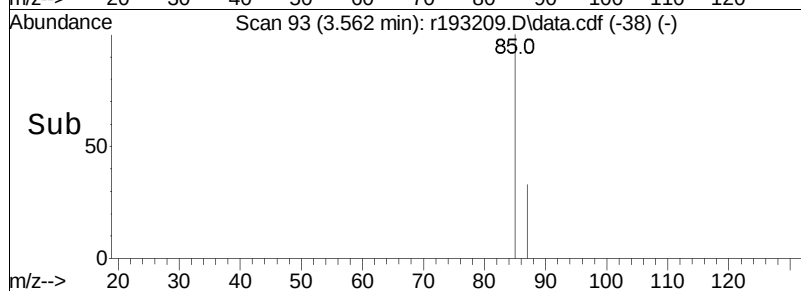
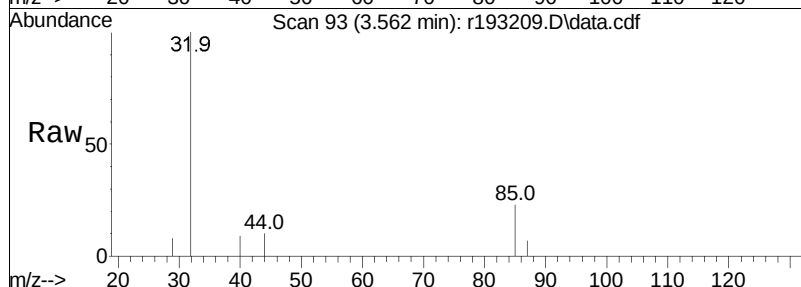
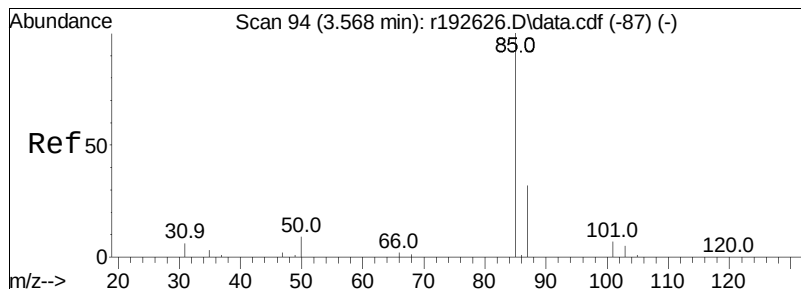
Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M

Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis

QLast Update : Tue Feb 25 10:21:40 2020

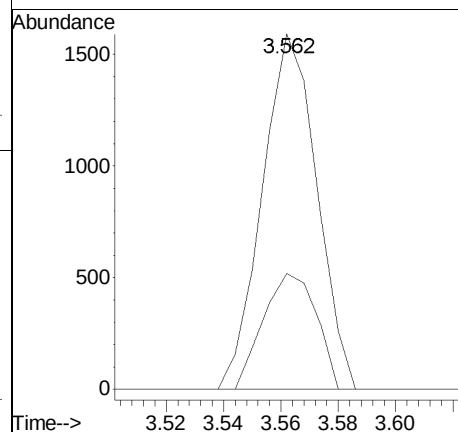
Response via : Initial Calibration

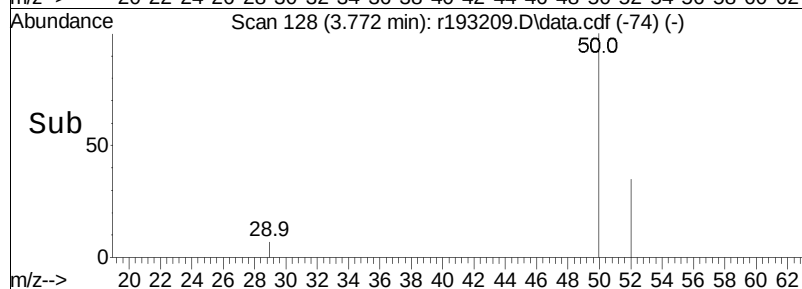
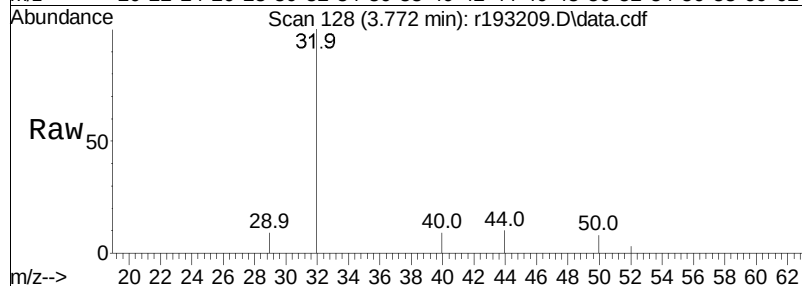
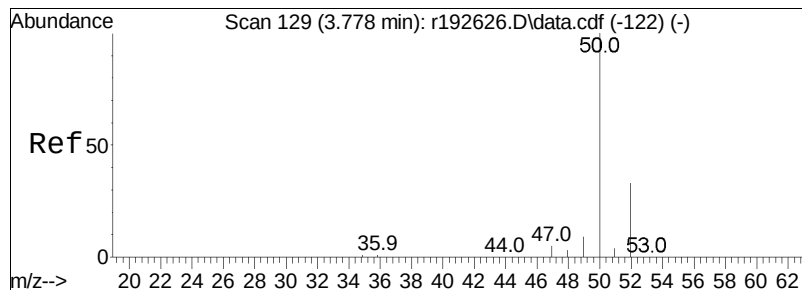




#5
 dichlorodifluoromethane
 Concen: 0.12 ppbV
 RT: 3.562 min Scan# 93
 Delta R.T. 0.000 min
 Lab File: r193209.D
 Acq: 21 Mar 2020 2:28 AM

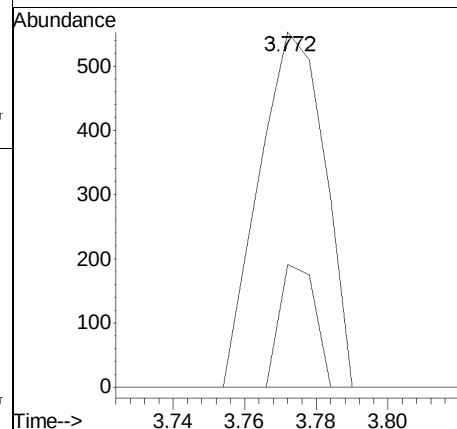
Tgt Ion: 85 Resp: 2107
 Ion Ratio Lower Upper
 85 100
 87 32.6 25.9 38.9

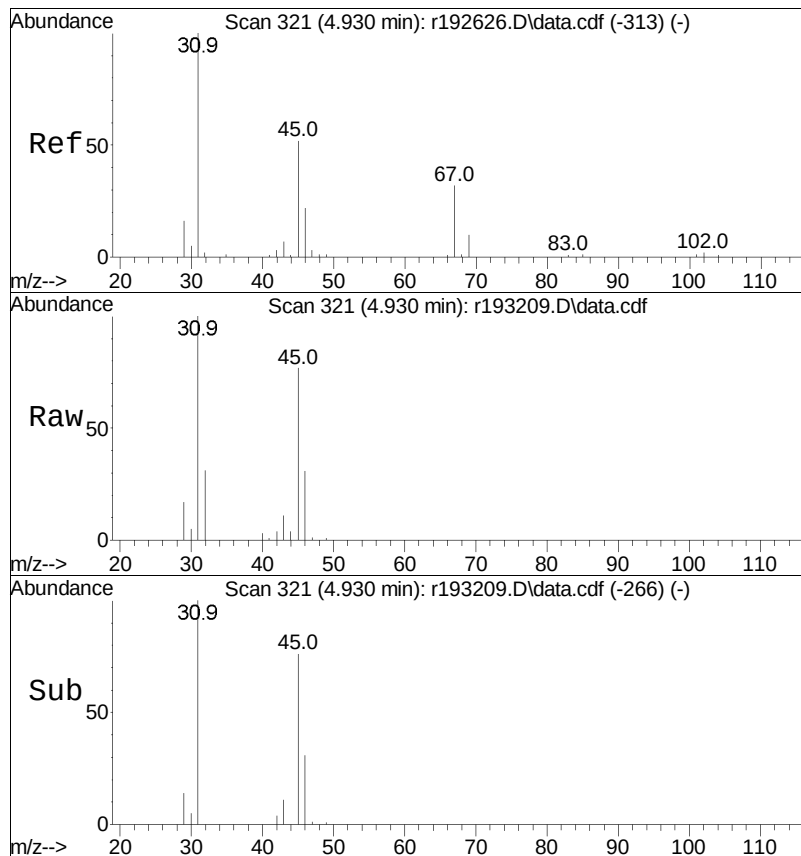




#6
chloromethane
Concen: 0.06 ppbV
RT: 3.772 min Scan# 128
Delta R.T. -0.006 min
Lab File: r193209.D
Acq: 21 Mar 2020 2:28 AM

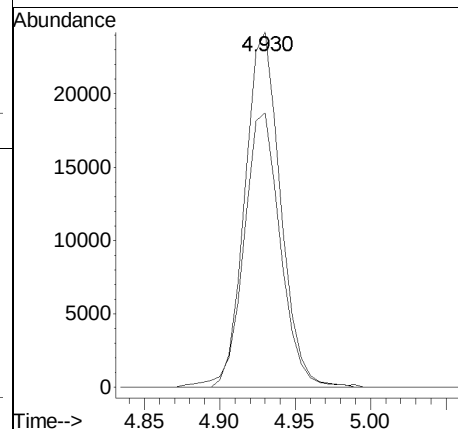
Tgt	Ion	Resp	Lower	Upper
50	100	702		
52	34.5	26.3	39.5	

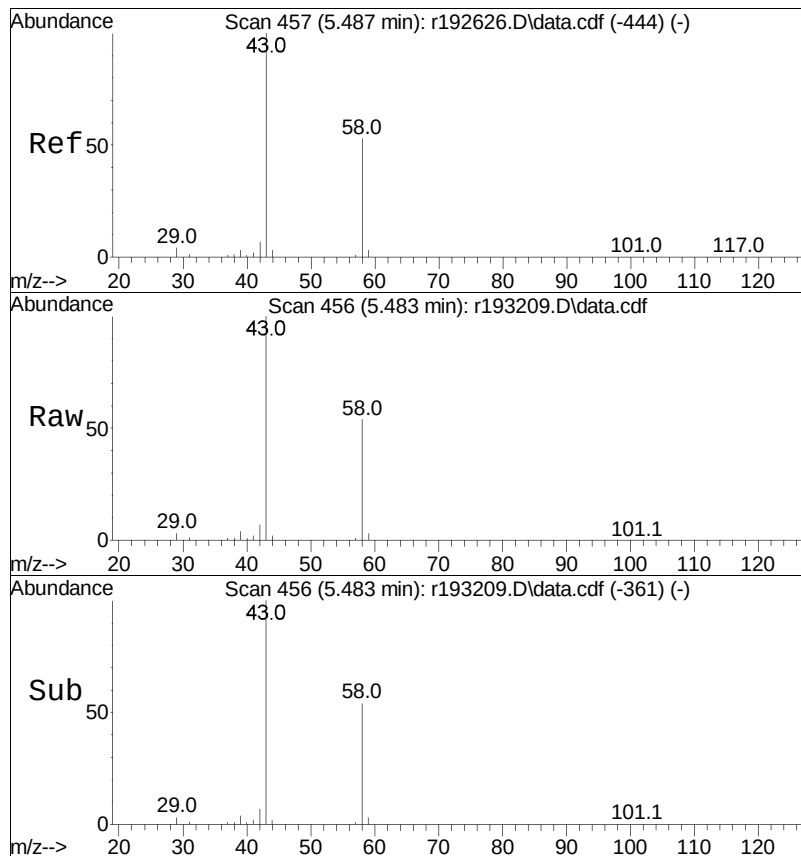




#15
ethanol
Concen: 4.23 ppbV
RT: 4.930 min Scan# 321
Delta R.T. 0.000 min
Lab File: r193209.D
Acq: 21 Mar 2020 2:28 AM

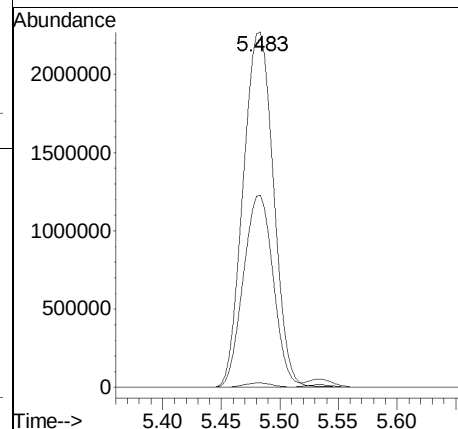
Tgt Ion	Ratio	Resp	Lower	Upper
31	100	39666		
45	77.3		40.6	60.8#

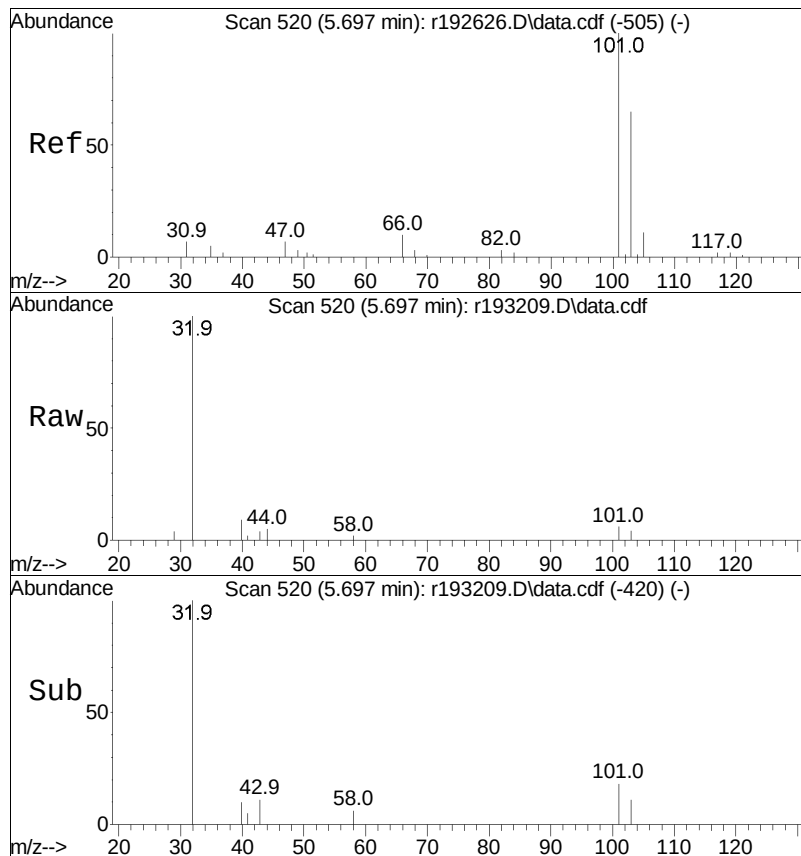




#19
acetone
Concen: 237.94 ppbV
RT: 5.483 min Scan# 456
Delta R.T. -0.013 min
Lab File: r193209.D
Acq: 21 Mar 2020 2:28 AM

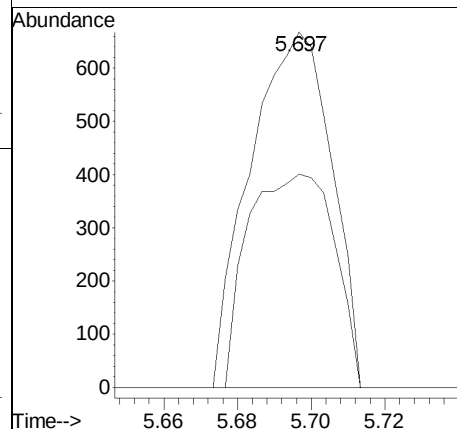
Tgt	Ion	Ratio	Lower	Upper
43	100			
58	54.1	42.0	63.0	
57	1.3	1.4	2.0	

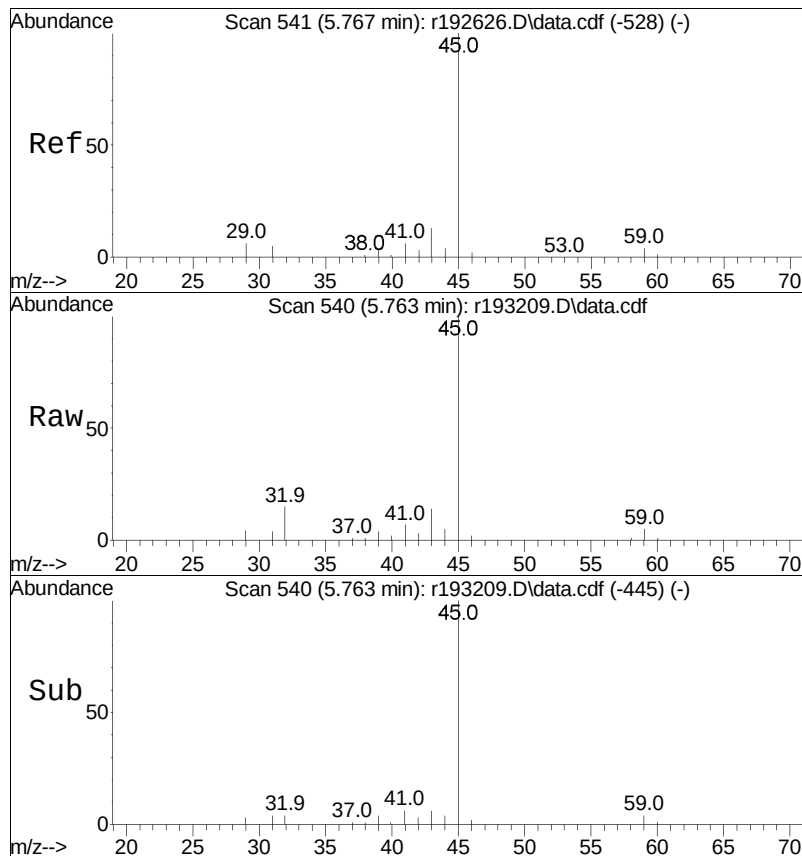




#21
trichlorofluoromethane
Concen: 0.05 ppbV
RT: 5.697 min Scan# 520
Delta R.T. 0.003 min
Lab File: r193209.D
Acq: 21 Mar 2020 2:28 AM

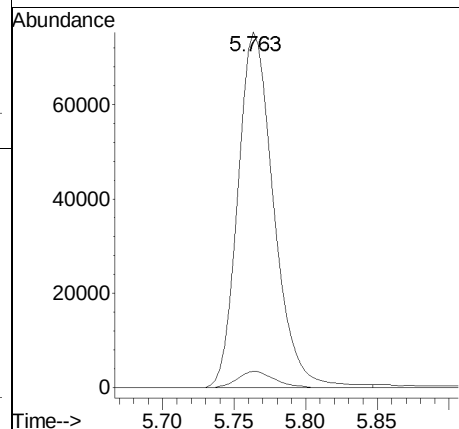
Tgt Ion	Ratio	Lower	Upper
101	100		
103	60.0	51.4	77.2

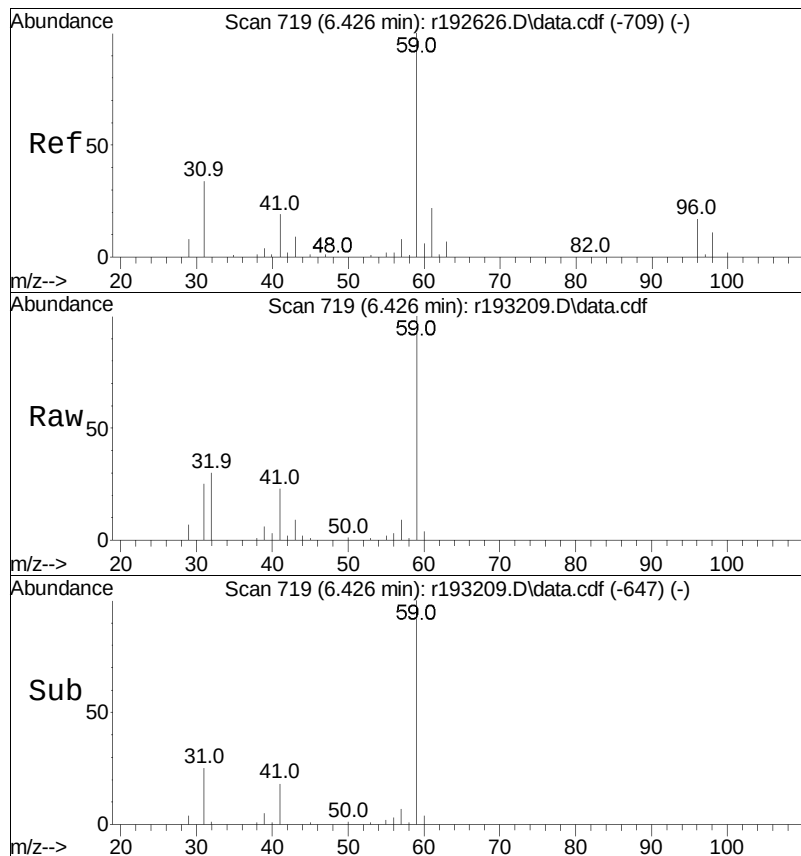




#22
isopropyl alcohol
Concen: 4.01 ppbV
RT: 5.763 min Scan# 540
Delta R.T. -0.013 min
Lab File: r193209.D
Acq: 21 Mar 2020 2:28 AM

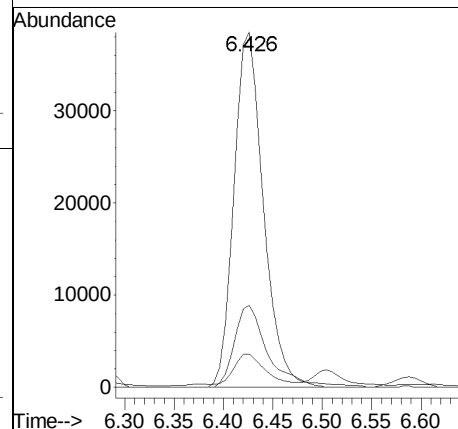
Tgt Ion	Ratio	Lower	Upper
45	100		
59	4.6	3.7	5.5

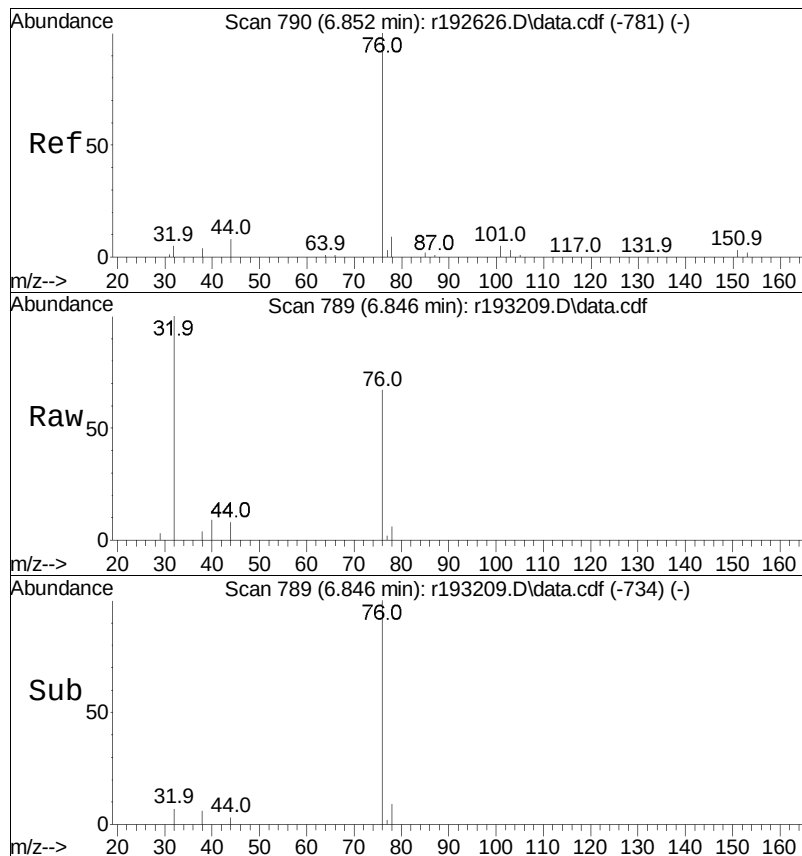




#27
 tertiary butyl alcohol
 Concen: 2.69 ppbV
 RT: 6.426 min Scan# 719
 Delta R.T. -0.024 min
 Lab File: r193209.D
 Acq: 21 Mar 2020 2:28 AM

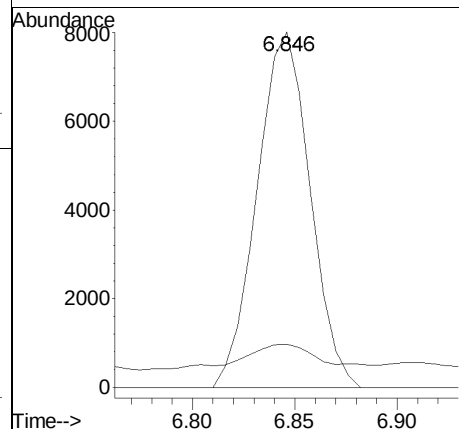
Tgt Ion:	59	Resp:	80562
Ion Ratio	Lower	Upper	
59	100		
41	23.1	18.8	28.2
43	9.4	9.8	14.8#

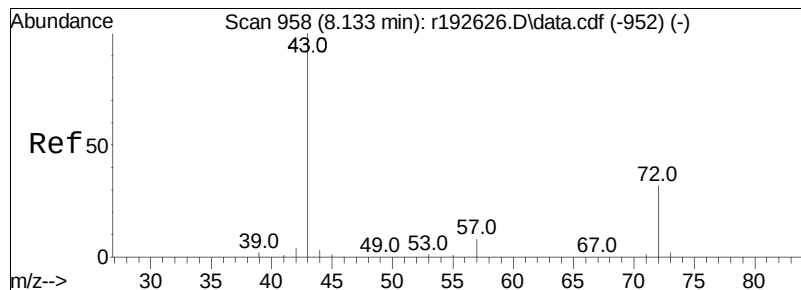




#30
 carbon disulfide
 Concen: 0.25 ppbV
 RT: 6.846 min Scan# 789
 Delta R.T. 0.000 min
 Lab File: r193209.D
 Acq: 21 Mar 2020 2:28 AM

Tgt Ion	Ratio	Lower	Upper
76	100		
44	12.2	12.3	18.5#





#36

2-butanone

Concen: 14.13 ppbV

RT: 8.125 min Scan# 957

Delta R.T. -0.033 min

Lab File: r193209.D

Acq: 21 Mar 2020 2:28 AM

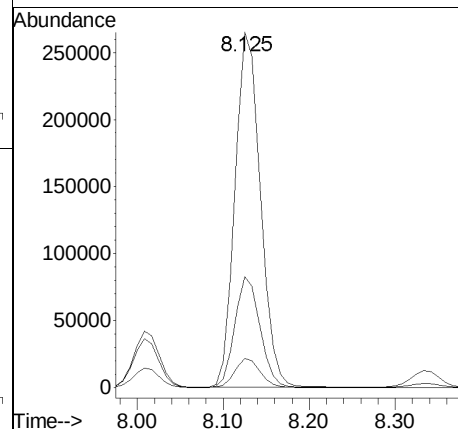
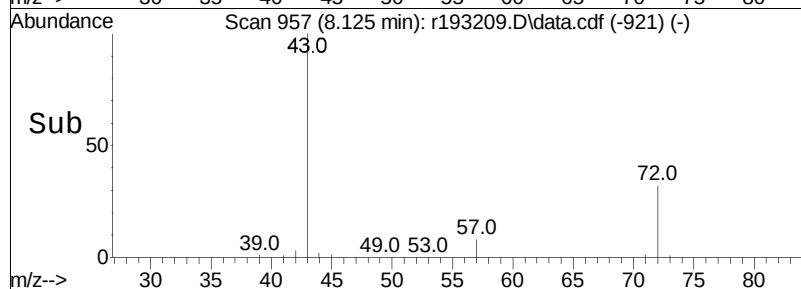
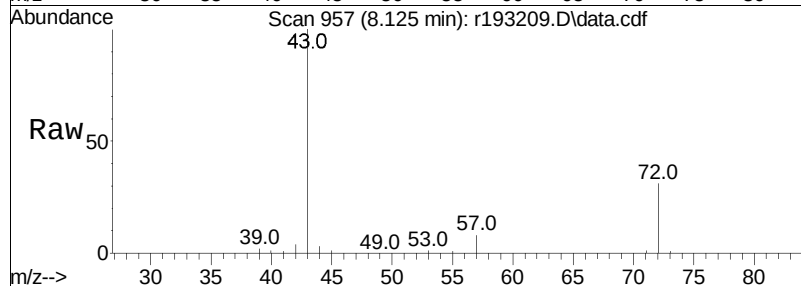
Tgt Ion: 43 Resp: 545208

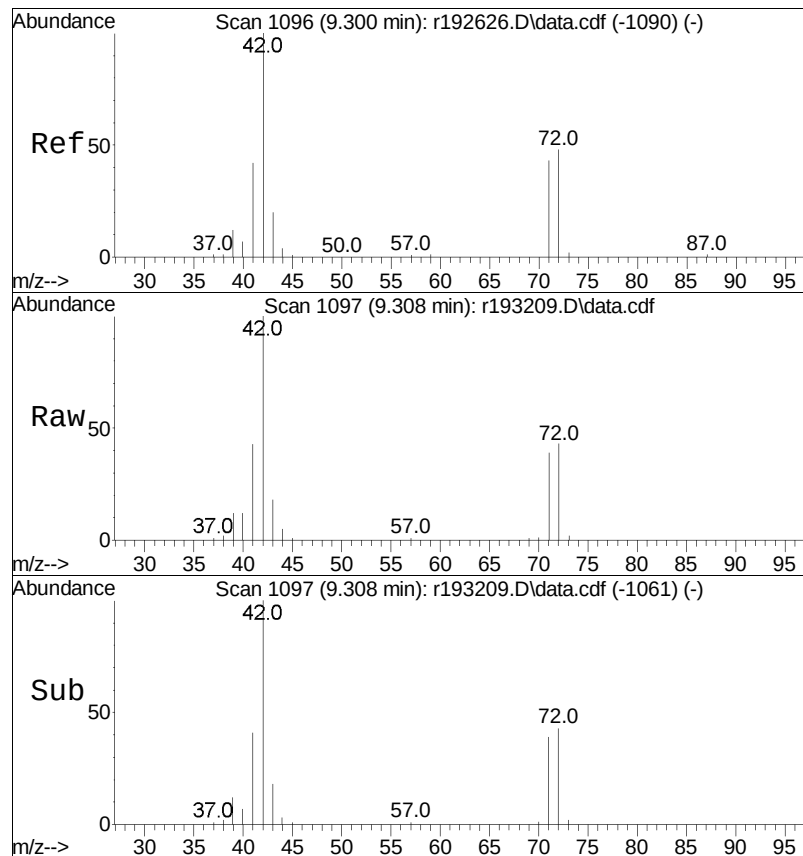
Ion Ratio Lower Upper

43 100

72 31.1 27.7 41.5

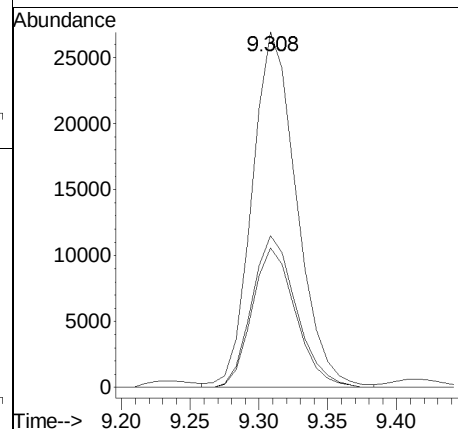
57 8.2 6.3 9.5

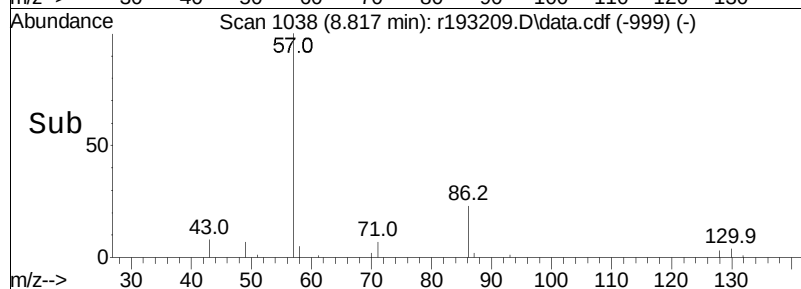
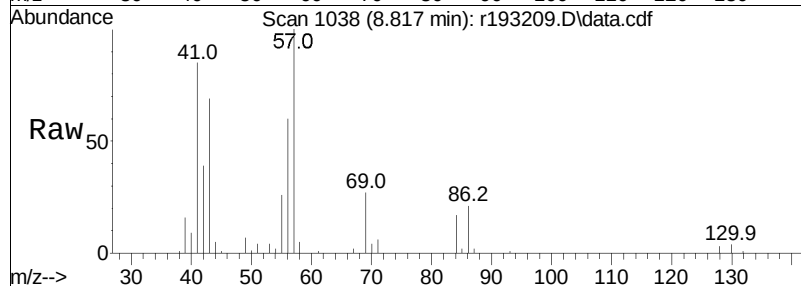
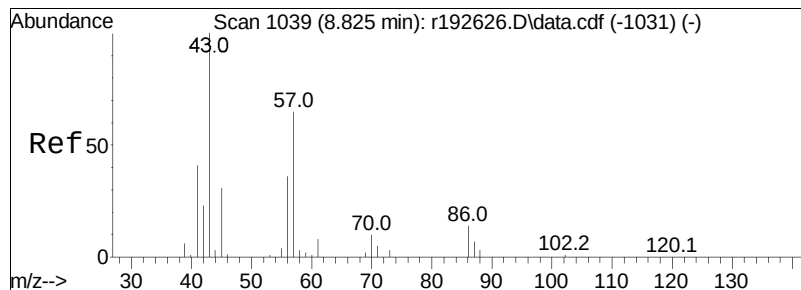




#40
 Tetrahydrofuran
 Concen: 2.35 ppbV
 RT: 9.308 min Scan# 1097
 Delta R.T. -0.033 min
 Lab File: r193209.D
 Acq: 21 Mar 2020 2:28 AM

Tgt Ion:	42	Resp:	60823
Ion Ratio	Lower	Upper	
42	100		
71	39.3	32.5	48.7
72	42.7	33.7	50.5





#44

hexane

Concen: 0.96 ppbV

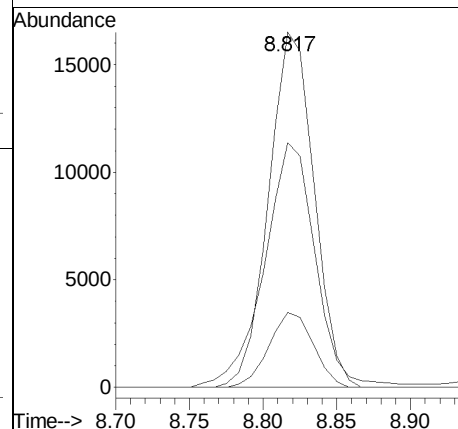
RT: 8.817 min Scan# 1038

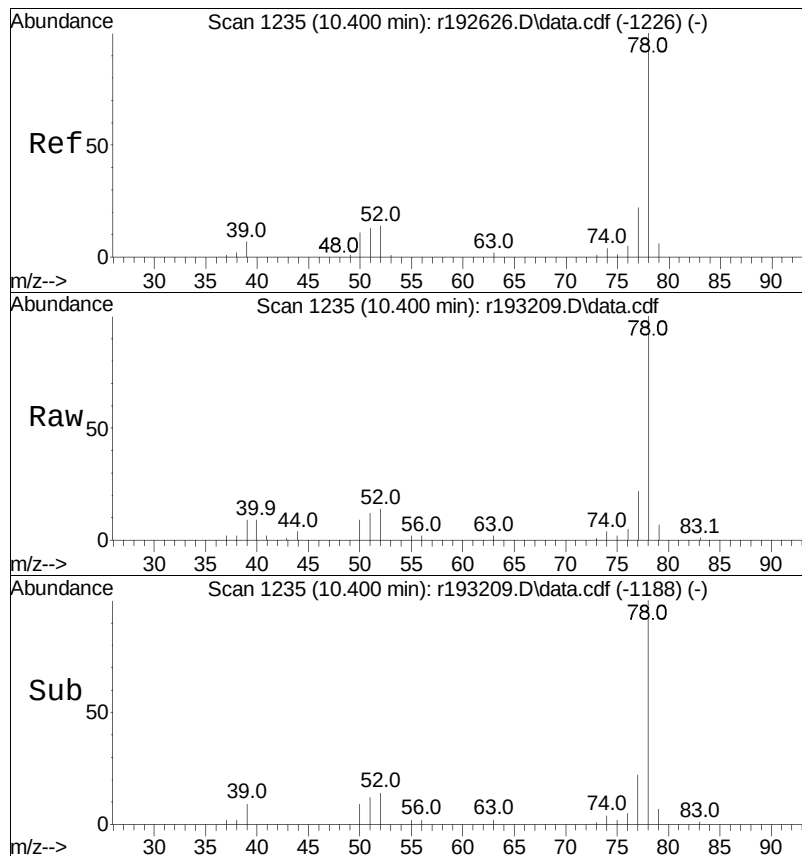
Delta R.T. -0.008 min

Lab File: r193209.D

Acq: 21 Mar 2020 2:28 AM

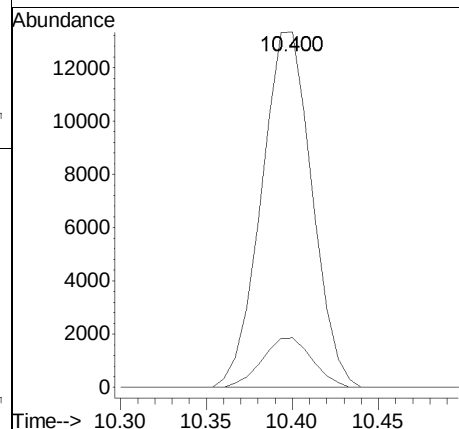
Tgt	Ion: 57	Resp:	35356
Ion	Ratio	Lower	Upper
57	100		
43	68.9	159.3	238.9#
86	21.1	15.7	23.5

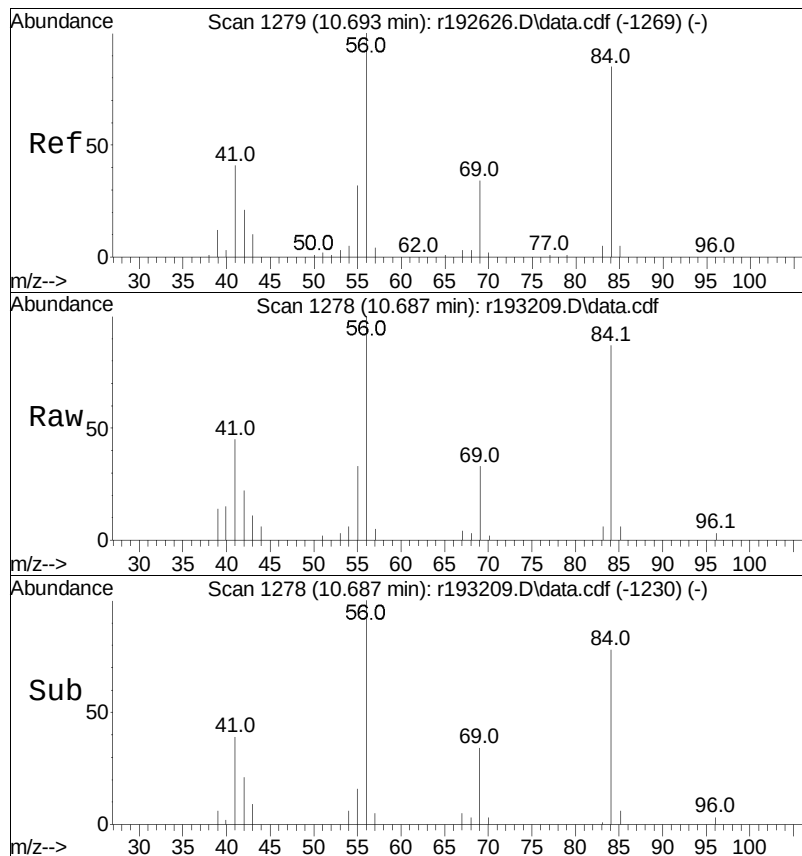




#50
benzene
Concen: 0.38 ppbV
RT: 10.400 min Scan# 1235
Delta R.T. 0.000 min
Lab File: r193209.D
Acq: 21 Mar 2020 2:28 AM

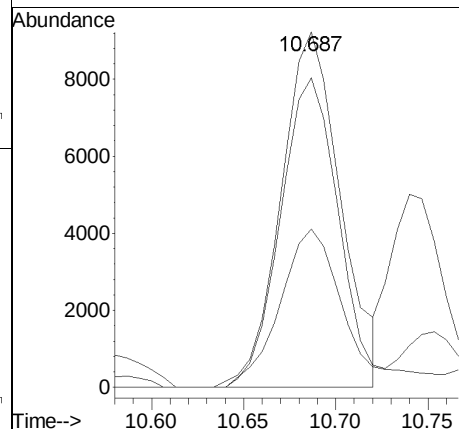
Tgt Ion	Ratio	Lower	Upper
78	100		
52	13.9	11.4	17.2

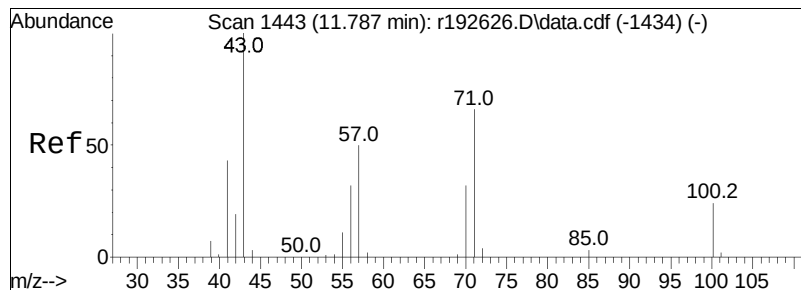




#53
cyclohexane
Concen: 0.51 ppbV
RT: 10.687 min Scan# 1278
Delta R.T. -0.007 min
Lab File: r193209.D
Acq: 21 Mar 2020 2:28 AM

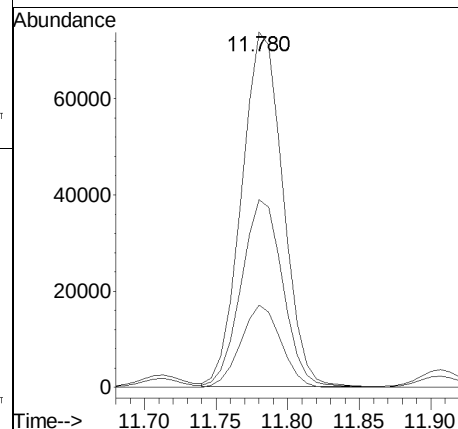
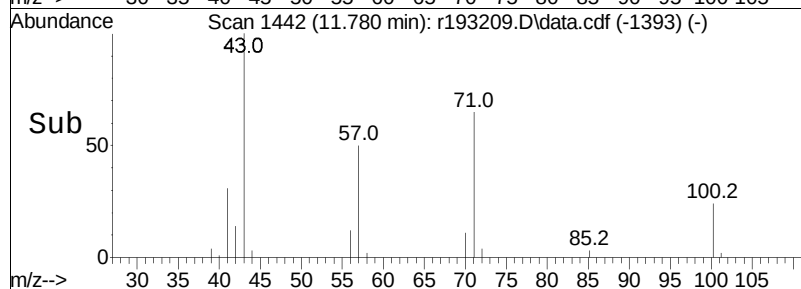
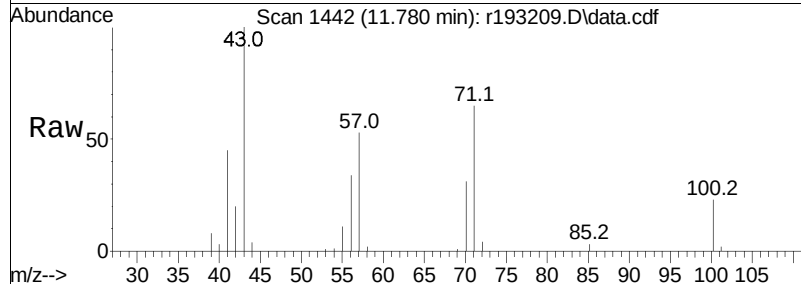
Tgt	Ion:	56	Resp:	20718
Ion	Ratio	Lower	Upper	
56	100			
84	87.1	69.8	104.6	
41	44.6	32.1	48.1	

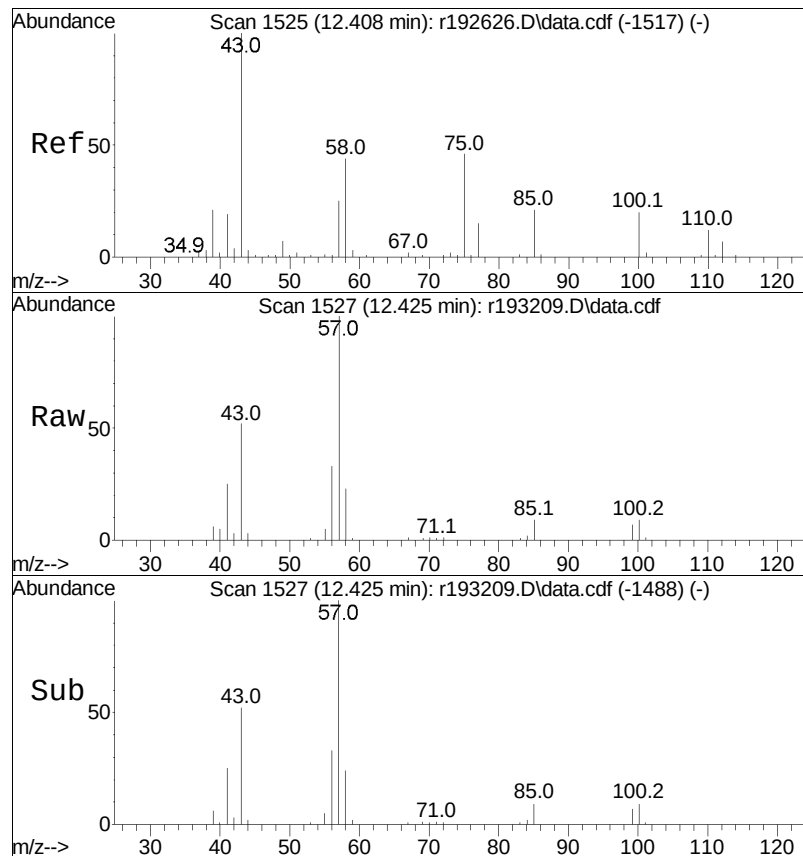




#62
heptane
Concen: 3.29 ppbV
RT: 11.780 min Scan# 1442
Delta R.T. 0.000 min
Lab File: r193209.D
Acq: 21 Mar 2020 2:28 AM

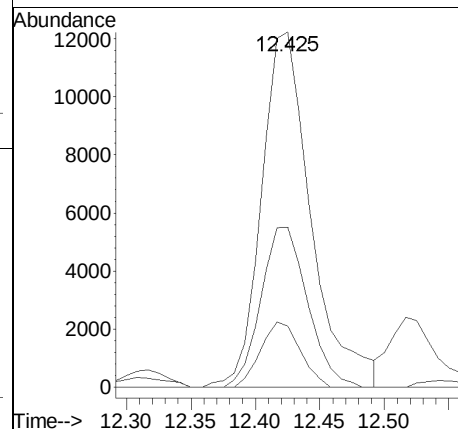
Tgt Ion	Ratio	Lower	Upper
43	100		
57	52.8	41.0	61.6
100	23.2	21.4	32.2

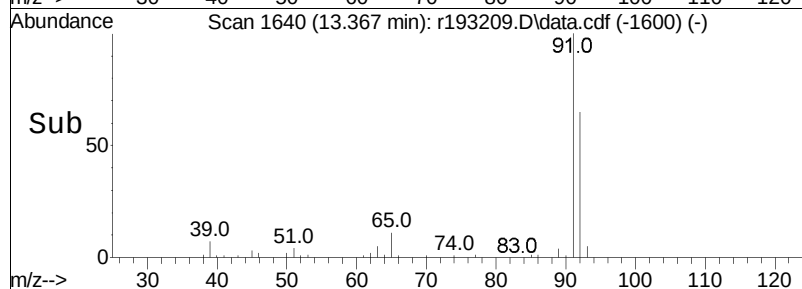
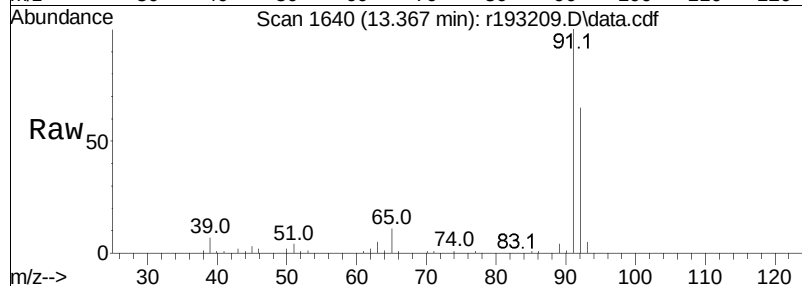
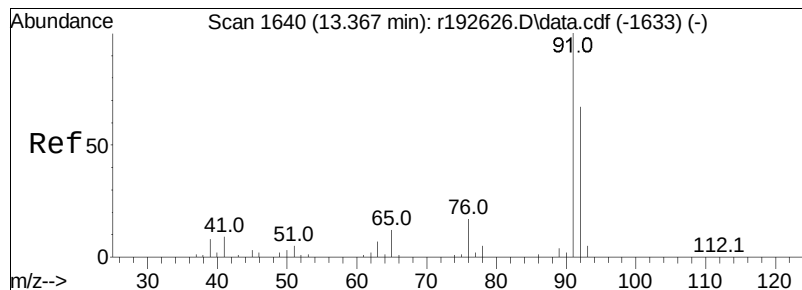




#64
 4-methyl-2-pentanone
 Concen: 0.68 ppbV
 RT: 12.425 min Scan# 1527
 Delta R.T. -0.008 min
 Lab File: r193209.D
 Acq: 21 Mar 2020 2:28 AM

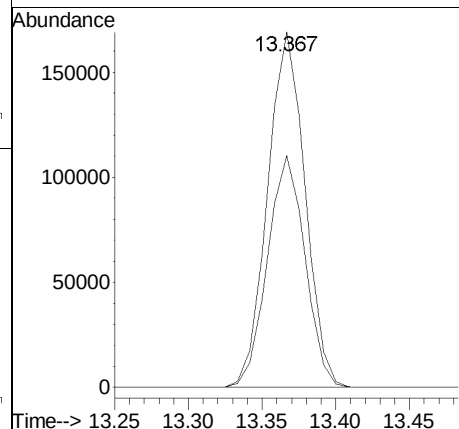
Tgt Ion:	43	58	100	Ratio	Lower	Upper
Resp:	32766					
Ion	43	58	100	100	45.1	17.3
Ratio					32.9	15.4
Lower					49.3	23.2
Upper						

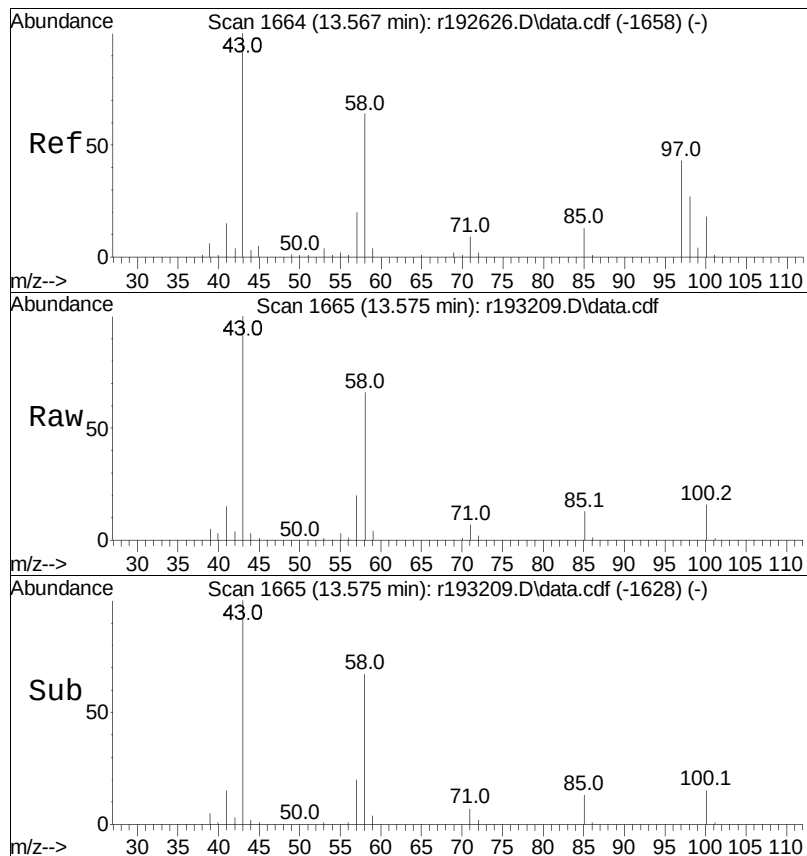




#68
toluene
Concen: 4.08 ppbV
RT: 13.367 min Scan# 1640
Delta R.T. 0.000 min
Lab File: r193209.D
Acq: 21 Mar 2020 2:28 AM

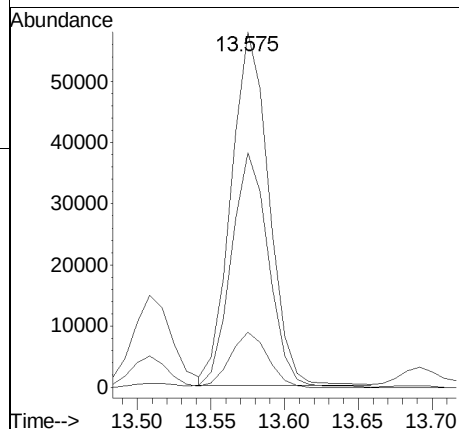
Tgt	Ion	Resp	Lower	Upper
91	100	298677		
92	65.2	53.3	79.9	

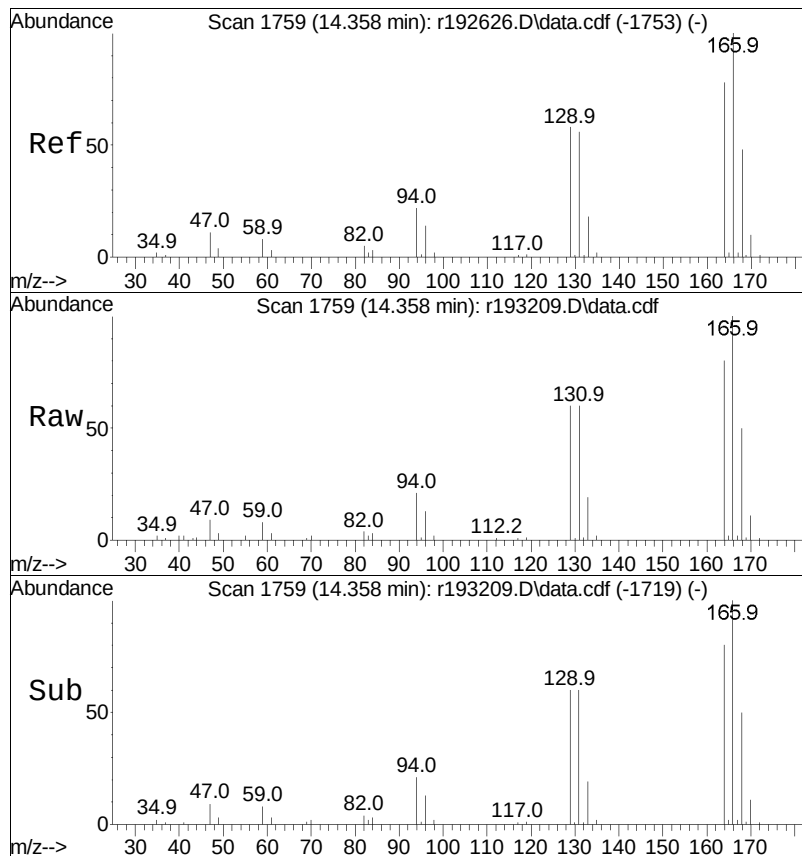




#72
 2-hexanone
 Concen: 2.42 ppbV
 RT: 13.575 min Scan# 1665
 Delta R.T. -0.025 min
 Lab File: r193209.D
 Acq: 21 Mar 2020 2:28 AM

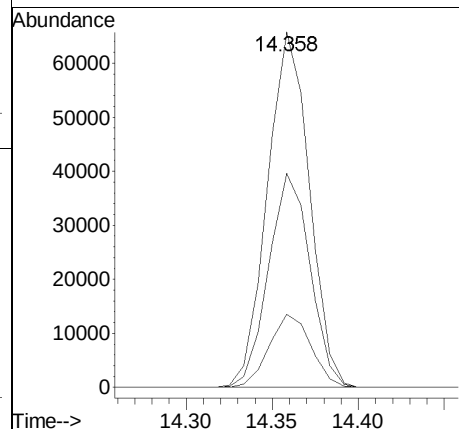
Tgt Ion:	43	Resp:	103089
Ion Ratio	Lower	Upper	
43	100		
58	66.1	62.6	94.0
100	15.5	26.5	39.7#

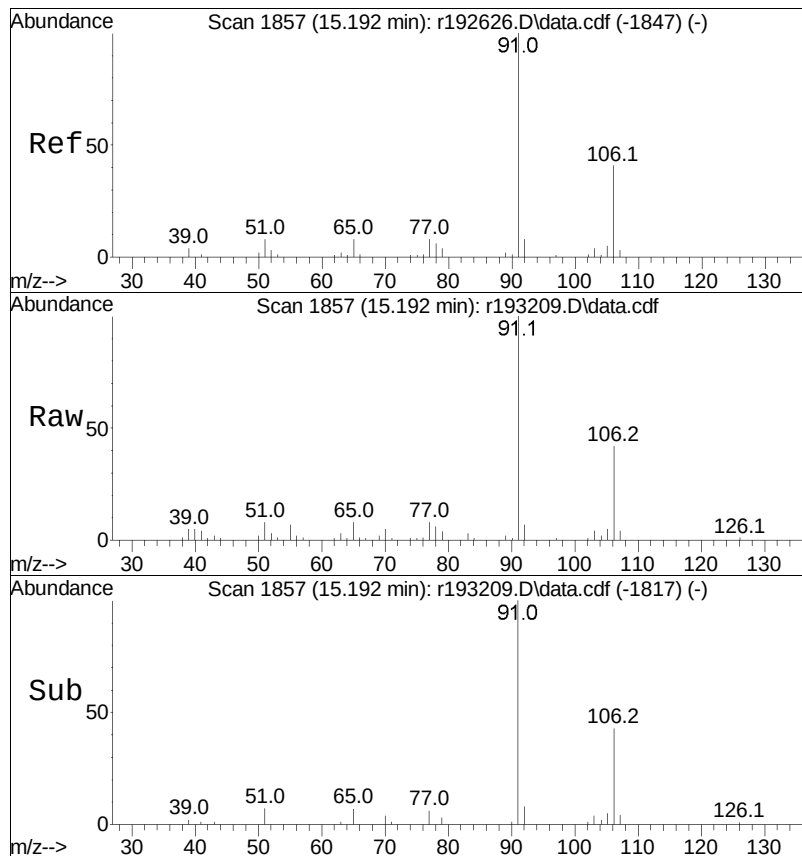




#78
 tetrachloroethene
 Concen: 3.47 ppbV
 RT: 14.358 min Scan# 1759
 Delta R.T. 0.000 min
 Lab File: r193209.D
 Acq: 21 Mar 2020 2:28 AM

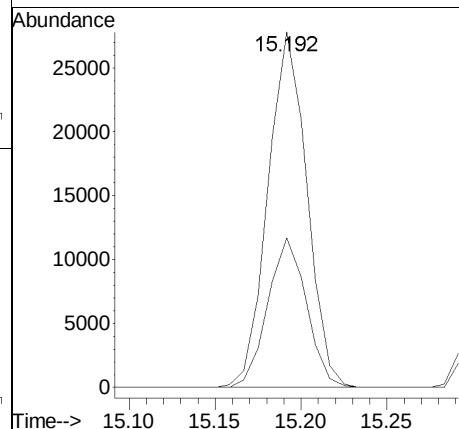
Tgt Ion	Ratio	Lower	Upper
166	100		
131	60.2	46.4	69.6
94	20.6	18.5	27.7

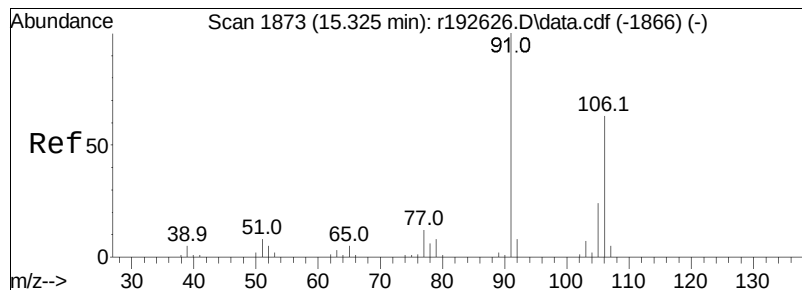




#81
ethylbenzene
Concen: 0.50 ppbV
RT: 15.192 min Scan# 1857
Delta R.T. 0.000 min
Lab File: r193209.D
Acq: 21 Mar 2020 2:28 AM

Tgt	Ion	Resp	Lower	Upper
91	100	43794		
106	42.1	32.9	49.3	





#83

m+p-xylene

Concen: 2.01 ppbV

RT: 15.317 min Scan# 1872

Delta R.T. -0.008 min

Lab File: r193209.D

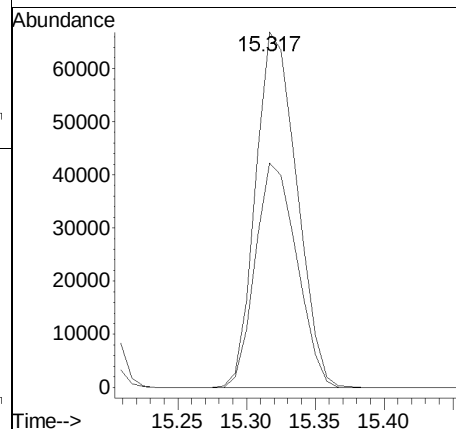
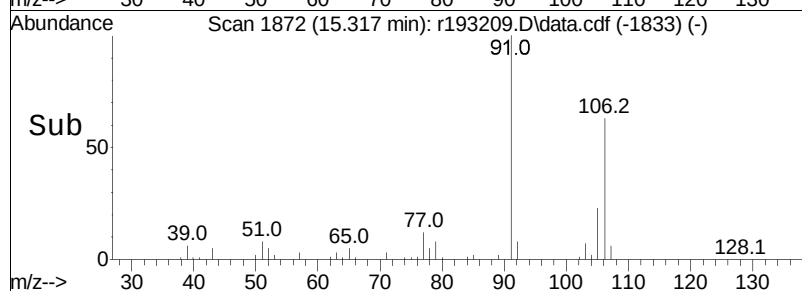
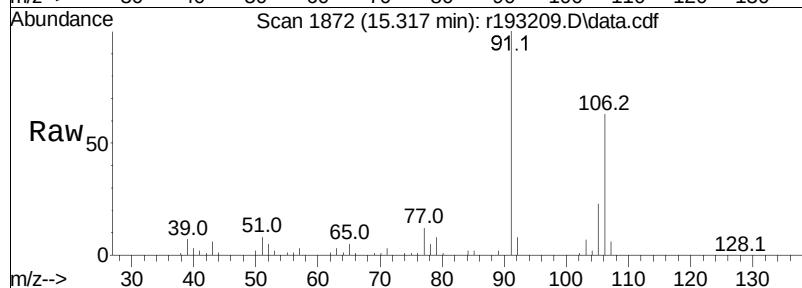
Acq: 21 Mar 2020 2:28 AM

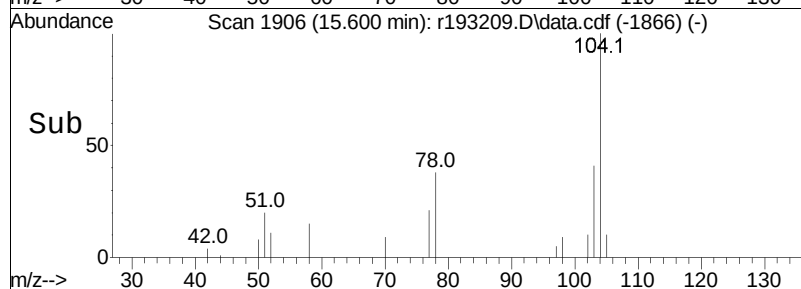
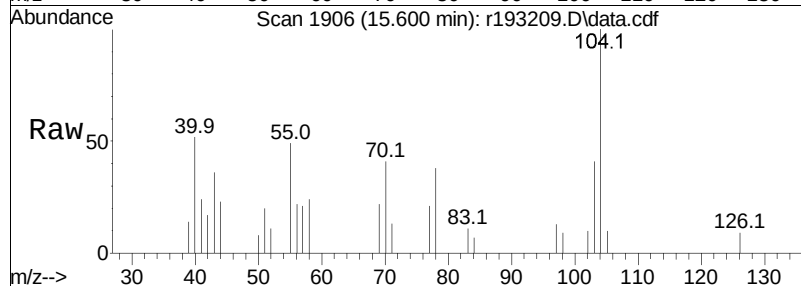
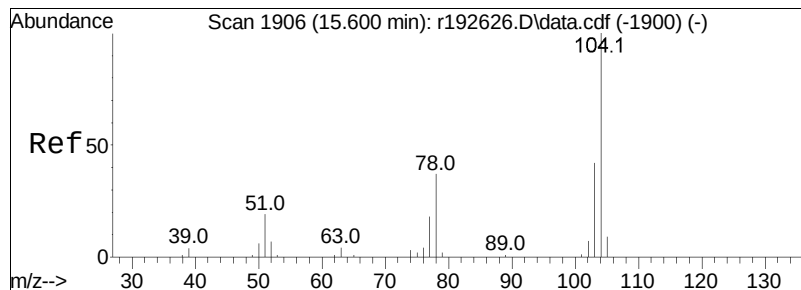
Tgt Ion: 91 Resp: 139441

Ion Ratio Lower Upper

91 100

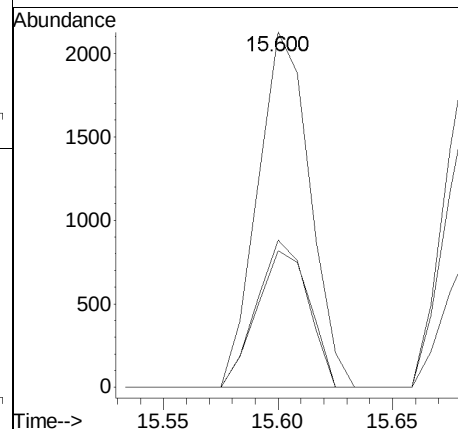
106 63.1 51.0 76.4

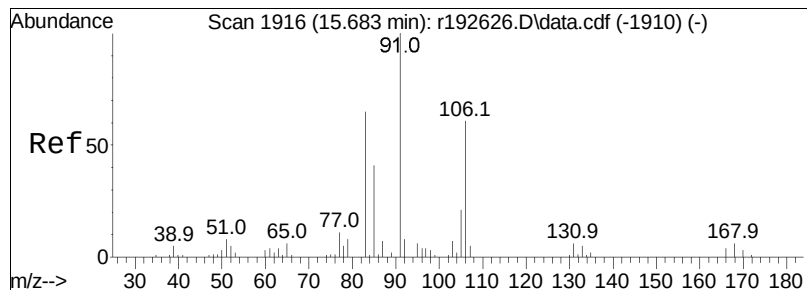




#85
styrene
Concen: 0.05 ppbV
RT: 15.600 min Scan# 1906
Delta R.T. 0.000 min
Lab File: r193209.D
Acq: 21 Mar 2020 2:28 AM

Tgt Ion	Ratio	Lower	Upper
104	100		
103	41.4	33.4	50.0
78	38.5	30.6	46.0





#87

o-xylene

Concen: 0.73 ppbV

RT: 15.683 min Scan# 1916

Delta R.T. 0.000 min

Lab File: r193209.D

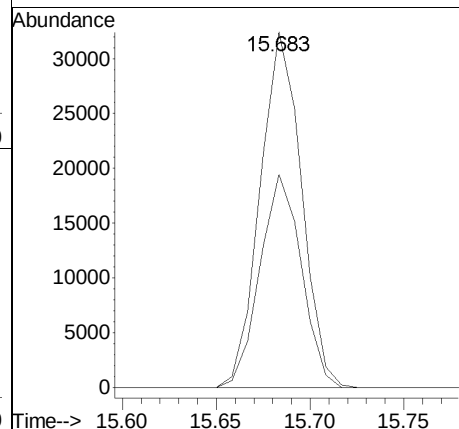
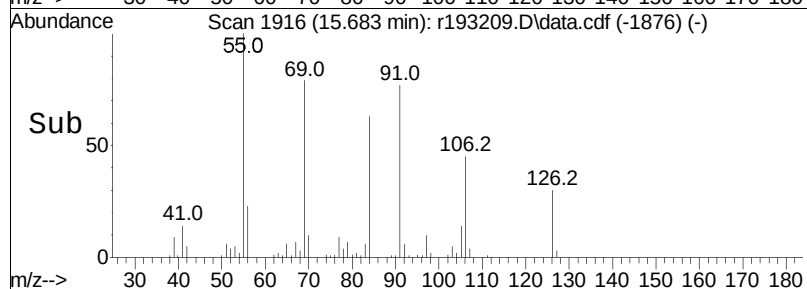
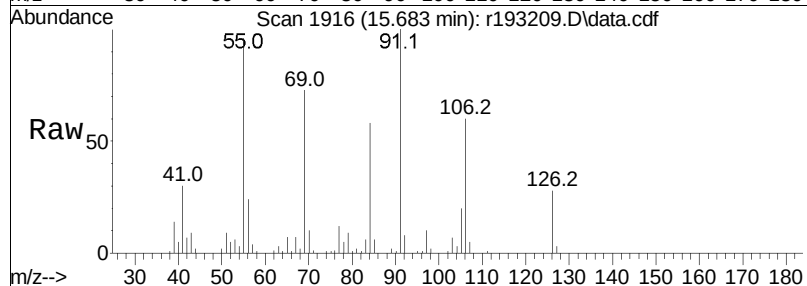
Acq: 21 Mar 2020 2:28 AM

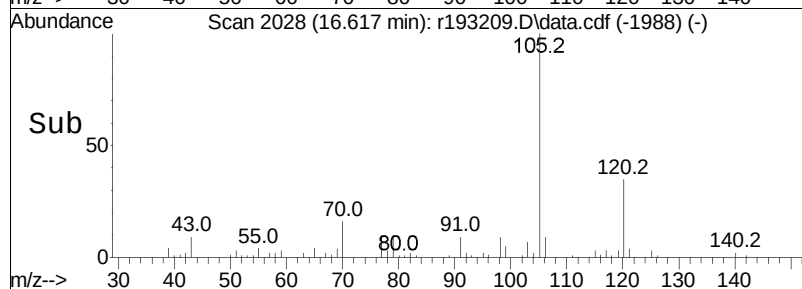
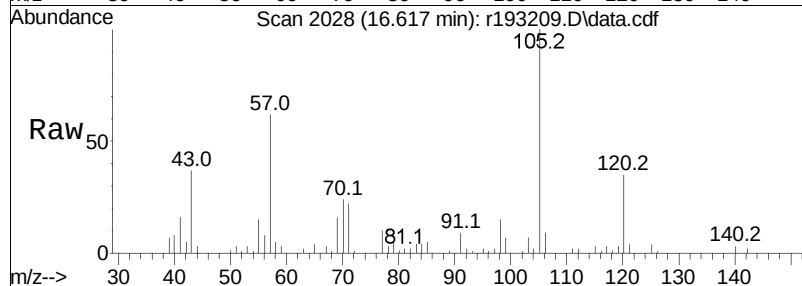
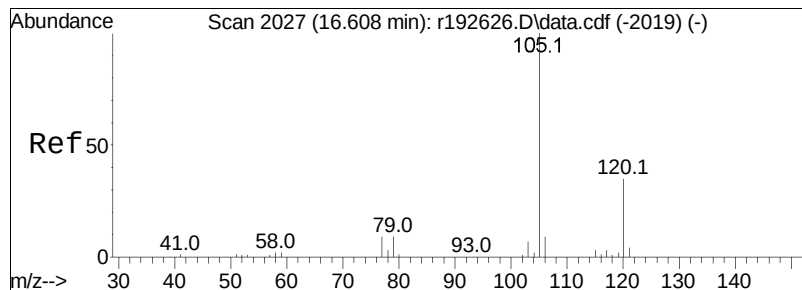
Tgt Ion: 91 Resp: 49703

Ion Ratio Lower Upper

91 100

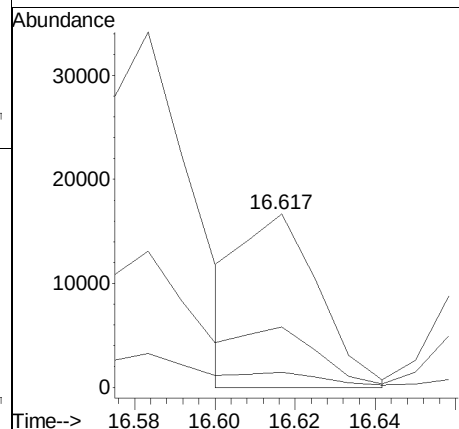
106 60.0 47.8 71.8

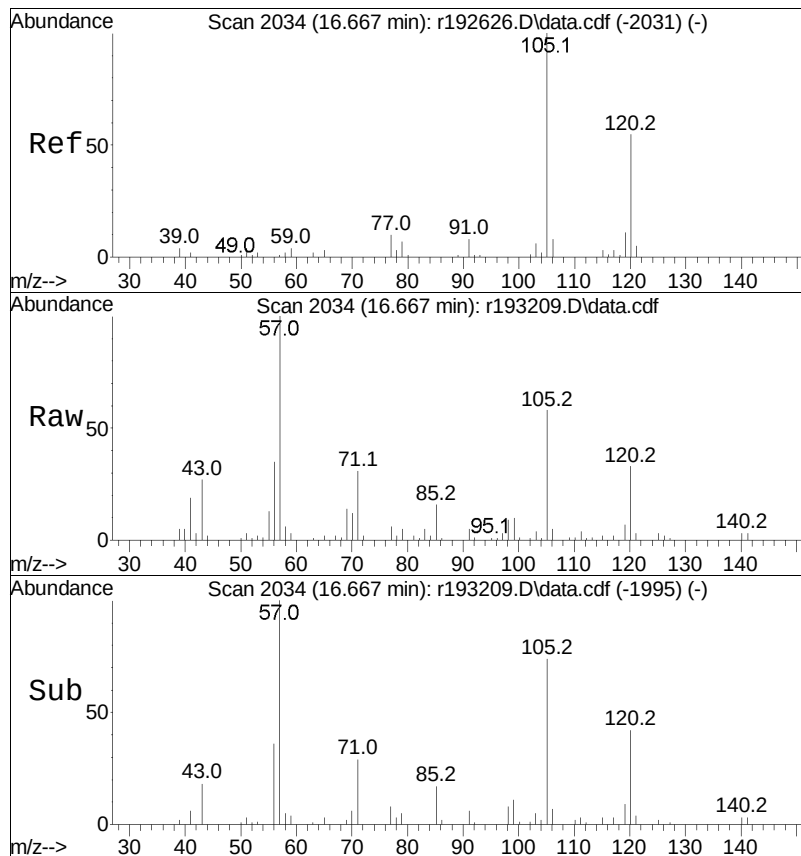




#96
 4-ethyl toluene
 Concen: 0.20 ppbV m
 RT: 16.617 min Scan# 2028
 Delta R.T. 0.000 min
 Lab File: r193209.D
 Acq: 21 Mar 2020 2:28 AM

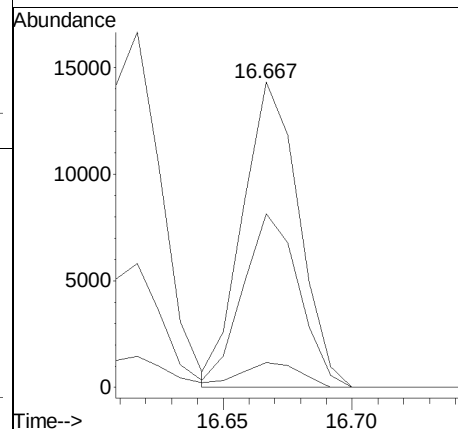
Tgt Ion	Ratio	Lower	Upper
105	100		
120	34.9	27.2	40.8
91	8.7	7.0	10.4

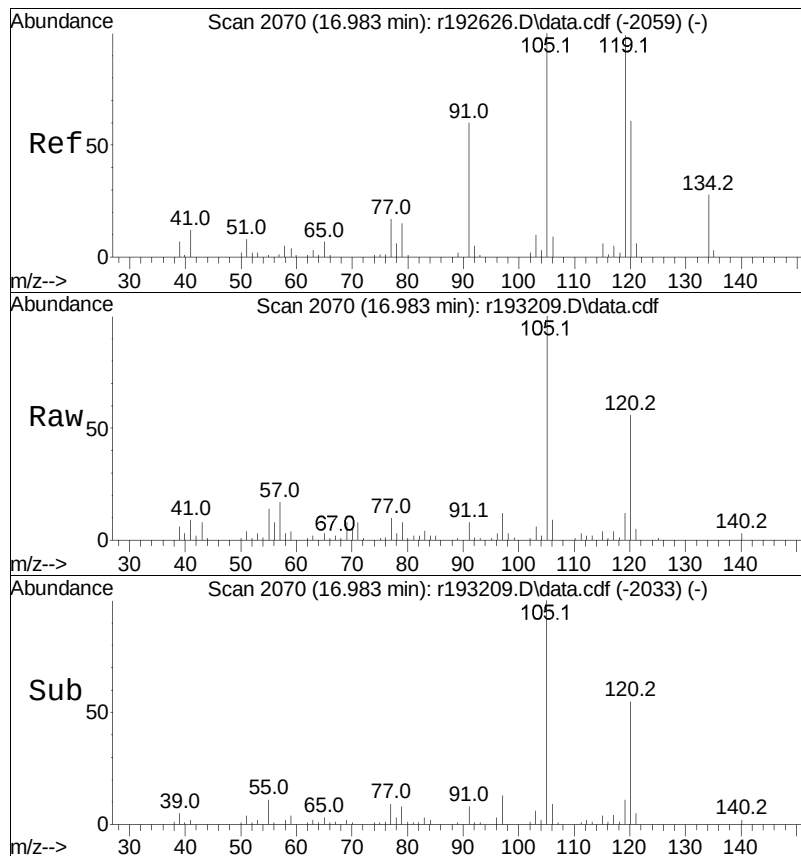




#97
 1,3,5-trimethylbenzene
 Concen: 0.24 ppbV
 RT: 16.667 min Scan# 2034
 Delta R.T. -0.008 min
 Lab File: r193209.D
 Acq: 21 Mar 2020 2:28 AM

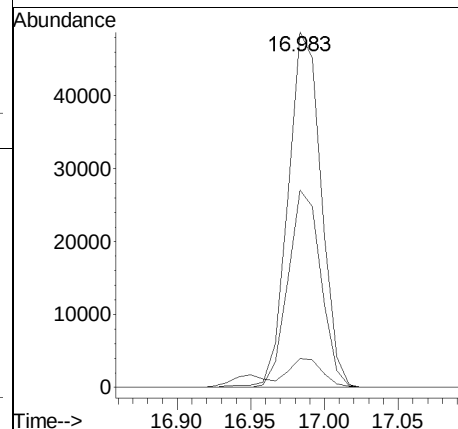
Tgt Ion	Ratio	Resp	Lower	Upper
105	100	21733		
120	56.9		42.6	64.0
91	8.1		6.6	9.8





#99
 1,2,4-trimethylbenzene
 Concen: 0.89 ppbV
 RT: 16.983 min Scan# 2070
 Delta R.T. -0.008 min
 Lab File: r193209.D
 Acq: 21 Mar 2020 2:28 AM

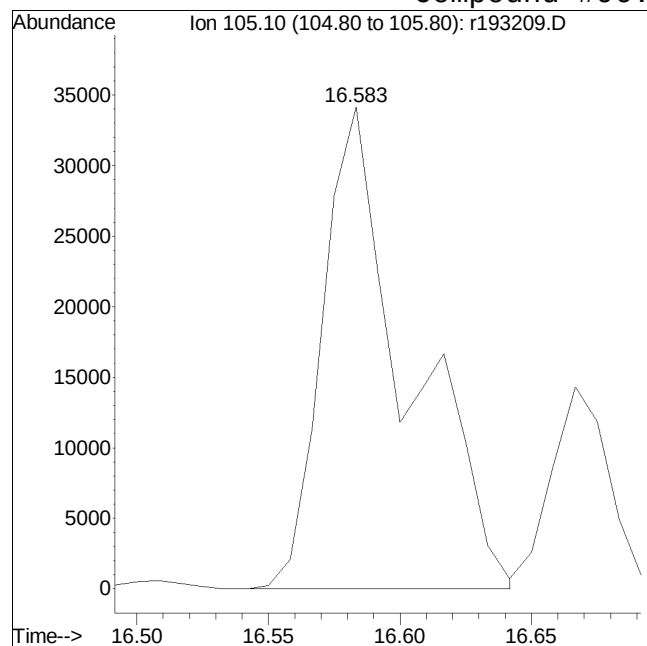
Tgt Ion:	105	Resp:	76194
Ion Ratio	Lower	Upper	
105	100		
120	55.5	49.2	73.8
91	8.2	49.9	74.9#



Manual Integration Report

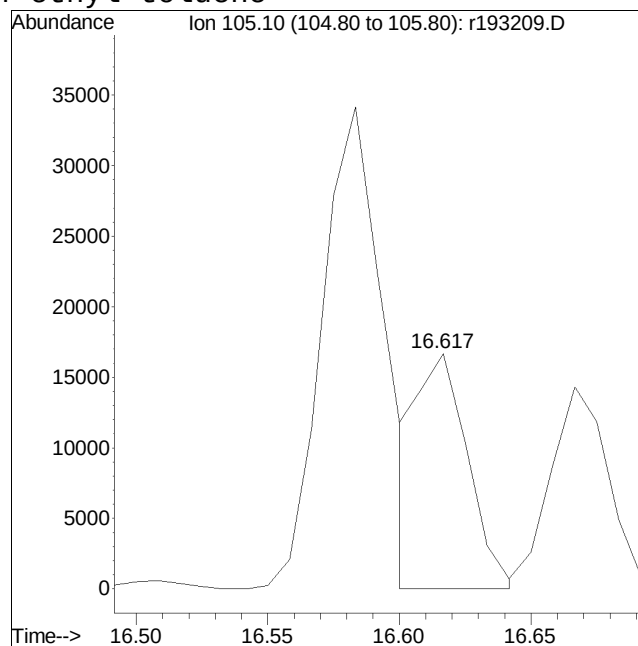
Data Path : 0:\Forensics\Data\Airlab19QMethod : TFS19_200224.M
Data File : r193209.D Operator : AIRLAB19:EW
Date Inj'd : 3/21/2020 0:2: 8 Instrument :
Sample : L2011723-02D,3,75,250 Quant Date : 3/21/2020 7:57 am

Compound #96: 4-ethyl toluene



Original Peak Response = 77525

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 22527 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193210.D
 Acq On : 21 Mar 2020 3:04 AM
 Operator : AIRLAB19:EW
 Sample : L2011723-03D,3,40,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 20:43:23 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\03\200320T\r193190.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	8.775	49	296033	10.000	ppbV	0.00
Standard Area = 288364			Recovery =	102.66%		
43) 1,4-difluorobenzene	10.747	114	913325	10.000	ppbV	0.00
Standard Area = 940727			Recovery =	97.09%		
67) chlorobenzene-D5	14.875	54	112218	10.000	ppbV	0.00
Standard Area = 108860			Recovery =	103.08%		

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue	
5) dichlorodifluoromethane	3.556	85	1115	0.067	ppbV		97
6) chloromethane	0.000		0	N.D.	d		
7) Freon-114	0.000		0	N.D.			
9) vinyl chloride	0.000		0	N.D.			
10) 1,3-butadiene	0.000		0	N.D.	d		
13) bromomethane	0.000		0	N.D.			
14) chloroethane	0.000		0	N.D.			
15) ethanol	4.936	31	12046	1.393	ppbV #		61
17) vinyl bromide	0.000		0	N.D.			
19) acetone	5.483	43	1088002	68.442	ppbV #		99
21) trichlorofluoromethane	5.690		0	N.D.			
22) isopropyl alcohol	5.770	45	31526	1.044	ppbV		99
26) 1,1-dichloroethene	0.000		0	N.D.			
27) tertiary butyl alcohol	6.438	59	21253	0.768	ppbV		96
28) methylene chloride	6.540		0	N.D.			
29) 3-chloropropene	0.000		0	N.D.	d		
30) carbon disulfide	6.840		0	N.D.			
31) Freon 113	6.822		0	N.D.			
32) trans-1,2-dichloroethene	7.533		0	N.D.			
33) 1,1-dichloroethane	0.000		0	N.D.			
34) MTBE	0.000		0	N.D.			
36) 2-butanone	8.133	43	159608	4.479	ppbV		95
37) cis-1,2-dichloroethene	8.600	61	191731	9.607	ppbV		96
38) Ethyl Acetate	0.000		0	N.D.			
39) chloroform	8.908	83	41339	1.670	ppbV		93
40) Tetrahydrofuran	9.325	42	17746	0.741	ppbV		98
42) 1,2-dichloroethane	0.000		0	N.D.			

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193210.D
 Acq On : 21 Mar 2020 3:04 AM
 Operator : AIRLAB19:EW
 Sample : L2011723-03D,3,40,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 20:43:23 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\03\200320T\r193190.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
44) hexane	8.817	57	6528	0.195	ppbV	#	26
48) 1,1,1-trichloroethane	0.000		0	N.D.			
50) benzene	10.400	78	10952	0.166	ppbV		99
52) carbon tetrachloride	0.000		0	N.D.			
53) cyclohexane	10.687	56	1939	0.053	ppbV	#	92
56) 1,2-dichloropropane	0.000		0	N.D.			
57) bromodichloromethane	0.000		0	N.D.	d		
58) 1,4-dioxane	0.000		0	N.D.			
59) trichloroethene	11.487	130	50792	2.158	ppbV		96
60) 2,2,4-trimethylpentane	0.000		0	N.D.	d		
62) heptane	11.780	43	16465	0.403	ppbV		97
63) cis-1,3-dichloropropene	0.000		0	N.D.			
64) 4-methyl-2-pentanone	0.000		0	N.D.	d		
65) trans-1,3-dichloropropene	0.000		0	N.D.			
66) 1,1,2-trichloroethane	0.000		0	N.D.			
68) toluene	13.367	91	107408	1.572	ppbV		99
72) 2-hexanone	13.583	43	56738	1.429	ppbV	#	79
74) dibromochloromethane	0.000		0	N.D.			
75) 1,2-dibromoethane	0.000		0	N.D.			
78) tetrachloroethene	14.358	166	1536096	51.163	ppbV		97
80) chlorobenzene	0.000		0	N.D.	d		
81) ethylbenzene	15.192	91	37803	0.461	ppbV		100
83) m+p-xylene	15.317	91	98318	1.522	ppbV		98
84) bromoform	0.000		0	N.D.			
85) styrene	15.600		0	N.D.			
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.	d		
87) o-xylene	15.683	91	32862	0.518	ppbV		97
96) 4-ethyl toluene	16.617	105	11228M6	0.105	ppbV		
97) 1,3,5-trimethylbenzene	16.667	105	8187	0.095	ppbV	#	92
99) 1,2,4-trimethylbenzene	16.983	105	23054	0.289	ppbV	#	60
101) Benzyl Chloride	0.000		0	N.D.	d		
102) 1,3-dichlorobenzene	0.000		0	N.D.			
103) 1,4-dichlorobenzene	0.000		0	N.D.			
107) 1,2-dichlorobenzene	17.433		0	N.D.			
115) 1,2,4-trichlorobenzene	0.000		0	N.D.			
119) hexachlorobutadiene	0.000		0	N.D.			

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193210.D
 Acq On : 21 Mar 2020 3:04 AM
 Operator : AIRLAB19:EW
 Sample : L2011723-03D,3,40,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 20:43:23 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

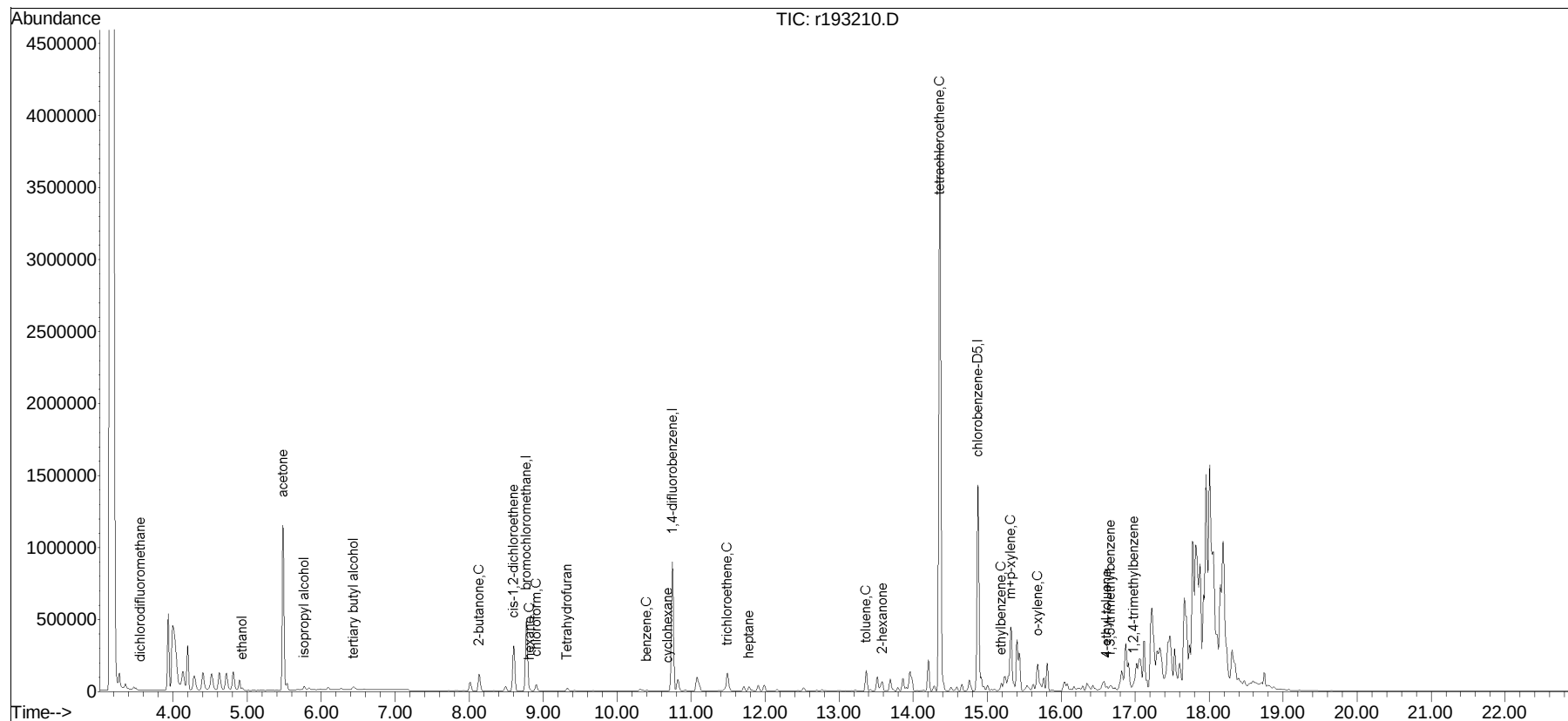
CCAL FILE : 0:\Forensics\Data\Airlab19\2020\03\200320T\r193190.D
 Sub List : T015-NY - .

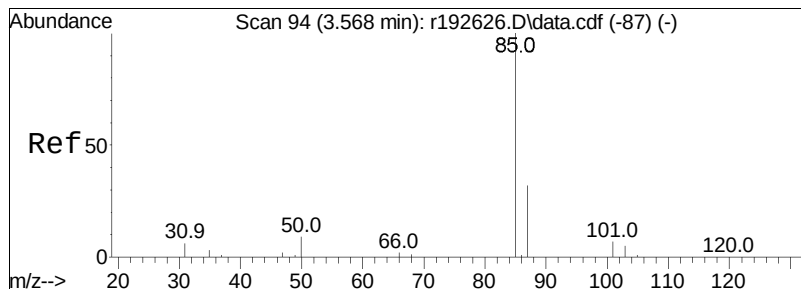
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Sub List : T015-NY - .s\Data\Airlab19\2020\03\200320T\r193190.D

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
Data File : r193210.D
Acq On : 21 Mar 2020 3:04 AM
Operator : AIRLAB19:EW
Sample : L2011723-03D, 3, 40, 250
Misc : WG1353556, ICAL16553
ALS Vial : 0 Sample Multiplier: 1

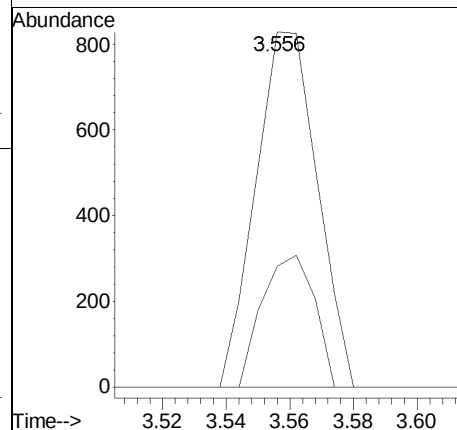
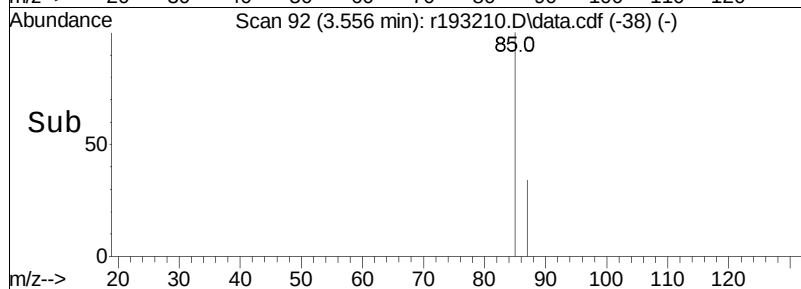
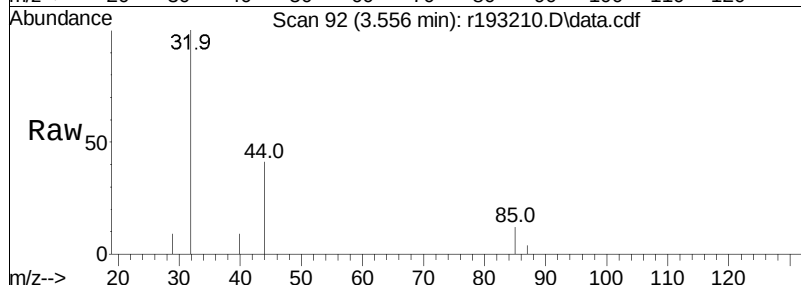
Quant Time: Mar 21 20:43:23 2020
Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Tue Feb 25 10:21:40 2020
Response via : Initial Calibration

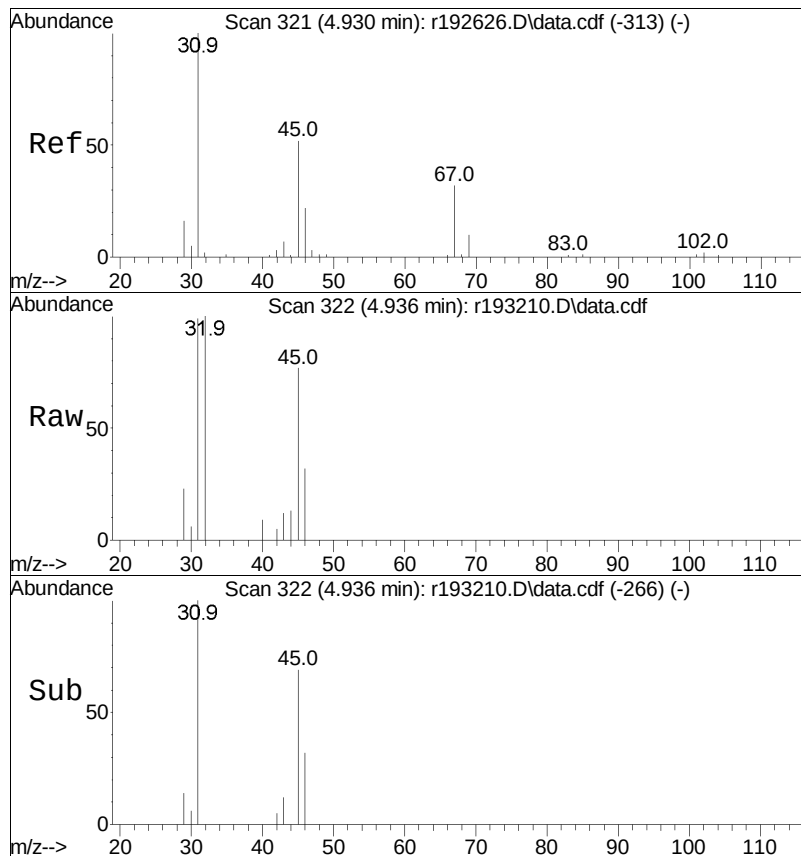




#5
dichlorodifluoromethane
Concen: 0.07 ppbV
RT: 3.556 min Scan# 92
Delta R.T. -0.006 min
Lab File: r193210.D
Acq: 21 Mar 2020 3:04 AM

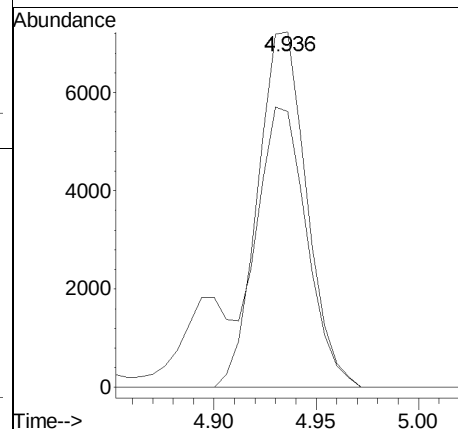
Tgt Ion: 85 Resp: 1115
Ion Ratio Lower Upper
85 100
87 34.1 25.9 38.9

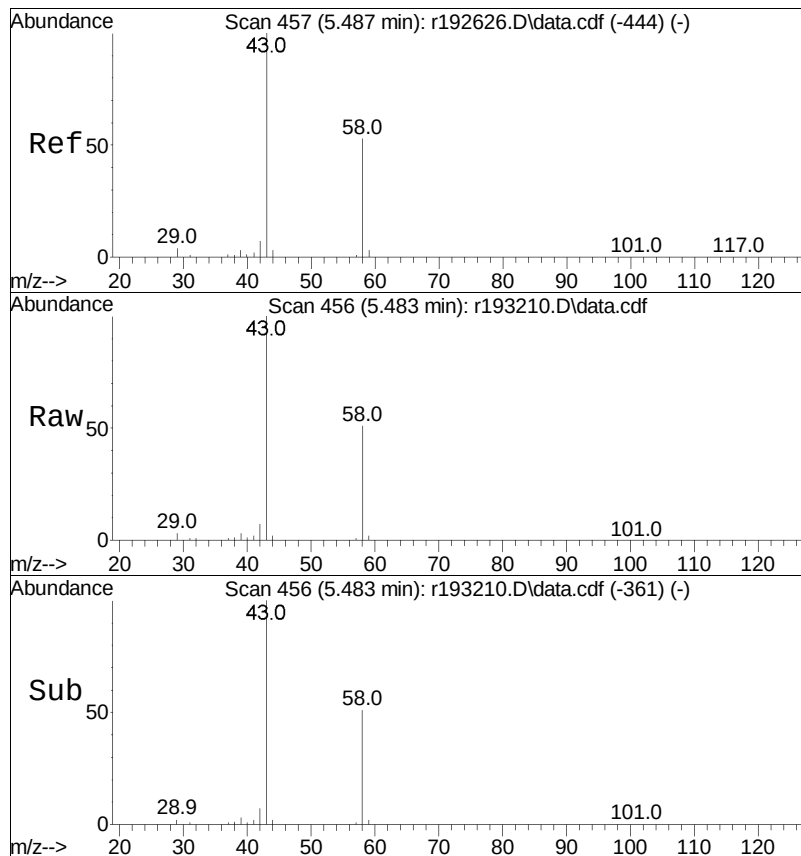




#15
 ethanol
 Concen: 1.39 ppbV
 RT: 4.936 min Scan# 322
 Delta R.T. 0.006 min
 Lab File: r193210.D
 Acq: 21 Mar 2020 3:04 AM

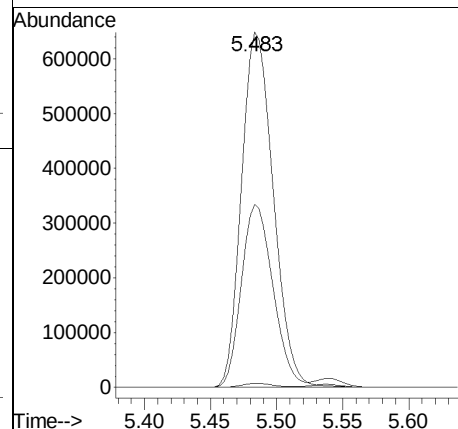
Tgt Ion	Ratio	Lower	Upper
31	100		
45	77.6	40.6	60.8#

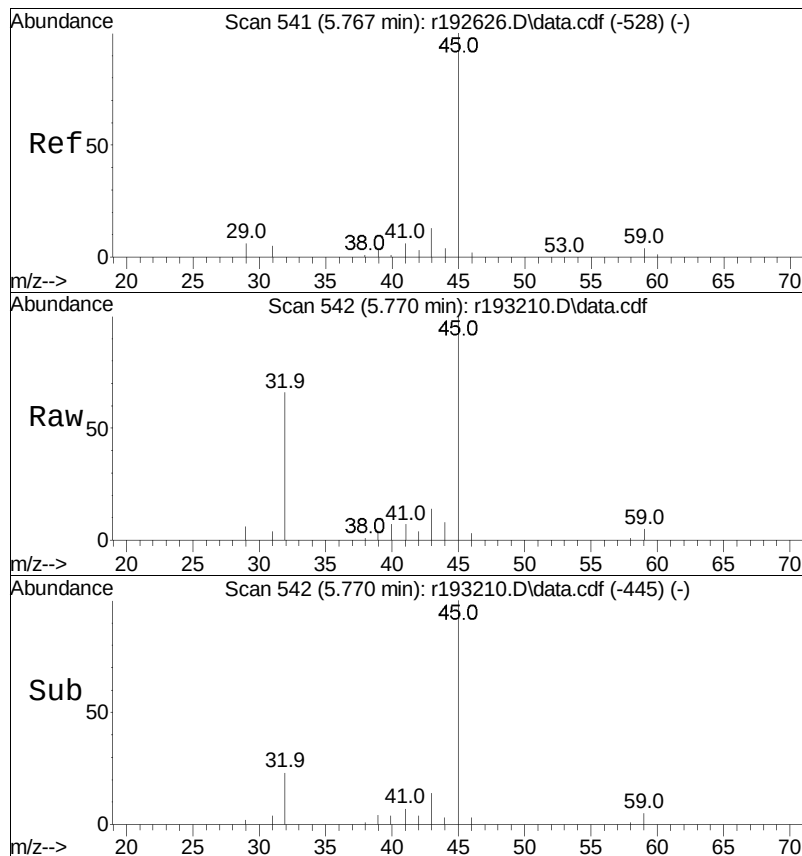




#19
acetone
Concen: 68.44 ppbV
RT: 5.483 min Scan# 456
Delta R.T. -0.013 min
Lab File: r193210.D
Acq: 21 Mar 2020 3:04 AM

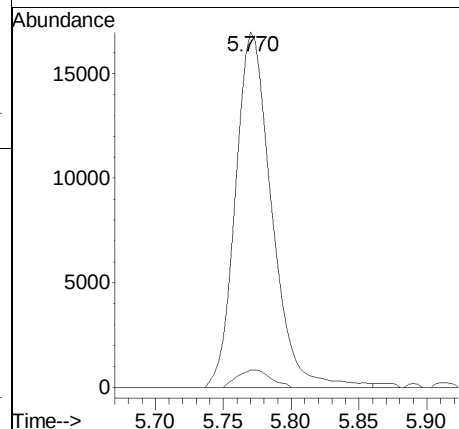
Tgt Ion	Ratio	Lower	Upper
43	100		
58	51.5	42.0	63.0
57	1.1	1.4	2.0#

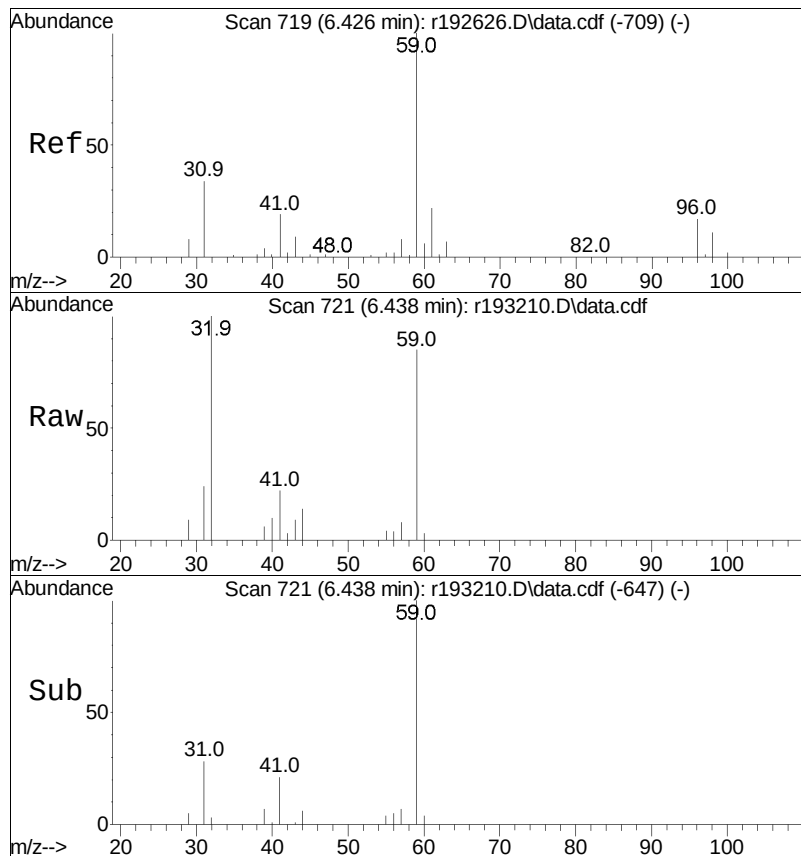




#22
 isopropyl alcohol
 Concen: 1.04 ppbV
 RT: 5.770 min Scan# 542
 Delta R.T. -0.007 min
 Lab File: r193210.D
 Acq: 21 Mar 2020 3:04 AM

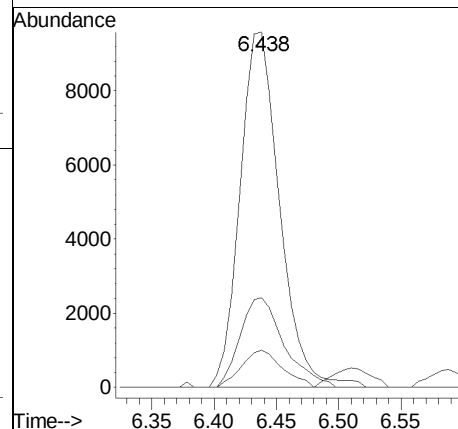
Tgt Ion	Ratio	Lower	Upper
45	100		
59	4.8	3.7	5.5

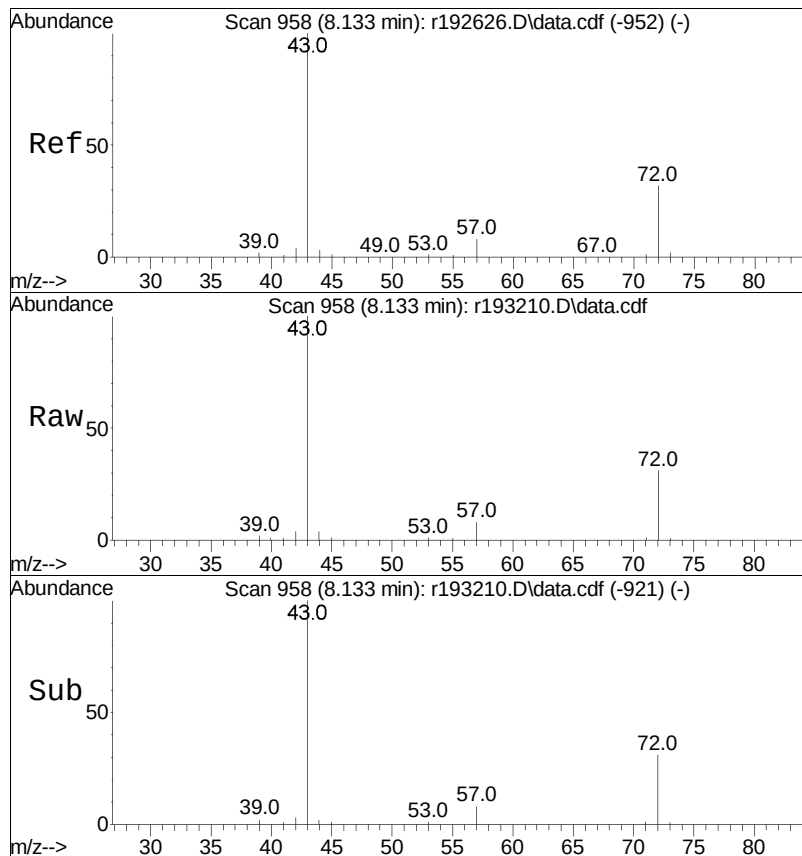




#27
 tertiary butyl alcohol
 Concen: 0.77 ppbV
 RT: 6.438 min Scan# 721
 Delta R.T. -0.012 min
 Lab File: r193210.D
 Acq: 21 Mar 2020 3:04 AM

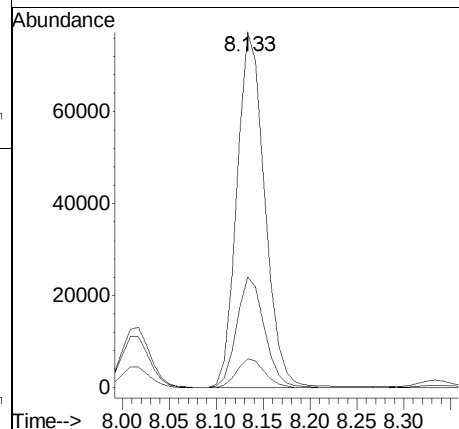
Tgt Ion:	59	Resp:	21253
Ion	Ratio	Lower	Upper
59	100		
41	25.3	18.8	28.2
43	10.5	9.8	14.8

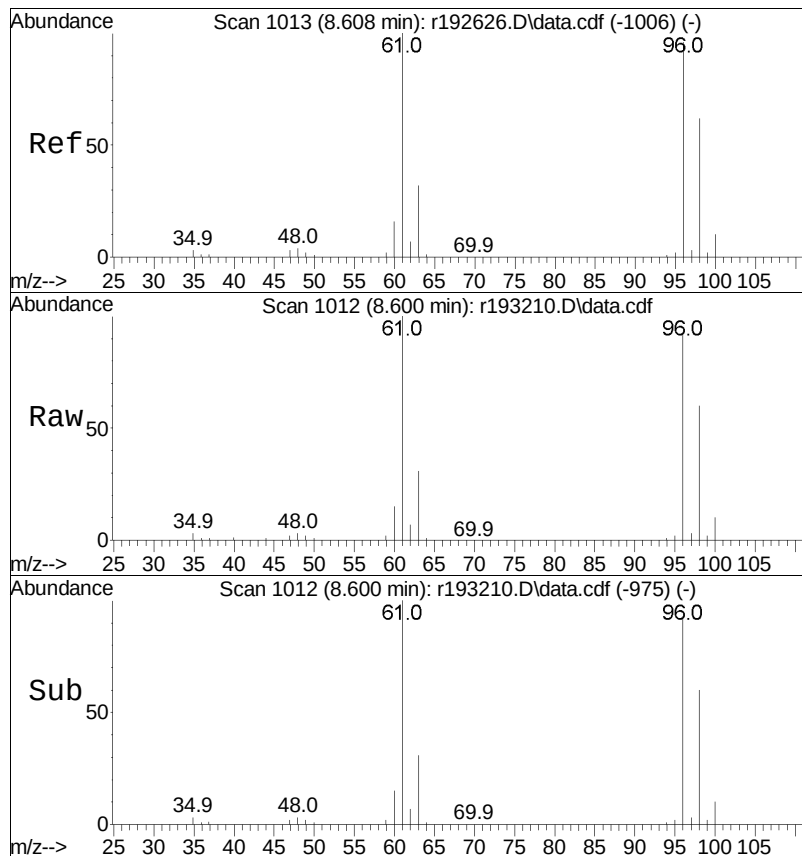




#36
 2-butanone
 Concen: 4.48 ppbV
 RT: 8.133 min Scan# 958
 Delta R.T. -0.025 min
 Lab File: r193210.D
 Acq: 21 Mar 2020 3:04 AM

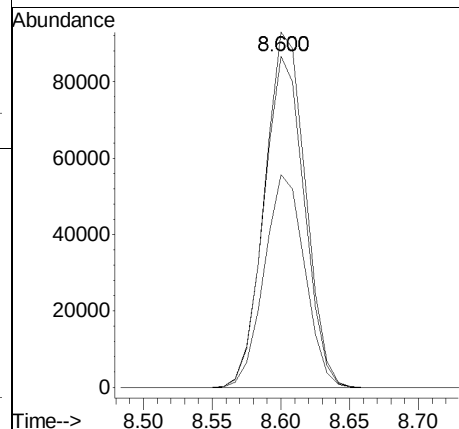
Tgt Ion	Ratio	Lower	Upper
43	100		
72	31.1	27.7	41.5
57	8.1	6.3	9.5

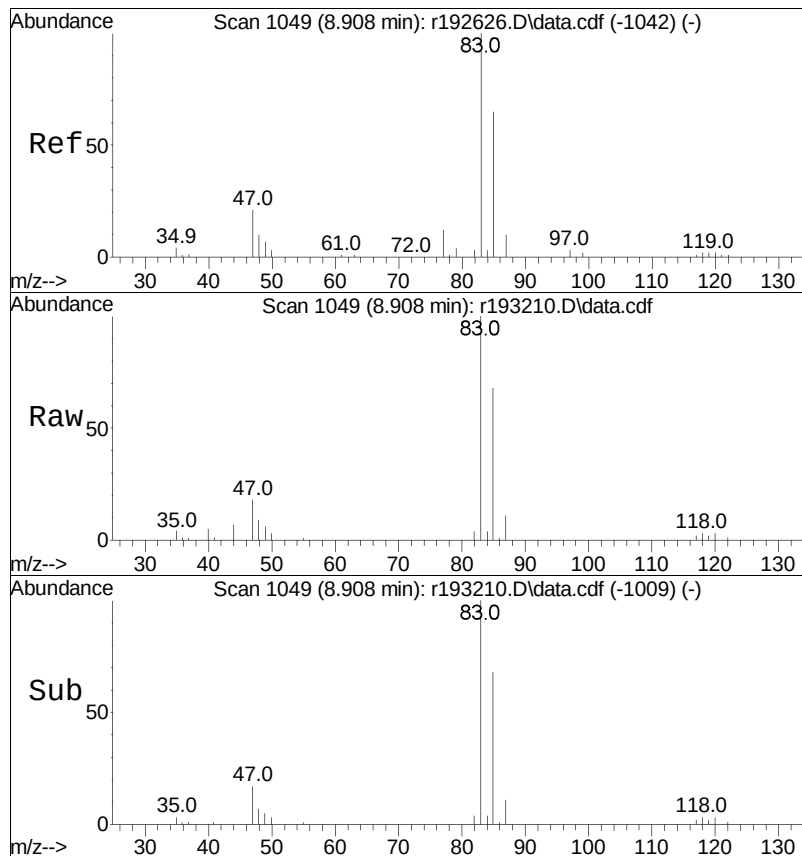




#37
 cis-1,2-dichloroethene
 Concen: 9.61 ppbV
 RT: 8.600 min Scan# 1012
 Delta R.T. -0.008 min
 Lab File: r193210.D
 Acq: 21 Mar 2020 3:04 AM

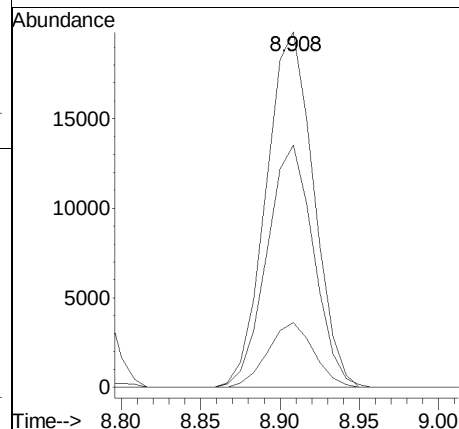
Tgt Ion:	61	Resp:	191731
Ion Ratio	Lower	Upper	
61	100		
96	93.2	77.4	116.0
98	59.9	51.0	76.6

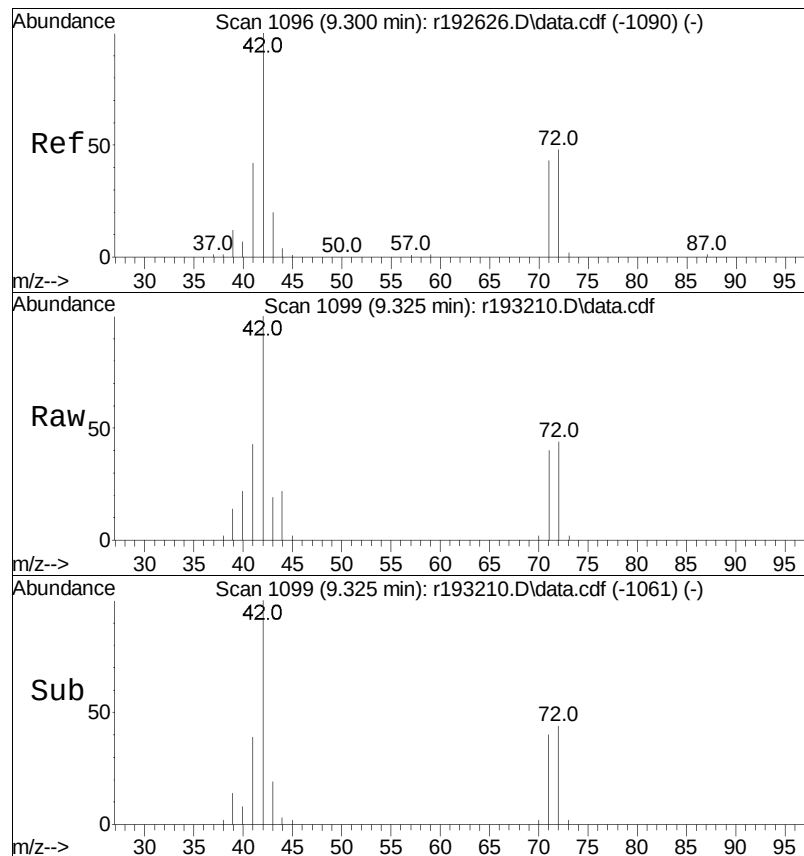




#39
chloroform
Concen: 1.67 ppbV
RT: 8.908 min Scan# 1049
Delta R.T. 0.000 min
Lab File: r193210.D
Acq: 21 Mar 2020 3:04 AM

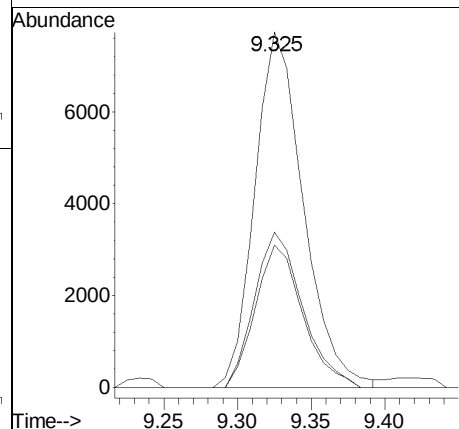
Tgt Ion	Ratio	Lower	Upper
83	100		
85	68.2	50.1	75.1
47	18.2	17.6	26.4

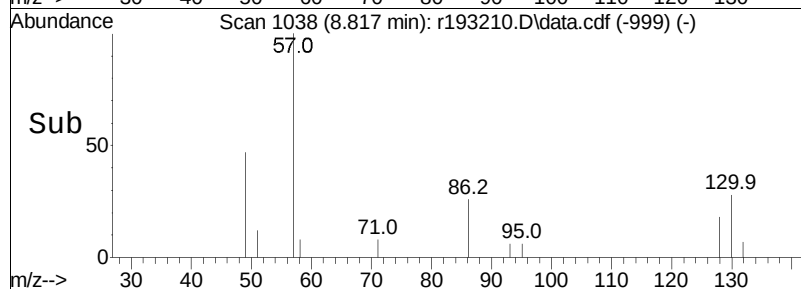
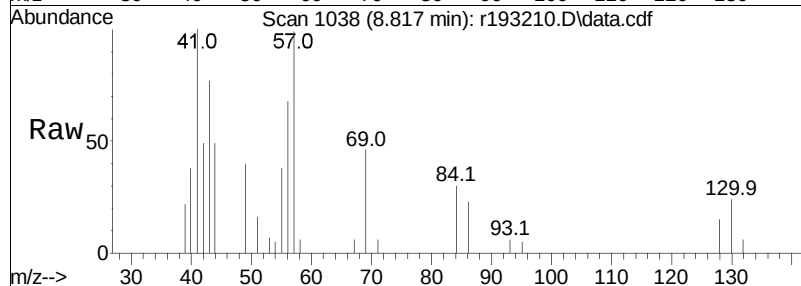
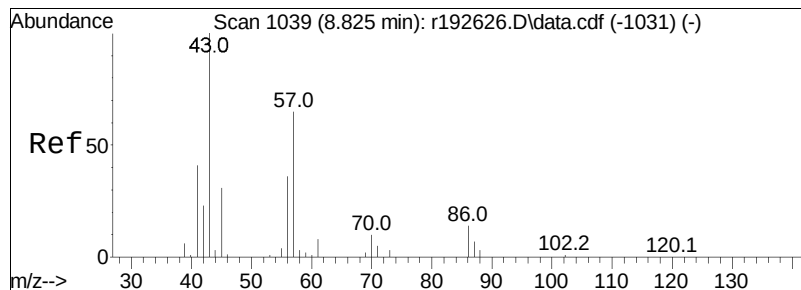




#40
 Tetrahydrofuran
 Concen: 0.74 ppbV
 RT: 9.325 min Scan# 1099
 Delta R.T. -0.017 min
 Lab File: r193210.D
 Acq: 21 Mar 2020 3:04 AM

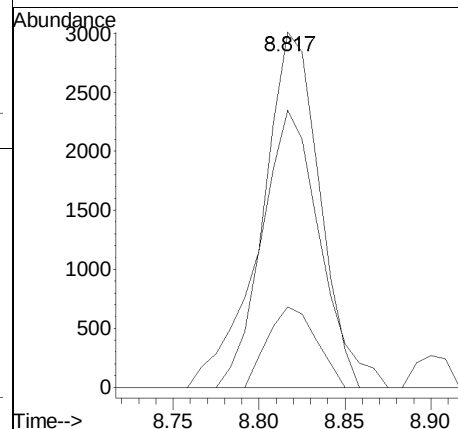
Tgt	Ion	Resp	Lower	Upper
42	100			
71	40.0		32.5	48.7
72	43.7		33.7	50.5

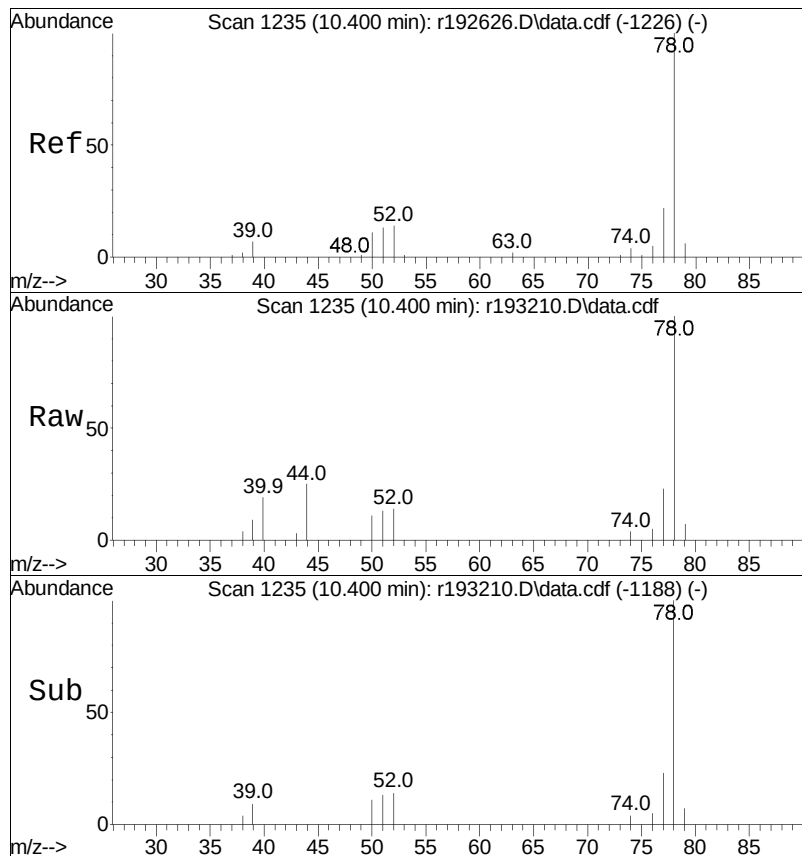




#44
hexane
Concen: 0.20 ppbV
RT: 8.817 min Scan# 1038
Delta R.T. -0.008 min
Lab File: r193210.D
Acq: 21 Mar 2020 3:04 AM

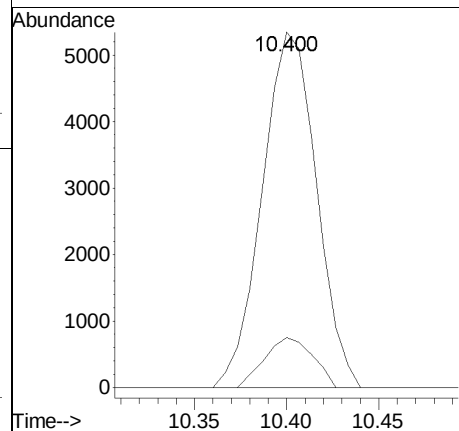
Tgt Ion	Ratio	Lower	Upper
57	100		
43	78.0	159.3	238.9#
86	22.7	15.7	23.5

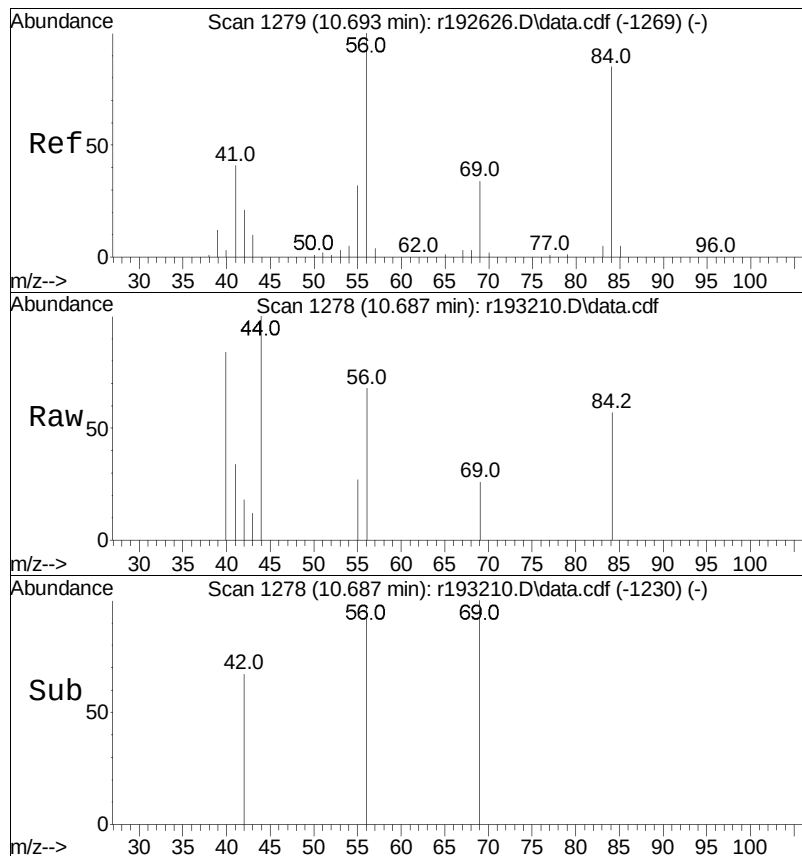




#50
benzene
Concen: 0.17 ppbV
RT: 10.400 min Scan# 1235
Delta R.T. 0.000 min
Lab File: r193210.D
Acq: 21 Mar 2020 3:04 AM

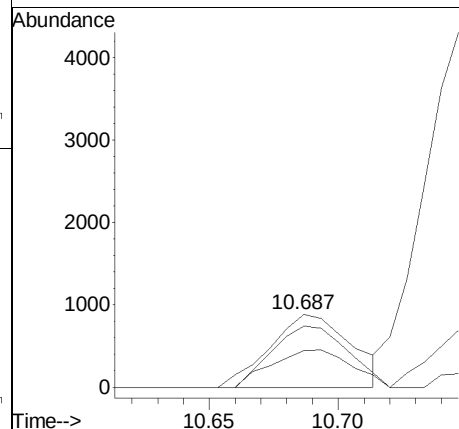
Tgt	Ion	Ratio	Lower	Upper
78	100			
52	14.0	11.4	17.2	

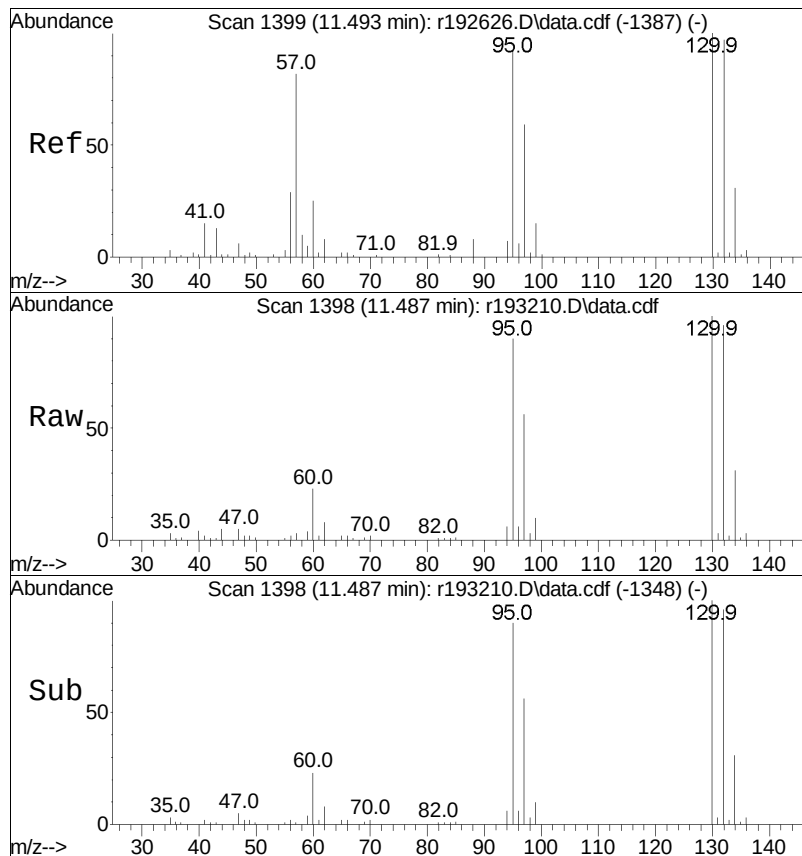




#53
cyclohexane
Concen: 0.05 ppbV
RT: 10.687 min Scan# 1278
Delta R.T. -0.007 min
Lab File: r193210.D
Acq: 21 Mar 2020 3:04 AM

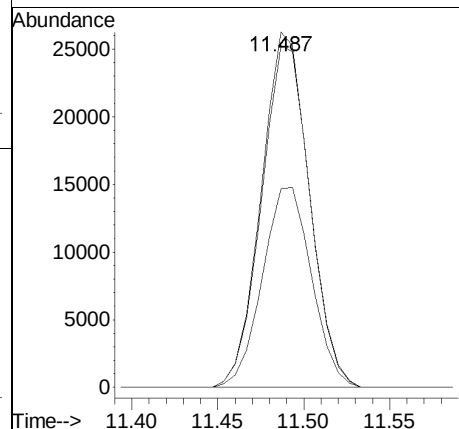
Tgt	Ion	Resp	Lower	Upper
56	100	1939		
84	84.1	69.8	104.6	
41	50.5	32.1	48.1	

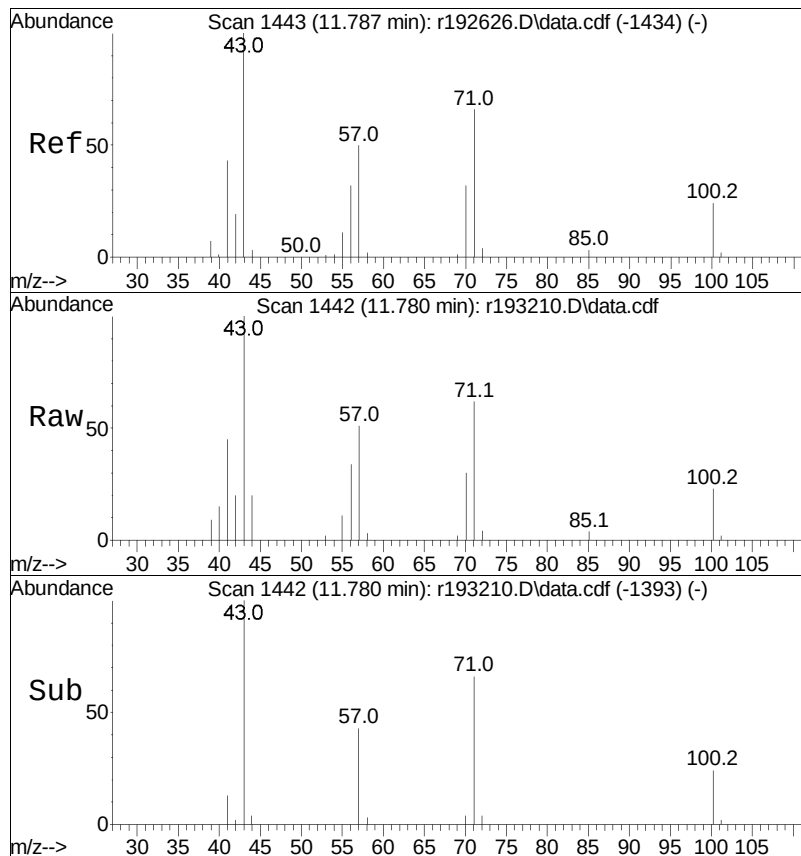




#59
 trichloroethene
 Concen: 2.16 ppbV
 RT: 11.487 min Scan# 1398
 Delta R.T. 0.000 min
 Lab File: r193210.D
 Acq: 21 Mar 2020 3:04 AM

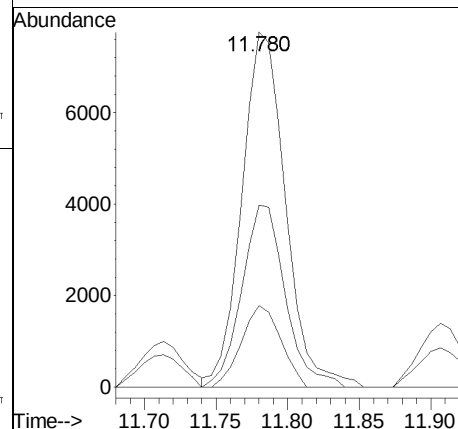
Tgt	Ion:130	Resp:	50792
Ion	Ratio	Lower	Upper
130	100		
132	96.2	73.8	110.8
97	55.9	46.9	70.3

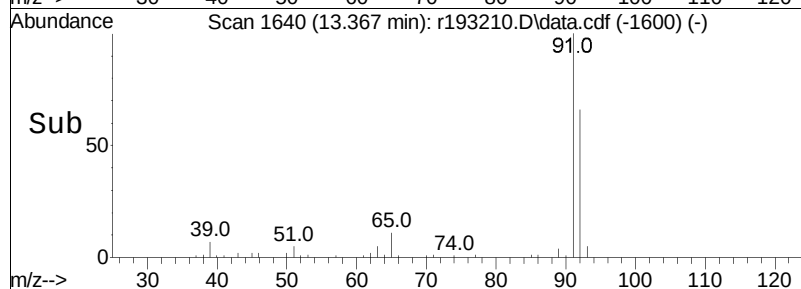
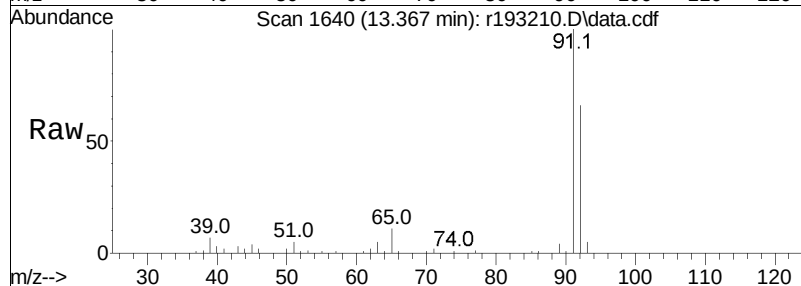
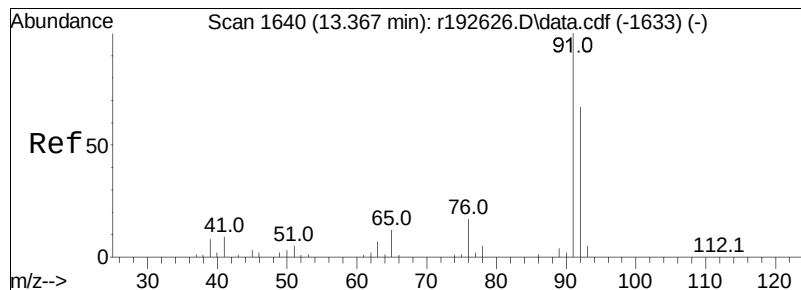




#62
 heptane
 Concen: 0.40 ppbV
 RT: 11.780 min Scan# 1442
 Delta R.T. 0.000 min
 Lab File: r193210.D
 Acq: 21 Mar 2020 3:04 AM

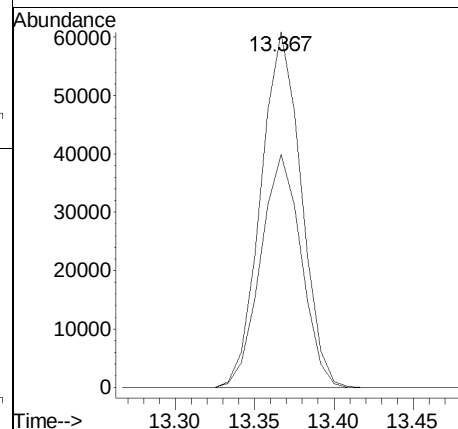
Tgt	Ion: 43	Resp:	16465
Ion	Ratio	Lower	Upper
43	100		
57	51.3	41.0	61.6
100	23.0	21.4	32.2

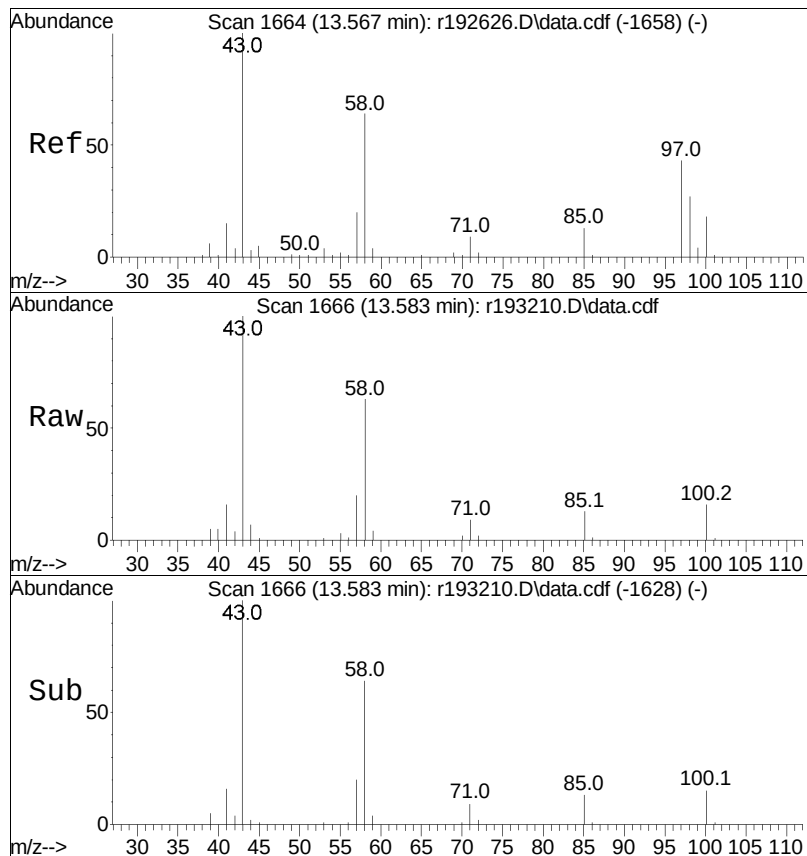




#68
toluene
Concen: 1.57 ppbV
RT: 13.367 min Scan# 1640
Delta R.T. 0.000 min
Lab File: r193210.D
Acq: 21 Mar 2020 3:04 AM

Tgt	Ion	Ratio	Lower	Upper
91	100			
92	65.6	53.3	79.9	





#72

2-hexanone

Concen: 1.43 ppbV

RT: 13.583 min Scan# 1666

Delta R.T. -0.017 min

Lab File: r193210.D

Acq: 21 Mar 2020 3:04 AM

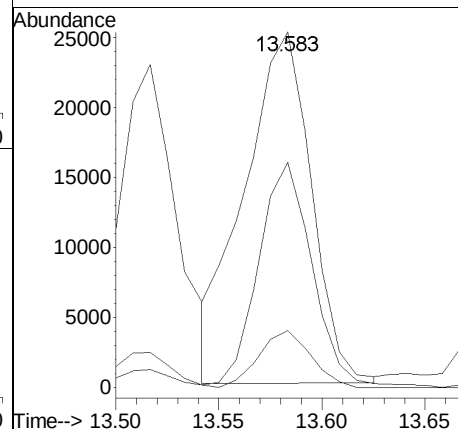
Tgt Ion: 43 Resp: 56738

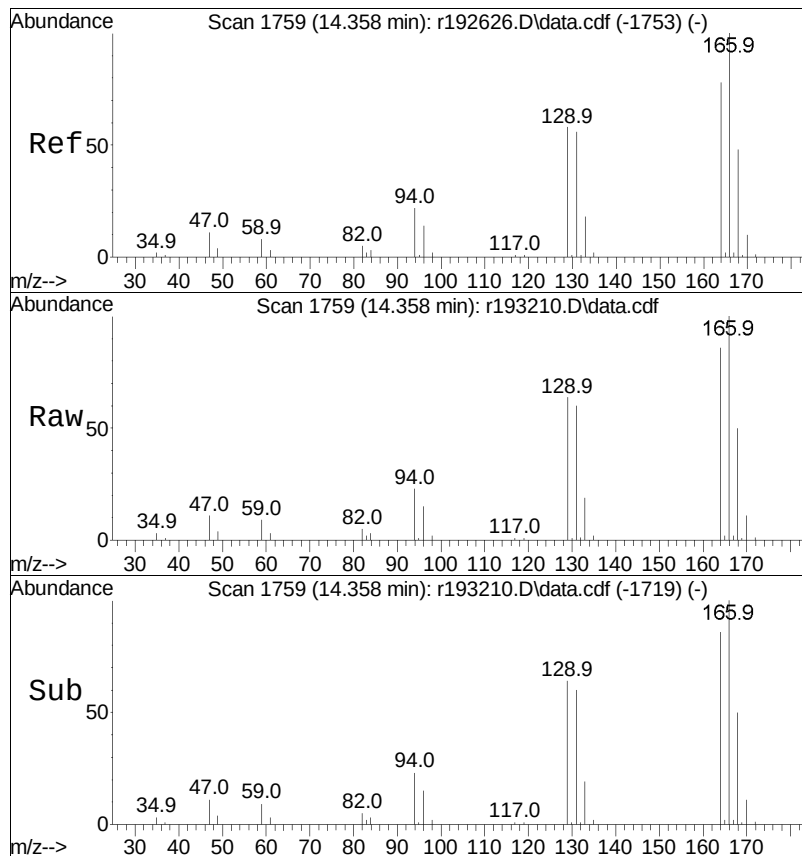
Ion Ratio Lower Upper

43 100

58 63.3 62.6 94.0

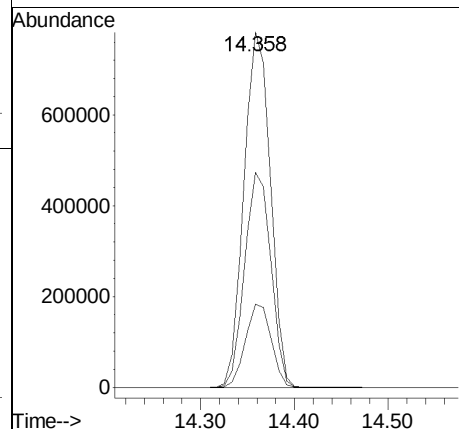
100 16.0 26.5 39.7#

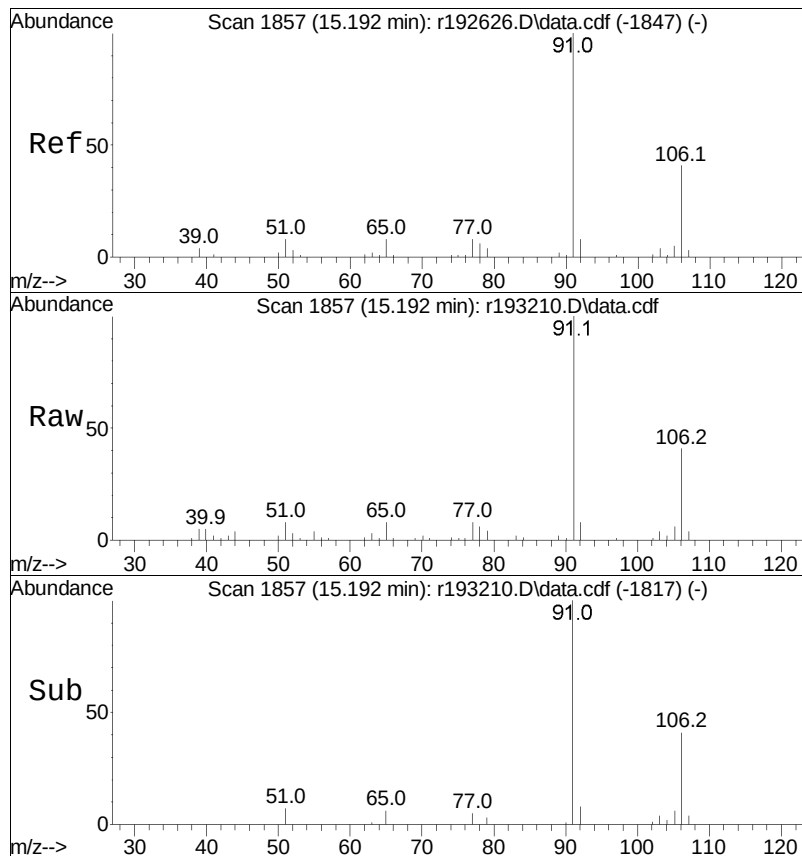




#78
 tetrachloroethene
 Concen: 51.16 ppbV
 RT: 14.358 min Scan# 1759
 Delta R.T. 0.000 min
 Lab File: r193210.D
 Acq: 21 Mar 2020 3:04 AM

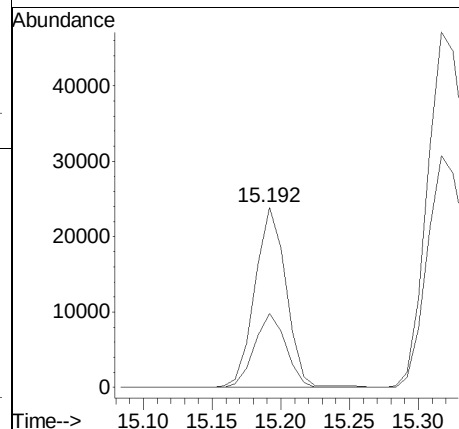
Tgt Ion	Ratio	Lower	Upper
166	100		
131	60.5	46.4	69.6
94	23.4	18.5	27.7

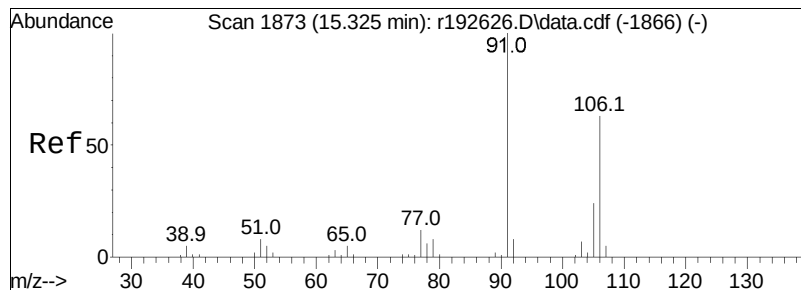




#81
ethylbenzene
Concen: 0.46 ppbV
RT: 15.192 min Scan# 1857
Delta R.T. 0.000 min
Lab File: r193210.D
Acq: 21 Mar 2020 3:04 AM

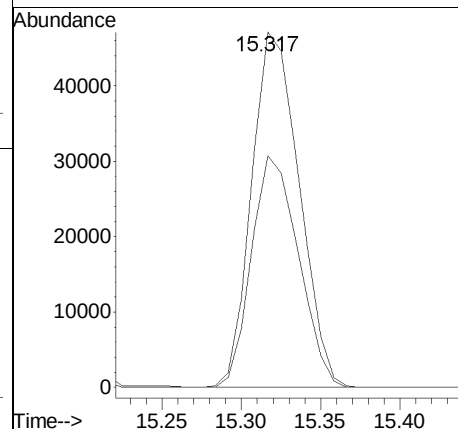
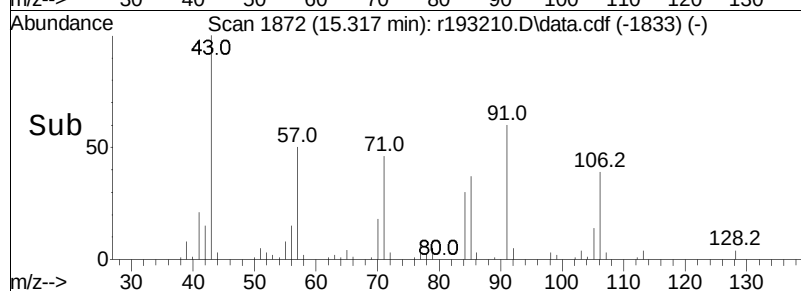
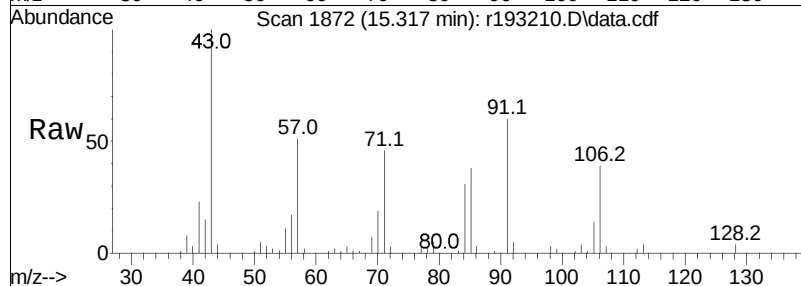
Tgt	Ion	Resp	Lower	Upper
91	100	37803		
106	41.0	32.9	49.3	

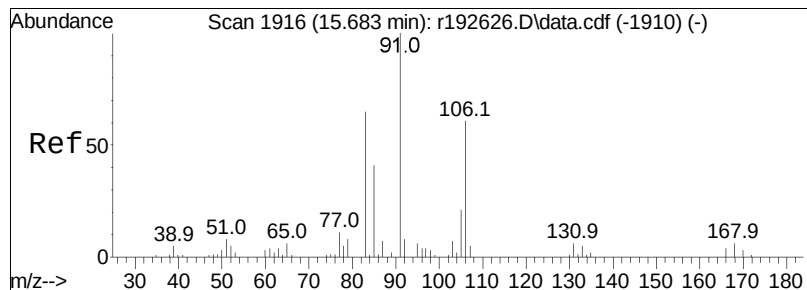




#83
 m+p-xylene
 Concen: 1.52 ppbV
 RT: 15.317 min Scan# 1872
 Delta R.T. -0.008 min
 Lab File: r193210.D
 Acq: 21 Mar 2020 3:04 AM

Tgt	Ion	Resp	Lower	Upper
91	100	98318		
106	65.2	51.0	76.4	





#87

o-xylene

Concen: 0.52 ppbV

RT: 15.683 min Scan# 1916

Delta R.T. 0.000 min

Lab File: r193210.D

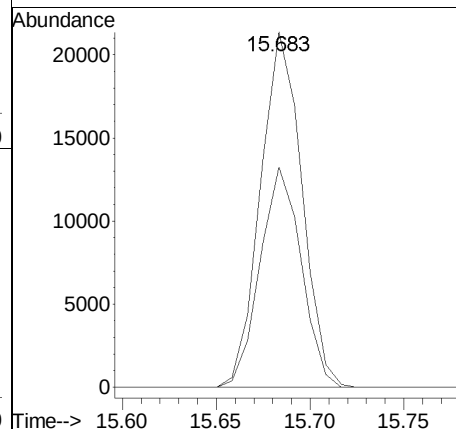
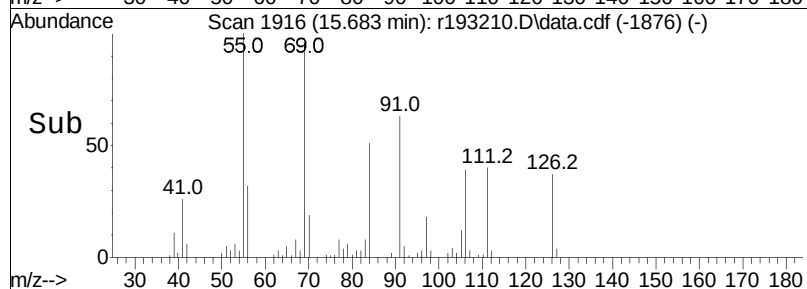
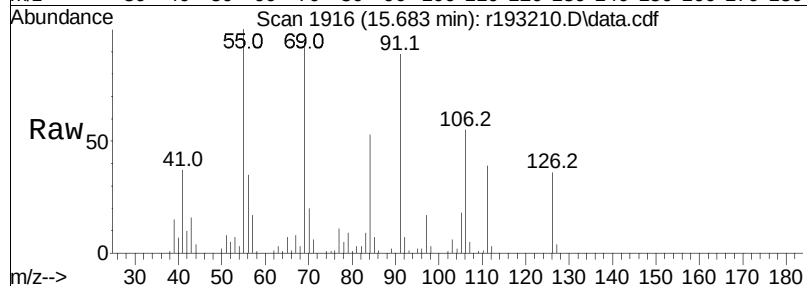
Acq: 21 Mar 2020 3:04 AM

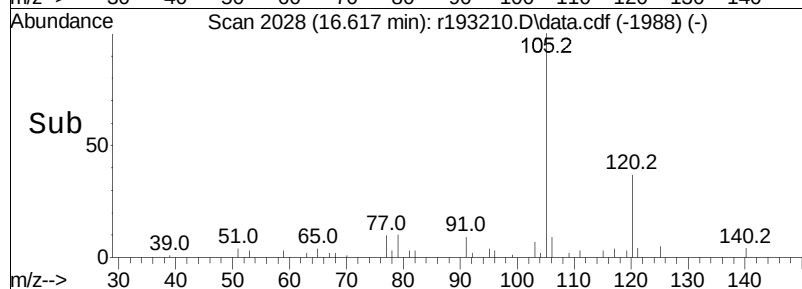
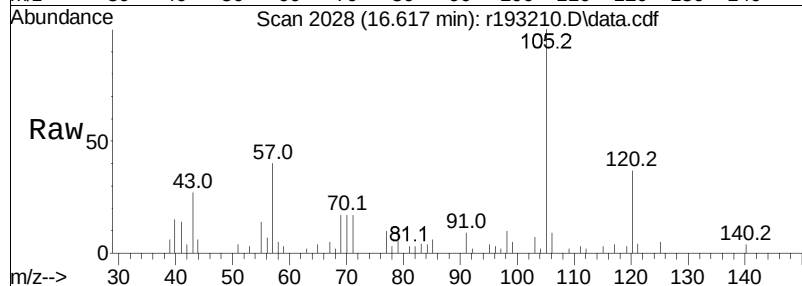
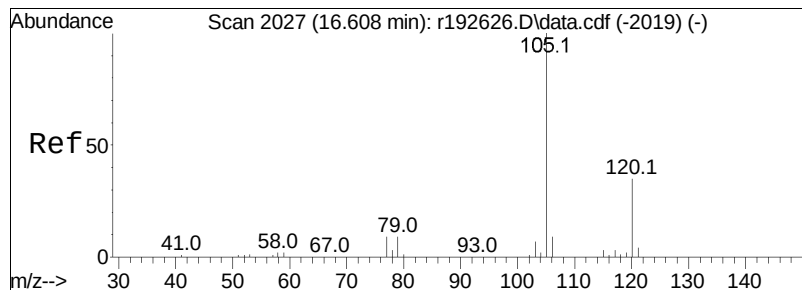
Tgt Ion: 91 Resp: 32862

Ion Ratio Lower Upper

91 100

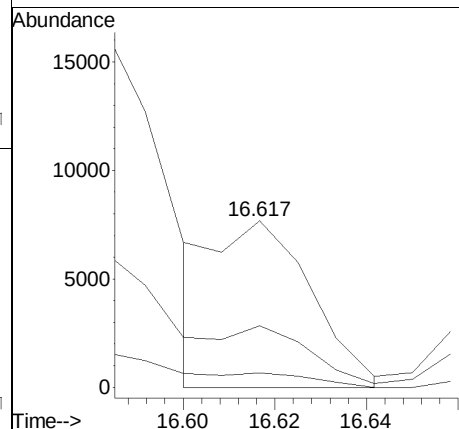
106 62.0 47.8 71.8

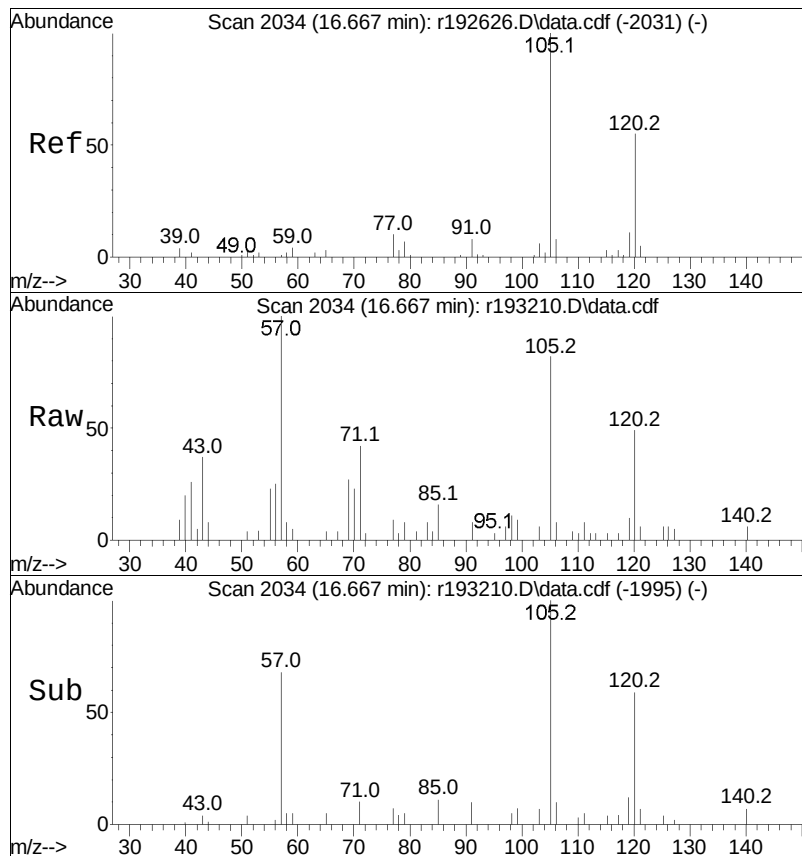




#96
 4-ethyl toluene
 Concen: 0.10 ppbV m
 RT: 16.617 min Scan# 2028
 Delta R.T. 0.000 min
 Lab File: r193210.D
 Acq: 21 Mar 2020 3:04 AM

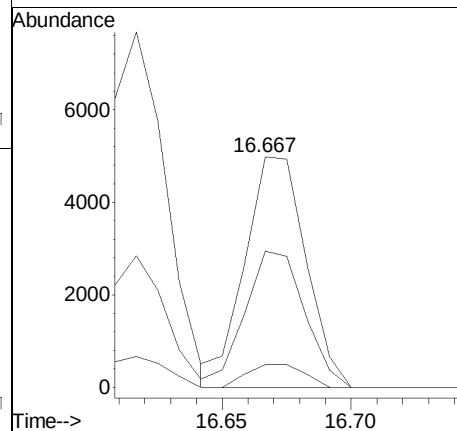
Tgt Ion	Ratio	Lower	Upper
105	100		
120	37.0	27.2	40.8
91	8.7	7.0	10.4

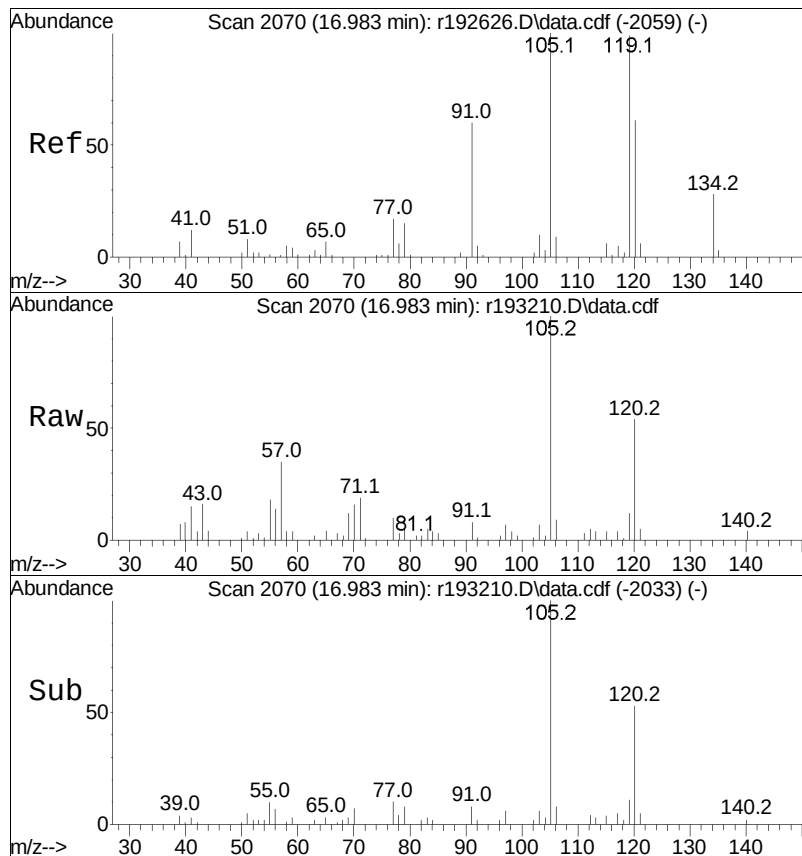




#97
 1,3,5-trimethylbenzene
 Concen: 0.09 ppbV
 RT: 16.667 min Scan# 2034
 Delta R.T. -0.008 min
 Lab File: r193210.D
 Acq: 21 Mar 2020 3:04 AM

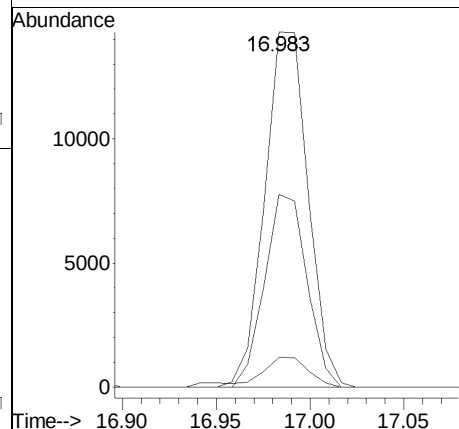
Tgt Ion	Ratio	Lower	Upper
105	100		
120	59.2	42.6	64.0
91	9.9	6.6	9.8





#99
 1,2,4-trimethylbenzene
 Concen: 0.29 ppbV
 RT: 16.983 min Scan# 2070
 Delta R.T. -0.008 min
 Lab File: r193210.D
 Acq: 21 Mar 2020 3:04 AM

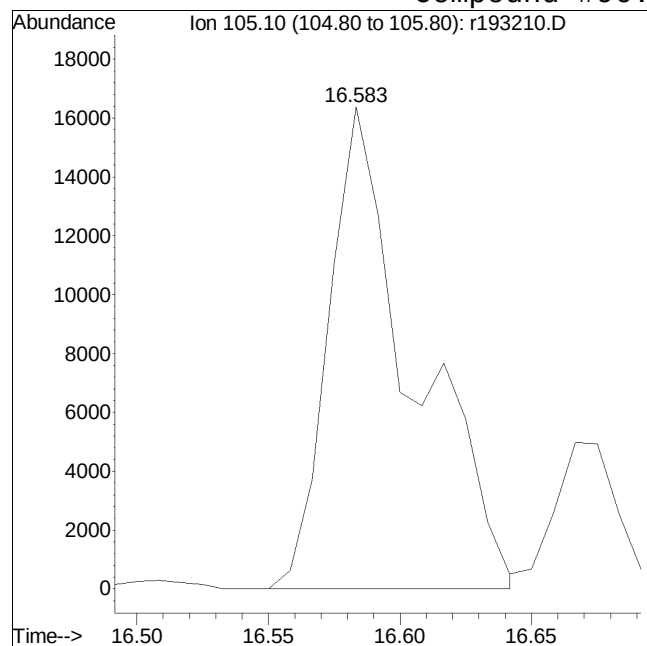
Tgt Ion	Ratio	Resp	Lower	Upper
105	100	23054		
120	54.3		49.2	73.8
91	8.4		49.9	74.9#



Manual Integration Report

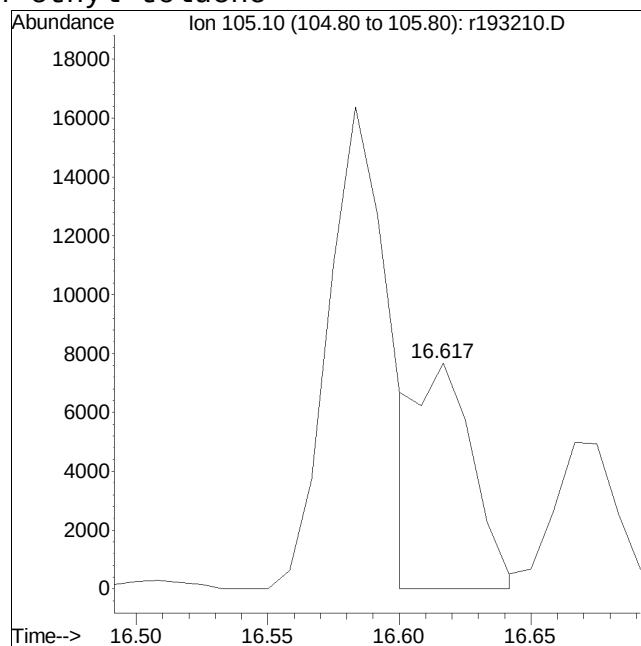
Data Path : O:\Forensics\Data\Airlab19QMethod : TFS19_200224.M
Data File : r193210.D Operator : AIRLAB19:EW
Date Inj'd : 3/21/2020 0:3: 4 Instrument :
Sample : L2011723-03D,3,40,250 Quant Date : 3/21/2020 7:58 am

Compound #96: 4-ethyl toluene



Original Peak Response = 36833

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 11228 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193211.D
 Acq On : 21 Mar 2020 3:40 AM
 Operator : AIRLAB19:EW
 Sample : L2011723-04D,3,100,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 20:45:17 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\03\200320T\r193190.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	8.775	49	324356	10.000	ppbV	0.00
Standard Area = 288364			Recovery =	112.48%		
43) 1,4-difluorobenzene	10.740	114	995276	10.000	ppbV	0.00
Standard Area = 940727			Recovery =	105.80%		
67) chlorobenzene-D5	14.875	54	122231	10.000	ppbV	0.00
Standard Area = 108860			Recovery =	112.28%		

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	3.556	85	3534	0.194	ppbV	98
6) chloromethane	3.766	50	1397	0.120	ppbV	98
7) Freon-114	0.000		0	N.D.	d	
9) vinyl chloride	0.000		0	N.D.		
10) 1,3-butadiene	4.192	54	22450	1.804	ppbV #	1
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	4.930	31	57925	6.112	ppbV #	66
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.483	43	5190456	298.002	ppbV #	100
21) trichlorofluoromethane	5.690	101	1608	0.084	ppbV	96
22) isopropyl alcohol	5.763	45	119124	3.600	ppbV	100
26) 1,1-dichloroethene	0.000		0	N.D.		
27) tertiary butyl alcohol	6.426	59	103346	3.407	ppbV #	97
28) methylene chloride	6.540		0	N.D.		
29) 3-chloropropene	0.000		0	N.D.	d	
30) carbon disulfide	6.840	76	6537	0.110	ppbV #	60
31) Freon 113	6.828		0	N.D.		
32) trans-1,2-dichloroethene	7.542		0	N.D.		
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	0.000		0	N.D.	d	
36) 2-butanone	8.133	43	993849	25.457	ppbV	95
37) cis-1,2-dichloroethene	0.000		0	N.D.		
38) Ethyl Acetate	0.000		0	N.D.	d	
39) chloroform	8.908	83	5567	0.205	ppbV	95
40) Tetrahydrofuran	9.308	42	74834	2.853	ppbV	98
42) 1,2-dichloroethane	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193211.D
 Acq On : 21 Mar 2020 3:40 AM
 Operator : AIRLAB19:EW
 Sample : L2011723-04D, 3, 100, 250
 Misc : WG1353556, ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 20:45:17 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\03\200320T\r193190.D
 Sub List : T015-NY - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
44) hexane	8.825	57	21722	0.595	ppbV	#	27
48) 1,1,1-trichloroethane	0.000		0	N.D.			
50) benzene	10.400	78	30477	0.423	ppbV		99
52) carbon tetrachloride	0.000		0	N.D.			
53) cyclohexane	10.687	56	4392	0.110	ppbV		96
56) 1,2-dichloropropane	0.000		0	N.D.			
57) bromodichloromethane	0.000		0	N.D.	d		
58) 1,4-dioxane	11.493		0	N.D.			
59) trichloroethene	11.487	130	2224	0.087	ppbV		93
60) 2,2,4-trimethylpentane	11.520	57	22014	0.191	ppbV	#	92
62) heptane	11.780	43	41996	0.943	ppbV		97
63) cis-1,3-dichloropropene	0.000		0	N.D.			
64) 4-methyl-2-pentanone	12.417	43	8112	0.169	ppbV		94
65) trans-1,3-dichloropropene	0.000		0	N.D.			
66) 1,1,2-trichloroethane	0.000		0	N.D.			
68) toluene	13.367	91	207155	2.783	ppbV		97
72) 2-hexanone	13.575	43	246686	5.704	ppbV	#	81
74) dibromochloromethane	0.000		0	N.D.			
75) 1,2-dibromoethane	0.000		0	N.D.			
78) tetrachloroethene	14.358	166	445228	13.615	ppbV		97
80) chlorobenzene	0.000		0	N.D.	d		
81) ethylbenzene	15.192	91	32341	0.362	ppbV		98
83) m+p-xylene	15.317	91	78329	1.113	ppbV		99
84) bromoform	0.000		0	N.D.			
85) styrene	15.600	104	3798	0.056	ppbV		99
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.	d		
87) o-xylene	15.683	91	24848	0.360	ppbV		99
96) 4-ethyl toluene	16.583	105	13157M6	0.113	ppbV		
97) 1,3,5-trimethylbenzene	16.633	105	10609	0.113	ppbV		94
99) 1,2,4-trimethylbenzene	16.942	105	26668	0.307	ppbV	#	61
101) Benzyl Chloride	0.000		0	N.D.	d		
102) 1,3-dichlorobenzene	17.117		0	N.D.			
103) 1,4-dichlorobenzene	17.117		0	N.D.			
107) 1,2-dichlorobenzene	17.383		0	N.D.			
115) 1,2,4-trichlorobenzene	0.000		0	N.D.			
119) hexachlorobutadiene	0.000		0	N.D.			

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193211.D
 Acq On : 21 Mar 2020 3:40 AM
 Operator : AIRLAB19:EW
 Sample : L2011723-04D,3,100,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 20:45:17 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

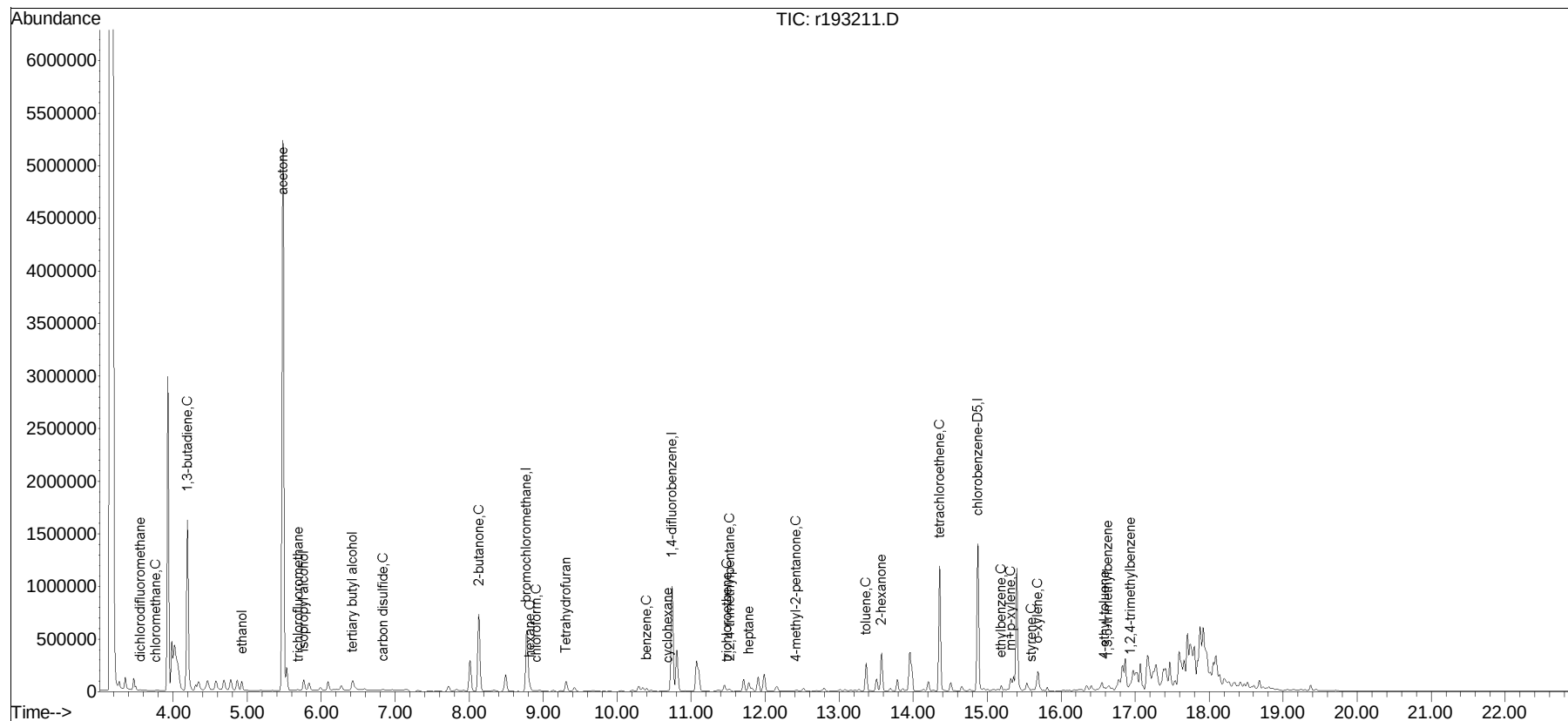
CCAL FILE : 0:\Forensics\Data\Airlab19\2020\03\200320T\r193190.D
 Sub List : T015-NY - .

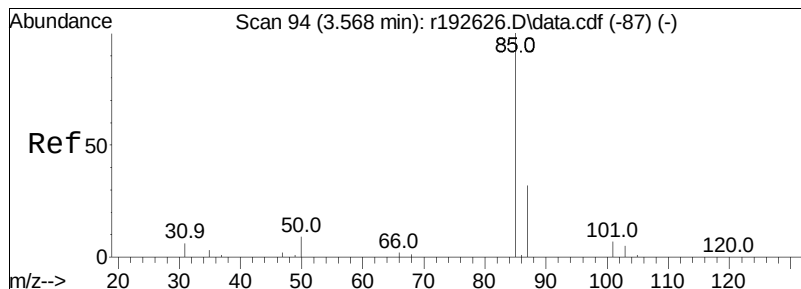
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Sub List : T015-NY - .s\Data\Airlab19\2020\03\200320T\r193190.D

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
Data File : r193211.D
Acq On : 21 Mar 2020 3:40 AM
Operator : AIRLAB19:EW
Sample : L2011723-04D,3,100,250
Misc : WG1353556,ICAL16553
ALS Vial : 0 Sample Multiplier: 1

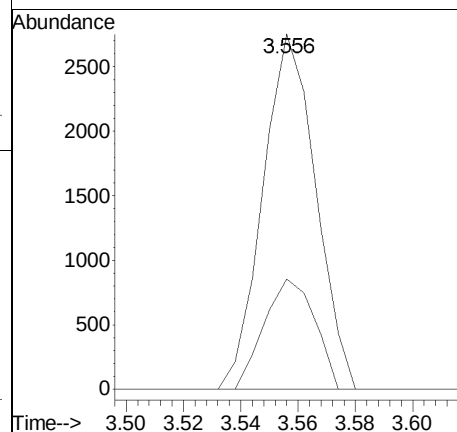
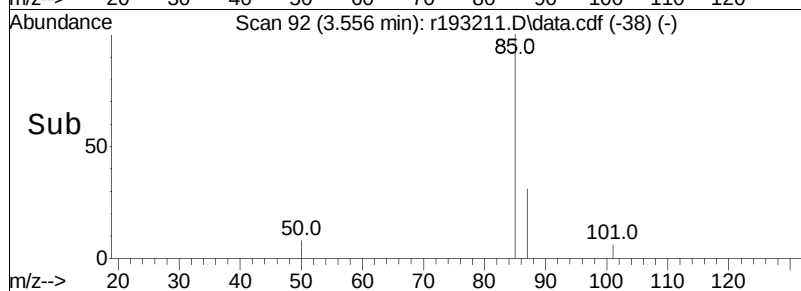
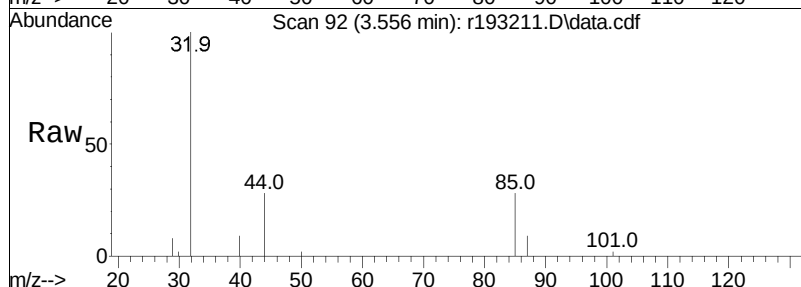
Quant Time: Mar 21 20:45:17 2020
Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Tue Feb 25 10:21:40 2020
Response via : Initial Calibration

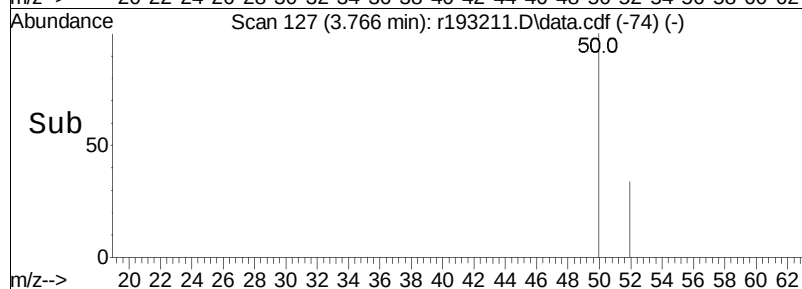
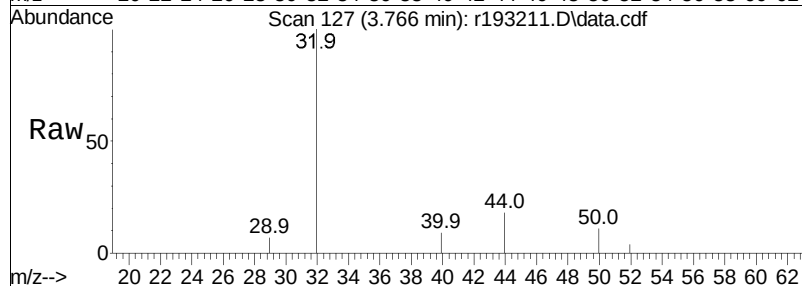
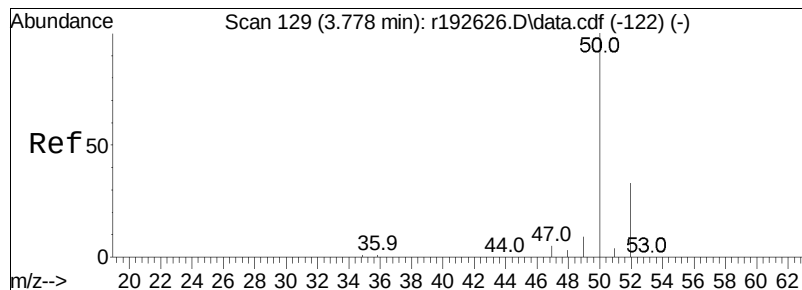




#5
dichlorodifluoromethane
Concen: 0.19 ppbV
RT: 3.556 min Scan# 92
Delta R.T. -0.006 min
Lab File: r193211.D
Acq: 21 Mar 2020 3:40 AM

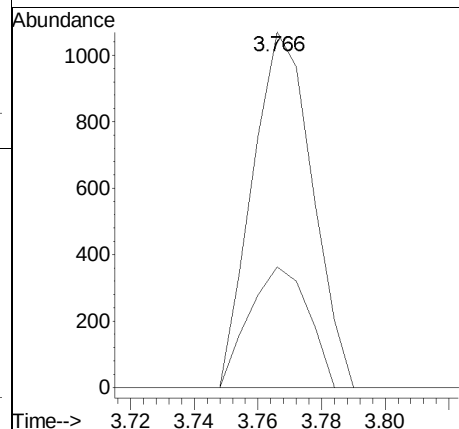
Tgt Ion: 85 Resp: 3534
Ion Ratio Lower Upper
85 100
87 31.1 25.9 38.9

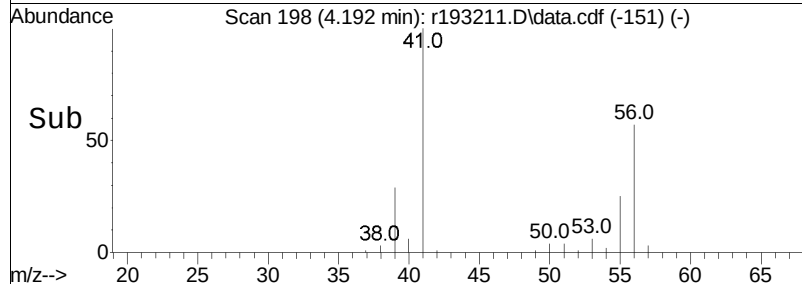
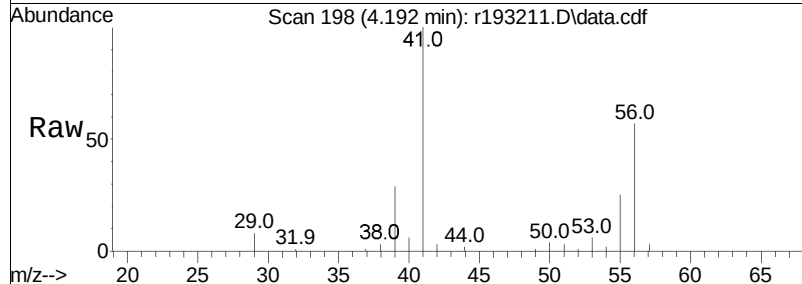
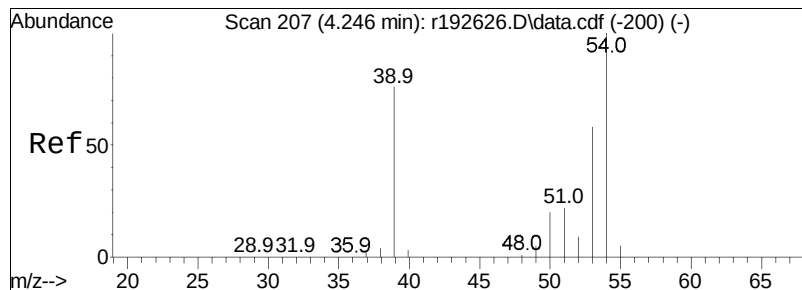




#6
chloromethane
Concen: 0.12 ppbV
RT: 3.766 min Scan# 127
Delta R.T. -0.012 min
Lab File: r193211.D
Acq: 21 Mar 2020 3:40 AM

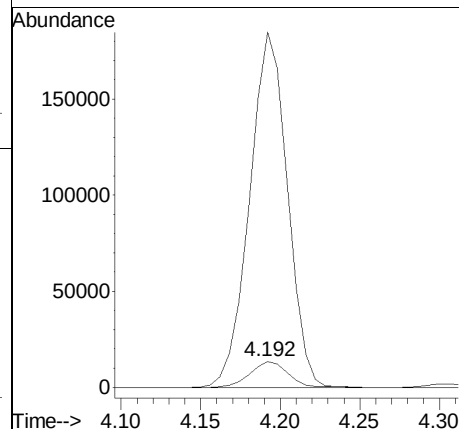
Tgt Ion	Ratio	Lower	Upper
50	100		
52	33.9	26.3	39.5

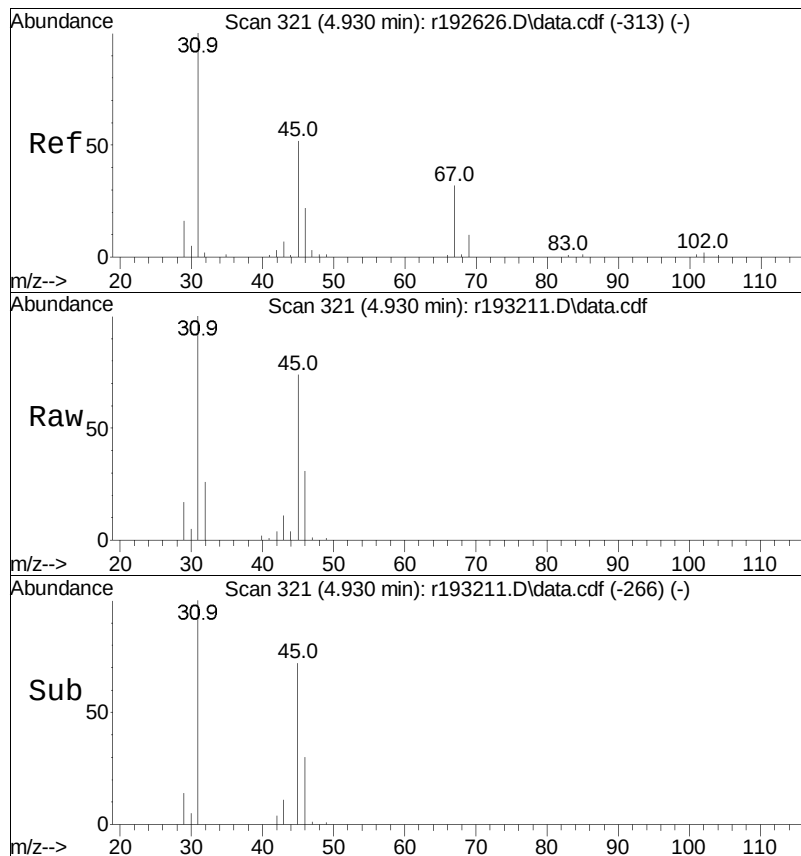




#10
 1,3-butadiene
 Concen: 1.80 ppbV
 RT: 4.192 min Scan# 198
 Delta R.T. -0.048 min
 Lab File: r193211.D
 Acq: 21 Mar 2020 3:40 AM

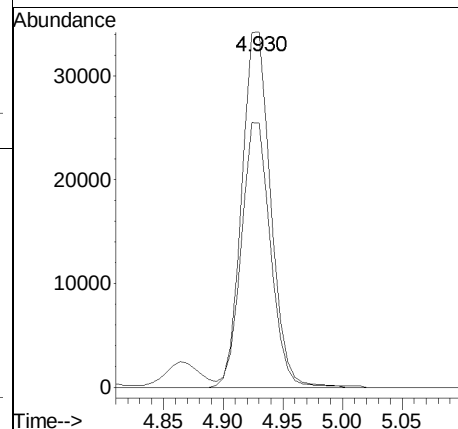
Tgt Ion: 54 Resp: 22450
 Ion Ratio Lower Upper
 54 100
 39 1376.1 65.3 97.9#

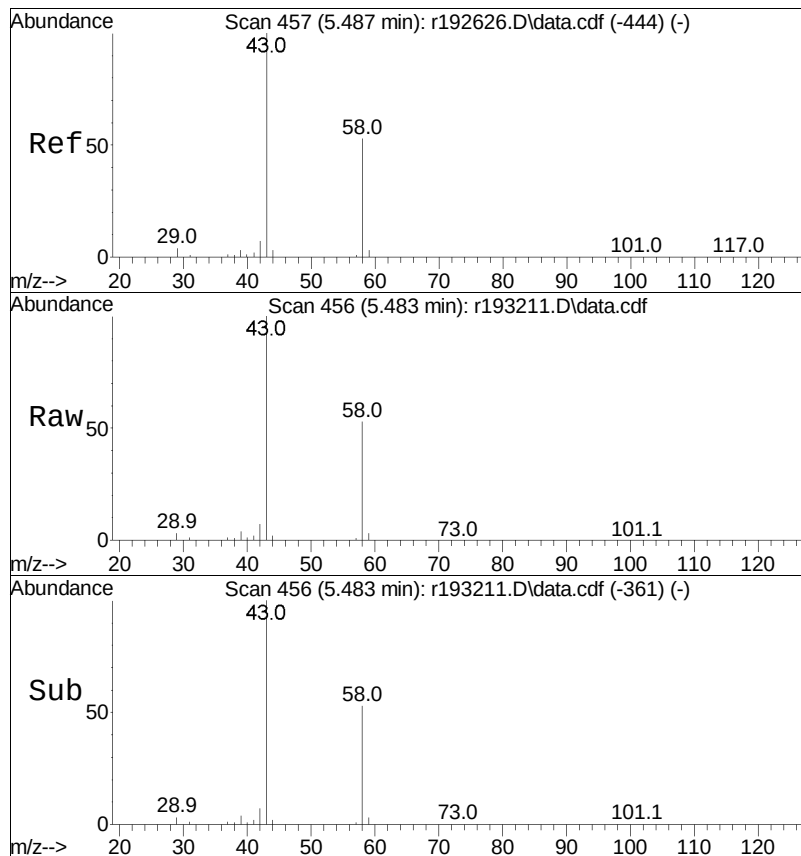




#15
ethanol
Concen: 6.11 ppbV
RT: 4.930 min Scan# 321
Delta R.T. 0.000 min
Lab File: r193211.D
Acq: 21 Mar 2020 3:40 AM

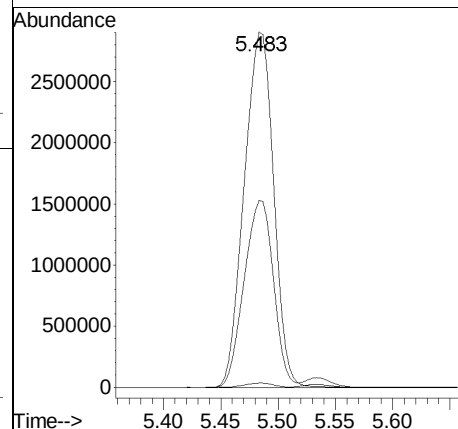
Tgt	Ion	Ratio	Lower	Upper
31	100			
45	74.4	40.6	60.8	

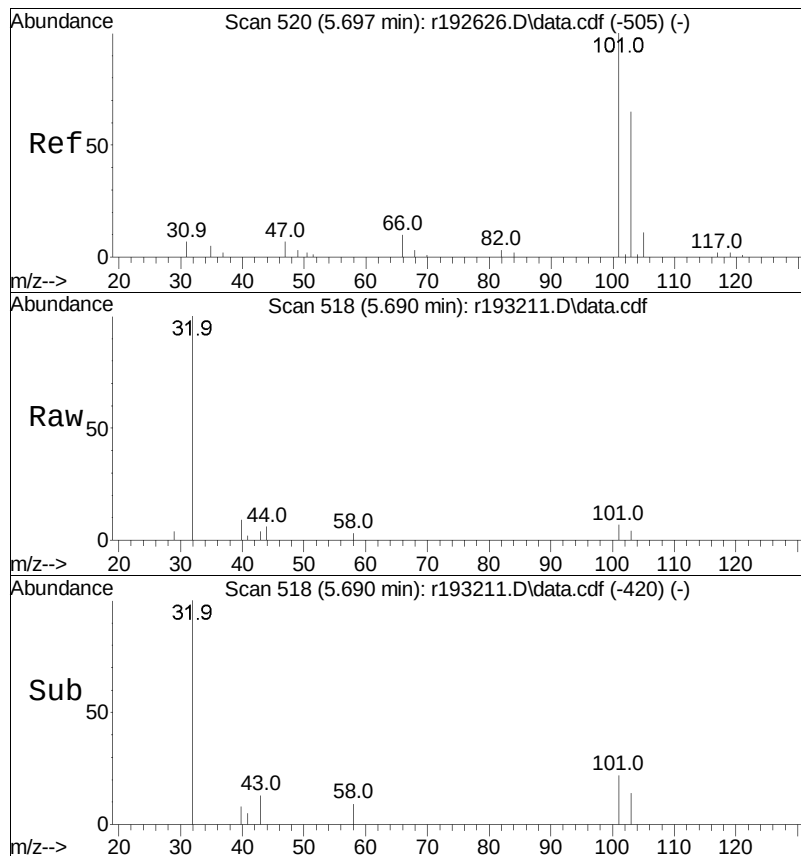




#19
acetone
Concen: 298.00 ppbV
RT: 5.483 min Scan# 456
Delta R.T. -0.013 min
Lab File: r193211.D
Acq: 21 Mar 2020 3:40 AM

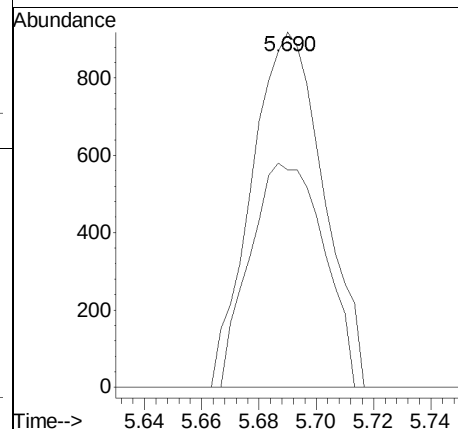
Tgt	Ion: 43	Resp: 5190456
Ion	Ratio	Lower Upper
43	100	
58	52.7	42.0 63.0
57	1.2	1.4 2.0#

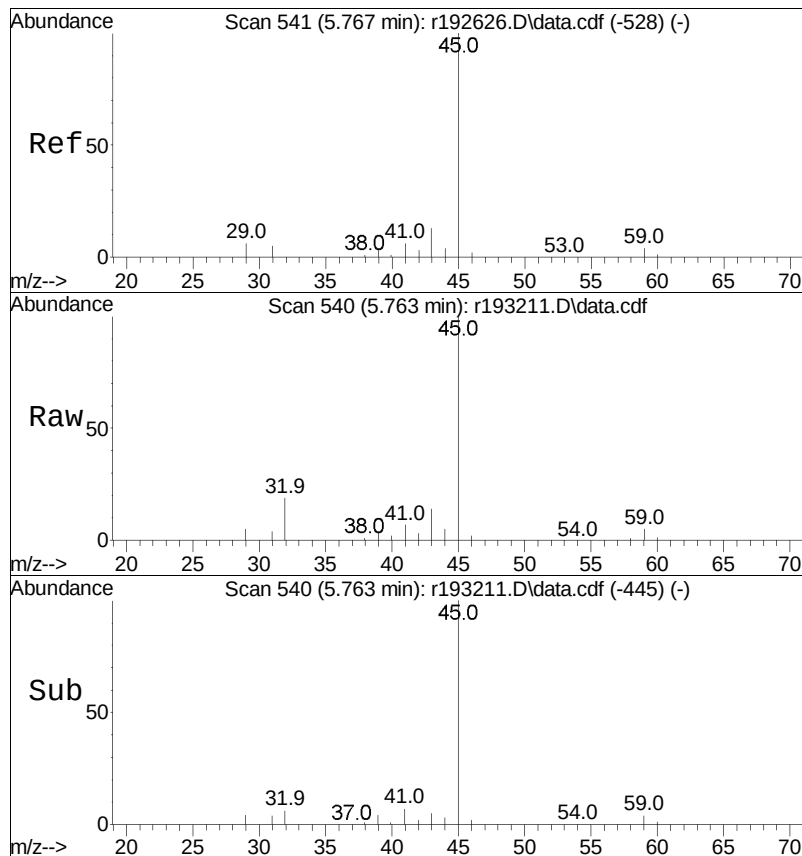




#21
 trichlorofluoromethane
 Concen: 0.08 ppbV
 RT: 5.690 min Scan# 518
 Delta R.T. -0.003 min
 Lab File: r193211.D
 Acq: 21 Mar 2020 3:40 AM

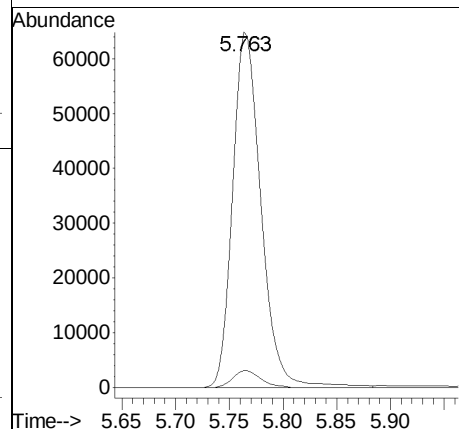
Tgt	Ion	Resp	Lower	Upper
101	100	1608		
103	61.2	51.4	77.2	

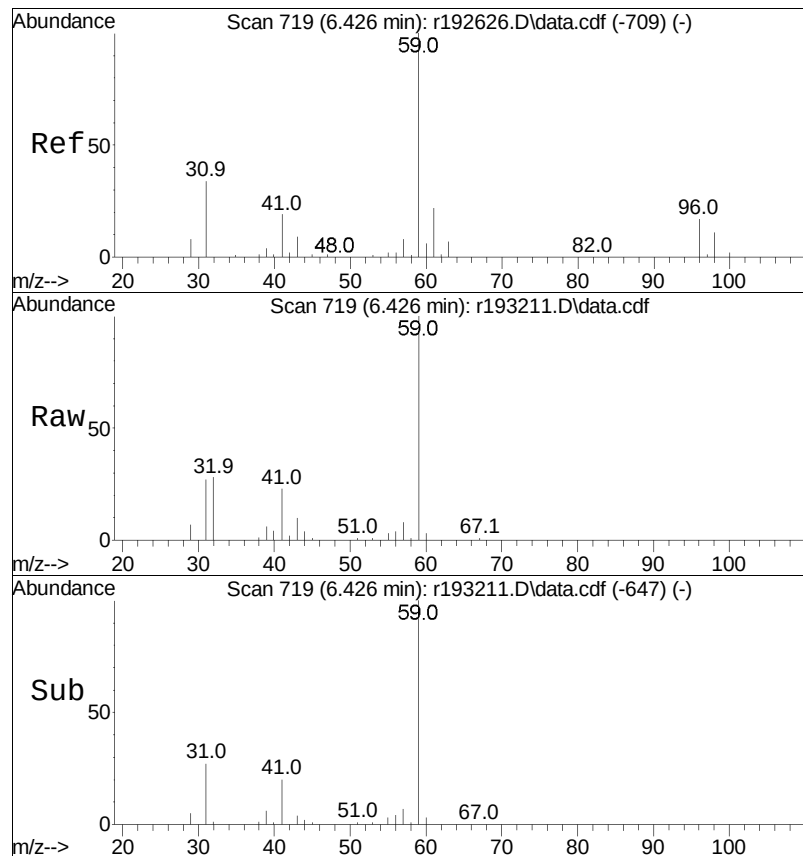




#22
 isopropyl alcohol
 Concen: 3.60 ppbV
 RT: 5.763 min Scan# 540
 Delta R.T. -0.013 min
 Lab File: r193211.D
 Acq: 21 Mar 2020 3:40 AM

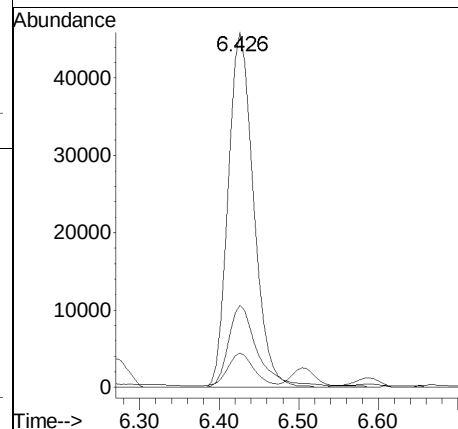
Tgt Ion	Ratio	Lower	Upper
45	100		
59	4.7	3.7	5.5

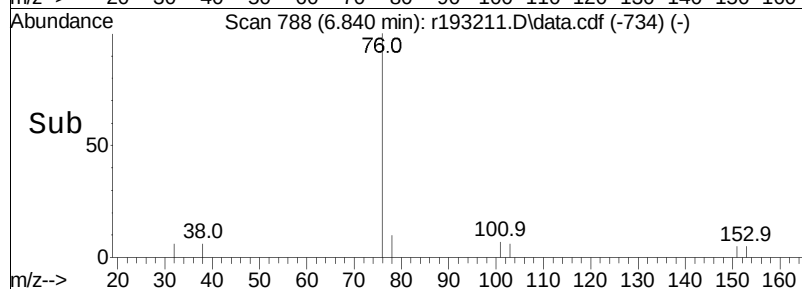
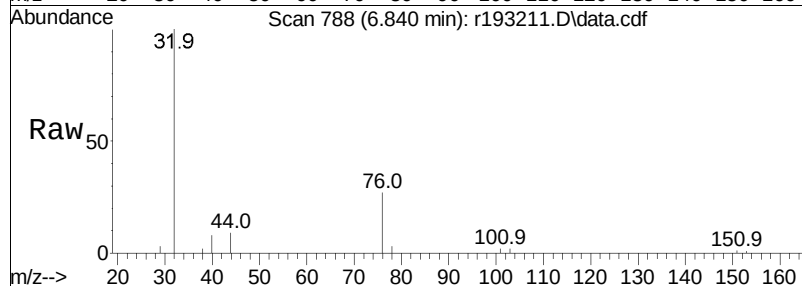
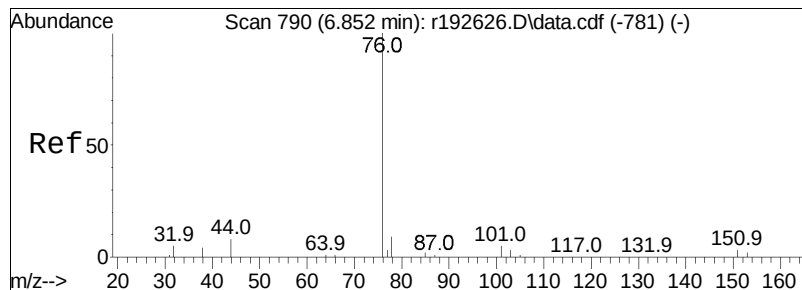




#27
 tertiary butyl alcohol
 Concen: 3.41 ppbV
 RT: 6.426 min Scan# 719
 Delta R.T. -0.024 min
 Lab File: r193211.D
 Acq: 21 Mar 2020 3:40 AM

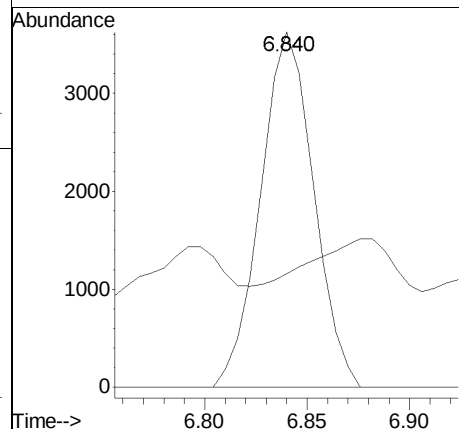
Tgt Ion:	59	Resp:	103346
Ion Ratio	Lower	Upper	
59	100		
41	23.1	18.8	28.2
43	9.7	9.8	14.8#

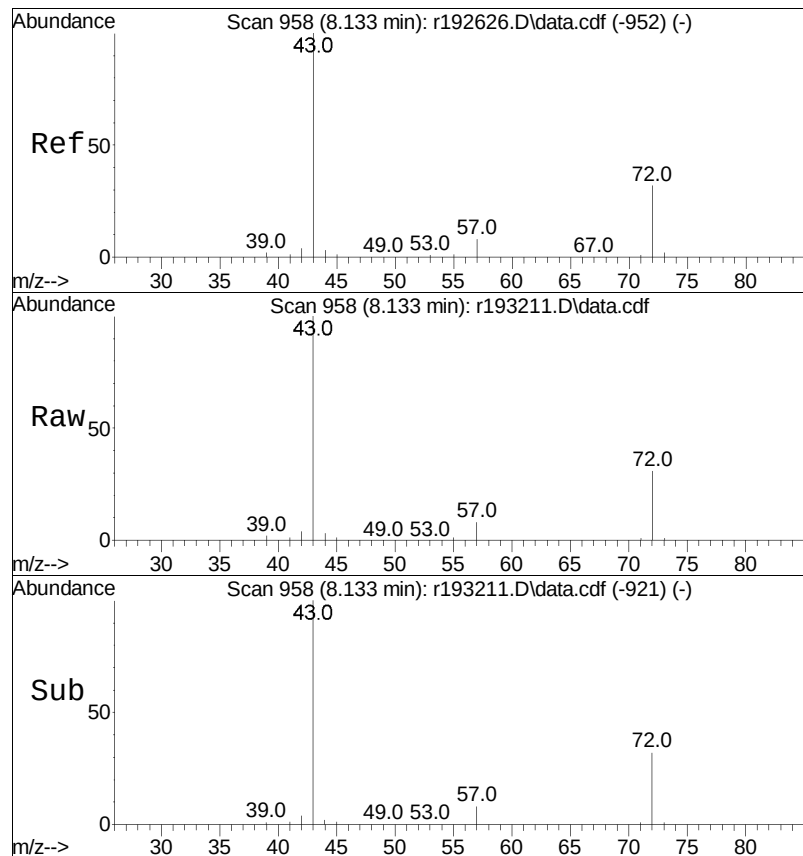




#30
carbon disulfide
Concen: 0.11 ppbV
RT: 6.840 min Scan# 788
Delta R.T. -0.006 min
Lab File: r193211.D
Acq: 21 Mar 2020 3:40 AM

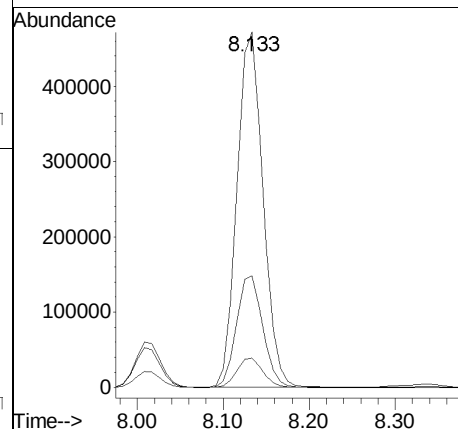
Tgt Ion	Ratio	Lower	Upper
76	100		
44	32.0	12.3	18.5#

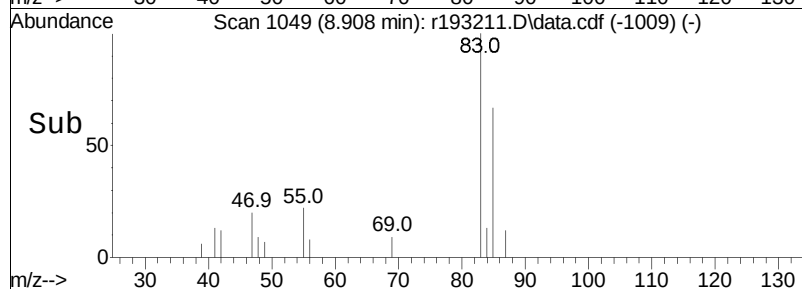
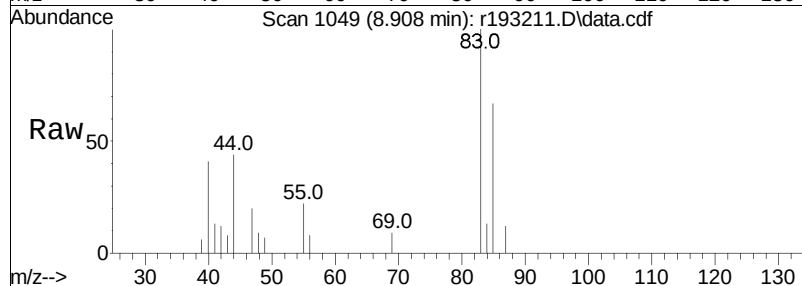
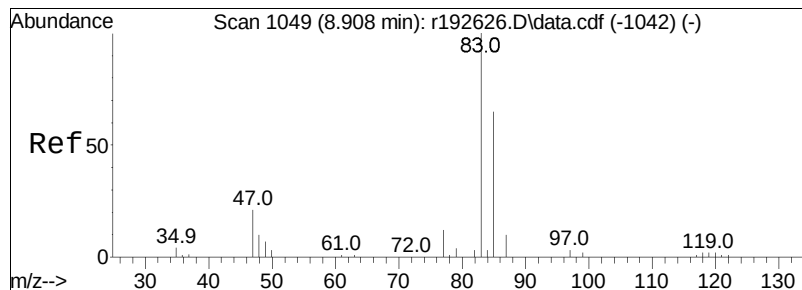




#36
 2-butanone
 Concen: 25.46 ppbV
 RT: 8.133 min Scan# 958
 Delta R.T. -0.025 min
 Lab File: r193211.D
 Acq: 21 Mar 2020 3:40 AM

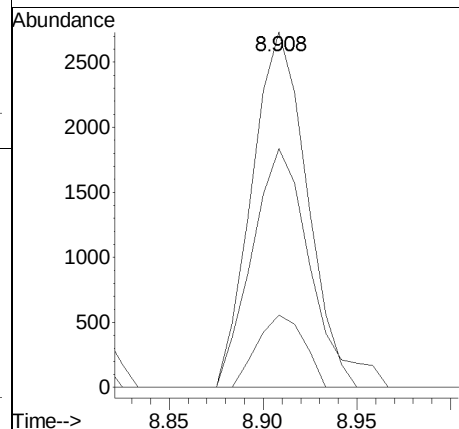
Tgt Ion:	43	Resp:	993849
Ion Ratio	Lower	Upper	
43	100		
72	31.5	27.7	41.5
57	8.3	6.3	9.5

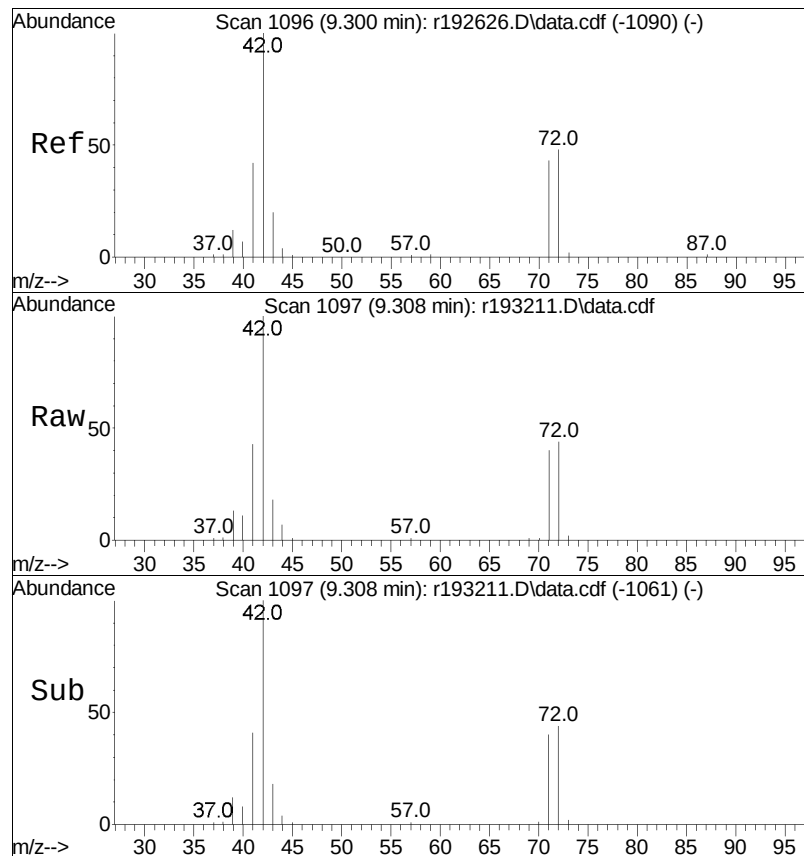




#39
chloroform
Concen: 0.21 ppbV
RT: 8.908 min Scan# 1049
Delta R.T. 0.000 min
Lab File: r193211.D
Acq: 21 Mar 2020 3:40 AM

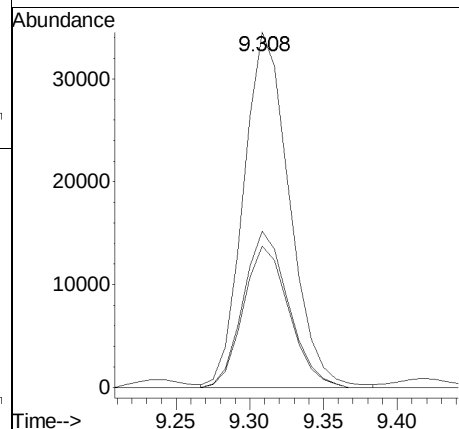
Tgt Ion	Ratio	Lower	Upper
83	100		
85	67.2	50.1	75.1
47	20.4	17.6	26.4

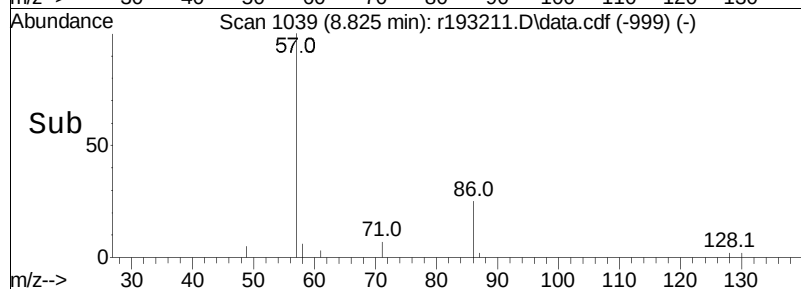
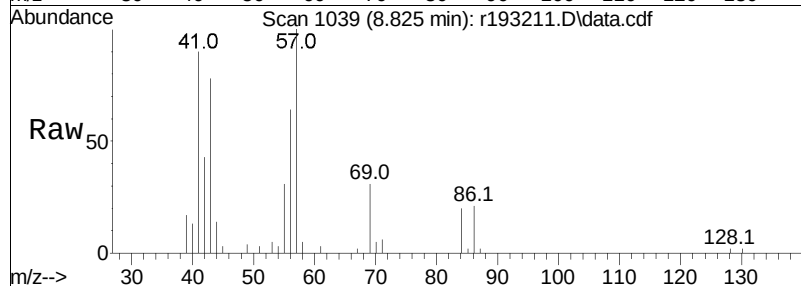
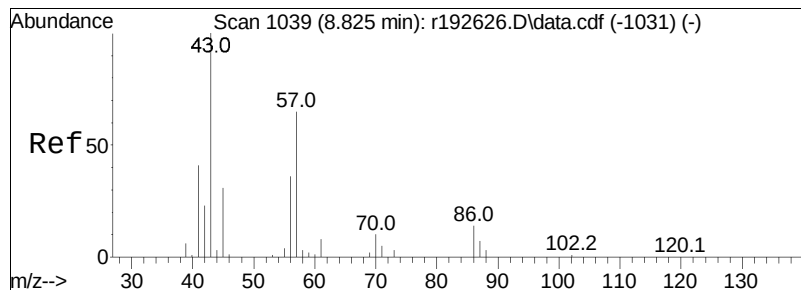




#40
 Tetrahydrofuran
 Concen: 2.85 ppbV
 RT: 9.308 min Scan# 1097
 Delta R.T. -0.033 min
 Lab File: r193211.D
 Acq: 21 Mar 2020 3:40 AM

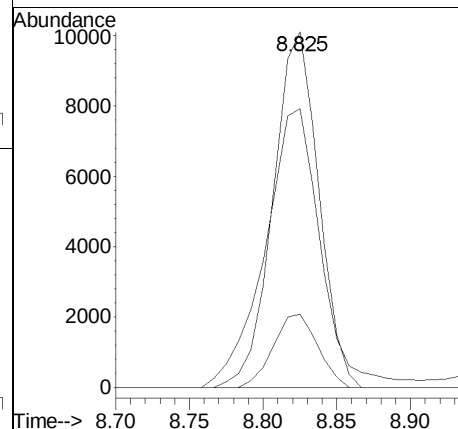
Tgt Ion	Ratio	Lower	Upper
42	100		
71	39.8	32.5	48.7
72	44.0	33.7	50.5

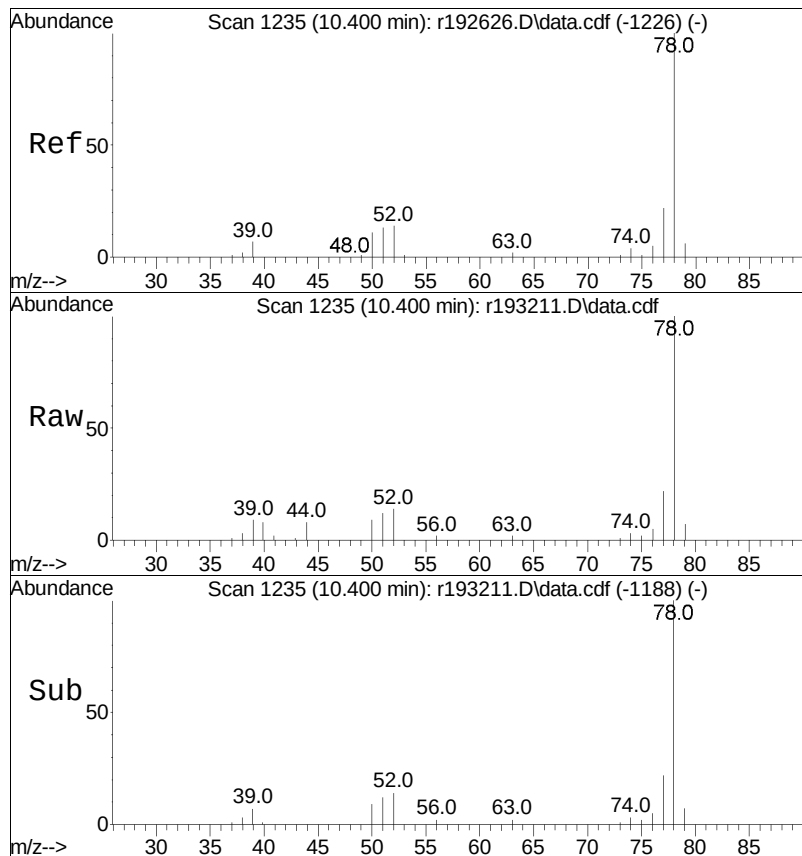




#44
hexane
Concen: 0.60 ppbV
RT: 8.825 min Scan# 1039
Delta R.T. 0.000 min
Lab File: r193211.D
Acq: 21 Mar 2020 3:40 AM

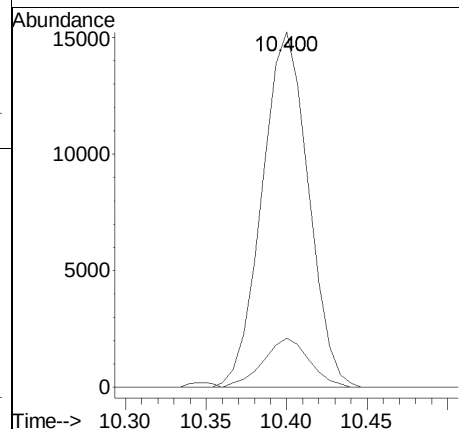
Tgt Ion:	57	Resp:	21722
Ion Ratio	Lower	Upper	
57	100		
43	78.4	159.3	238.9#
86	20.6	15.7	23.5

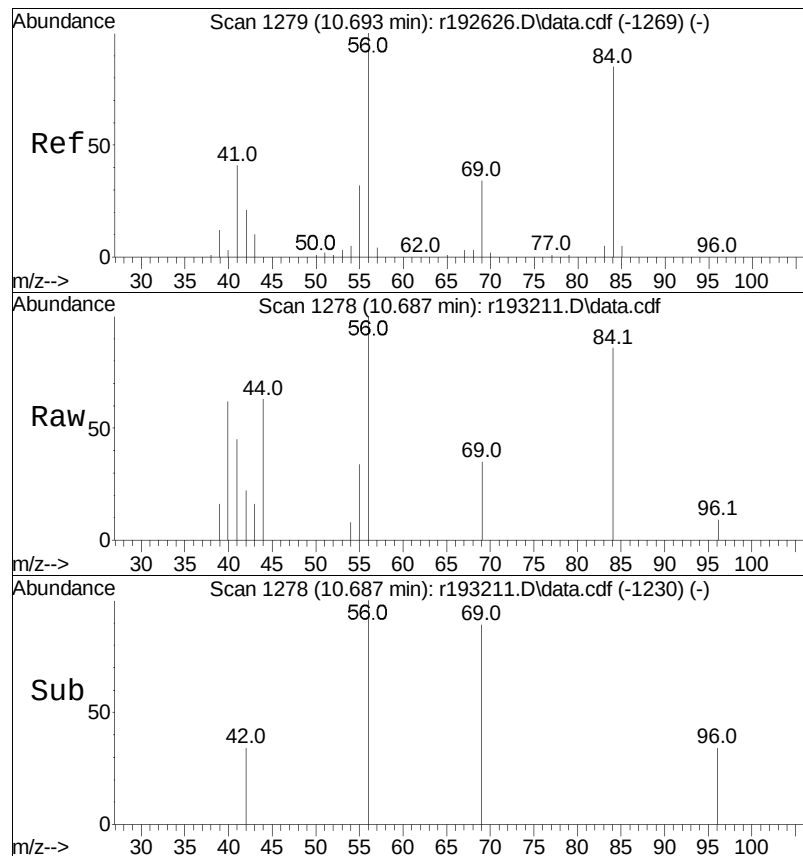




#50
benzene
Concen: 0.42 ppbV
RT: 10.400 min Scan# 1235
Delta R.T. 0.000 min
Lab File: r193211.D
Acq: 21 Mar 2020 3:40 AM

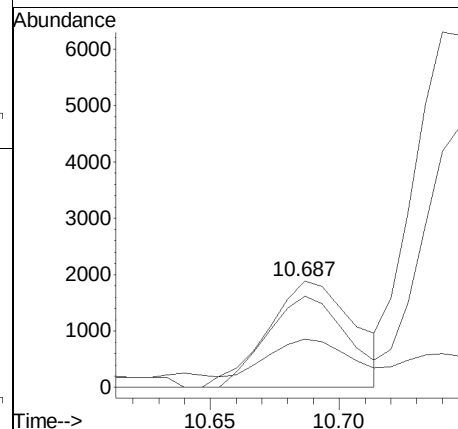
Tgt	Ion	Ratio	Lower	Upper
78	100			
52	13.9	11.4	17.2	

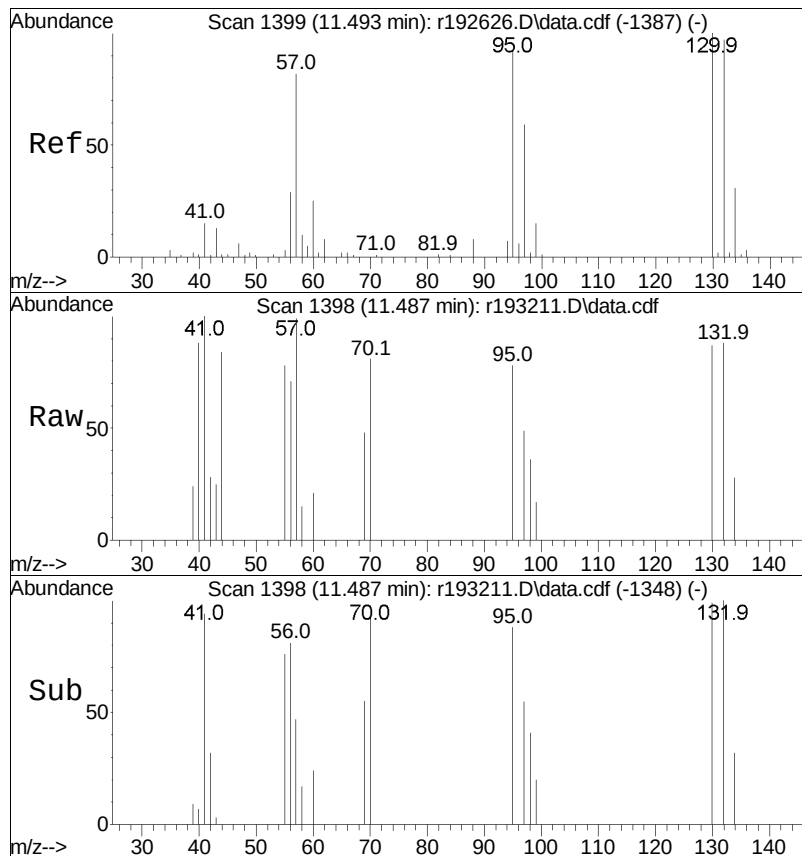




#53
cyclohexane
Concen: 0.11 ppbV
RT: 10.687 min Scan# 1278
Delta R.T. -0.007 min
Lab File: r193211.D
Acq: 21 Mar 2020 3:40 AM

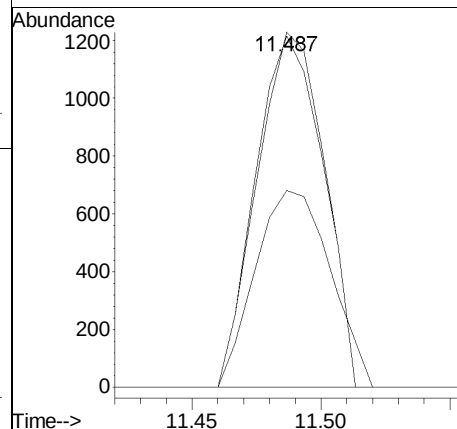
Tgt	Ion	Ratio	Lower	Upper
56	100			
84	85.8	69.8	104.6	
41	45.5	32.1	48.1	

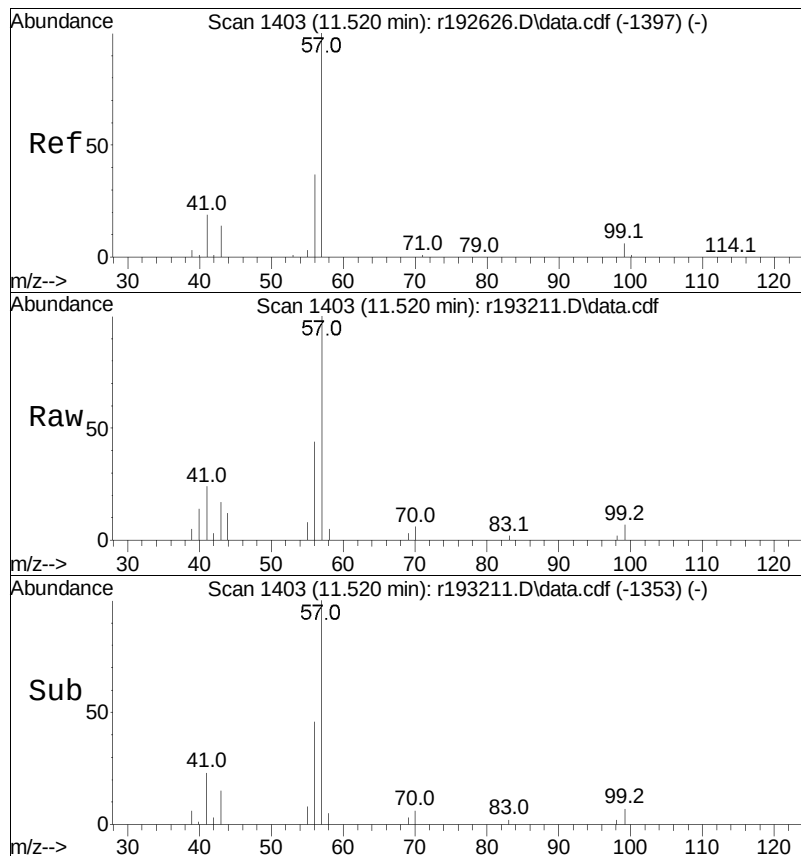




#59
trichloroethene
Concen: 0.09 ppbV
RT: 11.487 min Scan# 1398
Delta R.T. 0.000 min
Lab File: r193211.D
Acq: 21 Mar 2020 3:40 AM

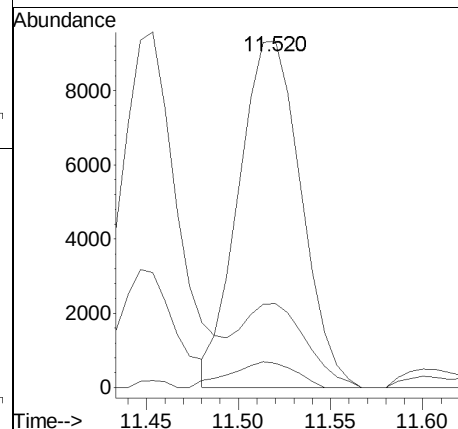
Tgt Ion:	130	Resp:	2224
Ion Ratio	Lower	Upper	
130	100		
132	101.2	73.8	110.8
97	56.0	46.9	70.3

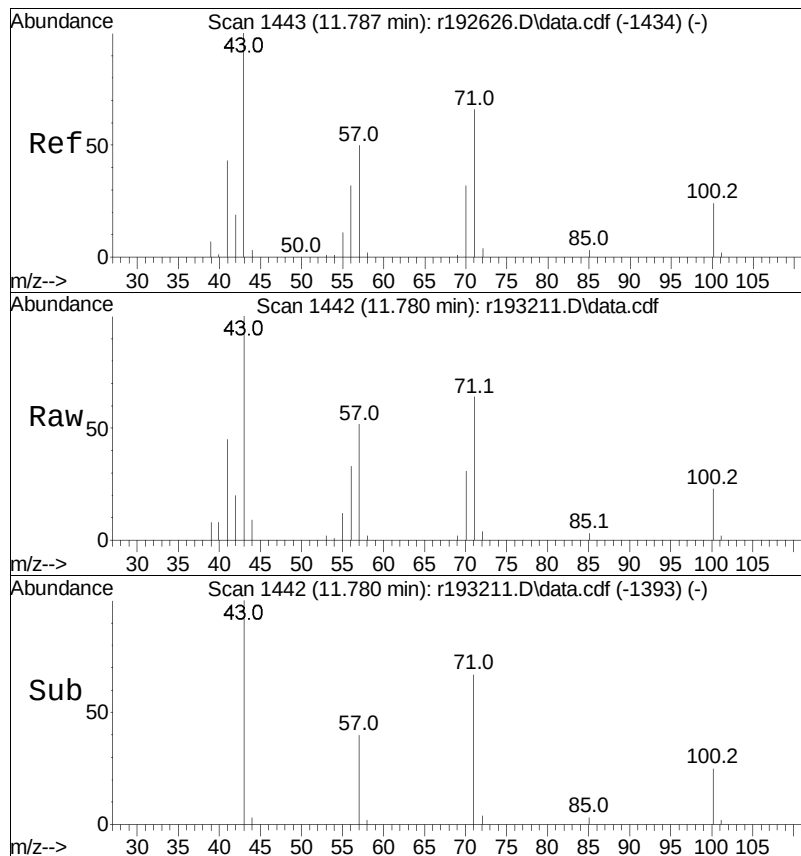




#60
 2,2,4-trimethylpentane
 Concen: 0.19 ppbV
 RT: 11.520 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: r193211.D
 Acq: 21 Mar 2020 3:40 AM

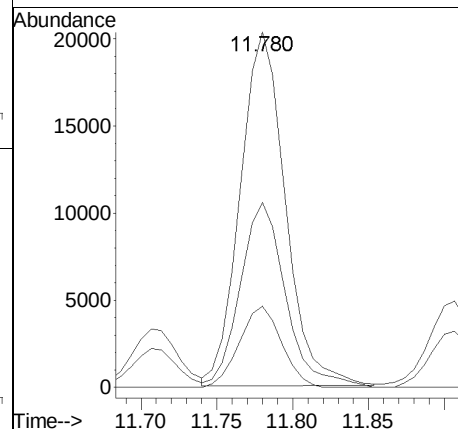
Tgt Ion	Ratio	Lower	Upper
57	100		
99	7.0	6.0	9.0
41	24.2	15.6	23.4

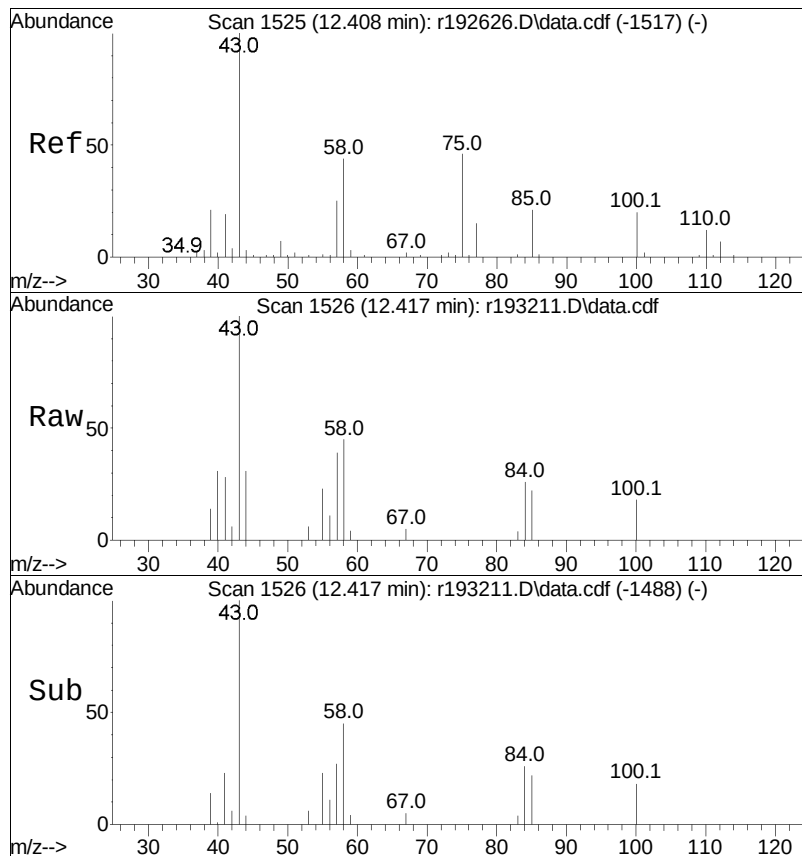




#62
 heptane
 Concen: 0.94 ppbV
 RT: 11.780 min Scan# 1442
 Delta R.T. 0.000 min
 Lab File: r193211.D
 Acq: 21 Mar 2020 3:40 AM

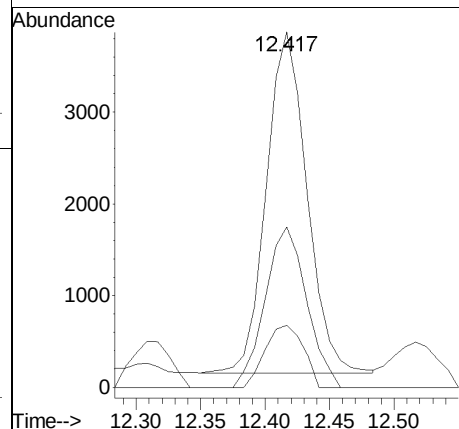
Tgt Ion:	43	Resp:	41996
Ion Ratio	Lower	Upper	
43	100		
57	52.0	41.0	61.6
100	22.9	21.4	32.2

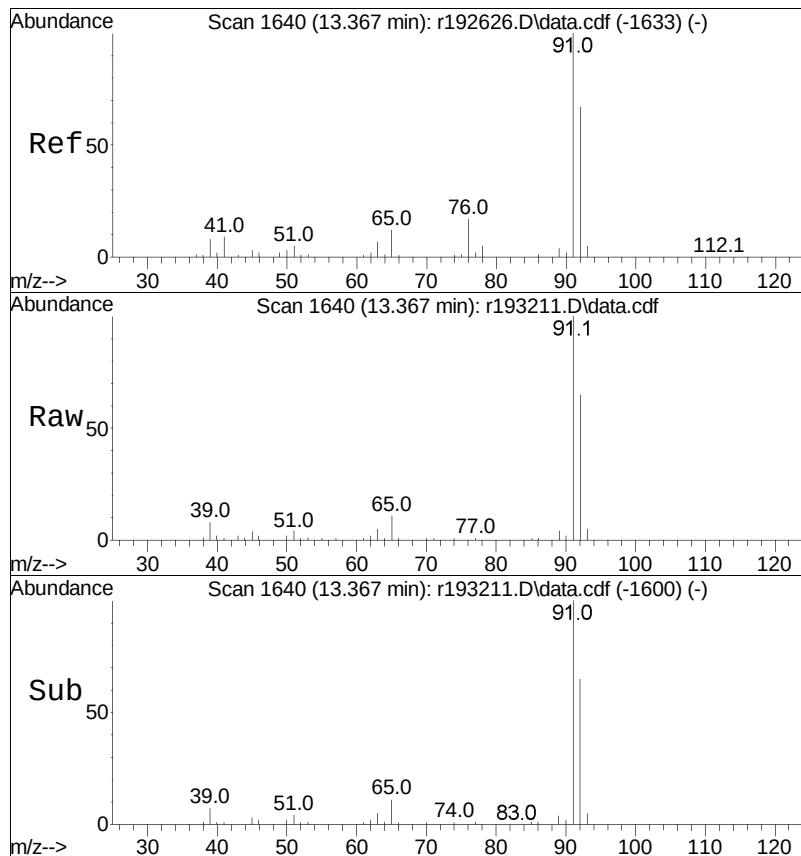




#64
 4-methyl-2-pentanone
 Concen: 0.17 ppbV
 RT: 12.417 min Scan# 1526
 Delta R.T. -0.017 min
 Lab File: r193211.D
 Acq: 21 Mar 2020 3:40 AM

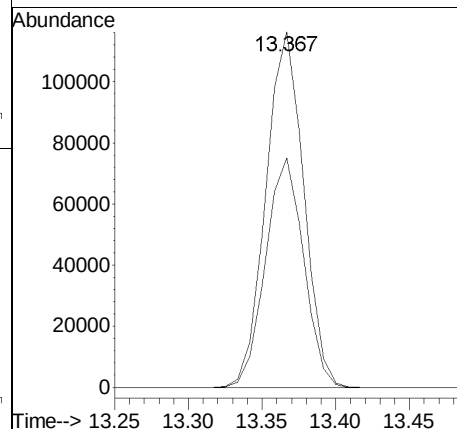
Tgt	Ion	Ratio	Lower	Upper
43	100			
58	45.2	32.9	49.3	
100	17.5	15.4	23.2	

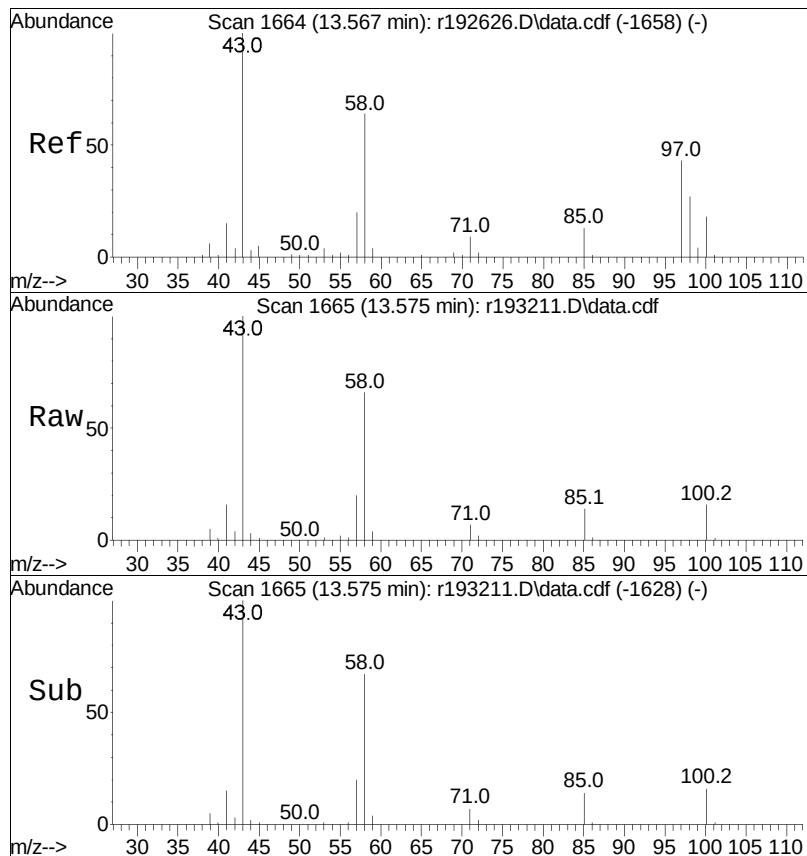




#68
 toluene
 Concen: 2.78 ppbV
 RT: 13.367 min Scan# 1640
 Delta R.T. 0.000 min
 Lab File: r193211.D
 Acq: 21 Mar 2020 3:40 AM

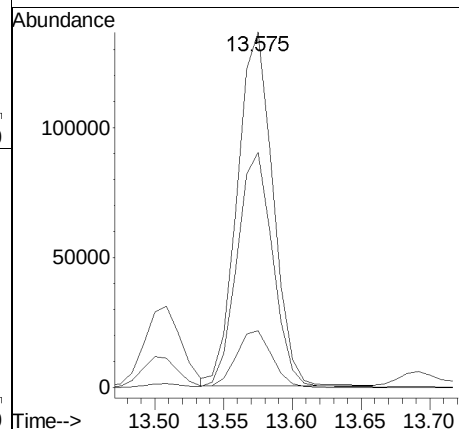
Tgt Ion:	91	Resp:	207155
Ion Ratio	Lower	Upper	
91	100		
92	64.6	53.3	79.9

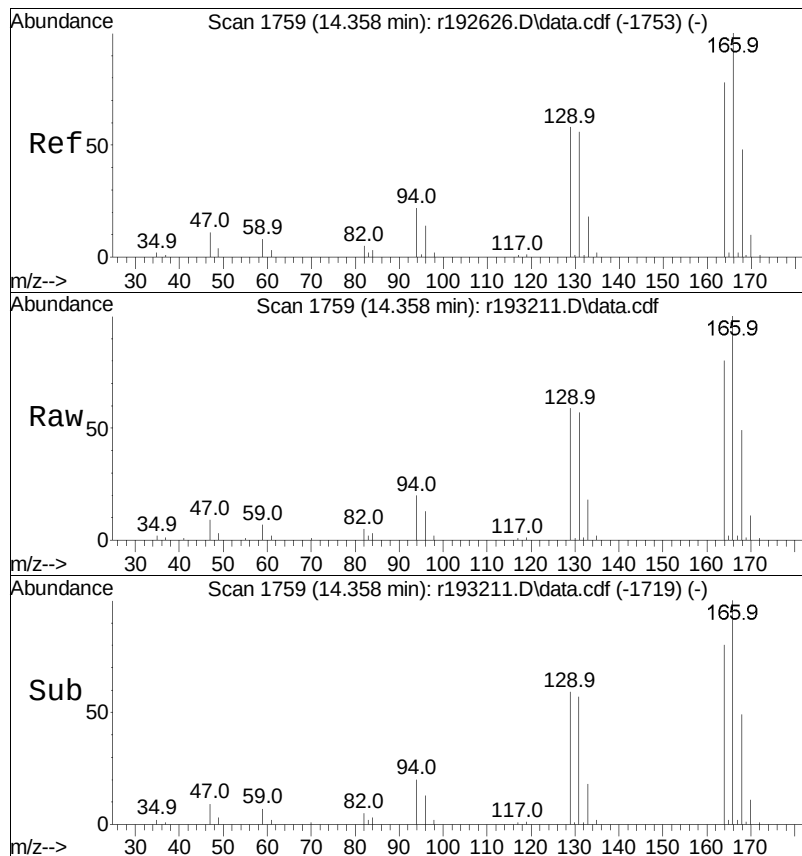




#72
 2-hexanone
 Concen: 5.70 ppbV
 RT: 13.575 min Scan# 1665
 Delta R.T. -0.025 min
 Lab File: r193211.D
 Acq: 21 Mar 2020 3:40 AM

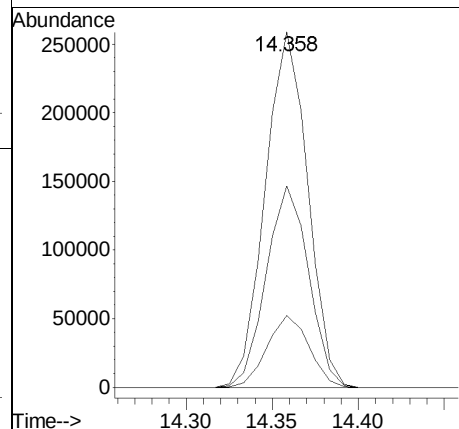
Tgt Ion:	43	58	100	Ratio	Lower	Upper
43	100					
58		66.1			62.6	94.0
100		16.0			26.5	39.7#

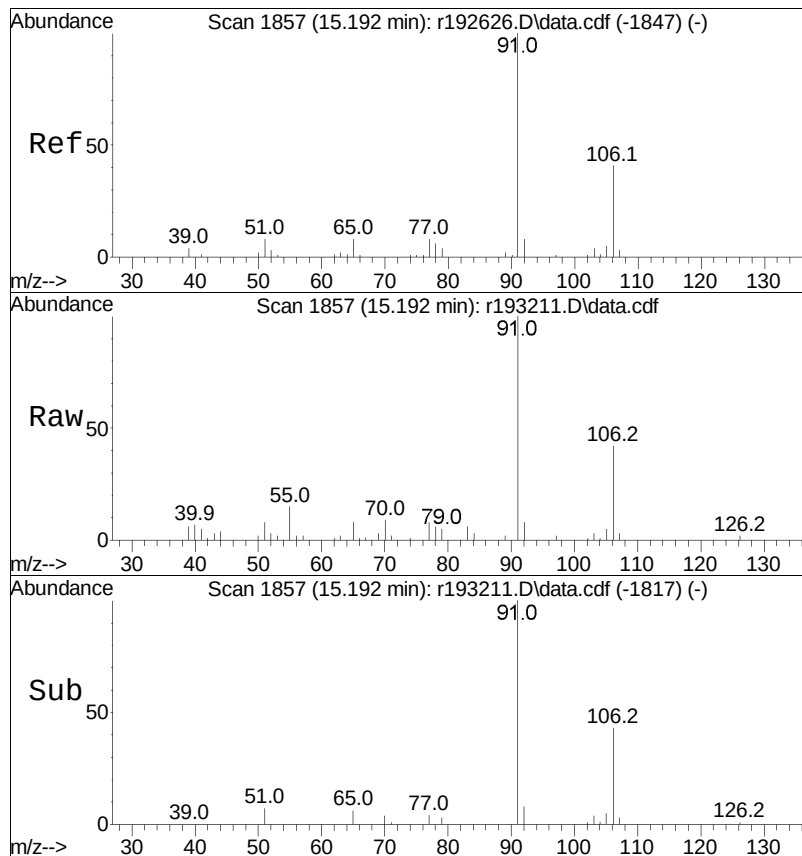




#78
 tetrachloroethene
 Concen: 13.61 ppbV
 RT: 14.358 min Scan# 1759
 Delta R.T. 0.000 min
 Lab File: r193211.D
 Acq: 21 Mar 2020 3:40 AM

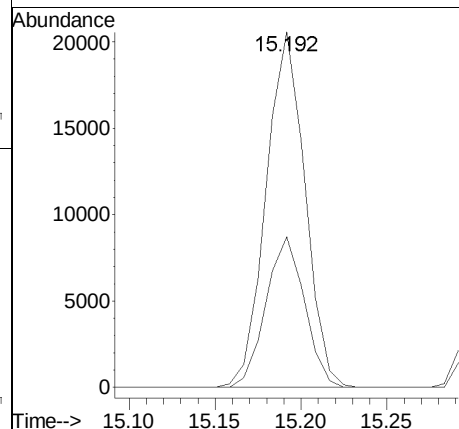
Tgt Ion	Ratio	Lower	Upper
166	100		
131	56.7	46.4	69.6
94	20.2	18.5	27.7

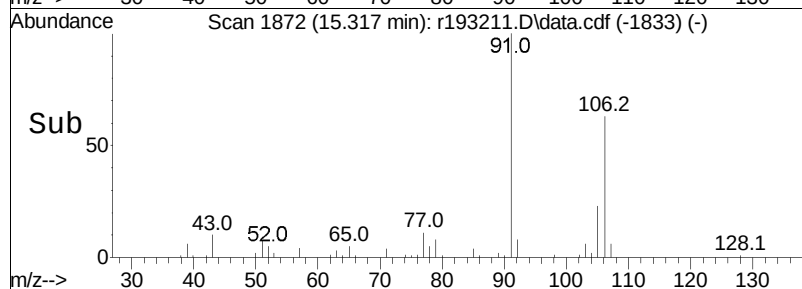
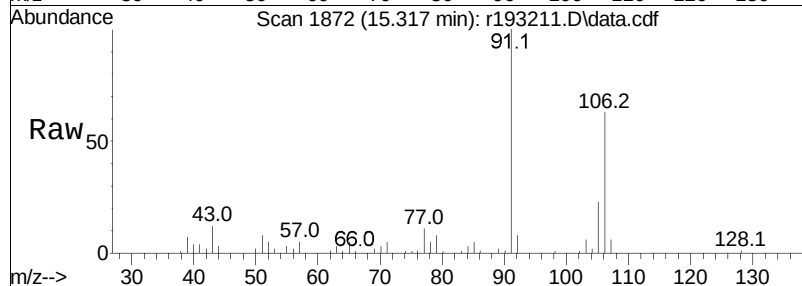
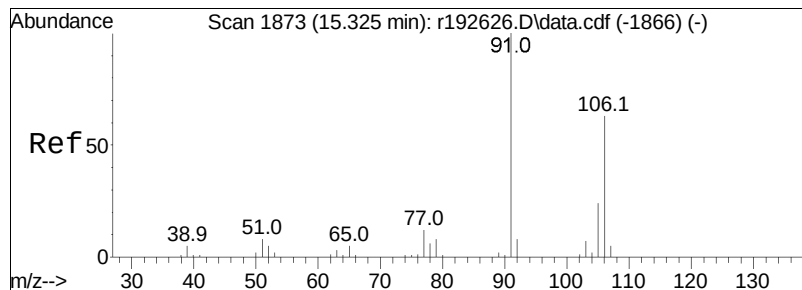




#81
 ethylbenzene
 Concen: 0.36 ppbV
 RT: 15.192 min Scan# 1857
 Delta R.T. 0.000 min
 Lab File: r193211.D
 Acq: 21 Mar 2020 3:40 AM

Tgt Ion	Ratio	Lower	Upper
91	100		
106	42.4	32.9	49.3





#83

m+p-xylene

Concen: 1.11 ppbV

RT: 15.317 min Scan# 1872

Delta R.T. -0.008 min

Lab File: r193211.D

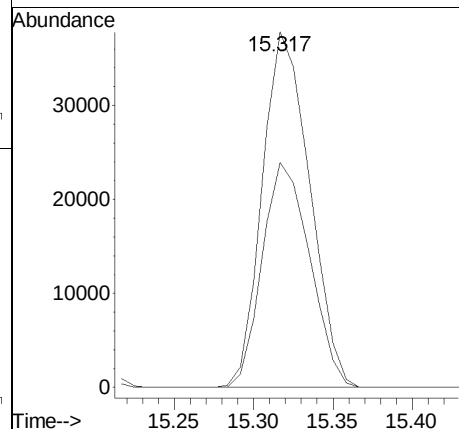
Acq: 21 Mar 2020 3:40 AM

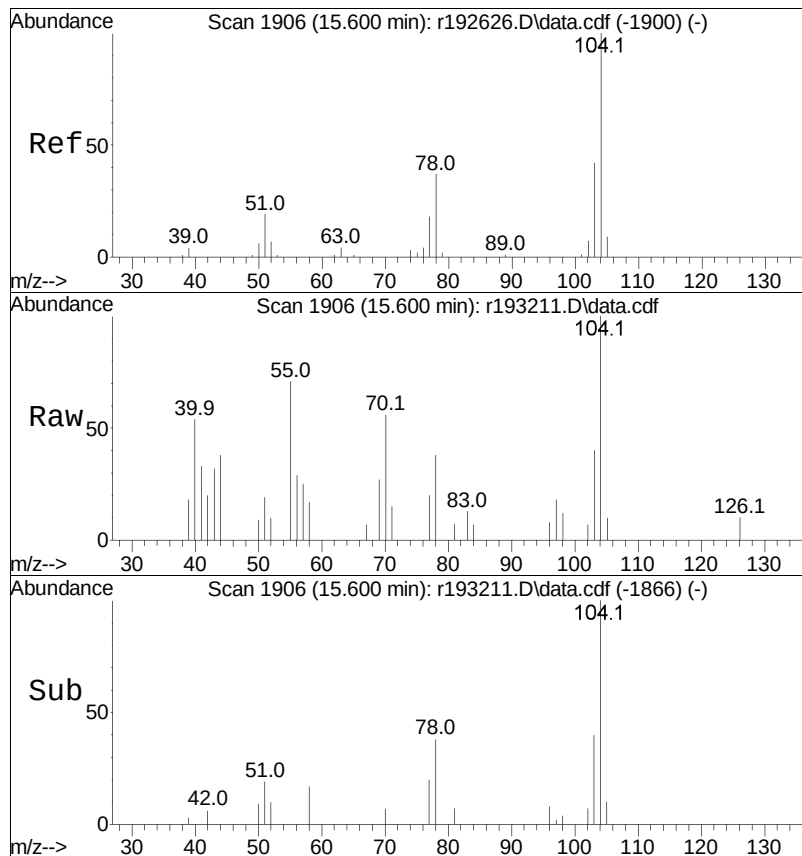
Tgt Ion: 91 Resp: 78329

Ion Ratio Lower Upper

91 100

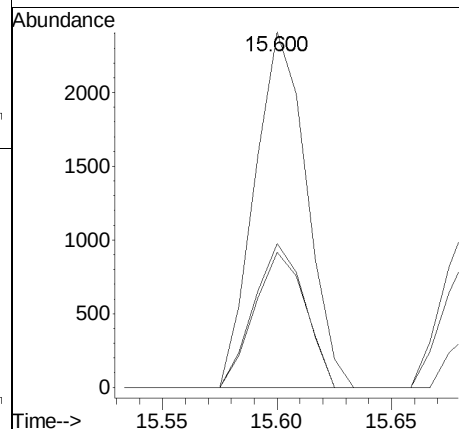
106 63.3 51.0 76.4

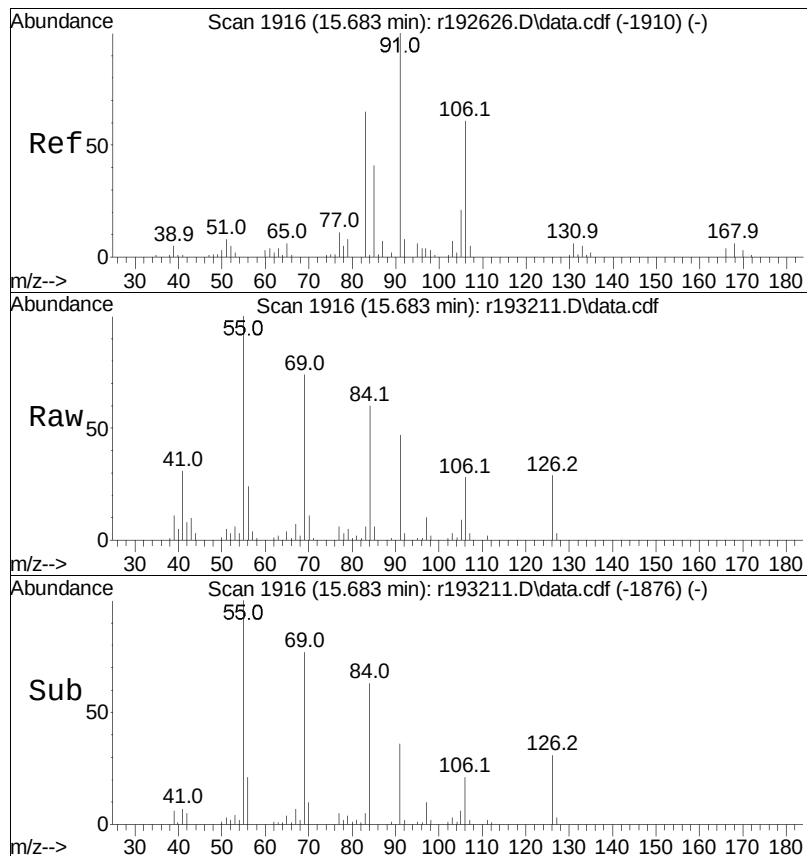




#85
 styrene
 Concen: 0.06 ppbV
 RT: 15.600 min Scan# 1906
 Delta R.T. 0.000 min
 Lab File: r193211.D
 Acq: 21 Mar 2020 3:40 AM

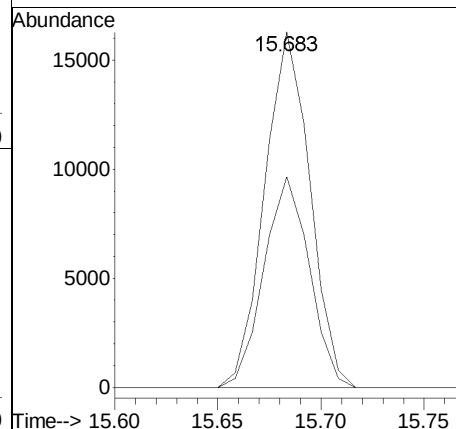
Tgt Ion:	104	Resp:	3798
Ion Ratio	Lower	Upper	
104	100		
103	40.5	33.4	50.0
78	38.0	30.6	46.0

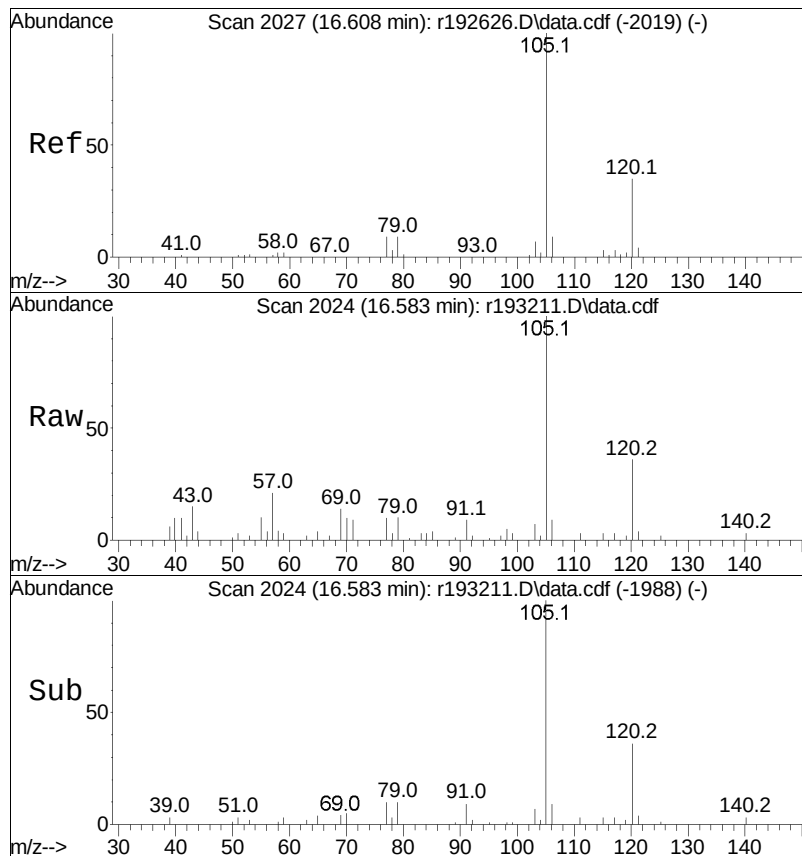




#87
o-xylene
Concen: 0.36 ppbV
RT: 15.683 min Scan# 1916
Delta R.T. 0.000 min
Lab File: r193211.D
Acq: 21 Mar 2020 3:40 AM

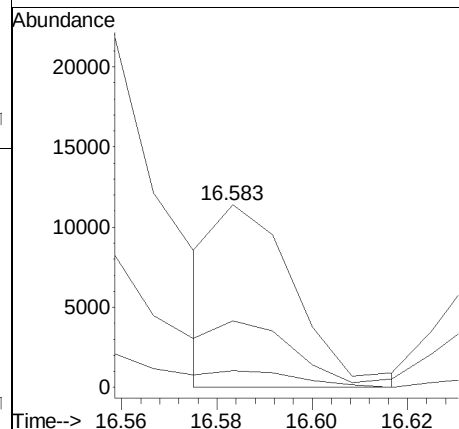
Tgt	Ion	Resp	Lower	Upper
91	100	24848		
106	59.3	47.8	71.8	

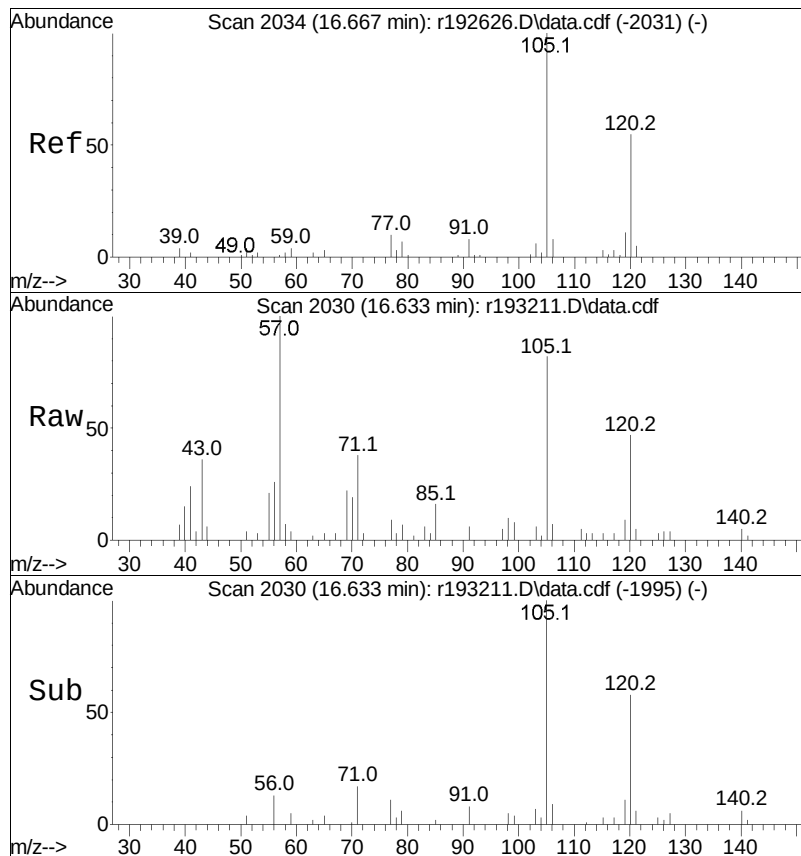




#96
 4-ethyl toluene
 Concen: 0.11 ppbV m
 RT: 16.583 min Scan# 2024
 Delta R.T. -0.033 min
 Lab File: r193211.D
 Acq: 21 Mar 2020 3:40 AM

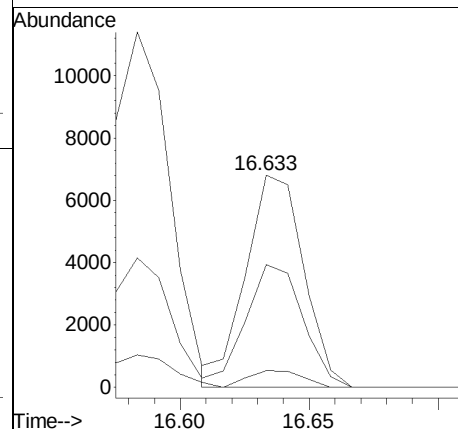
Tgt Ion:	105	Resp:	13157
Ion Ratio	Lower	Upper	
105	100		
120	36.5	27.2	40.8
91	9.1	7.0	10.4

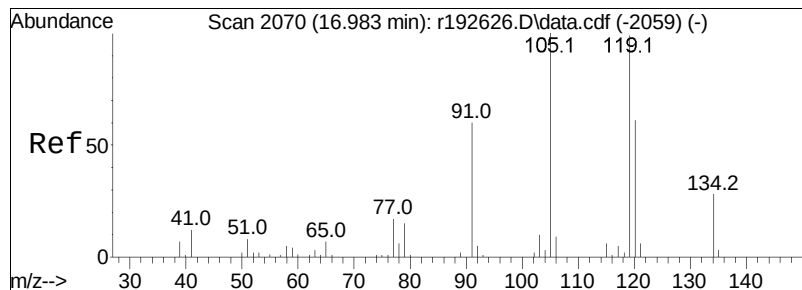




#97
 1,3,5-trimethylbenzene
 Concen: 0.11 ppbV
 RT: 16.633 min Scan# 2030
 Delta R.T. -0.042 min
 Lab File: r193211.D
 Acq: 21 Mar 2020 3:40 AM

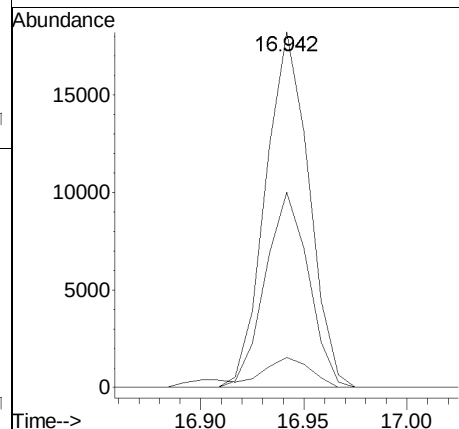
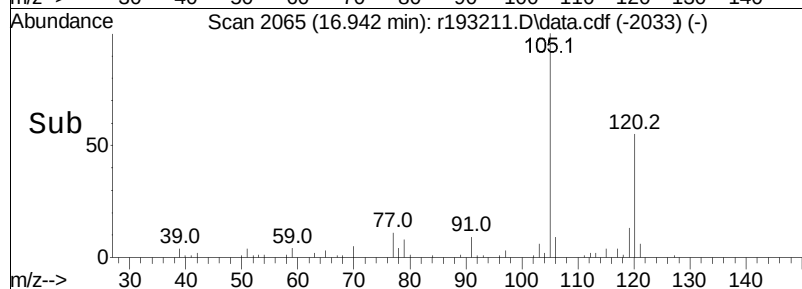
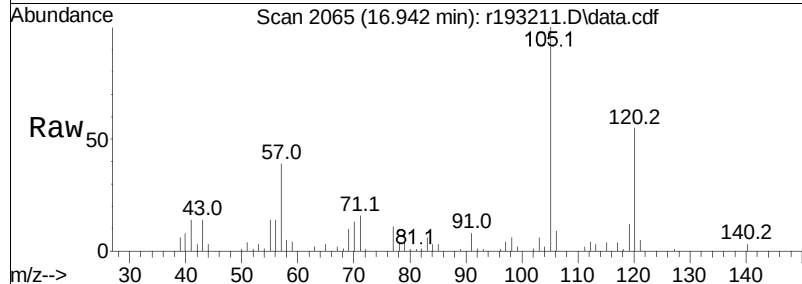
Tgt Ion	Ratio	Resp	Lower	Upper
105	100	10609		
120	57.9		42.6	64.0
91	7.9		6.6	9.8





#99
 1,2,4-trimethylbenzene
 Concen: 0.31 ppbV
 RT: 16.942 min Scan# 2065
 Delta R.T. -0.050 min
 Lab File: r193211.D
 Acq: 21 Mar 2020 3:40 AM

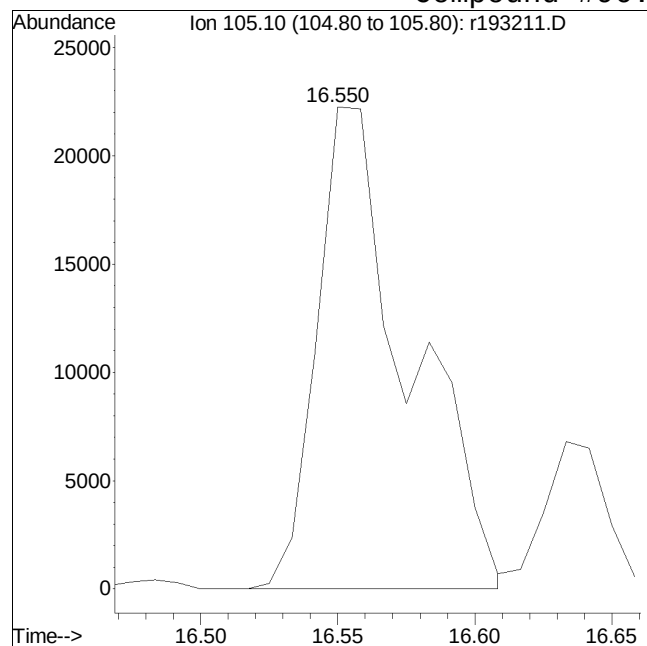
Tgt Ion	Ratio	Resp	Lower	Upper
105	100	26668		
120	54.9		49.2	73.8
91	8.4		49.9	74.9#



Manual Integration Report

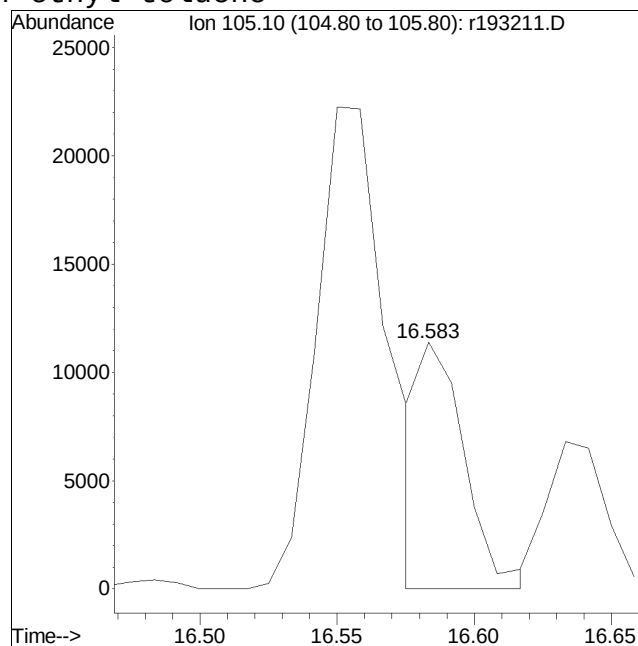
Data Path : 0:\Forensics\Data\Airlab19QMethod : TFS19_200224.M
Data File : r193211.D Operator : AIRLAB19:EW
Date Inj'd : 3/21/2020 0:3: 0 Instrument :
Sample : L2011723-04D,3,100,250 Quant Date : 3/21/2020 7:58 am

Compound #96: 4-ethyl toluene



Original Peak Response = 52045

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 13157 M6

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary

Form 6

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRLAB19
 Calibration dates : 02/25/20 02:44

02/25/20 07:28

Lab Number : L2011723
 Project Number : MHD1801
 Ical Ref : ICAL16553

Calibration Files

0.2 =r192622.D 0.5 =r192623.D 1.0 =r192624.D 5.0 =r192625.D 10 =r192626.D 20 =r192627.D
 50 =r192628.D 100 =r192629.D

Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
1) I bromochloromethane	-----ISTD-----									
2) chlorodifluoromethane	0.715	0.677	0.674	0.606	0.593	0.655	0.564	0.521	0.6257	10.44
3) propylene		0.478	0.452	0.406	0.397	0.429	0.371	0.343	0.4107	11.32
4) propane		0.535	0.517	0.440	0.420	0.452	0.396	0.359	0.4458	14.10
5) dichlorodifluoromethane	0.645	0.653	0.572	0.558	0.522	0.578	0.510	0.446	0.5604	12.32
6) C chloromethane	0.379	0.394	0.384	0.369	0.329	0.388	0.329	0.296	0.3584	9.98
7) Freon-114	0.992	0.957	0.915	0.871	0.814	0.830	0.686	0.588	0.8316	16.42
8) C methanol			0.207	0.162	0.153	0.163	0.149	0.138	0.1621	14.74
9) C vinyl chloride	0.511	0.500	0.492	0.442	0.411	0.430	0.401	0.371	0.4449	11.53
10) C 1,3-butadiene	0.410	0.422	0.414	0.374	0.369	0.390	0.357	0.333	0.3836	8.07
11) butane	0.759	0.710	0.679	0.614	0.581	0.608	0.560	0.519	0.6287	12.87
12) C acetaldehyde		0.222	0.209	0.205	0.187	0.178	0.147	0.128	0.1822	18.81
13) C bromomethane	0.397	0.399	0.403	0.348	0.341	0.337	0.311	0.280	0.3520	12.74
14) C chloroethane	0.252	0.262	0.248	0.233	0.220	0.226	0.220	0.205	0.2332	8.28
15) ethanol			0.346	0.307	0.284	0.302	0.271	0.244	0.2922	11.87
16) dichlorofluoromethane	0.695	0.698	0.696	0.612	0.592	0.590	0.549	0.509	0.6177	11.70
17) C vinyl bromide	0.430	0.438	0.410	0.376	0.367	0.364	0.342	0.317	0.3806	11.17
18) C acrolein		0.225	0.228	0.201	0.199	0.198	0.194	0.184	0.2043	8.03
19) acetone	0.620	0.584	0.565	0.547	0.515	0.646	0.428	0.391	0.5370	16.60
20) C acetonitrile	0.438	0.406	0.390	0.396	0.386	0.384	0.370	0.349	0.3898	6.65
21) trichlorofluoromethane	0.568	0.557	0.551	0.626	0.660	0.656	0.617	0.474	0.5887	10.70
22) isopropyl alcohol	1.360	1.185	1.094	1.020	0.932	0.962	0.860	0.748	1.0202	18.84
23) C acrylonitrile	0.568	0.562	0.540	0.496	0.499	0.502	0.496	0.471	0.5169	6.82
24) pentane	1.210	1.158	1.152	1.045	1.013	1.018	0.923	0.823	1.0427	12.41
25) ethyl ether	1.015	1.006	0.993	0.905	0.880	0.872	0.802	0.708	0.8976	11.97
26) C 1,1-dichloroethene	0.769	0.758	0.745	0.684	0.660	0.650	0.612	0.549	0.6785	11.32
27) tertiary butyl alcohol		1.052	1.011	0.954	0.850	0.941	0.913	0.827	0.9353	8.64
28) C methylene chloride		0.751	0.726	0.654	0.644	0.652	0.612	0.557	0.6565	9.99
29) C 3-chloropropene	0.873	0.859	0.846	0.782	0.765	0.773	0.744	0.687	0.7911	8.06
30) C carbon disulfide	2.084	2.108	2.068	1.853	1.808	1.750	1.588	1.339	1.8247	14.73
31) Freon 113	1.114	1.102	1.078	0.975	0.937	0.913	0.827	0.712	0.9571	14.77
32) trans-1,2-dichloroethene	0.877	0.866	0.850	0.772	0.753	0.745	0.715	0.644	0.7778	10.48
33) C 1,1-dichloroethane	1.040	1.049	1.020	0.946	0.923	0.911	0.884	0.808	0.9475	8.87
34) C MTBE	1.719	1.690	1.676	1.542	1.499	1.491	1.408	1.262	1.5360	10.20
35) C vinyl acetate			1.453	1.318	1.311	1.311	1.269	1.169	1.3050	7.01
36) C 2-butanone		1.356	1.324	1.208	1.191	1.180	1.132	1.034	1.2036	9.13



Initial Calibration Summary

Form 6

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRLAB19
 Calibration dates : 02/25/20 02:44

02/25/20 07:28

Lab Number : L2011723
 Project Number : MHD1801
 Ical Ref : ICAL16553

Calibration Files

0.2 =r192622.D 0.5 =r192623.D 1.0 =r192624.D 5.0 =r192625.D 10 =r192626.D 20 =r192627.D
 50 =r192628.D 100 =r192629.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
37)	cis-1,2-dichloroethene	0.757	0.745	0.731	0.668	0.655	0.648	0.625	0.565	0.6741	9.79
38)	Ethyl Acetate	0.211	0.236	0.225	0.208	0.209	0.202	0.188	0.159	0.2048	11.52
39) C	chloroform	0.935	0.954	0.941	0.841	0.810	0.795	0.752	0.663	0.8364	12.29
40)	Tetrahydrofuran	0.894	0.887	0.876	0.798	0.787	0.782	0.755	0.691	0.8088	8.87
41)	2,2-dichloropropane	0.783	0.773	0.766	0.702	0.681	0.660	0.629	0.557	0.6938	11.40
42) C	1,2-dichloroethane	0.453	0.458	0.448	0.406	0.395	0.387	0.375	0.347	0.4086	9.93
43) I	1,4-difluorobenzene	-----ISTD-----									
44) C	hexane	0.434	0.423	0.421	0.379	0.364	0.358	0.304	0.249	0.3665	17.41
45)	diisopropyl ether	0.225	0.224	0.223	0.205	0.197	0.193	0.167	0.139	0.1966	15.55
46)	tert-butyl ethyl ether	0.649	0.645	0.643	0.586	0.568	0.560	0.499	0.437	0.5734	13.22
47) s	1,2-dichloroethane-D4	0.128	0.129	0.129	0.130	0.128	0.130	0.121	0.114	0.1260	4.41
48) C	1,1,1-trichloroethane	0.266	0.269	0.271	0.241	0.232	0.226	0.201	0.176	0.2353	14.60
49)	1,1-dichloropropene	0.334	0.319	0.315	0.292	0.281	0.281	0.250	0.218	0.2859	13.38
50) C	benzene	0.831	0.819	0.808	0.736	0.713	0.708	0.630	0.542	0.7231	13.82
51)	thiophene	1.721	1.707	1.682	1.489	1.402	1.318	1.007	0.796	1.3902	24.47
52) C	carbon tetrachloride	0.229	0.232	0.226	0.207	0.193	0.185	0.152	0.128	0.1939	19.61
53)	cyclohexane	0.462	0.446	0.444	0.406	0.399	0.394	0.349	0.308	0.4009	12.98
54)	tert-amyl methyl ether	0.675	0.695	0.694	0.635	0.616	0.613	0.544	0.474	0.6183	12.47
55)	dibromomethane	0.219	0.209	0.207	0.185	0.174	0.168	0.144	0.119	0.1782	19.25
56) C	1,2-dichloropropane	0.263	0.262	0.261	0.236	0.230	0.226	0.200	0.172	0.2313	13.98
57)	bromodichloromethane	0.365	0.369	0.358	0.322	0.312	0.304	0.267	0.225	0.3153	16.03
58) C	1,4-dioxane	0.186	0.180	0.186	0.168	0.158	0.165	0.146	0.120	0.1637	13.64
59) C	trichloroethene	0.313	0.304	0.296	0.270	0.257	0.248	0.207	0.167	0.2577	19.58
60) C	2,2,4-trimethylpentane	1.369	1.351	1.332	1.205	1.122	1.134	0.968	0.774	1.1569	17.89
61)	methyl methacrylate		0.329	0.323	0.335	0.325	0.292	0.260	0.227	0.2987	13.73
62)	heptane	0.518	0.501	0.511	0.463	0.446	0.441	0.377	0.320	0.4472	15.47
63) C	cis-1,3-dichloropropene	0.399	0.389	0.392	0.358	0.348	0.335	0.287	0.244	0.3441	15.84
64) C	4-methyl-2-pentanone		0.553	0.563	0.521	0.497	0.484	0.409	0.341	0.4811	16.62
65)	trans-1,3-dichloropropene	0.333	0.339	0.343	0.320	0.314	0.306	0.277	0.244	0.3095	10.96
66) C	1,1,2-trichloroethane	0.281	0.286	0.285	0.263	0.250	0.246	0.219	0.184	0.2518	14.16
67) I	chlorobenzene-D5	-----ISTD-----									
68) C	toluene	7.251	7.097	6.908	6.288	6.056	5.799	5.061	4.253	6.0893	17.10
69) s	toluene-D8	5.794	5.784	5.787	5.851	5.936	5.981	6.085	6.004	5.9027	1.95
70)	2-methylthiophene	2.222	2.194	2.176	1.891	1.717	1.501	1.116	0.848	1.7081	30.39#
71)	1,3-dichloropropane	3.211	3.222	3.170	2.948	2.850	2.752	2.461	2.152	2.8457	13.48
72)	2-hexanone	3.992	3.827	3.924	3.682	3.572	3.478	3.124	2.706	3.5382	12.31



Initial Calibration Summary

Form 6

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRLAB19
 Calibration dates : 02/25/20 02:44

Lab Number : L2011723
 Project Number : MHD1801
 Ical Ref : ICAL16553

02/25/20 07:28

Calibration Files

0.2 =r192622.D 0.5 =r192623.D 1.0 =r192624.D 5.0 =r192625.D 10 =r192626.D 20 =r192627.D
 50 =r192628.D 100 =r192629.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
73)	3-methylthiophene	2.292	2.250	2.213	1.902	1.765	1.525	1.117	0.852	1.7396	31.02#
74)	dibromochloromethane	2.724	2.697	2.660	2.464	2.382	2.258	1.934	1.607	2.3405	16.96
75) C	1,2-dibromoethane	3.145	3.223	3.137	2.904	2.824	2.726	2.399	2.041	2.8000	14.57
76)	butyl acetate		0.965	1.018	0.956	0.940	0.935	0.868	0.756	0.9196	9.21
77)	octane	3.017	2.813	2.829	2.598	2.516	2.431	2.149	1.814	2.5206	15.58
78) C	tetrachloroethene	3.218	3.148	3.116	2.852	2.743	2.529	2.099	1.697	2.6754	20.26
79)	1,1,1,2-tetrachloroethane	2.074	1.984	2.030	1.849	1.751	1.643	1.350	1.089	1.7214	20.24
80) C	chlorobenzene	5.657	5.656	5.583	5.130	4.898	4.661	3.945	3.183	4.8391	18.40
81) C	ethylbenzene	8.473	8.419	8.319	7.736	7.477	6.938	6.072	4.993	7.3035	17.05
82)	2-ethylthiophene	2.313	2.340	2.275	1.950	1.750	1.474	1.069	0.800	1.7465	33.70#
83) C	m+p-xylene	7.034	6.878	6.802	6.197	5.840	5.408	4.392	3.513	5.7578	21.97
84) C	bromoform	3.045	3.008	3.108	2.833	2.638	2.433	2.019	1.592	2.5844	20.98
85) C	styrene	6.332	6.369	6.384	5.835	5.656	5.437	4.675	3.892	5.5725	16.04
86) C	1,1,2,2-tetrachloroethane	4.794	4.658	4.704	4.375	4.143	3.730	2.984	2.389	3.9723	22.14
87) C	o-xylene	7.250	6.837	6.807	6.138	5.730	5.150	4.049	3.234	5.6491	25.21
88)	1,2,3-trichloropropane	3.710	3.760	3.683	3.481	3.343	3.233	2.878	2.454	3.3177	13.76
89)	nonane	5.554	5.402	5.359	4.893	4.682	4.399	3.696	3.125	4.6388	18.66
90) s	bromofluorobenzene	3.720	3.685	3.661	3.725	3.775	3.858	4.064	4.015	3.8131	4.01
91) C	isopropylbenzene	9.935	9.475	9.438	8.782	8.318	7.928	6.576	5.233	8.2108	19.55
92)	bromobenzene	5.167	5.069	4.994	4.650	4.503	4.341	3.671	3.027	4.4278	16.80
93)	2-chlorotoluene	2.556	2.663	2.714	2.480	2.410	2.208	1.738	1.441	2.2762	20.13
94)	n-propylbenzene	3.167	3.133	3.168	3.002	2.877	2.621	2.157	1.767	2.7364	19.08
95)	4-chlorotoluene	2.489	2.618	2.554	2.473	2.362	2.252	2.014	1.672	2.3042	13.86
96)	4-ethyl toluene	1.122	1.096	1.110	1.040	1.004	0.921	0.734	0.626	0.9565	19.35
97)	1,3,5-trimethylbenzene	8.937	8.916	9.259	8.432	7.961	7.149	5.906	4.929	7.6862	20.42
98)	tert-butylbenzene	8.944	8.584	8.729	7.914	7.383	6.238	4.801	4.011	7.0754	26.48
99)	1,2,4-trimethylbenzene	8.683	8.754	8.947	8.079	7.519	6.291	4.728	3.914	7.1144	27.20
100)	decane	6.490	6.422	6.583	6.325	6.132	5.695	4.677	4.061	5.7980	16.18
101) C	Benzyl Chloride	5.816	5.870	6.235	6.417	6.379	5.863	4.862	4.394	5.7295	12.74
102)	1,3-dichlorobenzene	5.436	5.406	5.713	5.474	5.239	4.728	3.715	3.269	4.8724	18.57
103) C	1,4-dichlorobenzene	5.450	5.480	5.475	5.221	5.069	4.454	3.504	2.699	4.6689	22.41
104)	sec-butylbenzene	1.249	1.241	1.262	1.168	1.097	0.960	0.742	0.611	1.0413	23.86
105)	1,2,3-trimethylbenzene	8.026	7.956	8.247	8.247	7.777	6.206	4.818	4.214	6.9365	23.63
106)	p-isopropyltoluene	1.096	1.044	1.061	0.991	0.938	0.803	0.621	0.512	0.8833	24.61
107)	1,2-dichlorobenzene	5.038	5.123	5.207	5.164	4.998	4.490	3.635	3.306	4.6203	16.21
108)	n-butylbenzene	8.679	8.457	8.778	8.449	8.250	7.214	5.835	5.285	7.6183	17.92



Initial Calibration Summary

Form 6

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRLAB19
 Calibration dates : 02/25/20 02:44

02/25/20 07:28

Lab Number : L2011723
 Project Number : MHD1801
 Ical Ref : ICAL16553

Calibration Files

0.2 =r192622.D 0.5 =r192623.D 1.0 =r192624.D 5.0 =r192625.D 10 =r192626.D 20 =r192627.D
 50 =r192628.D 100 =r192629.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
109)	indan	7.790	7.898	8.062	8.549	8.141	6.775	5.387	4.698	7.1625	19.74
110)	indene	6.210	6.115	6.146	6.544	6.574	5.578	4.564	4.181	5.7392	15.73
111) C	1,2-dibromo-3-chloropropane	2.058	1.884	1.946	1.928	1.912	1.662	1.424	1.392	1.7758	14.21
112)	undecane	7.224	6.610	7.022	7.042	7.033	6.157	4.949	4.325	6.2951	17.30
113)	1,2,4,5-tetramethylbenzene	8.509	7.911	8.361	8.400	8.206	6.761	5.551	4.883	7.3227	19.44
114)	dodecane	6.360	6.364	7.176	7.854	7.805	5.382	4.450	3.548	6.1173	25.50
115) C	1,2,4-trichlorobenzene	4.495	4.141	4.766	5.032	5.021	3.746	2.919	2.363	4.0604	24.35
116)	naphthalene	1.276	1.073	1.175	1.109	1.172	0.940	0.844	0.726	1.0393	17.96
117)	1,2,3-trichlorobenzene	4.074	4.135	4.811	4.995	5.221	3.917	3.709	3.141	4.2503	16.62
118)	benzothiophene	7.697	7.827	9.294	6.056	6.620	7.669	7.428	6.451	7.3802	13.78
119) C	hexachlorobutadiene	4.112	3.721	4.285	4.328	4.192	3.034	2.511	2.047	3.5287	25.13
120)	2-methylnaphthalene			1.907	1.328	1.635	1.405	2.359	2.691	1.8874	28.81
121)	1-methylnaphthalene			2.979	3.085	3.508	2.381	3.602	3.955	3.2517	17.09

Initial Calibration Summary

Form 6

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRPIANO3
 Calibration dates : 03/12/20 12:25 03/12/20 17:00

Lab Number : L2011723
 Project Number : MHD1801
 Ical Ref : ICAL16594

Calibration Files

0.2 =r38592.D 0.5 =r38593.D 1.0 =r38594.D 5.0 =r38595.D 10 =r38596.D 20 =r38597.D 50 =r38598.D
 100 =r38599.D

Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
1) I bromochloromethane	-----ISTD-----									
2) chlorodifluoromethane	0.888	0.848	0.845	0.777	0.753	0.755	0.647	0.582	0.7618	13.70
3) propylene		0.525	0.516	0.473	0.445	0.444	0.401	0.371	0.4536	12.41
4) propane		0.720	0.695	0.615	0.598	0.602	0.520	0.464	0.6021	14.94
5) dichlorodifluoromethane	1.087	1.070	1.064	0.949	0.911	0.886	0.677	0.587	0.9039	20.56
6) C chloromethane	0.476	0.479	0.470	0.423	0.410	0.411	0.347	0.308	0.4153	14.95
7) Freon-114	1.364	1.336	1.313	1.169	1.110	1.075	0.802	0.631	1.0997	23.94
8) C methanol			0.256	0.214	0.205	0.202	0.173	0.153	0.2005	17.72
9) C vinyl chloride	0.547	0.536	0.526	0.482	0.468	0.485	0.432	0.400	0.4844	10.58
10) C 1,3-butadiene	0.545	0.542	0.537	0.494	0.479	0.492	0.426	0.372	0.4857	12.58
11) butane	0.856	0.825	0.803	0.724	0.701	0.701	0.579	0.516	0.7132	16.64
12) C acetaldehyde		0.281	0.266	0.253	0.237	0.199	0.150	0.124	0.2159	27.85
13) C bromomethane	0.444	0.456	0.447	0.401	0.393	0.404	0.351	0.312	0.4011	12.43
14) C chloroethane	0.279	0.274	0.268	0.240	0.235	0.244	0.220	0.210	0.2464	10.20
15) ethanol			0.481	0.434	0.409	0.470	0.299	0.245	0.3895	24.70
16) dichlorofluoromethane	0.853	0.854	0.839	0.764	0.740	0.770	0.607	0.542	0.7461	15.51
17) C vinyl bromide	0.513	0.520	0.507	0.467	0.458	0.525	0.375	0.321	0.4606	16.30
18) C acrolein		0.283	0.273	0.248	0.247	0.275	0.231	0.214	0.2531	10.03
19) acetone	0.781	0.741	0.717	0.700	0.669	0.768	0.444	0.370	0.6487	23.87
20) C acetonitrile	0.493	0.451	0.443	0.405	0.395	0.501	0.335	0.310	0.4165	16.57
21) trichlorofluoromethane	0.807	0.791	0.790	0.715	0.691	0.866	0.534	0.448	0.7053	20.54
22) isopropyl alcohol	0.992	0.914	0.869	0.865	0.832	1.001	0.627	0.537	0.8294	19.99
23) C acrylonitrile	0.488	0.473	0.480	0.450	0.444	0.513	0.408	0.368	0.4528	10.34
24) pentane	0.974	0.948	0.925	0.843	1.012	1.063	1.082	0.768	0.9516	11.22
25) ethyl ether	1.007	0.992	0.988	0.978	0.988	1.162	1.209	0.785	1.0136	12.67
26) C 1,1-dichloroethene	0.694	0.713	0.697	0.631	0.615	0.732	0.652	0.576	0.6638	8.13
27) tertiary butyl alcohol		1.045	1.026	0.938	1.019	1.048	0.979	0.905	0.9940	5.57
28) C methylene chloride		0.641	0.632	0.595	0.661	0.680	0.617	0.546	0.6245	7.10
29) C 3-chloropropene	0.911	0.895	0.878	0.816	0.808	0.818	0.745	0.681	0.8191	9.50
30) C carbon disulfide	2.016	2.024	2.020	1.869	1.838	1.839	1.617	1.378	1.8250	12.42
31) Freon 113	1.089	1.082	1.063	0.972	0.959	0.969	0.845	0.719	0.9623	13.26
32) trans-1,2-dichloroethene	0.839	0.845	0.837	0.784	0.777	0.786	0.710	0.643	0.7776	9.01
33) C 1,1-dichloroethane	1.010	1.020	0.991	0.910	0.896	0.909	0.829	0.761	0.9158	9.89
34) C MTBE	1.763	1.763	1.752	1.632	1.613	1.608	1.393	1.160	1.5855	13.31
35) C vinyl acetate			1.431	1.375	1.370	1.399	1.261	1.121	1.3260	8.72
36) C 2-butanone		1.401	1.375	1.262	1.231	1.243	1.113	0.985	1.2301	11.74



Initial Calibration Summary

Form 6

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRPIANO3
 Calibration dates : 03/12/20 12:25 03/12/20 17:00

Lab Number : L2011723
 Project Number : MHD1801
 Ical Ref : ICAL16594

Calibration Files

0.2 =r38592.D 0.5 =r38593.D 1.0 =r38594.D 5.0 =r38595.D 10 =r38596.D 20 =r38597.D 50 =r38598.D
 100 =r38599.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
37)	cis-1,2-dichloroethene	0.741	0.730	0.723	0.667	0.660	0.679	0.612	0.556	0.6710	9.43
38)	Ethyl Acetate		0.217	0.225	0.201	0.199	0.208	0.196	0.191	0.2053	5.79
39) C	chloroform	1.077	1.089	1.077	0.989	0.976	1.002	0.857	0.701	0.9710	13.67
40)	Tetrahydrofuran	0.846	0.834	0.824	0.769	0.760	0.773	0.708	0.642	0.7696	8.94
41)	2,2-dichloropropane	0.933	0.941	0.923	0.874	0.857	0.839	0.689	0.533	0.8237	17.29
42) C	1,2-dichloroethane	0.593	0.619	0.599	0.553	0.541	0.544	0.459	0.379	0.5359	14.96
43) I	1,4-difluorobenzene	-----ISTD-----									
44) C	hexane	0.421	0.405	0.399	0.377	0.368	0.377	0.336	0.285	0.3709	11.68
45)	diisopropyl ether	0.239	0.230	0.226	0.213	0.209	0.216	0.196	0.164	0.2117	10.99
46)	tert-butyl ethyl ether	0.661	0.656	0.653	0.622	0.608	0.621	0.552	0.481	0.6068	10.18
47) s	1,2-dichloroethane-D4	0.181	0.180	0.180	0.179	0.176	0.167	0.152	0.129	0.1681	11.17
48) C	1,1,1-trichloroethane	0.323	0.321	0.321	0.294	0.286	0.287	0.239	0.192	0.2829	16.23
49)	1,1-dichloropropene	0.341	0.324	0.328	0.312	0.304	0.305	0.264	0.219	0.2996	13.29
50) C	benzene	0.837	0.796	0.790	0.722	0.710	0.735	0.649	0.554	0.7241	12.51
51)	thiophene	1.698	1.684	1.679	1.565	1.528	1.542	1.244	0.919	1.4824	18.24
52) C	carbon tetrachloride	0.299	0.302	0.304	0.280	0.276	0.273	0.213	0.153	0.2627	20.16
53)	cyclohexane	0.432	0.427	0.426	0.400	0.393	0.410	0.379	0.347	0.4018	7.14
54)	tert-amyl methyl ether	0.700	0.707	0.694	0.657	0.649	0.645	0.550	0.454	0.6320	13.87
55)	dibromomethane	0.221	0.210	0.202	0.189	0.184	0.181	0.157	0.134	0.1847	15.38
56) C	1,2-dichloropropane	0.247	0.243	0.236	0.219	0.215	0.221	0.198	0.176	0.2194	10.90
57)	bromodichloromethane	0.430	0.426	0.421	0.400	0.394	0.399	0.344	0.277	0.3864	13.41
58) C	1,4-dioxane	0.175	0.178	0.174	0.166	0.164	0.170	0.163	0.139	0.1661	7.24
59) C	trichloroethene	0.295	0.295	0.292	0.270	0.267	0.273	0.247	0.221	0.2698	9.63
60) C	2,2,4-trimethylpentane	1.329	1.281	1.286	1.211	1.182	1.186	1.061	0.907	1.1805	11.71
61)	methyl methacrylate		0.341	0.335	0.374	0.371	0.326	0.290	0.243	0.3256	14.18
62)	heptane	0.525	0.514	0.508	0.483	0.468	0.471	0.406	0.337	0.4639	13.66
63) C	cis-1,3-dichloropropene	0.384	0.385	0.384	0.356	0.356	0.361	0.317	0.265	0.3511	11.80
64) C	4-methyl-2-pentanone		0.578	0.579	0.555	0.542	0.544	0.470	0.393	0.5229	13.01
65)	trans-1,3-dichloropropene	0.350	0.350	0.353	0.338	0.336	0.342	0.296	0.246	0.3265	11.35
66) C	1,1,2-trichloroethane	0.265	0.265	0.265	0.240	0.236	0.243	0.217	0.192	0.2403	10.87
67) I	chlorobenzene-D5	-----ISTD-----									
68) C	toluene	5.739	5.464	5.507	4.986	4.888	5.088	4.600	4.327	5.0748	9.44
69) s	toluene-D8	4.773	4.761	4.751	4.774	4.737	4.659	4.701	4.988	4.7680	2.04
70)	2-methylthiophene	1.725	1.731	1.717	1.555	1.487	1.429	1.088	0.815	1.4435	23.01
71)	1,3-dichloropropane	2.786	2.746	2.737	2.576	2.542	2.556	2.217	1.882	2.5051	12.36
72)	2-hexanone	3.323	3.368	3.419	3.281	3.207	3.087	2.331	1.812	2.9786	19.66



Initial Calibration Summary

Form 6

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRPIANO3
 Calibration dates : 03/12/20 12:25 03/12/20 17:00

Lab Number : L2011723
 Project Number : MHD1801
 Ical Ref : ICAL16594

Calibration Files

0.2 =r38592.D 0.5 =r38593.D 1.0 =r38594.D 5.0 =r38595.D 10 =r38596.D 20 =r38597.D 50 =r38598.D
 100 =r38599.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
73)	3-methylthiophene	1.755	1.755	1.756	1.596	1.521	1.455	1.065	0.777	1.4599	24.64
74)	dibromochloromethane	2.297	2.290	2.305	2.230	2.252	2.287	2.022	1.836	2.1898	7.78
75) C	1,2-dibromoethane	2.562	2.586	2.590	2.397	2.390	2.519	2.240	2.045	2.4163	7.99
76)	butyl acetate		0.776	0.796	0.776	0.789	0.817	0.748	0.679	0.7689	5.85
77)	octane	2.245	2.269	2.236	2.173	2.158	2.292	2.123	1.916	2.1767	5.52
78) C	tetrachloroethene	2.428	2.443	2.454	2.229	2.193	2.323	2.024	1.746	2.2300	11.00
79)	1,1,1,2-tetrachloroethane	1.904	1.809	1.792	1.684	1.665	1.671	1.453	1.258	1.6545	12.60
80) C	chlorobenzene	4.413	4.353	4.336	3.997	3.975	4.275	3.758	3.247	4.0444	9.77
81) C	ethylbenzene	6.599	6.599	6.591	6.027	5.941	6.192	5.480	4.924	6.0440	9.93
82)	2-ethylthiophene	1.852	1.867	1.871	1.694	1.609	1.509	1.077	0.780	1.5323	26.28
83) C	m+p-xylene	5.593	5.503	5.510	5.035	4.964	5.125	4.297	3.556	4.9478	14.17
84) C	bromoform	1.962	2.098	2.106	2.123	2.184	2.259	1.966	1.634	2.0414	9.43
85) C	styrene	4.497	4.551	4.593	4.421	4.457	4.720	4.254	3.833	4.4157	6.15
86) C	1,1,2,2-tetrachloroethane	3.769	3.877	3.849	3.566	3.539	3.706	2.991	2.330	3.4534	15.46
87) C	o-xylene	5.513	5.519	5.507	5.052	4.943	5.031	4.052	3.169	4.8483	17.20
88)	1,2,3-trichloropropane	3.127	3.108	3.119	2.994	2.975	2.987	2.634	2.300	2.9055	10.04
89)	nonane	4.566	4.572	4.541	4.290	4.194	4.196	3.516	2.934	4.1011	14.25
90) s	bromofluorobenzene	2.995	3.011	3.013	3.128	3.257	2.963	3.194	3.626	3.1483	6.97
91) C	isopropylbenzene	7.755	7.655	7.764	7.262	7.134	7.132	6.061	5.149	6.9890	13.24
92)	bromobenzene	3.934	4.018	4.020	3.904	3.933	3.975	3.404	2.856	3.7555	11.05
93)	2-chlorotoluene	2.070	2.038	2.045	1.973	1.964	2.013	1.876	1.734	1.9642	5.65
94)	n-propylbenzene	2.279	2.338	2.336	2.262	2.294	2.414	2.240	1.925	2.2610	6.46
95)	4-chlorotoluene	1.927	1.932	1.980	1.895	1.913	1.962	1.858	1.764	1.9042	3.57
96)	4-ethyl toluene	8.447	8.520	8.597	8.276	8.118	8.142	6.762	5.587	7.8060	13.69
97)	1,3,5-trimethylbenzene	7.007	7.125	7.091	6.562	6.446	6.588	5.469	4.504	6.3491	14.43
98)	tert-butylbenzene	6.736	6.910	7.008	6.641	6.608	6.315	4.756	3.689	6.0829	19.74
99)	1,2,4-trimethylbenzene	6.655	6.931	7.032	6.403	6.296	6.022	4.482	3.439	5.9074	21.61
100)	decane	4.940	5.048	5.154	5.023	4.941	4.905	4.128	3.486	4.7030	12.43
101) C	Benzyl Chloride	3.286	3.812	4.151	4.548	4.867	4.883	4.119	3.388	4.1315	14.89
102)	1,3-dichlorobenzene	3.847	3.980	4.024	3.728	3.724	3.935	3.216	2.628	3.6353	13.20
103) C	1,4-dichlorobenzene	3.402	3.517	3.644	3.652	3.738	3.697	3.215	2.793	3.4571	9.25
104)	sec-butylbenzene	0.953	0.981	1.000	0.963	0.945	0.916	0.743	0.611	0.8890	15.49
105)	1,2,3-trimethylbenzene	6.010	6.155	6.270	6.729	6.582	5.423	4.090	3.158	5.5520	23.01
106)	p-isopropyltoluene	7.956	8.223	8.289	8.194	8.188	7.632	5.719	4.344	7.3183	20.13
107)	1,2-dichlorobenzene	3.562	3.696	3.735	3.524	3.543	3.649	3.195	2.822	3.4658	8.90
108)	n-butylbenzene	6.158	6.444	6.729	6.740	6.657	6.362	5.366	4.570	6.1281	12.61

Initial Calibration Summary

Form 6

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRPIANO3
 Calibration dates : 03/12/20 12:25 03/12/20 17:00

Lab Number : L2011723
 Project Number : MHD1801
 Ical Ref : ICAL16594

Calibration Files

0.2 =r38592.D 0.5 =r38593.D 1.0 =r38594.D 5.0 =r38595.D 10 =r38596.D 20 =r38597.D 50 =r38598.D
 100 =r38599.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
109)	indan	5.628	5.890	6.005	6.647	6.680	6.074	5.186	4.406	5.8144	12.95
110)	indene	3.927	4.328	4.529	5.263	5.344	4.928	4.361	3.810	4.5613	12.57
111) C	1,2-dibromo-3-chloropropane	1.413	1.450	1.611	1.727	1.746	1.545	1.286	1.097	1.4843	14.91
112)	undecane	5.162	5.405	5.559	5.672	5.595	5.298	4.420	3.659	5.0962	13.79
113)	1,2,4,5-tetramethylbenzene	5.285	5.484	5.585	6.474	7.060	6.038	5.169	4.387	5.6853	14.56
114)	dodecane	4.553	5.044	5.329	6.159	6.086	5.118	4.429	3.699	5.0520	16.46
115) C	1,2,4-trichlorobenzene	1.385	1.742	2.159	2.347	2.574	2.409	2.425	2.248	2.1609	18.52
116)	naphthalene	5.197	5.488	6.234	7.316	7.786	6.602	6.569	6.076	6.4086	13.50
117)	1,2,3-trichlorobenzene	1.921	2.141	2.423	2.858	3.077	2.597	2.545	2.301	2.4830	15.08
118)	benzothiophene	2.323	2.883	3.863	3.602	4.121	4.629	5.005	4.999	3.9279	24.75
119) C	hexachlorobutadiene	3.029	3.112	3.118	2.897	2.832	2.561	2.145	1.743	2.6796	18.66
120)	2-methylnaphthalene			0.670	0.851	1.061	1.160	1.404	1.579	1.1208	30.16#
121)	1-methylnaphthalene			2.328	2.406	2.669	2.710	2.911	3.001	2.6707	9.99

Response Factor Report

Method Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Method File : TFS19_200224.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Tue Feb 25 10:21:39 2020
 Response Via : Initial Calibration

Calibration Files

0.2 =r192622.D 0.5 =r192623.D 1.0 =r192624.D 5.0 =r192625.D 10 =r192626.D 20 =r192627.D
 50 =r192628.D 100 =r192629.D

Compound		0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
-----ISTD-----											
1) I	bromochloromethane										
2)	chlorodifluoromethane	0.715	0.677	0.674	0.606	0.593	0.655	0.564	0.521	0.6257	10.44
3)	propylene		0.478	0.452	0.406	0.397	0.429	0.371	0.343	0.4107	11.32
4)	propane		0.535	0.517	0.440	0.420	0.452	0.396	0.359	0.4458	14.10
5)	dichlorodifluoromethane	0.645	0.653	0.572	0.558	0.522	0.578	0.510	0.446	0.5604	12.32
6) C	chloromethane	0.379	0.394	0.384	0.369	0.329	0.388	0.329	0.296	0.3584	9.98
7)	Freon-114	0.992	0.957	0.915	0.871	0.814	0.830	0.686	0.588	0.8316	16.42
8) C	methanol			0.207	0.162	0.153	0.163	0.149	0.138	0.1621	14.74
9) C	vinyl chloride	0.511	0.500	0.492	0.442	0.411	0.430	0.401	0.371	0.4449	11.53
10) C	1,3-butadiene	0.410	0.422	0.414	0.374	0.369	0.390	0.357	0.333	0.3836	8.07
11)	butane	0.759	0.710	0.679	0.614	0.581	0.608	0.560	0.519	0.6287	12.87
12) C	acetaldehyde		0.222	0.209	0.205	0.187	0.178	0.147	0.128	0.1822	18.81
13) C	bromomethane	0.397	0.399	0.403	0.348	0.341	0.337	0.311	0.280	0.3520	12.74
14) C	chloroethane	0.252	0.262	0.248	0.233	0.220	0.226	0.220	0.205	0.2332	8.28
15)	ethanol			0.346	0.307	0.284	0.302	0.271	0.244	0.2922	11.87
16)	dichlorofluoromethane	0.695	0.698	0.696	0.612	0.592	0.590	0.549	0.509	0.6177	11.70
17) C	vinyl bromide	0.430	0.438	0.410	0.376	0.367	0.364	0.342	0.317	0.3806	11.17
18) C	acrolein		0.225	0.228	0.201	0.199	0.198	0.194	0.184	0.2043	8.03
19)	acetone	0.620	0.584	0.565	0.547	0.515	0.646	0.428	0.391	0.5370	16.60
20) C	acetonitrile	0.438	0.406	0.390	0.396	0.386	0.384	0.370	0.349	0.3898	6.65
21)	trichlorofluoromethane	0.568	0.557	0.551	0.626	0.660	0.656	0.617	0.474	0.5887	10.70
22)	isopropyl alcohol	1.360	1.185	1.094	1.020	0.932	0.962	0.860	0.748	1.0202	18.84
23) C	acrylonitrile	0.568	0.562	0.540	0.496	0.499	0.502	0.496	0.471	0.5169	6.82
24)	pentane	1.210	1.158	1.152	1.045	1.013	1.018	0.923	0.823	1.0427	12.41
25)	ethyl ether	1.015	1.006	0.993	0.905	0.880	0.872	0.802	0.708	0.8976	11.97
26) C	1,1-dichloroethene	0.769	0.758	0.745	0.684	0.660	0.650	0.612	0.549	0.6785	11.32
27)	tertiary butyl alcohol		1.052	1.011	0.954	0.850	0.941	0.913	0.827	0.9353	8.64
28) C	methylene chloride		0.751	0.726	0.654	0.644	0.652	0.612	0.557	0.6565	9.99
29) C	3-chloropropene	0.873	0.859	0.846	0.782	0.765	0.773	0.744	0.687	0.7911	8.06
30) C	carbon disulfide	2.084	2.108	2.068	1.853	1.808	1.750	1.588	1.339	1.8247	14.73
31)	Freon 113	1.114	1.102	1.078	0.975	0.937	0.913	0.827	0.712	0.9571	14.77

Response Factor Report

Method Path : O:\Forensics\Data\Airlab19\2020\02\200224T_I\
Method File : TFS19_200224.M
Title : T0-14A/T0-15 SIM/Full Scan Analysis
Last Update : Tue Feb 25 10:21:39 2020
Response Via : Initial Calibration

Calibration Files

0.2 =r192622.D 0.5 =r192623.D 1.0 =r192624.D 5.0 =r192625.D 10 =r192626.D 20 =r192627.D
50 =r192628.D 100 =r192629.D

Compound		0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
32)	trans-1,2-dichloroethene	0.877	0.866	0.850	0.772	0.753	0.745	0.715	0.644	0.7778	10.48
33) C	1,1-dichloroethane	1.040	1.049	1.020	0.946	0.923	0.911	0.884	0.808	0.9475	8.87
34) C	MTBE	1.719	1.690	1.676	1.542	1.499	1.491	1.408	1.262	1.5360	10.20
35) C	vinyl acetate			1.453	1.318	1.311	1.311	1.269	1.169	1.3050	7.01
36) C	2-butanone		1.356	1.324	1.208	1.191	1.180	1.132	1.034	1.2036	9.13
37)	cis-1,2-dichloroethene	0.757	0.745	0.731	0.668	0.655	0.648	0.625	0.565	0.6741	9.79
38)	Ethyl Acetate	0.211	0.236	0.225	0.208	0.209	0.202	0.188	0.159	0.2048	11.52
39) C	chloroform	0.935	0.954	0.941	0.841	0.810	0.795	0.752	0.663	0.8364	12.29
40)	Tetrahydrofuran	0.894	0.887	0.876	0.798	0.787	0.782	0.755	0.691	0.8088	8.87
41)	2,2-dichloropropane	0.783	0.773	0.766	0.702	0.681	0.660	0.629	0.557	0.6938	11.40
42) C	1,2-dichloroethane	0.453	0.458	0.448	0.406	0.395	0.387	0.375	0.347	0.4086	9.93
43) I	1,4-difluorobenzene	-----ISTD-----									
44) C	hexane	0.434	0.423	0.421	0.379	0.364	0.358	0.304	0.249	0.3665	17.41
45)	diisopropyl ether	0.225	0.224	0.223	0.205	0.197	0.193	0.167	0.139	0.1966	15.55
46)	tert-butyl ethyl ether	0.649	0.645	0.643	0.586	0.568	0.560	0.499	0.437	0.5734	13.22
47) s	1,2-dichloroethane-D4	0.128	0.129	0.129	0.130	0.128	0.130	0.121	0.114	0.1260	4.41
48) C	1,1,1-trichloroethane	0.266	0.269	0.271	0.241	0.232	0.226	0.201	0.176	0.2353	14.60
49)	1,1-dichloropropene	0.334	0.319	0.315	0.292	0.281	0.281	0.250	0.218	0.2859	13.38
50) C	benzene	0.831	0.819	0.808	0.736	0.713	0.708	0.630	0.542	0.7231	13.82
51)	thiophene	1.721	1.707	1.682	1.489	1.402	1.318	1.007	0.796	1.3902	24.47
52) C	carbon tetrachloride	0.229	0.232	0.226	0.207	0.193	0.185	0.152	0.128	0.1939	19.61
53)	cyclohexane	0.462	0.446	0.444	0.406	0.399	0.394	0.349	0.308	0.4009	12.98
54)	tert-amyl methyl ether	0.675	0.695	0.694	0.635	0.616	0.613	0.544	0.474	0.6183	12.47
55)	dibromomethane	0.219	0.209	0.207	0.185	0.174	0.168	0.144	0.119	0.1782	19.25
56) C	1,2-dichloropropane	0.263	0.262	0.261	0.236	0.230	0.226	0.200	0.172	0.2313	13.98
57)	bromodichloromethane	0.365	0.369	0.358	0.322	0.312	0.304	0.267	0.225	0.3153	16.03
58) C	1,4-dioxane	0.186	0.180	0.186	0.168	0.158	0.165	0.146	0.120	0.1637	13.64
59) C	trichloroethene	0.313	0.304	0.296	0.270	0.257	0.248	0.207	0.167	0.2577	19.58
60) C	2,2,4-trimethylpentane	1.369	1.351	1.332	1.205	1.122	1.134	0.968	0.774	1.1569	17.89
61)	methyl methacrylate		0.329	0.323	0.335	0.325	0.292	0.260	0.227	0.2987	13.73
62)	heptane	0.518	0.501	0.511	0.463	0.446	0.441	0.377	0.320	0.4472	15.47

Response Factor Report

Method Path : O:\Forensics\Data\Airlab19\2020\02\200224T_I\
Method File : TFS19_200224.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Tue Feb 25 10:21:39 2020
Response Via : Initial Calibration

Calibration Files

0.2 =r192622.D 0.5 =r192623.D 1.0 =r192624.D 5.0 =r192625.D 10 =r192626.D 20 =r192627.D
50 =r192628.D 100 =r192629.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
63) C	cis-1,3-dichloropropene	0.399	0.389	0.392	0.358	0.348	0.335	0.287	0.244	0.3441	15.84
64) C	4-methyl-2-pentanone		0.553	0.563	0.521	0.497	0.484	0.409	0.341	0.4811	16.62
65)	trans-1,3-dichloropropene	0.333	0.339	0.343	0.320	0.314	0.306	0.277	0.244	0.3095	10.96
66) C	1,1,2-trichloroethane	0.281	0.286	0.285	0.263	0.250	0.246	0.219	0.184	0.2518	14.16
67) I	chlorobenzene-D5	-----ISTD-----									
68) C	toluene	7.251	7.097	6.908	6.288	6.056	5.799	5.061	4.253	6.0893	17.10
69) s	toluene-D8	5.794	5.784	5.787	5.851	5.936	5.981	6.085	6.004	5.9027	1.95
70)	2-methylthiophene	2.222	2.194	2.176	1.891	1.717	1.501	1.116	0.848	1.7081	30.39#
71)	1,3-dichloropropane	3.211	3.222	3.170	2.948	2.850	2.752	2.461	2.152	2.8457	13.48
72)	2-hexanone	3.992	3.827	3.924	3.682	3.572	3.478	3.124	2.706	3.5382	12.31
73)	3-methylthiophene	2.292	2.250	2.213	1.902	1.765	1.525	1.117	0.852	1.7396	31.02#
74)	dibromochloromethane	2.724	2.697	2.660	2.464	2.382	2.258	1.934	1.607	2.3405	16.96
75) C	1,2-dibromoethane	3.145	3.223	3.137	2.904	2.824	2.726	2.399	2.041	2.8000	14.57
76)	butyl acetate		0.965	1.018	0.956	0.940	0.935	0.868	0.756	0.9196	9.21
77)	octane	3.017	2.813	2.829	2.598	2.516	2.431	2.149	1.814	2.5206	15.58
78) C	tetrachloroethene	3.218	3.148	3.116	2.852	2.743	2.529	2.099	1.697	2.6754	20.26
79)	1,1,1,2-tetrachloroethane	2.074	1.984	2.030	1.849	1.751	1.643	1.350	1.089	1.7214	20.24
80) C	chlorobenzene	5.657	5.656	5.583	5.130	4.898	4.661	3.945	3.183	4.8391	18.40
81) C	ethylbenzene	8.473	8.419	8.319	7.736	7.477	6.938	6.072	4.993	7.3035	17.05
82)	2-ethylthiophene	2.313	2.340	2.275	1.950	1.750	1.474	1.069	0.800	1.7465	33.70#
83) C	m+p-xylene	7.034	6.878	6.802	6.197	5.840	5.408	4.392	3.513	5.7578	21.97
84) C	bromoform	3.045	3.008	3.108	2.833	2.638	2.433	2.019	1.592	2.5844	20.98
85) C	styrene	6.332	6.369	6.384	5.835	5.656	5.437	4.675	3.892	5.5725	16.04
86) C	1,1,2,2-tetrachloroethane	4.794	4.658	4.704	4.375	4.143	3.730	2.984	2.389	3.9723	22.14
87) C	o-xylene	7.250	6.837	6.807	6.138	5.730	5.150	4.049	3.234	5.6491	25.21
88)	1,2,3-trichloropropane	3.710	3.760	3.683	3.481	3.343	3.233	2.878	2.454	3.3177	13.76
89)	nonane	5.554	5.402	5.359	4.893	4.682	4.399	3.696	3.125	4.6388	18.66
90) s	bromofluorobenzene	3.720	3.685	3.661	3.725	3.775	3.858	4.064	4.015	3.8131	4.01
91) C	isopropylbenzene	9.935	9.475	9.438	8.782	8.318	7.928	6.576	5.233	8.2108	19.55
92)	bromobenzene	5.167	5.069	4.994	4.650	4.503	4.341	3.671	3.027	4.4278	16.80
93)	2-chlorotoluene	2.556	2.663	2.714	2.480	2.410	2.208	1.738	1.441	2.2762	20.13

Response Factor Report

Method Path : O:\Forensics\Data\Airlab19\2020\02\200224T_I\
Method File : TFS19_200224.M
Title : T0-14A/T0-15 SIM/Full Scan Analysis
Last Update : Tue Feb 25 10:21:39 2020
Response Via : Initial Calibration

Calibration Files

0.2 =r192622.D 0.5 =r192623.D 1.0 =r192624.D 5.0 =r192625.D 10 =r192626.D 20 =r192627.D
50 =r192628.D 100 =r192629.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
94)	n-propylbenzene	3.167	3.133	3.168	3.002	2.877	2.621	2.157	1.767	2.7364	19.08
95)	4-chlorotoluene	2.489	2.618	2.554	2.473	2.362	2.252	2.014	1.672	2.3042	13.86
96)	4-ethyl toluene	1.122	1.096	1.110	1.040	1.004	0.921	0.734	0.626	0.9565	19.35
97)	1,3,5-trimethylbenzene	8.937	8.916	9.259	8.432	7.961	7.149	5.906	4.929	7.6862	20.42
98)	tert-butylbenzene	8.944	8.584	8.729	7.914	7.383	6.238	4.801	4.011	7.0754	26.48
99)	1,2,4-trimethylbenzene	8.683	8.754	8.947	8.079	7.519	6.291	4.728	3.914	7.1144	27.20
100)	decane	6.490	6.422	6.583	6.325	6.132	5.695	4.677	4.061	5.7980	16.18
101) C	Benzyl Chloride	5.816	5.870	6.235	6.417	6.379	5.863	4.862	4.394	5.7295	12.74
102)	1,3-dichlorobenzene	5.436	5.406	5.713	5.474	5.239	4.728	3.715	3.269	4.8724	18.57
103) C	1,4-dichlorobenzene	5.450	5.480	5.475	5.221	5.069	4.454	3.504	2.699	4.6689	22.41
104)	sec-butylbenzene	1.249	1.241	1.262	1.168	1.097	0.960	0.742	0.611	1.0413	23.86
105)	1,2,3-trimethylbenzene	8.026	7.956	8.247	8.247	7.777	6.206	4.818	4.214	6.9365	23.63
106)	p-isopropyltoluene	1.096	1.044	1.061	0.991	0.938	0.803	0.621	0.512	0.8833	24.61
107)	1,2-dichlorobenzene	5.038	5.123	5.207	5.164	4.998	4.490	3.635	3.306	4.6203	16.21
108)	n-butylbenzene	8.679	8.457	8.778	8.449	8.250	7.214	5.835	5.285	7.6183	17.92
109)	indan	7.790	7.898	8.062	8.549	8.141	6.775	5.387	4.698	7.1625	19.74
110)	indene	6.210	6.115	6.146	6.544	6.574	5.578	4.564	4.181	5.7392	15.73
111) C	1,2-dibromo-3-chloropropane	2.058	1.884	1.946	1.928	1.912	1.662	1.424	1.392	1.7758	14.21
112)	undecane	7.224	6.610	7.022	7.042	7.033	6.157	4.949	4.325	6.2951	17.30
113)	1,2,4,5-tetramethylbenzene	8.509	7.911	8.361	8.400	8.206	6.761	5.551	4.883	7.3227	19.44
114)	dodecane	6.360	6.364	7.176	7.854	7.805	5.382	4.450	3.548	6.1173	25.50
115) C	1,2,4-trichlorobenzene	4.495	4.141	4.766	5.032	5.021	3.746	2.919	2.363	4.0604	24.35
116)	naphthalene	1.276	1.073	1.175	1.109	1.172	0.940	0.844	0.726	1.0393	17.96
117)	1,2,3-trichlorobenzene	4.074	4.135	4.811	4.995	5.221	3.917	3.709	3.141	4.2503	16.62
118)	benzothiophene	7.697	7.827	9.294	6.056	6.620	7.669	7.428	6.451	7.3802	13.78
119) C	hexachlorobutadiene	4.112	3.721	4.285	4.328	4.192	3.034	2.511	2.047	3.5287	25.13
120)	2-methylnaphthalene			1.907	1.328	1.635	1.405	2.359	2.691	1.8874	28.81
121)	1-methylnaphthalene			2.979	3.085	3.508	2.381	3.602	3.955	3.2517	17.09

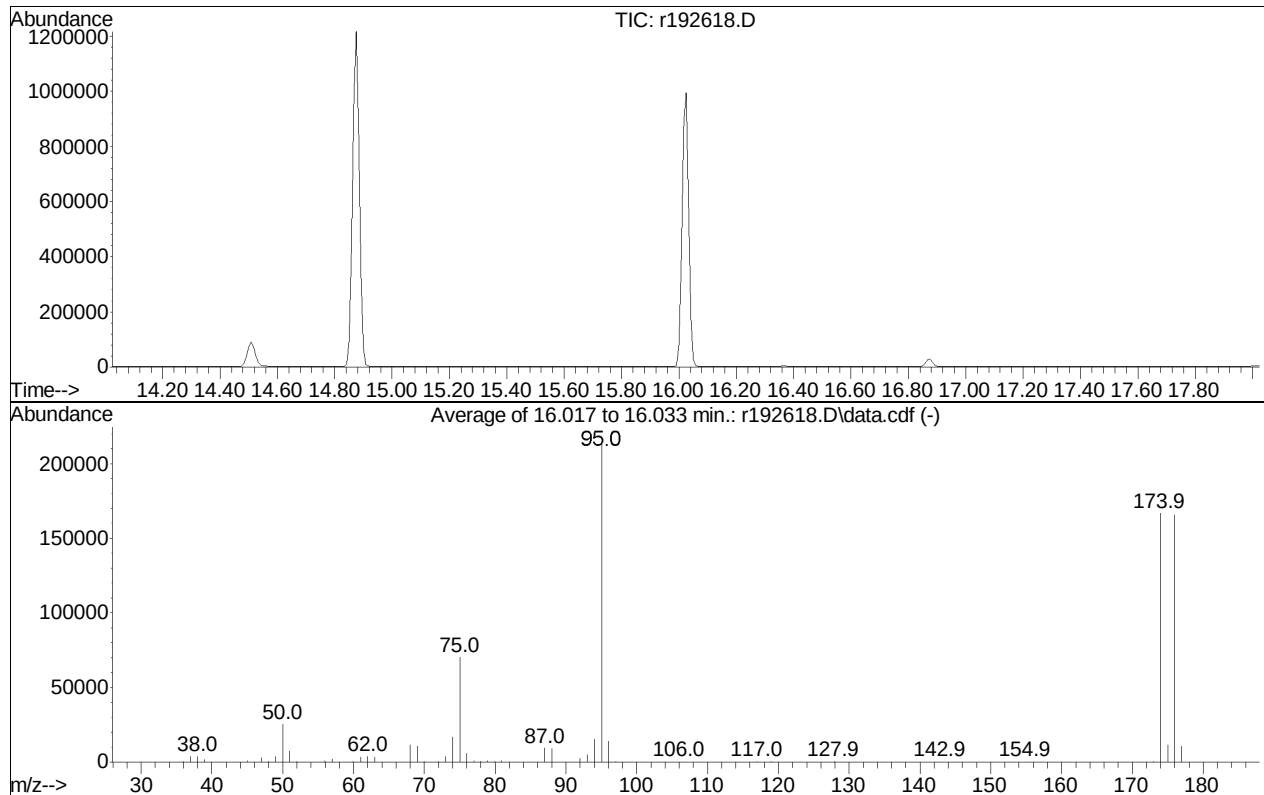
(#) = Out of Range

BFB

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192618.D
 Acq On : 25 Feb 2020 12:05 AM
 Operator : AIRLAB19:RY
 Sample : WG1344146-1,3,250,250
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Tue Feb 25 10:21:39 2020



Spectrum Information: Average of 16.017 to 16.033 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	11.8	25292	PASS
75	95	30	66	33.0	70626	PASS
95	95	100	100	100.0	214080	PASS
96	95	5	9	6.5	13900	PASS
173	174	0.00	2	0.5	791	PASS
174	95	50	120	78.0	166925	PASS
175	174	4	9	7.0	11666	PASS
176	174	93	101	99.3	165677	PASS
177	176	5	9	6.5	10782	PASS

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192622.D
 Acq On : 25 Feb 2020 2:44 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD0.2
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:09:36 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	8.78	49	309515	10.000	ppbV	0.00
Standard Area = 313159			Recovery =		98.84%	
43) 1,4-difluorobenzene	10.75	114	878467	10.000	ppbV	0.00
Standard Area = 892162			Recovery =		98.46%	
67) chlorobenzene-D5	14.88	54	115566	10.000	ppbV	0.00
Standard Area = 115842			Recovery =		99.76%	
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	9.55	65	112007	9.996	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		99.96%	
69) toluene-D8	13.28	98	669639	9.762	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		97.62%	
90) bromofluorobenzene	16.02	95	429960	9.854	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		98.54%	
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.44	51	4426	0.241	ppbV	98
3) propylene	3.48	41	3215M6	0.262	ppbV	
4) propane	3.50	29	4015M4	0.309	ppbV	
5) dichlorodifluoromethane	3.56	85	3992	0.247	ppbV	99
6) chloromethane	3.78	50	2344	0.230	ppbV	100
7) Freon-114	3.92	85	6139	0.244	ppbV	99
8) methanol	3.98	31	7067	1.493	ppbV #	1
9) vinyl chloride	4.07	62	3163	0.248	ppbV	99
10) 1,3-butadiene	4.24	54	2536	0.222	ppbV	94
11) butane	4.31	43	4699	0.261	ppbV	94
12) acetaldehyde	3.93	29	7510	1.299	ppbV	97
13) bromomethane	4.57	94	2460	0.233	ppbV	98
14) chloroethane	4.79	64	1561	0.229	ppbV	93
15) ethanol	4.93	31	12171	1.385	ppbV	98
16) dichlorofluoromethane	4.92	67	4302	0.235	ppbV	97
17) vinyl bromide	5.21	106	2661	0.234	ppbV	94
18) acrolein	5.34	56	1547	0.251	ppbV #	41
19) acetone	5.50	43	19196	1.204	ppbV #	99
20) acetonitrile	5.19	41	2711	0.227	ppbV #	42
21) trichlorofluoromethane	5.69	101	3518	0.172	ppbV	99
22) isopropyl alcohol	5.78	45	21042	0.729	ppbV	99
23) acrylonitrile	6.02	53	3517	0.228	ppbV	98
24) pentane	6.10	43	7489	0.239	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192622.D
 Acq On : 25 Feb 2020 2:44 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD0.2
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:09:36 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.12	31	6285	0.231	ppbV	97
26) 1,1-dichloroethene	6.40	61	4760	0.233	ppbV	96
27) tertiary butyl alcohol	6.45	59	6643	0.253	ppbV #	91
28) methylene chloride	6.53	49	4943	0.248	ppbV	99
29) 3-chloropropene	6.67	41	5405	0.228	ppbV	98
30) carbon disulfide	6.85	76	12903	0.231	ppbV #	78
31) Freon 113	6.82	101	6893	0.238	ppbV	98
32) trans-1,2-dichloroethene	7.53	61	5430	0.233	ppbV	100
33) 1,1-dichloroethane	7.74	63	6436	0.225	ppbV	99
34) MTBE	7.81	73	10641	0.229	ppbV	98
35) vinyl acetate	7.90	43	9283	0.229	ppbV	98
36) 2-butanone	8.16	43	8400	0.228	ppbV	95
37) cis-1,2-dichloroethene	8.61	61	4683	0.231	ppbV	99
38) Ethyl Acetate	8.83	61	1309	0.203	ppbV	96
39) chloroform	8.91	83	5786	0.231	ppbV	97
40) Tetrahydrofuran	9.34	42	5537	0.227	ppbV	94
41) 2,2-dichloropropane	8.94	77	4848	0.230	ppbV	98
42) 1,2-dichloroethane	9.67	62	2807	0.229	ppbV	97
44) hexane	8.82	57	7623	0.238	ppbV #	69
45) diisopropyl ether	8.81	87	3961	0.229	ppbV	88
46) tert-butyl ethyl ether	9.36	59	11401	0.228	ppbV	97
48) 1,1,1-trichloroethane	9.93	97	4680	0.229	ppbV	98
49) 1,1-dichloropropene	10.25	75	5860	0.238	ppbV	96
50) benzene	10.40	78	14594	0.233	ppbV	100
51) thiophene	10.54	84	30234	0.246	ppbV	99
52) carbon tetrachloride	10.56	117	4029	0.238	ppbV	93
53) cyclohexane	10.69	56	8120	0.232	ppbV	98
54) tert-amyl methyl ether	11.00	73	11863	0.219	ppbV	99
55) dibromomethane	11.22	93	3841	0.251	ppbV	98
56) 1,2-dichloropropane	11.25	63	4627	0.229	ppbV	99
57) bromodichloromethane	11.45	83	6407	0.234	ppbV	98
58) 1,4-dioxane	11.50	88	3262	0.234	ppbV #	78
59) trichloroethene	11.49	130	5496	0.243	ppbV	97
60) 2,2,4-trimethylpentane	11.52	57	24044	0.244	ppbV	99
61) methyl methacrylate	11.67	41	5600	0.196	ppbV	100
62) heptane	11.78	43	9109	0.233	ppbV	97
63) cis-1,3-dichloropropene	12.40	75	7009	0.229	ppbV	98
64) 4-methyl-2-pentanone	12.43	43	10003	0.229	ppbV	96
65) trans-1,3-dichloropropene	12.93	75	5858	0.213	ppbV	94
66) 1,1,2-trichloroethane	13.10	97	4931	0.224	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192622.D
 Acq On : 25 Feb 2020 2:44 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD0.2
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:09:36 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	toluene	13.37	91	16760	0.239	ppbV	99
70)	2-methylthiophene	13.43	97	51352	0.259	ppbV	99
71)	1,3-dichloropropane	13.38	76	7422	0.225	ppbV	98
72)	2-hexanone	13.60	43	9226	0.223	ppbV #	78
73)	3-methylthiophene	13.59	97	52982	0.260	ppbV	99
74)	dibromochloromethane	13.76	129	6295	0.229	ppbV	98
75)	1,2-dibromoethane	13.98	107	7270	0.223	ppbV	98
76)	butyl acetate	14.13	73	2439	0.225	ppbV	88
77)	octane	14.21	85	6974	0.240	ppbV	97
78)	tetrachloroethene	14.36	166	7438	0.235	ppbV	97
79)	1,1,1,2-tetrachloroethane	14.89	131	4794	0.237	ppbV	96
80)	chlorobenzene	14.91	112	13076	0.231	ppbV	98
81)	ethylbenzene	15.19	91	19584	0.227	ppbV	100
82)	2-ethylthiophene	15.23	97	53459	0.264	ppbV	97
83)	m+p-xylene	15.32	91	32515	0.482	ppbV	100
84)	bromoform	15.41	173	7037	0.231	ppbV	97
85)	styrene	15.60	104	14635	0.224	ppbV	99
86)	1,1,2,2-tetrachloroethane	15.68	83	11081	0.231	ppbV	99
87)	o-xylene	15.68	91	16757	0.253	ppbV	98
88)	1,2,3-trichloropropane	15.78	75	8575	0.222	ppbV	98
89)	nonane	15.82	43	12838	0.237	ppbV	99
91)	isopropylbenzene	16.12	105	22964	0.239	ppbV	96
92)	bromobenzene	16.21	77	11942	0.229	ppbV	95
93)	2-chlorotoluene	16.50	126	5907	0.212	ppbV	94
94)	n-propylbenzene	16.51	120	7321	0.220	ppbV	83
95)	4-chlorotoluene	16.55	126	5752	0.211	ppbV	96
96)	4-ethyl toluene	16.62	105	25926	0.223	ppbV	98
97)	1,3,5-trimethylbenzene	16.68	105	20657	0.225	ppbV	98
98)	tert-butylbenzene	16.99	119	20673	0.242	ppbV	99
99)	1,2,4-trimethylbenzene	16.99	105	20069	0.231	ppbV	98
100)	decane	17.03	57	15001	0.212	ppbV	97
101)	Benzyl Chloride	17.11	91	13442	0.182	ppbV	99
102)	1,3-dichlorobenzene	17.13	146	12564	0.208	ppbV	99
103)	1,4-dichlorobenzene	17.18	146	12596	0.215	ppbV	99
104)	sec-butylbenzene	17.19	105	28879	0.228	ppbV	100
105)	1,2,3-trimethylbenzene	17.32	105	18551	0.206	ppbV	96
106)	p-isopropyltoluene	17.31	119	25332	0.234	ppbV	99
107)	1,2-dichlorobenzene	17.44	146	11645	0.202	ppbV	99
108)	n-butylbenzene	17.63	91	20061	0.210	ppbV	99
109)	indan	17.48	117	18006	0.191	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192622.D
 Acq On : 25 Feb 2020 2:44 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD0.2
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:09:36 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

110) indene	17.56	115	14353	0.189	ppbV	98
111) 1,2-dibromo-3-chloropr...	17.80	75	4757	0.215	ppbV	90
112) undecane	17.99	57	16696	0.205	ppbV	96
113) 1,2,4,5-tetramethylben...	18.23	119	19668	0.207	ppbV	99
114) dodecane	18.84	57	14701	0.163	ppbV	93
115) 1,2,4-trichlorobenzene	18.83	180	10389	0.179	ppbV	98
116) naphthalene	18.94	128	29490	0.218	ppbV	98
117) 1,2,3-trichlorobenzene	19.18	180	9417	0.156	ppbV	98
118) benzothiophene	19.00	134	17791	0.233	ppbV	100
119) hexachlorobutadiene	19.22	225	9504	0.196	ppbV	99
120) 2-methylnaphthalene	19.94	142	1977	0.105	ppbV	93
121) 1-methylnaphthalene	20.12	142	3544	0.087	ppbV #	94

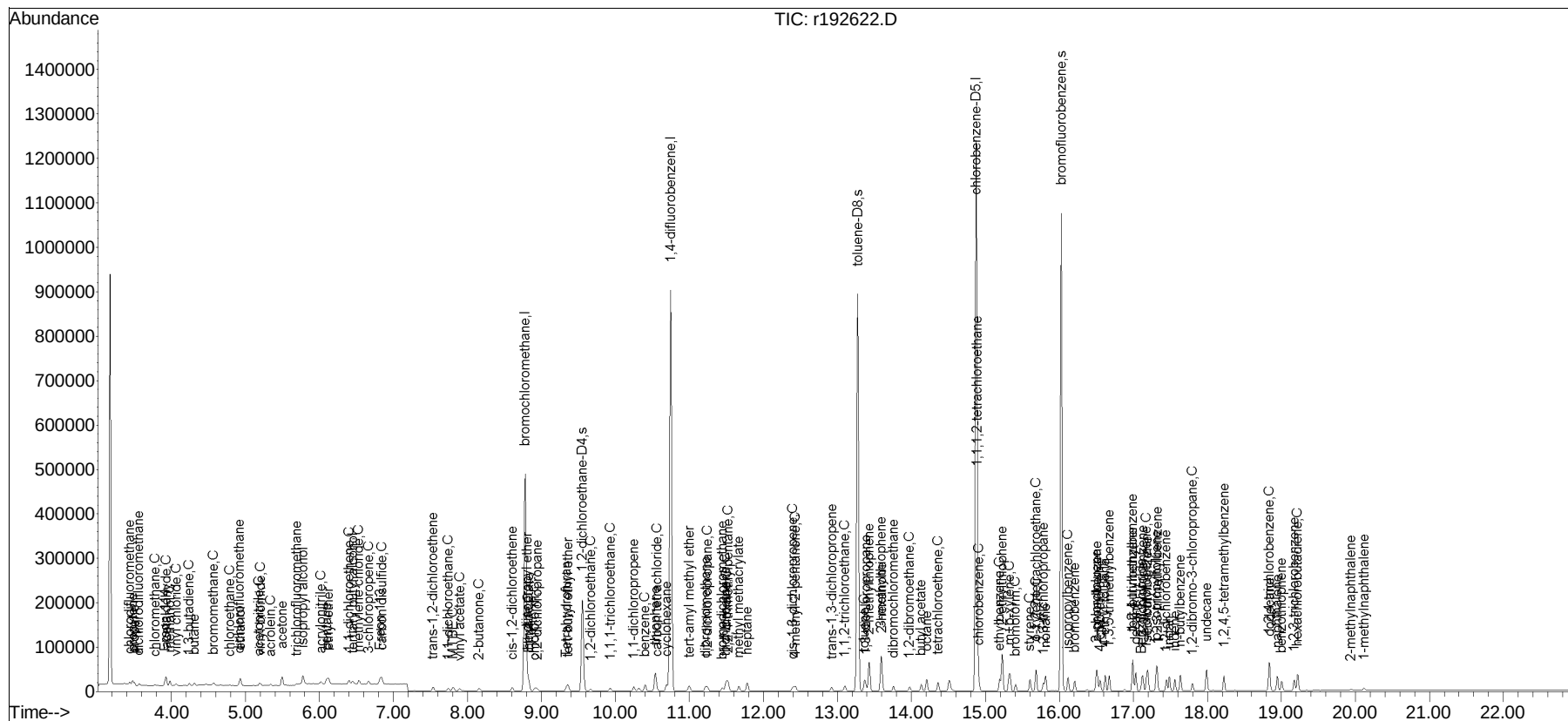
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

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Data Path   : O:\Forensics\Data\AirLab19\2020\02\200224T_I\
Data File  : r192622.D
Acq On     : 25 Feb 2020    2:44 AM
Operator   : AIRLAB19:RY
Sample     : IT015-SIMSTD0.2
Misc       : WG1344146
ALS Vial   : 0    Sample Multiplier: 1
```

Quant Time: Feb 25 10:09:36 2020
Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Tue Feb 25 08:56:41 2020
Response via : Initial Calibration

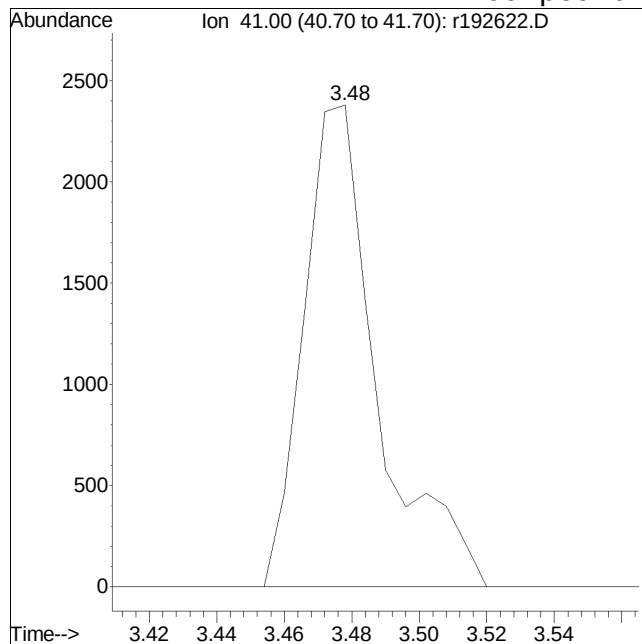
Sub List : Default - All compounds listed0\02\200224T_I\r192626.D



Manual Integration/Negative Proof Report

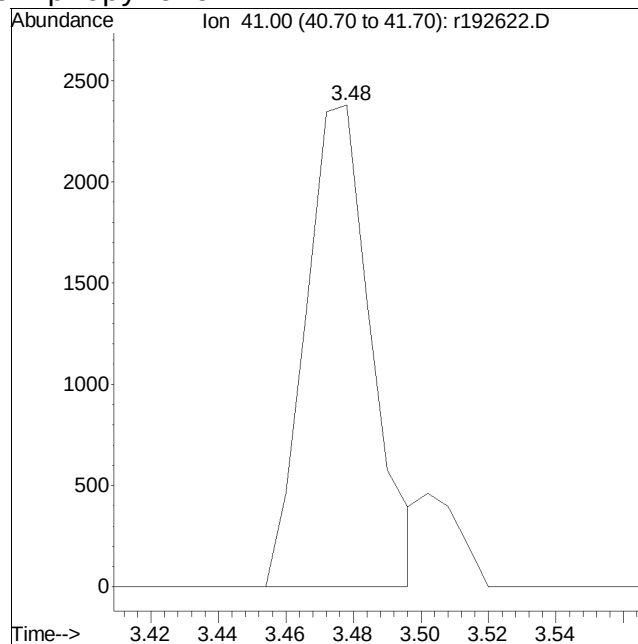
Data Path : 0:\Forensics\Data\Airlab19\QMethod : TFS19_200224.M
Data File : r192622.D Operator : AIRLAB19:RY
Date Inj'd : 2/25/2020 0:2: 4 Instrument :
Sample : IT015-SIMSTD0.2 Quant Date : 2/25/2020 8:57 am

Compound #3: propylene



Original Peak Response = 3599

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

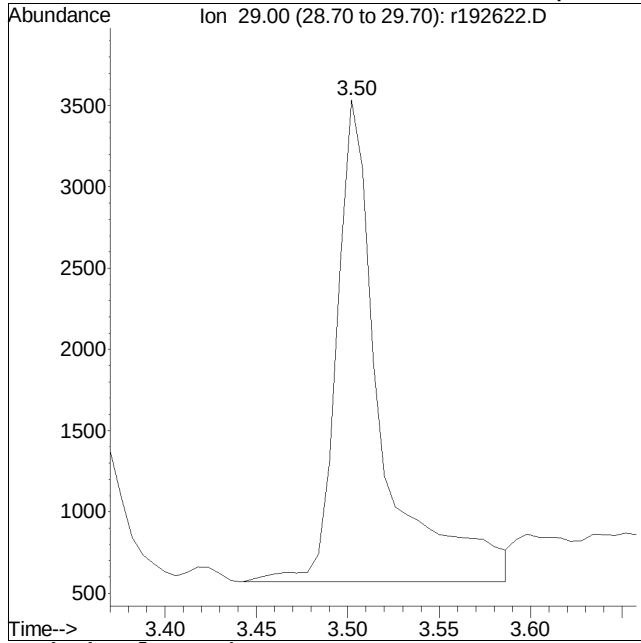


Manual Peak Response = 3215 M6

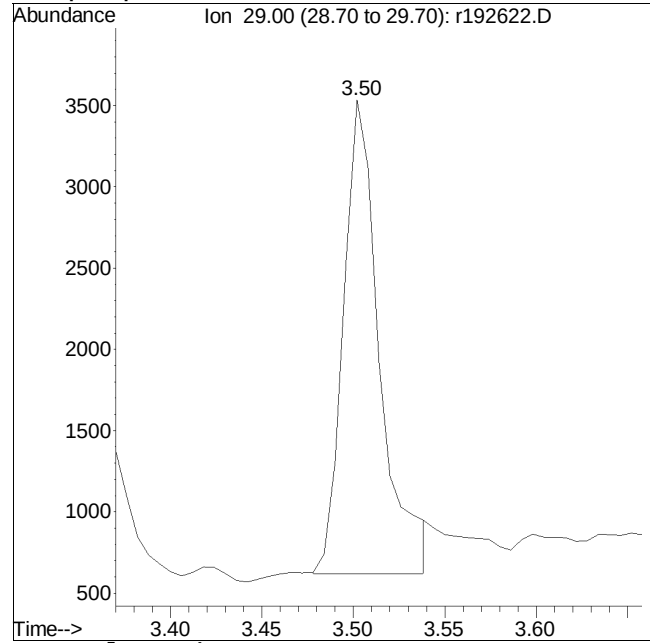
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airlab19\QMethod : TFS19_200224.M
Data File : r192622.D Operator : AIRLAB19:RY
Date Inj'd : 2/25/2020 0:2: 4 Instrument :
Sample : IT015-SIMSTD0.2 Quant Date : 2/25/2020 8:57 am

Compound #4: propane



Original Peak Response = 5068



Manual Peak Response = 4015 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192623.D
 Acq On : 25 Feb 2020 3:24 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD0.5
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:11:31 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	8.78	49	329018	10.000	ppbV	0.00
Standard Area = 313159			Recovery =	105.06%		
43) 1,4-difluorobenzene	10.75	114	933900	10.000	ppbV	0.00
Standard Area = 892162			Recovery =	104.68%		
67) chlorobenzene-D5	14.88	54	122856	10.000	ppbV	0.00
Standard Area = 115842			Recovery =	106.05%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	9.56	65	120460	10.112	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	101.12%		
69) toluene-D8	13.28	98	710576	9.744	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	97.44%		
90) bromofluorobenzene	16.02	95	452704	9.760	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	97.60%		
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.44	51	11133	0.570	ppbV	99
3) propylene	3.48	41	7863M6	0.603	ppbV	
4) propane	3.50	29	8802	0.636	ppbV	96
5) dichlorodifluoromethane	3.57	85	10745	0.626	ppbV	97
6) chloromethane	3.78	50	6479	0.599	ppbV	99
7) Freon-114	3.92	85	15736	0.588	ppbV	99
8) methanol	3.98	31	17077	3.395	ppbV #	35
9) vinyl chloride	4.07	62	8232	0.608	ppbV	99
10) 1,3-butadiene	4.24	54	6940	0.572	ppbV	98
11) butane	4.31	43	11686	0.612	ppbV	99
12) acetaldehyde	3.93	29	18223	2.964	ppbV	98
13) bromomethane	4.58	94	6557	0.585	ppbV	97
14) chloroethane	4.79	64	4315	0.595	ppbV	97
15) ethanol	4.94	31	29796	3.191	ppbV	100
16) dichlorofluoromethane	4.92	67	11485	0.590	ppbV	97
17) vinyl bromide	5.21	106	7212	0.597	ppbV	96
18) acrolein	5.34	56	3706	0.565	ppbV #	76
19) acetone	5.50	43	48049	2.834	ppbV	97
20) acetonitrile	5.19	41	6675	0.526	ppbV	86
21) trichlorofluoromethane	5.70	101	9160	0.422	ppbV	99
22) isopropyl alcohol	5.78	45	48718	1.588	ppbV	99
23) acrylonitrile	6.02	53	9246	0.563	ppbV	96
24) pentane	6.10	43	19056	0.572	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192623.D
 Acq On : 25 Feb 2020 3:24 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD0.5
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:11:31 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.13	31	16545	0.571	ppbV	96
26) 1,1-dichloroethene	6.40	61	12473	0.574	ppbV	98
27) tertiary butyl alcohol	6.44	59	17307	0.619	ppbV	96
28) methylene chloride	6.54	49	12349	0.582	ppbV	100
29) 3-chloropropene	6.67	41	14131	0.561	ppbV	99
30) carbon disulfide	6.85	76	34672	0.583	ppbV #	92
31) Freon 113	6.83	101	18126	0.588	ppbV	99
32) trans-1,2-dichloroethene	7.54	61	14247	0.575	ppbV	99
33) 1,1-dichloroethane	7.75	63	17259	0.569	ppbV	99
34) MTBE	7.80	73	27805	0.564	ppbV	99
35) vinyl acetate	7.89	43	24338	0.564	ppbV	98
36) 2-butanone	8.15	43	22310	0.569	ppbV	100
37) cis-1,2-dichloroethene	8.61	61	12248	0.569	ppbV	98
38) Ethyl Acetate	8.82	61	3885	0.566	ppbV	87
39) chloroform	8.91	83	15699	0.589	ppbV	97
40) Tetrahydrofuran	9.33	42	14591	0.564	ppbV	97
41) 2,2-dichloropropane	8.94	77	12720	0.568	ppbV	99
42) 1,2-dichloroethane	9.67	62	7529	0.579	ppbV	97
44) hexane	8.82	57	19733	0.581	ppbV #	57
45) diisopropyl ether	8.81	87	10474	0.571	ppbV	98
46) tert-butyl ethyl ether	9.36	59	30135	0.568	ppbV	99
48) 1,1,1-trichloroethane	9.93	97	12558	0.579	ppbV	98
49) 1,1-dichloropropene	10.25	75	14889	0.568	ppbV	98
50) benzene	10.40	78	38222	0.574	ppbV	99
51) thiophene	10.54	84	79711	0.609	ppbV	99
52) carbon tetrachloride	10.56	117	10816	0.600	ppbV	99
53) cyclohexane	10.69	56	20806	0.559	ppbV	99
54) tert-amyl methyl ether	10.99	73	32455	0.564	ppbV	99
55) dibromomethane	11.22	93	9773	0.600	ppbV	99
56) 1,2-dichloropropane	11.25	63	12215	0.569	ppbV	98
57) bromodichloromethane	11.45	83	17240	0.593	ppbV	98
58) 1,4-dioxane	11.49	88	8425	0.570	ppbV	86
59) trichloroethene	11.49	130	14210	0.592	ppbV	98
60) 2,2,4-trimethylpentane	11.52	57	63101	0.602	ppbV	100
61) methyl methacrylate	11.67	41	15368	0.506	ppbV	98
62) heptane	11.78	43	23400	0.562	ppbV	98
63) cis-1,3-dichloropropene	12.40	75	18167	0.560	ppbV	98
64) 4-methyl-2-pentanone	12.43	43	25836	0.557	ppbV	100
65) trans-1,3-dichloropropene	12.93	75	15826	0.540	ppbV	96
66) 1,1,2-trichloroethane	13.10	97	13369	0.572	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192623.D
 Acq On : 25 Feb 2020 3:24 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD0.5
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:11:31 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	toluene	13.37	91	43597	0.586	ppbV	98
70)	2-methylthiophene	13.43	97	134783	0.639	ppbV	99
71)	1,3-dichloropropane	13.38	76	19791	0.565	ppbV	100
72)	2-hexanone	13.59	43	23509	0.536	ppbV #	79
73)	3-methylthiophene	13.59	97	138200	0.637	ppbV	100
74)	dibromochloromethane	13.76	129	16565	0.566	ppbV	99
75)	1,2-dibromoethane	13.98	107	19799	0.571	ppbV	98
76)	butyl acetate	14.13	73	5927	0.513	ppbV	97
77)	octane	14.21	85	17277	0.559	ppbV	97
78)	tetrachloroethene	14.36	166	19338	0.574	ppbV	99
79)	1,1,1,2-tetrachloroethane	14.89	131	12186	0.566	ppbV	97
80)	chlorobenzene	14.91	112	34742	0.577	ppbV	99
81)	ethylbenzene	15.19	91	51718	0.563	ppbV	100
82)	2-ethylthiophene	15.23	97	143768	0.669	ppbV	96
83)	m+p-xylene	15.32	91	84500	1.178	ppbV	100
84)	bromoform	15.41	173	18476	0.570	ppbV	98
85)	styrene	15.60	104	39126	0.563	ppbV	99
86)	1,1,2,2-tetrachloroethane	15.68	83	28616	0.562	ppbV	98
87)	o-xylene	15.68	91	41996	0.597	ppbV	99
88)	1,2,3-trichloropropane	15.78	75	23099	0.562	ppbV	98
89)	nonane	15.82	43	33185	0.577	ppbV	99
91)	isopropylbenzene	16.12	105	58202	0.570	ppbV	99
92)	bromobenzene	16.21	77	31135	0.563	ppbV	92
93)	2-chlorotoluene	16.49	126	16356	0.552	ppbV #	53
94)	n-propylbenzene	16.51	120	19247	0.545	ppbV	98
95)	4-chlorotoluene	16.54	126	16080	0.554	ppbV	97
96)	4-ethyl toluene	16.62	105	67338	0.546	ppbV	99
97)	1,3,5-trimethylbenzene	16.67	105	54769	0.560	ppbV	99
98)	tert-butylbenzene	16.99	119	52729	0.581	ppbV	98
99)	1,2,4-trimethylbenzene	16.99	105	53776	0.582	ppbV	98
100)	decane	17.03	57	39446	0.524	ppbV	96
101)	Benzyl Chloride	17.11	91	36058	0.460	ppbV	99
102)	1,3-dichlorobenzene	17.13	146	33205	0.516	ppbV	99
103)	1,4-dichlorobenzene	17.18	146	33663	0.541	ppbV	99
104)	sec-butylbenzene	17.19	105	76251	0.566	ppbV	98
105)	1,2,3-trimethylbenzene	17.32	105	48874	0.512	ppbV	95
106)	p-isopropyltoluene	17.31	119	64149	0.557	ppbV	100
107)	1,2-dichlorobenzene	17.44	146	31471	0.513	ppbV	99
108)	n-butylbenzene	17.63	91	51947	0.513	ppbV	99
109)	indan	17.48	117	48515	0.485	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192623.D
 Acq On : 25 Feb 2020 3:24 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD0.5
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:11:31 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	17.56	115	37563	0.465	ppbV	99
111) 1,2-dibromo-3-chloropr...	17.80	75	11573	0.493	ppbV	90
112) undecane	17.99	57	40604	0.470	ppbV	98
113) 1,2,4,5-tetramethylben...	18.23	119	48596	0.482	ppbV	97
114) dodecane	18.84	57	39090	0.408	ppbV	93
115) 1,2,4-trichlorobenzene	18.83	180	25436	0.412	ppbV	96
116) naphthalene	18.94	128	65927	0.458	ppbV	100
117) 1,2,3-trichlorobenzene	19.18	180	25399	0.396	ppbV	98
118) benzothiophene	19.01	134	48081	0.591	ppbV	99
119) hexachlorobutadiene	19.22	225	22857	0.444	ppbV	100
120) 2-methylnaphthalene	19.94	142	8213	0.409	ppbV	95
121) 1-methylnaphthalene	20.12	142	13615	0.316	ppbV	98

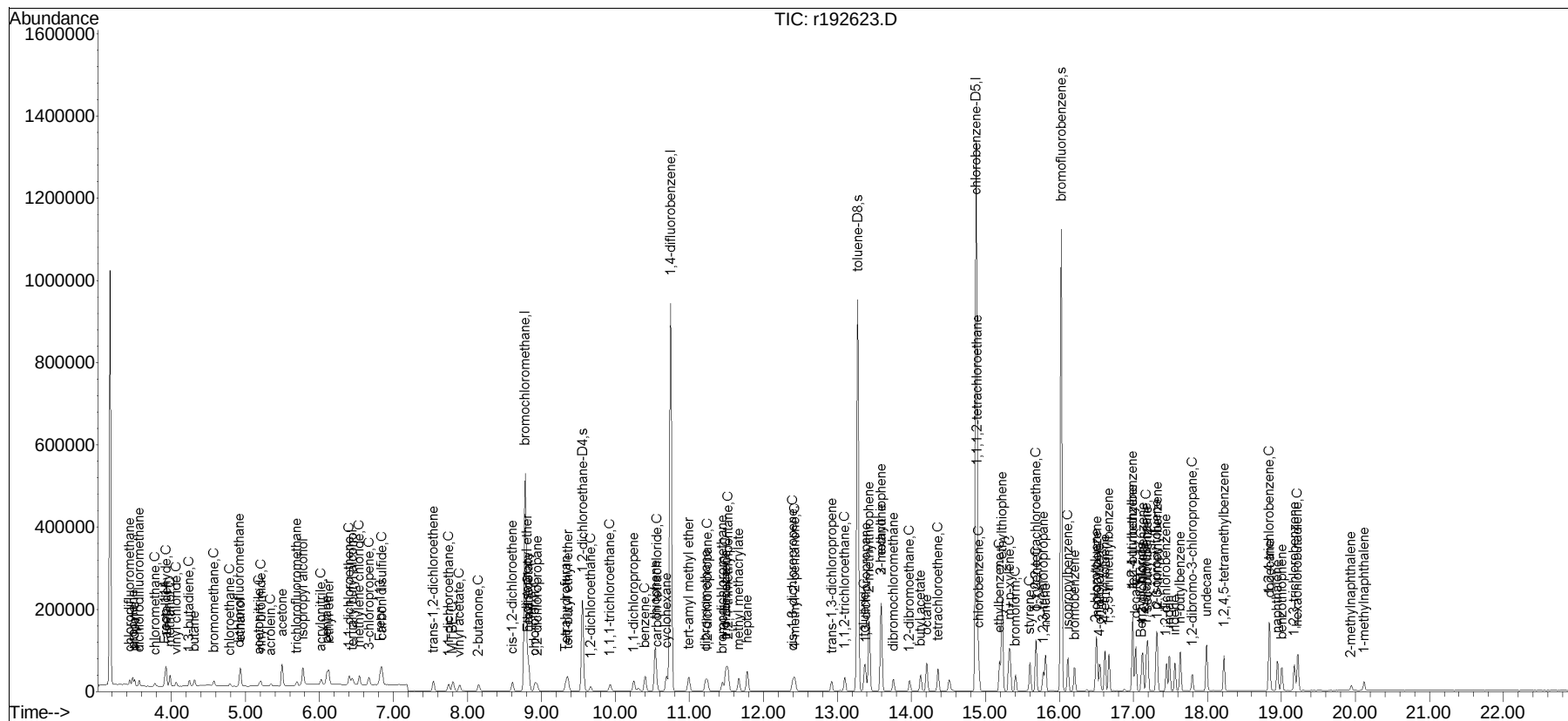
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

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Data Path   : O:\Forensics\Data\AirLab19\2020\02\200224T_I\
Data File  : r192623.D
Acq On     : 25 Feb 2020   3:24 AM
Operator   : AIRLAB19:RY
Sample     : IT015-SIMSTD0.5
Misc       : WG1344146
ALS Vial   : 0      Sample Multiplier: 1
```

Quant Time: Feb 25 10:11:31 2020
Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Tue Feb 25 08:56:41 2020
Response via : Initial Calibration

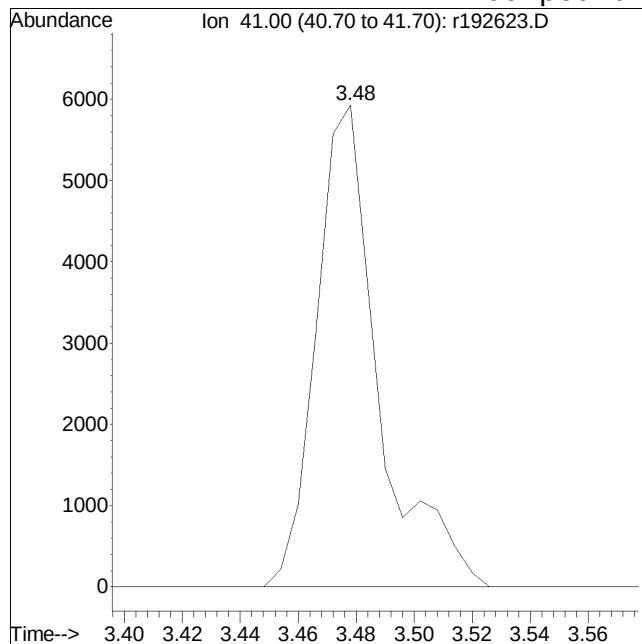
Sub List : Default - All compounds listed0\02\200224T_I\r192626.D



Manual Integration/Negative Proof Report

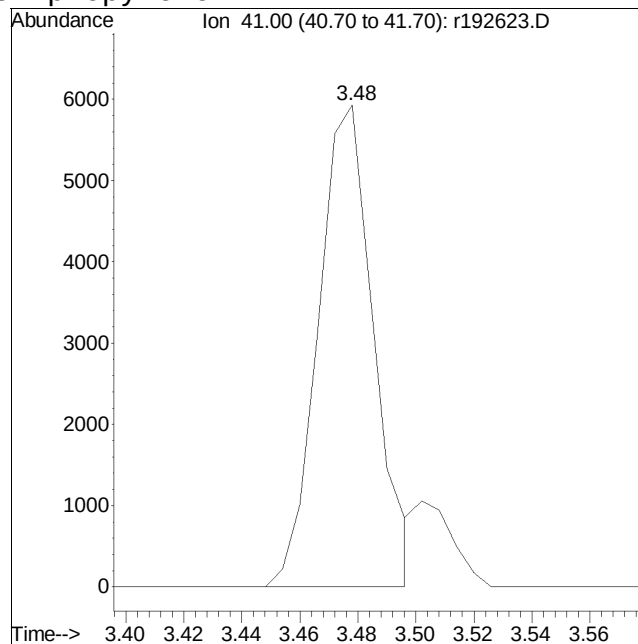
Data Path : 0:\Forensics\Data\Airlab19\QMethod : TFS19_200224.M
Data File : r192623.D Operator : AIRLAB19:RY
Date Inj'd : 2/25/2020 0:3: 4 Instrument :
Sample : IT015-SIMSTD0.5 Quant Date : 2/25/2020 8:57 am

Compound #3: propylene



Original Peak Response = 8827

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 7863 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192624.D
 Acq On : 25 Feb 2020 4:06 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD1.0
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:13:28 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	8.78	49	313016	10.000	ppbV	0.00
Standard Area = 313159			Recovery =	99.95%		
43) 1,4-difluorobenzene	10.75	114	883036	10.000	ppbV	0.00
Standard Area = 892162			Recovery =	98.98%		
67) chlorobenzene-D5	14.88	54	116619	10.000	ppbV	0.00
Standard Area = 115842			Recovery =	100.67%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	9.56	65	114160	10.135	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	101.35%		
69) toluene-D8	13.28	98	674831	9.749	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	97.49%		
90) bromofluorobenzene	16.02	95	426954	9.697	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	96.97%		
Target Compounds						Qvalue
2) chlorodifluoromethane	3.44	51	21101	1.136	ppbV	99
3) propylene	3.48	41	14142M6	1.139	ppbV	
4) propane	3.50	29	16195M4	1.231	ppbV	
5) dichlorodifluoromethane	3.57	85	17911	1.096	ppbV	99
6) chloromethane	3.78	50	12035	1.170	ppbV	97
7) Freon-114	3.92	85	28644	1.124	ppbV	100
8) methanol	3.98	31	32393	6.768	ppbV #	66
9) vinyl chloride	4.07	62	15407	1.196	ppbV	99
10) 1,3-butadiene	4.25	54	12968	1.123	ppbV	99
11) butane	4.31	43	21239	1.169	ppbV	99
12) acetaldehyde	3.93	29	32703	5.591	ppbV	97
13) bromomethane	4.58	94	12621	1.184	ppbV	100
14) chloroethane	4.79	64	7749	1.123	ppbV	100
15) ethanol	4.93	31	54097	6.089	ppbV	100
16) dichlorofluoromethane	4.92	67	21792	1.177	ppbV	100
17) vinyl bromide	5.21	106	12848	1.117	ppbV	98
18) acrolein	5.34	56	7148	1.146	ppbV #	88
19) acetone	5.49	43	88422	5.482	ppbV	99
20) acetonitrile	5.19	41	12215	1.011	ppbV	87
21) trichlorofluoromethane	5.69	101	17251	0.835	ppbV	96
22) isopropyl alcohol	5.77	45	85639	2.934	ppbV	99
23) acrylonitrile	6.02	53	16910	1.082	ppbV	99
24) pentane	6.10	43	36047	1.137	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192624.D
 Acq On : 25 Feb 2020 4:06 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD1.0
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:13:28 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.12	31	31083	1.128	ppbV	99
26) 1,1-dichloroethene	6.40	61	23320	1.128	ppbV	99
27) tertiary butyl alcohol	6.43	59	31635	1.190	ppbV	98
28) methylene chloride	6.54	49	22712	1.126	ppbV	100
29) 3-chloropropene	6.67	41	26484	1.106	ppbV	99
30) carbon disulfide	6.85	76	64739	1.144	ppbV	97
31) Freon 113	6.82	101	33746	1.151	ppbV	99
32) trans-1,2-dichloroethene	7.53	61	26618	1.129	ppbV	99
33) 1,1-dichloroethane	7.74	63	31912	1.105	ppbV	99
34) MTBE	7.80	73	52476	1.119	ppbV	99
35) vinyl acetate	7.89	43	45474	1.108	ppbV	100
36) 2-butanone	8.14	43	41458	1.112	ppbV	98
37) cis-1,2-dichloroethene	8.61	61	22891	1.117	ppbV	98
38) Ethyl Acetate	8.82	61	7050	1.079	ppbV	89
39) chloroform	8.91	83	29453	1.161	ppbV	97
40) Tetrahydrofuran	9.32	42	27428	1.114	ppbV	96
41) 2,2-dichloropropane	8.94	77	23968	1.124	ppbV	98
42) 1,2-dichloroethane	9.67	62	14020	1.133	ppbV	98
44) hexane	8.82	57	37205	1.158	ppbV #	60
45) diisopropyl ether	8.81	87	19681	1.134	ppbV	98
46) tert-butyl ethyl ether	9.35	59	56737	1.130	ppbV	99
48) 1,1,1-trichloroethane	9.93	97	23972	1.169	ppbV	100
49) 1,1-dichloropropene	10.25	75	27785	1.121	ppbV	98
50) benzene	10.40	78	71330	1.134	ppbV	100
51) thiophene	10.54	84	148522	1.200	ppbV	99
52) carbon tetrachloride	10.56	117	19977	1.172	ppbV	98
53) cyclohexane	10.69	56	39191	1.114	ppbV	98
54) tert-amyl methyl ether	10.99	73	61275	1.126	ppbV	99
55) dibromomethane	11.22	93	18266	1.186	ppbV	99
56) 1,2-dichloropropane	11.25	63	23051	1.136	ppbV	99
57) bromodichloromethane	11.45	83	31646	1.150	ppbV	99
58) 1,4-dioxane	11.48	88	16382	1.171	ppbV	99
59) trichloroethene	11.49	130	26162	1.153	ppbV	98
60) 2,2,4-trimethylpentane	11.52	57	117625	1.187	ppbV	99
61) methyl methacrylate	11.67	41	28486	0.992	ppbV	99
62) heptane	11.78	43	45164	1.148	ppbV	99
63) cis-1,3-dichloropropene	12.39	75	34602	1.127	ppbV	97
64) 4-methyl-2-pentanone	12.42	43	49689	1.132	ppbV	98
65) trans-1,3-dichloropropene	12.92	75	30260	1.092	ppbV	100
66) 1,1,2-trichloroethane	13.10	97	25181	1.139	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192624.D
 Acq On : 25 Feb 2020 4:06 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD1.0
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:13:28 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	13.37	91	80566	1.141	ppbV	97
70) 2-methylthiophene	13.43	97	253801	1.268	ppbV	100
71) 1,3-dichloropropane	13.38	76	36972	1.112	ppbV	98
72) 2-hexanone	13.58	43	45759	1.098	ppbV #	85
73) 3-methylthiophene	13.59	97	258063	1.254	ppbV	99
74) dibromochloromethane	13.76	129	31016	1.117	ppbV	100
75) 1,2-dibromoethane	13.98	107	36589	1.111	ppbV	99
76) butyl acetate	14.12	73	11867	1.083	ppbV	95
77) octane	14.21	85	32993	1.125	ppbV	99
78) tetrachloroethene	14.36	166	36337	1.136	ppbV	99
79) 1,1,1,2-tetrachloroethane	14.89	131	23679	1.160	ppbV	97
80) chlorobenzene	14.91	112	65106	1.140	ppbV	99
81) ethylbenzene	15.19	91	97012	1.113	ppbV	99
82) 2-ethylthiophene	15.23	97	265337	1.300	ppbV	98
83) m+p-xylene	15.32	91	158640	2.329	ppbV	98
84) bromoform	15.41	173	36249	1.178	ppbV	97
85) styrene	15.60	104	74445	1.129	ppbV	99
86) 1,1,2,2-tetrachloroethane	15.68	83	54854	1.135	ppbV	100
87) o-xylene	15.68	91	79378	1.188	ppbV	99
88) 1,2,3-trichloropropane	15.78	75	42951	1.102	ppbV	99
89) nonane	15.82	43	62494	1.145	ppbV	97
91) isopropylbenzene	16.11	105	110067	1.135	ppbV	98
92) bromobenzene	16.20	77	58245	1.109	ppbV	99
93) 2-chlorotoluene	16.48	126	31650	1.126	ppbV #	45
94) n-propylbenzene	16.50	120	36947	1.101	ppbV	98
95) 4-chlorotoluene	16.54	126	29788	1.081	ppbV	97
96) 4-ethyl toluene	16.61	105	129430	1.105	ppbV	99
97) 1,3,5-trimethylbenzene	16.67	105	107979	1.163	ppbV	98
98) tert-butylbenzene	16.98	119	101792	1.182	ppbV	99
99) 1,2,4-trimethylbenzene	16.98	105	104339	1.190	ppbV	98
100) decane	17.02	57	76774	1.074	ppbV	96
101) Benzyl Chloride	17.11	91	72713	0.977	ppbV	98
102) 1,3-dichlorobenzene	17.13	146	66620	1.090	ppbV	99
103) 1,4-dichlorobenzene	17.18	146	63844	1.080	ppbV	98
104) sec-butylbenzene	17.19	105	147147	1.150	ppbV	99
105) 1,2,3-trimethylbenzene	17.32	105	96178	1.060	ppbV	100
106) p-isopropyltoluene	17.31	119	123790	1.131	ppbV	100
107) 1,2-dichlorobenzene	17.44	146	60726	1.042	ppbV	99
108) n-butylbenzene	17.63	91	102364	1.064	ppbV	98
109) indan	17.48	117	94016	0.990	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192624.D
 Acq On : 25 Feb 2020 4:06 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD1.0
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:13:28 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110)	indene	17.56	115	71678	0.935	ppbV	99
111)	1,2-dibromo-3-chloropr...	17.79	75	22692	1.018	ppbV	100
112)	undecane	17.98	57	81886	0.998	ppbV	97
113)	1,2,4,5-tetramethylben...	18.23	119	97504	1.019	ppbV	98
114)	dodecane	18.83	57	83682	0.919	ppbV	94
115)	1,2,4-trichlorobenzene	18.83	180	55585	0.949	ppbV	97
116)	naphthalene	18.94	128	137026	1.003	ppbV	100
117)	1,2,3-trichlorobenzene	19.18	180	56109	0.922	ppbV	98
118)	benzothiophene	19.00	134	108382	1.404	ppbV	100
119)	hexachlorobutadiene	19.22	225	49973	1.022	ppbV	97
120)	2-methylnaphthalene	19.94	142	22243	1.167	ppbV	99
121)	1-methylnaphthalene	20.12	142	34736	0.849	ppbV	98

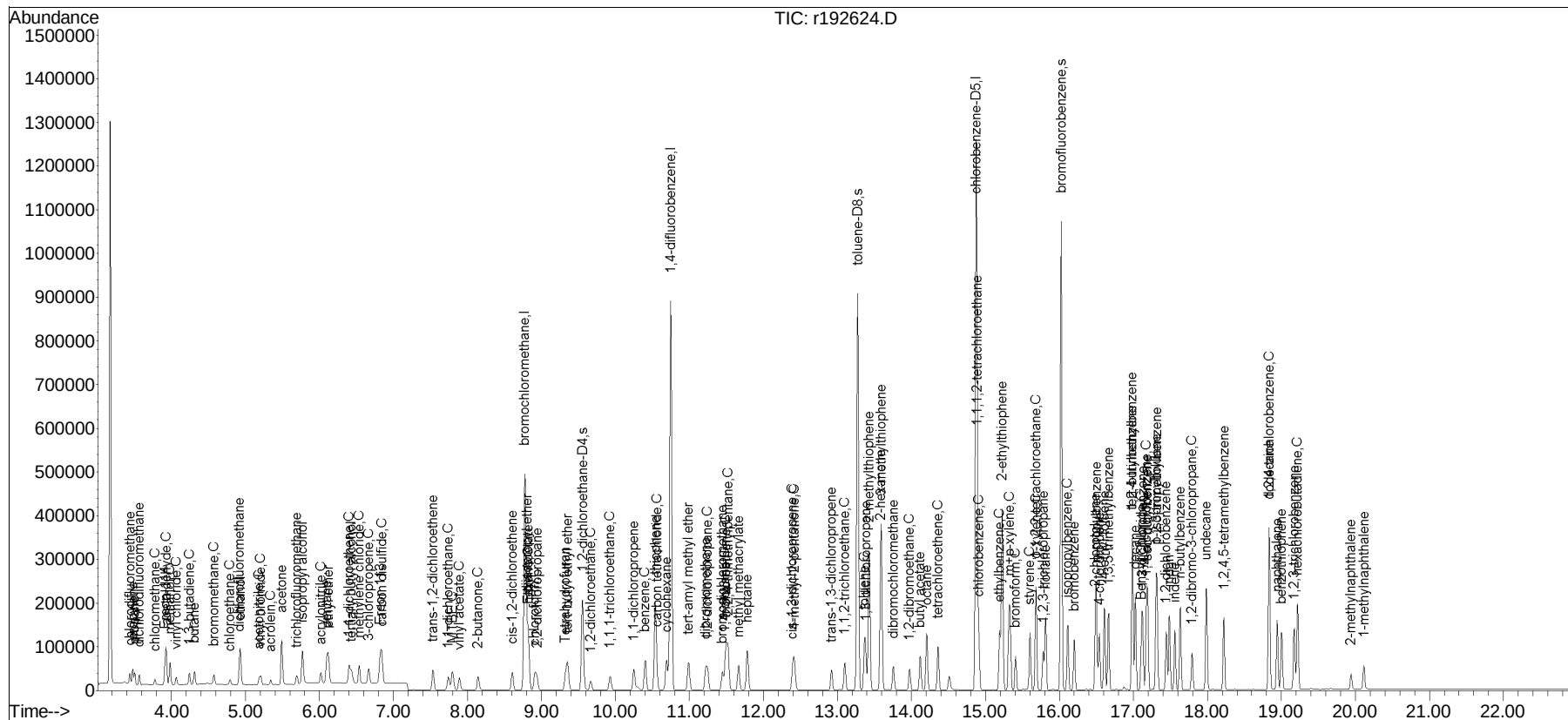
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

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Data Path   : O:\Forensics\Data\AirLab19\2020\02\200224T_I\
Data File  : r192624.D
Acq On     : 25 Feb 2020    4:06 AM
Operator   : AIRLAB19:RY
Sample     : IT015-SIMSTD1.0
Misc       : WG1344146
ALS Vial   : 0    Sample Multiplier: 1
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Quant Time: Feb 25 10:13:28 2020
Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Tue Feb 25 08:56:41 2020
Response via : Initial Calibration

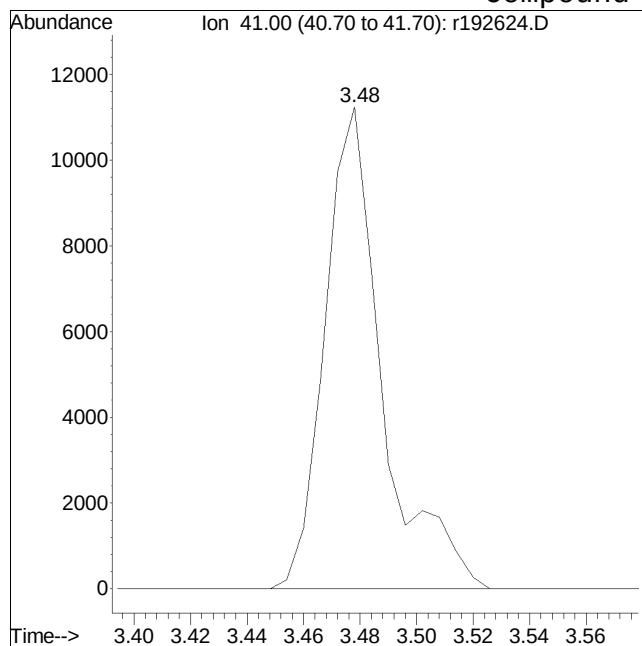
Sub List : Default - All compounds listed0\02\200224T_I\r192626.D



Manual Integration/Negative Proof Report

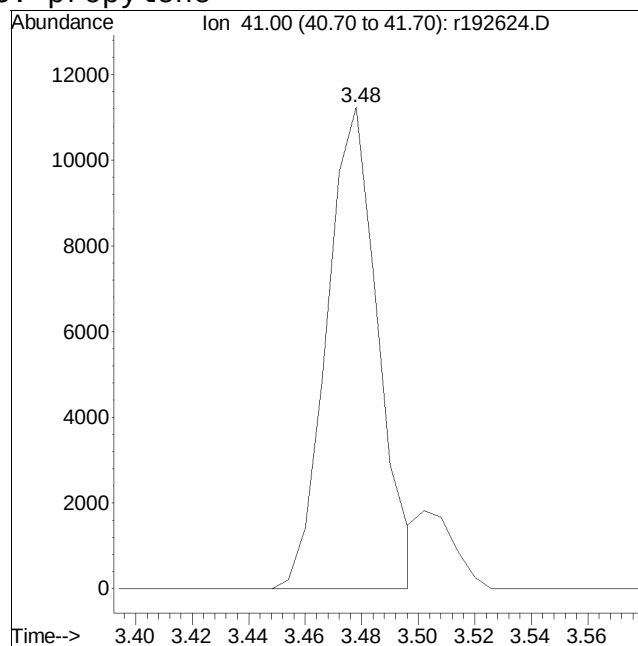
Data Path : 0:\Forensics\Data\Airlab19\QMethod : TFS19_200224.M
Data File : r192624.D Operator : AIRLAB19:RY
Date Inj'd : 2/25/2020 0:4: 6 Instrument :
Sample : IT015-SIMSTD1.0 Quant Date : 2/25/2020 8:57 am

Compound #3: propylene



Original Peak Response = 15815

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

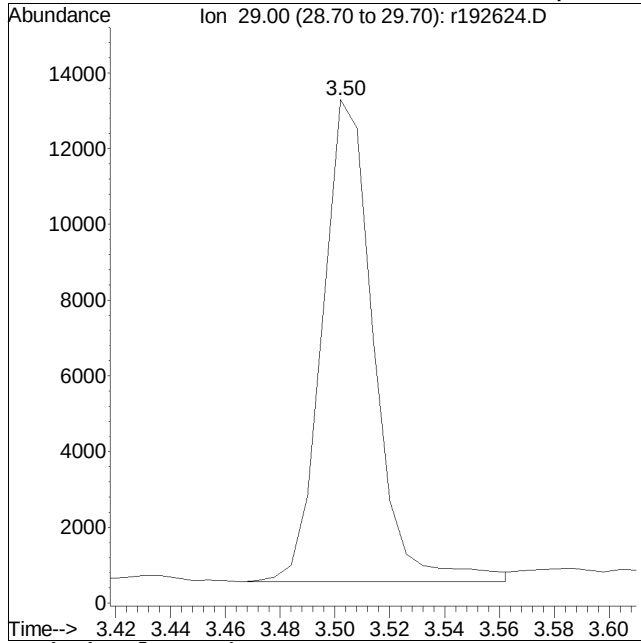


Manual Peak Response = 14142 M6

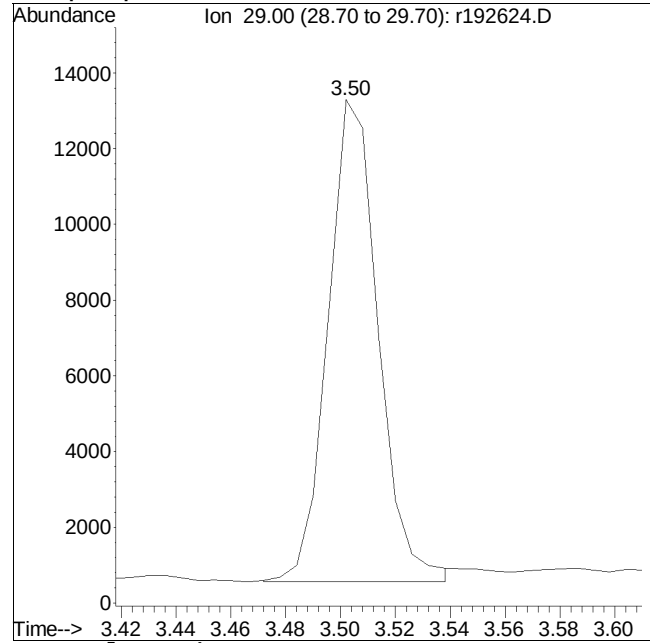
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airlab19\QMethod : TFS19_200224.M
Data File : r192624.D Operator : AIRLAB19:RY
Date Inj'd : 2/25/2020 0:4: 6 Instrument :
Sample : IT015-SIMSTD1.0 Quant Date : 2/25/2020 8:57 am

Compound #4: propane



Original Peak Response = 16667



Manual Peak Response = 16195 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192625.D
 Acq On : 25 Feb 2020 4:46 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD5.0
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:14:56 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	8.78	49	323977	10.000	ppbV	0.00
Standard Area = 313159			Recovery =	103.45%		
43) 1,4-difluorobenzene	10.75	114	915938	10.000	ppbV	0.00
Standard Area = 892162			Recovery =	102.66%		
67) chlorobenzene-D5	14.88	54	119525	10.000	ppbV	0.00
Standard Area = 115842			Recovery =	103.18%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	9.55	65	118914	10.178	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	101.78%		
69) toluene-D8	13.28	98	699321	9.857	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	98.57%		
90) bromofluorobenzene	16.02	95	445208	9.866	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	98.66%		
Target Compounds						Qvalue
2) chlorodifluoromethane	3.44	51	98191	5.108	ppbV	100
3) propylene	3.48	41	65702M6	5.113	ppbV	
4) propane	3.50	29	71195	5.227	ppbV	99
5) dichlorodifluoromethane	3.57	85	90376	5.344	ppbV	99
6) chloromethane	3.78	50	59731	5.608	ppbV	100
7) Freon-114	3.92	85	141144	5.352	ppbV	99
8) methanol	3.98	31	131539	26.554	ppbV	95
9) vinyl chloride	4.07	62	71605	5.372	ppbV	100
10) 1,3-butadiene	4.25	54	60551	5.064	ppbV	99
11) butane	4.31	43	99477	5.289	ppbV	100
12) acetaldehyde	3.93	29	166146	27.445	ppbV	99
13) bromomethane	4.58	94	56334	5.106	ppbV	99
14) chloroethane	4.79	64	37717	5.281	ppbV	99
15) ethanol	4.93	31	248571	27.033	ppbV	99
16) dichlorofluoromethane	4.92	67	99190	5.176	ppbV	99
17) vinyl bromide	5.21	106	60833	5.110	ppbV	99
18) acrolein	5.34	56	32500	5.036	ppbV	98
19) acetone	5.49	43	443038	26.539	ppbV	99
20) acetonitrile	5.19	41	64084	5.125	ppbV	98
21) trichlorofluoromethane	5.70	101	101377	4.738	ppbV	99
22) isopropyl alcohol	5.77	45	413142	13.676	ppbV	100
23) acrylonitrile	6.02	53	80378	4.970	ppbV	100
24) pentane	6.10	43	169313	5.161	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192625.D
 Acq On : 25 Feb 2020 4:46 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD5.0
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:14:56 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.12	31	146639	5.144	ppbV	99
26) 1,1-dichloroethene	6.40	61	110811	5.179	ppbV	100
27) tertiary butyl alcohol	6.43	59	154464	5.612	ppbV	99
28) methylene chloride	6.54	49	106010	5.078	ppbV	100
29) 3-chloropropene	6.67	41	126637	5.108	ppbV	99
30) carbon disulfide	6.85	76	300188	5.125	ppbV	99
31) Freon 113	6.83	101	157941	5.205	ppbV	99
32) trans-1,2-dichloroethene	7.54	61	125082	5.127	ppbV	100
33) 1,1-dichloroethane	7.75	63	153171	5.125	ppbV	99
34) MTBE	7.79	73	249780	5.144	ppbV	100
35) vinyl acetate	7.89	43	213427	5.024	ppbV	100
36) 2-butanone	8.13	43	195617	5.070	ppbV	99
37) cis-1,2-dichloroethene	8.61	61	108283	5.106	ppbV	99
38) Ethyl Acetate	8.82	61	33690	4.983	ppbV	84
39) chloroform	8.91	83	136152	5.188	ppbV	97
40) Tetrahydrofuran	9.31	42	129249	5.071	ppbV	99
41) 2,2-dichloropropane	8.94	77	113686	5.151	ppbV	99
42) 1,2-dichloroethane	9.66	62	65751	5.136	ppbV	99
44) hexane	8.82	57	173373	5.201	ppbV	85
45) diisopropyl ether	8.80	87	93709	5.205	ppbV	96
46) tert-butyl ethyl ether	9.35	59	268405	5.156	ppbV	98
48) 1,1,1-trichloroethane	9.93	97	110368	5.189	ppbV	99
49) 1,1-dichloropropene	10.25	75	133522	5.194	ppbV	99
50) benzene	10.40	78	337143	5.166	ppbV	100
51) thiophene	10.53	84	682060	5.312	ppbV	99
52) carbon tetrachloride	10.55	117	94632	5.351	ppbV	97
53) cyclohexane	10.69	56	186059	5.097	ppbV	100
54) tert-amyl methyl ether	10.98	73	290774	5.154	ppbV	100
55) dibromomethane	11.22	93	84771	5.305	ppbV	99
56) 1,2-dichloropropane	11.24	63	108061	5.133	ppbV	100
57) bromodichloromethane	11.45	83	147694	5.176	ppbV	98
58) 1,4-dioxane	11.47	88	77003	5.307	ppbV	99
59) trichloroethene	11.49	130	123540	5.249	ppbV	99
60) 2,2,4-trimethylpentane	11.52	57	551886	5.369	ppbV	99
61) methyl methacrylate	11.66	41	153252	5.146	ppbV	100
62) heptane	11.78	43	212154	5.197	ppbV	99
63) cis-1,3-dichloropropene	12.39	75	164097	5.153	ppbV	100
64) 4-methyl-2-pentanone	12.41	43	238414	5.237	ppbV	99
65) trans-1,3-dichloropropene	12.92	75	146541	5.098	ppbV	99
66) 1,1,2-trichloroethane	13.10	97	120259	5.246	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192625.D
 Acq On : 25 Feb 2020 4:46 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD5.0
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:14:56 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	toluene	13.37	91	375815	5.192	ppbV	99
70)	2-methylthiophene	13.43	97	1130178	5.509	ppbV	100
71)	1,3-dichloropropane	13.38	76	176151	5.171	ppbV	99
72)	2-hexanone	13.57	43	220042	5.153	ppbV	100
73)	3-methylthiophene	13.59	97	1136968	5.389	ppbV	99
74)	dibromochloromethane	13.76	129	147262	5.173	ppbV	99
75)	1,2-dibromoethane	13.98	107	173541	5.141	ppbV	98
76)	butyl acetate	14.11	73	57160	5.088	ppbV	98
77)	octane	14.21	85	155247	5.163	ppbV	99
78)	tetrachloroethene	14.36	166	170447	5.198	ppbV	99
79)	1,1,1,2-tetrachloroethane	14.89	131	110530	5.281	ppbV	99
80)	chlorobenzene	14.91	112	306571	5.236	ppbV	99
81)	ethylbenzene	15.19	91	462345	5.173	ppbV	100
82)	2-ethylthiophene	15.23	97	1165578	5.571	ppbV	98
83)	m+p-xylene	15.32	91	740662	10.611	ppbV	99
84)	bromoform	15.41	173	169294	5.369	ppbV	97
85)	styrene	15.60	104	348722	5.158	ppbV	99
86)	1,1,2,2-tetrachloroethane	15.68	83	261469	5.280	ppbV	100
87)	o-xylene	15.68	91	366803	5.356	ppbV	99
88)	1,2,3-trichloropropane	15.78	75	208032	5.206	ppbV	100
89)	nonane	15.81	43	292417	5.225	ppbV	98
91)	isopropylbenzene	16.12	105	524860	5.279	ppbV	98
92)	bromobenzene	16.20	77	277925	5.163	ppbV	99
93)	2-chlorotoluene	16.49	126	148218	5.145	ppbV	71
94)	n-propylbenzene	16.50	120	179379	5.217	ppbV	81
95)	4-chlorotoluene	16.54	126	147773	5.233	ppbV	99
96)	4-ethyl toluene	16.62	105	621337	5.176	ppbV	99
97)	1,3,5-trimethylbenzene	16.67	105	503928	5.296	ppbV	99
98)	tert-butylbenzene	16.98	119	472960	5.360	ppbV	100
99)	1,2,4-trimethylbenzene	16.98	105	482824	5.373	ppbV	99
100)	decane	17.02	57	377972	5.157	ppbV	99
101)	Benzyl Chloride	17.11	91	383493	5.030	ppbV	99
102)	1,3-dichlorobenzene	17.13	146	327117	5.224	ppbV	99
103)	1,4-dichlorobenzene	17.18	146	311999	5.150	ppbV	99
104)	sec-butylbenzene	17.19	105	697750	5.320	ppbV	99
105)	1,2,3-trimethylbenzene	17.32	105	492841	5.302	ppbV	98
106)	p-isopropyltoluene	17.31	119	591972	5.279	ppbV	100
107)	1,2-dichlorobenzene	17.44	146	308608	5.166	ppbV	100
108)	n-butylbenzene	17.63	91	504930	5.121	ppbV	100
109)	indan	17.48	117	510883	5.250	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192625.D
 Acq On : 25 Feb 2020 4:46 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD5.0
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:14:56 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	17.56	115	391092	4.977	ppbV	99
111) 1,2-dibromo-3-chloropr...	17.79	75	115209	5.041	ppbV	96
112) undecane	17.98	57	420873	5.007	ppbV	99
113) 1,2,4,5-tetramethylben...	18.22	119	501994	5.118	ppbV	100
114) dodecane	18.83	57	469392	5.032	ppbV	98
115) 1,2,4-trichlorobenzene	18.82	180	300743	5.011	ppbV	99
116) naphthalene	18.94	128	662617	4.732	ppbV	100
117) 1,2,3-trichlorobenzene	19.17	180	298498	4.783	ppbV	99
118) benzothiophene	19.00	134	361937	4.574	ppbV	100
119) hexachlorobutadiene	19.22	225	258676	5.163	ppbV	99
120) 2-methylnaphthalene	19.94	142	79336	4.061	ppbV	95
121) 1-methylnaphthalene	20.11	142	184370	4.397	ppbV	99

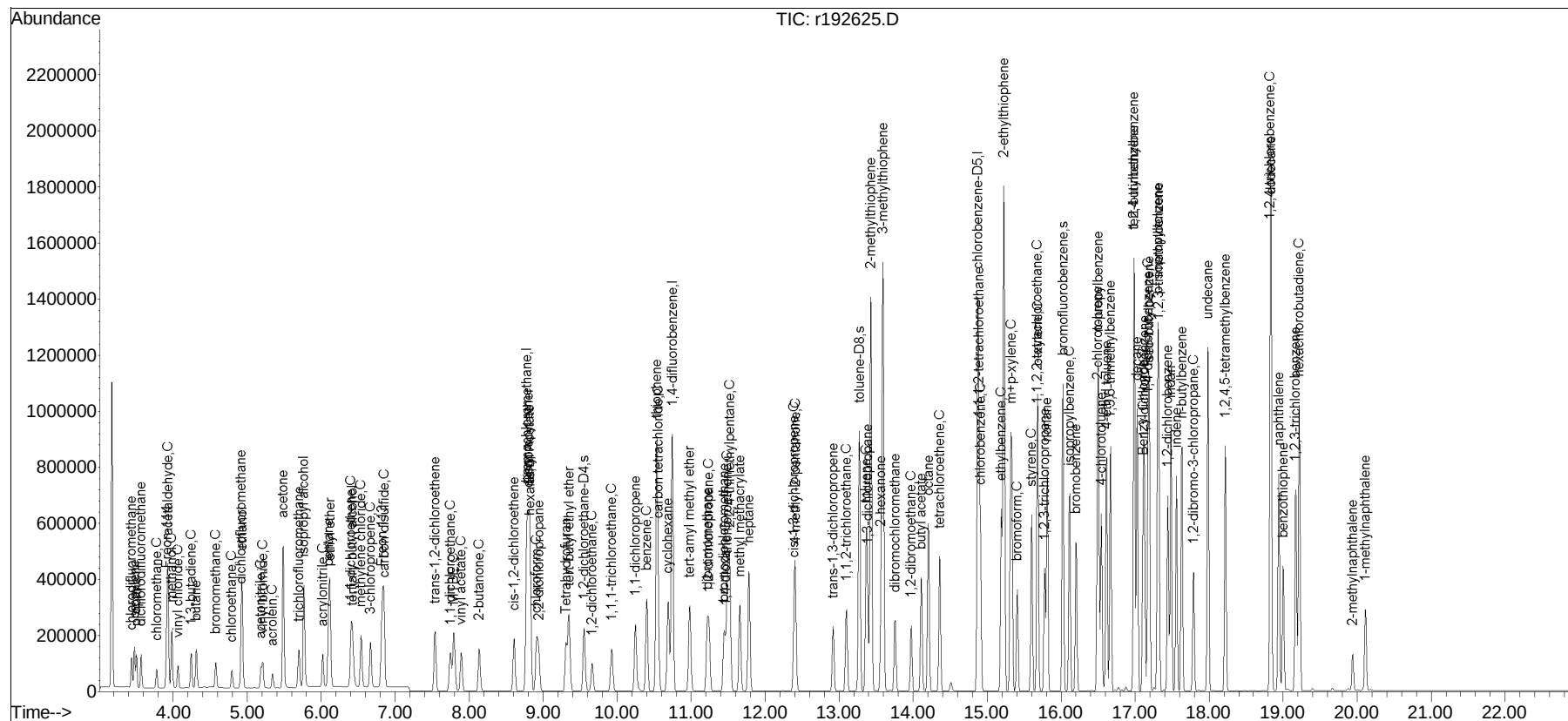
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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Data Path   : 0:\Forensics\Data\AirLab19\2020\02\200224T_I\
Data File   : r192625.D
Acq On      : 25 Feb 2020    4:46 AM
Operator    : AIRLAB19:RY
Sample      : IT015-SIMSTD5.0
Misc        : WG1344146
ALS Vial    : 0    Sample Multiplier: 1
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Quant Time: Feb 25 10:14:56 2020
Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Tue Feb 25 08:56:41 2020
Response via : Initial Calibration

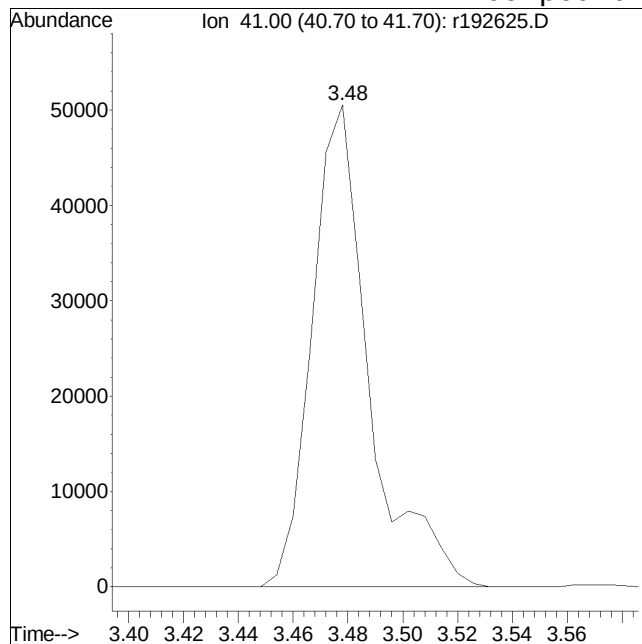
Sub List : Default - All compounds listed0\02\200224T_I\r192626.D



Manual Integration/Negative Proof Report

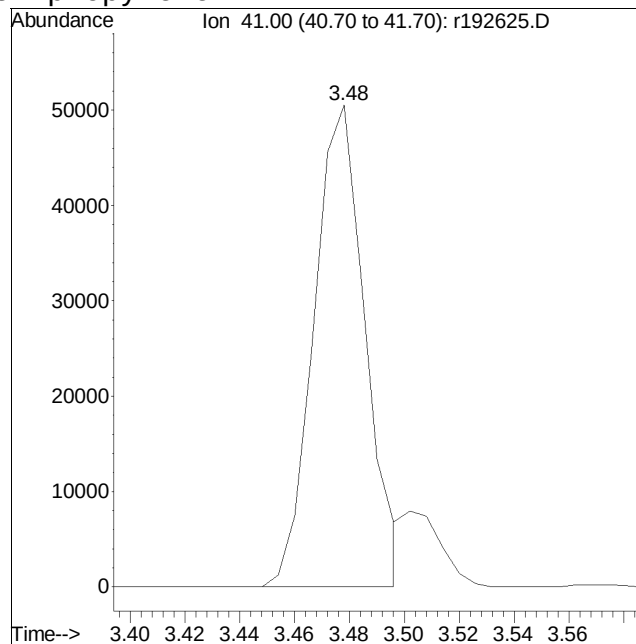
Data Path : 0:\Forensics\Data\Airlab19\QMethod : TFS19_200224.M
Data File : r192625.D Operator : AIRLAB19:RY
Date Inj'd : 2/25/2020 0:4: 6 Instrument :
Sample : IT015-SIMSTD5.0 Quant Date : 2/25/2020 8:57 am

Compound #3: propylene



Original Peak Response = 73372

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 65702 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192626.D
 Acq On : 25 Feb 2020 5:28 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD010
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 08:55:41 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Dec 04 12:54:37 2019
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	8.78	49	313159	10.000	ppbV	-0.03
Standard Area = 313159			Recovery =	100.00%		
43) 1,4-difluorobenzene	10.75	114	892162	10.000	ppbV	-0.03
Standard Area = 892162			Recovery =	100.00%		
67) chlorobenzene-D5	14.88	54	115842	10.000	ppbV	-0.02
Standard Area = 115842			Recovery =	100.00%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	9.55	65	113798	7.660	ppbV	-0.03
Spiked Amount 10.000	Range 70 - 130		Recovery =	76.60%		
69) toluene-D8	13.28	98	687587	9.233	ppbV	-0.03
Spiked Amount 10.000	Range 70 - 130		Recovery =	92.33%		
90) bromofluorobenzene	16.02	95	437358	8.862	ppbV	-0.02
Spiked Amount 10.000	Range 70 - 130		Recovery =	88.62%		
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.44	51	185794	10.222	ppbV #	92
3) propylene	3.48	41	124215M6	8.346	ppbV	
4) propane	3.50	29	131658	11.164	ppbV #	81
5) dichlorodifluoromethane	3.57	85	163456	8.519	ppbV	99
6) chloromethane	3.78	50	102951	8.715	ppbV	96
7) Freon-114	3.92	85	254923	9.052	ppbV	97
8) methanol	3.98	31	239410	51.497	ppbV	95
9) vinyl chloride	4.07	62	128831	9.245	ppbV	97
10) 1,3-butadiene	4.25	54	115573	9.471	ppbV	90
11) butane	4.31	43	181819	7.181	ppbV #	97
12) acetaldehyde	3.93	29	292583	54.552	ppbV #	76
13) bromomethane	4.58	94	106646	8.748	ppbV	98
14) chloroethane	4.80	64	69029	8.587	ppbV	98
15) ethanol	4.93	31	444402	52.584	ppbV #	73
16) dichlorofluoromethane	4.92	67	185242	7.799	ppbV	99
17) vinyl bromide	5.21	106	115075	8.379	ppbV	99
18) acrolein	5.34	56	62382	9.143	ppbV	98
19) acetone	5.49	43	806811	36.724	ppbV #	83
20) acetonitrile	5.19	41	120878	8.570	ppbV	97
21) trichlorofluoromethane	5.70	101	206817	8.606	ppbV	100
22) isopropyl alcohol	5.77	45	730026	19.071	ppbV	98
23) acrylonitrile	6.02	53	156332	9.998	ppbV	99
24) pentane	6.10	43	317115	7.455	ppbV #	92

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192626.D
 Acq On : 25 Feb 2020 5:28 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD010
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 08:55:41 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Dec 04 12:54:37 2019
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.12	31	275571	12.583	ppbV #	74
26) 1,1-dichloroethene	6.41	61	206831	8.203	ppbV	93
27) tertiary butyl alcohol	6.43	59	266071	7.593	ppbV	93
28) methylene chloride	6.54	49	201786	10.209	ppbV	90
29) 3-chloropropene	6.67	41	239643	7.319	ppbV #	89
30) carbon disulfide	6.85	76	566220	9.782	ppbV #	94
31) Freon 113	6.83	101	293297	9.061	ppbV	97
32) trans-1,2-dichloroethene	7.54	61	235798	8.321	ppbV	95
33) 1,1-dichloroethane	7.74	63	288894	8.169	ppbV	99
34) MTBE	7.79	73	469368	8.703	ppbV	95
35) vinyl acetate	7.89	43	410640	8.053	ppbV	96
36) 2-butanone	8.13	43	372946	8.001	ppbV	92
37) cis-1,2-dichloroethene	8.61	61	204983	8.317	ppbV	93
38) Ethyl Acetate	8.81	61	65358	9.205	ppbV	70
39) chloroform	8.91	83	253697	8.764	ppbV	98
40) Tetrahydrofuran	9.30	42	246371	7.720	ppbV #	87
41) 2,2-dichloropropane	8.93	77	213317	8.098	ppbV	90
42) 1,2-dichloroethane	9.66	62	123754	6.936	ppbV #	87
44) hexane	8.82	57	324685	10.827	ppbV #	72
45) diisopropyl ether	8.80	87	175371	9.761	ppbV	99
46) tert-butyl ethyl ether	9.34	59	507094	9.636	ppbV	98
48) 1,1,1-trichloroethane	9.93	97	207168	8.540	ppbV	98
49) 1,1-dichloropropene	10.25	75	250391	9.907	ppbV #	89
50) benzene	10.40	78	635708	10.981	ppbV	99
51) thiophene	10.54	84	1250600	10.493	ppbV	99
52) carbon tetrachloride	10.55	117	172271	8.690	ppbV #	96
53) cyclohexane	10.69	56	355565	10.975	ppbV #	89
54) tert-amyl methyl ether	10.98	73	549579	9.837	ppbV	93
55) dibromomethane	11.22	93	155660	9.220	ppbV	100
56) 1,2-dichloropropane	11.25	63	205044	9.664	ppbV	97
57) bromodichloromethane	11.45	83	277952	9.877	ppbV	96
58) 1,4-dioxane	11.47	88	141324	9.660	ppbV	97
59) trichloroethene	11.49	130	229244	9.985	ppbV	96
60) 2,2,4-trimethylpentane	11.52	57	1001262M6	10.408	ppbV	
61) methyl methacrylate	11.66	41	290093	8.978	ppbV #	82
62) heptane	11.79	43	397590	9.156	ppbV	93
63) cis-1,3-dichloropropene	12.39	75	310172	10.683	ppbV #	86
64) 4-methyl-2-pentanone	12.41	43	443432	9.420	ppbV	91
65) trans-1,3-dichloropropene	12.92	75	279964	10.146	ppbV #	91
66) 1,1,2-trichloroethane	13.10	97	223277	10.069	ppbV	93

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192626.D
 Acq On : 25 Feb 2020 5:28 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD010
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 08:55:41 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Wed Dec 04 12:54:37 2019
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	13.37	91	701515	9.507	ppbV	97
70) 2-methylthiophene	13.43	97	1988447	9.782	ppbV	99
71) 1,3-dichloropropane	13.38	76	330184	9.866	ppbV #	81
72) 2-hexanone	13.57	43	413836	8.563	ppbV	88
73) 3-methylthiophene	13.59	97	2044645	9.856	ppbV	98
74) dibromochloromethane	13.76	129	275896	9.263	ppbV	98
75) 1,2-dibromoethane	13.98	107	327140	10.126	ppbV	99
76) butyl acetate	14.11	73	108889	9.811	ppbV	80
77) octane	14.21	85	291410	9.373	ppbV	91
78) tetrachloroethene	14.36	166	317798	9.480	ppbV	96
79) 1,1,1,2-tetrachloroethane	14.89	131	202833	8.925	ppbV	100
80) chlorobenzene	14.91	112	567426	9.889	ppbV	100
81) ethylbenzene	15.19	91	866191	9.584	ppbV	96
82) 2-ethylthiophene	15.23	97	2027772	9.393	ppbV	97
83) m+p-xylene	15.32	91	1352950	18.839	ppbV	91
84) bromoform	15.41	173	305601	9.491	ppbV	97
85) styrene	15.60	104	655191	10.418	ppbV	97
86) 1,1,2,2-tetrachloroethane	15.68	83	479981	10.644	ppbV	96
87) o-xylene	15.68	91	663728	9.458	ppbV	95
88) 1,2,3-trichloropropane	15.78	75	387256	9.852	ppbV #	95
89) nonane	15.82	43	542372	8.748	ppbV	86
91) isopropylbenzene	16.11	105	963584	9.985	ppbV	99
92) bromobenzene	16.20	77	521684	10.013	ppbV	94
93) 2-chlorotoluene	16.49	126	279205	9.846	ppbV	91
94) n-propylbenzene	16.50	120	333229	9.816	ppbV	96
95) 4-chlorotoluene	16.54	126	273670	9.567	ppbV	91
96) 4-ethyl toluene	16.61	105	1163432	10.669	ppbV	98
97) 1,3,5-trimethylbenzene	16.67	105	922248	10.372	ppbV	99
98) tert-butylbenzene	16.98	119	855260	9.506	ppbV	100
99) 1,2,4-trimethylbenzene	16.98	105	870980	10.656	ppbV	95
100) decane	17.02	57	710351	10.194	ppbV	90
101) Benzyl Chloride	17.11	91	738978	9.770	ppbV	97
102) 1,3-dichlorobenzene	17.13	146	606906	10.720	ppbV	98
103) 1,4-dichlorobenzene	17.18	146	587198	10.680	ppbV	96
104) sec-butylbenzene	17.19	105	1271163	10.529	ppbV	99
105) 1,2,3-trimethylbenzene	17.32	105	900882	11.070	ppbV	99
106) p-isopropyltoluene	17.31	119	1086871	9.607	ppbV	98
107) 1,2-dichlorobenzene	17.44	146	579002	10.802	ppbV	97
108) n-butylbenzene	17.63	91	955685	9.738	ppbV	96
109) indan	17.48	117	943080	10.651	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192626.D
 Acq On : 25 Feb 2020 5:28 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD010
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 08:55:41 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Wed Dec 04 12:54:37 2019
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

110)	indene	17.56	115	761568	10.443	ppbV	100
111)	1,2-dibromo-3-chloropr...	17.79	75	221519	9.688	ppbV	96
112)	undecane	17.99	57	814742	10.480	ppbV	94
113)	1,2,4,5-tetramethylben...	18.23	119	950550	7.812	ppbV	98
114)	dodecane	18.84	57	904153	11.894	ppbV	89
115)	1,2,4-trichlorobenzene	18.83	180	581624	11.690	ppbV	98
116)	naphthalene	18.95	128	1357250	10.601	ppbV	98
117)	1,2,3-trichlorobenzene	19.18	180	604812	11.452	ppbV	99
118)	benzothiophene	19.01	134	766863	6.768	ppbV	99
119)	hexachlorobutadiene	19.23	225	485592	10.646	ppbV	98
120)	2-methylnaphthalene	19.95	142	189361	10.862	ppbV	97
121)	1-methylnaphthalene	20.12	142	406430	17.099	ppbV	97

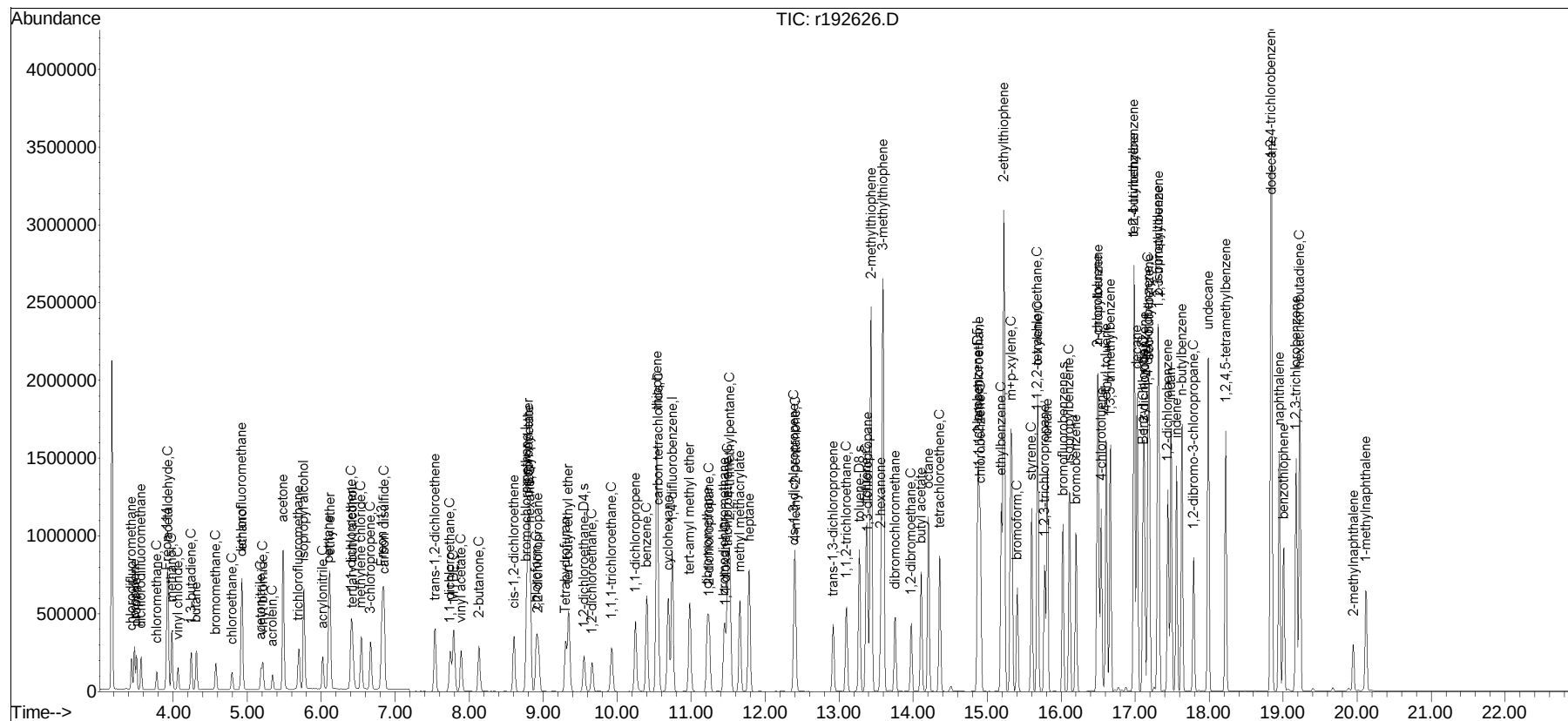
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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Data Path   : 0:\Forensics\Data\AirLab19\2020\02\200224T_I\
Data File  : r192626.D
Acq On     : 25 Feb 2020    5:28 AM
Operator   : AIRLAB19:RY
Sample     : IT015-SIMSTD010
Misc       : WG1344146
ALS Vial   : 0    Sample Multiplier: 1
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Quant Time: Feb 25 08:55:41 2020
Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Wed Dec 04 12:54:37 2019
Response via : Initial Calibration

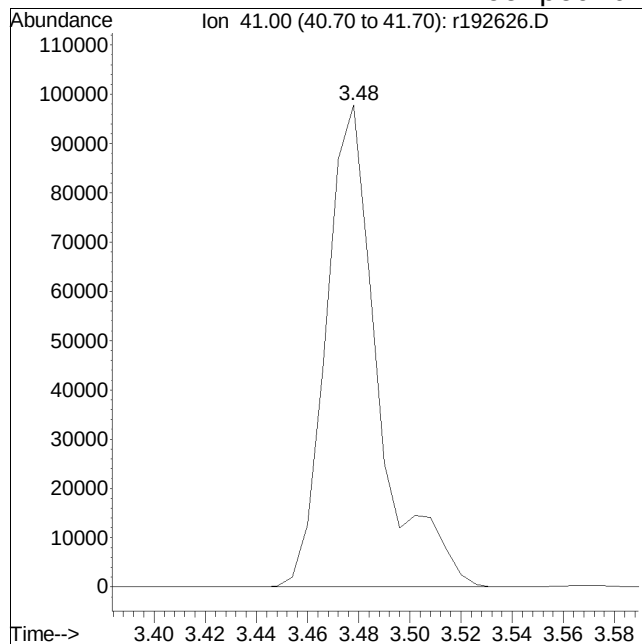
Sub List : Default - All compounds listed0\02\200224T_I\r192626.D



Manual Integration/Negative Proof Report

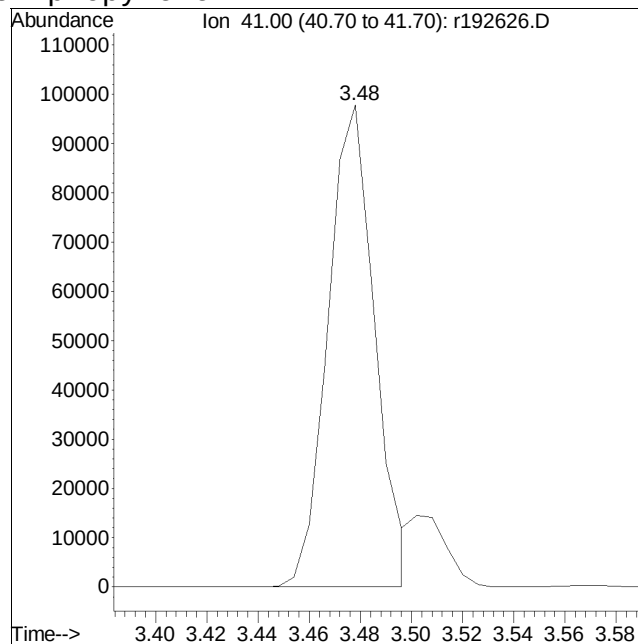
Data Path : 0:\Forensics\Data\AirLab19\QMethod : TFS19_200224.M
Data File : r192626.D Operator : AIRLAB19:RY
Date Inj'd : 2/25/2020 0:5: 8 Instrument :
Sample : IT015-SIMSTD010 Quant Date : 2/25/2020 8:54 am

Compound #3: propylene



Original Peak Response = 138471

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

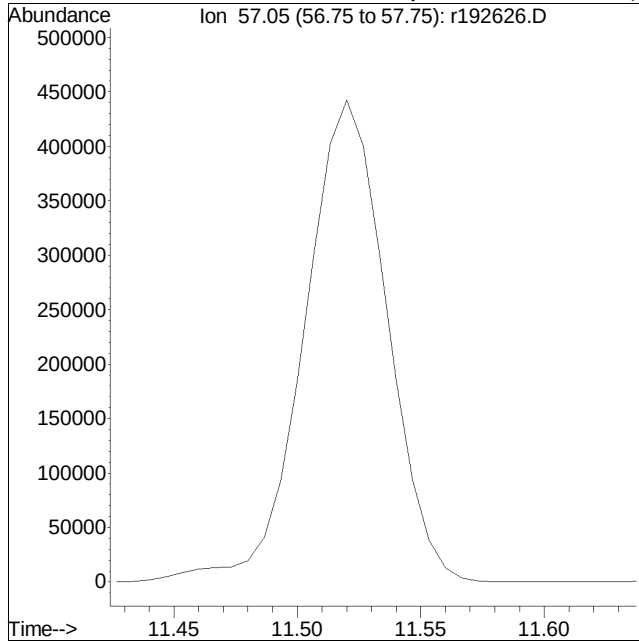


Manual Peak Response = 124215 M6

Manual Integration/Negative Proof Report

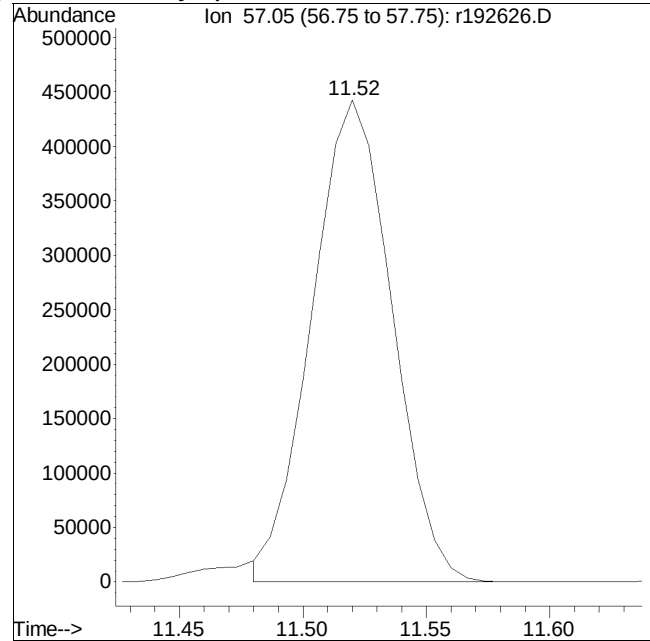
Data Path : 0:\Forensics\Data\Airlab19\QMethod : TFS19_200224.M
Data File : r192626.D Operator : AIRLAB19:RY
Date Inj'd : 2/25/2020 0:5: 8 Instrument :
Sample : IT015-SIMSTD010 Quant Date : 2/25/2020 8:54 am

Compound #60: 2,2,4-trimethylpentane



Original Peak Response =

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 1001262 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192627.D
 Acq On : 25 Feb 2020 6:07 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD020
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:16:58 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	8.78	49	341458	10.000	ppbV	0.00
Standard Area = 313159			Recovery =	109.04%		
43) 1,4-difluorobenzene	10.74	114	961114	10.000	ppbV	0.00
Standard Area = 892162			Recovery =	107.73%		
67) chlorobenzene-D5	14.88	54	124449	10.000	ppbV	0.00
Standard Area = 115842			Recovery =	107.43%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	9.55	65	124643	10.167	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	101.67%		
69) toluene-D8	13.28	98	744343	10.077	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.77%		
90) bromofluorobenzene	16.02	95	480119	10.218	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	102.18%		
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.44	51	447261	22.078	ppbV	99
3) propylene	3.47	41	293021M6	21.635	ppbV	
4) propane	3.50	29	308948	21.521	ppbV	98
5) dichlorodifluoromethane	3.56	85	394607	22.141	ppbV	100
6) chloromethane	3.77	50	264997	23.607	ppbV	100
7) Freon-114	3.92	85	567062	20.401	ppbV	99
8) methanol	3.98	31	558079	106.893	ppbV	96
9) vinyl chloride	4.06	62	293623	20.902	ppbV	99
10) 1,3-butadiene	4.24	54	266579	21.154	ppbV	99
11) butane	4.31	43	415027	20.935	ppbV	100
12) acetaldehyde	3.93	29	607442	95.204	ppbV	96
13) bromomethane	4.58	94	230307	19.806	ppbV	100
14) chloroethane	4.79	64	154452	20.521	ppbV	99
15) ethanol	4.92	31	1029988	106.281	ppbV	99
16) dichlorofluoromethane	4.92	67	403257	19.965	ppbV	99
17) vinyl bromide	5.21	106	248434	19.800	ppbV	95
18) acrolein	5.34	56	135554	19.929	ppbV	99
19) acetone	5.48	43	2204914	125.319	ppbV	99
20) acetonitrile	5.18	41	262185	19.892	ppbV	99
21) trichlorofluoromethane	5.70	101	447859	19.860	ppbV	99
22) isopropyl alcohol	5.76	45	1642082	51.573	ppbV	100
23) acrylonitrile	6.02	53	343034	20.124	ppbV	99
24) pentane	6.10	43	694909	20.097	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192627.D
 Acq On : 25 Feb 2020 6:07 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD020
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:16:58 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.12	31	595312	19.812	ppbV	99
26) 1,1-dichloroethene	6.40	61	443937	19.685	ppbV	99
27) tertiary butyl alcohol	6.42	59	642568	22.149	ppbV	100
28) methylene chloride	6.54	49	445554	20.251	ppbV	99
29) 3-chloropropene	6.67	41	527710	20.196	ppbV	100
30) carbon disulfide	6.85	76	1195010	19.356	ppbV	100
31) Freon 113	6.82	101	623515	19.497	ppbV	98
32) trans-1,2-dichloroethene	7.54	61	508578	19.781	ppbV	100
33) 1,1-dichloroethane	7.74	63	622452	19.760	ppbV	100
34) MTBE	7.79	73	1018432	19.900	ppbV	100
35) vinyl acetate	7.89	43	895127	19.992	ppbV	100
36) 2-butanone	8.13	43	805706	19.813	ppbV	99
37) cis-1,2-dichloroethene	8.61	61	442665	19.805	ppbV	100
38) Ethyl Acetate	8.81	61	138192	19.392	ppbV	90
39) chloroform	8.91	83	542944	19.628	ppbV	98
40) Tetrahydrofuran	9.30	42	534125	19.883	ppbV	99
41) 2,2-dichloropropane	8.93	77	450626	19.374	ppbV	100
42) 1,2-dichloroethane	9.66	62	264202	19.580	ppbV	99
44) hexane	8.82	57	688586	19.686	ppbV	91
45) diisopropyl ether	8.80	87	370328	19.602	ppbV	98
46) tert-butyl ethyl ether	9.34	59	1076494	19.706	ppbV	100
48) 1,1,1-trichloroethane	9.93	97	433835	19.439	ppbV	98
49) 1,1-dichloropropene	10.25	75	540204	20.027	ppbV	99
50) benzene	10.40	78	1360423	19.865	ppbV	100
51) thiophene	10.54	84	2533021	18.801	ppbV	100
52) carbon tetrachloride	10.55	117	354680	19.111	ppbV	99
53) cyclohexane	10.69	56	757124	19.766	ppbV	100
54) tert-amyl methyl ether	10.98	73	1179199	19.917	ppbV	99
55) dibromomethane	11.22	93	323537	19.294	ppbV	100
56) 1,2-dichloropropane	11.24	63	433667	19.633	ppbV	99
57) bromodichloromethane	11.45	83	584994	19.537	ppbV	99
58) 1,4-dioxane	11.46	88	317235	20.837	ppbV	99
59) trichloroethene	11.49	130	476748	19.305	ppbV	99
60) 2,2,4-trimethylpentane	11.52	57	2180240	20.213	ppbV	100
61) methyl methacrylate	11.66	41	560925	17.949	ppbV	99
62) heptane	11.78	43	847181	19.779	ppbV	99
63) cis-1,3-dichloropropene	12.39	75	643908	19.270	ppbV	98
64) 4-methyl-2-pentanone	12.40	43	929778	19.464	ppbV	99
65) trans-1,3-dichloropropene	12.92	75	588423	19.510	ppbV	99
66) 1,1,2-trichloroethane	13.10	97	473238	19.675	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192627.D
 Acq On : 25 Feb 2020 6:07 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD020
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:16:58 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	13.37	91	1443273	19.151	ppbV	99
70) 2-methylthiophene	13.43	97	3735550	17.487	ppbV	100
71) 1,3-dichloropropane	13.38	76	685064	19.313	ppbV	99
72) 2-hexanone	13.57	43	865647	19.471	ppbV	100
73) 3-methylthiophene	13.59	97	3794633	17.275	ppbV	100
74) dibromochloromethane	13.76	129	561993	18.961	ppbV	99
75) 1,2-dibromoethane	13.98	107	678569	19.308	ppbV	99
76) butyl acetate	14.11	73	232629	19.886	ppbV	99
77) octane	14.21	85	604952	19.324	ppbV	99
78) tetrachloroethene	14.36	166	629513	18.439	ppbV	98
79) 1,1,1,2-tetrachloroethane	14.89	131	409013	18.770	ppbV	99
80) chlorobenzene	14.91	112	1160172	19.032	ppbV	100
81) ethylbenzene	15.19	91	1726934	18.558	ppbV	97
82) 2-ethylthiophene	15.23	97	3667928	16.837	ppbV	98
83) m+p-xylene	15.32	91	2691902	37.041	ppbV	98
84) bromoform	15.41	173	605494	18.443	ppbV	98
85) styrene	15.60	104	1353287	19.226	ppbV	99
86) 1,1,2,2-tetrachloroethane	15.68	83	928417	18.005	ppbV	100
87) o-xylene	15.68	91	1281753	17.976	ppbV	99
88) 1,2,3-trichloropropane	15.78	75	804680	19.342	ppbV	100
89) nonane	15.82	43	1094852	18.790	ppbV	98
91) isopropylbenzene	16.12	105	1973305	19.062	ppbV	98
92) bromobenzene	16.21	77	1080428	19.278	ppbV	100
93) 2-chlorotoluene	16.50	126	549631	18.324	ppbV	81
94) n-propylbenzene	16.51	120	652336	18.222	ppbV	100
95) 4-chlorotoluene	16.55	126	560450	19.063	ppbV	97
96) 4-ethyl toluene	16.62	105	2291945	18.337	ppbV	99
97) 1,3,5-trimethylbenzene	16.68	105	1779293	17.959	ppbV	98
98) tert-butylbenzene	16.99	119	1552507	16.897	ppbV	100
99) 1,2,4-trimethylbenzene	16.99	105	1565811	16.734	ppbV	99
100) decane	17.03	57	1417559	18.576	ppbV	98
101) Benzyl Chloride	17.11	91	1459224	18.381	ppbV	98
102) 1,3-dichlorobenzene	17.13	146	1176791	18.049	ppbV	99
103) 1,4-dichlorobenzene	17.18	146	1108586	17.574	ppbV	100
104) sec-butylbenzene	17.19	105	2389211	17.496	ppbV	99
105) 1,2,3-trimethylbenzene	17.32	105	1544673	15.960	ppbV	98
106) p-isopropyltoluene	17.31	119	1999243	17.122	ppbV	98
107) 1,2-dichlorobenzene	17.44	146	1117563	17.967	ppbV	100
108) n-butylbenzene	17.63	91	1795592	17.489	ppbV	95
109) indan	17.48	117	1686266	16.644	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192627.D
 Acq On : 25 Feb 2020 6:07 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD020
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:16:58 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	17.56	115	1388414	16.970	ppbV	98
111) 1,2-dibromo-3-chloropr...	17.78	75	413708	17.384	ppbV	95
112) undecane	17.98	57	1532419	17.508	ppbV	98
113) 1,2,4,5-tetramethylben...	18.22	119	1682921	16.480	ppbV	100
114) dodecane	18.83	57	1339652	13.792	ppbV	98
115) 1,2,4-trichlorobenzene	18.82	180	932390	14.922	ppbV	99
116) naphthalene	18.94	128	2339532	16.045	ppbV	100
117) 1,2,3-trichlorobenzene	19.17	180	974870	15.004	ppbV	100
118) benzothiophene	19.00	134	1908697	23.168	ppbV	100
119) hexachlorobutadiene	19.22	225	755063	14.474	ppbV	96
120) 2-methylnaphthalene	19.93	142	349663	17.188	ppbV	98
121) 1-methylnaphthalene	20.11	142	592552	13.571	ppbV	99

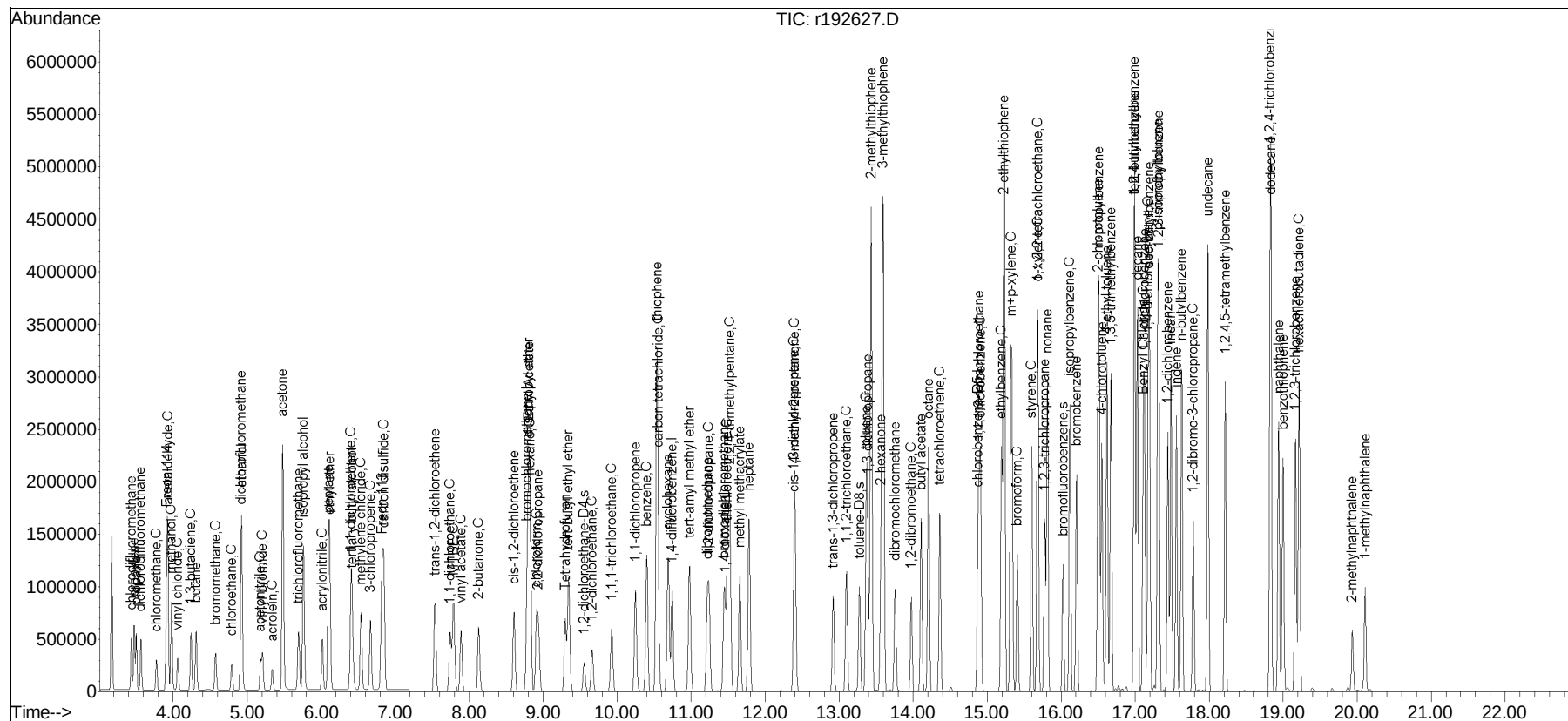
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\AirLab19\2020\02\200224T_I\
 Data File : r192627.D
 Acq On : 25 Feb 2020 6:07 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD020
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:16:58 2020
 Quant Method : 0:\Forensics\Data\AirLab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

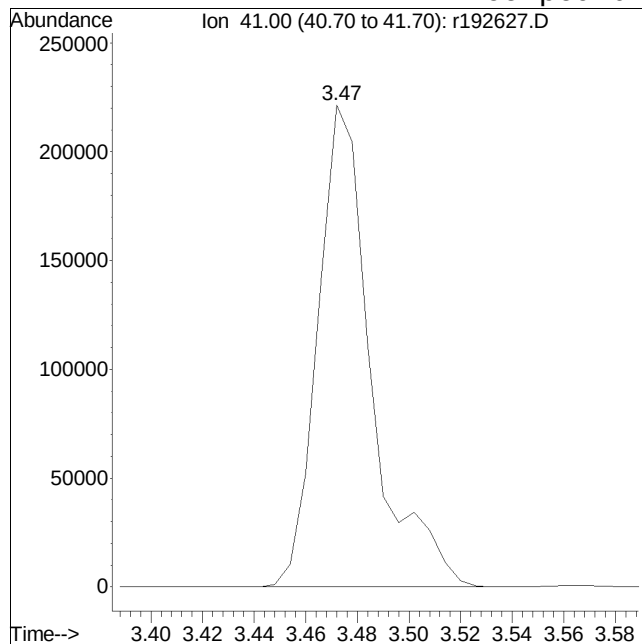
Sub List : Default - All compounds listed 0\02\200224T_I\r192626.D



Manual Integration/Negative Proof Report

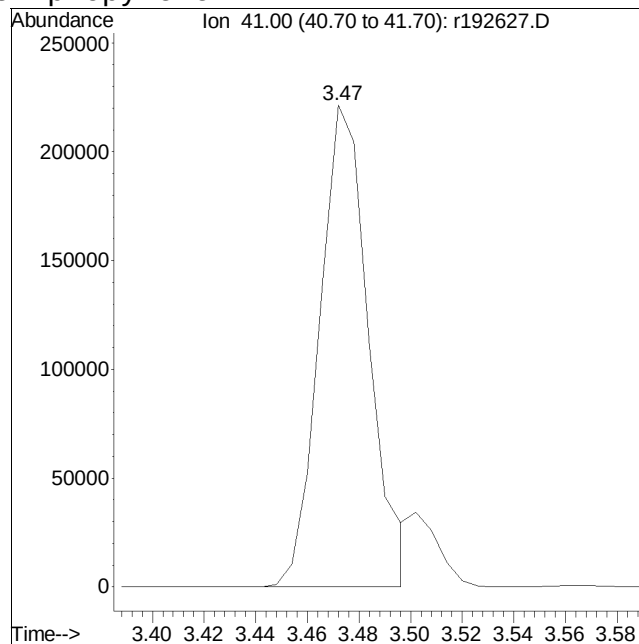
Data Path : 0:\Forensics\Data\AirLab19\QMethod : TFS19_200224.M
Data File : r192627.D Operator : AIRLAB19:RY
Date Inj'd : 2/25/2020 0:6: 7 Instrument :
Sample : IT015-SIMSTD020 Quant Date : 2/25/2020 8:57 am

Compound #3: propylene



Original Peak Response = 320043

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 293021 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192628.D
 Acq On : 25 Feb 2020 6:46 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD050
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:18:44 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	8.78	49	312030	10.000	ppbV	0.00
Standard Area = 313159			Recovery =	99.64%		
43) 1,4-difluorobenzene	10.75	114	941952	10.000	ppbV	0.00
Standard Area = 892162			Recovery =	105.58%		
67) chlorobenzene-D5	14.88	54	118440	10.000	ppbV	0.00
Standard Area = 115842			Recovery =	102.24%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	9.55	65	113785	9.470	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	94.70%		
69) toluene-D8	13.28	98	720661	10.251	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	102.51%		
90) bromofluorobenzene	16.02	95	481396	10.765	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	107.65%		
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.44	51	880328	47.553	ppbV	99
3) propylene	3.48	41	578319M6	46.726	ppbV	
4) propane	3.50	29	618260	47.129	ppbV	99
5) dichlorodifluoromethane	3.57	85	795290	48.831	ppbV	99
6) chloromethane	3.78	50	513371	50.046	ppbV	99
7) Freon-114	3.92	85	1069756	42.116	ppbV	98
8) methanol	3.98	31	1163706	243.916	ppbV	96
9) vinyl chloride	4.07	62	625922	48.761	ppbV	100
10) 1,3-butadiene	4.24	54	557033	48.372	ppbV	98
11) butane	4.31	43	873725	48.229	ppbV	100
12) acetaldehyde	3.93	29	1148738	197.020	ppbV	99
13) bromomethane	4.58	94	484880	45.631	ppbV	100
14) chloroethane	4.79	64	342722	49.829	ppbV	99
15) ethanol	4.94	31	2117121	239.061	ppbV	100
16) dichlorofluoromethane	4.92	67	855832	46.368	ppbV	99
17) vinyl bromide	5.21	106	533969	46.570	ppbV	98
18) acrolein	5.34	56	302819	48.718	ppbV	99
19) acetone	5.49	43	3338531	207.645	ppbV	97
20) acetonitrile	5.19	41	577833	47.976	ppbV	99
21) trichlorofluoromethane	5.70	101	962715	46.718	ppbV	99
22) isopropyl alcohol	5.77	45	3355477	115.325	ppbV	99
23) acrylonitrile	6.02	53	774450	49.718	ppbV	99
24) pentane	6.10	43	1440362	45.585	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192628.D
 Acq On : 25 Feb 2020 6:46 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD050
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:18:44 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.12	31	1250717	45.551	ppbV	98
26) 1,1-dichloroethene	6.40	61	954602	46.321	ppbV	99
27) tertiary butyl alcohol	6.43	59	1424410	53.729	ppbV	99
28) methylene chloride	6.54	49	954137	47.456	ppbV	99
29) 3-chloropropene	6.67	41	1160436	48.599	ppbV	100
30) carbon disulfide	6.85	76	2477346	43.911	ppbV	100
31) Freon 113	6.83	101	1290086	44.145	ppbV	99
32) trans-1,2-dichloroethene	7.54	61	1115159	47.464	ppbV	99
33) 1,1-dichloroethane	7.75	63	1379002	47.907	ppbV	99
34) MTBE	7.79	73	2196373	46.964	ppbV	99
35) vinyl acetate	7.89	43	1979150	48.371	ppbV	99
36) 2-butanone	8.13	43	1766267	47.531	ppbV	98
37) cis-1,2-dichloroethene	8.61	61	974603	47.718	ppbV	99
38) Ethyl Acetate	8.81	61	292871	44.972	ppbV	78
39) chloroform	8.91	83	1172803	46.396	ppbV	97
40) Tetrahydrofuran	9.29	42	1177653	47.973	ppbV	98
41) 2,2-dichloropropane	8.94	77	980818	46.146	ppbV	99
42) 1,2-dichloroethane	9.66	62	585099	47.450	ppbV	99
44) hexane	8.82	57	1433972	41.831	ppbV	91
45) diisopropyl ether	8.80	87	785910	42.445	ppbV	87
46) tert-butyl ethyl ether	9.34	59	2347918	43.854	ppbV	100
48) 1,1,1-trichloroethane	9.93	97	948582	43.368	ppbV	98
49) 1,1-dichloropropene	10.25	75	1175225	44.455	ppbV	98
50) benzene	10.40	78	2964880	44.174	ppbV	100
51) thiophene	10.54	84	4741712	35.911	ppbV	98
52) carbon tetrachloride	10.56	117	715650	39.346	ppbV	97
53) cyclohexane	10.69	56	1643417	43.777	ppbV	99
54) tert-amyl methyl ether	10.98	73	2563416	44.178	ppbV	100
55) dibromomethane	11.22	93	679842	41.366	ppbV	99
56) 1,2-dichloropropane	11.25	63	943782	43.595	ppbV	99
57) bromodichloromethane	11.45	83	1255264	42.774	ppbV	100
58) 1,4-dioxane	11.46	88	688877	46.168	ppbV	99
59) trichloroethene	11.49	130	975199	40.291	ppbV	99
60) 2,2,4-trimethylpentane	11.52	57	4557372	43.110	ppbV	100
61) methyl methacrylate	11.66	41	1225181	40.002	ppbV	98
62) heptane	11.79	43	1777451	42.343	ppbV	97
63) cis-1,3-dichloropropene	12.40	75	1353998	41.346	ppbV	95
64) 4-methyl-2-pentanone	12.41	43	1927198	41.164	ppbV	97
65) trans-1,3-dichloropropene	12.93	75	1303850	44.110	ppbV	97
66) 1,1,2-trichloroethane	13.10	97	1031241	43.745	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192628.D
 Acq On : 25 Feb 2020 6:46 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD050
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:18:44 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	13.37	91	2997108	41.786	ppbV	100
70) 2-methylthiophene	13.44	97	6609247	32.509	ppbV	99
71) 1,3-dichloropropane	13.39	76	1457232	43.166	ppbV	99
72) 2-hexanone	13.57	43	1850229	43.729	ppbV	97
73) 3-methylthiophene	13.60	97	6615551	31.646	ppbV	99
74) dibromochloromethane	13.76	129	1145247	40.600	ppbV	98
75) 1,2-dibromoethane	13.98	107	1420658	42.474	ppbV	100
76) butyl acetate	14.11	73	513999	46.169	ppbV	95
77) octane	14.21	85	1272375	42.705	ppbV	95
78) tetrachloroethene	14.36	166	1243295	38.264	ppbV	99
79) 1,1,1,2-tetrachloroethane	14.89	131	799205	38.538	ppbV	99
80) chlorobenzene	14.92	112	2336124	40.267	ppbV	99
81) ethylbenzene	15.19	91	3595729	40.601	ppbV	96
82) 2-ethylthiophene	15.23	97	6329001	30.527	ppbV #	95
83) m+p-xylene	15.33	91	5201701	75.208	ppbV	97
84) bromoform	15.41	173	1195648	38.266	ppbV	97
85) styrene	15.60	104	2768327	41.325	ppbV	99
86) 1,1,2,2-tetrachloroethane	15.68	83	1767241	36.011	ppbV	100
87) o-xylene	15.69	91	2397848	35.335	ppbV	96
88) 1,2,3-trichloropropane	15.78	75	1704279	43.044	ppbV	98
89) nonane	15.82	43	2188890	39.472	ppbV	96
91) isopropylbenzene	16.12	105	3894455	39.530	ppbV	98
92) bromobenzene	16.21	77	2174142	40.761	ppbV	98
93) 2-chlorotoluene	16.49	126	1029131	36.051	ppbV #	34
94) n-propylbenzene	16.51	120	1277348	37.492	ppbV	78
95) 4-chlorotoluene	16.55	126	1192602	42.622	ppbV	97
96) 4-ethyl toluene	16.62	105	4346102	36.536	ppbV	97
97) 1,3,5-trimethylbenzene	16.67	105	3497391	37.091	ppbV	94
98) tert-butylbenzene	16.99	119	2842991	32.512	ppbV	98
99) 1,2,4-trimethylbenzene	16.99	105	2799795	31.440	ppbV	99
100) decane	17.03	57	2769455	38.132	ppbV	97
101) Benzyl Chloride	17.11	91	2879059	38.105	ppbV	97
102) 1,3-dichlorobenzene	17.13	146	2200059	35.455	ppbV	99
103) 1,4-dichlorobenzene	17.18	146	2074875	34.560	ppbV	99
104) sec-butylbenzene	17.19	105	4395450	33.820	ppbV	98
105) 1,2,3-trimethylbenzene	17.32	105	2853346	30.978	ppbV	98
106) p-isopropyltoluene	17.31	119	3674877	33.070	ppbV	98
107) 1,2-dichlorobenzene	17.44	146	2152519	36.361	ppbV	99
108) n-butylbenzene	17.63	91	3455314	35.362	ppbV	97
109) indan	17.48	117	3190275	33.086	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192628.D
 Acq On : 25 Feb 2020 6:46 AM
 Operator : AIRLAB19:RY
 Sample : IT015-SIMSTD050
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:18:44 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	17.56	115	2703019	34.714	ppbV	100
111) 1,2-dibromo-3-chloropr...	17.79	75	843325	37.235	ppbV	97
112) undecane	17.98	57	2930634	35.181	ppbV #	97
113) 1,2,4,5-tetramethylben...	18.23	119	3287191	33.823	ppbV	99
114) dodecane	18.84	57	2635035	28.504	ppbV	97
115) 1,2,4-trichlorobenzene	18.83	180	1728492	29.066	ppbV	95
116) naphthalene	18.95	128	4996254	36.004	ppbV	99
117) 1,2,3-trichlorobenzene	19.18	180	2196260	35.517	ppbV	99
118) benzothiophene	19.01	134	4398584	56.100	ppbV	99
119) hexachlorobutadiene	19.23	225	1487192	29.955	ppbV	96
120) 2-methylnaphthalene	19.94	142	1396985	72.155	ppbV	97
121) 1-methylnaphthalene	20.12	142	2133052	51.331	ppbV	98

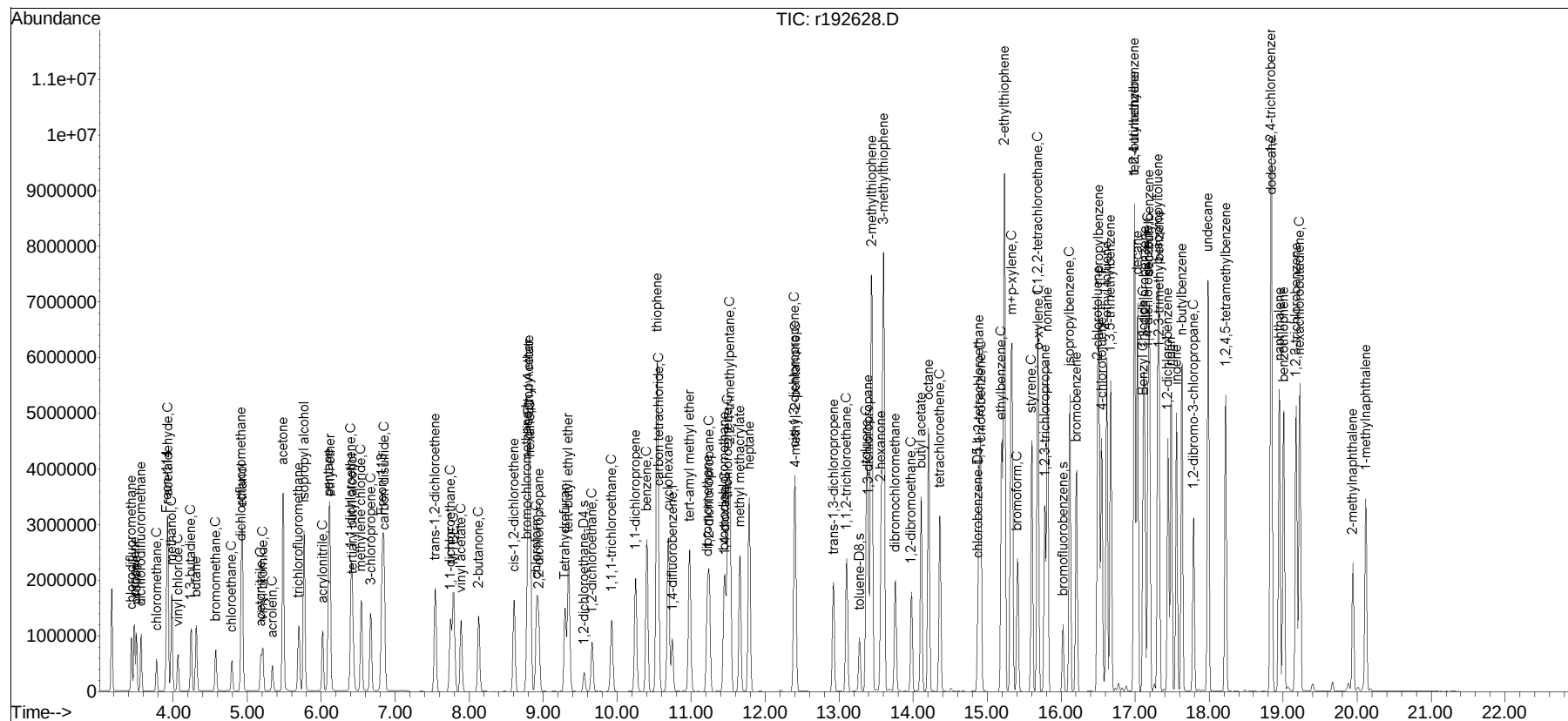
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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Data Path   : 0:\Forensics\Data\AirLab19\2020\02\200224T_I\
Data File  : r192628.D
Acq On     : 25 Feb 2020    6:46 AM
Operator   : AIRLAB19:RY
Sample     : IT015-SIMSTD050
Misc       : WG1344146
ALS Vial   : 0    Sample Multiplier: 1
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Quant Time: Feb 25 10:18:44 2020
Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Tue Feb 25 08:56:41 2020
Response via : Initial Calibration

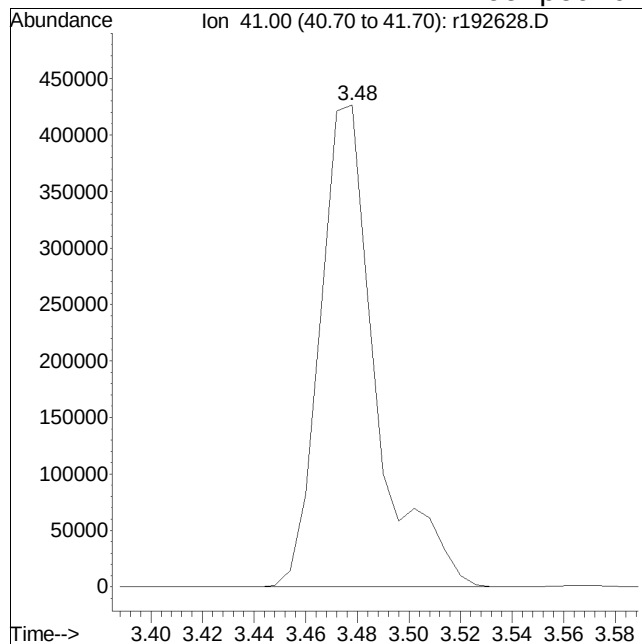
Sub List : Default - All compounds listed0\02\200224T_I\r192626.D



Manual Integration/Negative Proof Report

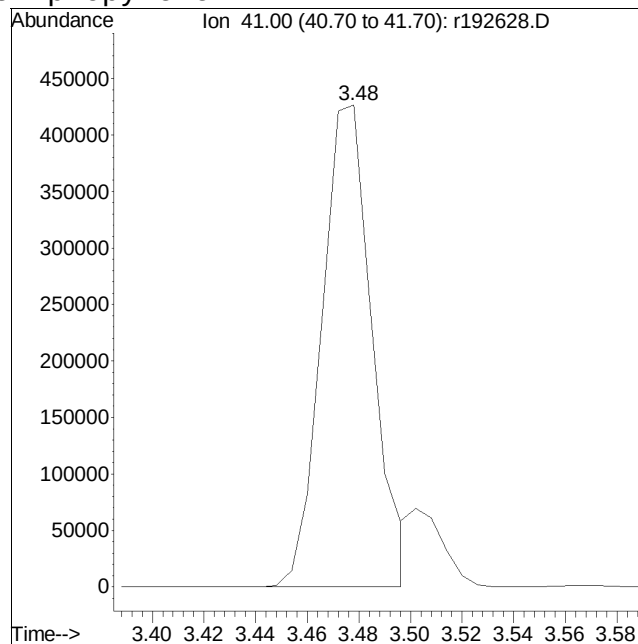
Data Path : 0:\Forensics\Data\AirLab19\QMethod : TFS19_200224.M
Data File : r192628.D Operator : AIRLAB19:RY
Date Inj'd : 2/25/2020 0:6: 6 Instrument :
Sample : IT015-SIMSTD050 Quant Date : 2/25/2020 8:57 am

Compound #3: propylene



Original Peak Response = 641436

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 578319 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192629.D
 Acq On : 25 Feb 2020 7:28 AM
 Operator : AIRLAB19:RY
 Sample : IT015-LLSTD100
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:20:58 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	8.78	49	280976	10.000	ppbV	0.00
Standard Area = 313159			Recovery =		89.72%	
43) 1,4-difluorobenzene	10.75	114	868932	10.000	ppbV	0.00
Standard Area = 892162			Recovery =		97.40%	
67) chlorobenzene-D5	14.88	54	106304	10.000	ppbV	0.00
Standard Area = 115842			Recovery =		91.77%	
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	9.55	65	99331	8.962	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		89.62%	
69) toluene-D8	13.28	98	638294	10.116	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		101.16%	
90) bromofluorobenzene	16.02	95	426847	10.635	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		106.35%	
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.44	51	1464962	87.880	ppbV	99
3) propylene	3.47	41	963788M6	86.478	ppbV	
4) propane	3.50	29	1010024	85.503	ppbV	98
5) dichlorodifluoromethane	3.56	85	1252468	85.401	ppbV	100
6) chloromethane	3.77	50	831725	90.042	ppbV	98
7) Freon-114	3.91	85	1653315	72.284	ppbV	98
8) methanol	3.98	31	1936693	450.800	ppbV	95
9) vinyl chloride	4.06	62	1042231	90.165	ppbV	100
10) 1,3-butadiene	4.24	54	935654	90.231	ppbV	95
11) butane	4.31	43	1458945	89.432	ppbV	99
12) acetaldehyde	3.93	29	1791391	341.198	ppbV	98
13) bromomethane	4.58	94	787400	82.290	ppbV	98
14) chloroethane	4.79	64	575483	92.917	ppbV	100
15) ethanol	4.94	31	3423732	429.328	ppbV	99
16) dichlorofluoromethane	4.92	67	1431277	86.115	ppbV	99
17) vinyl bromide	5.21	106	890815	86.278	ppbV	97
18) acrolein	5.34	56	516448	92.271	ppbV	100
19) acetone	5.49	43	5487473	379.024	ppbV	92
20) acetonitrile	5.19	41	980380	90.395	ppbV	99
21) trichlorofluoromethane	5.70	101	1332517	71.810	ppbV	99
22) isopropyl alcohol	5.77	45	5254813	200.565	ppbV	98
23) acrylonitrile	6.02	53	1323170	94.333	ppbV	99
24) pentane	6.10	43	2312923	81.291	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192629.D
 Acq On : 25 Feb 2020 7:28 AM
 Operator : AIRLAB19:RY
 Sample : IT015-LLSTD100
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:20:58 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.12	31	1989885	80.480	ppbV	96
26) 1,1-dichloroethene	6.40	61	1543343	83.165	ppbV	100
27) tertiary butyl alcohol	6.43	59	2324137	97.355	ppbV	99
28) methylene chloride	6.54	49	1563945	86.383	ppbV	97
29) 3-chloropropene	6.67	41	1931470	89.829	ppbV	99
30) carbon disulfide	6.85	76	3761475	74.040	ppbV	100
31) Freon 113	6.82	101	1999794	75.993	ppbV	98
32) trans-1,2-dichloroethene	7.53	61	1810158	85.560	ppbV	99
33) 1,1-dichloroethane	7.74	63	2270366	87.590	ppbV	100
34) MTBE	7.78	73	3546617	84.216	ppbV	98
35) vinyl acetate	7.89	43	3285386	89.170	ppbV	98
36) 2-butanone	8.13	43	2906303	86.854	ppbV	97
37) cis-1,2-dichloroethene	8.61	61	1586949	86.286	ppbV	99
38) Ethyl Acetate	8.82	61	445768	76.016	ppbV	78
39) chloroform	8.92	83	1864265	81.901	ppbV	98
40) Tetrahydrofuran	9.29	42	1942174	87.861	ppbV	99
41) 2,2-dichloropropane	8.94	77	1565018	81.769	ppbV	97
42) 1,2-dichloroethane	9.67	62	975549	87.859	ppbV	99
44) hexane	8.82	57	2166064	68.496	ppbV	92
45) diisopropyl ether	8.80	87	1210417	70.866	ppbV	82
46) tert-butyl ethyl ether	9.34	59	3798473	76.909	ppbV	98
48) 1,1,1-trichloroethane	9.93	97	1525066	75.583	ppbV	96
49) 1,1-dichloropropene	10.25	75	1891687	77.569	ppbV	96
50) benzene	10.41	78	4709545	76.064	ppbV	99
51) thiophene	10.55	84	6918473	56.800	ppbV	97
52) carbon tetrachloride	10.57	117	1109245	66.111	ppbV	98
53) cyclohexane	10.69	56	2678908	77.356	ppbV	98
54) tert-amyl methyl ether	10.98	73	4114450	76.867	ppbV	99
55) dibromomethane	11.23	93	1033087	68.142	ppbV	97
56) 1,2-dichloropropane	11.25	63	1497807	75.001	ppbV	99
57) bromodichloromethane	11.45	83	1957157	72.296	ppbV	99
58) 1,4-dioxane	11.47	88	1043762	75.830	ppbV	97
59) trichloroethene	11.49	130	1446982	64.807	ppbV	98
60) 2,2,4-trimethylpentane	11.53	57	6724565	68.956	ppbV	99
61) methyl methacrylate	11.67	41	1976786	69.965	ppbV	98
62) heptane	11.79	43	2779181	71.769	ppbV	95
63) cis-1,3-dichloropropene	12.40	75	2122416	70.256	ppbV	93
64) 4-methyl-2-pentanone	12.41	43	2966885	68.696	ppbV	96
65) trans-1,3-dichloropropene	12.93	75	2119097	77.715	ppbV	96
66) 1,1,2-trichloroethane	13.11	97	1603138	73.720	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192629.D
 Acq On : 25 Feb 2020 7:28 AM
 Operator : AIRLAB19:RY
 Sample : IT015-LLSTD100
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:20:58 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	13.38	91	4521265	70.233	ppbV	100
70) 2-methylthiophene	13.44	97	9014012	49.399	ppbV #	99
71) 1,3-dichloropropane	13.40	76	2287177	75.485	ppbV	98
72) 2-hexanone	13.57	43	2876654	75.749	ppbV	96
73) 3-methylthiophene	13.61	97	9061478M3	48.294	ppbV	
74) dibromochloromethane	13.76	129	1708209	67.470	ppbV	97
75) 1,2-dibromoethane	13.98	107	2169871	72.280	ppbV	100
76) butyl acetate	14.11	73	803732	80.435	ppbV	94
77) octane	14.21	85	1927954	72.096	ppbV	96
78) tetrachloroethene	14.37	166	1804450	61.874	ppbV	94
79) 1,1,1,2-tetrachloroethane	14.90	131	1158141	62.221	ppbV	97
80) chlorobenzene	14.92	112	3383670	64.982	ppbV	98
81) ethylbenzene	15.20	91	5307549	66.772	ppbV	94
82) 2-ethylthiophene	15.24	97	8502892	45.695	ppbV #	93
83) m+p-xylene	15.33	91	7469360	120.323	ppbV	97
84) bromoform	15.42	173	1692161	60.340	ppbV	98
85) styrene	15.61	104	4137569	68.817	ppbV	99
86) 1,1,2,2-tetrachloroethane	15.68	83	2539748	57.661	ppbV	99
87) o-xylene	15.69	91	3437459	56.437	ppbV	95
88) 1,2,3-trichloropropane	15.78	75	2608253	73.395	ppbV #	97
89) nonane	15.82	43	3322026	66.746	ppbV	99
91) isopropylbenzene	16.12	105	5562575	62.908	ppbV	96
92) bromobenzene	16.21	77	3217663	67.212	ppbV	97
93) 2-chlorotoluene	16.48	126	1532073	59.796	ppbV #	14
94) n-propylbenzene	16.51	120	1878037	61.415	ppbV #	58
95) 4-chlorotoluene	16.54	126	1777294	70.770	ppbV	94
96) 4-ethyl toluene	16.61	105	6651047	62.297	ppbV	96
97) 1,3,5-trimethylbenzene	16.67	105	5240001	61.916	ppbV	96
98) tert-butylbenzene	16.99	119	4263954	54.329	ppbV	95
99) 1,2,4-trimethylbenzene	16.99	105	4161267	52.064	ppbV	98
100) decane	17.03	57	4316598	66.219	ppbV	98
101) Benzyl Chloride	17.11	91	4671443	68.887	ppbV	97
102) 1,3-dichlorobenzene	17.13	146	3475464	62.403	ppbV	96
103) 1,4-dichlorobenzene	17.18	146	2869524	53.253	ppbV	97
104) sec-butylbenzene	17.20	105	6494806	55.678	ppbV	99
105) 1,2,3-trimethylbenzene	17.32	105	4479874	54.189	ppbV	100
106) p-isopropyltoluene	17.31	119	5441852	54.561	ppbV	99
107) 1,2-dichlorobenzene	17.45	146	3514914	66.153	ppbV	94
108) n-butylbenzene	17.63	91	5618426	64.064	ppbV	97
109) indan	17.49	117	4994055	57.706	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192629.D
 Acq On : 25 Feb 2020 7:28 AM
 Operator : AIRLAB19:RY
 Sample : IT015-LLSTD100
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:20:58 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110)	indene	17.57	115	4444967	63.603	ppbV	98
111)	1,2-dibromo-3-chloropr...	17.79	75	1480212	72.816	ppbV	94
112)	undecane	17.99	57	4597349	61.490	ppbV	98
113)	1,2,4,5-tetramethylben...	18.23	119	5190321	59.503	ppbV	98
114)	dodecane	18.83	57	3771388	45.454	ppbV	86
115)	1,2,4-trichlorobenzene	18.82	180	2512011	47.065	ppbV #	93
116)	naphthalene	18.94	128	7722818	62.006	ppbV	97
117)	1,2,3-trichlorobenzene	19.17	180	3338635	60.154	ppbV	93
118)	benzothiophene	19.00	134	6858122	97.455	ppbV #	97
119)	hexachlorobutadiene	19.22	225	2175648	48.824	ppbV #	94
120)	2-methylnaphthalene	19.93	142	2860554	164.618	ppbV	99
121)	1-methylnaphthalene	20.10	142	4204782	112.739	ppbV	98

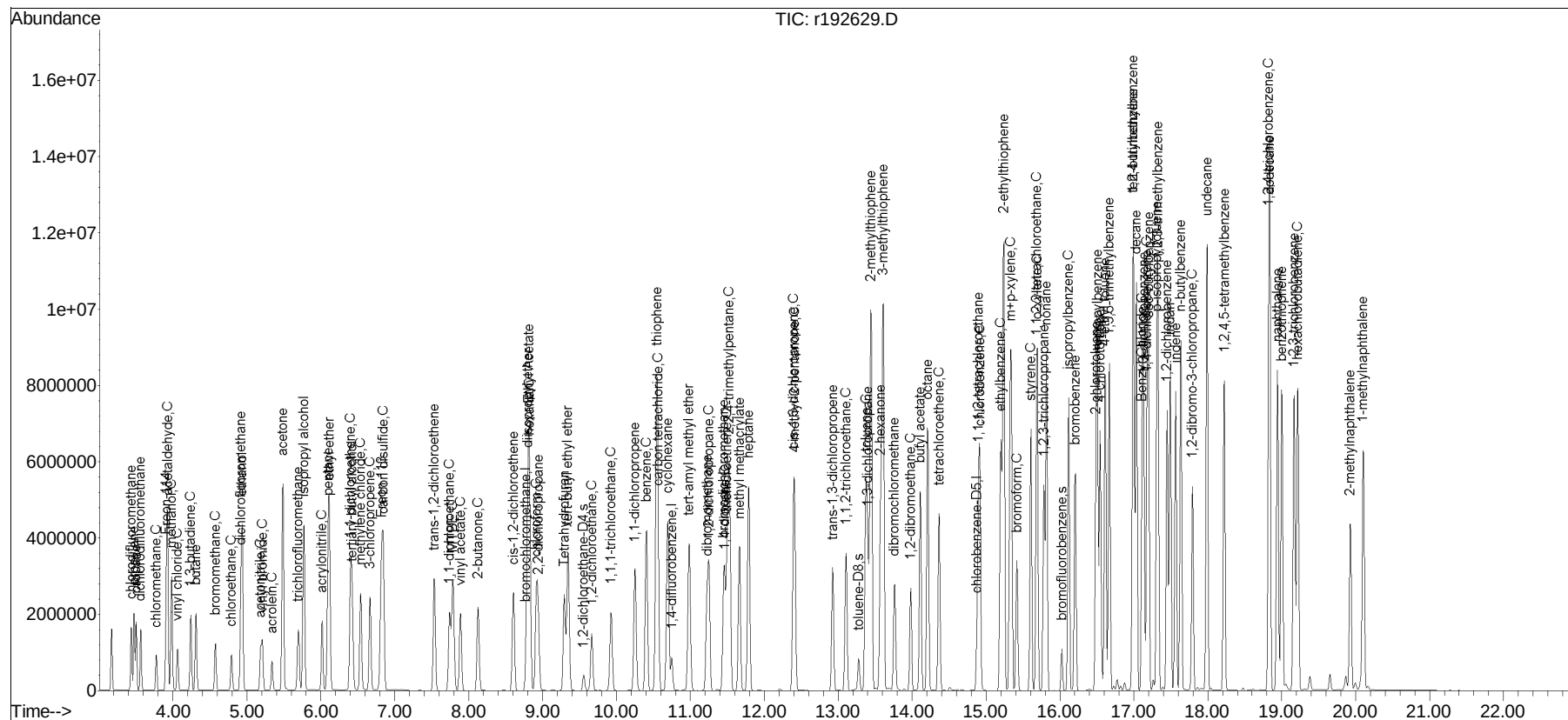
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\AirLab19\2020\02\200224T_I\
 Data File : r192629.D
 Acq On : 25 Feb 2020 7:28 AM
 Operator : AIRLAB19:RY
 Sample : IT015-LLSTD100
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:20:58 2020
 Quant Method : 0:\Forensics\Data\AirLab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 08:56:41 2020
 Response via : Initial Calibration

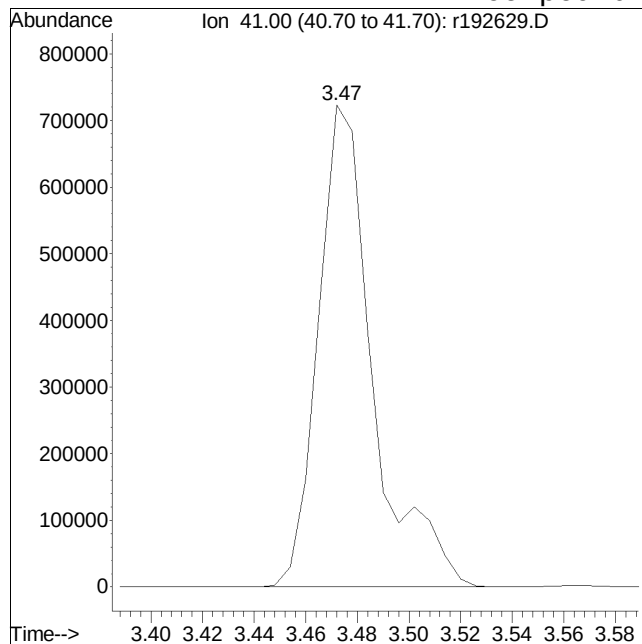
Sub List : Default - All compounds listed 0\02\200224T_I\r192626.D



Manual Integration/Negative Proof Report

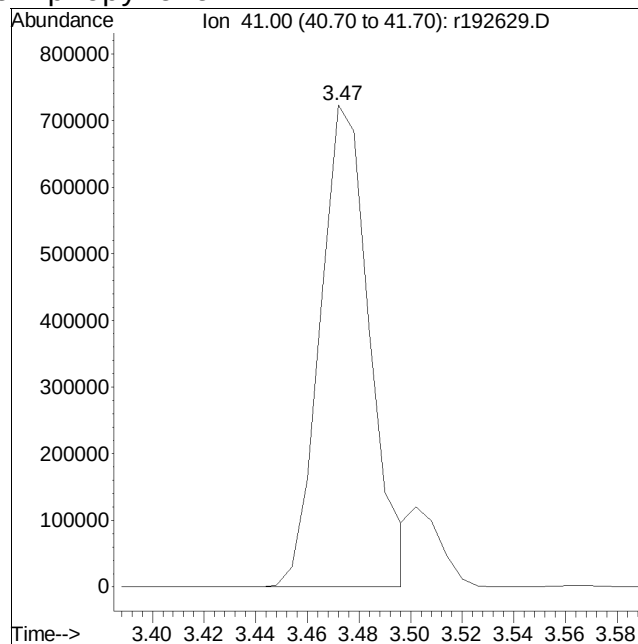
Data Path : 0:\Forensics\Data\Airlab19\QMethod : TFS19_200224.M
Data File : r192629.D Operator : AIRLAB19:RY
Date Inj'd : 2/25/2020 0:7: 8 Instrument :
Sample : IT015-LLSTD100 Quant Date : 2/25/2020 8:57 am

Compound #3: propylene



Original Peak Response = 1064674

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

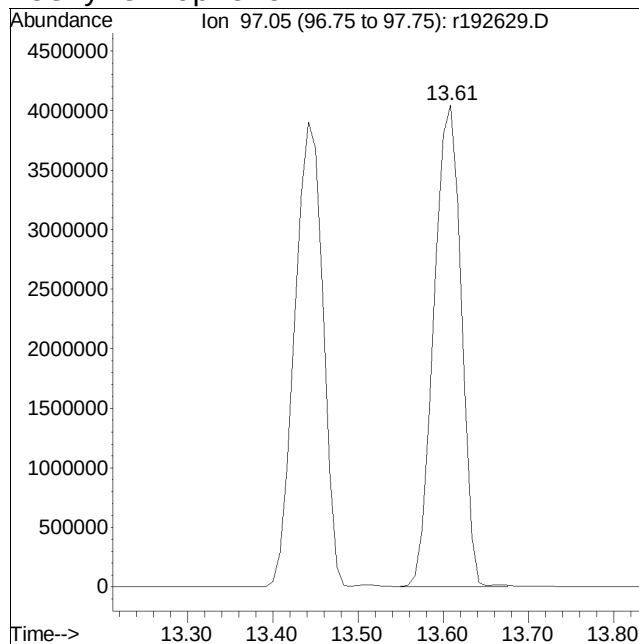
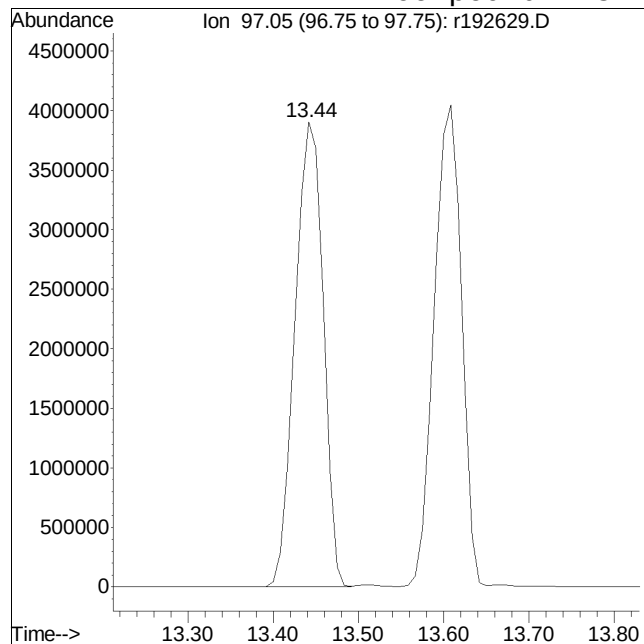


Manual Peak Response = 963788 M6

Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airlab19\QMethod : TFS19_200224.M
 Data File : r192629.D Operator : AIRLAB19:RY
 Date Inj'd : 2/25/2020 0:7: 8 Instrument :
 Sample : IT015-LLSTD100 Quant Date : 2/25/2020 8:57 am

Compound #73: 3-methylthiophene



Original Peak Response = 9014012

Manual Peak Response = 9061478 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192632.D
 Acq On : 25 Feb 2020 10:32 AM
 Operator : AIRLAB19:RY
 Sample : CT015-LLSTD010
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:59:57 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	bromochloromethane	1.000	1.000	0.0	96	0.00
2	chlorodifluoromethane	0.626	0.535	14.5	86	0.00
3	propylene	0.411	0.428	-4.1	103	0.00
4	propane	0.446	0.375	15.9	85	0.00
5	dichlorodifluoromethane	0.560	0.507	9.5	93	0.00
6 C	chloromethane	0.358	0.320	10.6	93	0.00
7	Freon-114	0.832	0.781	6.1	92	0.00
8 C	methanol	0.162	0.167	-3.1	104	0.00
9 C	vinyl chloride	0.445	0.399	10.3	93	0.00
10 C	1,3-butadiene	0.384	0.375	2.3	97	0.00
11	butane	0.629	0.544	13.5	89	0.00
13 C	bromomethane	0.352	0.324	8.0	91	0.00
14 C	chloroethane	0.233	0.219	6.0	95	0.00
15	ethanol	0.292	0.269	7.9	91	0.00
16	dichlorofluoromethane	0.618	0.534	13.6	86	0.00
17 C	vinyl bromide	0.381	0.345	9.4	90	0.00
18 C	acrolein	0.204	0.177	13.2	85	0.00
19	acetone	0.537	0.435	19.0	81	-0.01
20 C	acetonitrile	0.390	0.357	8.5	88	0.00
21	trichlorofluoromethane	0.589	0.637	-8.1	92	0.00
22	isopropyl alcohol	1.020	0.807	20.9	83	-0.01
23 C	acrylonitrile	0.517	0.485	6.2	93	0.00
24	pentane	1.043	0.939	10.0	89	0.00
25	ethyl ether	0.898	0.825	8.1	90	0.00
26 C	1,1-dichloroethene	0.678	0.662	2.4	96	0.00
27	tertiary butyl alcohol	0.935	0.817	12.6	92	-0.02
28 C	methylene chloride	0.657	0.656	0.2	97	0.00
29 C	3-chloropropene	0.791	0.821	-3.8	103	0.00
30 C	carbon disulfide	1.825	1.725	5.5	91	0.00
31	Freon 113	0.957	0.947	1.0	97	0.00
32	trans-1,2-dichloroethene	0.778	0.736	5.4	93	0.00
33 C	1,1-dichloroethane	0.947	0.913	3.6	95	0.00
34 C	MTBE	1.536	1.505	2.0	96	-0.02
35 C	vinyl acetate	1.305	1.256	3.8	92	0.00
36 C	2-butanone	1.204	1.186	1.5	95	-0.03
37	cis-1,2-dichloroethene	0.674	0.662	1.8	97	0.00
38	Ethyl Acetate	0.205	0.218	-6.3	100	-0.02
39 C	chloroform	0.836	0.829	0.8	98	0.00
40	Tetrahydrofuran	0.809	0.774	4.3	94	-0.03

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192632.D
 Acq On : 25 Feb 2020 10:32 AM
 Operator : AIRLAB19:RY
 Sample : CT015-LLSTD010
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:59:57 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	2,2-dichloropropane	0.694	0.613	11.7	86	0.00
42 C	1,2-dichloroethane	0.409	0.379	7.3	92	0.00
43 I	1,4-difluorobenzene	1.000	1.000	0.0	95	0.00
44 C	hexane	0.367	0.373	-1.6	97	0.00
45	diisopropyl ether	0.197	0.187	5.1	91	0.00
46	tert-butyl ethyl ether	0.573	0.526	8.2	88	0.00
47 s	1,2-dichloroethane-D4	0.126	0.120	4.8	89	0.00
48 C	1,1,1-trichloroethane	0.235	0.227	3.4	93	0.00
49	1,1-dichloropropene	0.286	0.274	4.2	93	0.00
50 C	benzene	0.723	0.723	0.0	97	0.00
52 C	carbon tetrachloride	0.194	0.200	-3.1	98	0.00
53	cyclohexane	0.401	0.418	-4.2	100	0.00
54	tert-amyl methyl ether	0.618	0.586	5.2	90	-0.01
55	dibromomethane	0.178	0.166	6.7	91	0.00
56 C	1,2-dichloropropane	0.231	0.235	-1.7	97	0.00
57	bromodichloromethane	0.315	0.319	-1.3	98	0.00
58 C	1,4-dioxane	0.164	0.167	-1.8	100	-0.04
59 C	trichloroethene	0.258	0.262	-1.6	97	0.00
60 C	2,2,4-trimethylpentane	1.157	1.207	-4.3	102	0.00
61	methyl methacrylate	0.299	0.227	24.1	66	0.00
62	heptane	0.447	0.456	-2.0	97	0.00
63 C	cis-1,3-dichloropropene	0.344	0.371	-7.8	101	0.00
64 C	4-methyl-2-pentanone	0.481	0.510	-6.0	98	-0.03
65	trans-1,3-dichloropropene	0.309	0.285	7.8	87	0.00
66 C	1,1,2-trichloroethane	0.252	0.263	-4.4	100	0.00
67 I	chlorobenzene-D5	1.000	1.000	0.0	94	0.00
68 C	toluene	6.089	6.177	-1.4	96	0.00
69 s	toluene-D8	5.903	5.891	0.2	94	0.00
71	1,3-dichloropropane	2.846	2.697	5.2	89	0.00
72	2-hexanone	3.538	3.821	-8.0	101	-0.03
74	dibromochloromethane	2.341	2.461	-5.1	97	0.00
75 C	1,2-dibromoethane	2.800	2.930	-4.6	98	0.00
76	butyl acetate	0.920	0.877	4.7	88	-0.03
77	octane	2.521	2.415	4.2	90	0.00
78 C	tetrachloroethene	2.675	2.784	-4.1	96	0.00
79	1,1,1,2-tetrachloroethane	1.721	1.621	5.8	87	0.00
80 C	chlorobenzene	4.839	5.126	-5.9	99	0.00

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192632.D
 Acq On : 25 Feb 2020 10:32 AM
 Operator : AIRLAB19:RY
 Sample : CT015-LLSTD010
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:59:57 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81 C	ethylbenzene	7.303	7.575	-3.7	95	0.00
83 C	m+p-xylene	5.758	5.982	-3.9	97	0.00
84 C	bromoform	2.584	2.758	-6.7	99	0.00
85 C	styrene	5.572	5.864	-5.2	98	0.00
86 C	1,1,2,2-tetrachloroethane	3.972	4.303	-8.3	98	0.00
87 C	o-xylene	5.649	5.828	-3.2	96	0.00
88	1,2,3-trichloropropane	3.318	3.181	4.1	90	0.00
89	nonane	4.639	4.377	5.6	88	0.00
90 s	bromofluorobenzene	3.813	3.688	3.3	92	0.00
91 C	isopropylbenzene	8.211	8.144	0.8	92	0.00
92	bromobenzene	4.428	4.321	2.4	90	0.00
93	2-chlorotoluene	2.276	2.227	2.2	87	-0.02
94	n-propylbenzene	2.736	2.765	-1.1	91	0.00
95	4-chlorotoluene	2.304	2.296	0.3	92	0.00
96	4-ethyl toluene	9.565	10.120	-5.8	95	0.00
97	1,3,5-trimethylbenzene	7.686	8.209	-6.8	97	-0.02
98	tert-butylbenzene	7.075	7.002	1.0	89	0.00
99	1,2,4-trimethylbenzene	7.114	7.607	-6.9	95	0.00
100	decane	5.798	5.805	-0.1	89	0.00
101 C	Benzyl Chloride	5.729	6.246	-9.0	92	0.00
102	1,3-dichlorobenzene	4.872	5.374	-10.3	97	0.00
103 C	1,4-dichlorobenzene	4.669	5.057	-8.3	94	0.00
104	sec-butylbenzene	10.413	10.549	-1.3	91	0.00
106	p-isopropyltoluene	8.833	8.303	6.0	83	0.00
107	1,2-dichlorobenzene	4.620	5.095	-10.3	96	0.00
108	n-butylbenzene	7.618	7.877	-3.4	90	0.00
111 C	1,2-dibromo-3-chloropropane	1.776	1.723	3.0	85	0.00
112	undecane	6.295	6.516	-3.5	87	0.00
114	dodecane	6.117	6.450	-5.4	78	0.00
115 C	1,2,4-trichlorobenzene	4.060	4.981	-22.7	94	0.00
116	naphthalene	10.393	10.404	-0.1	84	0.00
117	1,2,3-trichlorobenzene	4.250	4.669	-9.9	84	0.00
119 C	hexachlorobutadiene	3.529	3.927	-11.3	88	0.00

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192632.D
 Acq On : 25 Feb 2020 10:32 AM
 Operator : AIRLAB19:RY
 Sample : CT015-LLSTD010
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:59:57 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	8.78	49	299243	10.000	ppbV	0.00
Standard Area = 313159			Recovery =		95.56%	
43) 1,4-difluorobenzene	10.75	114	848827	10.000	ppbV	0.00
Standard Area = 892162			Recovery =		95.14%	
67) chlorobenzene-D5	14.88	54	109184	10.000	ppbV	0.00
Standard Area = 115842			Recovery =		94.25%	
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	9.55	65	101802	9.519	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		95.19%	
69) toluene-D8	13.28	98	643252	9.981	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		99.81%	
90) bromofluorobenzene	16.02	95	402624	9.671	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		96.71%	
Target Compounds						Qvalue
2) chlorodifluoromethane	3.44	51	160220	8.557	ppbV	97
3) propylene	3.48	41	128203M6	10.432	ppbV	
4) propane	3.50	29	112164	8.408	ppbV #	91
5) dichlorodifluoromethane	3.57	85	151616	9.041	ppbV	100
6) chloromethane	3.78	50	95707	8.923	ppbV	100
7) Freon-114	3.92	85	233732	9.392	ppbV	98
8) methanol	3.98	31	250054	51.542	ppbV #	1
9) vinyl chloride	4.07	62	119453	8.973	ppbV	99
10) 1,3-butadiene	4.25	54	112123	9.767	ppbV	96
11) butane	4.31	43	162665	8.646	ppbV	95
13) bromomethane	4.58	94	96973	9.207	ppbV	100
14) chloroethane	4.79	64	65658	9.407	ppbV	94
15) ethanol	4.93	31	402905	46.081	ppbV	99
16) dichlorofluoromethane	4.92	67	159679	8.639	ppbV	97
17) vinyl bromide	5.21	106	103314	9.071	ppbV	94
18) acrolein	5.34	56	53048	8.679	ppbV #	48
19) acetone	5.48	43	651144	40.522	ppbV #	99
20) acetonitrile	5.19	41	106739	9.150	ppbV #	58
21) trichlorofluoromethane	5.70	101	190501	10.814	ppbV	98
22) isopropyl alcohol	5.76	45	603547	19.770	ppbV	100
23) acrylonitrile	6.02	53	145282	9.392	ppbV	98
24) pentane	6.10	43	281012	9.006	ppbV	99
25) ethyl ether	6.12	31	247022	9.197	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192632.D
 Acq On : 25 Feb 2020 10:32 AM
 Operator : AIRLAB19:RY
 Sample : CT015-LLSTD010
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:59:57 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) 1,1-dichloroethene	6.40	61	198033	9.754	ppbV	94
27) tertiary butyl alcohol	6.43	59	244580	8.739	ppbV #	91
28) methylene chloride	6.54	49	196205	9.987	ppbV	99
29) 3-chloropropene	6.67	41	245743	10.380	ppbV	97
30) carbon disulfide	6.85	76	516140	9.452	ppbV #	81
31) Freon 113	6.83	101	283441	9.897	ppbV	99
32) trans-1,2-dichloroethene	7.54	61	220296	9.465	ppbV	99
33) 1,1-dichloroethane	7.74	63	273081	9.632	ppbV	99
34) MTBE	7.79	73	450457	9.800	ppbV	99
35) vinyl acetate	7.89	43	375759	9.622	ppbV	98
36) 2-butanone	8.13	43	354860	9.852	ppbV	97
37) cis-1,2-dichloroethene	8.61	61	198070	9.819	ppbV	99
38) Ethyl Acetate	8.82	61	65154	10.632	ppbV	88
39) chloroform	8.91	83	248156	9.915	ppbV	98
40) Tetrahydrofuran	9.31	42	231750	9.575	ppbV	93
41) 2,2-dichloropropane	8.94	77	183572	8.842	ppbV	97
42) 1,2-dichloroethane	9.67	62	113459	9.278	ppbV	96
44) hexane	8.82	57	316422	10.170	ppbV	80
45) diisopropyl ether	8.80	87	159139	9.537	ppbV	94
46) tert-butyl ethyl ether	9.35	59	446325	9.171	ppbV	98
48) 1,1,1-trichloroethane	9.93	97	192487	9.636	ppbV	96
49) 1,1-dichloropropene	10.25	75	232673	9.586	ppbV	95
50) benzene	10.41	78	613642	9.997	ppbV	100
52) carbon tetrachloride	10.56	117	169669	10.310	ppbV #	90
53) cyclohexane	10.69	56	354574	10.419	ppbV	99
54) tert-amyl methyl ether	10.99	73	497070	9.471	ppbV	98
55) dibromomethane	11.22	93	141240	9.336	ppbV	97
56) 1,2-dichloropropane	11.25	63	199269	10.151	ppbV	99
57) bromodichloromethane	11.45	83	271180	10.132	ppbV	99
58) 1,4-dioxane	11.46	88	141566	10.188	ppbV #	79
59) trichloroethene	11.49	130	222103	10.153	ppbV	98
60) 2,2,4-trimethylpentane	11.52	57	1024677	10.435	ppbV	98
61) methyl methacrylate	11.66	41	192636	7.598	ppbV	98
62) heptane	11.79	43	387005	10.194	ppbV	98
63) cis-1,3-dichloropropene	12.39	75	314575	10.771	ppbV	98
64) 4-methyl-2-pentanone	12.41	43	433285	10.609	ppbV	94
65) trans-1,3-dichloropropene	12.92	75	242198	9.220	ppbV	95
66) 1,1,2-trichloroethane	13.10	97	222971	10.431	ppbV	98
68) toluene	13.37	91	674393	10.144	ppbV	100
71) 1,3-dichloropropane	13.38	76	294501	9.478	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192632.D
 Acq On : 25 Feb 2020 10:32 AM
 Operator : AIRLAB19:RY
 Sample : CT015-LLSTD010
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:59:57 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
72) 2-hexanone	13.57	43	417197	10.800	ppbV	#	81
74) dibromochloromethane	13.76	129	268745	10.516	ppbV		97
75) 1,2-dibromoethane	13.98	107	319880	10.463	ppbV		97
76) butyl acetate	14.11	73	95718	9.533	ppbV		88
77) octane	14.21	85	263669	9.581	ppbV		98
78) tetrachloroethene	14.36	166	303918	10.404	ppbV		98
79) 1,1,1,2-tetrachloroethane	14.89	131	176971	9.416	ppbV		96
80) chlorobenzene	14.91	112	559644	10.592	ppbV		98
81) ethylbenzene	15.19	91	827026	10.371	ppbV		99
83) m+p-xylene	15.32	91	1306182	20.777	ppbV		99
84) bromoform	15.41	173	301091	10.670	ppbV		97
85) styrene	15.60	104	640293	10.524	ppbV		99
86) 1,1,2,2-tetrachloroethane	15.68	83	469854	10.833	ppbV		98
87) o-xylene	15.68	91	636367	10.317	ppbV		96
88) 1,2,3-trichloropropane	15.78	75	347295	9.587	ppbV		97
89) nonane	15.81	43	477906	9.436	ppbV		95
91) isopropylbenzene	16.11	105	889166	9.918	ppbV		96
92) bromobenzene	16.20	77	471821	9.759	ppbV		96
93) 2-chlorotoluene	16.48	126	243144	9.783	ppbV	#	39
94) n-propylbenzene	16.50	120	301909	10.105	ppbV		74
95) 4-chlorotoluene	16.54	126	250666	9.964	ppbV		97
96) 4-ethyl toluene	16.61	105	1104966	10.580	ppbV		99
97) 1,3,5-trimethylbenzene	16.66	105	896314	10.680	ppbV		95
98) tert-butylbenzene	16.98	119	764512	9.896	ppbV		99
99) 1,2,4-trimethylbenzene	16.98	105	830529	10.692	ppbV		94
100) decane	17.02	57	633814	10.012	ppbV		96
101) Benzyl Chloride	17.11	91	681921	10.901	ppbV		98
102) 1,3-dichlorobenzene	17.13	146	586728	11.029	ppbV		100
103) 1,4-dichlorobenzene	17.18	146	552133	10.831	ppbV		98
104) sec-butylbenzene	17.19	105	1151791	10.131	ppbV		99
106) p-isopropyltoluene	17.30	119	906581	9.400	ppbV		96
107) 1,2-dichlorobenzene	17.44	146	556254	11.027	ppbV		99
108) n-butylbenzene	17.63	91	860019	10.339	ppbV		99
111) 1,2-dibromo-3-chloropr...	17.79	75	188171	9.705	ppbV		89
112) undecane	17.98	57	711452	10.351	ppbV		96
114) dodecane	18.83	57	704231	10.544	ppbV		93
115) 1,2,4-trichlorobenzene	18.82	180	543832	12.267	ppbV		96
116) naphthalene	18.94	128	1135908	10.010	ppbV		97
117) 1,2,3-trichlorobenzene	19.17	180	509754	10.985	ppbV		94
119) hexachlorobutadiene	19.22	225	428804	11.130	ppbV		98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\
 Data File : r192632.D
 Acq On : 25 Feb 2020 10:32 AM
 Operator : AIRLAB19:RY
 Sample : CT015-LLSTD010
 Misc : WG1344146
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Feb 25 10:59:57 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\r192626.D
 Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

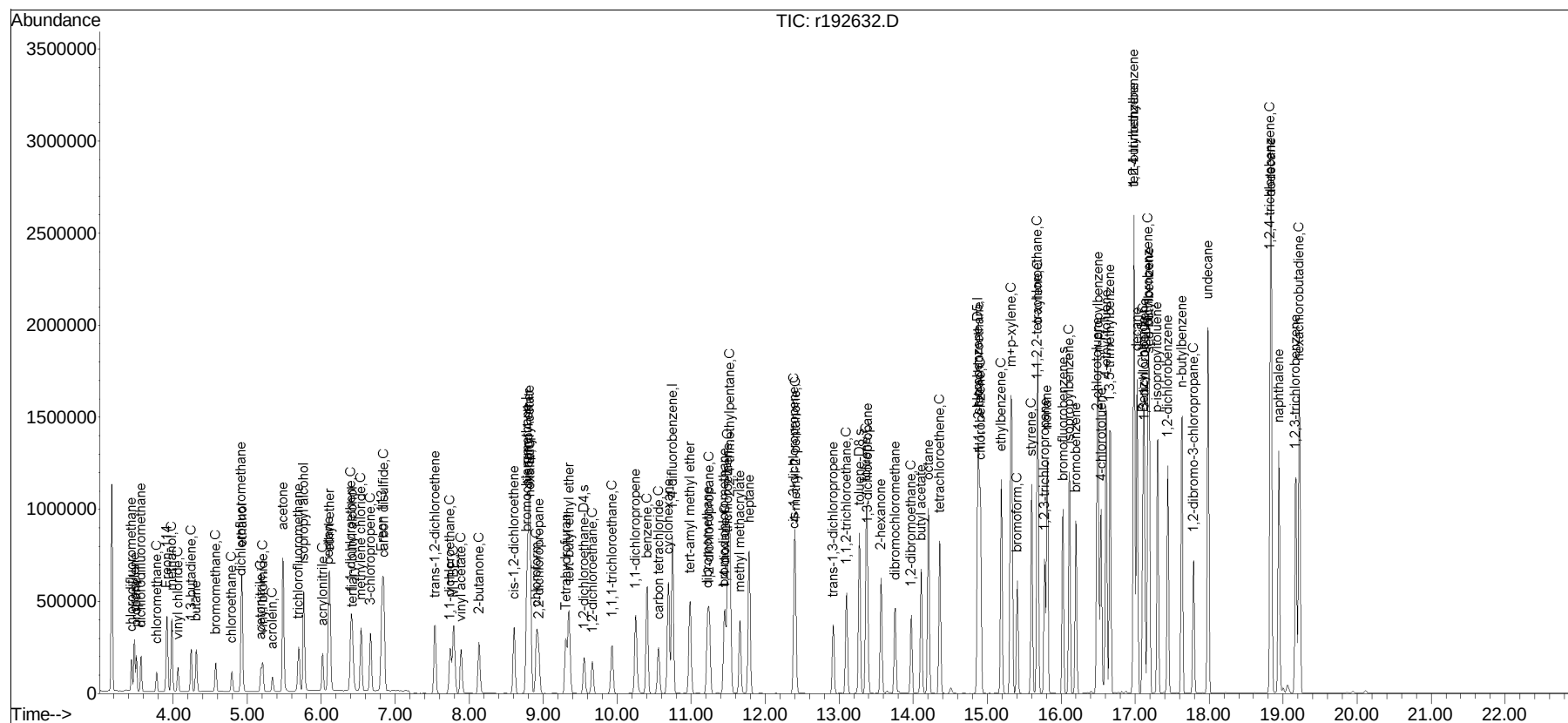
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

```
Data Path   : 0:\Forensics\Data\AirLab19\2020\02\200224T_I\
Data File  : r192632.D
Acq On     : 25 Feb 2020   10:32 AM
Operator   : AIRLAB19:RY
Sample     : CT015-LLSTD010
Misc       : WG1344146
ALS Vial   : 0      Sample Multiplier: 1
```

Quant Time: Feb 25 10:59:57 2020
Quant Method : 0:\Forensics\Data\Airlab19\2020\02\200224T_I\TFS19_200224.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Tue Feb 25 10:21:40 2020
Response via : Initial Calibration

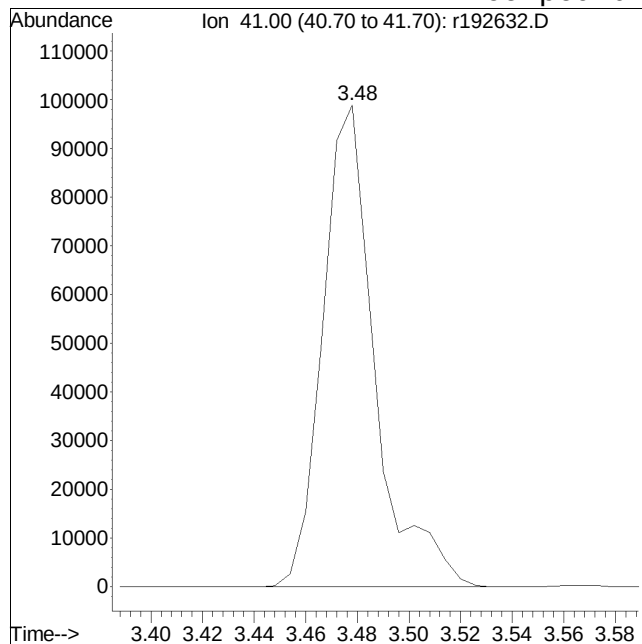
Sub List : Default-ICV-AP2 - All compounds listed224T_I\r192626.D



Manual Integration/Negative Proof Report

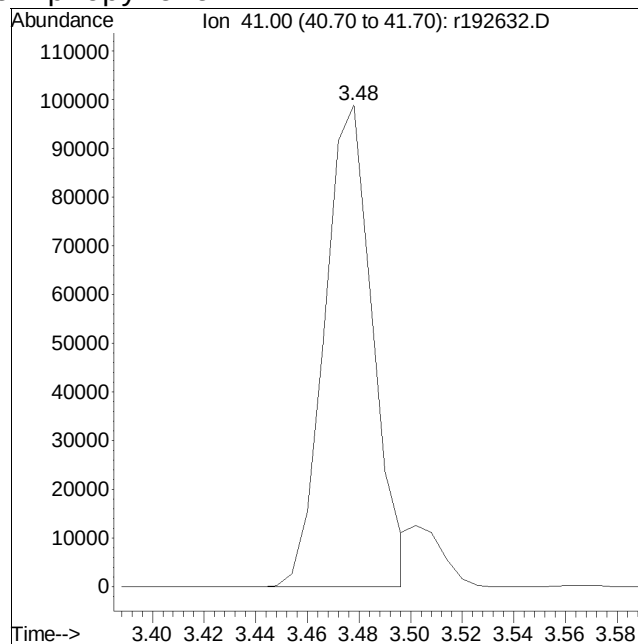
Data Path : 0:\Forensics\Data\Airlab19\QMethod : TFS19_200224.M
Data File : r192632.D Operator : AIRLAB19:RY
Date Inj'd : 2/25/2020 0:0: 2 Instrument :
Sample : CT015-LLSTD010 Quant Date : 2/25/2020 10:59 am

Compound #3: propylene



Original Peak Response = 139532

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 128203 M6

Response Factor Report

Method Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Method File : TFS3_200312.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Thu Mar 12 17:27:58 2020
 Response Via : Initial Calibration

Calibration Files

0.2 =r38592.D 0.5 =r38593.D 1.0 =r38594.D 5.0 =r38595.D 10 =r38596.D 20 =r38597.D 50 =r38598.D
 100 =r38599.D

Compound		0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
-----ISTD-----											
1) I	bromochloromethane										
2)	chlorodifluoromethane	0.888	0.848	0.845	0.777	0.753	0.755	0.647	0.582	0.7618	13.70
3)	propylene		0.525	0.516	0.473	0.445	0.444	0.401	0.371	0.4536	12.41
4)	propane		0.720	0.695	0.615	0.598	0.602	0.520	0.464	0.6021	14.94
5)	dichlorodifluoromethane	1.087	1.070	1.064	0.949	0.911	0.886	0.677	0.587	0.9039	20.56
6) C	chloromethane	0.476	0.479	0.470	0.423	0.410	0.411	0.347	0.308	0.4153	14.95
7)	Freon-114	1.364	1.336	1.313	1.169	1.110	1.075	0.802	0.631	1.0997	23.94
8) C	methanol			0.256	0.214	0.205	0.202	0.173	0.153	0.2005	17.72
9) C	vinyl chloride	0.547	0.536	0.526	0.482	0.468	0.485	0.432	0.400	0.4844	10.58
10) C	1,3-butadiene	0.545	0.542	0.537	0.494	0.479	0.492	0.426	0.372	0.4857	12.58
11)	butane	0.856	0.825	0.803	0.724	0.701	0.701	0.579	0.516	0.7132	16.64
12) C	acetaldehyde		0.281	0.266	0.253	0.237	0.199	0.150	0.124	0.2159	27.85
13) C	bromomethane	0.444	0.456	0.447	0.401	0.393	0.404	0.351	0.312	0.4011	12.43
14) C	chloroethane	0.279	0.274	0.268	0.240	0.235	0.244	0.220	0.210	0.2464	10.20
15)	ethanol			0.481	0.434	0.409	0.470	0.299	0.245	0.3895	24.70
16)	dichlorofluoromethane	0.853	0.854	0.839	0.764	0.740	0.770	0.607	0.542	0.7461	15.51
17) C	vinyl bromide	0.513	0.520	0.507	0.467	0.458	0.525	0.375	0.321	0.4606	16.30
18) C	acrolein		0.283	0.273	0.248	0.247	0.275	0.231	0.214	0.2531	10.03
19)	acetone	0.781	0.741	0.717	0.700	0.669	0.768	0.444	0.370	0.6487	23.87
20) C	acetonitrile	0.493	0.451	0.443	0.405	0.395	0.501	0.335	0.310	0.4165	16.57
21)	trichlorofluoromethane	0.807	0.791	0.790	0.715	0.691	0.866	0.534	0.448	0.7053	20.54
22)	isopropyl alcohol	0.992	0.914	0.869	0.865	0.832	1.001	0.627	0.537	0.8294	19.99
23) C	acrylonitrile	0.488	0.473	0.480	0.450	0.444	0.513	0.408	0.368	0.4528	10.34
24)	pentane	0.974	0.948	0.925	0.843	1.012	1.063	1.082	0.768	0.9516	11.22
25)	ethyl ether	1.007	0.992	0.988	0.978	0.988	1.162	1.209	0.785	1.0136	12.67
26) C	1,1-dichloroethene	0.694	0.713	0.697	0.631	0.615	0.732	0.652	0.576	0.6638	8.13
27)	tertiary butyl alcohol		1.045	1.026	0.938	1.019	1.048	0.979	0.905	0.9940	5.57
28) C	methylene chloride		0.641	0.632	0.595	0.661	0.680	0.617	0.546	0.6245	7.10
29) C	3-chloropropene	0.911	0.895	0.878	0.816	0.808	0.818	0.745	0.681	0.8191	9.50
30) C	carbon disulfide	2.016	2.024	2.020	1.869	1.838	1.839	1.617	1.378	1.8250	12.42
31)	Freon 113	1.089	1.082	1.063	0.972	0.959	0.969	0.845	0.719	0.9623	13.26

Response Factor Report

Method Path : O:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Method File : TFS3_200312.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Thu Mar 12 17:27:58 2020
 Response Via : Initial Calibration

Calibration Files

0.2 =r38592.D 0.5 =r38593.D 1.0 =r38594.D 5.0 =r38595.D 10 =r38596.D 20 =r38597.D 50 =r38598.D
 100 =r38599.D

Compound		0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
32)	trans-1,2-dichloroethene	0.839	0.845	0.837	0.784	0.777	0.786	0.710	0.643	0.7776	9.01
33) C	1,1-dichloroethane	1.010	1.020	0.991	0.910	0.896	0.909	0.829	0.761	0.9158	9.89
34) C	MTBE	1.763	1.763	1.752	1.632	1.613	1.608	1.393	1.160	1.5855	13.31
35) C	vinyl acetate			1.431	1.375	1.370	1.399	1.261	1.121	1.3260	8.72
36) C	2-butanone		1.401	1.375	1.262	1.231	1.243	1.113	0.985	1.2301	11.74
37)	cis-1,2-dichloroethene	0.741	0.730	0.723	0.667	0.660	0.679	0.612	0.556	0.6710	9.43
38)	Ethyl Acetate		0.217	0.225	0.201	0.199	0.208	0.196	0.191	0.2053	5.79
39) C	chloroform	1.077	1.089	1.077	0.989	0.976	1.002	0.857	0.701	0.9710	13.67
40)	Tetrahydrofuran	0.846	0.834	0.824	0.769	0.760	0.773	0.708	0.642	0.7696	8.94
41)	2,2-dichloropropane	0.933	0.941	0.923	0.874	0.857	0.839	0.689	0.533	0.8237	17.29
42) C	1,2-dichloroethane	0.593	0.619	0.599	0.553	0.541	0.544	0.459	0.379	0.5359	14.96
43) I	1,4-difluorobenzene	-----ISTD-----									
44) C	hexane	0.421	0.405	0.399	0.377	0.368	0.377	0.336	0.285	0.3709	11.68
45)	diisopropyl ether	0.239	0.230	0.226	0.213	0.209	0.216	0.196	0.164	0.2117	10.99
46)	tert-butyl ethyl ether	0.661	0.656	0.653	0.622	0.608	0.621	0.552	0.481	0.6068	10.18
47) s	1,2-dichloroethane-D4	0.181	0.180	0.180	0.179	0.176	0.167	0.152	0.129	0.1681	11.17
48) C	1,1,1-trichloroethane	0.323	0.321	0.321	0.294	0.286	0.287	0.239	0.192	0.2829	16.23
49)	1,1-dichloropropene	0.341	0.324	0.328	0.312	0.304	0.305	0.264	0.219	0.2996	13.29
50) C	benzene	0.837	0.796	0.790	0.722	0.710	0.735	0.649	0.554	0.7241	12.51
51)	thiophene	1.698	1.684	1.679	1.565	1.528	1.542	1.244	0.919	1.4824	18.24
52) C	carbon tetrachloride	0.299	0.302	0.304	0.280	0.276	0.273	0.213	0.153	0.2627	20.16
53)	cyclohexane	0.432	0.427	0.426	0.400	0.393	0.410	0.379	0.347	0.4018	7.14
54)	tert-amyl methyl ether	0.700	0.707	0.694	0.657	0.649	0.645	0.550	0.454	0.6320	13.87
55)	dibromomethane	0.221	0.210	0.202	0.189	0.184	0.181	0.157	0.134	0.1847	15.38
56) C	1,2-dichloropropane	0.247	0.243	0.236	0.219	0.215	0.221	0.198	0.176	0.2194	10.90
57)	bromodichloromethane	0.430	0.426	0.421	0.400	0.394	0.399	0.344	0.277	0.3864	13.41
58) C	1,4-dioxane	0.175	0.178	0.174	0.166	0.164	0.170	0.163	0.139	0.1661	7.24
59) C	trichloroethene	0.295	0.295	0.292	0.270	0.267	0.273	0.247	0.221	0.2698	9.63
60) C	2,2,4-trimethylpentane	1.329	1.281	1.286	1.211	1.182	1.186	1.061	0.907	1.1805	11.71
61)	methyl methacrylate		0.341	0.335	0.374	0.371	0.326	0.290	0.243	0.3256	14.18
62)	heptane	0.525	0.514	0.508	0.483	0.468	0.471	0.406	0.337	0.4639	13.66

Response Factor Report

Method Path : O:\Forensics\Data\Airpiano3\2020\03\200312T_I\
Method File : TFS3_200312.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Thu Mar 12 17:27:58 2020
Response Via : Initial Calibration

Calibration Files

0.2 =r38592.D 0.5 =r38593.D 1.0 =r38594.D 5.0 =r38595.D 10 =r38596.D 20 =r38597.D 50 =r38598.D
100 =r38599.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
63) C	cis-1,3-dichloropropene	0.384	0.385	0.384	0.356	0.356	0.361	0.317	0.265	0.3511	11.80
64) C	4-methyl-2-pentanone		0.578	0.579	0.555	0.542	0.544	0.470	0.393	0.5229	13.01
65)	trans-1,3-dichloropropene	0.350	0.350	0.353	0.338	0.336	0.342	0.296	0.246	0.3265	11.35
66) C	1,1,2-trichloroethane	0.265	0.265	0.265	0.240	0.236	0.243	0.217	0.192	0.2403	10.87
67) I	chlorobenzene-D5	-----ISTD-----									
68) C	toluene	5.739	5.464	5.507	4.986	4.888	5.088	4.600	4.327	5.0748	9.44
69) s	toluene-D8	4.773	4.761	4.751	4.774	4.737	4.659	4.701	4.988	4.7680	2.04
70)	2-methylthiophene	1.725	1.731	1.717	1.555	1.487	1.429	1.088	0.815	1.4435	23.01
71)	1,3-dichloropropane	2.786	2.746	2.737	2.576	2.542	2.556	2.217	1.882	2.5051	12.36
72)	2-hexanone	3.323	3.368	3.419	3.281	3.207	3.087	2.331	1.812	2.9786	19.66
73)	3-methylthiophene	1.755	1.755	1.756	1.596	1.521	1.455	1.065	0.777	1.4599	24.64
74)	dibromochloromethane	2.297	2.290	2.305	2.230	2.252	2.287	2.022	1.836	2.1898	7.78
75) C	1,2-dibromoethane	2.562	2.586	2.590	2.397	2.390	2.519	2.240	2.045	2.4163	7.99
76)	butyl acetate		0.776	0.796	0.776	0.789	0.817	0.748	0.679	0.7689	5.85
77)	octane	2.245	2.269	2.236	2.173	2.158	2.292	2.123	1.916	2.1767	5.52
78) C	tetrachloroethene	2.428	2.443	2.454	2.229	2.193	2.323	2.024	1.746	2.2300	11.00
79)	1,1,1,2-tetrachloroethane	1.904	1.809	1.792	1.684	1.665	1.671	1.453	1.258	1.6545	12.60
80) C	chlorobenzene	4.413	4.353	4.336	3.997	3.975	4.275	3.758	3.247	4.0444	9.77
81) C	ethylbenzene	6.599	6.599	6.591	6.027	5.941	6.192	5.480	4.924	6.0440	9.93
82)	2-ethylthiophene	1.852	1.867	1.871	1.694	1.609	1.509	1.077	0.780	1.5323	26.28
83) C	m+p-xylene	5.593	5.503	5.510	5.035	4.964	5.125	4.297	3.556	4.9478	14.17
84) C	bromoforn	1.962	2.098	2.106	2.123	2.184	2.259	1.966	1.634	2.0414	9.43
85) C	styrene	4.497	4.551	4.593	4.421	4.457	4.720	4.254	3.833	4.4157	6.15
86) C	1,1,2,2-tetrachloroethane	3.769	3.877	3.849	3.566	3.539	3.706	2.991	2.330	3.4534	15.46
87) C	o-xylene	5.513	5.519	5.507	5.052	4.943	5.031	4.052	3.169	4.8483	17.20
88)	1,2,3-trichloropropane	3.127	3.108	3.119	2.994	2.975	2.987	2.634	2.300	2.9055	10.04
89)	nonane	4.566	4.572	4.541	4.290	4.194	4.196	3.516	2.934	4.1011	14.25
90) s	bromofluorobenzene	2.995	3.011	3.013	3.128	3.257	2.963	3.194	3.626	3.1483	6.97
91) C	isopropylbenzene	7.755	7.655	7.764	7.262	7.134	7.132	6.061	5.149	6.9890	13.24
92)	bromobenzene	3.934	4.018	4.020	3.904	3.933	3.975	3.404	2.856	3.7555	11.05
93)	2-chlorotoluene	2.070	2.038	2.045	1.973	1.964	2.013	1.876	1.734	1.9642	5.65

Response Factor Report

Method Path : O:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Method File : TFS3_200312.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Thu Mar 12 17:27:58 2020
 Response Via : Initial Calibration

Calibration Files

0.2 =r38592.D 0.5 =r38593.D 1.0 =r38594.D 5.0 =r38595.D 10 =r38596.D 20 =r38597.D 50 =r38598.D
 100 =r38599.D

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
94)	n-propylbenzene	2.279	2.338	2.336	2.262	2.294	2.414	2.240	1.925	2.2610	6.46
95)	4-chlorotoluene	1.927	1.932	1.980	1.895	1.913	1.962	1.858	1.764	1.9042	3.57
96)	4-ethyl toluene	8.447	8.520	8.597	8.276	8.118	8.142	6.762	5.587	7.8060	13.69
97)	1,3,5-trimethylbenzene	7.007	7.125	7.091	6.562	6.446	6.588	5.469	4.504	6.3491	14.43
98)	tert-butylbenzene	6.736	6.910	7.008	6.641	6.608	6.315	4.756	3.689	6.0829	19.74
99)	1,2,4-trimethylbenzene	6.655	6.931	7.032	6.403	6.296	6.022	4.482	3.439	5.9074	21.61
100)	decane	4.940	5.048	5.154	5.023	4.941	4.905	4.128	3.486	4.7030	12.43
101) C	Benzyl Chloride	3.286	3.812	4.151	4.548	4.867	4.883	4.119	3.388	4.1315	14.89
102)	1,3-dichlorobenzene	3.847	3.980	4.024	3.728	3.724	3.935	3.216	2.628	3.6353	13.20
103) C	1,4-dichlorobenzene	3.402	3.517	3.644	3.652	3.738	3.697	3.215	2.793	3.4571	9.25
104)	sec-butylbenzene	0.953	0.981	1.000	0.963	0.945	0.916	0.743	0.611	0.8890	15.49
105)	1,2,3-trimethylbenzene	6.010	6.155	6.270	6.729	6.582	5.423	4.090	3.158	5.5520	23.01
106)	p-isopropyltoluene	7.956	8.223	8.289	8.194	8.188	7.632	5.719	4.344	7.3183	20.13
107)	1,2-dichlorobenzene	3.562	3.696	3.735	3.524	3.543	3.649	3.195	2.822	3.4658	8.90
108)	n-butylbenzene	6.158	6.444	6.729	6.740	6.657	6.362	5.366	4.570	6.1281	12.61
109)	indan	5.628	5.890	6.005	6.647	6.680	6.074	5.186	4.406	5.8144	12.95
110)	indene	3.927	4.328	4.529	5.263	5.344	4.928	4.361	3.810	4.5613	12.57
111) C	1,2-dibromo-3-chloropropane	1.413	1.450	1.611	1.727	1.746	1.545	1.286	1.097	1.4843	14.91
112)	undecane	5.162	5.405	5.559	5.672	5.595	5.298	4.420	3.659	5.0962	13.79
113)	1,2,4,5-tetramethylbenzene	5.285	5.484	5.585	6.474	7.060	6.038	5.169	4.387	5.6853	14.56
114)	dodecane	4.553	5.044	5.329	6.159	6.086	5.118	4.429	3.699	5.0520	16.46
115) C	1,2,4-trichlorobenzene	1.385	1.742	2.159	2.347	2.574	2.409	2.425	2.248	2.1609	18.52
116)	naphthalene	5.197	5.488	6.234	7.316	7.786	6.602	6.569	6.076	6.4086	13.50
117)	1,2,3-trichlorobenzene	1.921	2.141	2.423	2.858	3.077	2.597	2.545	2.301	2.4830	15.08
118)	benzothiophene	2.323	2.883	3.863	3.602	4.121	4.629	5.005	4.999	3.9279	24.75
119) C	hexachlorobutadiene	3.029	3.112	3.118	2.897	2.832	2.561	2.145	1.743	2.6796	18.66
120)	2-methylnaphthalene			0.670	0.851	1.061	1.160	1.404	1.579	1.1208	30.16#
121)	1-methylnaphthalene			2.328	2.406	2.669	2.710	2.911	3.001	2.6707	9.99

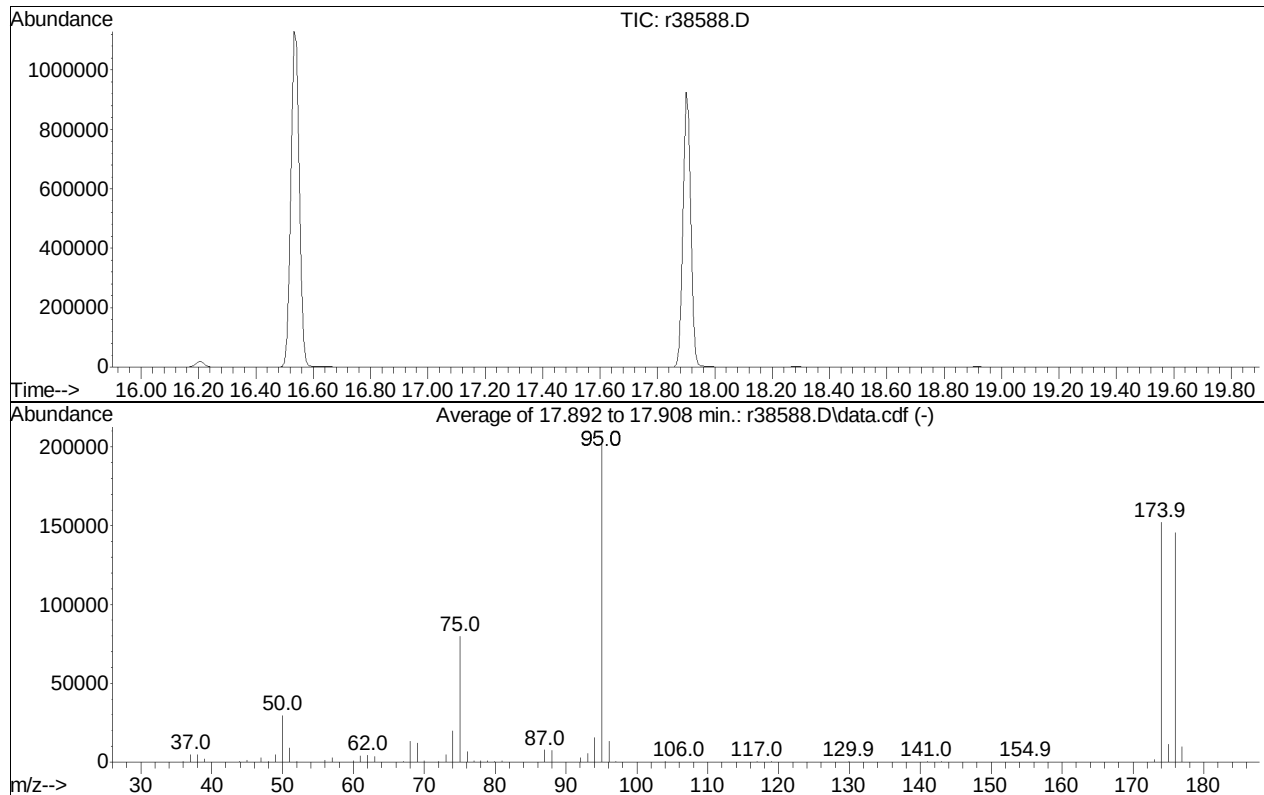
(#) = Out of Range

BFB

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38588.D
 Acq On : 12 Mar 2020 9:50 AM
 Operator : AIRPIANO3:RY
 Sample : WG1350408-1,3,250,250
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Thu Mar 12 17:27:58 2020



Spectrum Information: Average of 17.892 to 17.908 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	14.5	29472	PASS
75	95	30	66	39.3	79731	PASS
95	95	100	100	100.0	202734	PASS
96	95	5	9	6.6	13477	PASS
173	174	0.00	2	1.1	1647	PASS
174	95	50	120	75.2	152363	PASS
175	174	4	9	7.4	11319	PASS
176	174	93	101	95.4	145430	PASS
177	176	5	9	6.8	9839	PASS

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38592.D
 Acq On : 12 Mar 2020 12:25 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.2
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:16:38 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:12:16 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.54	49	349104	10.000	ppbV	0.00
Standard Area = 370599			Recovery =	94.20%		
43) 1,4-difluorobenzene	11.81	114	958347	10.000	ppbV	0.00
Standard Area = 1030530			Recovery =	93.00%		
67) chlorobenzene-D5	16.53	54	149124	10.000	ppbV	0.00
Standard Area = 160625			Recovery =	92.84%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.43	65	173919	10.297	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	102.97%		
69) toluene-D8	14.64	98	711753	10.077	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.77%		
90) bromofluorobenzene	17.90	95	446624	9.195	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	91.95%		
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.86	51	6201	0.236	ppbV #	95
3) propylene	3.90	41	3677M4	0.237	ppbV	
4) propane	3.92	29	5314	0.255	ppbV	96
5) dichlorodifluoromethane	3.98	85	7593	0.239	ppbV	99
6) chloromethane	4.16	50	3320	0.232	ppbV	97
7) Freon-114	4.28	85	9524	0.246	ppbV	97
8) methanol	4.36	31	9994	1.396	ppbV	86
9) vinyl chloride	4.41	62	3817	0.234	ppbV	97
10) 1,3-butadiene	4.58	54	3807	0.228	ppbV	100
11) butane	4.64	43	5980	0.244	ppbV	98
12) acetaldehyde	4.30	29	10733	1.295	ppbV	96
13) bromomethane	4.89	94	3101	0.226	ppbV	94
14) chloroethane	5.12	64	1945	0.237	ppbV	96
15) ethanol	5.30	31	23643	1.656	ppbV	98
16) dichlorofluoromethane	5.25	67	5953	0.230	ppbV	97
17) vinyl bromide	5.54	106	3579	0.224	ppbV	94
18) acrolein	5.70	56	2089	0.242	ppbV #	87
19) acetone	5.87	43	27256	1.167	ppbV #	98
20) acetonitrile	5.54	41	3442	0.250	ppbV	96
21) trichlorofluoromethane	6.06	101	5637	0.234	ppbV	100
22) isopropyl alcohol	6.20	45	17310	0.596	ppbV	99
23) acrylonitrile	6.43	53	3408	0.220	ppbV	93
24) pentane	6.51	43	6800	0.193	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38592.D
 Acq On : 12 Mar 2020 12:25 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.2
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:16:38 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:12:16 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.56	31	7031	0.204	ppbV	98
26) 1,1-dichloroethene	6.83	61	4848	0.226	ppbV	96
27) tertiary butyl alcohol	6.94	59	7577	0.213	ppbV	97
28) methylene chloride	6.99	49	4530	0.196	ppbV	95
29) 3-chloropropene	7.13	41	6358	0.226	ppbV	98
30) carbon disulfide	7.28	76	14073	0.219	ppbV #	79
31) Freon 113	7.33	101	7606	0.227	ppbV	98
32) trans-1,2-dichloroethene	8.13	61	5857	0.216	ppbV	99
33) 1,1-dichloroethane	8.36	63	7054	0.225	ppbV	100
34) MTBE	8.46	73	12306	0.219	ppbV	99
35) vinyl acetate	8.58	43	10371	0.217	ppbV	99
36) 2-butanone	8.87	43	9837	0.229	ppbV	99
37) cis-1,2-dichloroethene	9.35	61	5175	0.225	ppbV	99
38) Ethyl Acetate	9.68	61	1595M4	0.230	ppbV	
39) chloroform	9.71	83	7522	0.221	ppbV	98
40) Tetrahydrofuran	10.18	42	5910	0.223	ppbV	96
41) 2,2-dichloropropane	9.72	77	6514	0.218	ppbV	95
42) 1,2-dichloroethane	10.55	62	4142	0.220	ppbV	96
44) hexane	9.62	57	8078	0.229	ppbV #	67
45) diisopropyl ether	9.63	87	4573	0.228	ppbV	97
46) tert-butyl ethyl ether	10.27	59	12671	0.218	ppbV	99
48) 1,1,1-trichloroethane	10.84	97	6185	0.226	ppbV	97
49) 1,1-dichloropropene	11.21	75	6537	0.224	ppbV	95
50) benzene	11.37	78	16040	0.236	ppbV	99
51) thiophene	11.52	84	32536	0.222	ppbV	97
52) carbon tetrachloride	11.54	117	5736	0.217	ppbV	98
53) cyclohexane	11.69	56	8286	0.220	ppbV	98
54) tert-amyl methyl ether	12.09	73	13422	0.216	ppbV	98
55) dibromomethane	12.29	93	4229	0.240	ppbV	96
56) 1,2-dichloropropane	12.33	63	4737	0.229	ppbV	97
57) bromodichloromethane	12.55	83	8244	0.218	ppbV	99
58) 1,4-dioxane	12.62	88	3354	0.213	ppbV	96
59) trichloroethene	12.61	130	5656	0.221	ppbV	99
60) 2,2,4-trimethylpentane	12.65	57	25476	0.225	ppbV	100
61) methyl methacrylate	12.87	41	6563	0.185	ppbV	97
62) heptane	12.97	43	10056	0.224	ppbV	97
63) cis-1,3-dichloropropene	13.62	75	7361	0.216	ppbV	98
64) 4-methyl-2-pentanone	13.68	43	11060	0.213	ppbV	99
65) trans-1,3-dichloropropene	14.24	75	6708	0.209	ppbV	98
66) 1,1,2-trichloroethane	14.44	97	5085	0.225	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38592.D
 Acq On : 12 Mar 2020 12:25 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.2
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:16:38 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:12:16 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.75	91	17117	0.235	ppbV	100
70) 2-methylthiophene	14.82	97	51442	0.232	ppbV	99
71) 1,3-dichloropropane	14.78	76	8308	0.219	ppbV	98
72) 2-hexanone	15.06	43	9911	0.207	ppbV	94
73) 3-methylthiophene	15.02	97	52330	0.231	ppbV	99
74) dibromochloromethane	15.20	129	6851	0.204	ppbV	94
75) 1,2-dibromoethane	15.45	107	7640	0.214	ppbV	99
76) butyl acetate	15.71	73	2230	0.189	ppbV	98
77) octane	15.79	85	6697	0.208	ppbV	92
78) tetrachloroethene	15.92	166	7242	0.221	ppbV	99
79) 1,1,1,2-tetrachloroethane	16.56	131	5680	0.229	ppbV	94
80) chlorobenzene	16.57	112	13161	0.222	ppbV	98
81) ethylbenzene	16.93	91	19681	0.222	ppbV	96
82) 2-ethylthiophene	16.97	97	55236	0.230	ppbV	93
83) m+p-xylene	17.09	91	33364	0.451	ppbV	97
84) bromoform	17.16	173	5852	0.180	ppbV	98
85) styrene	17.42	104	13411	0.202	ppbV	98
86) 1,1,2,2-tetrachloroethane	17.51	83	11241	0.213	ppbV	98
87) o-xylene	17.51	91	16442	0.223	ppbV	97
88) 1,2,3-trichloropropane	17.63	75	9327	0.210	ppbV	98
89) nonane	17.70	43	13619	0.218	ppbV	99
91) isopropylbenzene	18.02	105	23129	0.217	ppbV	97
92) bromobenzene	18.09	77	11734	0.200	ppbV	99
93) 2-chlorotoluene	18.42	126	6174	0.211	ppbV	97
94) n-propylbenzene	18.45	120	6796	0.199	ppbV	90
95) 4-chlorotoluene	18.48	126	5748	0.201	ppbV	100
96) 4-ethyl toluene	18.57	105	25193	0.208	ppbV	98
97) 1,3,5-trimethylbenzene	18.63	105	20897	0.217	ppbV	99
98) tert-butylbenzene	18.96	119	20091	0.204	ppbV	98
99) 1,2,4-trimethylbenzene	18.96	105	19847	0.211	ppbV	96
100) decane	19.03	57	14734	0.200	ppbV	96
101) Benzyl Chloride	19.07	91	9800	0.135	ppbV	96
102) 1,3-dichlorobenzene	19.08	146	11474	0.207	ppbV	97
103) 1,4-dichlorobenzene	19.14	146	10145	0.182	ppbV	99
104) sec-butylbenzene	19.18	105	28416	0.202	ppbV	98
105) 1,2,3-trimethylbenzene	19.30	105	17924	0.183	ppbV	100
106) p-isopropyltoluene	19.29	119	23730	0.194	ppbV	97
107) 1,2-dichlorobenzene	19.42	146	10623	0.201	ppbV	97
108) n-butylbenzene	19.63	91	18365	0.185	ppbV	98
109) indan	19.46	117	16784	0.168	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38592.D
 Acq On : 12 Mar 2020 12:25 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.2
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:16:38 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:12:16 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110)	indene	19.54	115	11713	0.147	ppbV	98
111)	1,2-dibromo-3-chloropr...	19.77	75	4213	0.162	ppbV	95
112)	undecane	20.03	57	15395	0.185	ppbV	96
113)	1,2,4,5-tetramethylben...	20.25	119	15762	0.150	ppbV	97
114)	dodecane	20.93	57	13579	0.150	ppbV	94
115)	1,2,4-trichlorobenzene	20.88	180	4130	0.108	ppbV	99
116)	naphthalene	20.99	128	15500	0.133	ppbV	100
117)	1,2,3-trichlorobenzene	21.24	180	5728	0.125	ppbV	99
118)	benzothiophene	21.06	134	6927	0.113	ppbV	98
119)	hexachlorobutadiene	21.31	225	9035	0.214	ppbV	97
120)	2-methylnaphthalene	22.10	142	837	0.053	ppbV #	77
121)	1-methylnaphthalene	22.30	142	4049	0.102	ppbV	97

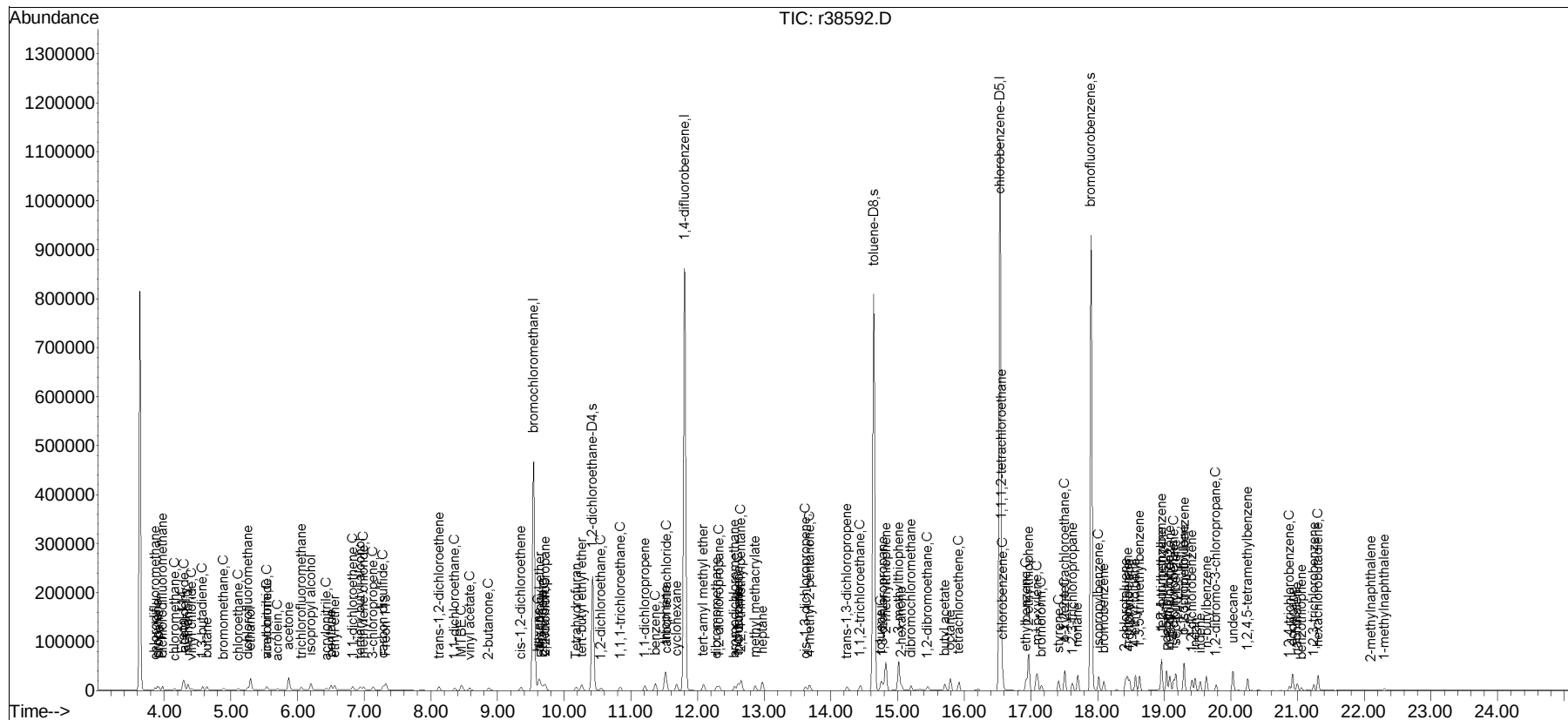
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

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Data Path   : O:\Forensics\Data\Airpiano3\2020\03\200312T_I\
Data File   : r38592.D
Acq On      : 12 Mar 2020  12:25 PM
Operator    : AIRPIANO3:RY
Sample      : IT015-SIMSTD0.2
Misc        : WG1350408
ALS Vial    : 0    Sample Multiplier: 1
```

Quant Time: Mar 12 16:16:38 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Mar 12 16:12:16 2020
Response via : Initial Calibration

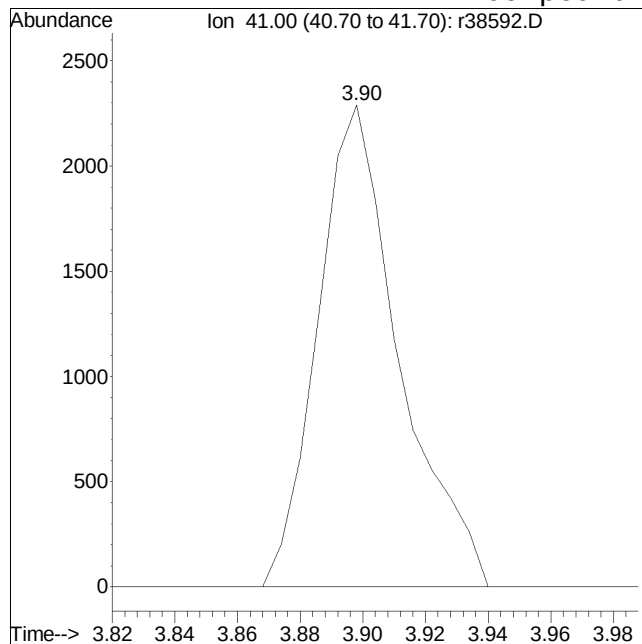
Sub List : Default - All compounds listed20\03\200312T_I\r38596.D



Manual Integration/Negative Proof Report

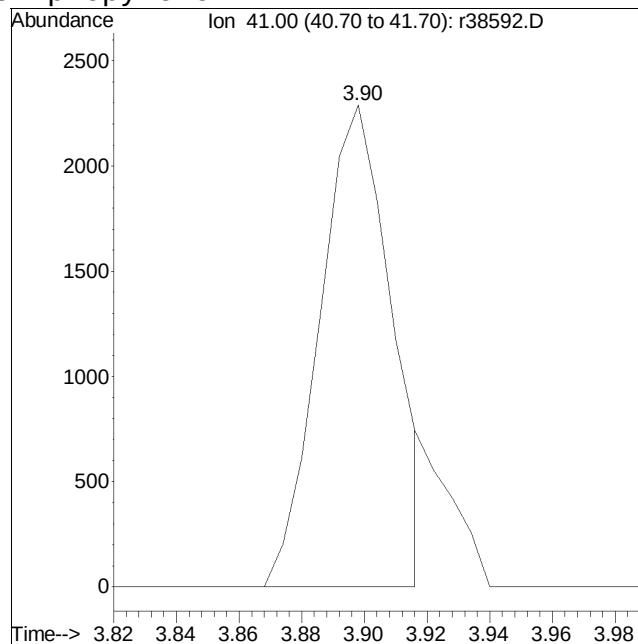
Data Path : 0:\Forensics\Data\Airpiano3QMethod : TFS3_200312.M
Data File : r38592.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:2: 5 Instrument :
Sample : IT015-SIMSTD0.2 Quant Date : 3/12/2020 4:13 pm

Compound #3: propylene



Original Peak Response = 4123

M4 = Poor automated baseline construction.

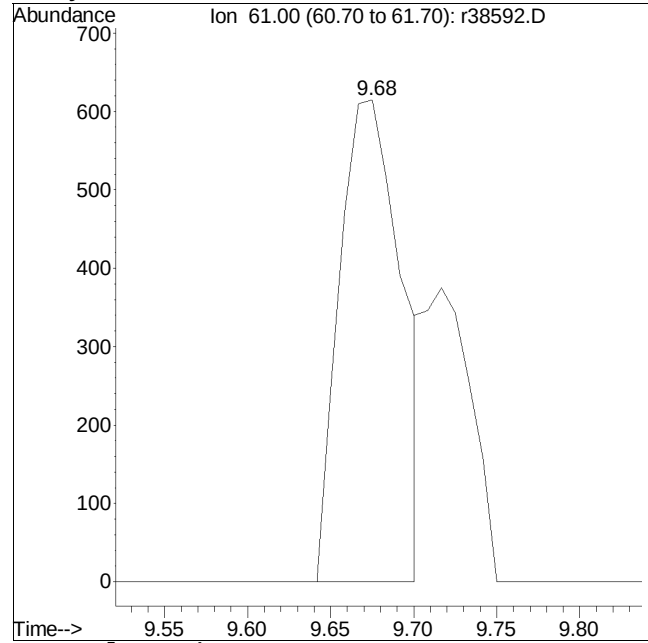
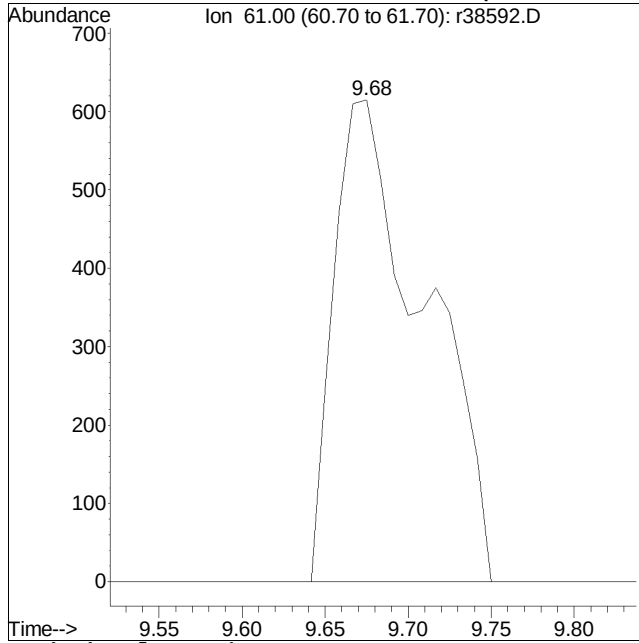


Manual Peak Response = 3677 M4

Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TFS3_200312.M
Data File : r38592.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:2: 5 Instrument :
Sample : IT015-SIMSTD0.2 Quant Date : 3/12/2020 4:13 pm

Compound #38: Ethyl Acetate



M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38593.D
 Acq On : 12 Mar 2020 1:03 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.5
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:18:37 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:12:16 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.54	49	348120	10.000	ppbV	0.00
Standard Area = 370599			Recovery =		93.93%	
43) 1,4-difluorobenzene	11.81	114	967742	10.000	ppbV	0.00
Standard Area = 1030530			Recovery =		93.91%	
67) chlorobenzene-D5	16.54	54	149594	10.000	ppbV	0.00
Standard Area = 160625			Recovery =		93.13%	
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.43	65	174592	10.237	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		102.37%	
69) toluene-D8	14.64	98	712267	10.052	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		100.52%	
90) bromofluorobenzene	17.91	95	450364	9.242	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		92.42%	
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.87	51	14758	0.563	ppbV	99
3) propylene	3.90	41	9137M4	0.590	ppbV	
4) propane	3.92	29	12536	0.602	ppbV	97
5) dichlorodifluoromethane	3.98	85	18627	0.588	ppbV	100
6) chloromethane	4.16	50	8330	0.583	ppbV	98
7) Freon-114	4.29	85	23250	0.602	ppbV	99
8) methanol	4.36	31	23026	3.225	ppbV	94
9) vinyl chloride	4.41	62	9328	0.573	ppbV	100
10) 1,3-butadiene	4.58	54	9440	0.566	ppbV	99
11) butane	4.65	43	14365	0.588	ppbV	99
12) acetaldehyde	4.31	29	24435	2.956	ppbV	99
13) bromomethane	4.89	94	7941	0.580	ppbV	99
14) chloroethane	5.12	64	4767	0.583	ppbV	100
15) ethanol	5.30	31	47185	3.315	ppbV	99
16) dichlorofluoromethane	5.25	67	14867	0.577	ppbV	99
17) vinyl bromide	5.54	106	9051	0.567	ppbV	99
18) acrolein	5.70	56	4931	0.573	ppbV	98
19) acetone	5.86	43	64470	2.769	ppbV	97
20) acetonitrile	5.54	41	7848	0.571	ppbV	99
21) trichlorofluoromethane	6.06	101	13775	0.573	ppbV	100
22) isopropyl alcohol	6.20	45	39760	1.373	ppbV	100
23) acrylonitrile	6.44	53	8235	0.533	ppbV	98
24) pentane	6.51	43	16494M4	0.468	ppbV	

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38593.D
 Acq On : 12 Mar 2020 1:03 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.5
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:18:37 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:12:16 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.56	31	17268	0.502	ppbV	97
26) 1,1-dichloroethene	6.83	61	12414	0.580	ppbV	98
27) tertiary butyl alcohol	6.94	59	18184	0.513	ppbV	96
28) methylene chloride	7.00	49	11155	0.485	ppbV	97
29) 3-chloropropene	7.14	41	15585	0.554	ppbV	99
30) carbon disulfide	7.29	76	35231	0.551	ppbV #	91
31) Freon 113	7.33	101	18841	0.565	ppbV	96
32) trans-1,2-dichloroethene	8.13	61	14700	0.543	ppbV	100
33) 1,1-dichloroethane	8.36	63	17756	0.569	ppbV	99
34) MTBE	8.46	73	30685	0.547	ppbV	99
35) vinyl acetate	8.58	43	25460	0.534	ppbV	100
36) 2-butanone	8.86	43	24389	0.569	ppbV	100
37) cis-1,2-dichloroethene	9.35	61	12702	0.553	ppbV	96
38) Ethyl Acetate	9.67	61	3773	0.544	ppbV	92
39) chloroform	9.71	83	18955	0.558	ppbV	94
40) Tetrahydrofuran	10.18	42	14522	0.549	ppbV	100
41) 2,2-dichloropropane	9.72	77	16373	0.549	ppbV	97
42) 1,2-dichloroethane	10.56	62	10771	0.572	ppbV	99
44) hexane	9.62	57	19587	0.550	ppbV #	71
45) diisopropyl ether	9.63	87	11115	0.550	ppbV	94
46) tert-butyl ethyl ether	10.26	59	31752	0.540	ppbV	100
48) 1,1,1-trichloroethane	10.84	97	15546	0.561	ppbV	98
49) 1,1-dichloropropene	11.21	75	15688	0.533	ppbV	96
50) benzene	11.37	78	38530	0.561	ppbV	99
51) thiophene	11.52	84	81471	0.551	ppbV	98
52) carbon tetrachloride	11.55	117	14632	0.547	ppbV	98
53) cyclohexane	11.69	56	20643	0.542	ppbV	99
54) tert-amyl methyl ether	12.09	73	34233	0.545	ppbV	99
55) dibromomethane	12.29	93	10179	0.573	ppbV	98
56) 1,2-dichloropropane	12.33	63	11780	0.565	ppbV	98
57) bromodichloromethane	12.56	83	20610	0.540	ppbV	100
58) 1,4-dioxane	12.61	88	8594	0.541	ppbV	100
59) trichloroethene	12.61	130	14257	0.553	ppbV	95
60) 2,2,4-trimethylpentane	12.65	57	61999	0.542	ppbV	100
61) methyl methacrylate	12.87	41	16502	0.460	ppbV	98
62) heptane	12.97	43	24871	0.549	ppbV	99
63) cis-1,3-dichloropropene	13.63	75	18615	0.540	ppbV	99
64) 4-methyl-2-pentanone	13.68	43	27948	0.532	ppbV	99
65) trans-1,3-dichloropropene	14.24	75	16941	0.522	ppbV	97
66) 1,1,2-trichloroethane	14.44	97	12844	0.562	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38593.D
 Acq On : 12 Mar 2020 1:03 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.5
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:18:37 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:12:16 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.76	91	40867	0.559	ppbV	100
70) 2-methylthiophene	14.82	97	129499	0.582	ppbV	100
71) 1,3-dichloropropane	14.78	76	20536	0.540	ppbV	100
72) 2-hexanone	15.06	43	25190	0.525	ppbV #	92
73) 3-methylthiophene	15.02	97	131259	0.577	ppbV	100
74) dibromochloromethane	15.21	129	17130	0.508	ppbV	98
75) 1,2-dibromoethane	15.45	107	19345	0.541	ppbV	100
76) butyl acetate	15.71	73	5805	0.492	ppbV	99
77) octane	15.79	85	16975	0.526	ppbV	94
78) tetrachloroethene	15.93	166	18274	0.557	ppbV	97
79) 1,1,1,2-tetrachloroethane	16.57	131	13531	0.543	ppbV	99
80) chlorobenzene	16.57	112	32562	0.548	ppbV	100
81) ethylbenzene	16.93	91	49356	0.555	ppbV	97
82) 2-ethylthiophene	16.97	97	139640	0.580	ppbV	94
83) m+p-xylene	17.09	91	82318	1.109	ppbV	97
84) bromoform	17.16	173	15689	0.480	ppbV	99
85) styrene	17.42	104	34041	0.511	ppbV	99
86) 1,1,2,2-tetrachloroethane	17.51	83	28998	0.548	ppbV	99
87) o-xylene	17.51	91	41280	0.558	ppbV	96
88) 1,2,3-trichloropropane	17.63	75	23244	0.522	ppbV	99
89) nonane	17.71	43	34195	0.545	ppbV	99
91) isopropylbenzene	18.02	105	57257	0.536	ppbV	98
92) bromobenzene	18.09	77	30056	0.511	ppbV	99
93) 2-chlorotoluene	18.43	126	15244M3	0.519	ppbV	
94) n-propylbenzene	18.45	120	17485	0.509	ppbV	92
95) 4-chlorotoluene	18.48	126	14452	0.505	ppbV	94
96) 4-ethyl toluene	18.57	105	63728	0.525	ppbV	98
97) 1,3,5-trimethylbenzene	18.63	105	53296	0.553	ppbV	97
98) tert-butylbenzene	18.96	119	51681	0.523	ppbV	97
99) 1,2,4-trimethylbenzene	18.96	105	51839	0.550	ppbV	98
100) decane	19.03	57	37754	0.511	ppbV	95
101) Benzyl Chloride	19.07	91	28514	0.392	ppbV	99
102) 1,3-dichlorobenzene	19.08	146	29770	0.534	ppbV	99
103) 1,4-dichlorobenzene	19.14	146	26303	0.470	ppbV	99
104) sec-butylbenzene	19.18	105	73388	0.519	ppbV	99
105) 1,2,3-trimethylbenzene	19.30	105	46040	0.468	ppbV	98
106) p-isopropyltoluene	19.29	119	61509	0.502	ppbV	97
107) 1,2-dichlorobenzene	19.41	146	27644	0.522	ppbV	98
108) n-butylbenzene	19.63	91	48198	0.484	ppbV	100
109) indan	19.46	117	44053	0.441	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38593.D
 Acq On : 12 Mar 2020 1:03 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.5
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:18:37 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:12:16 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.54	115	32372	0.405	ppbV	100
111) 1,2-dibromo-3-chloropr...	19.77	75	10847	0.415	ppbV	96
112) undecane	20.02	57	40429	0.483	ppbV	96
113) 1,2,4,5-tetramethylben...	20.25	119	41019	0.388	ppbV	95
114) dodecane	20.93	57	37730	0.414	ppbV	93
115) 1,2,4-trichlorobenzene	20.88	180	13029	0.338	ppbV	99
116) naphthalene	20.99	128	41048	0.352	ppbV	100
117) 1,2,3-trichlorobenzene	21.24	180	16013	0.348	ppbV	97
118) benzothiophene	21.06	134	21561	0.350	ppbV	98
119) hexachlorobutadiene	21.31	225	23276	0.550	ppbV	97
120) 2-methylnaphthalene	22.10	142	3801	0.239	ppbV	99
121) 1-methylnaphthalene	22.30	142	14748	0.369	ppbV	100

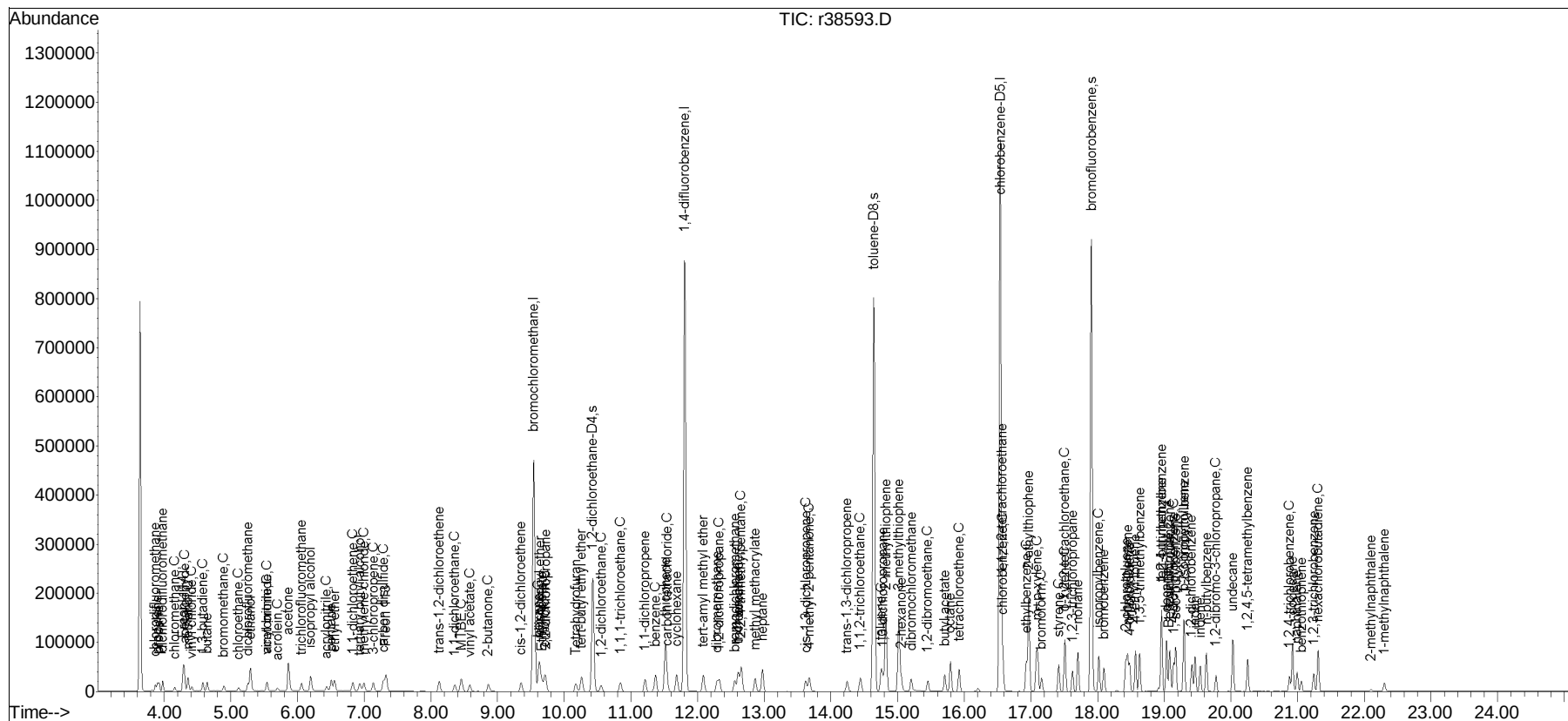
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

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Data Path   : O:\Forensics\Data\Airpiano3\2020\03\200312T_I\
Data File   : r38593.D
Acq On      : 12 Mar 2020    1:03 PM
Operator    : AIRPIANO3:RY
Sample      : IT015-SIMSTD0.5
Misc        : WG1350408
ALS Vial    : 0    Sample Multiplier: 1
```

Quant Time: Mar 12 16:18:37 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Mar 12 16:12:16 2020
Response via : Initial Calibration

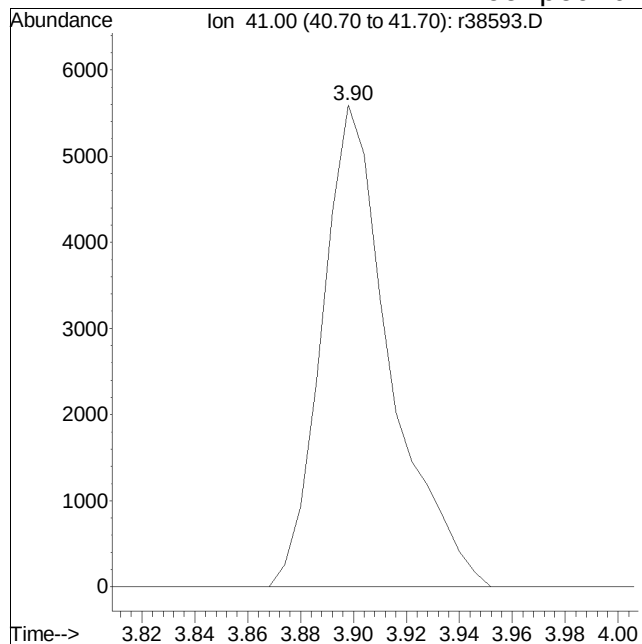
Sub List : Default - All compounds listed20\03\200312T_I\r38596.D



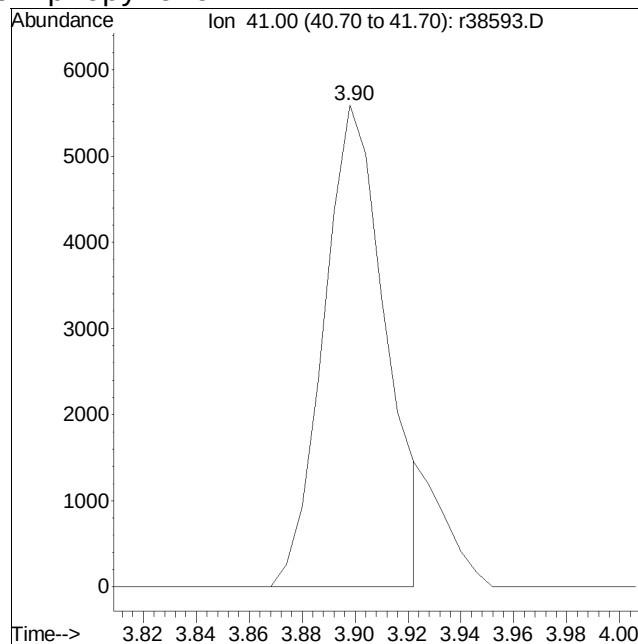
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TFS3_200312.M
Data File : r38593.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:1: 3 Instrument :
Sample : IT015-SIMSTD0.5 Quant Date : 3/12/2020 4:13 pm

Compound #3: propylene



Original Peak Response = 10057



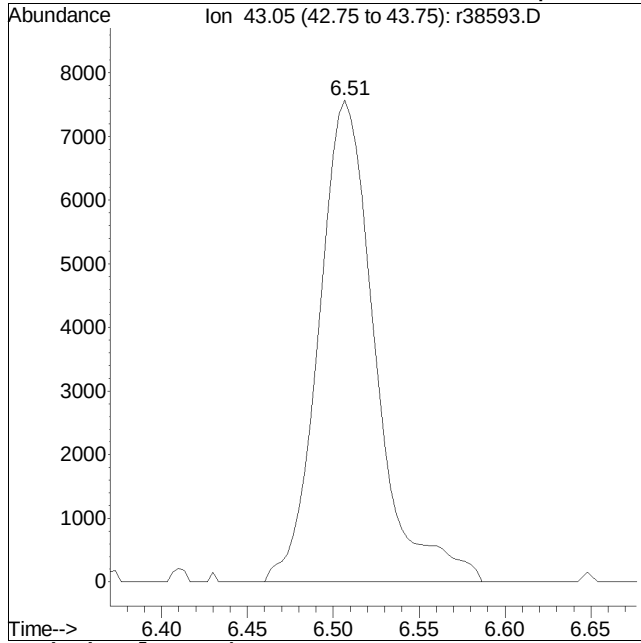
Manual Peak Response = 9137 M4

M4 = Poor automated baseline construction.

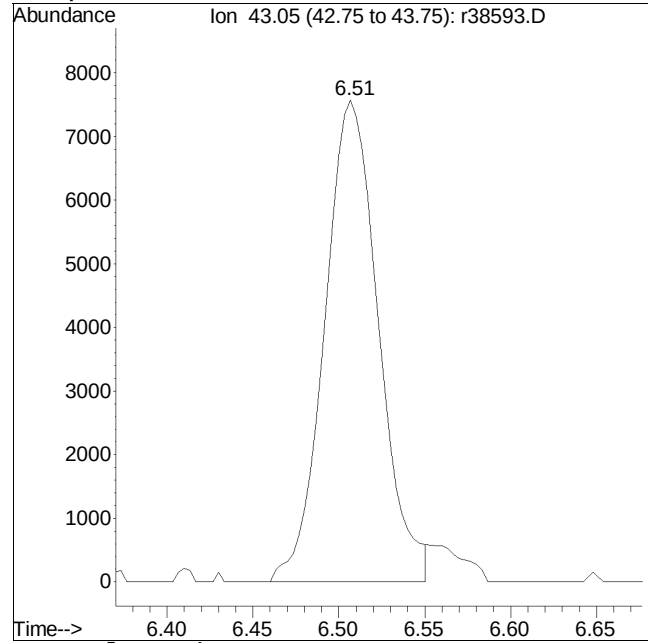
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TFS3_200312.M
Data File : r38593.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:1: 3 Instrument :
Sample : IT015-SIMSTD0.5 Quant Date : 3/12/2020 4:13 pm

Compound #24: pentane



Original Peak Response = 18631



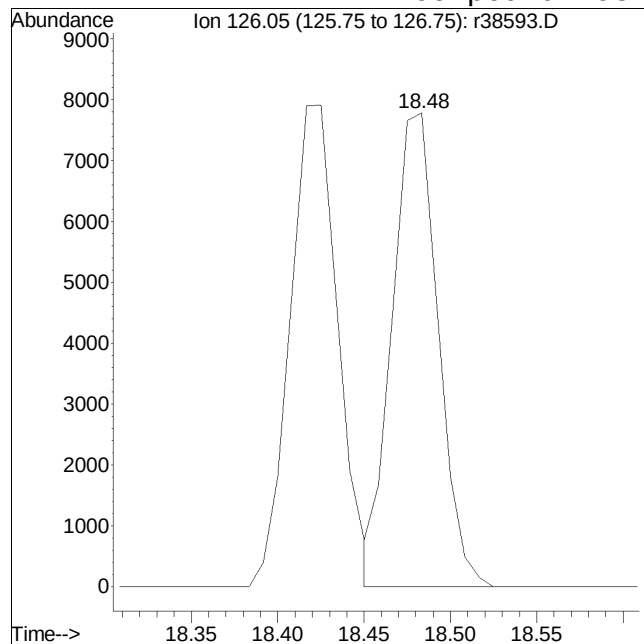
Manual Peak Response = 16494 M4

M4 = Poor automated baseline construction.

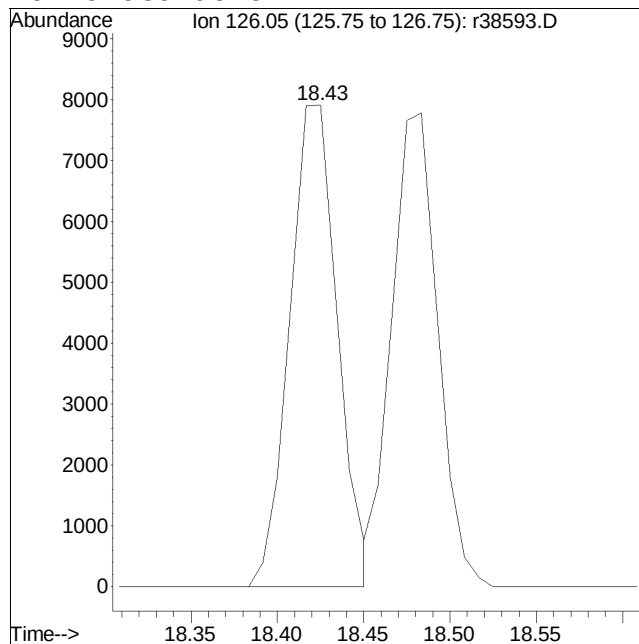
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TFS3_200312.M
 Data File : r38593.D Operator : AIRPIAN03:RY
 Date Inj'd : 3/12/2020 0:1: 3 Instrument :
 Sample : IT015-SIMSTD0.5 Quant Date : 3/12/2020 4:13 pm

Compound #93: 2-chlorotoluene



Original Peak Response = 14452



Manual Peak Response = 15244 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38594.D
 Acq On : 12 Mar 2020 1:44 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD1.0
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:19:48 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:12:16 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.54	49	351962	10.000	ppbV	0.00
Standard Area = 370599			Recovery =	94.97%		
43) 1,4-difluorobenzene	11.81	114	970385	10.000	ppbV	0.00
Standard Area = 1030530			Recovery =	94.16%		
67) chlorobenzene-D5	16.54	54	150304	10.000	ppbV	0.00
Standard Area = 160625			Recovery =	93.57%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.43	65	174426	10.199	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	101.99%		
69) toluene-D8	14.64	98	714083	10.030	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.30%		
90) bromofluorobenzene	17.91	95	452813	9.249	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	92.49%		
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.87	51	29732	1.121	ppbV	99
3) propylene	3.90	41	18154M4	1.160	ppbV	
4) propane	3.92	29	24461	1.162	ppbV	98
5) dichlorodifluoromethane	3.98	85	37458	1.169	ppbV	99
6) chloromethane	4.16	50	16534	1.145	ppbV	100
7) Freon-114	4.28	85	46204	1.183	ppbV	100
8) methanol	4.35	31	45049	6.240	ppbV	96
9) vinyl chloride	4.41	62	18513	1.124	ppbV	99
10) 1,3-butadiene	4.58	54	18885	1.120	ppbV	99
11) butane	4.64	43	28277	1.146	ppbV	98
12) acetaldehyde	4.30	29	46885	5.610	ppbV	98
13) bromomethane	4.89	94	15725	1.136	ppbV	100
14) chloroethane	5.12	64	9436	1.141	ppbV	100
15) ethanol	5.29	31	84588	5.877	ppbV	99
16) dichlorofluoromethane	5.25	67	29546	1.134	ppbV	99
17) vinyl bromide	5.54	106	17849	1.107	ppbV	99
18) acrolein	5.70	56	9609	1.104	ppbV	98
19) acetone	5.86	43	126240	5.363	ppbV	97
20) acetonitrile	5.54	41	15587	1.122	ppbV	97
21) trichlorofluoromethane	6.06	101	27798	1.143	ppbV	99
22) isopropyl alcohol	6.19	45	76426	2.610	ppbV	100
23) acrylonitrile	6.43	53	16891	1.082	ppbV	98
24) pentane	6.51	43	32561M4	0.915	ppbV	

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38594.D
 Acq On : 12 Mar 2020 1:44 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD1.0
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:19:48 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:12:16 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.55	31	34763	1.000	ppbV	99
26) 1,1-dichloroethene	6.83	61	24524	1.133	ppbV	100
27) tertiary butyl alcohol	6.92	59	36105	1.007	ppbV #	94
28) methylene chloride	7.00	49	22236	0.956	ppbV	93
29) 3-chloropropene	7.13	41	30914	1.088	ppbV	100
30) carbon disulfide	7.28	76	71085	1.099	ppbV	96
31) Freon 113	7.33	101	37417	1.109	ppbV	98
32) trans-1,2-dichloroethene	8.13	61	29449	1.076	ppbV	100
33) 1,1-dichloroethane	8.36	63	34868	1.106	ppbV	99
34) MTBE	8.45	73	61669	1.086	ppbV	99
35) vinyl acetate	8.58	43	50350	1.044	ppbV	99
36) 2-butanone	8.86	43	48401	1.117	ppbV	99
37) cis-1,2-dichloroethene	9.35	61	25464	1.097	ppbV	99
38) Ethyl Acetate	9.66	61	7904	1.128	ppbV	94
39) chloroform	9.71	83	37894	1.103	ppbV	98
40) Tetrahydrofuran	10.17	42	28999	1.084	ppbV	100
41) 2,2-dichloropropane	9.72	77	32484	1.076	ppbV	97
42) 1,2-dichloroethane	10.56	62	21090	1.109	ppbV	99
44) hexane	9.62	57	38709	1.085	ppbV #	79
45) diisopropyl ether	9.63	87	21947	1.082	ppbV	93
46) tert-butyl ethyl ether	10.26	59	63371	1.075	ppbV	100
48) 1,1,1-trichloroethane	10.84	97	31121	1.121	ppbV	99
49) 1,1-dichloropropene	11.21	75	31795	1.077	ppbV	97
50) benzene	11.37	78	76702	1.113	ppbV	99
51) thiophene	11.52	84	162901	1.099	ppbV	97
52) carbon tetrachloride	11.54	117	29485	1.100	ppbV	98
53) cyclohexane	11.69	56	41305	1.082	ppbV	99
54) tert-amyl methyl ether	12.08	73	67368	1.070	ppbV	99
55) dibromomethane	12.29	93	19608	1.101	ppbV	97
56) 1,2-dichloropropane	12.33	63	22943	1.097	ppbV	99
57) bromodichloromethane	12.56	83	40862	1.068	ppbV	100
58) 1,4-dioxane	12.61	88	16855	1.058	ppbV	98
59) trichloroethene	12.61	130	28360	1.096	ppbV	97
60) 2,2,4-trimethylpentane	12.65	57	124824	1.088	ppbV	100
61) methyl methacrylate	12.86	41	32481	0.902	ppbV	99
62) heptane	12.97	43	49280	1.084	ppbV	99
63) cis-1,3-dichloropropene	13.63	75	37300	1.080	ppbV	100
64) 4-methyl-2-pentanone	13.67	43	56217	1.068	ppbV	99
65) trans-1,3-dichloropropene	14.24	75	34300	1.053	ppbV	98
66) 1,1,2-trichloroethane	14.44	97	25687	1.121	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38594.D
 Acq On : 12 Mar 2020 1:44 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD1.0
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:19:48 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:12:16 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.76	91	82766	1.127	ppbV	100
70) 2-methylthiophene	14.82	97	258074	1.154	ppbV	100
71) 1,3-dichloropropane	14.78	76	41141	1.077	ppbV	100
72) 2-hexanone	15.05	43	51391	1.066	ppbV	94
73) 3-methylthiophene	15.02	97	263918	1.155	ppbV	100
74) dibromochloromethane	15.21	129	34640	1.023	ppbV	99
75) 1,2-dibromoethane	15.45	107	38929	1.084	ppbV	99
76) butyl acetate	15.71	73	11971	1.009	ppbV	97
77) octane	15.79	85	33606	1.036	ppbV	92
78) tetrachloroethene	15.93	166	36884	1.119	ppbV	99
79) 1,1,1,2-tetrachloroethane	16.57	131	26935	1.076	ppbV	98
80) chlorobenzene	16.58	112	65165	1.091	ppbV	99
81) ethylbenzene	16.93	91	99065	1.109	ppbV	97
82) 2-ethylthiophene	16.97	97	281165	1.163	ppbV	94
83) m+p-xylene	17.09	91	165625	2.220	ppbV	98
84) bromoform	17.16	173	31653	0.964	ppbV	99
85) styrene	17.42	104	69038	1.031	ppbV	100
86) 1,1,2,2-tetrachloroethane	17.51	83	57859	1.088	ppbV	100
87) o-xylene	17.51	91	82779	1.114	ppbV	97
88) 1,2,3-trichloropropane	17.63	75	46878	1.048	ppbV	99
89) nonane	17.71	43	68251	1.083	ppbV	99
91) isopropylbenzene	18.02	105	116699	1.088	ppbV	97
92) bromobenzene	18.09	77	60423	1.022	ppbV	100
93) 2-chlorotoluene	18.43	126	30739	1.041	ppbV	72
94) n-propylbenzene	18.45	120	35113	1.018	ppbV	89
95) 4-chlorotoluene	18.48	126	29765	1.035	ppbV	91
96) 4-ethyl toluene	18.57	105	129212	1.059	ppbV	98
97) 1,3,5-trimethylbenzene	18.63	105	106587	1.100	ppbV	99
98) tert-butylbenzene	18.96	119	105339	1.061	ppbV	97
99) 1,2,4-trimethylbenzene	18.96	105	105693	1.117	ppbV	98
100) decane	19.03	57	77474	1.043	ppbV	96
101) Benzyl Chloride	19.07	91	62385	0.853	ppbV	99
102) 1,3-dichlorobenzene	19.08	146	60481	1.080	ppbV	98
103) 1,4-dichlorobenzene	19.14	146	54768	0.975	ppbV	99
104) sec-butylbenzene	19.18	105	150309	1.058	ppbV	100
105) 1,2,3-trimethylbenzene	19.30	105	94236	0.953	ppbV	99
106) p-isopropyltoluene	19.29	119	124587	1.012	ppbV	96
107) 1,2-dichlorobenzene	19.42	146	56146	1.054	ppbV	99
108) n-butylbenzene	19.63	91	101140	1.011	ppbV	99
109) indan	19.47	117	90260	0.899	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38594.D
 Acq On : 12 Mar 2020 1:44 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD1.0
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:19:48 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:12:16 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.54	115	68067	0.847	ppbV	98
111) 1,2-dibromo-3-chloropr...	19.77	75	24209	0.922	ppbV	97
112) undecane	20.03	57	83558	0.994	ppbV	95
113) 1,2,4,5-tetramethylben...	20.25	119	83952	0.791	ppbV	97
114) dodecane	20.93	57	80097	0.876	ppbV	96
115) 1,2,4-trichlorobenzene	20.88	180	32451	0.839	ppbV	99
116) naphthalene	20.99	128	93706	0.801	ppbV	100
117) 1,2,3-trichlorobenzene	21.24	180	36424	0.788	ppbV	99
118) benzothiophene	21.06	134	58065	0.938	ppbV	99
119) hexachlorobutadiene	21.31	225	46871	1.101	ppbV	98
120) 2-methylnaphthalene	22.10	142	10066	0.631	ppbV	99
121) 1-methylnaphthalene	22.30	142	34992	0.872	ppbV	100

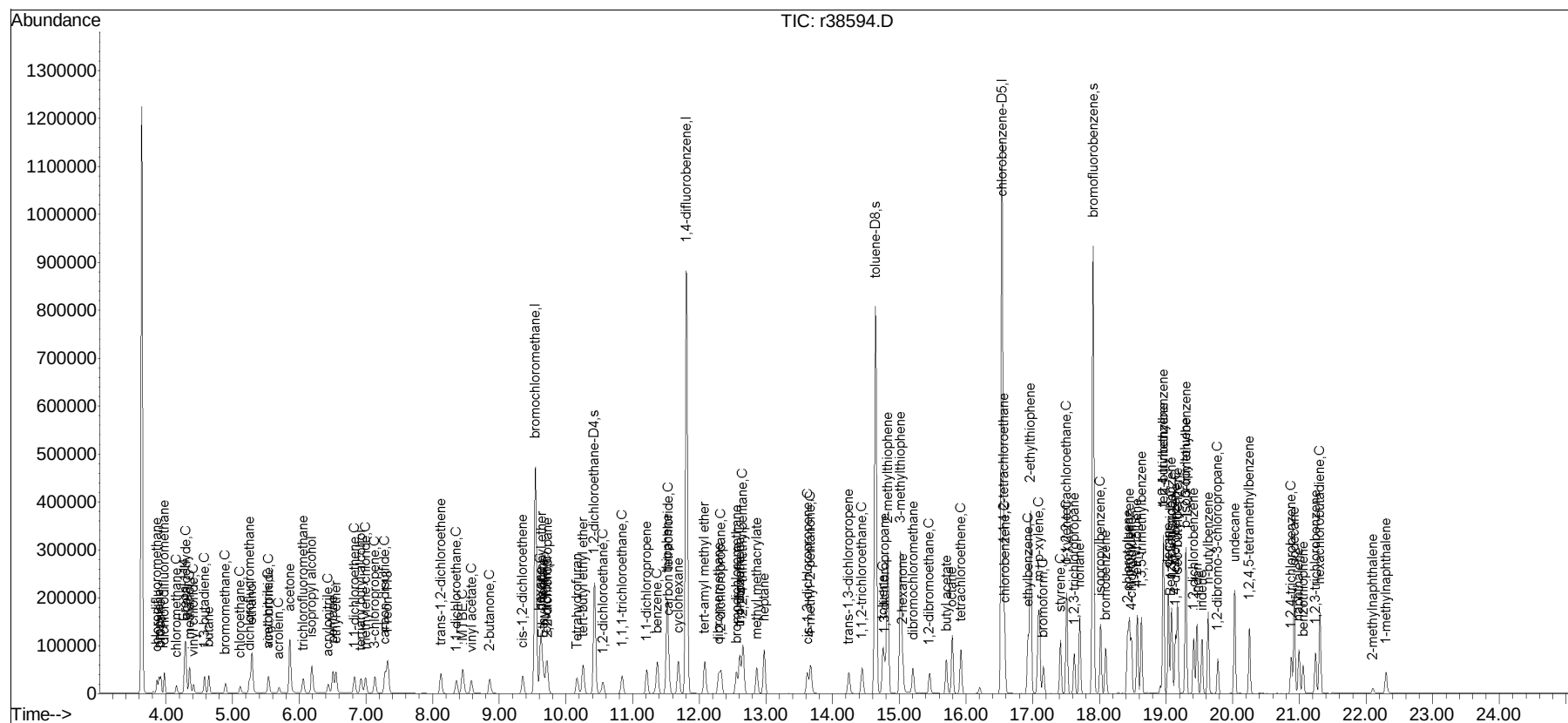
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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Data Path   : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
Data File  : r38594.D
Acq On     : 12 Mar 2020    1:44 PM
Operator   : AIRPIANO3:RY
Sample     : IT015-SIMSTD1.0
Misc       : WG1350408
ALS Vial   : 0    Sample Multiplier: 1
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Quant Time: Mar 12 16:19:48 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Mar 12 16:12:16 2020
Response via : Initial Calibration

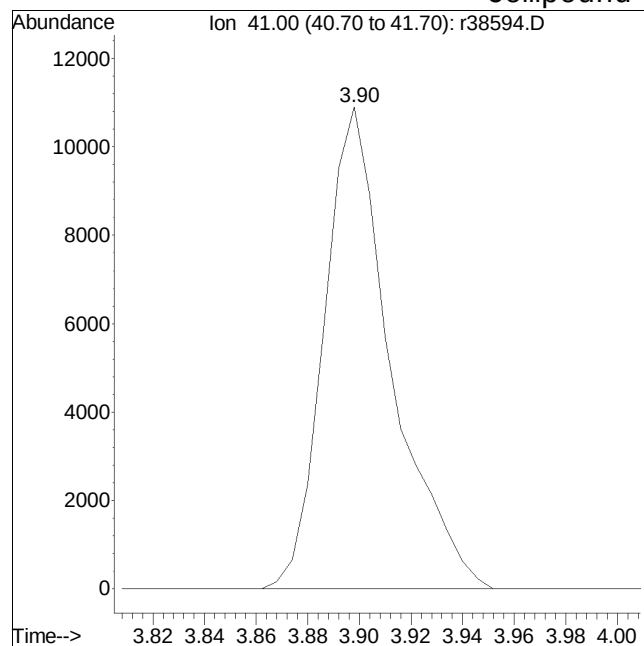
Sub List : Default - All compounds listed20\03\200312T_I\r38596.D



Manual Integration/Negative Proof Report

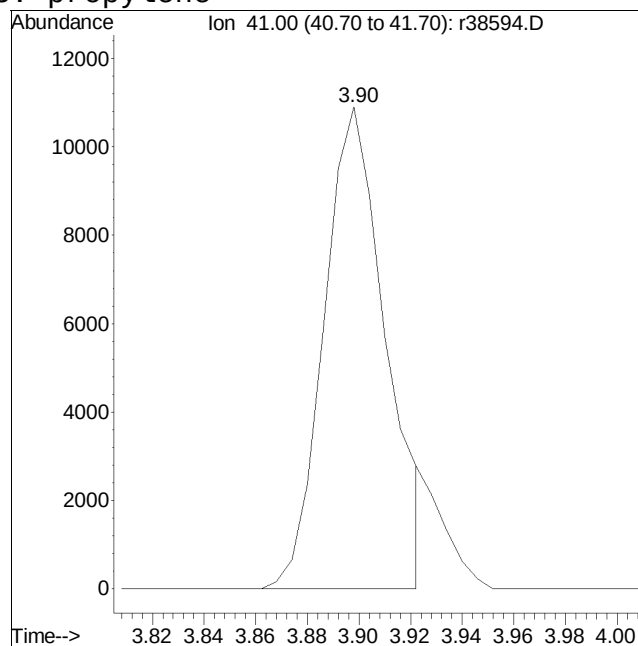
Data Path : 0:\Forensics\Data\Airpiano3QMethod : TFS3_200312.M
Data File : r38594.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:1: 4 Instrument :
Sample : IT015-SIMSTD1.0 Quant Date : 3/12/2020 4:13 pm

Compound #3: propylene



Original Peak Response = 19705

M4 = Poor automated baseline construction.

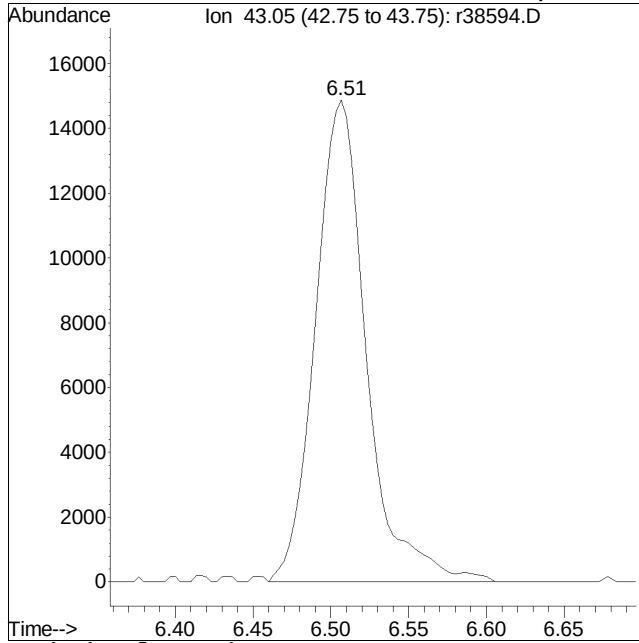


Manual Peak Response = 18154 M4

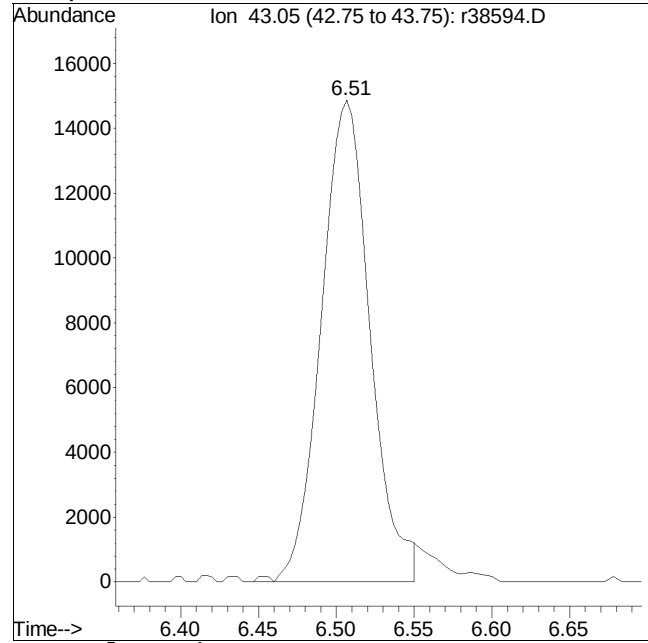
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TFS3_200312.M
Data File : r38594.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:1: 4 Instrument :
Sample : IT015-SIMSTD1.0 Quant Date : 3/12/2020 4:13 pm

Compound #24: pentane



Original Peak Response = 37510



Manual Peak Response = 32561 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38595.D
 Acq On : 12 Mar 2020 2:23 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD5.0
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:21:29 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:12:16 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.54	49	359537	10.000	ppbV	0.00
Standard Area = 370599			Recovery =	97.02%		
43) 1,4-difluorobenzene	11.81	114	990503	10.000	ppbV	0.00
Standard Area = 1030530			Recovery =	96.12%		
67) chlorobenzene-D5	16.54	54	155000	10.000	ppbV	0.00
Standard Area = 160625			Recovery =	96.50%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.43	65	177778	10.184	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	101.84%		
69) toluene-D8	14.64	98	739983	10.079	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.79%		
90) bromofluorobenzene	17.91	95	484818	9.603	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	96.03%		
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.87	51	139638	5.155	ppbV	100
3) propylene	3.90	41	85005M4	5.317	ppbV	
4) propane	3.92	29	110625	5.145	ppbV	98
5) dichlorodifluoromethane	3.98	85	170563	5.210	ppbV	100
6) chloromethane	4.16	50	76128	5.161	ppbV	100
7) Freon-114	4.28	85	210060	5.265	ppbV	100
8) methanol	4.35	31	192143	26.054	ppbV	99
9) vinyl chloride	4.41	62	86665	5.150	ppbV	99
10) 1,3-butadiene	4.58	54	88773	5.155	ppbV	99
11) butane	4.64	43	130109	5.161	ppbV	100
12) acetaldehyde	4.30	29	227740	26.677	ppbV	99
13) bromomethane	4.89	94	72058	5.097	ppbV	99
14) chloroethane	5.12	64	43208	5.113	ppbV	100
15) ethanol	5.29	31	390098	26.533	ppbV	99
16) dichlorofluoromethane	5.25	67	137350	5.160	ppbV	100
17) vinyl bromide	5.54	106	83872	5.092	ppbV	100
18) acrolein	5.70	56	44562	5.010	ppbV	99
19) acetone	5.85	43	629219	26.166	ppbV	99
20) acetonitrile	5.54	41	72746	5.126	ppbV	99
21) trichlorofluoromethane	6.06	101	128558	5.176	ppbV	99
22) isopropyl alcohol	6.18	45	388680	12.996	ppbV	100
23) acrylonitrile	6.44	53	80886	5.073	ppbV	99
24) pentane	6.51	43	151459M4	4.165	ppbV	

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38595.D
 Acq On : 12 Mar 2020 2:23 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD5.0
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:21:29 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:12:16 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.55	31	175875	4.952	ppbV	99
26) 1,1-dichloroethene	6.83	61	113400	5.128	ppbV	100
27) tertiary butyl alcohol	6.91	59	168620	4.604	ppbV	93
28) methylene chloride	7.00	49	107050	4.507	ppbV	96
29) 3-chloropropene	7.13	41	146704	5.053	ppbV	100
30) carbon disulfide	7.28	76	335965	5.084	ppbV	100
31) Freon 113	7.33	101	174749	5.070	ppbV	98
32) trans-1,2-dichloroethene	8.13	61	140958	5.043	ppbV	100
33) 1,1-dichloroethane	8.36	63	163525	5.076	ppbV	99
34) MTBE	8.44	73	293302	5.058	ppbV	100
35) vinyl acetate	8.58	43	247096	5.015	ppbV	100
36) 2-butanone	8.85	43	226853	5.126	ppbV	98
37) cis-1,2-dichloroethene	9.36	61	119899	5.056	ppbV	99
38) Ethyl Acetate	9.66	61	36211	5.059	ppbV	99
39) chloroform	9.71	83	177821	5.067	ppbV	100
40) Tetrahydrofuran	10.15	42	138184	5.056	ppbV	100
41) 2,2-dichloropropane	9.72	77	157125	5.097	ppbV	99
42) 1,2-dichloroethane	10.56	62	99425	5.116	ppbV	99
44) hexane	9.62	57	186650	5.125	ppbV	85
45) diisopropyl ether	9.63	87	105454	5.096	ppbV	96
46) tert-butyl ethyl ether	10.25	59	308006	5.118	ppbV	100
48) 1,1,1-trichloroethane	10.84	97	145744	5.143	ppbV	100
49) 1,1-dichloropropene	11.21	75	154286	5.120	ppbV	98
50) benzene	11.37	78	357399	5.080	ppbV	100
51) thiophene	11.52	84	775248	5.123	ppbV	99
52) carbon tetrachloride	11.55	117	138747	5.071	ppbV	99
53) cyclohexane	11.69	56	198194	5.087	ppbV	100
54) tert-amyl methyl ether	12.08	73	325611	5.069	ppbV	99
55) dibromomethane	12.29	93	93590	5.147	ppbV	97
56) 1,2-dichloropropane	12.33	63	108286	5.074	ppbV	99
57) bromodichloromethane	12.56	83	197916	5.067	ppbV	99
58) 1,4-dioxane	12.60	88	82241	5.059	ppbV	100
59) trichloroethene	12.61	130	133495	5.056	ppbV	98
60) 2,2,4-trimethylpentane	12.65	57	599862	5.123	ppbV	100
61) methyl methacrylate	12.86	41	185088	5.037	ppbV	99
62) heptane	12.97	43	239084	5.153	ppbV	99
63) cis-1,3-dichloropropene	13.63	75	176460	5.005	ppbV	99
64) 4-methyl-2-pentanone	13.66	43	274821	5.116	ppbV	99
65) trans-1,3-dichloropropene	14.24	75	167181	5.028	ppbV	99
66) 1,1,2-trichloroethane	14.44	97	118632	5.073	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38595.D
 Acq On : 12 Mar 2020 2:23 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD5.0
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:21:29 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:12:16 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.76	91	386396	5.100	ppbV	100
70) 2-methylthiophene	14.82	97	1204773	5.226	ppbV	100
71) 1,3-dichloropropane	14.78	76	199652	5.068	ppbV	99
72) 2-hexanone	15.04	43	254304	5.116	ppbV	98
73) 3-methylthiophene	15.02	97	1236961	5.247	ppbV	100
74) dibromochloromethane	15.21	129	172819	4.951	ppbV	100
75) 1,2-dibromoethane	15.45	107	185772	5.014	ppbV	100
76) butyl acetate	15.70	73	60105	4.913	ppbV	98
77) octane	15.79	85	168439	5.035	ppbV	97
78) tetrachloroethene	15.93	166	172728	5.082	ppbV	99
79) 1,1,1,2-tetrachloroethane	16.57	131	130531	5.058	ppbV	99
80) chlorobenzene	16.57	112	309798	5.028	ppbV	98
81) ethylbenzene	16.93	91	467067	5.072	ppbV	99
82) 2-ethylthiophene	16.97	97	1313040	5.265	ppbV	96
83) m+p-xylene	17.09	91	780438	10.143	ppbV	100
84) bromoform	17.16	173	164537	4.861	ppbV	100
85) styrene	17.42	104	342608	4.959	ppbV	99
86) 1,1,2,2-tetrachloroethane	17.51	83	276348	5.037	ppbV	99
87) o-xylene	17.51	91	391553	5.110	ppbV	98
88) 1,2,3-trichloropropane	17.63	75	232016	5.031	ppbV	99
89) nonane	17.71	43	332469	5.115	ppbV	99
91) isopropylbenzene	18.02	105	562796	5.089	ppbV	98
92) bromobenzene	18.09	77	302540	4.962	ppbV	98
93) 2-chlorotoluene	18.42	126	152897	5.022	ppbV	95
94) n-propylbenzene	18.45	120	175298	4.929	ppbV	92
95) 4-chlorotoluene	18.48	126	146888	4.954	ppbV	100
96) 4-ethyl toluene	18.57	105	641369	5.097	ppbV	99
97) 1,3,5-trimethylbenzene	18.63	105	508545	5.090	ppbV	99
98) tert-butylbenzene	18.96	119	514659	5.025	ppbV	99
99) 1,2,4-trimethylbenzene	18.96	105	496240	5.085	ppbV	99
100) decane	19.03	57	389253	5.083	ppbV	98
101) Benzyl Chloride	19.07	91	352452	4.672	ppbV	99
102) 1,3-dichlorobenzene	19.08	146	288914	5.005	ppbV	99
103) 1,4-dichlorobenzene	19.14	146	283056	4.885	ppbV	100
104) sec-butylbenzene	19.18	105	746005	5.094	ppbV	100
105) 1,2,3-trimethylbenzene	19.30	105	521495	5.112	ppbV	98
106) p-isopropyltoluene	19.29	119	635011	5.003	ppbV	99
107) 1,2-dichlorobenzene	19.41	146	273092	4.972	ppbV	100
108) n-butylbenzene	19.63	91	522326	5.062	ppbV	100
109) indan	19.46	117	515164	4.975	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38595.D
 Acq On : 12 Mar 2020 2:23 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD5.0
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:21:29 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:12:16 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

110)	indene	19.53	115	407856	4.924	ppbV	100
111)	1,2-dibromo-3-chloropr...	19.77	75	133843	4.945	ppbV	97
112)	undecane	20.02	57	439578	5.069	ppbV	98
113)	1,2,4,5-tetramethylben...	20.25	119	501760	4.585	ppbV	99
114)	dodecane	20.93	57	477288	5.060	ppbV	97
115)	1,2,4-trichlorobenzene	20.88	180	181854	4.559	ppbV	100
116)	naphthalene	20.99	128	566994	4.698	ppbV	100
117)	1,2,3-trichlorobenzene	21.24	180	221523	4.644	ppbV	99
118)	benzothiophene	21.05	134	279146	4.371	ppbV	99
119)	hexachlorobutadiene	21.31	225	224551	5.116	ppbV	98
120)	2-methylnaphthalene	22.10	142	65939	4.008	ppbV	98
121)	1-methylnaphthalene	22.30	142	186454	4.507	ppbV	100

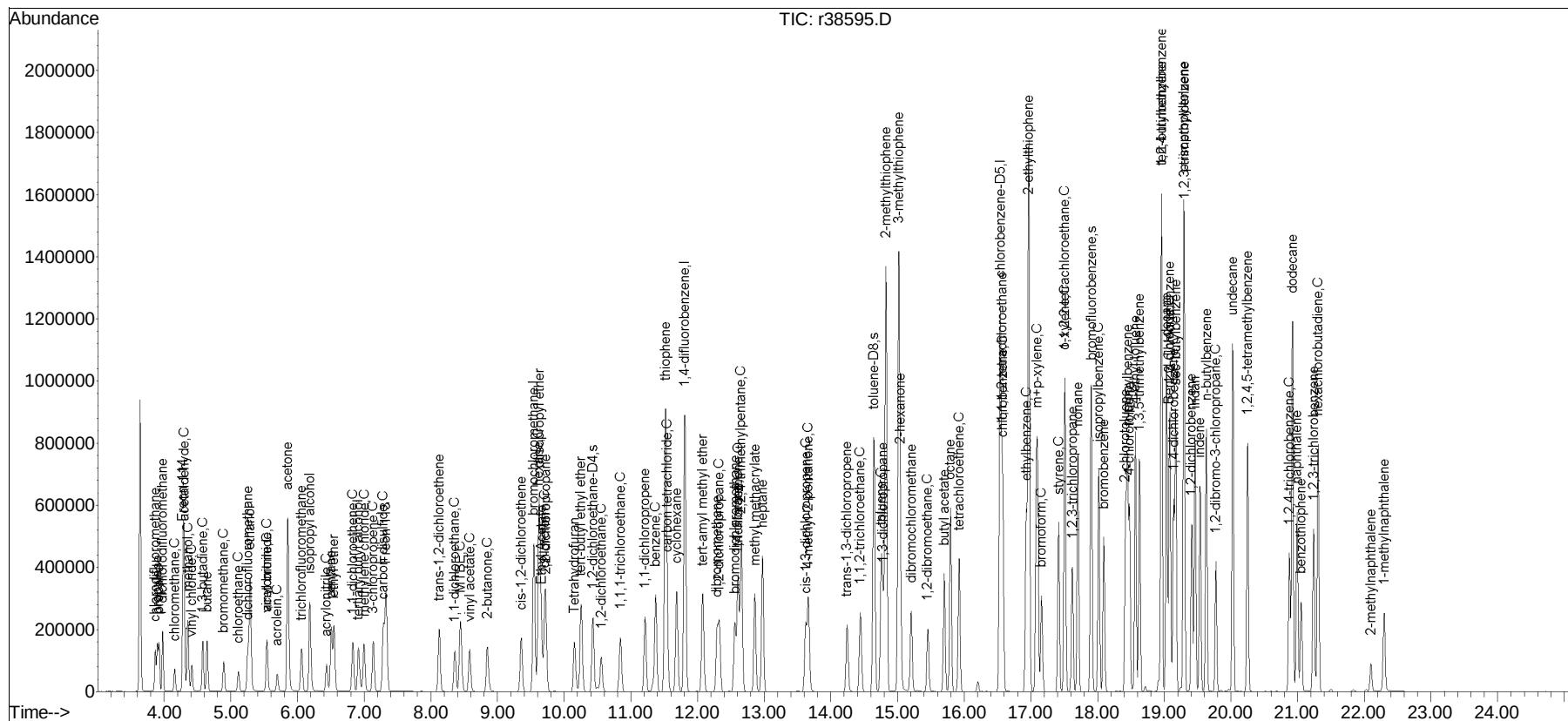
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

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Data Path   : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
Data File   : r38595.D
Acq On      : 12 Mar 2020    2:23 PM
Operator    : AIRPIANO3:RY
Sample      : IT015-SIMSTD5.0
Misc        : WG1350408
ALS Vial    : 0    Sample Multiplier: 1
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Quant Time: Mar 12 16:21:29 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Mar 12 16:12:16 2020
Response via : Initial Calibration

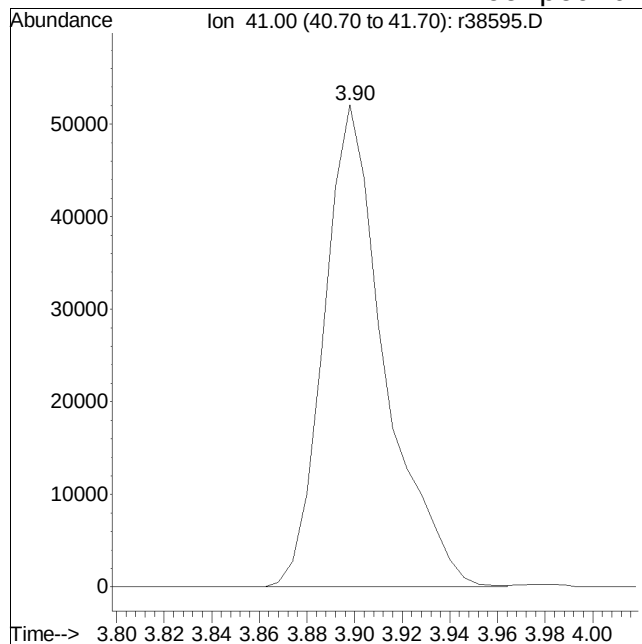
Sub List : Default - All compounds listed20\03\200312T_I\r38596.D



Manual Integration/Negative Proof Report

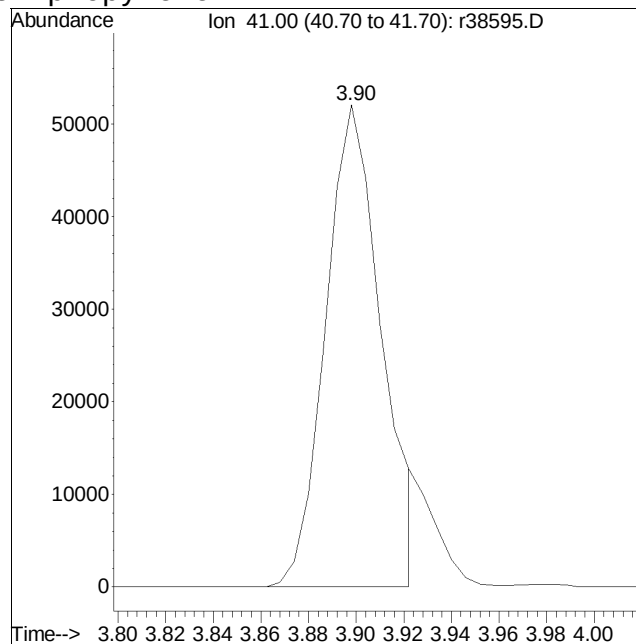
Data Path : 0:\Forensics\Data\Airpiano3QMethod : TFS3_200312.M
Data File : r38595.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:2: 3 Instrument :
Sample : IT015-SIMSTD5.0 Quant Date : 3/12/2020 4:14 pm

Compound #3: propylene



Original Peak Response = 92584

M4 = Poor automated baseline construction.

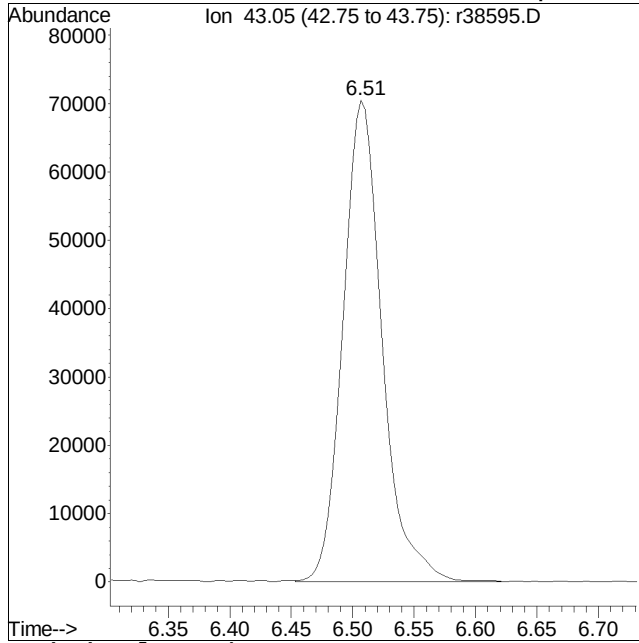


Manual Peak Response = 85005 M4

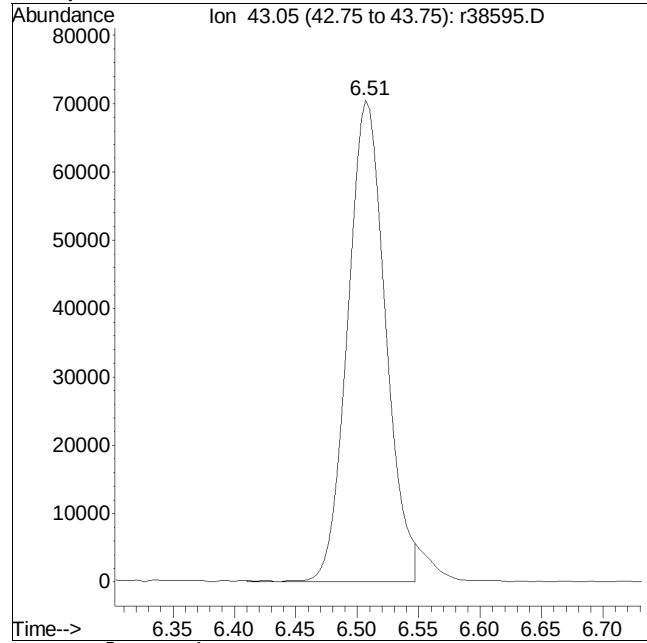
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TFS3_200312.M
Data File : r38595.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:2: 3 Instrument :
Sample : IT015-SIMSTD5.0 Quant Date : 3/12/2020 4:14 pm

Compound #24: pentane



Original Peak Response = 177534



Manual Peak Response = 151459 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38596.D
 Acq On : 12 Mar 2020 3:04 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD010
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:11:29 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Fri Feb 14 14:35:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.55	49	370599	10.000	ppbV	-0.03
Standard Area = 370599			Recovery =	100.00%		
43) 1,4-difluorobenzene	11.81	114	1030530	10.000	ppbV	-0.03
Standard Area = 1030530			Recovery =	100.00%		
67) chlorobenzene-D5	16.54	54	160625	10.000	ppbV	-0.02
Standard Area = 160625			Recovery =	100.00%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.43	65	181617	9.885	ppbV	-0.04
Spiked Amount 10.000	Range 70 - 130		Recovery =	98.85%		
69) toluene-D8	14.65	98	760817	10.809	ppbV	-0.03
Spiked Amount 10.000	Range 70 - 130		Recovery =	108.09%		
90) bromofluorobenzene	17.91	95	523209	11.630	ppbV	-0.02
Spiked Amount 10.000	Range 70 - 130		Recovery =	116.30%		
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.87	51	279186	9.595	ppbV	99
3) propylene	3.90	41	164789M4	10.479	ppbV	
4) propane	3.93	29	221626	9.538	ppbV	98
5) dichlorodifluoromethane	3.98	85	337444	8.930	ppbV	100
6) chloromethane	4.16	50	152059	8.662	ppbV	100
7) Freon-114	4.29	85	411225	8.677	ppbV	99
8) methanol	4.36	31	380089	42.187	ppbV	96
9) vinyl chloride	4.42	62	173448	8.358	ppbV	100
10) 1,3-butadiene	4.58	54	177511	9.029	ppbV	99
11) butane	4.65	43	259861	9.125	ppbV	97
12) acetaldehyde	4.30	29	439986	41.438	ppbV #	81
13) bromomethane	4.90	94	145724	8.398	ppbV	99
14) chloroethane	5.12	64	87098	8.164	ppbV	98
15) ethanol	5.30	31	757737	45.373	ppbV	89
16) dichlorofluoromethane	5.26	67	274366	8.484	ppbV	99
17) vinyl bromide	5.55	106	169791	10.024	ppbV	98
18) acrolein	5.70	56	91677	9.124	ppbV	96
19) acetone	5.85	43	1239367	46.225	ppbV	99
20) acetonitrile	5.54	41	146288	8.976	ppbV	99
21) trichlorofluoromethane	6.06	101	256013	8.488	ppbV	100
22) isopropyl alcohol	6.19	45	770674	23.003	ppbV	99
23) acrylonitrile	6.44	53	164361	9.154	ppbV	99
24) pentane	6.51	43	374869	8.790	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38596.D
 Acq On : 12 Mar 2020 3:04 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD010
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:11:29 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Fri Feb 14 14:35:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.55	31	366090	10.476	ppbV	97
26) 1,1-dichloroethene	6.83	61	227939	8.192	ppbV	97
27) tertiary butyl alcohol	6.92	59	377536	9.294	ppbV #	91
28) methylene chloride	7.00	49	244821	10.733	ppbV	90
29) 3-chloropropene	7.14	41	299273	10.631	ppbV	98
30) carbon disulfide	7.29	76	681139	10.067	ppbV	100
31) Freon 113	7.33	101	355288	10.371	ppbV	96
32) trans-1,2-dichloroethene	8.13	61	288110	10.300	ppbV	97
33) 1,1-dichloroethane	8.37	63	332086	10.273	ppbV	100
34) MTBE	8.44	73	597669	10.499	ppbV	98
35) vinyl acetate	8.58	43	507895	10.607	ppbV	99
36) 2-butanone	8.84	43	456160	10.219	ppbV	98
37) cis-1,2-dichloroethene	9.36	61	244416	10.237	ppbV	97
38) Ethyl Acetate	9.66	61	73773	10.124	ppbV	70
39) chloroform	9.71	83	361740	9.999	ppbV	98
40) Tetrahydrofuran	10.15	42	281741	10.135	ppbV	99
41) 2,2-dichloropropane	9.72	77	317763	10.431	ppbV	96
42) 1,2-dichloroethane	10.56	62	200314	10.023	ppbV	98
44) hexane	9.63	57	378902	9.600	ppbV	98
45) diisopropyl ether	9.63	87	215310	9.603	ppbV	86
46) tert-butyl ethyl ether	10.26	59	626083	9.558	ppbV	98
48) 1,1,1-trichloroethane	10.84	97	294852	9.735	ppbV	96
49) 1,1-dichloropropene	11.21	75	313516	9.589	ppbV	97
50) benzene	11.37	78	731958	9.344	ppbV	99
51) thiophene	11.52	84	1574436	9.771	ppbV	99
52) carbon tetrachloride	11.55	117	284638	10.098	ppbV	98
53) cyclohexane	11.69	56	405387	9.555	ppbV	97
54) tert-amyl methyl ether	12.08	73	668340	9.894	ppbV	98
55) dibromomethane	12.29	93	189180	9.578	ppbV	98
56) 1,2-dichloropropane	12.33	63	222026	9.446	ppbV	97
57) bromodichloromethane	12.56	83	406358	9.503	ppbV	99
58) 1,4-dioxane	12.60	88	169136	9.434	ppbV	99
59) trichloroethene	12.61	130	274676	9.713	ppbV	99
60) 2,2,4-trimethylpentane	12.66	57	1218254	9.826	ppbV	98
61) methyl methacrylate	12.86	41	382295	10.746	ppbV	97
62) heptane	12.98	43	482730	9.480	ppbV	95
63) cis-1,3-dichloropropene	13.63	75	366824	9.729	ppbV	99
64) 4-methyl-2-pentanone	13.66	43	558912	9.642	ppbV	95
65) trans-1,3-dichloropropene	14.24	75	345918	9.838	ppbV	99
66) 1,1,2-trichloroethane	14.44	97	243281	9.876	ppbV	93

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38596.D
 Acq On : 12 Mar 2020 3:04 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD010
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:11:29 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Fri Feb 14 14:35:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.76	91	785072	9.998	ppbV	99
70) 2-methylthiophene	14.82	97	2389119	10.430	ppbV	99
71) 1,3-dichloropropane	14.79	76	408236	9.843	ppbV	100
72) 2-hexanone	15.04	43	515105	9.858	ppbV	97
73) 3-methylthiophene	15.03	97	2442820	10.522	ppbV	99
74) dibromochloromethane	15.21	129	361759	10.817	ppbV	99
75) 1,2-dibromoethane	15.46	107	383958	10.441	ppbV	99
76) butyl acetate	15.70	73	126783	10.411	ppbV	95
77) octane	15.79	85	346684	10.520	ppbV	91
78) tetrachloroethene	15.93	166	352204	10.807	ppbV	99
79) 1,1,1,2-tetrachloroethane	16.57	131	267416	10.615	ppbV	98
80) chlorobenzene	16.58	112	638561	10.536	ppbV	99
81) ethylbenzene	16.93	91	954346	10.614	ppbV	98
82) 2-ethylthiophene	16.97	97	2584552	10.837	ppbV	97
83) m+p-xylene	17.09	91	1594664	21.418	ppbV	97
84) bromoform	17.16	173	350779	11.564	ppbV	99
85) styrene	17.42	104	715919	11.710	ppbV	96
86) 1,1,2,2-tetrachloroethane	17.51	83	568523	10.457	ppbV	98
87) o-xylene	17.51	91	794007	10.887	ppbV	95
88) 1,2,3-trichloropropane	17.63	75	477908	10.676	ppbV	97
89) nonane	17.71	43	673602	10.196	ppbV	91
91) isopropylbenzene	18.02	105	1145979	11.739	ppbV	97
92) bromobenzene	18.09	77	631815	11.000	ppbV	89
93) 2-chlorotoluene	18.42	126	315473M3	11.654	ppbV	
94) n-propylbenzene	18.45	120	368534	11.276	ppbV	96
95) 4-chlorotoluene	18.48	126	307286	11.607	ppbV	97
96) 4-ethyl toluene	18.57	105	1303917	11.905	ppbV	99
97) 1,3,5-trimethylbenzene	18.63	105	1035403	11.704	ppbV	98
98) tert-butylbenzene	18.96	119	1061392	12.125	ppbV	99
99) 1,2,4-trimethylbenzene	18.96	105	1011332	12.144	ppbV	95
100) decane	19.03	57	793631	11.497	ppbV	89
101) Benzyl Chloride	19.07	91	781719	12.822	ppbV	98
102) 1,3-dichlorobenzene	19.08	146	598231	11.491	ppbV	98
103) 1,4-dichlorobenzene	19.14	146	600476	12.162	ppbV	98
104) sec-butylbenzene	19.18	105	1517768	12.240	ppbV	99
105) 1,2,3-trimethylbenzene	19.30	105	1057203	13.285	ppbV	98
106) p-isopropyltoluene	19.29	119	1315219	12.504	ppbV	99
107) 1,2-dichlorobenzene	19.41	146	569157	11.671	ppbV	95
108) n-butylbenzene	19.63	91	1069316	11.632	ppbV	98
109) indan	19.46	117	1073038	13.090	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38596.D
 Acq On : 12 Mar 2020 3:04 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD010
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:11:29 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Fri Feb 14 14:35:02 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

110)	indene	19.53	115	858390	13.388	ppbV	99
111)	1,2-dibromo-3-chloropr...	19.77	75	280505	12.121	ppbV	93
112)	undecane	20.02	57	898670	11.939	ppbV	92
113)	1,2,4,5-tetramethylben...	20.25	119	1133956	14.075	ppbV	98
114)	dodecane	20.93	57	977549	12.896	ppbV	91
115)	1,2,4-trichlorobenzene	20.88	180	413383	13.394	ppbV	99
116)	naphthalene	20.99	128	1250597	13.837	ppbV	99
117)	1,2,3-trichlorobenzene	21.24	180	494287	13.962	ppbV	100
118)	benzothiophene	21.05	134	661868	11.773	ppbV	99
119)	hexachlorobutadiene	21.31	225	454820	11.289	ppbV	97
120)	2-methylnaphthalene	22.10	142	170486	11.012	ppbV	100
121)	1-methylnaphthalene	22.29	142	428680	11.131	ppbV	99

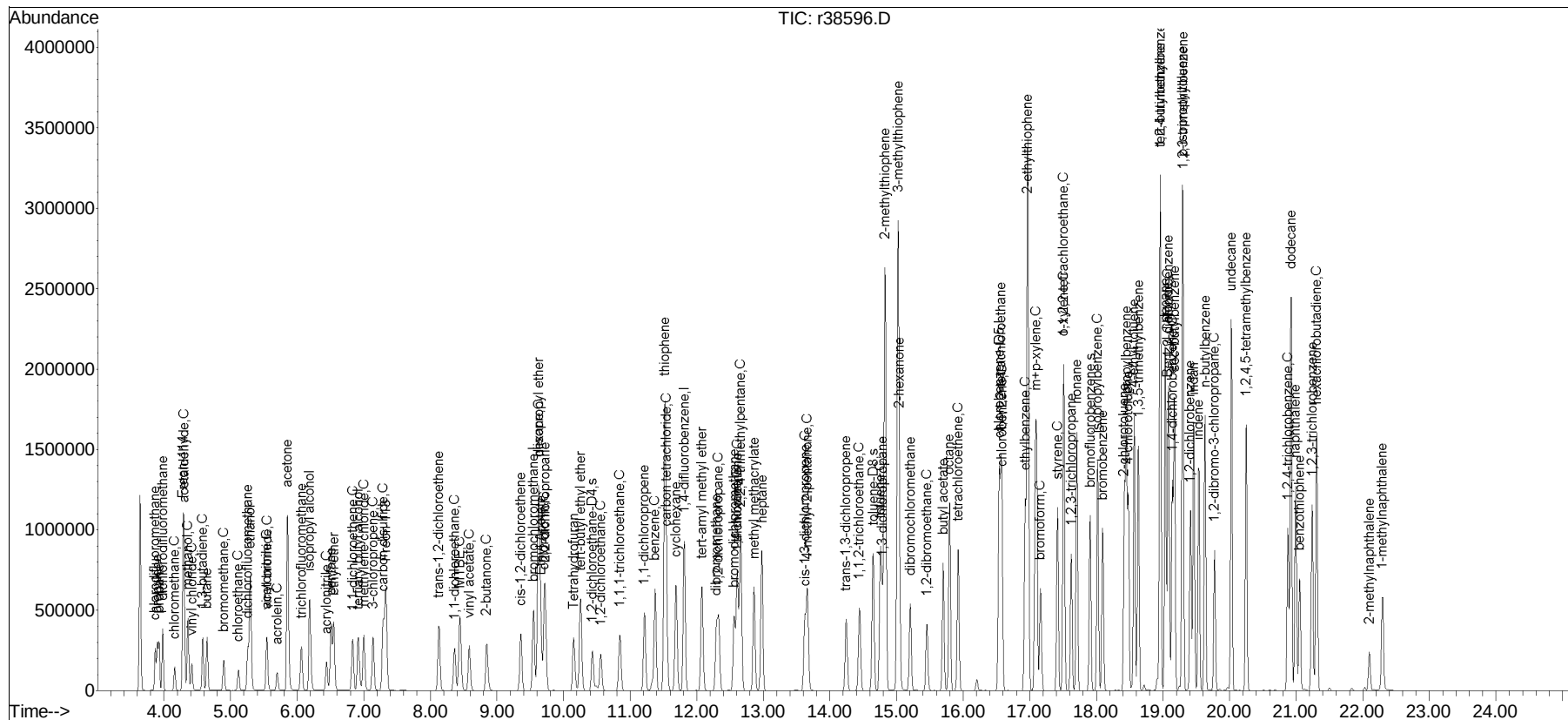
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

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Data Path   : O:\Forensics\Data\Airpiano3\2020\03\200312T_I\
Data File   : r38596.D
Acq On      : 12 Mar 2020    3:04 PM
Operator    : AIRPIANO3:RY
Sample      : IT015-SIMSTD010
Misc        : WG1350408
ALS Vial    : 0    Sample Multiplier: 1
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Quant Time: Mar 12 16:11:29 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Fri Feb 14 14:35:02 2020
Response via : Initial Calibration

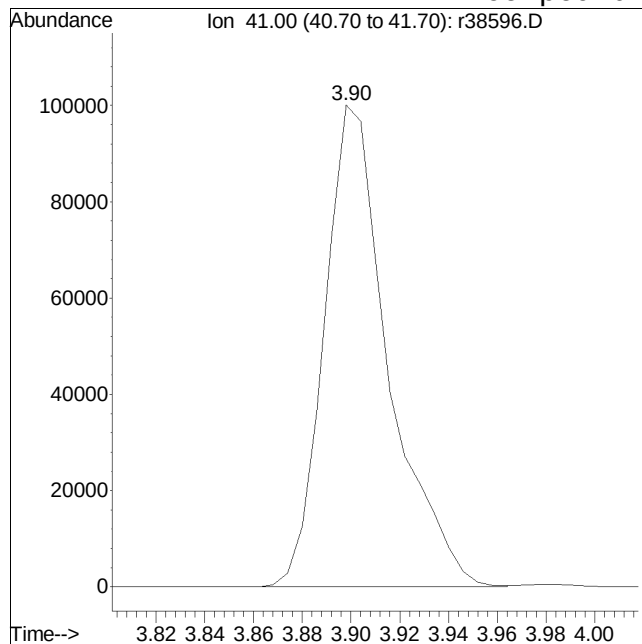
Sub List : Default - All compounds listed20\03\200312T_I\r38596.D



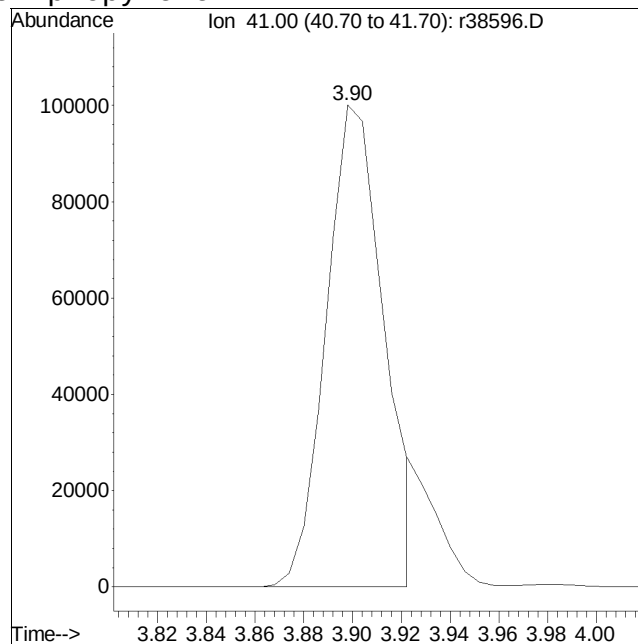
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TFS3_200312.M
Data File : r38596.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:3: 4 Instrument :
Sample : IT015-SIMSTD010 Quant Date : 3/12/2020 4:10 pm

Compound #3: propylene



Original Peak Response = 182915



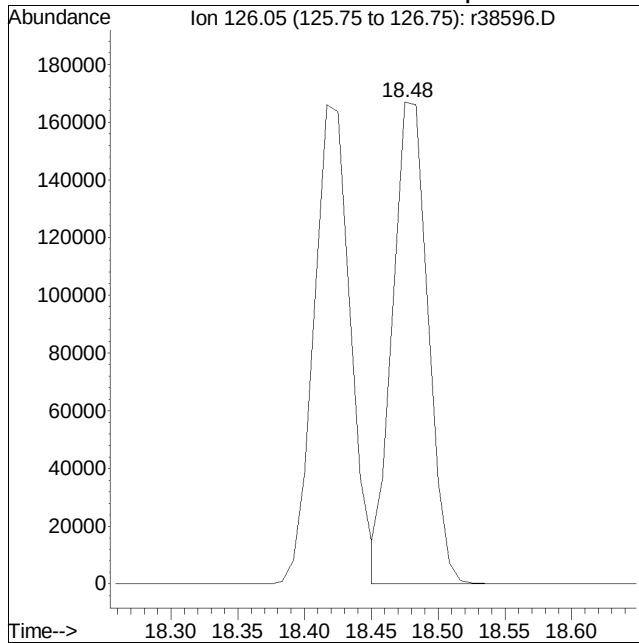
Manual Peak Response = 164789 M4

M4 = Poor automated baseline construction.

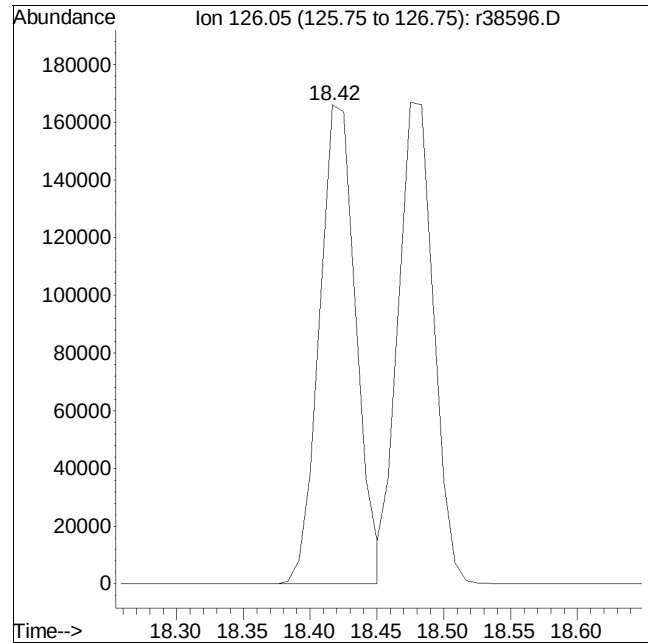
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TFS3_200312.M
Data File : r38596.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:3: 4 Instrument :
Sample : IT015-SIMSTD010 Quant Date : 3/12/2020 4:10 pm

Compound #93: 2-chlorotoluene



Original Peak Response = 307286



Manual Peak Response = 315473 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38597.D
 Acq On : 12 Mar 2020 3:41 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD020
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:23:03 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:12:16 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.55	49	386429	10.000	ppbV	0.00
Standard Area = 370599			Recovery = 104.27%			
43) 1,4-difluorobenzene	11.81	114	1078162	10.000	ppbV	0.00
Standard Area = 1030530			Recovery = 104.62%			
67) chlorobenzene-D5	16.54	54	164563	10.000	ppbV	0.00
Standard Area = 160625			Recovery = 102.45%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.43	65	179843	9.465	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 94.65%			
69) toluene-D8	14.64	98	766726	9.837	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.37%			
90) bromofluorobenzene	17.91	95	487677	9.098	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 90.98%			
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.86	51	583374	20.040	ppbV	99
3) propylene	3.90	41	343301M4	19.979	ppbV	
4) propane	3.92	29	465200	20.130	ppbV	99
5) dichlorodifluoromethane	3.98	85	684916	19.466	ppbV	99
6) chloromethane	4.16	50	317415	20.019	ppbV	99
7) Freon-114	4.28	85	830655	19.372	ppbV	96
8) methanol	4.36	31	781152	98.550	ppbV	99
9) vinyl chloride	4.41	62	374747	20.721	ppbV	100
10) 1,3-butadiene	4.58	54	379994	20.530	ppbV	98
11) butane	4.64	43	541534	19.986	ppbV	100
12) acetaldehyde	4.29	29	768566	83.762	ppbV	98
13) bromomethane	4.89	94	312102	20.540	ppbV	100
14) chloroethane	5.12	64	188865	20.796	ppbV	100
15) ethanol	5.30	31	1815350	114.881	ppbV	98
16) dichlorofluoromethane	5.25	67	594950	20.796	ppbV	100
17) vinyl bromide	5.54	106	405433	22.900	ppbV	100
18) acrolein	5.69	56	212538	22.234	ppbV #	94
19) acetone	5.85	43	2968859	114.867	ppbV	91
20) acetonitrile	5.54	41	386891	25.364	ppbV	98
21) trichlorofluoromethane	6.06	101	669558	25.082	ppbV	99
22) isopropyl alcohol	6.18	45	1934019	60.168	ppbV	98
23) acrylonitrile	6.44	53	396159	23.116	ppbV	94
24) pentane	6.51	43	821379M4	21.014	ppbV	

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38597.D
 Acq On : 12 Mar 2020 3:41 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD020
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:23:03 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:12:16 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.54	31	898169	23.529	ppbV	94
26) 1,1-dichloroethene	6.83	61	565884	23.809	ppbV	97
27) tertiary butyl alcohol	6.90	59	809631	20.567	ppbV	100
28) methylene chloride	7.00	49	525608	20.590	ppbV	98
29) 3-chloropropene	7.14	41	632395	20.265	ppbV	99
30) carbon disulfide	7.29	76	1421404	20.013	ppbV	99
31) Freon 113	7.33	101	749135	20.222	ppbV	99
32) trans-1,2-dichloroethene	8.13	61	607186	20.211	ppbV	100
33) 1,1-dichloroethane	8.36	63	702745	20.295	ppbV	100
34) MTBE	8.43	73	1242858	19.943	ppbV	99
35) vinyl acetate	8.57	43	1081123	20.414	ppbV	98
36) 2-butanone	8.83	43	960585	20.195	ppbV	100
37) cis-1,2-dichloroethene	9.36	61	524541	20.582	ppbV	100
38) Ethyl Acetate	9.65	61	160808	20.905	ppbV	95
39) chloroform	9.71	83	774091	20.522	ppbV	100
40) Tetrahydrofuran	10.14	42	597765	20.348	ppbV	100
41) 2,2-dichloropropane	9.72	77	648675	19.578	ppbV	99
42) 1,2-dichloroethane	10.56	62	420268	20.121	ppbV	98
44) hexane	9.63	57	812392	20.493	ppbV	91
45) diisopropyl ether	9.63	87	466703	20.718	ppbV	94
46) tert-butyl ethyl ether	10.25	59	1339787	20.454	ppbV	99
48) 1,1,1-trichloroethane	10.84	97	618172	20.039	ppbV	99
49) 1,1-dichloropropene	11.21	75	657747	20.053	ppbV	99
50) benzene	11.37	78	1584394	20.690	ppbV	99
51) thiophene	11.52	84	3325766	20.190	ppbV	98
52) carbon tetrachloride	11.55	117	588824	19.773	ppbV	99
53) cyclohexane	11.69	56	884569	20.856	ppbV	98
54) tert-amyl methyl ether	12.07	73	1389759	19.876	ppbV	99
55) dibromomethane	12.29	93	390854	19.748	ppbV	99
56) 1,2-dichloropropane	12.33	63	475668	20.477	ppbV	99
57) bromodichloromethane	12.56	83	861241	20.258	ppbV	100
58) 1,4-dioxane	12.59	88	366184	20.694	ppbV	98
59) trichloroethene	12.61	130	588842	20.491	ppbV	99
60) 2,2,4-trimethylpentane	12.66	57	2558298	20.072	ppbV	99
61) methyl methacrylate	12.85	41	702145	17.555	ppbV	99
62) heptane	12.98	43	1015332	20.104	ppbV	98
63) cis-1,3-dichloropropene	13.62	75	779217	20.304	ppbV	98
64) 4-methyl-2-pentanone	13.66	43	1172539	20.052	ppbV	99
65) trans-1,3-dichloropropene	14.24	75	738494	20.406	ppbV	99
66) 1,1,2-trichloroethane	14.44	97	523628	20.573	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38597.D
 Acq On : 12 Mar 2020 3:41 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD020
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:23:03 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:12:16 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.76	91	1674567	20.820	ppbV	100
70) 2-methylthiophene	14.82	97	4703576	19.216	ppbV	99
71) 1,3-dichloropropane	14.79	76	841358	20.116	ppbV	100
72) 2-hexanone	15.04	43	1016055	19.253	ppbV	97
73) 3-methylthiophene	15.03	97	4790025	19.139	ppbV	99
74) dibromochloromethane	15.21	129	752593	20.306	ppbV	99
75) 1,2-dibromoethane	15.45	107	829173	21.079	ppbV	99
76) butyl acetate	15.70	73	269042	20.713	ppbV	97
77) octane	15.79	85	754362	21.239	ppbV	96
78) tetrachloroethene	15.93	166	764542	21.188	ppbV	98
79) 1,1,1,2-tetrachloroethane	16.57	131	549959	20.074	ppbV	98
80) chlorobenzene	16.58	112	1407174	21.509	ppbV	97
81) ethylbenzene	16.93	91	2038028	20.844	ppbV	98
82) 2-ethylthiophene	16.97	97	4966476	18.756	ppbV	97
83) m+p-xylene	17.09	91	3373517	41.298	ppbV	100
84) bromoform	17.16	173	743359	20.685	ppbV	99
85) styrene	17.42	104	1553435	21.179	ppbV	100
86) 1,1,2,2-tetrachloroethane	17.51	83	1219682	20.940	ppbV	100
87) o-xylene	17.51	91	1655953	20.357	ppbV	97
88) 1,2,3-trichloropropane	17.63	75	983255	20.082	ppbV	98
89) nonane	17.71	43	1381089	20.012	ppbV	95
91) isopropylbenzene	18.02	105	2347265	19.992	ppbV	97
92) bromobenzene	18.09	77	1308232	20.210	ppbV	98
93) 2-chlorotoluene	18.43	126	662496	20.498	ppbV	78
94) n-propylbenzene	18.45	120	794531	21.043	ppbV	91
95) 4-chlorotoluene	18.48	126	645874	20.516	ppbV	97
96) 4-ethyl toluene	18.57	105	2679695	20.059	ppbV	98
97) 1,3,5-trimethylbenzene	18.63	105	2168207	20.440	ppbV	96
98) tert-butylbenzene	18.96	119	2078272	19.112	ppbV	100
99) 1,2,4-trimethylbenzene	18.96	105	1982017	19.129	ppbV	94
100) decane	19.03	57	1614312	19.854	ppbV	95
101) Benzyl Chloride	19.07	91	1607004	20.065	ppbV	97
102) 1,3-dichlorobenzene	19.08	146	1294947	21.128	ppbV	98
103) 1,4-dichlorobenzene	19.14	146	1216666	19.777	ppbV	97
104) sec-butylbenzene	19.18	105	3015939	19.395	ppbV	99
105) 1,2,3-trimethylbenzene	19.30	105	1784686	16.477	ppbV	93
106) p-isopropyltoluene	19.29	119	2511907	18.642	ppbV	99
107) 1,2-dichlorobenzene	19.42	146	1201041	20.597	ppbV	98
108) n-butylbenzene	19.63	91	2093750	19.112	ppbV	99
109) indan	19.47	117	1998972	18.183	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38597.D
 Acq On : 12 Mar 2020 3:41 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD020
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:23:03 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:12:16 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110)	indene	19.54	115	1622067	18.444	ppbV	100
111)	1,2-dibromo-3-chloropr...	19.77	75	508415	17.691	ppbV	93
112)	undecane	20.02	57	1743721	18.939	ppbV	96
113)	1,2,4,5-tetramethylben...	20.25	119	1987228	17.105	ppbV	99
114)	dodecane	20.93	57	1684320	16.818	ppbV	96
115)	1,2,4-trichlorobenzene	20.88	180	792964	18.723	ppbV	97
116)	naphthalene	20.99	128	2172923	16.959	ppbV	99
117)	1,2,3-trichlorobenzene	21.24	180	854703	16.878	ppbV	96
118)	benzothiophene	21.05	134	1523541	22.468	ppbV	99
119)	hexachlorobutadiene	21.31	225	842756	18.086	ppbV	98
120)	2-methylnaphthalene	22.10	142	381887	21.864	ppbV	99
121)	1-methylnaphthalene	22.29	142	891996	20.310	ppbV	98

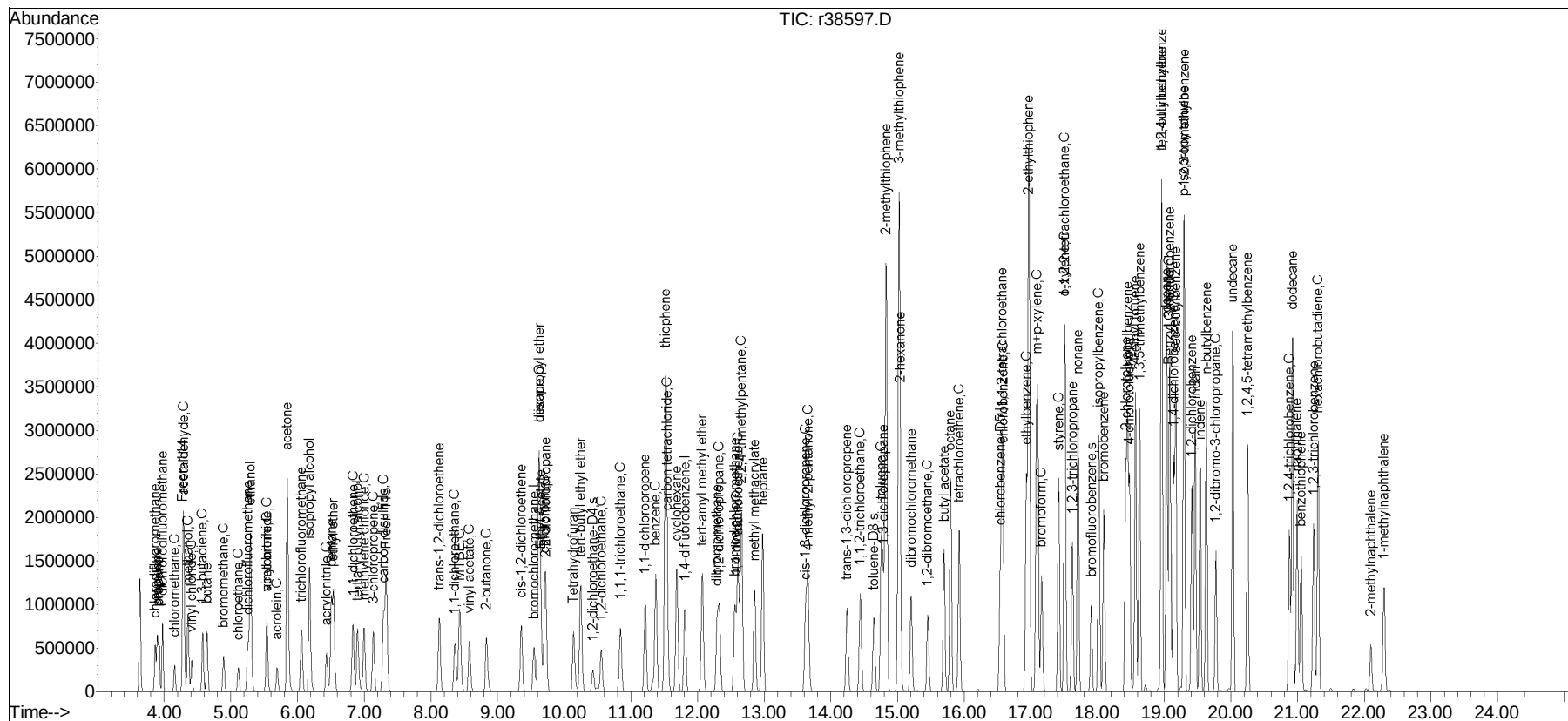
(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

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Data Path   : O:\Forensics\Data\Airpiano3\2020\03\200312T_I\
Data File  : r38597.D
Acq On     : 12 Mar 2020    3:41 PM
Operator   : AIRPIANO3:RY
Sample     : IT015-SIMSTD020
Misc       : WG1350408
ALS Vial   : 0    Sample Multiplier: 1
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Quant Time: Mar 12 16:23:03 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Mar 12 16:12:16 2020
Response via : Initial Calibration

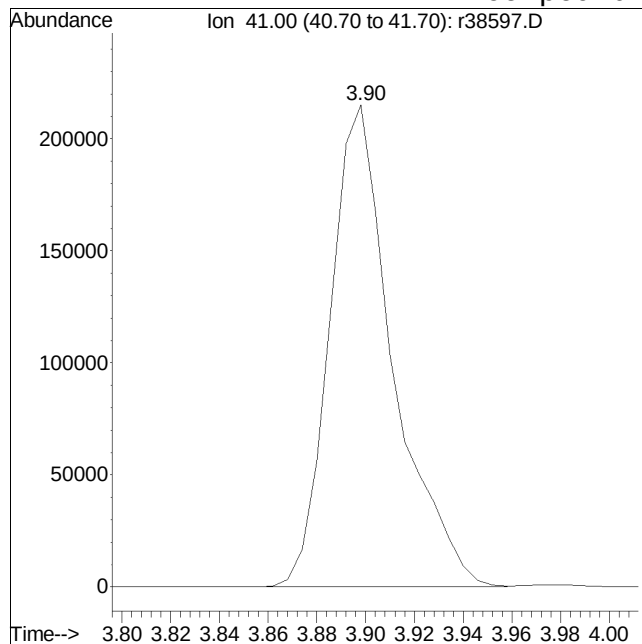
Sub List : Default - All compounds listed20\03\200312T_I\r38596.D



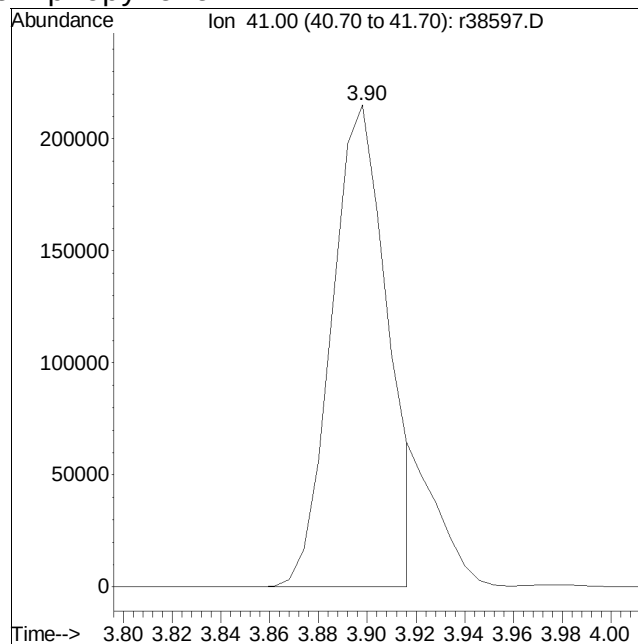
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TFS3_200312.M
Data File : r38597.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:3: 1 Instrument :
Sample : IT015-SIMSTD020 Quant Date : 3/12/2020 4:15 pm

Compound #3: propylene



Original Peak Response = 387944



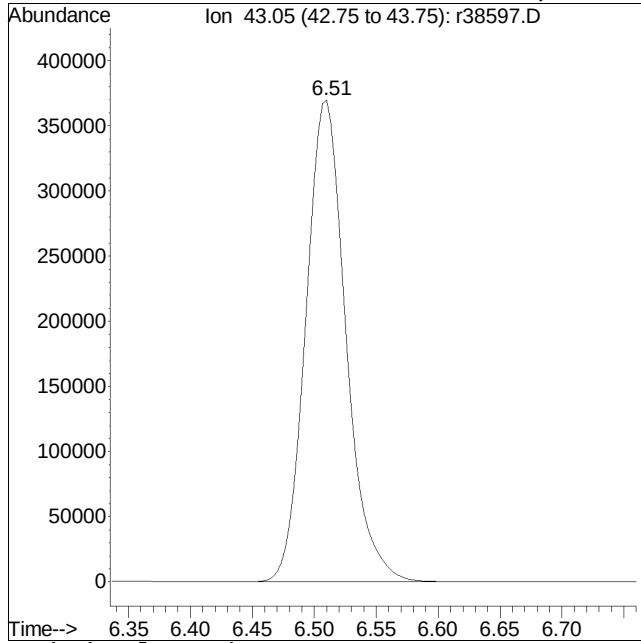
Manual Peak Response = 343301 M4

M4 = Poor automated baseline construction.

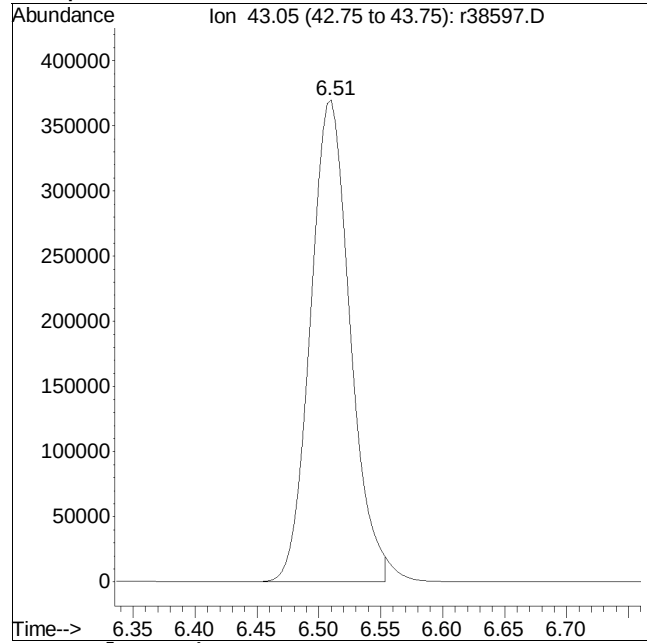
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TFS3_200312.M
Data File : r38597.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:3: 1 Instrument :
Sample : IT015-SIMSTD020 Quant Date : 3/12/2020 4:15 pm

Compound #24: pentane



Original Peak Response = 996503



Manual Peak Response = 821379 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38598.D
 Acq On : 12 Mar 2020 4:20 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD050
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:51:20 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:24:00 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.55	49	399060	10.000	ppbV	0.00
Standard Area = 370599			Recovery =	107.68%		
43) 1,4-difluorobenzene	11.81	114	1122309	10.000	ppbV	0.00
Standard Area = 1030530			Recovery =	108.91%		
67) chlorobenzene-D5	16.54	54	167383	10.000	ppbV	# 0.00
Standard Area = 160625			Recovery =	104.21%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.43	65	170176	8.549	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	85.49%		
69) toluene-D8	14.65	98	786785	9.911	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	99.11%		
90) bromofluorobenzene	17.91	95	534647	10.435	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	104.35%		
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.87	51	1291300	39.902	ppbV	96
3) propylene	3.90	41	800449M4	41.746	ppbV	
4) propane	3.92	29	1038518	40.279	ppbV	98
5) dichlorodifluoromethane	3.98	85	1350266	34.021	ppbV	99
6) chloromethane	4.16	50	691722	38.977	ppbV	98
7) Freon-114	4.28	85	1599390	32.649	ppbV	90
8) methanol	4.36	31	1723159	196.941	ppbV	96
9) vinyl chloride	4.41	62	861114	42.539	ppbV	99
10) 1,3-butadiene	4.58	54	849471	41.352	ppbV	97
11) butane	4.65	43	1154285	37.640	ppbV	98
12) acetaldehyde	4.30	29	1497293	151.673	ppbV	95
13) bromomethane	4.89	94	701184	41.424	ppbV	99
14) chloroethane	5.12	64	439761	42.927	ppbV	98
15) ethanol	5.30	31	2985173	166.848	ppbV	100
16) dichlorofluoromethane	5.26	67	1210304	37.751	ppbV	99
17) vinyl bromide	5.54	106	747538	37.603	ppbV	99
18) acrolein	5.69	56	460065	43.453	ppbV	96
19) acetone	5.85	43	4426806	152.098	ppbV	89
20) acetonitrile	5.54	41	669199	37.450	ppbV	100
21) trichlorofluoromethane	6.06	101	1066265	34.397	ppbV	98
22) isopropyl alcohol	6.19	45	3127466	85.939	ppbV	98
23) acrylonitrile	6.44	53	813651	42.967	ppbV	98
24) pentane	6.51	43	2158042	56.297	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38598.D
 Acq On : 12 Mar 2020 4:20 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD050
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:51:20 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:24:00 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.54	31	2411457	59.291	ppbV	97
26) 1,1-dichloroethene	6.83	61	1300985	47.915	ppbV	99
27) tertiary butyl alcohol	6.91	59	1952792	48.214	ppbV	97
28) methylene chloride	7.00	49	1230394	48.043	ppbV	93
29) 3-chloropropene	7.14	41	1486826	43.609	ppbV	97
30) carbon disulfide	7.29	76	3226333	41.799	ppbV	99
31) Freon 113	7.33	101	1685355	41.304	ppbV	97
32) trans-1,2-dichloroethene	8.13	61	1416872	43.768	ppbV	99
33) 1,1-dichloroethane	8.37	63	1654273	43.362	ppbV	99
34) MTBE	8.43	73	2780256	41.266	ppbV	96
35) vinyl acetate	8.58	43	2515234	45.227	ppbV	96
36) 2-butanone	8.84	43	2221399	42.741	ppbV	99
37) cis-1,2-dichloroethene	9.36	61	1221512	43.732	ppbV	98
38) Ethyl Acetate	9.65	61	391860	46.764	ppbV	94
39) chloroform	9.72	83	1710422	41.413	ppbV	98
40) Tetrahydrofuran	10.14	42	1411796	44.158	ppbV	99
41) 2,2-dichloropropane	9.72	77	1374618	38.507	ppbV	96
42) 1,2-dichloroethane	10.56	62	915347	39.907	ppbV	96
44) hexane	9.62	57	1884388	42.933	ppbV #	75
45) diisopropyl ether	9.63	87	1102049	44.207	ppbV	74
46) tert-butyl ethyl ether	10.25	59	3095625	43.311	ppbV	96
48) 1,1,1-trichloroethane	10.84	97	1342178	39.172	ppbV #	97
49) 1,1-dichloropropene	11.21	75	1481254	41.380	ppbV	95
50) benzene	11.37	78	3639691	42.390	ppbV	98
51) thiophene	11.53	84	6981664	38.497	ppbV	98
52) carbon tetrachloride	11.55	117	1195837	36.849	ppbV	99
53) cyclohexane	11.69	56	2127284	45.703	ppbV	96
54) tert-amyl methyl ether	12.07	73	3086091	40.712	ppbV	98
55) dibromomethane	12.30	93	882556	39.753	ppbV	98
56) 1,2-dichloropropane	12.33	63	1110757	42.977	ppbV	97
57) bromodichloromethane	12.56	83	1927920	41.720	ppbV	100
58) 1,4-dioxane	12.59	88	914671	47.647	ppbV	96
59) trichloroethene	12.61	130	1386095	43.818	ppbV	97
60) 2,2,4-trimethylpentane	12.66	57	5952089	42.560	ppbV	97
61) methyl methacrylate	12.86	41	1625272	41.469	ppbV	99
62) heptane	12.98	43	2276024	40.990	ppbV	94
63) cis-1,3-dichloropropene	13.63	75	1777546	42.676	ppbV	98
64) 4-methyl-2-pentanone	13.66	43	2636333	41.978	ppbV	95
65) trans-1,3-dichloropropene	14.24	75	1662587	42.954	ppbV	99
66) 1,1,2-trichloroethane	14.44	97	1218161	43.018	ppbV	95

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38598.D
 Acq On : 12 Mar 2020 4:20 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD050
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:51:20 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:24:00 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.76	91	3850178	43.577	ppbV	100
70) 2-methylthiophene	14.83	97	9107228	33.850	ppbV	99
71) 1,3-dichloropropane	14.79	76	1855139	41.712	ppbV	98
72) 2-hexanone	15.04	43	1951168	35.530	ppbV #	89
73) 3-methylthiophene	15.03	97	8909419	32.464	ppbV	99
74) dibromochloromethane	15.21	129	1692267	44.405	ppbV	97
75) 1,2-dibromoethane	15.46	107	1874938	44.673	ppbV	100
76) butyl acetate	15.70	73	626429	47.315	ppbV	92
77) octane	15.80	85	1776964	47.625	ppbV	92
78) tetrachloroethene	15.93	166	1693608	43.149	ppbV	97
79) 1,1,1,2-tetrachloroethane	16.57	131	1215736	41.403	ppbV	96
80) chlorobenzene	16.58	112	3145408	44.477	ppbV	93
81) ethylbenzene	16.93	91	4585962	43.318	ppbV	96
82) 2-ethylthiophene	16.98	97	9012200	31.057	ppbV	95
83) m+p-xylene	17.10	91	7192700	81.258	ppbV	96
84) bromoform	17.17	173	1645518	46.332	ppbV	98
85) styrene	17.42	104	3560494	46.856	ppbV	97
86) 1,1,2,2-tetrachloroethane	17.51	83	2503064	40.224	ppbV	99
87) o-xylene	17.51	91	3390869	38.506	ppbV	93
88) 1,2,3-trichloropropane	17.63	75	2204534	43.158	ppbV	96
89) nonane	17.71	43	2942683	40.018	ppbV #	90
91) isopropylbenzene	18.02	105	5072251	40.673	ppbV	91
92) bromobenzene	18.10	77	2848495	42.930	ppbV	98
93) 2-chlorotoluene	18.43	126	1570320	46.509	ppbV	97
94) n-propylbenzene	18.45	120	1874997	48.274	ppbV	74
95) 4-chlorotoluene	18.48	126	1555400	48.021	ppbV	75
96) 4-ethyl toluene	18.57	105	5659025	40.490	ppbV	92
97) 1,3,5-trimethylbenzene	18.63	105	4576925	40.193	ppbV	90
98) tert-butylbenzene	18.96	119	3980603	35.479	ppbV	93
99) 1,2,4-trimethylbenzene	18.97	105	3750900	34.179	ppbV	90
100) decane	19.04	57	3454532	41.262	ppbV	92
101) Benzyl Chloride	19.07	91	3447289	48.373	ppbV #	89
102) 1,3-dichlorobenzene	19.09	146	2691666	41.521	ppbV	95
103) 1,4-dichlorobenzene	19.14	146	2690383	44.546	ppbV	95
104) sec-butylbenzene	19.18	105	6218111	38.712	ppbV	94
105) 1,2,3-trimethylbenzene	19.30	105	3423186	33.014	ppbV	91
106) p-isopropyltoluene	19.30	119	4786254	35.387	ppbV	92
107) 1,2-dichlorobenzene	19.42	146	2673932	44.151	ppbV	96
108) n-butylbenzene	19.63	91	4490773	41.182	ppbV	94
109) indan	19.47	117	4339841	42.132	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38598.D
 Acq On : 12 Mar 2020 4:20 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD050
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:51:20 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:24:00 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.54	115	3649994	46.201	ppbV	99
111) 1,2-dibromo-3-chloropr...	19.77	75	1076414	40.652	ppbV #	83
112) undecane	20.03	57	3698999	40.560	ppbV	94
113) 1,2,4,5-tetramethylben...	20.25	119	4326330	43.167	ppbV	95
114) dodecane	20.93	57	3706435	41.148	ppbV	92
115) 1,2,4-trichlorobenzene	20.88	180	2029103	57.657	ppbV	94
116) naphthalene	20.99	128	5498084	51.027	ppbV	98
117) 1,2,3-trichlorobenzene	21.24	180	2130337	50.851	ppbV	94
118) benzothiophene	21.06	134	4188654	70.097	ppbV	98
119) hexachlorobutadiene	21.31	225	1794781	36.660	ppbV	96
120) 2-methylnaphthalene	22.10	142	1174658	75.012	ppbV	99
121) 1-methylnaphthalene	22.30	142	2435879	57.561	ppbV	99

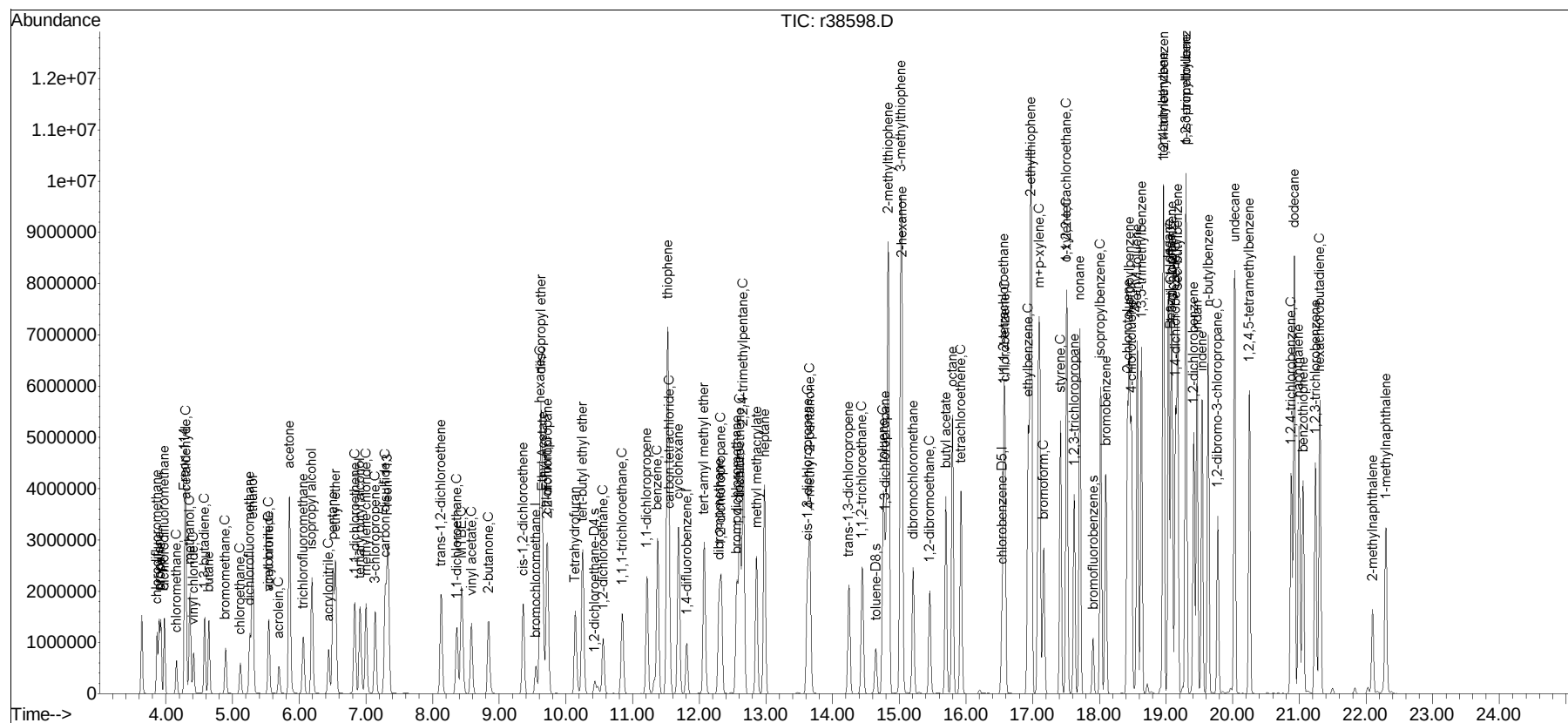
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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Data Path   : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
Data File  : r38598.D
Acq On     : 12 Mar 2020    4:20 PM
Operator   : AIRPIANO3:RY
Sample     : IT015-SIMSTD050
Misc       : WG1350408
ALS Vial   : 0    Sample Multiplier: 1
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Quant Time: Mar 12 16:51:20 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Mar 12 16:24:00 2020
Response via : Initial Calibration

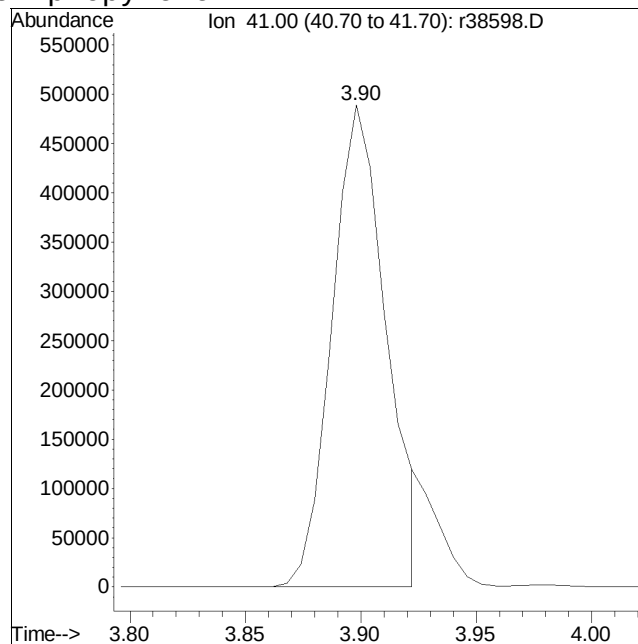
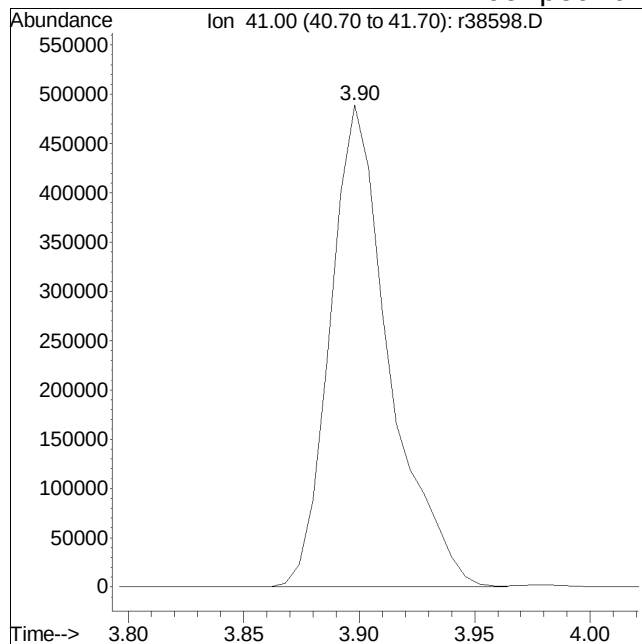
Sub List : Default - All compounds listed20\03\200312T_I\r38596.D



Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TFS3_200312.M
Data File : r38598.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:4: 0 Instrument :
Sample : IT015-SIMSTD050 Quant Date : 3/12/2020 4:51 pm

Compound #3: propylene



Original Peak Response = 873787

Manual Peak Response = 800449 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38599.D
 Acq On : 12 Mar 2020 5:00 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-LLSTD100
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 17:26:44 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:52:49 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.56	49	392985	10.000	ppbV	0.00
Standard Area = 370599			Recovery =	106.04%		
43) 1,4-difluorobenzene	11.81	114	1133202	10.000	ppbV	0.00
Standard Area = 1030530			Recovery =	109.96%		
67) chlorobenzene-D5	16.54	54	156109	10.000	ppbV	# 0.00
Standard Area = 160625			Recovery =	97.19%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.44	65	146136	7.425	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	74.25%		
69) toluene-D8	14.65	98	778693	10.531	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	105.31%		
90) bromofluorobenzene	17.91	95	565978	11.771	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	117.71%		
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.87	51	2285538	73.847	ppbV	95
3) propylene	3.90	41	1459024M4	79.455	ppbV	
4) propane	3.93	29	1822443	74.179	ppbV	98
5) dichlorodifluoromethane	3.98	85	2305372	61.805	ppbV	98
6) chloromethane	4.16	50	1209198	71.438	ppbV	98
7) Freon-114	4.28	85	2479139	54.070	ppbV	# 88
8) methanol	4.37	31	3006021	364.336	ppbV	95
9) vinyl chloride	4.41	62	1573531	80.653	ppbV	99
10) 1,3-butadiene	4.58	54	1459980	73.998	ppbV	100
11) butane	4.65	43	2028685	69.635	ppbV	98
12) acetaldehyde	4.30	29	2437240	268.291	ppbV	90
13) bromomethane	4.89	94	1227161	75.467	ppbV	99
14) chloroethane	5.12	64	825953	83.560	ppbV	98
15) ethanol	5.31	31	4805439	292.175	ppbV	97
16) dichlorofluoromethane	5.26	67	2129930	69.909	ppbV	99
17) vinyl bromide	5.55	106	1261127	66.783	ppbV	97
18) acrolein	5.70	56	841908	82.549	ppbV	95
19) acetone	5.86	43	7264363	268.469	ppbV	92
20) acetonitrile	5.55	41	1218185	71.800	ppbV	100
21) trichlorofluoromethane	6.06	101	1758611	60.296	ppbV	100
22) isopropyl alcohol	6.21	45	5271895	153.979	ppbV	97
23) acrylonitrile	6.45	53	1444522	79.050	ppbV	96
24) pentane	6.51	43	3016244	78.490	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38599.D
 Acq On : 12 Mar 2020 5:00 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-LLSTD100
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 17:26:44 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:52:49 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	6.55	31	3084099	75.011	ppbV	94
26) 1,1-dichloroethene	6.83	61	2264848	85.211	ppbV	96
27) tertiary butyl alcohol	6.92	59	3555789	89.682	ppbV #	94
28) methylene chloride	7.01	49	2145648	85.635	ppbV	89
29) 3-chloropropene	7.15	41	2676447	81.197	ppbV	95
30) carbon disulfide	7.29	76	5414559	72.942	ppbV	97
31) Freon 113	7.33	101	2824568	72.084	ppbV	99
32) trans-1,2-dichloroethene	8.13	61	2528507	80.753	ppbV	98
33) 1,1-dichloroethane	8.37	63	2989967	81.123	ppbV	98
34) MTBE	8.44	73	4559956	70.486	ppbV #	91
35) vinyl acetate	8.58	43	4404990	81.998	ppbV #	91
36) 2-butanone	8.84	43	3871714	77.521	ppbV #	98
37) cis-1,2-dichloroethene	9.37	61	2185138	80.890	ppbV	97
38) Ethyl Acetate	9.66	61	750801	91.977	ppbV #	61
39) chloroform	9.72	83	2755905	69.462	ppbV	97
40) Tetrahydrofuran	10.14	42	2524563	81.544	ppbV	99
41) 2,2-dichloropropane	9.73	77	2094710	61.608	ppbV #	96
42) 1,2-dichloroethane	10.57	62	1491297	67.983	ppbV #	92
44) hexane	9.63	57	3232660	74.447	ppbV #	72
45) diisopropyl ether	9.63	87	1859969	75.136	ppbV #	69
46) tert-butyl ethyl ether	10.26	59	5455208	77.063	ppbV	95
48) 1,1,1-trichloroethane	10.85	97	2179130	64.999	ppbV #	94
49) 1,1-dichloropropene	11.22	75	2480160	70.352	ppbV	93
50) benzene	11.38	78	6273737	73.974	ppbV	97
51) thiophene	11.53	84	10418332	58.828	ppbV	98
52) carbon tetrachloride	11.56	117	1737641	55.100	ppbV	99
53) cyclohexane	11.69	56	3933376	84.734	ppbV	96
54) tert-amyl methyl ether	12.08	73	5142847	69.025	ppbV	96
55) dibromomethane	12.30	93	1513724	69.565	ppbV	98
56) 1,2-dichloropropane	12.33	63	1993528	77.956	ppbV #	95
57) bromodichloromethane	12.57	83	3142967	68.992	ppbV	98
58) 1,4-dioxane	12.59	88	1579071	82.017	ppbV	96
59) trichloroethene	12.61	130	2499624	79.666	ppbV	94
60) 2,2,4-trimethylpentane	12.66	57	10275344	74.347	ppbV	95
61) methyl methacrylate	12.86	41	2756058	71.683	ppbV	96
62) heptane	12.98	43	3817424	69.887	ppbV	88
63) cis-1,3-dichloropropene	13.63	75	3006777	73.022	ppbV	96
64) 4-methyl-2-pentanone	13.67	43	4450307	72.108	ppbV #	89
65) trans-1,3-dichloropropene	14.25	75	2793051	72.935	ppbV	99
66) 1,1,2-trichloroethane	14.45	97	2172487	77.528	ppbV	95

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38599.D
 Acq On : 12 Mar 2020 5:00 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-LLSTD100
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 17:26:44 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:52:49 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) toluene	14.77	91	6755326	83.513	ppbV	99
70) 2-methylthiophene	14.84	97	12726115	53.170	ppbV	98
71) 1,3-dichloropropane	14.80	76	2937666	72.540	ppbV	97
72) 2-hexanone	15.05	43	2828288	57.602	ppbV	90
73) 3-methylthiophene	15.03	97	12136075	49.915	ppbV	99
74) dibromochloromethane	15.22	129	2865749	81.938	ppbV	97
75) 1,2-dibromoethane	15.46	107	3192552	82.820	ppbV	98
76) butyl acetate	15.70	73	1059843	86.608	ppbV	86
77) octane	15.80	85	2991292	86.548	ppbV	87
78) tetrachloroethene	15.93	166	2726279	75.962	ppbV	93
79) 1,1,1,2-tetrachloroethane	16.57	131	1963984	73.522	ppbV	94
80) chlorobenzene	16.59	112	5069114	78.088	ppbV	90
81) ethylbenzene	16.94	91	7686469	79.364	ppbV	95
82) 2-ethylthiophene	16.98	97	12169346	47.538	ppbV	96
83) m+p-xylene	17.11	91	11101885	138.178	ppbV	94
84) bromoform	17.18	173	2550293	77.808	ppbV	98
85) styrene	17.43	104	5983185	85.190	ppbV	94
86) 1,1,2,2-tetrachloroethane	17.52	83	3637497	64.476	ppbV	99
87) o-xylene	17.52	91	4946819	62.277	ppbV	89
88) 1,2,3-trichloropropane	17.63	75	3590309	76.866	ppbV	93
89) nonane	17.71	43	4579928	68.742	ppbV #	85
91) isopropylbenzene	18.02	105	8038564	71.007	ppbV #	87
92) bromobenzene	18.10	77	4457824	73.521	ppbV	89
93) 2-chlorotoluene	18.43	126	2707014	86.831	ppbV	78
94) n-propylbenzene	18.45	120	3005465	83.379	ppbV #	66
95) 4-chlorotoluene	18.48	126	2754294	91.695	ppbV #	64
96) 4-ethyl toluene	18.57	105	8721765	68.780	ppbV #	89
97) 1,3,5-trimethylbenzene	18.63	105	7031887	68.120	ppbV #	87
98) tert-butylbenzene	18.96	119	5759549	57.425	ppbV #	90
99) 1,2,4-trimethylbenzene	18.97	105	5368101	54.931	ppbV	90
100) decane	19.04	57	5441402	71.473	ppbV	92
101) Benzyl Chloride	19.07	91	5288261	79.936	ppbV #	84
102) 1,3-dichlorobenzene	19.09	146	4102534	69.539	ppbV #	94
103) 1,4-dichlorobenzene	19.14	146	4359847	78.627	ppbV #	93
104) sec-butylbenzene	19.18	105	9541349	65.813	ppbV #	87
105) 1,2,3-trimethylbenzene	19.31	105	4929431	53.574	ppbV	93
106) p-isopropyltoluene	19.30	119	6781977	56.107	ppbV #	88
107) 1,2-dichlorobenzene	19.42	146	4405659	79.324	ppbV #	95
108) n-butylbenzene	19.63	91	7133718	71.956	ppbV #	85
109) indan	19.47	117	6878535	73.247	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38599.D
 Acq On : 12 Mar 2020 5:00 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-LLSTD100
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 17:26:44 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:52:49 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110)	indene	19.54	115	5947927	81.611	ppbV	99
111)	1,2-dibromo-3-chloropr...	19.78	75	1712085	71.231	ppbV #	79
112)	undecane	20.03	57	5711928	69.016	ppbV	94
113)	1,2,4,5-tetramethylben...	20.25	119	6848414	74.725	ppbV	90
114)	dodecane	20.93	57	5774305	70.519	ppbV	94
115)	1,2,4-trichlorobenzene	20.88	180	3508995	104.621	ppbV	95
116)	naphthalene	21.00	128	9484653	94.107	ppbV	98
117)	1,2,3-trichlorobenzene	21.24	180	3592794	91.730	ppbV	94
118)	benzothiophene	21.06	134	7803479	132.418	ppbV	99
119)	hexachlorobutadiene	21.31	225	2721280	61.960	ppbV	96
120)	2-methylnaphthalene	22.10	142	2465093	153.435	ppbV	99
121)	1-methylnaphthalene	22.30	142	4684604	115.209	ppbV	97

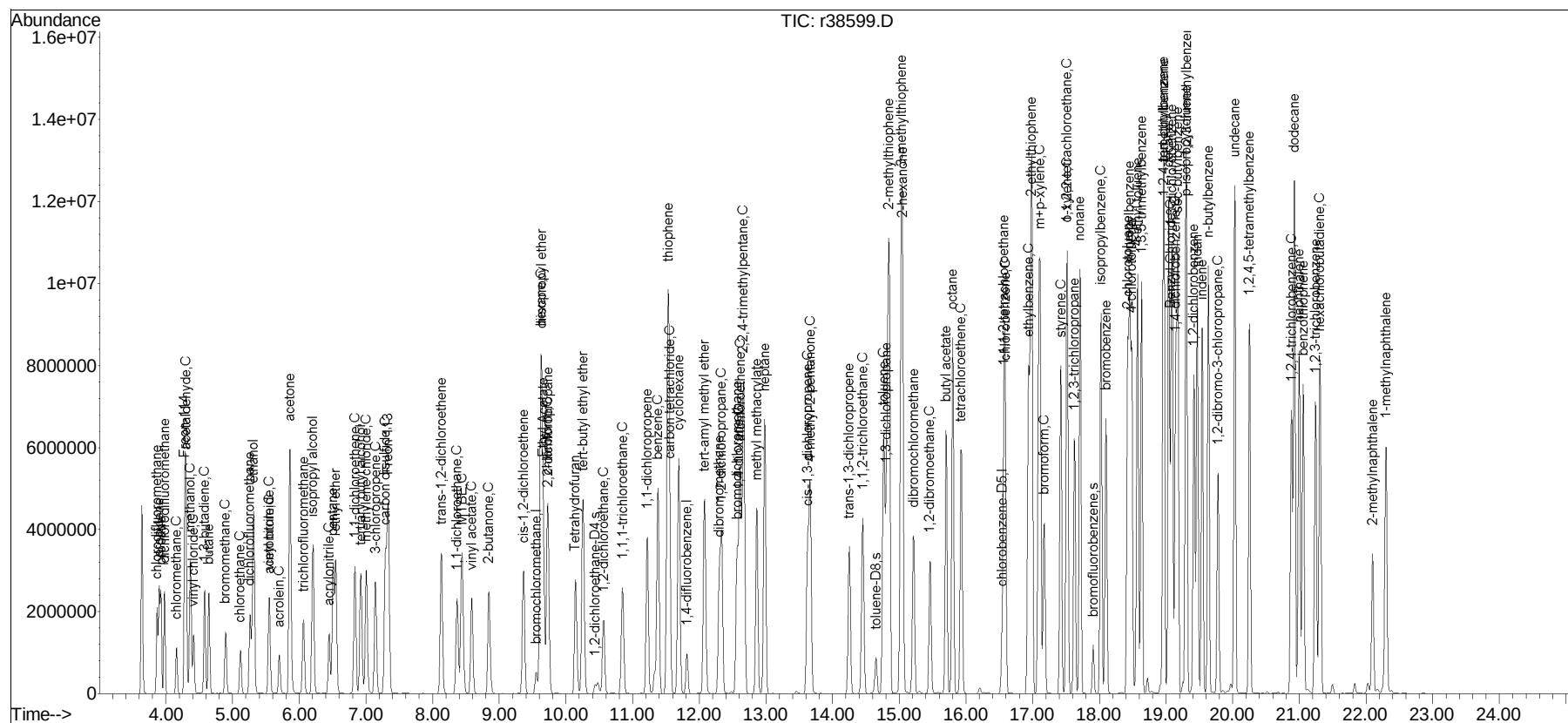
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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Data Path   : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
Data File  : r38599.D
Acq On     : 12 Mar 2020    5:00 PM
Operator   : AIRPIANO3:RY
Sample     : IT015-LLSTD100
Misc       : WG1350408
ALS Vial   : 0    Sample Multiplier: 1
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Quant Time: Mar 12 17:26:44 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Mar 12 16:52:49 2020
Response via : Initial Calibration

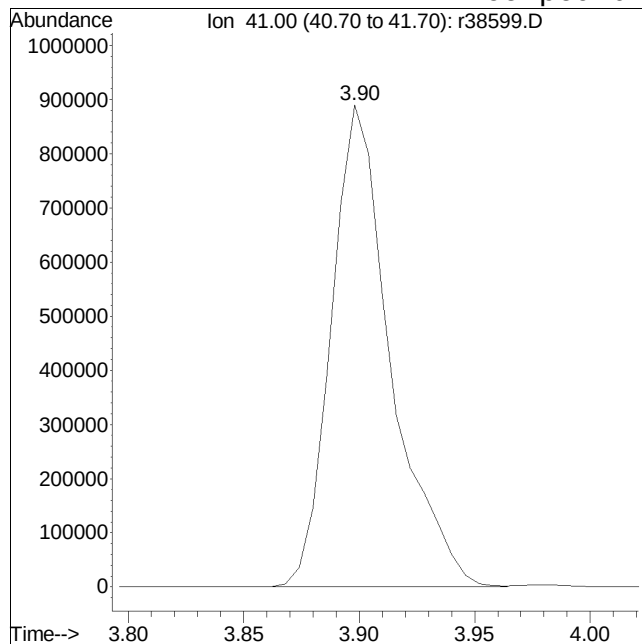
Sub List : Default - All compounds listed20\03\200312T_I\r38596.D



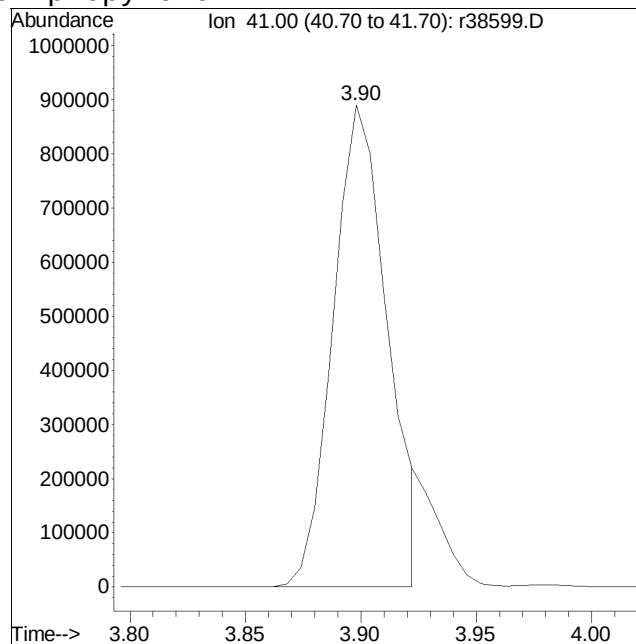
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TFS3_200312.M
Data File : r38599.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:5: 0 Instrument :
Sample : IT015-LLSTD100 Quant Date : 3/12/2020 5:26 pm

Compound #3: propylene



Original Peak Response = 1597829



Manual Peak Response = 1459024 M4

M4 = Poor automated baseline construction.

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38602.D
 Acq On : 13 Mar 2020 12:06 AM
 Operator : AIRPIAN03:AR
 Sample : CT015-LLSTD010
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 13 04:41:55 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	bromochloromethane	1.000	1.000	0.0	93	0.00
2	chlorodifluoromethane	0.762	0.639	16.1	79	0.00
3	propylene	0.454	0.468	-3.1	98	0.00
4	propane	0.602	0.529	12.1	83	0.00
5	dichlorodifluoromethane	0.904	0.772	14.6	79	0.00
6 C	chloromethane	0.415	0.372	10.4	85	0.00
7	Freon-114	1.100	1.040	5.5	88	0.00
8 C	methanol	0.200	0.190	5.0	87	0.00
9 C	vinyl chloride	0.484	0.496	-2.5	99	0.00
10 C	1,3-butadiene	0.486	0.479	1.4	94	0.00
11	butane	0.713	0.589	17.4	79	0.00
13 C	bromomethane	0.401	0.396	1.2	94	0.00
14 C	chloroethane	0.246	0.250	-1.6	99	0.00
15	ethanol	0.390	0.352	9.7	81	0.00
16	dichlorofluoromethane	0.746	0.607	18.6	77	0.00
17 C	vinyl bromide	0.461	0.391	15.2	80	0.00
18 C	acrolein	0.253	0.221	12.6	84	0.00
19	acetone	0.649	0.481	25.9	67	0.00
20 C	acetonitrile	0.417	0.363	12.9	86	0.00
21	trichlorofluoromethane	0.705	0.553	21.6	75	0.00
22	isopropyl alcohol	0.829	0.661	20.3	74	0.00
23 C	acrylonitrile	0.453	0.394	13.0	83	0.00
24	pentane	0.952	0.813	14.6	75	0.00
25	ethyl ether	1.014	0.845	16.7	80	0.00
26 C	1,1-dichloroethene	0.664	0.611	8.0	93	0.00
27	tertiary butyl alcohol	0.994	0.846	14.9	78	-0.01
28 C	methylene chloride	0.624	0.483	22.6	68	0.00
29 C	3-chloropropene	0.819	0.843	-2.9	98	0.00
30 C	carbon disulfide	1.825	1.664	8.8	85	0.00
31	Freon 113	0.962	0.947	1.6	92	0.00
32	trans-1,2-dichloroethene	0.778	0.783	-0.6	94	0.00
33 C	1,1-dichloroethane	0.916	0.936	-2.2	98	0.00
34 C	MTBE	1.585	1.448	8.6	84	0.00
35 C	vinyl acetate	1.326	1.301	1.9	89	0.00
36 C	2-butanone	1.230	1.191	3.2	90	0.00
37	cis-1,2-dichloroethene	0.671	0.721	-7.5	102	0.00
38	Ethyl Acetate	0.205	0.232	-13.2	109	0.00
39 C	chloroform	0.971	0.997	-2.7	95	0.00
40	Tetrahydrofuran	0.770	0.751	2.5	92	0.00

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38602.D
 Acq On : 13 Mar 2020 12:06 AM
 Operator : AIRPIAN03:AR
 Sample : CT015-LLSTD010
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 13 04:41:55 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	2,2-dichloropropane	0.824	0.669	18.8	73	0.00
42 C	1,2-dichloroethane	0.536	0.473	11.8	82	0.00
43 I	1,4-difluorobenzene	1.000	1.000	0.0	103	0.00
44 C	hexane	0.371	0.381	-2.7	107	0.00
45	diisopropyl ether	0.212	0.196	7.5	97	0.00
46	tert-butyl ethyl ether	0.607	0.547	9.9	93	0.00
47 s	1,2-dichloroethane-D4	0.168	0.131	22.0	76	0.00
48 C	1,1,1-trichloroethane	0.283	0.235	17.0	85	0.00
49	1,1-dichloropropene	0.300	0.252	16.0	85	0.00
50 C	benzene	0.724	0.669	7.6	97	0.00
52 C	carbon tetrachloride	0.263	0.236	10.3	88	0.00
53	cyclohexane	0.402	0.414	-3.0	108	0.00
54	tert-amyl methyl ether	0.632	0.513	18.8	81	0.00
55	dibromomethane	0.185	0.158	14.6	88	0.00
56 C	1,2-dichloropropane	0.219	0.215	1.8	103	0.00
57	bromodichloromethane	0.386	0.357	7.5	93	0.00
58 C	1,4-dioxane	0.166	0.176	-6.0	110	0.00
59 C	trichloroethene	0.270	0.268	0.7	104	0.00
60 C	2,2,4-trimethylpentane	1.181	1.233	-4.4	107	0.00
61	methyl methacrylate	0.326	0.226	30.7#	63	0.00
62	heptane	0.464	0.414	10.8	91	0.00
63 C	cis-1,3-dichloropropene	0.351	0.335	4.6	97	0.00
64 C	4-methyl-2-pentanone	0.523	0.478	8.6	91	0.00
65	trans-1,3-dichloropropene	0.327	0.265	19.0	81	0.00
66 C	1,1,2-trichloroethane	0.240	0.229	4.6	100	0.00
67 I	chlorobenzene-D5	1.000	1.000	0.0	95	0.00
68 C	toluene	5.075	5.300	-4.4	103	0.00
69 s	toluene-D8	4.768	4.550	4.6	91	0.00
71	1,3-dichloropropane	2.505	2.230	11.0	83	0.00
72	2-hexanone	2.979	3.066	-2.9	91	0.00
74	dibromochloromethane	2.190	2.327	-6.3	98	0.00
75 C	1,2-dibromoethane	2.416	2.450	-1.4	97	0.00
76	butyl acetate	0.769	0.689	10.4	83	0.00
77	octane	2.177	2.176	0.0	96	0.00
78 C	tetrachloroethene	2.230	2.391	-7.2	103	0.00
79	1,1,1,2-tetrachloroethane	1.655	1.541	6.9	88	0.00
80 C	chlorobenzene	4.044	4.527	-11.9	108	0.00

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38602.D
 Acq On : 13 Mar 2020 12:06 AM
 Operator : AIRPIAN03:AR
 Sample : CT015-LLSTD010
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 13 04:41:55 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81 C	ethylbenzene	6.044	6.512	-7.7	104	0.00
83 C	m+p-xylene	4.948	5.282	-6.8	101	0.00
84 C	bromoform	2.041	2.296	-12.5	100	0.00
85 C	styrene	4.416	4.708	-6.6	100	0.00
86 C	1,1,2,2-tetrachloroethane	3.453	4.111	-19.1	110	0.00
87 C	o-xylene	4.848	5.307	-9.5	102	0.00
88	1,2,3-trichloropropane	2.906	2.667	8.2	85	0.00
89	nonane	4.101	3.710	9.5	84	0.00
90 s	bromofluorobenzene	3.148	2.956	6.1	86	0.00
91 C	isopropylbenzene	6.989	6.960	0.4	93	0.00
92	bromobenzene	3.755	3.661	2.5	88	0.00
93	2-chlorotoluene	1.964	1.931	1.7	93	0.00
94	n-propylbenzene	2.261	2.386	-5.5	99	0.00
95	4-chlorotoluene	1.904	1.871	1.7	93	0.00
96	4-ethyl toluene	7.806	8.084	-3.6	94	0.00
97	1,3,5-trimethylbenzene	6.349	6.723	-5.9	99	0.00
98	tert-butylbenzene	6.083	6.570	-8.0	94	0.00
99	1,2,4-trimethylbenzene	5.907	6.664	-12.8	100	0.00
100	decane	4.703	5.074	-7.9	97	0.00
101 C	Benzyl Chloride	4.132	4.863	-17.7	95	0.00
102	1,3-dichlorobenzene	3.635	4.131	-13.6	105	0.00
103 C	1,4-dichlorobenzene	3.457	3.798	-9.9	96	0.00
104	sec-butylbenzene	8.890	8.859	0.3	89	0.00
106	p-isopropyltoluene	7.318	7.408	-1.2	86	0.00
107	1,2-dichlorobenzene	3.466	3.850	-11.1	103	0.00
108	n-butylbenzene	6.128	6.589	-7.5	94	0.00
111 C	1,2-dibromo-3-chloropropane	1.484	1.503	-1.3	82	0.00
112	undecane	5.096	5.771	-13.2	98	0.00
114	dodecane	5.052	6.149	-21.7	96	0.00
115 C	1,2,4-trichlorobenzene	2.161	3.260	-50.9#	120	0.00
116	naphthalene	6.409	7.553	-17.8	92	0.00
117	1,2,3-trichlorobenzene	2.483	2.998	-20.7	92	0.00
119 C	hexachlorobutadiene	2.680	3.398	-26.8	114	0.00

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38602.D
 Acq On : 13 Mar 2020 12:06 AM
 Operator : AIRPIAN03:AR
 Sample : CT015-LLSTD010
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 13 04:41:55 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.542	49	346389	10.000	ppbV	0.00
Standard Area = 370599			Recovery =	93.47%		
43) 1,4-difluorobenzene	11.807	114	1060289	10.000	ppbV	0.00
Standard Area = 1030530			Recovery =	102.89%		
67) chlorobenzene-D5	16.542	54	152384	10.000	ppbV	0.00
Standard Area = 160625			Recovery =	94.87%		
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	10.425	65	138570	7.775	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	77.75%		
69) toluene-D8	14.642	98	693328	9.543	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	95.43%		
90) bromofluorobenzene	17.908	95	450423	9.389	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	93.89%		
Target Compounds						
					Qvalue	
2) chlorodifluoromethane	3.868	51	221421	8.391	ppbV	95
3) propylene	3.898	41	162020M6	10.313	ppbV	
4) propane	3.922	29	183286	8.788	ppbV	98
5) dichlorodifluoromethane	3.976	85	267285	8.537	ppbV	98
6) chloromethane	4.156	50	128720	8.947	ppbV	97
7) Freon-114	4.282	85	360336	9.459	ppbV	93
8) methanol	4.354	31	329300	47.425	ppbV	95
9) vinyl chloride	4.414	62	171787	10.237	ppbV	98
10) 1,3-butadiene	4.582	54	166084	9.871	ppbV	98
11) butane	4.642	43	204001	8.258	ppbV	98
13) bromomethane	4.894	94	137099	9.868	ppbV	99
14) chloroethane	5.116	64	86451	10.131	ppbV	98
15) ethanol	5.290	31	610412	45.240	ppbV	95
16) dichlorofluoromethane	5.254	67	210424	8.142	ppbV	97
17) vinyl bromide	5.540	106	135293	8.480	ppbV	99
18) acrolein	5.693	56	76623	8.741	ppbV	95
19) acetone	5.847	43	833014	37.073	ppbV	87
20) acetonitrile	5.537	41	125827	8.721	ppbV	100
21) trichlorofluoromethane	6.057	101	191678	7.845	ppbV	99
22) isopropyl alcohol	6.180	45	572476	19.927	ppbV	98
23) acrylonitrile	6.433	53	136352	8.693	ppbV	96
24) pentane	6.503	43	281647	8.545	ppbV	98
25) ethyl ether	6.543	31	292726	8.338	ppbV	95

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38602.D
 Acq On : 13 Mar 2020 12:06 AM
 Operator : AIRPIAN03:AR
 Sample : CT015-LLSTD010
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 13 04:41:55 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) 1,1-dichloroethene	6.828	61	211747	9.208	ppbV	98
27) tertiary butyl alcohol	6.906	59	293109	8.513	ppbV #	89
28) methylene chloride	6.996	49	167183	7.729	ppbV	86
29) 3-chloropropene	7.134	41	292018	10.293	ppbV	96
30) carbon disulfide	7.284	76	576346	9.117	ppbV	96
31) Freon 113	7.326	101	327923	9.838	ppbV	99
32) trans-1,2-dichloroethene	8.125	61	271264	10.071	ppbV	98
33) 1,1-dichloroethane	8.358	63	324331	10.225	ppbV	98
34) MTBE	8.442	73	501666	9.135	ppbV #	92
35) vinyl acetate	8.575	43	450582	9.810	ppbV #	94
36) 2-butanone	8.842	43	412576	9.683	ppbV	99
37) cis-1,2-dichloroethene	9.358	61	249634	10.741	ppbV	98
38) Ethyl Acetate	9.650	61	80301	11.290	ppbV	78
39) chloroform	9.708	83	345239	10.264	ppbV	97
40) Tetrahydrofuran	10.150	42	260110	9.757	ppbV	98
41) 2,2-dichloropropane	9.717	77	231569	8.116	ppbV	96
42) 1,2-dichloroethane	10.550	62	163926	8.832	ppbV	94
44) hexane	9.617	57	404341	10.281	ppbV #	71
45) diisopropyl ether	9.625	87	208167	9.276	ppbV	80
46) tert-butyl ethyl ether	10.250	59	579709	9.011	ppbV	99
48) 1,1,1-trichloroethane	10.842	97	249411	8.315	ppbV #	94
49) 1,1-dichloropropene	11.213	75	266994	8.406	ppbV	96
50) benzene	11.373	78	709014	9.235	ppbV	98
52) carbon tetrachloride	11.540	117	249878	8.972	ppbV #	97
53) cyclohexane	11.687	56	438751	10.298	ppbV	95
54) tert-amyl methyl ether	12.073	73	543454	8.110	ppbV	97
55) dibromomethane	12.293	93	167372	8.546	ppbV	99
56) 1,2-dichloropropane	12.327	63	228485	9.820	ppbV	96
57) bromodichloromethane	12.560	83	378150	9.229	ppbV	99
58) 1,4-dioxane	12.593	88	186460	10.589	ppbV	98
59) trichloroethene	12.607	130	284662	9.949	ppbV	97
60) 2,2,4-trimethylpentane	12.653	57	1307678	10.447	ppbV	93
61) methyl methacrylate	12.853	41	240011M4	6.953	ppbV	
62) heptane	12.973	43	439274	8.931	ppbV	91
63) cis-1,3-dichloropropene	13.617	75	355494	9.549	ppbV	97
64) 4-methyl-2-pentanone	13.658	43	506304	9.132	ppbV	91
65) trans-1,3-dichloropropene	14.242	75	280764	8.110	ppbV	99
66) 1,1,2-trichloroethane	14.442	97	243173	9.543	ppbV	93
68) toluene	14.758	91	807623	10.444	ppbV	99
71) 1,3-dichloropropane	14.783	76	339853	8.903	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38602.D
 Acq On : 13 Mar 2020 12:06 AM
 Operator : AIRPIAN03:AR
 Sample : CT015-LLSTD010
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 13 04:41:55 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
72) 2-hexanone	15.042	43	467205	10.293	ppbV	92
74) dibromochloromethane	15.200	129	354639	10.628	ppbV	98
75) 1,2-dibromoethane	15.450	107	373416	10.142	ppbV	98
76) butyl acetate	15.700	73	104928	8.955	ppbV #	89
77) octane	15.792	85	331646	9.998	ppbV	89
78) tetrachloroethene	15.925	166	364411	10.724	ppbV	96
79) 1,1,1,2-tetrachloroethane	16.567	131	234866	9.315	ppbV	97
80) chlorobenzene	16.575	112	689902	11.194	ppbV	93
81) ethylbenzene	16.933	91	992346	10.774	ppbV	98
83) m+p-xylene	17.092	91	1609680	21.349	ppbV	100
84) bromoform	17.158	173	349842	11.246	ppbV	99
85) styrene	17.417	104	717448	10.662	ppbV	98
86) 1,1,2,2-tetrachloroethane	17.508	83	626486	11.905	ppbV	99
87) o-xylene	17.508	91	808732	10.946	ppbV	100
88) 1,2,3-trichloropropane	17.625	75	406448	9.180	ppbV	97
89) nonane	17.708	43	565284	9.045	ppbV	85
91) isopropylbenzene	18.017	105	1060550	9.958	ppbV	94
92) bromobenzene	18.092	77	557819	9.747	ppbV	98
93) 2-chlorotoluene	18.417	126	294303	9.833	ppbV	97
94) n-propylbenzene	18.450	120	363605	10.553	ppbV	90
95) 4-chlorotoluene	18.475	126	285098	9.825	ppbV	96
96) 4-ethyl toluene	18.567	105	1231846	10.356	ppbV	95
97) 1,3,5-trimethylbenzene	18.633	105	1024519	10.589	ppbV	92
98) tert-butylbenzene	18.958	119	1001095	10.800	ppbV	97
99) 1,2,4-trimethylbenzene	18.958	105	1015452	11.280	ppbV	91
100) decane	19.033	57	773171	10.789	ppbV	89
101) Benzyl Chloride	19.075	91	741045	11.770	ppbV	97
102) 1,3-dichlorobenzene	19.083	146	629458	11.363	ppbV	97
103) 1,4-dichlorobenzene	19.142	146	578780	10.987	ppbV	97
104) sec-butylbenzene	19.175	105	1349895	9.965	ppbV	100
106) p-isopropyltoluene	19.292	119	1128850	10.123	ppbV	99
107) 1,2-dichlorobenzene	19.417	146	586621	11.107	ppbV	97
108) n-butylbenzene	19.633	91	1004129	10.753	ppbV	99
111) 1,2-dibromo-3-chloropr...	19.775	75	228977	10.123	ppbV	88
112) undecane	20.025	57	879394	11.324	ppbV	91
114) dodecane	20.925	57	936981	12.171	ppbV	91
115) 1,2,4-trichlorobenzene	20.875	180	496706	15.084	ppbV	95
116) naphthalene	20.992	128	1150960	11.786	ppbV	98
117) 1,2,3-trichlorobenzene	21.242	180	456864	12.074	ppbV	96
119) hexachlorobutadiene	21.308	225	517809	12.681	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
 Data File : r38602.D
 Acq On : 13 Mar 2020 12:06 AM
 Operator : AIRPIAN03:AR
 Sample : CT015-LLSTD010
 Misc : WG1350408
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 13 04:41:55 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

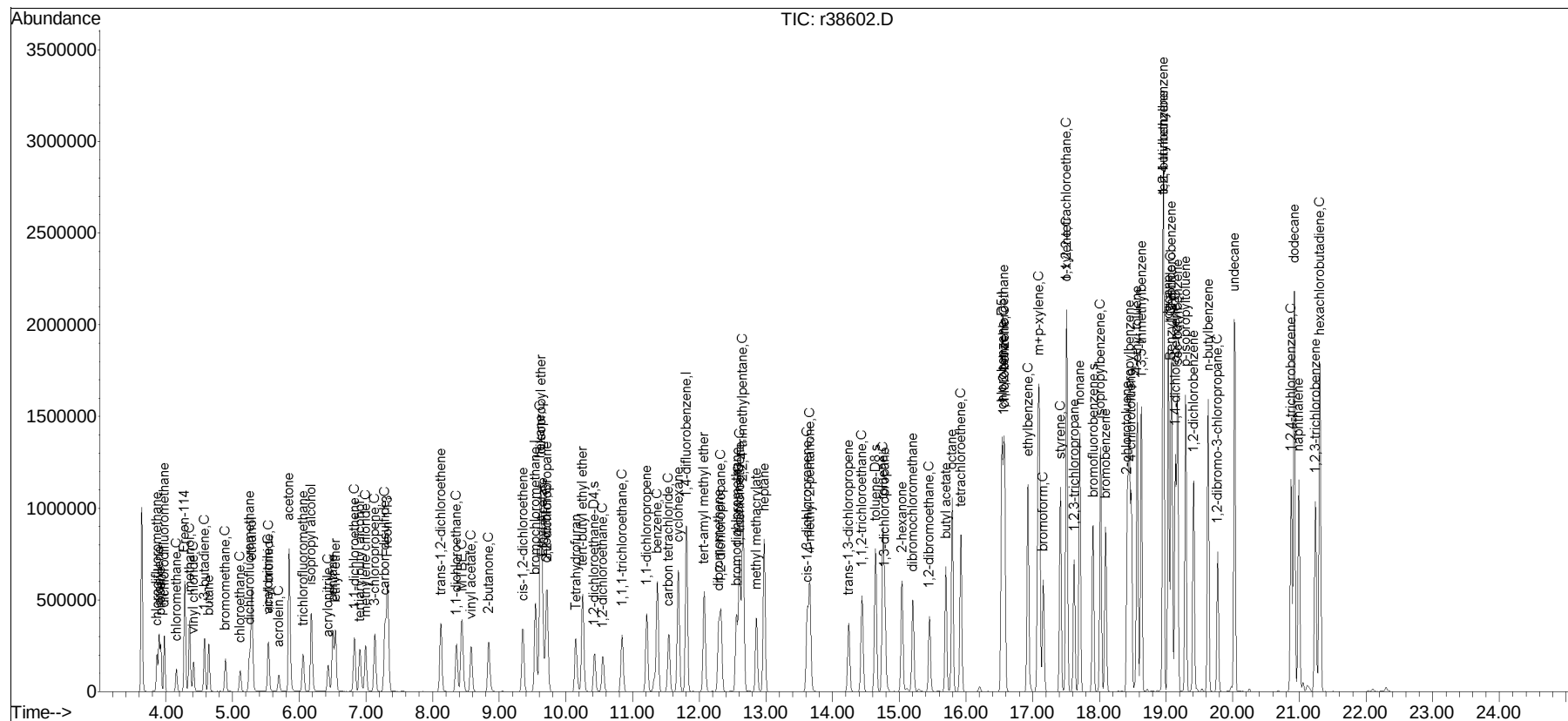
CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\r38596.D
 Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----	-----	-----	-----	-----	-----	-----

(#) = qualifier out of range (m) = manual integration (+) = signals summed


```
Data Path   : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\
Data File   : r38602.D
Acq On      : 13 Mar 2020  12:06 AM
Operator    : AIRPIANO3:AR
Sample      : CT015-LLSTD010
Misc        : WG1350408
ALS Vial    : 0    Sample Multiplier: 1
```

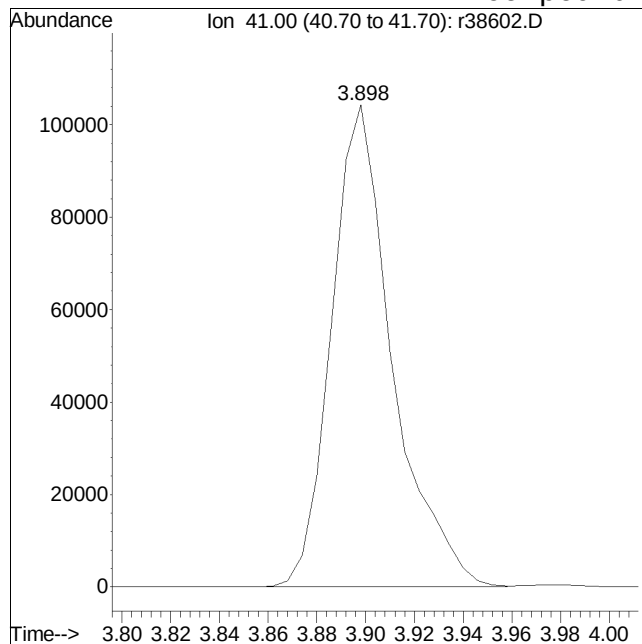
Quant Time: Mar 13 04:41:55 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312T_I\TFS3_200312.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Mar 12 17:27:58 2020
Response via : Initial Calibration



Manual Integration/Negative Proof Report

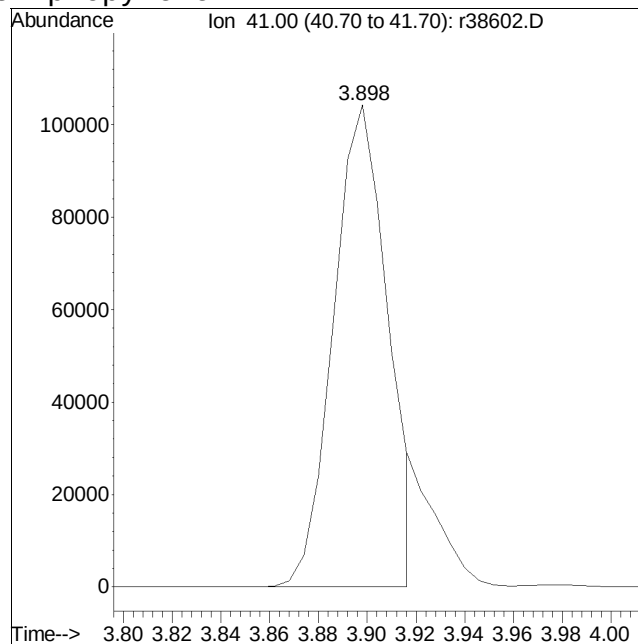
Data Path : 0:\Forensics\Data\Airpiano3QMethod : TFS3_200312.M
Data File : r38602.D Operator : AIRPIAN03:AR
Date Inj'd : 3/13/2020 0:2: 6 Instrument :
Sample : CT015-LLSTD010 Quant Date : 3/13/2020 4:37 am

Compound #3: propylene



Original Peak Response = 180746

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

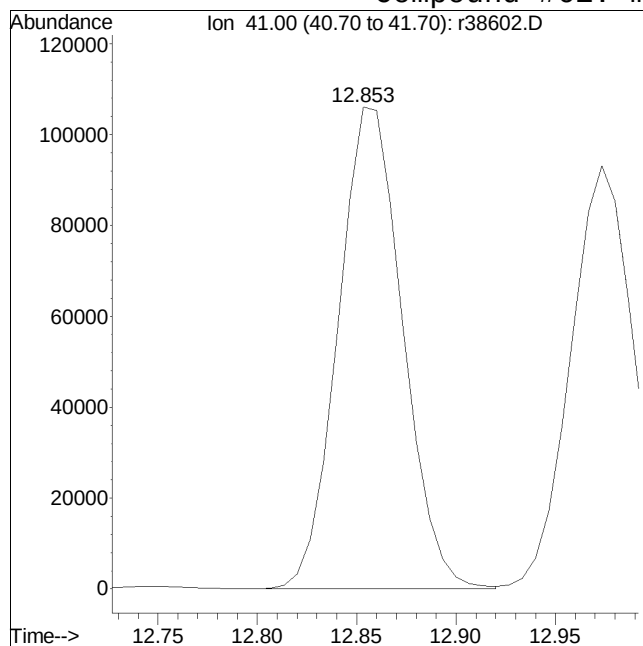


Manual Peak Response = 162020 M6

Manual Integration/Negative Proof Report

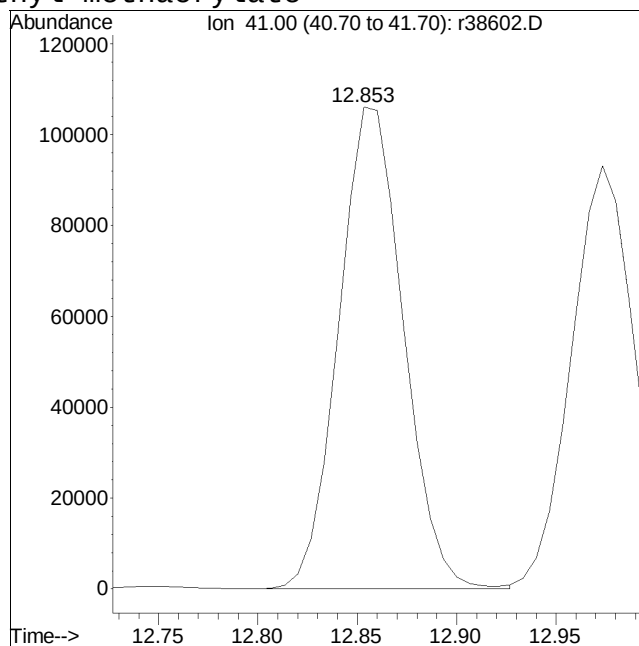
Data Path : 0:\Forensics\Data\Airpiano3QMethod : TFS3_200312.M
Data File : r38602.D Operator : AIRPIAN03:AR
Date Inj'd : 3/13/2020 0:2: 6 Instrument :
Sample : CT015-LLSTD010 Quant Date : 3/13/2020 4:37 am

Compound #61: methyl methacrylate



Original Peak Response = 239660

M4 = Poor automated baseline construction.



Manual Peak Response = 240011 M4

Continuing Calibration

Calibration Verification Summary

Form 7

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRLAB19
 Lab File ID : R193190
 Sample No : WG1353556-2
 Channel :

Lab Number : L2011723
 Project Number : MHD1801
 Calibration Date : 03/20/20 12:08
 Init. Calib. Date(s) : 02/25/20 02/25/20
 Init. Calib. Times : 02:44 07:28

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
bromochloromethane	1	1	-	0	30	92	0
chlorodifluoromethane	0.626	0.534	-	14.7	30	83	0
propylene	0.411	0.455	-	-10.7	30	106	0
propane	0.446	0.319	-	28.5	30	70	0
dichlorodifluoromethane	0.56	0.527	-	5.9	30	93	0
chloromethane	0.358	0.353	-	1.4	30	99	0
Freon-114	0.832	0.905	-	-8.8	30	102	0
methanol	0.162	0.13	-	19.8	30	78	0
vinyl chloride	0.445	0.44	-	1.1	30	98	0
1,3-butadiene	0.384	0.391	-	-1.8	30	98	0
butane	0.629	0.663	-	-5.4	30	105	0
bromomethane	0.352	0.349	-	0.9	30	94	0
chloroethane	0.233	0.238	-	-2.1	30	99	0
ethanol	0.292	0.238	-	18.5	30	77	0
dichlorofluoromethane	0.618	0.618	-	0	30	96	0
vinyl bromide	0.381	0.357	-	6.3	30	90	0
acrolein	0.204	0.199	-	2.5	30	92	0
acetone	0.537	0.562	-	-4.7	30	100	-.02
acetonitrile	0.39	0.495	-	-26.9	30	118	0
trichlorofluoromethane	0.589	0.563	-	4.4	30	78	0
isopropyl alcohol	1.02	1.034	-	-1.4	30	102	-.02
acrylonitrile	0.517	0.513	-	0.8	30	95	0
pentane	1.043	1.171	-	-12.3	30	106	0
ethyl ether	0.898	0.681	-	24.2	30	71	0
1,1-dichloroethene	0.678	0.732	-	-8	30	102	0
tertiary butyl alcohol	0.935	0.926	-	1	30	100	-.03
methylene chloride	0.657	0.627	-	4.6	30	90	0
3-chloropropene	0.791	0.983	-	-24.3	30	118	0
carbon disulfide	1.825	1.971	-	-8	30	100	0
Freon 113	0.957	0.993	-	-3.8	30	98	0
trans-1,2-dichloroethene	0.778	0.854	-	-9.8	30	104	0
1,1-dichloroethane	0.947	1.037	-	-9.5	30	103	0
MTBE	1.536	1.441	-	6.2	30	89	-.02
vinyl acetate	1.305	1.446	-	-10.8	30	102	0
2-butanone	1.204	1.334	-	-10.8	30	103	-.03
cis-1,2-dichloroethene	0.674	0.738	-	-9.5	30	104	0
Ethyl Acetate	0.205	0.248	-	-21	30	109	-.02
chloroform	0.836	0.847	-	-1.3	30	96	0
Tetrahydrofuran	0.809	0.93	-	-15	30	109	-.03
2,2-dichloropropane	0.694	0.607	-	12.5	30	82	0
1,2-dichloroethane	0.409	0.384	-	6.1	30	90	0
1,4-difluorobenzene	1	1	-	0	30	105	0
hexane	0.367	0.361	-	1.6	30	104	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRLAB19
 Lab File ID : R193190
 Sample No : WG1353556-2
 Channel :

Lab Number : L2011723
 Project Number : MHD1801
 Calibration Date : 03/20/20 12:08
 Init. Calib. Date(s) : 02/25/20 02/25/20
 Init. Calib. Times : 02:44 07:28

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
diisopropyl ether	0.197	0.196	-	0.5	30	105	0
tert-butyl ethyl ether	0.573	0.525	-	8.4	30	97	0
1,1,1-trichloroethane	0.235	0.181	-	23	30	82	0
1,1-dichloropropene	0.286	0.247	-	13.6	30	93	0
benzene	0.723	0.7	-	3.2	30	104	0
carbon tetrachloride	0.194	0.156	-	19.6	30	85	0
cyclohexane	0.401	0.396	-	1.2	30	105	0
tert-amyl methyl ether	0.618	0.542	-	12.3	30	93	-0.02
dibromomethane	0.178	0.167	-	6.2	30	101	0
1,2-dichloropropane	0.231	0.235	-	-1.7	30	108	0
bromodichloromethane	0.315	0.284	-	9.8	30	96	0
1,4-dioxane	0.164	0.169	-	-3	30	112	-0.03
trichloroethene	0.258	0.242	-	6.2	30	99	0
2,2,4-trimethylpentane	1.157	1.166	-	-0.8	30	110	0
methyl methacrylate	0.299	0.339	-	-13.4	30	110	0
heptane	0.447	0.438	-	2	30	104	0
cis-1,3-dichloropropene	0.344	0.317	-	7.8	30	96	0
4-methyl-2-pentanone	0.481	0.489	-	-1.7	30	104	-0.03
trans-1,3-dichloropropene	0.309	0.267	-	13.6	30	90	0
1,1,2-trichloroethane	0.252	0.237	-	6	30	100	0
chlorobenzene-D5	1	1	-	0	30	94	0
toluene	6.089	6.503	-	-6.8	30	101	0
1,3-dichloropropane	2.846	2.988	-	-5	30	99	0
2-hexanone	3.538	3.952	-	-11.7	30	104	-0.03
dibromochloromethane	2.341	2.368	-	-1.2	30	93	0
1,2-dibromoethane	2.8	3.001	-	-7.2	30	100	0
butyl acetate	0.92	1.016	-	-10.4	30	102	-0.03
octane	2.521	2.917	-	-15.7	30	109	0
tetrachloroethene	2.675	2.957	-	-10.5	30	101	0
1,1,1,2-tetrachloroethane	1.721	1.835	-	-6.6	30	98	0
chlorobenzene	4.839	5.569	-	-15.1	30	107	0
ethylbenzene	7.303	7.736	-	-5.9	30	97	0
m+p-xylene	5.758	6.014	-	-4.4	30	97	0
bromoform	2.584	2.73	-	-5.7	30	97	0
styrene	5.572	5.924	-	-6.3	30	98	0
1,1,2,2-tetrachloroethane	3.972	4.768	-	-20	30	108	0
o-xylene	5.649	5.849	-	-3.5	30	96	0
1,2,3-trichloropropane	3.318	3.494	-	-5.3	30	98	0
nonane	4.639	5.145	-	-10.9	30	103	0
isopropylbenzene	8.211	8.444	-	-2.8	30	95	0
bromobenzene	4.428	4.784	-	-8	30	100	0
2-chlorotoluene	2.276	2.624	-	-15.3	30	102	-0.02
n-propylbenzene	2.736	3.134	-	-14.5	30	102	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRLAB19
 Lab File ID : R193190
 Sample No : WG1353556-2
 Channel :

Lab Number : L2011723
 Project Number : MHD1801
 Calibration Date : 03/20/20 12:08
 Init. Calib. Date(s) : 02/25/20 02/25/20
 Init. Calib. Times : 02:44 07:28

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
4-chlorotoluene	2.304	2.517	-	-9.2	30	100	0
4-ethyl toluene	9.565	10.154	-	-6.2	30	95	0
1,3,5-trimethylbenzene	7.686	8.276	-	-7.7	30	98	0
tert-butylbenzene	7.075	7.787	-	-10.1	30	99	0
1,2,4-trimethylbenzene	7.114	7.505	-	-5.5	30	94	0
decane	5.798	7.185	-	-23.9	30	110	0
Benzyl Chloride	5.729	6.447	-	-12.5	30	95	0
1,3-dichlorobenzene	4.872	5.744	-	-17.9	30	103	0
1,4-dichlorobenzene	4.669	5.259	-	-12.6	30	97	0
sec-butylbenzene	10.413	11.389	-	-9.4	30	98	0
p-isopropyltoluene	8.833	9.751	-	-10.4	30	98	0
1,2-dichlorobenzene	4.62	5.263	-	-13.9	30	99	0
n-butylbenzene	7.618	8.544	-	-12.2	30	97	0
1,2-dibromo-3-chloropropan	1.776	1.647	-	7.3	30	81	-.02
undecane	6.295	7.632	-	-21.2	30	102	0
dodecane	6.117	6.792	-	-11	30	82	0
1,2,4-trichlorobenzene	4.06	4.556	-	-12.2	30	85	0
naphthalene	10.393	10.568	-	-1.7	30	85	0
1,2,3-trichlorobenzene	4.25	4.468	-	-5.1	30	80	0
hexachlorobutadiene	3.529	3.398	-	3.7	30	76	0

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRPIANO3
 Lab File ID : R38754
 Sample No : WG1353541-2
 Channel :

Lab Number : L2011723
 Project Number : MHD1801
 Calibration Date : 03/20/20 13:32
 Init. Calib. Date(s) : 03/12/20 03/12/20
 Init. Calib. Times : 12:25 17:00

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
bromochloromethane	1	1	-	0	30	95	.03
chlorodifluoromethane	0.762	0.634	-	16.8	30	80	.02
propylene	0.454	0.57	-	-25.6	30	122	.02
propane	0.602	0.503	-	16.4	30	80	.02
dichlorodifluoromethane	0.904	0.962	-	-6.4	30	101	.02
chloromethane	0.415	0.496	-	-19.5	30	115	.02
Freon-114	1.1	1.3	-	-18.2	30	112	.02
methanol	0.2	0.212	-	-6	30	99	.02
vinyl chloride	0.484	0.558	-	-15.3	30	114	.02
1,3-butadiene	0.486	0.522	-	-7.4	30	104	.02
butane	0.713	0.901	-	-26.4	30	123	.02
bromomethane	0.401	0.482	-	-20.2	30	117	.02
chloroethane	0.246	0.298	-	-21.1	30	121	.03
ethanol	0.39	0.39	-	0	30	91	.02
dichlorofluoromethane	0.746	0.898	-	-20.4	30	116	.02
vinyl bromide	0.461	0.544	-	-18	30	113	.02
acrolein	0.253	0.228	-	9.9	30	88	.02
acetone	0.649	0.751	-	-15.7	30	107	.03
acetonitrile	0.417	0.473	-	-13.4	30	114	.02
trichlorofluoromethane	0.705	0.865	-	-22.7	30	120	.03
isopropyl alcohol	0.829	1.037	-	-25.1	30	119	.03
acrylonitrile	0.453	0.458	-	-1.1	30	99	.03
pentane	0.952	1.323	-	-39*	30	125	.03
ethyl ether	1.014	0.907	-	10.6	30	88	.03
1,1-dichloroethene	0.664	0.719	-	-8.3	30	111	.03
tertiary butyl alcohol	0.994	0.929	-	6.5	30	87	.02
methylene chloride	0.624	0.686	-	-9.9	30	99	.03
3-chloropropene	0.819	1.03	-	-25.8	30	122	.03
carbon disulfide	1.825	1.75	-	4.1	30	91	.03
Freon 113	0.962	1.056	-	-9.8	30	105	.02
trans-1,2-dichloroethene	0.778	0.84	-	-8	30	103	.03
1,1-dichloroethane	0.916	1.058	-	-15.5	30	113	.03
MTBE	1.585	1.675	-	-5.7	30	99	.03
vinyl acetate	1.326	1.625	-	-22.5	30	113	.03
2-butanone	1.23	1.478	-	-20.2	30	115	.03
cis-1,2-dichloroethene	0.671	0.772	-	-15.1	30	112	.03
Ethyl Acetate	0.205	0.24	-	-17.1	30	115	.03
chloroform	0.971	0.994	-	-2.4	30	97	.03
Tetrahydrofuran	0.77	0.9	-	-16.9	30	113	.03
2,2-dichloropropane	0.824	0.782	-	5.1	30	87	.03
1,2-dichloroethane	0.536	0.599	-	-11.8	30	106	.03
1,4-difluorobenzene	1	1	-	0	30	94	.03
hexane	0.371	0.382	-	-3	30	98	.03

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRPIANO3
 Lab File ID : R38754
 Sample No : WG1353541-2
 Channel :

Lab Number : L2011723
 Project Number : MHD1801
 Calibration Date : 03/20/20 13:32
 Init. Calib. Date(s) : 03/12/20 03/12/20
 Init. Calib. Times : 12:25 17:00

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
diisopropyl ether	0.212	0.203	-	4.2	30	92	.03
tert-butyl ethyl ether	0.607	0.596	-	1.8	30	92	.03
1,1,1-trichloroethane	0.283	0.321	-	-13.4	30	106	.03
1,1-dichloropropene	0.3	0.297	-	1	30	92	.03
benzene	0.724	0.705	-	2.6	30	93	.03
carbon tetrachloride	0.263	0.283	-	-7.6	30	96	.03
cyclohexane	0.402	0.405	-	-0.7	30	97	.03
tert-amyl methyl ether	0.632	0.628	-	0.6	30	91	.03
dibromomethane	0.185	0.19	-	-2.7	30	97	.03
1,2-dichloropropane	0.219	0.269	-	-22.8	30	118	.03
bromodichloromethane	0.386	0.382	-	1	30	91	.03
1,4-dioxane	0.166	0.183	-	-10.2	30	105	.03
trichloroethene	0.27	0.324	-	-20	30	114	.03
2,2,4-trimethylpentane	1.181	1.249	-	-5.8	30	100	.03
methyl methacrylate	0.326	0.31	-	4.9	30	79	.03
heptane	0.464	0.571	-	-23.1	30	115	.03
cis-1,3-dichloropropene	0.351	0.389	-	-10.8	30	103	.03
4-methyl-2-pentanone	0.523	0.668	-	-27.7	30	116	.03
trans-1,3-dichloropropene	0.327	0.313	-	4.3	30	88	.03
1,1,2-trichloroethane	0.24	0.277	-	-15.4	30	111	.03
chlorobenzene-D5	1	1	-	0	30	87	.02
toluene	5.075	6.093	-	-20.1	30	109	.03
1,3-dichloropropane	2.505	2.594	-	-3.6	30	89	.03
2-hexanone	2.979	4.179	-	-40.3*	30	114	.03
dibromochloromethane	2.19	2.833	-	-29.4	30	110	.02
1,2-dibromoethane	2.416	2.718	-	-12.5	30	99	.02
butyl acetate	0.769	0.784	-	-2	30	87	.03
octane	2.177	2.211	-	-1.6	30	89	.03
tetrachloroethene	2.23	2.569	-	-15.2	30	102	.02
1,1,1,2-tetrachloroethane	1.655	1.91	-	-15.4	30	100	.02
chlorobenzene	4.044	4.627	-	-14.4	30	101	.03
ethylbenzene	6.044	7.362	-	-21.8	30	108	.02
m+p-xylene	4.948	6.131	-	-23.9	30	108	.03
bromoform	2.041	2.424	-	-18.8	30	97	.02
styrene	4.416	5.077	-	-15	30	99	.02
1,1,2,2-tetrachloroethane	3.453	4.279	-	-23.9	30	105	.03
o-xylene	4.848	6.27	-	-29.3	30	111	.03
1,2,3-trichloropropane	2.906	2.947	-	-1.4	30	86	.02
nonane	4.101	4.921	-	-20	30	102	.03
isopropylbenzene	6.989	7.592	-	-8.6	30	93	.03
bromobenzene	3.755	3.796	-	-1.1	30	84	.03
2-chlorotoluene	1.964	2.226	-	-13.3	30	99	.02
n-propylbenzene	2.261	2.56	-	-13.2	30	97	.03

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRPIANO3
 Lab File ID : R38754
 Sample No : WG1353541-2
 Channel :

Lab Number : L2011723
 Project Number : MHD1801
 Calibration Date : 03/20/20 13:32
 Init. Calib. Date(s) : 03/12/20 03/12/20
 Init. Calib. Times : 12:25 17:00

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
4-chlorotoluene	1.904	2.132	-	-12	30	97	.02
4-ethyl toluene	7.806	9.008	-	-15.4	30	97	.02
1,3,5-trimethylbenzene	6.349	7.68	-	-21	30	104	.02
tert-butylbenzene	6.083	7.184	-	-18.1	30	95	.03
1,2,4-trimethylbenzene	5.907	7.673	-	-29.9	30	106	.03
decane	4.703	5.266	-	-12	30	93	.02
Benzyl Chloride	4.132	5.22	-	-26.3	30	93	.03
1,3-dichlorobenzene	3.635	4.4	-	-21	30	103	.03
1,4-dichlorobenzene	3.457	4.188	-	-21.1	30	98	.02
sec-butylbenzene	8.89	9.791	-	-10.1	30	90	.02
p-isopropyltoluene	7.318	8.018	-	-9.6	30	85	.02
1,2-dichlorobenzene	3.466	4.188	-	-20.8	30	103	.02
n-butylbenzene	6.128	7.37	-	-20.3	30	96	.02
1,2-dibromo-3-chloropropan	1.484	1.709	-	-15.2	30	85	.03
undecane	5.096	5.922	-	-16.2	30	92	.03
dodecane	5.052	6.014	-	-19	30	86	.02
1,2,4-trichlorobenzene	2.161	2.986	-	-38.2*	30	101	.02
naphthalene	6.409	7.957	-	-24.2	30	89	.02
1,2,3-trichlorobenzene	2.483	2.9	-	-16.8	30	82	.02
hexachlorobutadiene	2.68	3.915	-	-46.1*	30	120	.02

* Value outside of QC limits.



Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193190.D
 Acq On : 20 Mar 2020 12:08 PM
 Operator : AIRLAB19:EW
 Sample : WG1353556-2,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:27:29 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	bromochloromethane	1.000	1.000	0.0	92	0.00
2	chlorodifluoromethane	0.626	0.534	14.7	83	0.00
3	propylene	0.411	0.455	-10.7	106	0.00
4	propane	0.446	0.319	28.5	70	0.00
5	dichlorodifluoromethane	0.560	0.527	5.9	93	0.00
6 C	chloromethane	0.358	0.353	1.4	99	0.00
7	Freon-114	0.832	0.905	-8.8	102	0.00
8 C	methanol	0.162	0.130	19.8	78	0.00
9 C	vinyl chloride	0.445	0.440	1.1	98	0.00
10 C	1,3-butadiene	0.384	0.391	-1.8	98	0.00
11	butane	0.629	0.663	-5.4	105	0.00
13 C	bromomethane	0.352	0.349	0.9	94	0.00
14 C	chloroethane	0.233	0.238	-2.1	99	0.00
15	ethanol	0.292	0.238	18.5	77	0.00
16	dichlorofluoromethane	0.618	0.618	0.0	96	0.00
17 C	vinyl bromide	0.381	0.357	6.3	90	0.00
18 C	acrolein	0.204	0.199	2.5	92	0.00
19	acetone	0.537	0.562	-4.7	100	-0.02
20 C	acetonitrile	0.390	0.495	-26.9	118	0.00
21	trichlorofluoromethane	0.589	0.563	4.4	78	0.00
22	isopropyl alcohol	1.020	1.034	-1.4	102	-0.02
23 C	acrylonitrile	0.517	0.513	0.8	95	0.00
24	pentane	1.043	1.171	-12.3	106	0.00
25	ethyl ether	0.898	0.681	24.2	71	0.00
26 C	1,1-dichloroethene	0.678	0.732	-8.0	102	0.00
27	tertiary butyl alcohol	0.935	0.926	1.0	100	-0.03
28 C	methylene chloride	0.657	0.627	4.6	90	0.00
29 C	3-chloropropene	0.791	0.983	-24.3	118	0.00
30 C	carbon disulfide	1.825	1.971	-8.0	100	0.00
31	Freon 113	0.957	0.993	-3.8	98	0.00
32	trans-1,2-dichloroethene	0.778	0.854	-9.8	104	0.00
33 C	1,1-dichloroethane	0.947	1.037	-9.5	103	0.00
34 C	MTBE	1.536	1.441	6.2	89	-0.02
35 C	vinyl acetate	1.305	1.446	-10.8	102	0.00
36 C	2-butanone	1.204	1.334	-10.8	103	-0.03
37	cis-1,2-dichloroethene	0.674	0.738	-9.5	104	0.00
38	Ethyl Acetate	0.205	0.248	-21.0	109	-0.02
39 C	chloroform	0.836	0.847	-1.3	96	0.00
40	Tetrahydrofuran	0.809	0.930	-15.0	109	-0.03

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193190.D
 Acq On : 20 Mar 2020 12:08 PM
 Operator : AIRLAB19:EW
 Sample : WG1353556-2,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:27:29 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	2,2-dichloropropane	0.694	0.607	12.5	82	0.00
42 C	1,2-dichloroethane	0.409	0.384	6.1	90	0.00
43 I	1,4-difluorobenzene	1.000	1.000	0.0	105	0.00
44 C	hexane	0.367	0.361	1.6	104	0.00
45	diisopropyl ether	0.197	0.196	0.5	105	0.00
46	tert-butyl ethyl ether	0.573	0.525	8.4	97	0.00
48 C	1,1,1-trichloroethane	0.235	0.181	23.0	82	0.00
49	1,1-dichloropropene	0.286	0.247	13.6	93	0.00
50 C	benzene	0.723	0.700	3.2	104	0.00
52 C	carbon tetrachloride	0.194	0.156	19.6	85	0.00
53	cyclohexane	0.401	0.396	1.2	105	0.00
54	tert-amyl methyl ether	0.618	0.542	12.3	93	-0.02
55	dibromomethane	0.178	0.167	6.2	101	0.00
56 C	1,2-dichloropropane	0.231	0.235	-1.7	108	0.00
57	bromodichloromethane	0.315	0.284	9.8	96	0.00
58 C	1,4-dioxane	0.164	0.169	-3.0	112	-0.03
59 C	trichloroethene	0.258	0.242	6.2	99	0.00
60 C	2,2,4-trimethylpentane	1.157	1.166	-0.8	110	0.00
61	methyl methacrylate	0.299	0.339	-13.4	110	0.00
62	heptane	0.447	0.438	2.0	104	0.00
63 C	cis-1,3-dichloropropene	0.344	0.317	7.8	96	0.00
64 C	4-methyl-2-pentanone	0.481	0.489	-1.7	104	-0.03
65	trans-1,3-dichloropropene	0.309	0.267	13.6	90	0.00
66 C	1,1,2-trichloroethane	0.252	0.237	6.0	100	0.00
67 I	chlorobenzene-D5	1.000	1.000	0.0	94	0.00
68 C	toluene	6.089	6.503	-6.8	101	0.00
71	1,3-dichloropropane	2.846	2.988	-5.0	99	0.00
72	2-hexanone	3.538	3.952	-11.7	104	-0.03
74	dibromochloromethane	2.341	2.368	-1.2	93	0.00
75 C	1,2-dibromoethane	2.800	3.001	-7.2	100	0.00
76	butyl acetate	0.920	1.016	-10.4	102	-0.03
77	octane	2.521	2.917	-15.7	109	0.00
78 C	tetrachloroethene	2.675	2.957	-10.5	101	0.00
79	1,1,1,2-tetrachloroethane	1.721	1.835	-6.6	98	0.00
80 C	chlorobenzene	4.839	5.569	-15.1	107	0.00
81 C	ethylbenzene	7.303	7.736	-5.9	97	0.00
83 C	m+p-xylene	5.758	6.014	-4.4	97	0.00

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193190.D
 Acq On : 20 Mar 2020 12:08 PM
 Operator : AIRLAB19:EW
 Sample : WG1353556-2,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:27:29 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
84 C	bromoform	2.584	2.730	-5.7	97	0.00
85 C	styrene	5.572	5.924	-6.3	98	0.00
86 C	1,1,2,2-tetrachloroethane	3.972	4.768	-20.0	108	0.00
87 C	o-xylene	5.649	5.849	-3.5	96	0.00
88	1,2,3-trichloropropane	3.318	3.494	-5.3	98	0.00
89	nonane	4.639	5.145	-10.9	103	0.00
91 C	isopropylbenzene	8.211	8.444	-2.8	95	0.00
92	bromobenzene	4.428	4.784	-8.0	100	0.00
93	2-chlorotoluene	2.276	2.624	-15.3	102	-0.02
94	n-propylbenzene	2.736	3.134	-14.5	102	0.00
95	4-chlorotoluene	2.304	2.517	-9.2	100	0.00
96	4-ethyl toluene	9.565	10.154	-6.2	95	0.00
97	1,3,5-trimethylbenzene	7.686	8.276	-7.7	98	0.00
98	tert-butylbenzene	7.075	7.787	-10.1	99	0.00
99	1,2,4-trimethylbenzene	7.114	7.505	-5.5	94	0.00
100	decane	5.798	7.185	-23.9	110	0.00
101 C	Benzyl Chloride	5.729	6.447	-12.5	95	0.00
102	1,3-dichlorobenzene	4.872	5.744	-17.9	103	0.00
103 C	1,4-dichlorobenzene	4.669	5.259	-12.6	97	0.00
104	sec-butylbenzene	10.413	11.389	-9.4	98	0.00
106	p-isopropyltoluene	8.833	9.751	-10.4	98	0.00
107	1,2-dichlorobenzene	4.620	5.263	-13.9	99	0.00
108	n-butylbenzene	7.618	8.544	-12.2	97	0.00
111 C	1,2-dibromo-3-chloropropane	1.776	1.647	7.3	81	-0.02
112	undecane	6.295	7.632	-21.2	102	0.00
114	dodecane	6.117	6.792	-11.0	82	0.00
115 C	1,2,4-trichlorobenzene	4.060	4.556	-12.2	85	0.00
116	naphthalene	10.393	10.568	-1.7	85	0.00
117	1,2,3-trichlorobenzene	4.250	4.468	-5.1	80	0.00
119 C	hexachlorobutadiene	3.529	3.398	3.7	76	0.00

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193190.D
 Acq On : 20 Mar 2020 12:08 PM
 Operator : AIRLAB19:EW
 Sample : WG1353556-2,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:27:29 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	8.783	49	288364	10.000	ppbV	0.00
43) 1,4-difluorobenzene	10.747	114	940727	10.000	ppbV	0.00
67) chlorobenzene-D5	14.875	54	108860	10.000	ppbV	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) chlorodifluoromethane	3.436	51	153899	8.529	ppbV	96
3) propylene	3.472	41	131224M6	11.081	ppbV	
4) propane	3.502	29	92035	7.160	ppbV #	65
5) dichlorodifluoromethane	3.568	85	151945	9.402	ppbV	100
6) chloromethane	3.778	50	101875	9.856	ppbV	98
7) Freon-114	3.916	85	261065	10.886	ppbV	94
8) methanol	3.982	31	187416	40.088	ppbV #	1
9) vinyl chloride	4.066	62	126801	9.884	ppbV	99
10) 1,3-butadiene	4.240	54	112720	10.189	ppbV	98
11) butane	4.312	43	191052	10.538	ppbV	92
13) bromomethane	4.576	94	100755	9.927	ppbV	99
14) chloroethane	4.792	64	68634	10.204	ppbV	94
15) ethanol	4.924	31	342897	40.697	ppbV #	64
16) dichlorofluoromethane	4.918	67	178227	10.006	ppbV	96
17) vinyl bromide	5.210	106	103011	9.386	ppbV	92
18) acrolein	5.340	56	57354	9.737	ppbV #	40
19) acetone	5.480	43	810609	52.349	ppbV #	99
20) acetonitrile	5.183	41	142722	12.696	ppbV #	56
21) trichlorofluoromethane	5.693	101	162268	9.559	ppbV	100
22) isopropyl alcohol	5.760	45	745607	25.345	ppbV	100
23) acrylonitrile	6.013	53	148058	9.933	ppbV	98
24) pentane	6.100	43	337717	11.232	ppbV	96
25) ethyl ether	6.117	31	196288	7.583	ppbV #	77
26) 1,1-dichloroethene	6.402	61	211161	10.793	ppbV	95
27) tertiary butyl alcohol	6.420	59	267000	9.900	ppbV #	95
28) methylene chloride	6.540	49	180789	9.550	ppbV #	82
29) 3-chloropropene	6.666	41	283438	12.424	ppbV	94
30) carbon disulfide	6.846	76	568305	10.800	ppbV #	80
31) Freon 113	6.822	101	286376	10.376	ppbV	96
32) trans-1,2-dichloroethene	7.533	61	246338	10.983	ppbV	96
33) 1,1-dichloroethane	7.742	63	298953	10.942	ppbV	97
34) MTBE	7.792	73	415402	9.379	ppbV	95
35) vinyl acetate	7.892	43	416945	11.079	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193190.D
 Acq On : 20 Mar 2020 12:08 PM
 Operator : AIRLAB19:EW
 Sample : WG1353556-2,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:27:29 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) 2-butanone	8.133	43	384750	11.085	ppbV	95
37) cis-1,2-dichloroethene	8.608	61	212681	10.941	ppbV	96
38) Ethyl Acetate	8.817	61	71474	12.104	ppbV	84
39) chloroform	8.908	83	244279	10.129	ppbV #	94
40) Tetrahydrofuran	9.308	42	268223	11.500	ppbV	98
41) 2,2-dichloropropane	8.942	77	175116	8.753	ppbV	92
42) 1,2-dichloroethane	9.667	62	110764	9.400	ppbV	96
44) hexane	8.825	57	339237	9.838	ppbV	84
45) diisopropyl ether	8.800	87	183988	9.949	ppbV	91
46) tert-butyl ethyl ether	9.350	59	494062	9.160	ppbV	96
48) 1,1,1-trichloroethane	9.925	97	169899	7.675	ppbV	90
49) 1,1-dichloropropene	10.247	75	232103	8.629	ppbV #	87
50) benzene	10.400	78	658197	9.676	ppbV	98
52) carbon tetrachloride	10.560	117	146826	8.050	ppbV	89
53) cyclohexane	10.693	56	372504	9.876	ppbV	98
54) tert-amyl methyl ether	10.980	73	509898	8.767	ppbV	99
55) dibromomethane	11.220	93	157166	9.373	ppbV	99
56) 1,2-dichloropropane	11.247	63	221304	10.172	ppbV	97
57) bromodichloromethane	11.447	83	266810	8.995	ppbV	95
58) 1,4-dioxane	11.467	88	158535	10.295	ppbV	83
59) trichloroethene	11.493	130	227809	9.397	ppbV	95
60) 2,2,4-trimethylpentane	11.520	57	1096580	10.076	ppbV	99
61) methyl methacrylate	11.660	41	318895	11.349	ppbV	92
62) heptane	11.780	43	412056	9.794	ppbV	97
63) cis-1,3-dichloropropene	12.392	75	298586	9.225	ppbV	93
64) 4-methyl-2-pentanone	12.408	43	460276	10.169	ppbV	95
65) trans-1,3-dichloropropene	12.917	75	251366	8.635	ppbV	98
66) 1,1,2-trichloroethane	13.100	97	223151	9.420	ppbV	96
68) toluene	13.367	91	707935	10.680	ppbV	98
71) 1,3-dichloropropane	13.383	76	325299	10.501	ppbV #	95
72) 2-hexanone	13.567	43	430209	11.170	ppbV #	82
74) dibromochloromethane	13.758	129	257829	10.119	ppbV	98
75) 1,2-dibromoethane	13.975	107	326675	10.717	ppbV	99
76) butyl acetate	14.108	73	110621	11.050	ppbV	80
77) octane	14.208	85	317498	11.571	ppbV	96
78) tetrachloroethene	14.358	166	321862	11.051	ppbV	96
79) 1,1,1,2-tetrachloroethane	14.892	131	199770	10.661	ppbV	95
80) chlorobenzene	14.908	112	606187	11.507	ppbV	96
81) ethylbenzene	15.192	91	842194	10.593	ppbV	99
83) m+p-xylene	15.325	91	1309348	20.890	ppbV	98
84) bromoform	15.408	173	297232	10.565	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193190.D
 Acq On : 20 Mar 2020 12:08 PM
 Operator : AIRLAB19:EW
 Sample : WG1353556-2,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:27:29 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

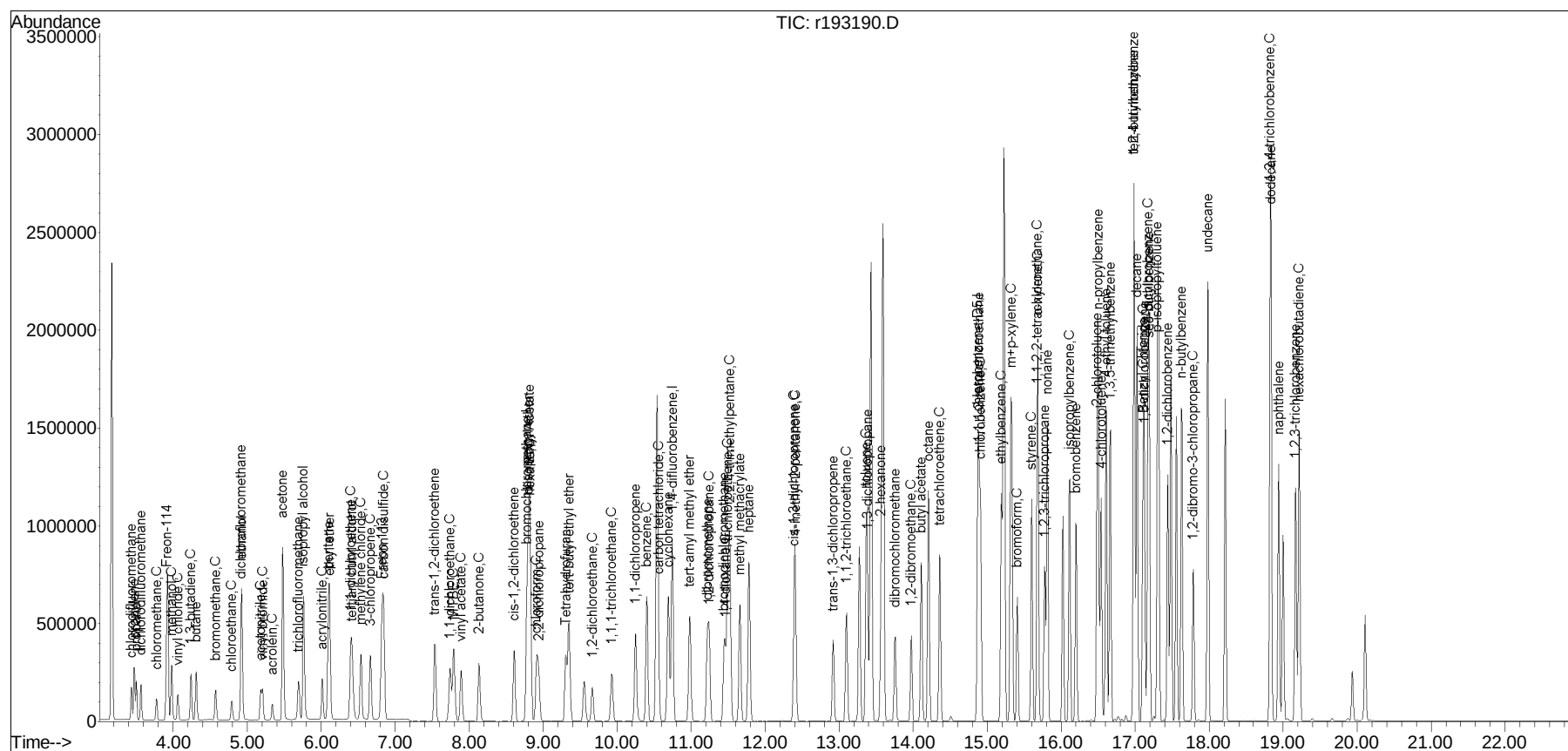
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
85) styrene	15.600	104	644931	10.632	ppbV	98
86) 1,1,2,2-tetrachloroethane	15.675	83	519017	12.002	ppbV	96
87) o-xylene	15.683	91	636697	10.353	ppbV	95
88) 1,2,3-trichloropropane	15.775	75	380400	10.533	ppbV	99
89) nonane	15.817	43	560107	11.092	ppbV	94
91) isopropylbenzene	16.117	105	919173	10.284	ppbV	94
92) bromobenzene	16.200	77	520830	10.805	ppbV	94
93) 2-chlorotoluene	16.483	126	285624	11.527	ppbV #	30
94) n-propylbenzene	16.500	120	341214	11.454	ppbV	74
95) 4-chlorotoluene	16.542	126	273987	10.923	ppbV	92
96) 4-ethyl toluene	16.608	105	1105350	10.615	ppbV	95
97) 1,3,5-trimethylbenzene	16.667	105	900899	10.767	ppbV	93
98) tert-butylbenzene	16.983	119	847644	11.005	ppbV	96
99) 1,2,4-trimethylbenzene	16.983	105	816949	10.548	ppbV	97
100) decane	17.025	57	782120	12.392	ppbV	91
101) Benzyl Chloride	17.108	91	701770	11.252	ppbV	98
102) 1,3-dichlorobenzene	17.125	146	625271	11.788	ppbV	98
103) 1,4-dichlorobenzene	17.175	146	572442	11.263	ppbV	97
104) sec-butylbenzene	17.192	105	1239777	10.937	ppbV	98
106) p-isopropyltoluene	17.300	119	1061443	11.039	ppbV	94
107) 1,2-dichlorobenzene	17.442	146	572901	11.391	ppbV	97
108) n-butylbenzene	17.625	91	930070	11.215	ppbV	95
111) 1,2-dibromo-3-chloropr...	17.783	75	179301	9.275	ppbV #	64
112) undecane	17.983	57	830869	12.124	ppbV	90
114) dodecane	18.833	57	739340	11.102	ppbV	87
115) 1,2,4-trichlorobenzene	18.825	180	495982	11.221	ppbV	98
116) naphthalene	18.942	128	1150418	10.168	ppbV	96
117) 1,2,3-trichlorobenzene	19.167	180	486391	10.512	ppbV	97
119) hexachlorobutadiene	19.217	225	369895	9.629	ppbV	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed


```
Data Path : 0:\Forensics\Data\AirLab19\2020\03\200320T\
Data File : r193190.D
Acq On    : 20 Mar 2020 12:08 PM
Operator  : AIRLAB19:EW
Sample    : WG1353556-2,3,250,250
Misc      : WG1353556,ICAL16553
ALS Vial  : 0 Sample Multiplier: 1
```

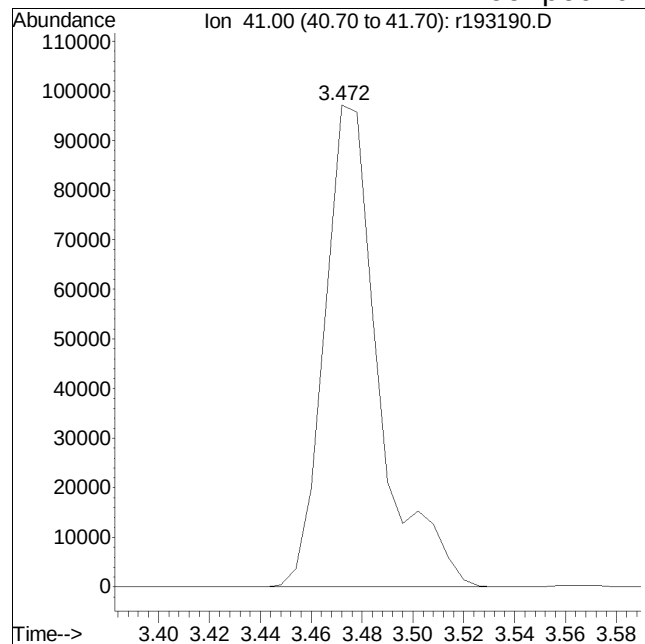
Quant Time: Mar 20 14:27:29 2020
Quant Method : 0:\Forensics\Data\AirLab19\2020\03\200320T\TFS19_200224.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Feb 25 10:21:40 2020
Response via : Initial Calibration



Manual Integration Report

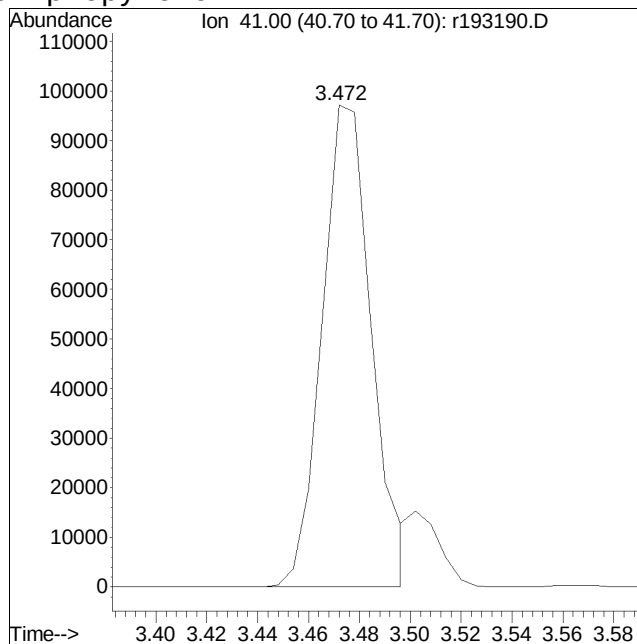
Data Path : 0:\Forensics\Data\Airlab19QMethod : TFS19_200224.M
Data File : r193190.D Operator : AIRLAB19:EW
Date Inj'd : 3/20/2020 0:2: 8 Instrument :
Sample : WG1353556-2,3,250,250 Quant Date : 3/20/2020 2:26 pm

Compound #3: propylene



Original Peak Response = 144031

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



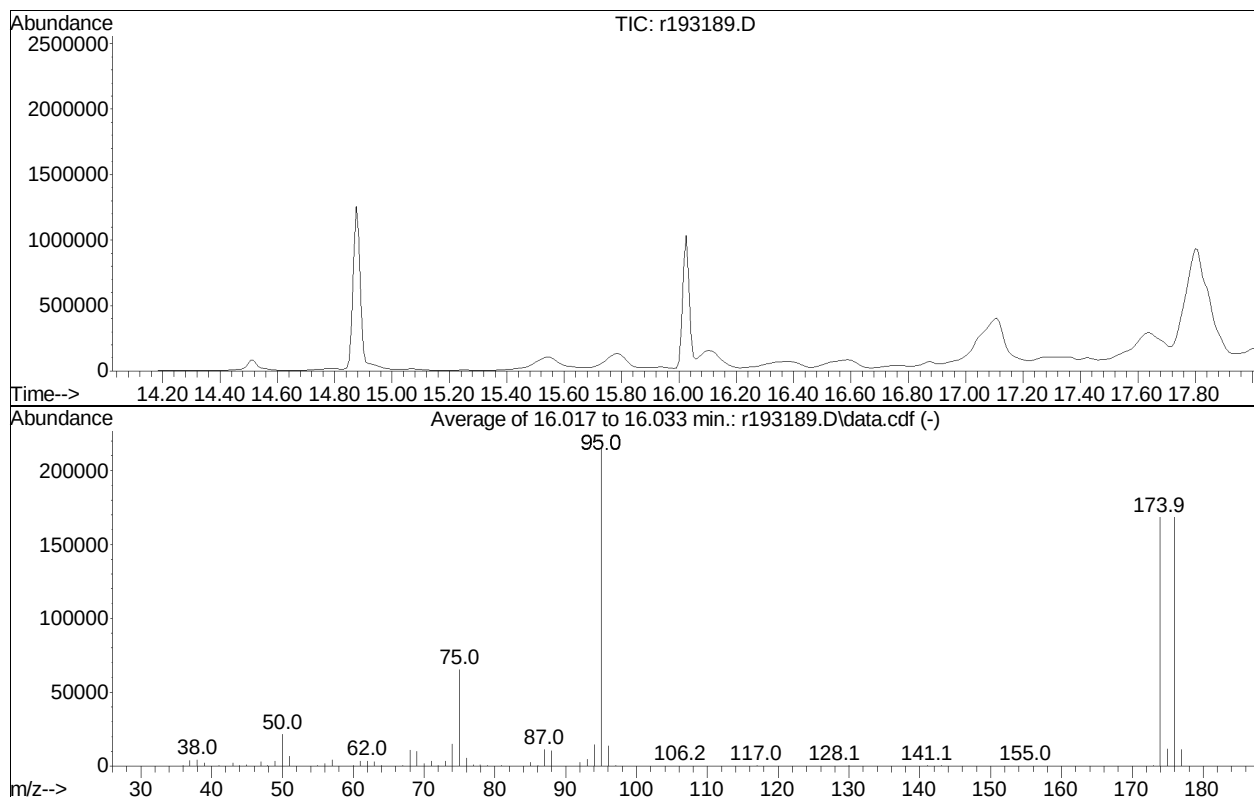
Manual Peak Response = 131224 M6

BFB

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193189.D
 Acq On : 20 Mar 2020 11:27 AM
 Operator : AIRLAB19:EW
 Sample : WG1353556-1,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Tue Feb 25 10:21:39 2020



Spectrum Information: Average of 16.017 to 16.033 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	10.0	21640	PASS
75	95	30	66	30.2	65329	PASS
95	95	100	100	100.0	216202	PASS
96	95	5	9	6.3	13705	PASS
173	174	0.00	2	0.4	755	PASS
174	95	50	120	78.1	168766	PASS
175	174	4	9	6.9	11582	PASS
176	174	93	101	99.7	168309	PASS
177	176	5	9	6.6	11144	PASS

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38754.D
 Acq On : 20 Mar 2020 1:32 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353541-2,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:43:06 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	bromochloromethane	1.000	1.000	0.0	95	0.03
2	chlorodifluoromethane	0.762	0.634	16.8	80	0.02
3	propylene	0.454	0.570	-25.6	122	0.02
4	propane	0.602	0.503	16.4	80	0.02
5	dichlorodifluoromethane	0.904	0.962	-6.4	101	0.02
6 C	chloromethane	0.415	0.496	-19.5	115	0.02
7	Freon-114	1.100	1.300	-18.2	112	0.02
8 C	methanol	0.200	0.212	-6.0	99	0.02
9 C	vinyl chloride	0.484	0.558	-15.3	114	0.02
10 C	1,3-butadiene	0.486	0.522	-7.4	104	0.02
11	butane	0.713	0.901	-26.4	123	0.02
13 C	bromomethane	0.401	0.482	-20.2	117	0.02
14 C	chloroethane	0.246	0.298	-21.1	121	0.03
15	ethanol	0.390	0.390	0.0	91	0.02
16	dichlorofluoromethane	0.746	0.898	-20.4	116	0.02
17 C	vinyl bromide	0.461	0.544	-18.0	113	0.02
18 C	acrolein	0.253	0.228	9.9	88	0.02
19	acetone	0.649	0.751	-15.7	107	0.03
20 C	acetonitrile	0.417	0.473	-13.4	114	0.02
21	trichlorofluoromethane	0.705	0.865	-22.7	120	0.03
22	isopropyl alcohol	0.829	1.037	-25.1	119	0.03
23 C	acrylonitrile	0.453	0.458	-1.1	99	0.03
24	pentane	0.952	1.323	-39.0#	125	0.03
25	ethyl ether	1.014	0.907	10.6	88	0.03
26 C	1,1-dichloroethene	0.664	0.719	-8.3	111	0.03
27	tertiary butyl alcohol	0.994	0.929	6.5	87	0.02
28 C	methylene chloride	0.624	0.686	-9.9	99	0.03
29 C	3-chloropropene	0.819	1.030	-25.8	122	0.03
30 C	carbon disulfide	1.825	1.750	4.1	91	0.03
31	Freon 113	0.962	1.056	-9.8	105	0.02
32	trans-1,2-dichloroethene	0.778	0.840	-8.0	103	0.03
33 C	1,1-dichloroethane	0.916	1.058	-15.5	113	0.03
34 C	MTBE	1.585	1.675	-5.7	99	0.03
35 C	vinyl acetate	1.326	1.625	-22.5	113	0.03
36 C	2-butanone	1.230	1.478	-20.2	115	0.03
37	cis-1,2-dichloroethene	0.671	0.772	-15.1	112	0.03
38	Ethyl Acetate	0.205	0.240	-17.1	115	0.03
39 C	chloroform	0.971	0.994	-2.4	97	0.03
40	Tetrahydrofuran	0.770	0.900	-16.9	113	0.03

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38754.D
 Acq On : 20 Mar 2020 1:32 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353541-2,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:43:06 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	2,2-dichloropropane	0.824	0.782	5.1	87	0.03
42 C	1,2-dichloroethane	0.536	0.599	-11.8	106	0.03
43 I	1,4-difluorobenzene	1.000	1.000	0.0	94	0.03
44 C	hexane	0.371	0.382	-3.0	98	0.03
45	diisopropyl ether	0.212	0.203	4.2	92	0.03
46	tert-butyl ethyl ether	0.607	0.596	1.8	92	0.03
48 C	1,1,1-trichloroethane	0.283	0.321	-13.4	106	0.03
49	1,1-dichloropropene	0.300	0.297	1.0	92	0.03
50 C	benzene	0.724	0.705	2.6	93	0.03
52 C	carbon tetrachloride	0.263	0.283	-7.6	96	0.03
53	cyclohexane	0.402	0.405	-0.7	97	0.03
54	tert-amyl methyl ether	0.632	0.628	0.6	91	0.03
55	dibromomethane	0.185	0.190	-2.7	97	0.03
56 C	1,2-dichloropropane	0.219	0.269	-22.8	118	0.03
57	bromodichloromethane	0.386	0.382	1.0	91	0.03
58 C	1,4-dioxane	0.166	0.183	-10.2	105	0.03
59 C	trichloroethene	0.270	0.324	-20.0	114	0.03
60 C	2,2,4-trimethylpentane	1.181	1.249	-5.8	100	0.03
61	methyl methacrylate	0.326	0.310	4.9	79	0.03
62	heptane	0.464	0.571	-23.1	115	0.03
63 C	cis-1,3-dichloropropene	0.351	0.389	-10.8	103	0.03
64 C	4-methyl-2-pentanone	0.523	0.668	-27.7	116	0.03
65	trans-1,3-dichloropropene	0.327	0.313	4.3	88	0.03
66 C	1,1,2-trichloroethane	0.240	0.277	-15.4	111	0.03
67 I	chlorobenzene-D5	1.000	1.000	0.0	87	0.02
68 C	toluene	5.075	6.093	-20.1	109	0.03
71	1,3-dichloropropane	2.505	2.594	-3.6	89	0.03
72	2-hexanone	2.979	4.179	-40.3#	114	0.03
74	dibromochloromethane	2.190	2.833	-29.4	110	0.02
75 C	1,2-dibromoethane	2.416	2.718	-12.5	99	0.02
76	butyl acetate	0.769	0.784	-2.0	87	0.03
77	octane	2.177	2.211	-1.6	89	0.03
78 C	tetrachloroethene	2.230	2.569	-15.2	102	0.02
79	1,1,1,2-tetrachloroethane	1.655	1.910	-15.4	100	0.02
80 C	chlorobenzene	4.044	4.627	-14.4	101	0.03
81 C	ethylbenzene	6.044	7.362	-21.8	108	0.02
83 C	m+p-xylene	4.948	6.131	-23.9	108	0.03

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38754.D
 Acq On : 20 Mar 2020 1:32 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353541-2,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:43:06 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
84 C	bromoform	2.041	2.424	-18.8	97	0.02
85 C	styrene	4.416	5.077	-15.0	99	0.02
86 C	1,1,2,2-tetrachloroethane	3.453	4.279	-23.9	105	0.03
87 C	o-xylene	4.848	6.270	-29.3	111	0.03
88	1,2,3-trichloropropane	2.906	2.947	-1.4	86	0.02
89	nonane	4.101	4.921	-20.0	102	0.03
91 C	isopropylbenzene	6.989	7.592	-8.6	93	0.03
92	bromobenzene	3.755	3.796	-1.1	84	0.03
93	2-chlorotoluene	1.964	2.226	-13.3	99	0.02
94	n-propylbenzene	2.261	2.560	-13.2	97	0.03
95	4-chlorotoluene	1.904	2.132	-12.0	97	0.02
96	4-ethyl toluene	7.806	9.008	-15.4	97	0.02
97	1,3,5-trimethylbenzene	6.349	7.680	-21.0	104	0.02
98	tert-butylbenzene	6.083	7.184	-18.1	95	0.03
99	1,2,4-trimethylbenzene	5.907	7.673	-29.9	106	0.03
100	decane	4.703	5.266	-12.0	93	0.02
101 C	Benzyl Chloride	4.132	5.220	-26.3	93	0.03
102	1,3-dichlorobenzene	3.635	4.400	-21.0	103	0.03
103 C	1,4-dichlorobenzene	3.457	4.188	-21.1	98	0.02
104	sec-butylbenzene	8.890	9.791	-10.1	90	0.02
106	p-isopropyltoluene	7.318	8.018	-9.6	85	0.02
107	1,2-dichlorobenzene	3.466	4.188	-20.8	103	0.02
108	n-butylbenzene	6.128	7.370	-20.3	96	0.02
111 C	1,2-dibromo-3-chloropropane	1.484	1.709	-15.2	85	0.03
112	undecane	5.096	5.922	-16.2	92	0.03
114	dodecane	5.052	6.014	-19.0	86	0.02
115 C	1,2,4-trichlorobenzene	2.161	2.986	-38.2#	101	0.02
116	naphthalene	6.409	7.957	-24.2	89	0.02
117	1,2,3-trichlorobenzene	2.483	2.900	-16.8	82	0.02
119 C	hexachlorobutadiene	2.680	3.915	-46.1#	120	0.02

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 0 CCC's out = 2

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38754.D
 Acq On : 20 Mar 2020 1:32 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353541-2,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:43:06 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320T\r38754.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.583	49	353543	10.000	ppbV	0.03
Standard Area = 353543			Recovery	=	100.00%	
43) 1,4-difluorobenzene	11.847	114	970632	10.000	ppbV	0.03
Standard Area = 970632			Recovery	=	100.00%	
67) chlorobenzene-D5	16.567	54	139948	10.000	ppbV	0.02
Standard Area = 139948			Recovery	=	100.00%	

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) chlorodifluoromethane	3.886	51	224083	8.320	ppbV #	94
3) propylene	3.916	41	201526M6	12.568	ppbV	
4) propane	3.946	29	177893	8.357	ppbV #	87
5) dichlorodifluoromethane	4.000	85	340013	10.640	ppbV	99
6) chloromethane	4.180	50	175228	11.933	ppbV	96
7) Freon-114	4.306	85	459629	11.822	ppbV	94
8) methanol	4.378	31	375337	52.962	ppbV	98
9) vinyl chloride	4.438	62	197192	11.513	ppbV	97
10) 1,3-butadiene	4.606	54	184419	10.739	ppbV	87
11) butane	4.672	43	318693	12.639	ppbV #	94
13) bromomethane	4.924	94	170280	12.008	ppbV	95
14) chloroethane	5.146	64	105516	12.115	ppbV	97
15) ethanol	5.320	31	688947	50.027	ppbV #	80
16) dichlorofluoromethane	5.284	67	317364	12.031	ppbV	98
17) vinyl bromide	5.570	106	192187	11.803	ppbV	99
18) acrolein	5.723	56	80597	9.009	ppbV	96
19) acetone	5.880	43	1327673	57.892	ppbV #	84
20) acetonitrile	5.567	41	167253	11.358	ppbV	97
21) trichlorofluoromethane	6.090	101	305977	12.270	ppbV	98
22) isopropyl alcohol	6.213	45	916909	31.270	ppbV #	96
23) acrylonitrile	6.467	53	162088	10.125	ppbV	98
24) pentane	6.537	43	467584	13.899	ppbV #	94
25) ethyl ether	6.577	31	320834	8.953	ppbV #	92
26) 1,1-dichloroethene	6.864	61	254062	10.825	ppbV	92
27) tertiary butyl alcohol	6.942	59	328459	9.346	ppbV	98
28) methylene chloride	7.032	49	242639	10.990	ppbV	99
29) 3-chloropropene	7.170	41	364211	12.578	ppbV	93
30) carbon disulfide	7.320	76	618756	9.590	ppbV	97
31) Freon 113	7.356	101	373192	10.969	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38754.D
 Acq On : 20 Mar 2020 1:32 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353541-2,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:43:06 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320T\r38754.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
32) trans-1,2-dichloroethene	8.158	61	296925	10.801	ppbV	97
33) 1,1-dichloroethane	8.392	63	374044	11.553	ppbV	100
34) MTBE	8.475	73	592185	10.565	ppbV	97
35) vinyl acetate	8.617	43	574639	12.258	ppbV	95
36) 2-butanone	8.875	43	522608	12.017	ppbV	96
37) cis-1,2-dichloroethene	9.392	61	272820	11.501	ppbV	97
38) Ethyl Acetate	9.692	61	84761	11.676	ppbV	99
39) chloroform	9.742	83	351512	10.239	ppbV	97
40) Tetrahydrofuran	10.183	42	318057	11.689	ppbV	94
41) 2,2-dichloropropane	9.758	77	276579	9.498	ppbV	90
42) 1,2-dichloroethane	10.592	62	211882	11.184	ppbV	96
44) hexane	9.650	57	371246	10.311	ppbV	97
45) diisopropyl ether	9.658	87	197448	9.611	ppbV	83
46) tert-butyl ethyl ether	10.283	59	578305	9.819	ppbV	98
48) 1,1,1-trichloroethane	10.875	97	311625	11.348	ppbV	98
49) 1,1-dichloropropene	11.247	75	287968	9.904	ppbV	95
50) benzene	11.407	78	683936	9.732	ppbV	99
52) carbon tetrachloride	11.580	117	274453	10.765	ppbV	97
53) cyclohexane	11.720	56	393017	10.077	ppbV	94
54) tert-amyl methyl ether	12.107	73	609545	9.936	ppbV	95
55) dibromomethane	12.327	93	184013	10.263	ppbV	96
56) 1,2-dichloropropane	12.360	63	261176	12.262	ppbV	99
57) bromodichloromethane	12.593	83	370778	9.885	ppbV	98
58) 1,4-dioxane	12.627	88	177883	11.035	ppbV	100
59) trichloroethene	12.640	130	314176	11.995	ppbV	98
60) 2,2,4-trimethylpentane	12.687	57	1212430	10.581	ppbV	95
61) methyl methacrylate	12.893	41	301099	9.528	ppbV	96
62) heptane	13.007	43	554356	12.312	ppbV	92
63) cis-1,3-dichloropropene	13.658	75	377301	11.071	ppbV	96
64) 4-methyl-2-pentanone	13.692	43	648864	12.784	ppbV	94
65) trans-1,3-dichloropropene	14.275	75	303555	9.578	ppbV	95
66) 1,1,2-trichloroethane	14.475	97	268889	11.527	ppbV	94
68) toluene	14.792	91	852731	12.007	ppbV	100
71) 1,3-dichloropropane	14.817	76	363045	10.355	ppbV	87
72) 2-hexanone	15.067	43	584802	14.029	ppbV #	87
74) dibromochloromethane	15.233	129	396414	12.935	ppbV	99
75) 1,2-dibromoethane	15.483	107	380331	11.247	ppbV	99
76) butyl acetate	15.725	73	109739	10.198	ppbV	82
77) octane	15.825	85	309483	10.159	ppbV	82
78) tetrachloroethene	15.950	166	359495	11.519	ppbV	93

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38754.D
 Acq On : 20 Mar 2020 1:32 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353541-2,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:43:06 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320T\r38754.D
 Sub List : Default-LCS-AP2 - All compounds listed

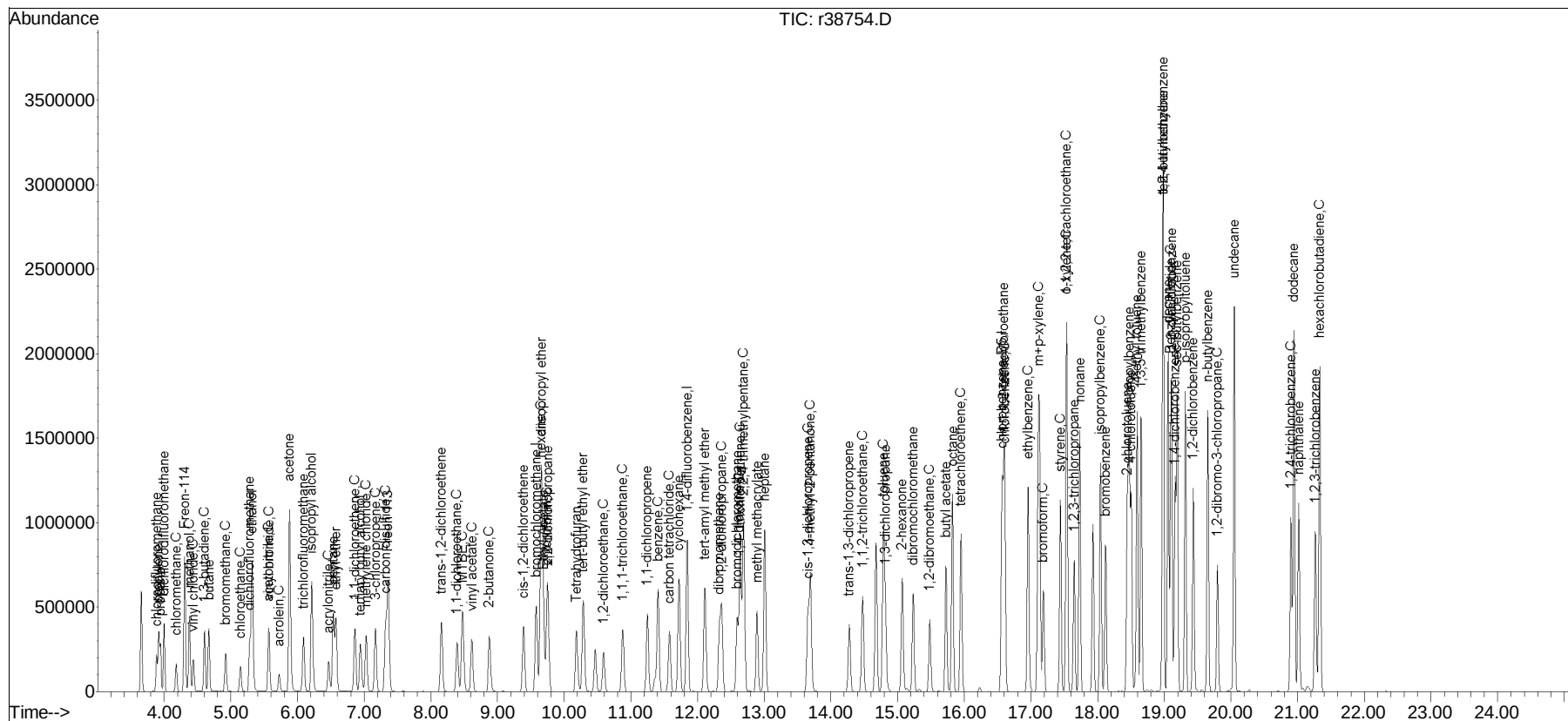
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	1,1,1,2-tetrachloroethane	16.592	131	267366	11.547	ppbV	98
80)	chlorobenzene	16.608	112	647553	11.441	ppbV	97
81)	ethylbenzene	16.958	91	1030325	12.181	ppbV	95
83)	m+p-xylene	17.117	91	1716028	24.782	ppbV	94
84)	bromoform	17.183	173	339273	11.876	ppbV	100
85)	styrene	17.442	104	710531	11.498	ppbV	98
86)	1,1,2,2-tetrachloroethane	17.533	83	598789	12.390	ppbV	99
87)	o-xylene	17.533	91	877460	12.932	ppbV	95
88)	1,2,3-trichloropropane	17.650	75	412426	10.143	ppbV	97
89)	nonane	17.733	43	688685	11.999	ppbV	93
91)	isopropylbenzene	18.042	105	1062537	10.863	ppbV	96
92)	bromobenzene	18.117	77	531287	10.109	ppbV	96
93)	2-chlorotoluene	18.442	126	311495	11.332	ppbV	97
94)	n-propylbenzene	18.475	120	358211	11.320	ppbV	98
95)	4-chlorotoluene	18.500	126	298365	11.196	ppbV	95
96)	4-ethyl toluene	18.592	105	1260588	11.539	ppbV	97
97)	1,3,5-trimethylbenzene	18.650	105	1074869	12.097	ppbV	96
98)	tert-butylbenzene	18.983	119	1005358	11.810	ppbV	97
99)	1,2,4-trimethylbenzene	18.983	105	1073784	12.988	ppbV	95
100)	decane	19.058	57	736961	11.197	ppbV	89
101)	Benzyl Chloride	19.100	91	730511	12.634	ppbV	98
102)	1,3-dichlorobenzene	19.108	146	615768	12.104	ppbV	99
103)	1,4-dichlorobenzene	19.158	146	586145	12.115	ppbV	97
104)	sec-butylbenzene	19.192	105	1370219	11.013	ppbV	94
106)	p-isopropyltoluene	19.317	119	1122136	10.956	ppbV	93
107)	1,2-dichlorobenzene	19.433	146	586153	12.085	ppbV	100
108)	n-butylbenzene	19.650	91	1031459	12.027	ppbV	96
111)	1,2-dibromo-3-chloropr...	19.800	75	239212	11.516	ppbV	93
112)	undecane	20.050	57	828718	11.620	ppbV	91
114)	dodecane	20.942	57	841582	11.903	ppbV	88
115)	1,2,4-trichlorobenzene	20.900	180	417816	13.816	ppbV	100
116)	naphthalene	21.017	128	1113601	12.417	ppbV	99
117)	1,2,3-trichlorobenzene	21.267	180	405826	11.679	ppbV	99
119)	hexachlorobutadiene	21.333	225	547909	14.611	ppbV	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : Default-LCS-AP2 - All compounds listed0320T\r38754.D

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
Data File : r38754.D
Acq On : 20 Mar 2020 1:32 PM
Operator : AIRPIANO3:EW
Sample : WG1353541-2,3,250,250
Misc : WG1353541,ICAL16594
ALS Vial : 0 Sample Multiplier: 1

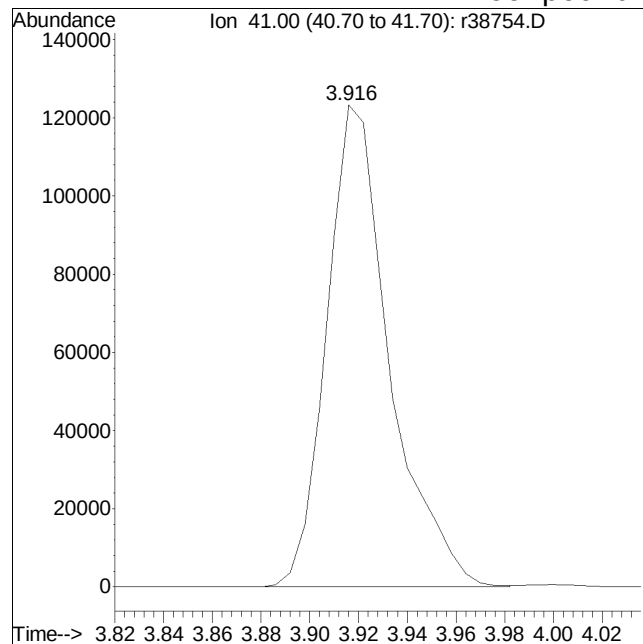
Quant Time: Mar 20 14:43:06 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Mar 12 17:27:58 2020
Response via : Initial Calibration



Manual Integration Report

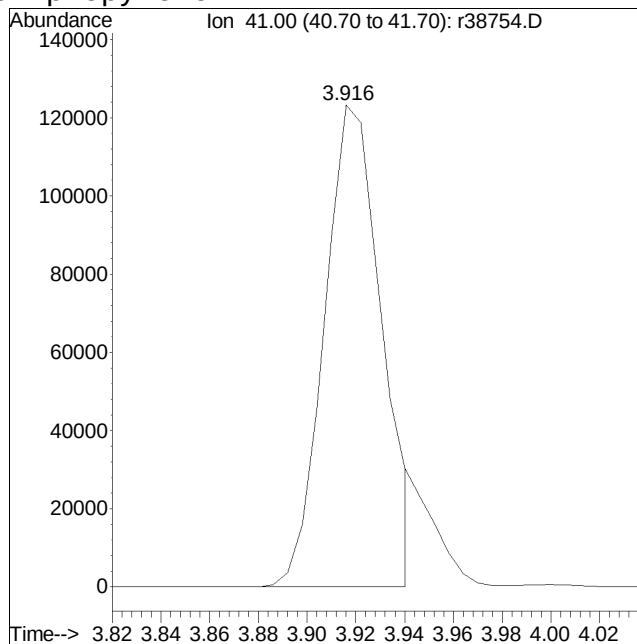
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200312.M
Data File : r38754.D Operator : AIRPIAN03:EW
Date Inj'd : 3/20/2020 0:1: 2 Instrument :
Sample : WG1353541-2, 3, 250, 250 Quant Date : 3/20/2020 2:42 pm

Compound #3: propylene



Original Peak Response = 220900

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



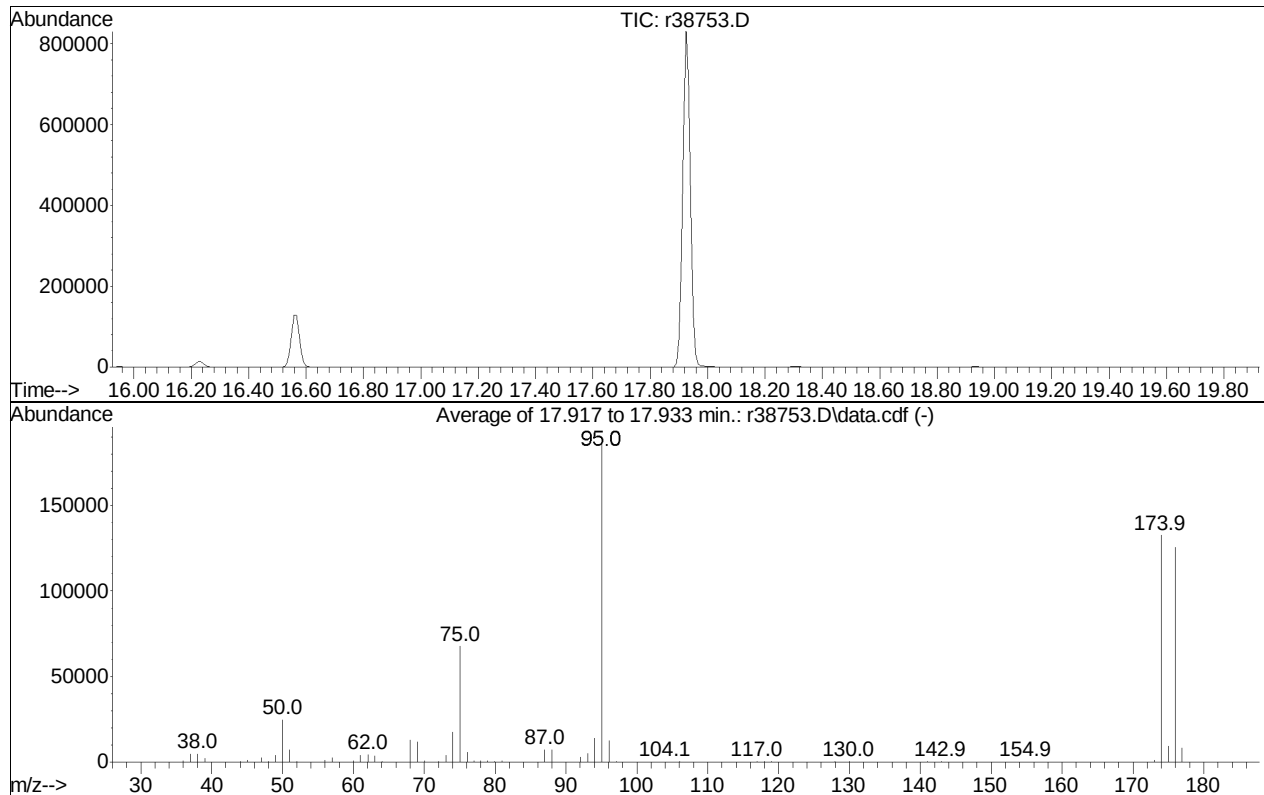
Manual Peak Response = 201526 M6

BFB

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38753.D
 Acq On : 20 Mar 2020 12:51 PM
 Operator : AIRPIANO3:EW
 Sample : WG1353541-1,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Thu Mar 12 17:27:58 2020



Spectrum Information: Average of 17.917 to 17.933 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	13.2	24646	PASS
75	95	30	66	36.4	67891	PASS
95	95	100	100	100.0	186762	PASS
96	95	5	9	6.8	12641	PASS
173	174	0.00	2	0.9	1150	PASS
174	95	50	120	71.1	132732	PASS
175	174	4	9	7.1	9417	PASS
176	174	93	101	94.6	125608	PASS
177	176	5	9	6.7	8448	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193194.D
 Acq On : 20 Mar 2020 3:55 PM
 Operator : AIRLAB19:EW
 Sample : WG1353556-4,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 16:32:01 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\03\200320T\r193190.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	8.783	49	293906	10.000	ppbV	0.00
Standard Area = 288364			Recovery =	101.92%		
43) 1,4-difluorobenzene	10.760	114	909254	10.000	ppbV	0.01
Standard Area = 940727			Recovery =	96.65%		
67) chlorobenzene-D5	14.883	54	110058	10.000	ppbV	0.00
Standard Area = 108860			Recovery =	101.10%		

System Monitoring Compounds

Target Compounds					Qvalue	
5) dichlorodifluoromethane	0.000		0	N.D.		
6) chloromethane	0.000		0	N.D.		
7) Freon-114	0.000		0	N.D.		
9) vinyl chloride	0.000		0	N.D.		
10) 1,3-butadiene	0.000		0	N.D.		
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	4.948	31	441	0.051	ppbV #	60
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.513	43	857	0.054	ppbV #	97
21) trichlorofluoromethane	0.000		0	N.D.		
22) isopropyl alcohol	5.800	45	2049	0.068	ppbV #	86
26) 1,1-dichloroethene	0.000		0	N.D.		
27) tertiary butyl alcohol	0.000		0	N.D.		
28) methylene chloride	6.546		0	N.D.		
29) 3-chloropropene	0.000		0	N.D.		
30) carbon disulfide	6.852		0	N.D.		
31) Freon 113	0.000		0	N.D.		
32) trans-1,2-dichloroethene	0.000		0	N.D.		
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	0.000		0	N.D.		
36) 2-butanone	0.000		0	N.D.		
37) cis-1,2-dichloroethene	0.000		0	N.D.		
38) Ethyl Acetate	0.000		0	N.D.		
39) chloroform	0.000		0	N.D.		
40) Tetrahydrofuran	0.000		0	N.D.		
42) 1,2-dichloroethane	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193194.D
 Acq On : 20 Mar 2020 3:55 PM
 Operator : AIRLAB19:EW
 Sample : WG1353556-4,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 16:32:01 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\03\200320T\r193190.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) hexane	0.000		0		N.D.	
48) 1,1,1-trichloroethane	0.000		0		N.D.	
50) benzene	0.000		0		N.D.	
52) carbon tetrachloride	0.000		0		N.D.	
53) cyclohexane	0.000		0		N.D.	d
56) 1,2-dichloropropane	0.000		0		N.D.	
57) bromodichloromethane	0.000		0		N.D.	
58) 1,4-dioxane	0.000		0		N.D.	
59) trichloroethene	0.000		0		N.D.	
60) 2,2,4-trimethylpentane	11.527		0		N.D.	
62) heptane	0.000		0		N.D.	
63) cis-1,3-dichloropropene	0.000		0		N.D.	
64) 4-methyl-2-pentanone	0.000		0		N.D.	
65) trans-1,3-dichloropropene	0.000		0		N.D.	
66) 1,1,2-trichloroethane	0.000		0		N.D.	
68) toluene	13.375		0		N.D.	
72) 2-hexanone	0.000		0		N.D.	
74) dibromochloromethane	0.000		0		N.D.	
75) 1,2-dibromoethane	0.000		0		N.D.	
78) tetrachloroethene	0.000		0		N.D.	
80) chlorobenzene	0.000		0		N.D.	
81) ethylbenzene	0.000		0		N.D.	
83) m+p-xylene	0.000		0		N.D.	
84) bromoform	0.000		0		N.D.	
85) styrene	0.000		0		N.D.	
86) 1,1,2,2-tetrachloroethane	0.000		0		N.D.	
87) o-xylene	0.000		0		N.D.	
96) 4-ethyl toluene	0.000		0		N.D.	
97) 1,3,5-trimethylbenzene	0.000		0		N.D.	
99) 1,2,4-trimethylbenzene	0.000		0		N.D.	
101) Benzyl Chloride	0.000		0		N.D.	
102) 1,3-dichlorobenzene	17.083		0		N.D.	
103) 1,4-dichlorobenzene	17.083		0		N.D.	
107) 1,2-dichlorobenzene	17.392		0		N.D.	
115) 1,2,4-trichlorobenzene	18.692		0		N.D.	
119) hexachlorobutadiene	0.000		0		N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193194.D
 Acq On : 20 Mar 2020 3:55 PM
 Operator : AIRLAB19:EW
 Sample : WG1353556-4,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 16:32:01 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\03\200320T\r193190.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Sub List : Default-LCS-AP2 - All compounds listed320T\r193190.D

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\

Data File : r193194.D

Acq On : 20 Mar 2020 3:55 PM

Operator : AIRLAB19:EW

Sample : WG1353556-4,3,250,250

Misc : WG1353556,ICAL16553

ALS Vial : 0 Sample Multiplier: 1

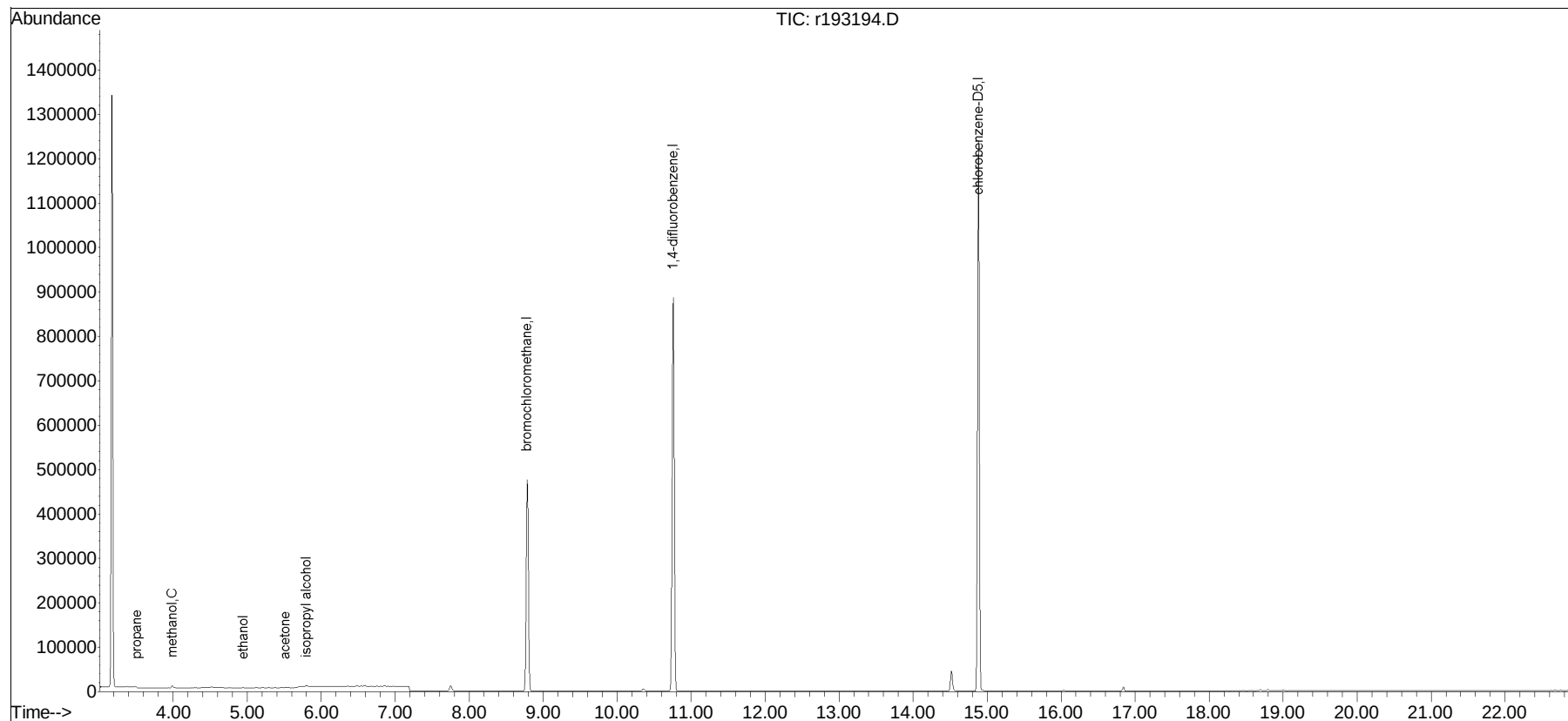
Quant Time: Mar 20 16:32:01 2020

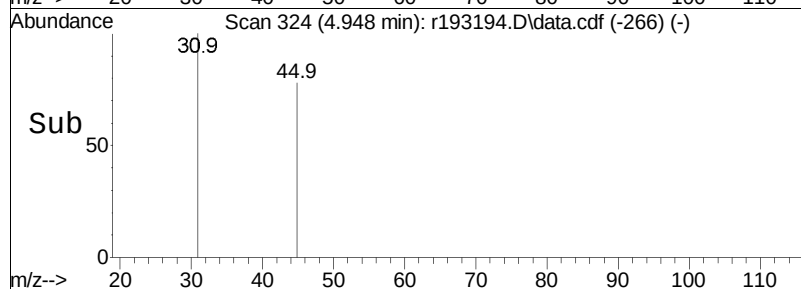
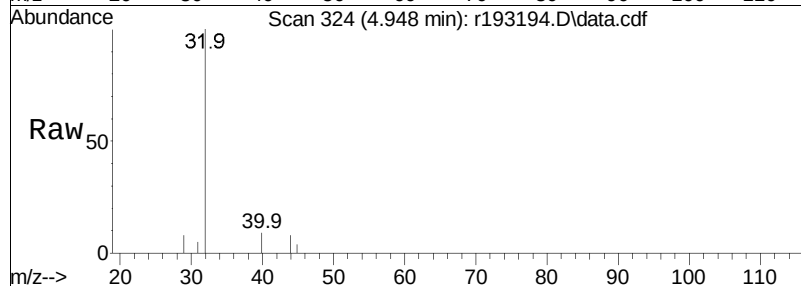
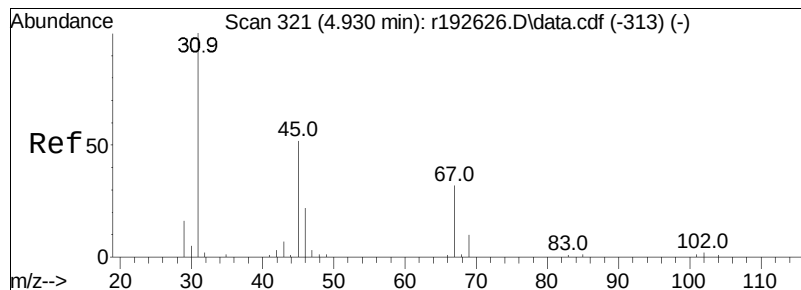
Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M

Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis

QLast Update : Tue Feb 25 10:21:40 2020

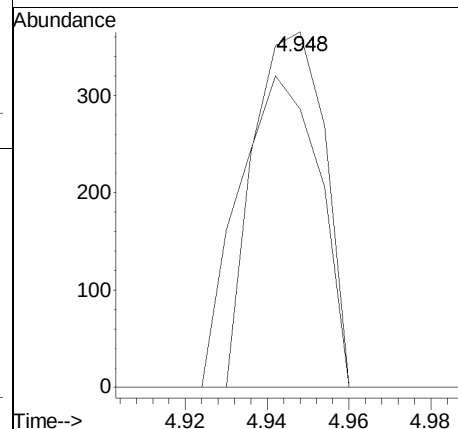
Response via : Initial Calibration

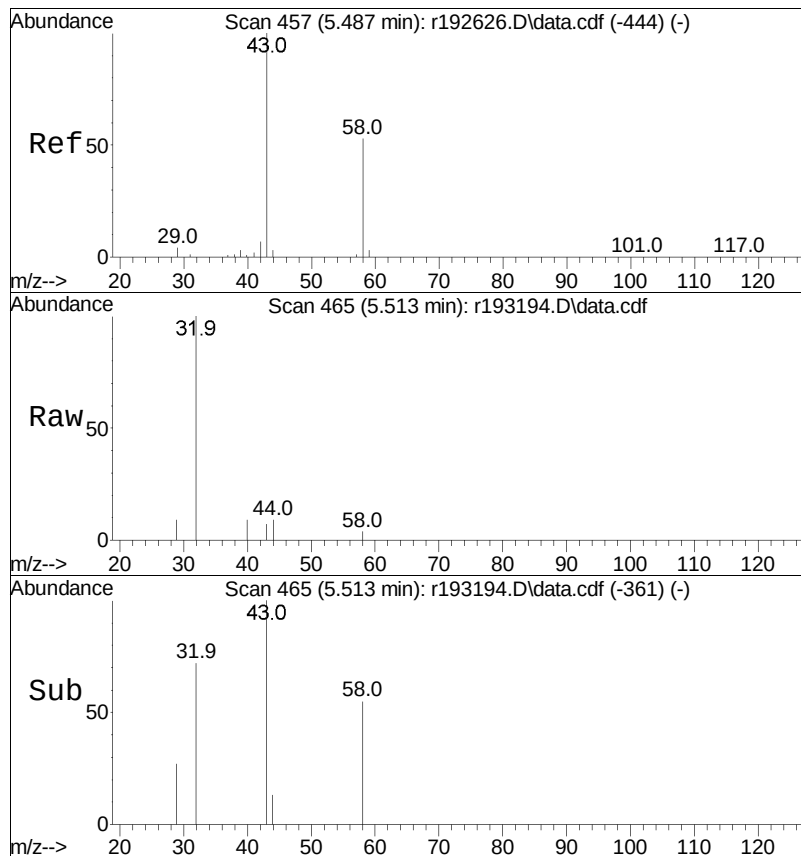




#15
ethanol
Concen: 0.05 ppbV
RT: 4.948 min Scan# 324
Delta R.T. 0.018 min
Lab File: r193194.D
Acq: 20 Mar 2020 3:55 PM

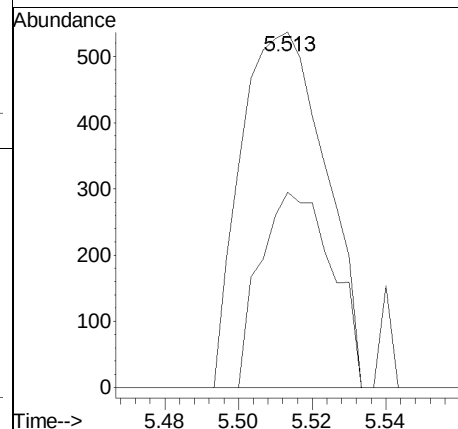
Tgt	Ion	Ratio	Lower	Upper
31	100			
45	78.4	40.6	60.8	

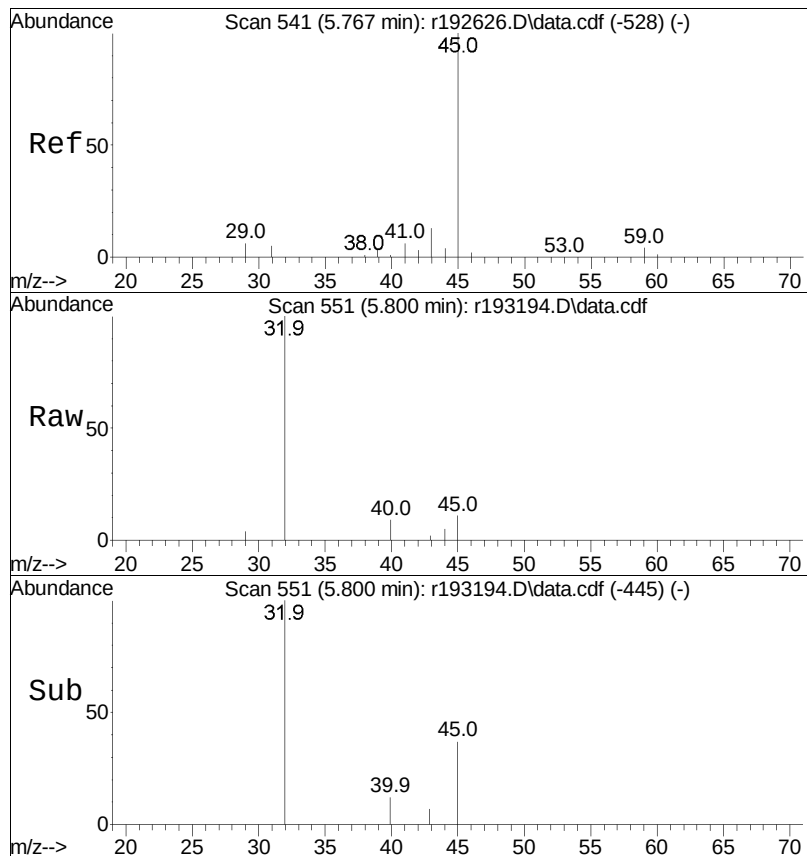




#19
acetone
Concen: 0.05 ppbV
RT: 5.513 min Scan# 465
Delta R.T. 0.017 min
Lab File: r193194.D
Acq: 20 Mar 2020 3:55 PM

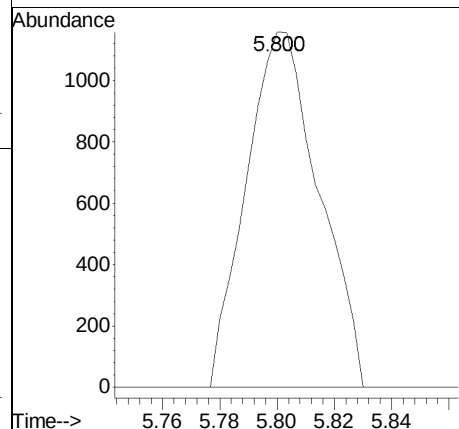
Tgt Ion	Ratio	Lower	Upper
43	100		
58	54.9	42.0	63.0
57	0.0	1.4	2.0#





#22
 isopropyl alcohol
 Concen: 0.07 ppbV
 RT: 5.800 min Scan# 551
 Delta R.T. 0.023 min
 Lab File: r193194.D
 Acq: 20 Mar 2020 3:55 PM

Tgt Ion	Ratio	Lower	Upper
45	100		
59	0.0	3.7	5.5#



Manual Integration Report

Data Path	: 0:\Forensics\Data\Airlab19Q	Method	: TFS19_200224.M
Data File	: r193194.D	Operator	: AIRLAB19:EW
Date Inj'd	: 3/20/2020 0:3: 5	Instrument	:
Sample	: WG1353556-4,3,250,250	Quant Date	: 3/20/2020 4:31 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38757.D
 Acq On : 20 Mar 2020 4:20 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353541-4,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 17:01:06 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320T\r38754.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.583	49	347721	10.000	ppbV	0.03
Standard Area = 353543			Recovery =		98.35%	
43) 1,4-difluorobenzene	11.847	114	944639	10.000	ppbV	0.03
Standard Area = 970632			Recovery =		97.32%	
67) chlorobenzene-D5	16.533	54	123905	10.000	ppbV	0.00
Standard Area = 139948			Recovery =		88.54%	

System Monitoring Compounds

Target Compounds					Qvalue	
5) dichlorodifluoromethane	0.000		0		N.D.	
6) chloromethane	0.000		0		N.D.	
7) Freon-114	0.000		0		N.D.	
9) vinyl chloride	0.000		0		N.D.	
10) 1,3-butadiene	0.000		0		N.D.	
13) bromomethane	0.000		0		N.D.	
14) chloroethane	0.000		0		N.D.	
15) ethanol	5.344	31	8335	0.615	ppbV #	78
17) vinyl bromide	0.000		0		N.D.	
19) acetone	5.927	43	1756	0.078	ppbV #	81
21) trichlorofluoromethane	0.000		0		N.D.	
22) isopropyl alcohol	6.253		0		N.D.	
26) 1,1-dichloroethene	0.000		0		N.D.	
27) tertiary butyl alcohol	0.000		0		N.D.	
28) methylene chloride	7.044		0		N.D.	
29) 3-chloropropene	0.000		0		N.D.	
30) carbon disulfide	0.000		0		N.D.	
31) Freon 113	0.000		0		N.D.	
32) trans-1,2-dichloroethene	0.000		0		N.D.	
33) 1,1-dichloroethane	0.000		0		N.D.	
34) MTBE	0.000		0		N.D.	
36) 2-butanone	8.933		0		N.D.	
37) cis-1,2-dichloroethene	0.000		0		N.D.	
38) Ethyl Acetate	0.000		0		N.D.	
39) chloroform	0.000		0		N.D.	
40) Tetrahydrofuran	0.000		0		N.D.	
42) 1,2-dichloroethane	0.000		0		N.D.	

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38757.D
 Acq On : 20 Mar 2020 4:20 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353541-4,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 17:01:06 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320T\r38754.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) hexane	0.000		0		N.D.	
48) 1,1,1-trichloroethane	0.000		0		N.D.	
50) benzene	11.413		0		N.D.	
52) carbon tetrachloride	0.000		0		N.D.	
53) cyclohexane	0.000		0		N.D.	
56) 1,2-dichloropropane	0.000		0		N.D.	
57) bromodichloromethane	0.000		0		N.D.	
58) 1,4-dioxane	0.000		0		N.D.	
59) trichloroethene	0.000		0		N.D.	
60) 2,2,4-trimethylpentane	0.000		0		N.D.	
62) heptane	0.000		0		N.D.	
63) cis-1,3-dichloropropene	0.000		0		N.D.	
64) 4-methyl-2-pentanone	0.000		0		N.D.	
65) trans-1,3-dichloropropene	0.000		0		N.D.	
66) 1,1,2-trichloroethane	0.000		0		N.D.	
68) toluene	0.000		0		N.D.	
72) 2-hexanone	0.000		0		N.D.	
74) dibromochloromethane	0.000		0		N.D.	
75) 1,2-dibromoethane	0.000		0		N.D.	
78) tetrachloroethene	0.000		0		N.D.	
80) chlorobenzene	0.000		0		N.D.	
81) ethylbenzene	0.000		0		N.D.	
83) m+p-xylene	0.000		0		N.D.	
84) bromoform	0.000		0		N.D.	
85) styrene	0.000		0		N.D.	
86) 1,1,2,2-tetrachloroethane	0.000		0		N.D.	
87) o-xylene	0.000		0		N.D.	
96) 4-ethyl toluene	0.000		0		N.D.	
97) 1,3,5-trimethylbenzene	0.000		0		N.D.	
99) 1,2,4-trimethylbenzene	0.000		0		N.D.	
101) Benzyl Chloride	0.000		0		N.D.	
102) 1,3-dichlorobenzene	0.000		0		N.D.	
103) 1,4-dichlorobenzene	0.000		0		N.D.	
107) 1,2-dichlorobenzene	0.000		0		N.D.	
115) 1,2,4-trichlorobenzene	20.858		0		N.D.	
119) hexachlorobutadiene	0.000		0		N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38757.D
 Acq On : 20 Mar 2020 4:20 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353541-4,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 17:01:06 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320T\r38754.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Sub List : Default-LCS-AP2 - All compounds listed0320T\r38754.D

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\

Data File : r38757.D

Acq On : 20 Mar 2020 4:20 PM

Operator : AIRPIANO3:EW

Sample : WG1353541-4,3,250,250

Misc : WG1353541,ICAL16594

ALS Vial : 0 Sample Multiplier: 1

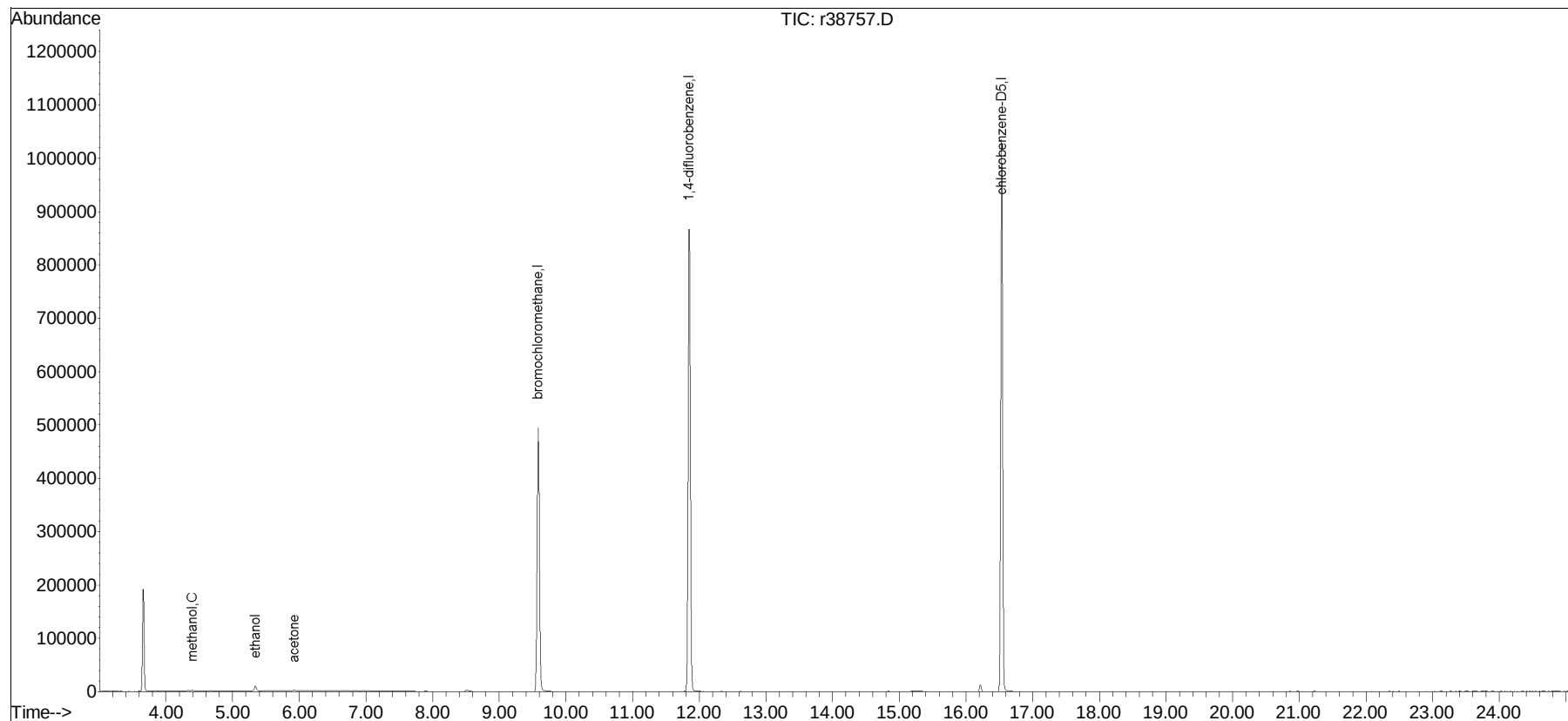
Quant Time: Mar 20 17:01:06 2020

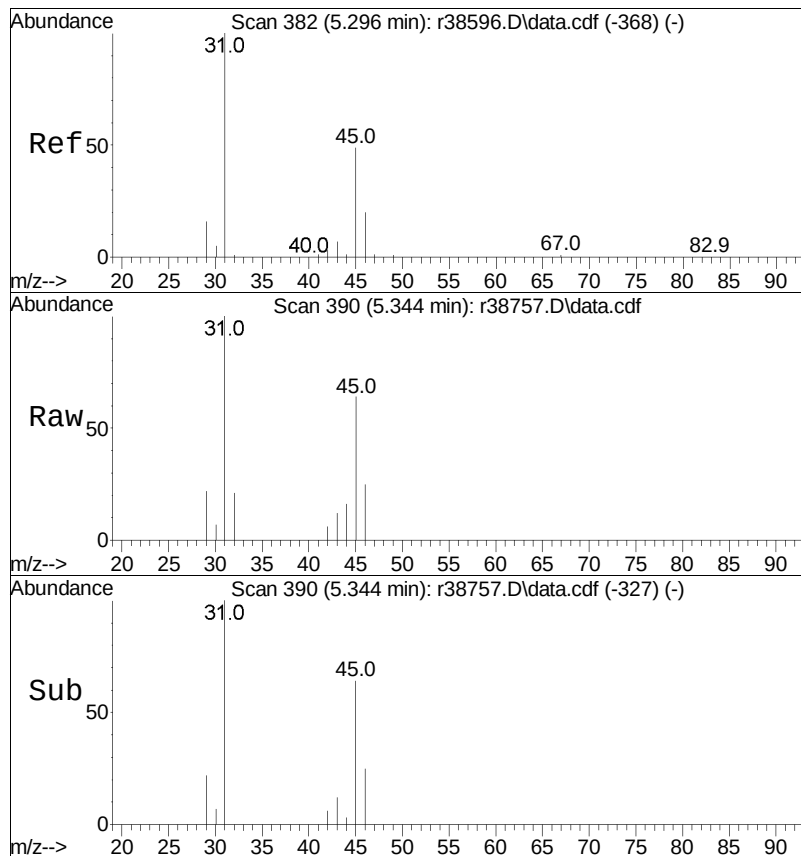
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Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis

QLast Update : Thu Mar 12 17:27:58 2020

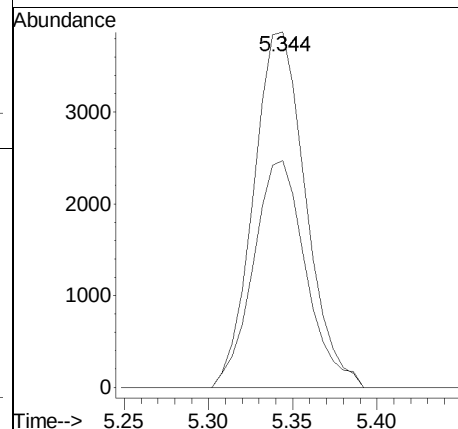
Response via : Initial Calibration

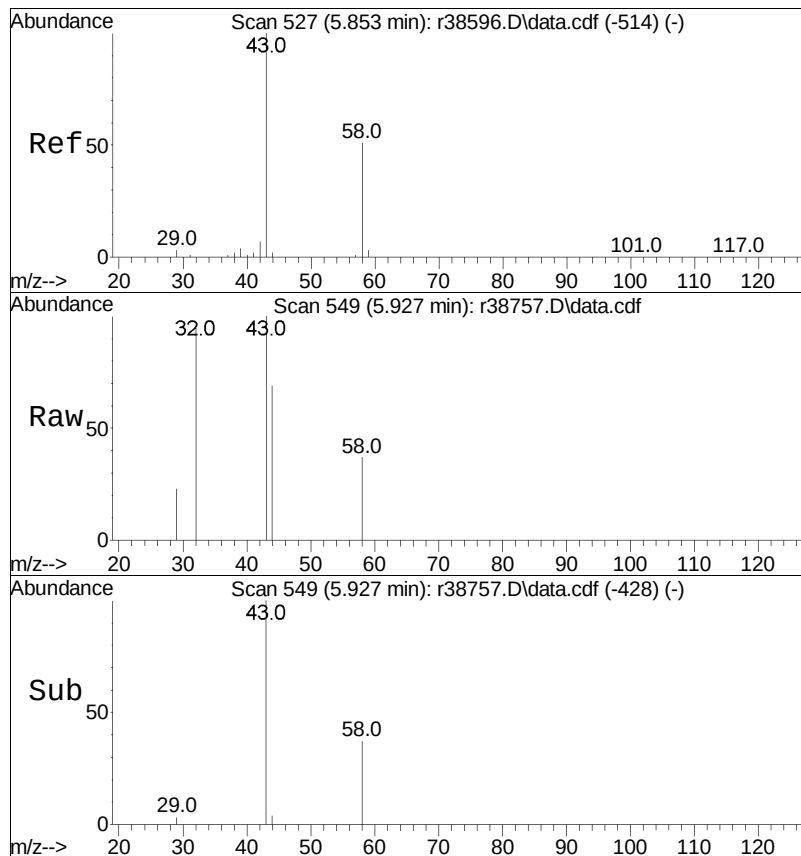




#15
 ethanol
 Concen: 0.62 ppbV
 RT: 5.344 min Scan# 390
 Delta R.T. 0.048 min
 Lab File: r38757.D
 Acq: 20 Mar 2020 4:20 PM

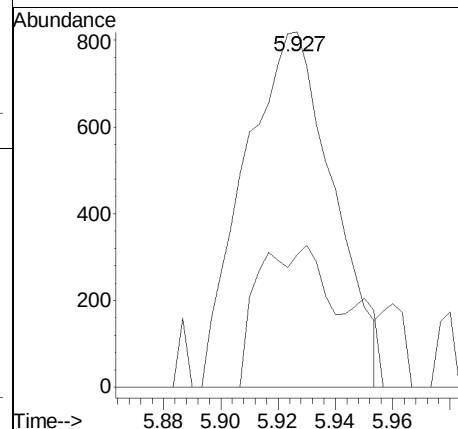
Tgt	Ion	Ratio	Resp	Lower	Upper
31	100		8335		
45	63.9			39.0	58.4#





#19
acetone
Concen: 0.08 ppbV
RT: 5.927 min Scan# 549
Delta R.T. 0.073 min
Lab File: r38757.D
Acq: 20 Mar 2020 4:20 PM

Tgt	Ion	Ratio	Resp	Lower	Upper
43	100		1756		
58	37.4	40.6	60.8#		
57	0.0	1.0	1.6#		



Manual Integration Report

Data Path	: 0:\Forensics\Data\AirpianoQ	Method	: TFS3_200312.M
Data File	: r38757.D	Operator	: AIRPIAN03:EW
Date Inj'd	: 3/20/2020 0:4: 0	Instrument	:
Sample	: WG1353541-4,3,250,250	Quant Date	: 3/20/2020 5:01 pm

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193191.D
 Acq On : 20 Mar 2020 12:51 PM
 Operator : AIRLAB19:EW
 Sample : WG1353556-3,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:29:02 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	bromochloromethane	10.000	10.000	0.0	93	0.00
2	chlorodifluoromethane	10.000	7.509	24.9	74	0.00
3	propylene	10.000	12.005	-20.1	116	0.00
4	propane	10.000	6.409	35.9#	63	0.00
5	dichlorodifluoromethane	10.000	8.898	11.0	89	0.00
6 C	chloromethane	10.000	9.468	5.3	96	0.00
7	Freon-114	10.000	10.327	-3.3	98	0.00
8 C	methanol	50.000	42.053	15.9	83	0.00
9 C	vinyl chloride	10.000	9.963	0.4	100	0.00
10 C	1,3-butadiene	10.000	9.938	0.6	96	0.00
11	butane	10.000	10.425	-4.3	105	0.00
13 C	bromomethane	10.000	9.724	2.8	93	0.00
14 C	chloroethane	10.000	10.106	-1.1	99	0.00
15	ethanol	50.000	37.759	24.5	72	0.00
16	dichlorofluoromethane	10.000	9.303	7.0	90	0.00
17 C	vinyl bromide	10.000	9.119	8.8	88	0.00
18 C	acrolein	10.000	8.915	10.9	85	0.00
19	acetone	50.000	45.580	8.8	88	-0.01
20 C	acetonitrile	10.000	11.116	-11.2	104	0.00
21	trichlorofluoromethane	10.000	9.614	3.9	80	0.00
22	isopropyl alcohol	25.000	23.256	7.0	95	0.00
23 C	acrylonitrile	10.000	9.641	3.6	93	0.00
24	pentane	10.000	10.668	-6.7	102	0.00
25	ethyl ether	10.000	7.028	29.7	67	0.00
26 C	1,1-dichloroethene	10.000	10.899	-9.0	104	0.00
27	tertiary butyl alcohol	10.000	9.807	1.9	100	-0.02
28 C	methylene chloride	10.000	9.693	3.1	92	0.01
29 C	3-chloropropene	10.000	13.025	-30.3#	125	0.00
30 C	carbon disulfide	10.000	10.299	-3.0	97	0.00
31	Freon 113	10.000	10.553	-5.5	100	0.00
32	trans-1,2-dichloroethene	10.000	10.791	-7.9	104	0.00
33 C	1,1-dichloroethane	10.000	11.014	-10.1	105	0.00
34 C	MTBE	10.000	9.539	4.6	91	0.00
35 C	vinyl acetate	10.000	10.457	-4.6	97	0.00
36 C	2-butanone	10.000	11.217	-12.2	105	-0.02
37	cis-1,2-dichloroethene	10.000	11.270	-12.7	108	0.00
38	Ethyl Acetate	10.000	12.454	-24.5	114	-0.02
39 C	chloroform	10.000	10.254	-2.5	98	0.00
40	Tetrahydrofuran	10.000	11.470	-14.7	110	-0.03

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193191.D
 Acq On : 20 Mar 2020 12:51 PM
 Operator : AIRLAB19:EW
 Sample : WG1353556-3,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:29:02 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41	2,2-dichloropropane	10.000	8.071	19.3	76	0.00
42 C	1,2-dichloroethane	10.000	9.265	7.3	89	0.00
43 I	1,4-difluorobenzene	10.000	10.000	0.0	106	0.00
44 C	hexane	10.000	10.014	-0.1	107	0.00
45	diisopropyl ether	10.000	9.350	6.5	99	0.00
46	tert-butyl ethyl ether	10.000	8.587	14.1	92	0.00
48 C	1,1,1-trichloroethane	10.000	7.922	20.8	85	0.00
49	1,1-dichloropropene	10.000	8.515	14.8	92	0.00
50 C	benzene	10.000	9.596	4.0	103	0.00
52 C	carbon tetrachloride	10.000	8.656	13.4	92	0.00
53	cyclohexane	10.000	10.293	-2.9	110	0.00
54	tert-amyl methyl ether	10.000	8.311	16.9	88	-0.01
55	dibromomethane	10.000	8.870	11.3	96	0.00
56 C	1,2-dichloropropane	10.000	10.439	-4.4	111	0.00
57	bromodichloromethane	10.000	9.253	7.5	99	0.00
58 C	1,4-dioxane	10.000	10.712	-7.1	117	-0.03
59 C	trichloroethene	10.000	9.604	4.0	102	0.00
60 C	2,2,4-trimethylpentane	10.000	10.372	-3.7	113	0.00
61	methyl methacrylate	10.000	7.913	20.9	77	0.00
62	heptane	10.000	10.124	-1.2	108	0.00
63 C	cis-1,3-dichloropropene	10.000	9.791	2.1	103	0.00
64 C	4-methyl-2-pentanone	10.000	10.406	-4.1	107	-0.03
65	trans-1,3-dichloropropene	10.000	7.912	20.9	83	0.00
66 C	1,1,2-trichloroethane	10.000	9.744	2.6	104	0.00
67 I	chlorobenzene-D5	10.000	10.000	0.0	93	0.00
68 C	toluene	10.000	10.825	-8.2	102	0.00
71	1,3-dichloropropane	10.000	9.883	1.2	92	0.00
72	2-hexanone	10.000	11.924	-19.2	110	-0.03
74	dibromochloromethane	10.000	10.808	-8.1	99	0.00
75 C	1,2-dibromoethane	10.000	10.794	-7.9	100	0.00
76	butyl acetate	10.000	9.718	2.8	89	-0.03
77	octane	10.000	10.842	-8.4	101	0.00
78 C	tetrachloroethene	10.000	11.344	-13.4	103	0.00
79	1,1,1,2-tetrachloroethane	10.000	9.951	0.5	91	0.00
80 C	chlorobenzene	10.000	11.813	-18.1	109	0.00
81 C	ethylbenzene	10.000	10.755	-7.6	98	0.00
83 C	m+p-xylene	20.000	21.510	-7.6	99	0.00

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193191.D
 Acq On : 20 Mar 2020 12:51 PM
 Operator : AIRLAB19:EW
 Sample : WG1353556-3,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:29:02 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
84 C	bromoform	10.000	11.018	-10.2	101	0.00
85 C	styrene	10.000	10.795	-7.9	99	0.00
86 C	1,1,2,2-tetrachloroethane	10.000	12.041	-20.4	108	0.00
87 C	o-xylene	10.000	10.686	-6.9	98	0.00
88	1,2,3-trichloropropane	10.000	9.903	1.0	92	0.00
89	nonane	10.000	10.322	-3.2	95	0.00
91 C	isopropylbenzene	10.000	9.924	0.8	91	0.00
92	bromobenzene	10.000	10.210	-2.1	94	0.00
93	2-chlorotoluene	10.000	10.417	-4.2	92	0.00
94	n-propylbenzene	10.000	10.459	-4.6	93	0.00
95	4-chlorotoluene	10.000	10.223	-2.2	93	0.00
96	4-ethyl toluene	10.000	10.731	-7.3	95	0.00
97	1,3,5-trimethylbenzene	10.000	10.409	-4.1	94	0.00
98	tert-butylbenzene	10.000	10.132	-1.3	91	0.00
99	1,2,4-trimethylbenzene	10.000	10.627	-6.3	94	0.00
100	decane	10.000	11.401	-14.0	101	0.00
101 C	Benzyl Chloride	10.000	10.906	-9.1	91	0.00
102	1,3-dichlorobenzene	10.000	11.603	-16.0	101	0.00
103 C	1,4-dichlorobenzene	10.000	11.275	-12.8	97	0.00
104	sec-butylbenzene	10.000	10.165	-1.6	90	0.00
106	p-isopropyltoluene	10.000	9.624	3.8	84	0.00
107	1,2-dichlorobenzene	10.000	11.326	-13.3	98	0.00
108	n-butylbenzene	10.000	10.910	-9.1	94	0.00
111 C	1,2-dibromo-3-chloropropane	10.000	9.096	9.0	79	0.00
112	undecane	10.000	11.978	-19.8	100	0.00
114	dodecane	10.000	11.821	-18.2	86	0.00
115 C	1,2,4-trichlorobenzene	10.000	12.491	-24.9	94	0.00
116	naphthalene	10.000	10.180	-1.8	84	0.00
117	1,2,3-trichlorobenzene	10.000	10.884	-8.8	83	0.00
119 C	hexachlorobutadiene	10.000	10.651	-6.5	84	0.00

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193191.D
 Acq On : 20 Mar 2020 12:51 PM
 Operator : AIRLAB19:EW
 Sample : WG1353556-3,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:29:02 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\03\200320T\r193190.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	8.783	49	291035	10.000	ppbV	0.00
Standard Area = 288364			Recovery =	100.93%		
43) 1,4-difluorobenzene	10.747	114	946102	10.000	ppbV	0.00
Standard Area = 940727			Recovery =	100.57%		
67) chlorobenzene-D5	14.875	54	108034	10.000	ppbV	0.00
Standard Area = 108860			Recovery =	99.24%		

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	3.568	85	145123	8.898	ppbV	100
6) chloromethane	3.778	50	98770	9.468	ppbV	98
7) Freon-114	3.916	85	249950	10.327	ppbV	94
9) vinyl chloride	4.066	62	128997	9.963	ppbV	99
10) 1,3-butadiene	4.246	54	110964	9.938	ppbV	98
13) bromomethane	4.576	94	99612	9.724	ppbV	99
14) chloroethane	4.798	64	68604	10.106	ppbV	93
15) ethanol	4.930	31	321089	37.759	ppbV #	65
17) vinyl bromide	5.210	106	101012	9.119	ppbV	92
19) acetone	5.487	43	712336	45.580	ppbV #	98
21) trichlorofluoromethane	5.697	101	164720	9.614	ppbV	98
22) isopropyl alcohol	5.767	45	690492	23.256	ppbV	100
26) 1,1-dichloroethene	6.408	61	215216	10.899	ppbV	96
27) tertiary butyl alcohol	6.426	59	266935	9.807	ppbV #	95
28) methylene chloride	6.546	49	185196	9.693	ppbV	84
29) 3-chloropropene	6.672	41	299903	13.025	ppbV	94
30) carbon disulfide	6.852	76	546933	10.299	ppbV #	80
31) Freon 113	6.828	101	293948	10.553	ppbV	97
32) trans-1,2-dichloroethene	7.542	61	244273	10.791	ppbV	97
33) 1,1-dichloroethane	7.750	63	303714	11.014	ppbV	98
34) MTBE	7.800	73	426408	9.539	ppbV	95
36) 2-butanone	8.142	43	392946	11.217	ppbV	93
37) cis-1,2-dichloroethene	8.617	61	221113	11.270	ppbV	93
38) Ethyl Acetate	8.817	61	74226	12.454	ppbV	82
39) chloroform	8.917	83	249600	10.254	ppbV #	94
40) Tetrahydrofuran	9.308	42	269982	11.470	ppbV	98
42) 1,2-dichloroethane	9.667	62	110185	9.265	ppbV	95

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193191.D
 Acq On : 20 Mar 2020 12:51 PM
 Operator : AIRLAB19:EW
 Sample : WG1353556-3,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:29:02 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\03\200320T\r193190.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) hexane	8.825	57	347249	10.014	ppbV	97
48) 1,1,1-trichloroethane	9.933	97	176378	7.922	ppbV	90
50) benzene	10.407	78	656527	9.596	ppbV	98
52) carbon tetrachloride	10.560	117	158780	8.656	ppbV #	87
53) cyclohexane	10.693	56	390430	10.293	ppbV	98
56) 1,2-dichloropropane	11.247	63	228409	10.439	ppbV	98
57) bromodichloromethane	11.447	83	276018	9.253	ppbV	95
58) 1,4-dioxane	11.467	88	165900	10.712	ppbV	81
59) trichloroethene	11.493	130	234179	9.604	ppbV	96
60) 2,2,4-trimethylpentane	11.520	57	1135194	10.372	ppbV	99
62) heptane	11.787	43	428379	10.124	ppbV	96
63) cis-1,3-dichloropropene	12.400	75	318728	9.791	ppbV #	91
64) 4-methyl-2-pentanone	12.408	43	473699	10.406	ppbV	95
65) trans-1,3-dichloropropene	12.925	75	231649	7.912	ppbV	97
66) 1,1,2-trichloroethane	13.100	97	232153	9.744	ppbV	96
68) toluene	13.367	91	712092	10.825	ppbV	99
72) 2-hexanone	13.567	43	455782	11.924	ppbV #	82
74) dibromochloromethane	13.758	129	273299	10.808	ppbV	98
75) 1,2-dibromoethane	13.975	107	326529	10.794	ppbV	97
78) tetrachloroethene	14.358	166	327900	11.344	ppbV	96
80) chlorobenzene	14.908	112	617599	11.813	ppbV	94
81) ethylbenzene	15.192	91	848602	10.755	ppbV	98
83) m+p-xylene	15.325	91	1337977	21.510	ppbV	99
84) bromoform	15.408	173	307610	11.018	ppbV	98
85) styrene	15.600	104	649854	10.795	ppbV	97
86) 1,1,2,2-tetrachloroethane	15.683	83	516728	12.041	ppbV	96
87) o-xylene	15.683	91	652185	10.686	ppbV	96
96) 4-ethyl toluene	16.608	105	1108912	10.731	ppbV	95
97) 1,3,5-trimethylbenzene	16.667	105	864333	10.409	ppbV	93
99) 1,2,4-trimethylbenzene	16.983	105	816769	10.627	ppbV	94
101) Benzyl Chloride	17.108	91	675058	10.906	ppbV	99
102) 1,3-dichlorobenzene	17.125	146	610754	11.603	ppbV	98
103) 1,4-dichlorobenzene	17.175	146	568718	11.275	ppbV	97
107) 1,2-dichlorobenzene	17.442	146	565344	11.326	ppbV	98
115) 1,2,4-trichlorobenzene	18.833	180	547929	12.491	ppbV	97
119) hexachlorobutadiene	19.225	225	406023	10.651	ppbV	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193191.D
 Acq On : 20 Mar 2020 12:51 PM
 Operator : AIRLAB19:EW
 Sample : WG1353556-3,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

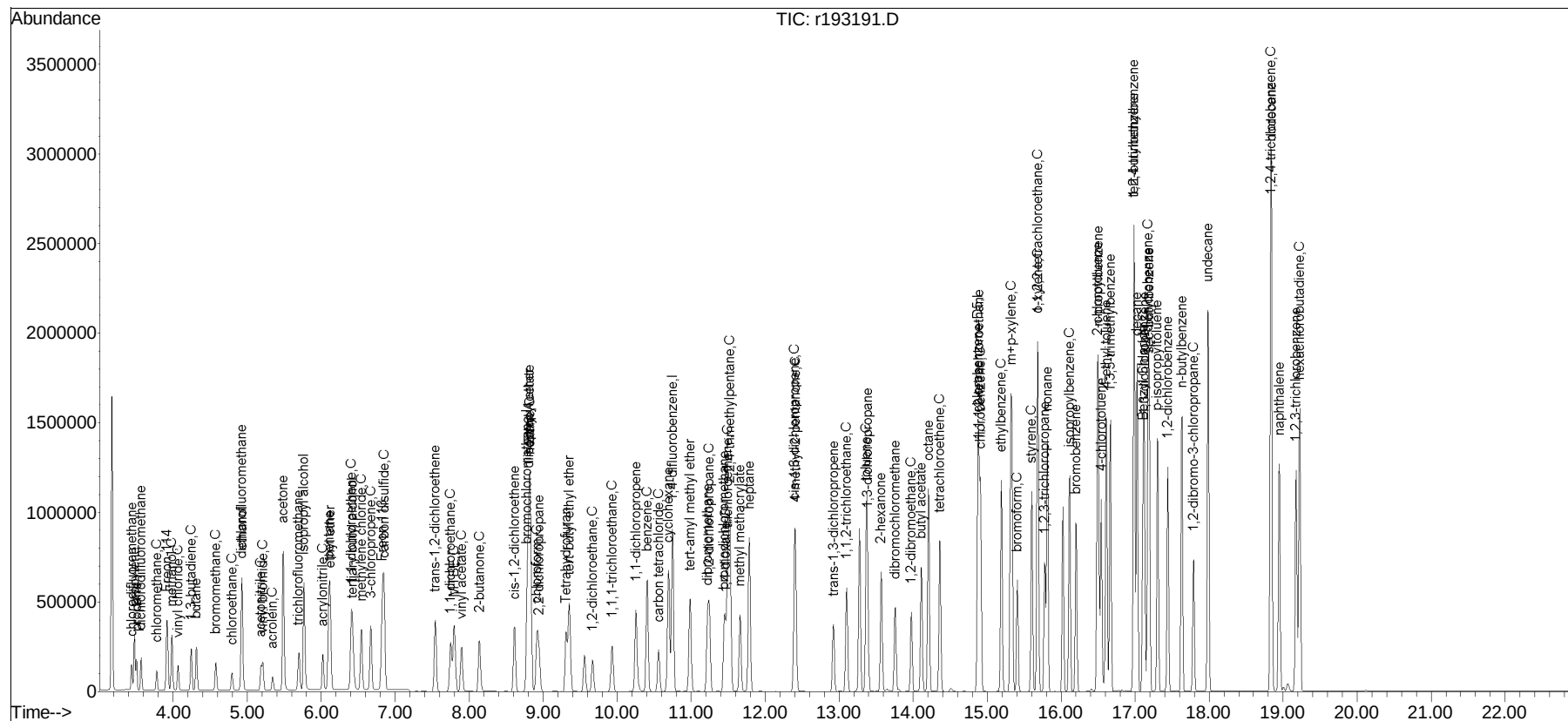
Quant Time: Mar 20 14:29:02 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

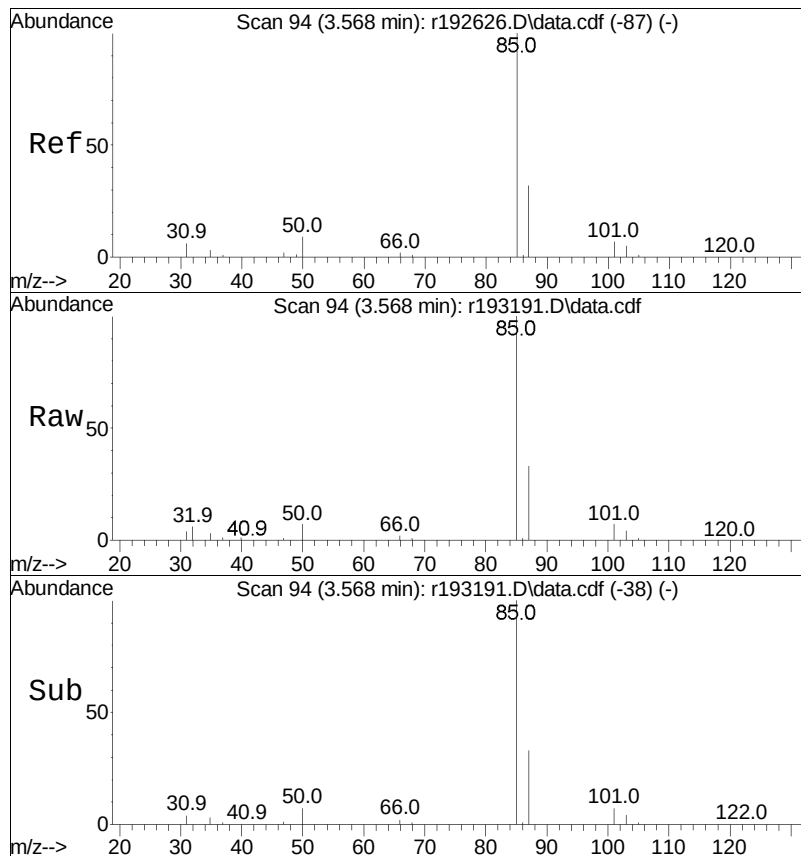
CCAL FILE : 0:\Forensics\Data\Airlab19\2020\03\200320T\r193190.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

```
Data Path : 0:\Forensics\Data\AirLab19\2020\03\200320T\
Data File : r193191.D
Acq On    : 20 Mar 2020 12:51 PM
Operator  : AIRLAB19:EW
Sample    : WG1353556-3,3,250,250
Misc      : WG1353556,ICAL16553
ALS Vial  : 0 Sample Multiplier: 1
```

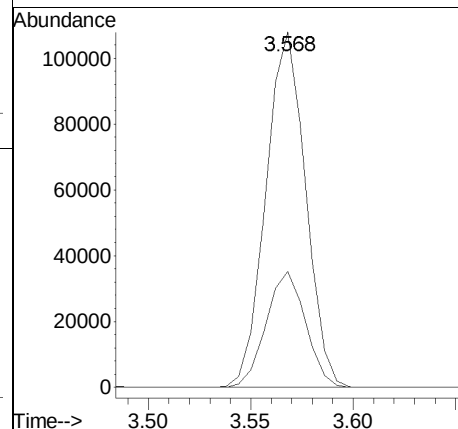
Quant Time: Mar 20 14:29:02 2020
Quant Method : 0:\Forensics\Data\AirLab19\2020\03\200320T\TFS19_200224.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Tue Feb 25 10:21:40 2020
Response via : Initial Calibration

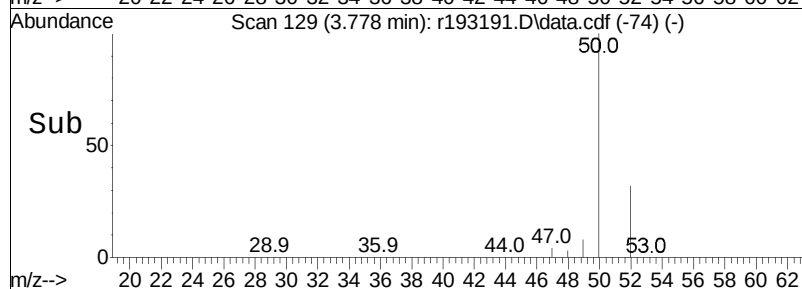
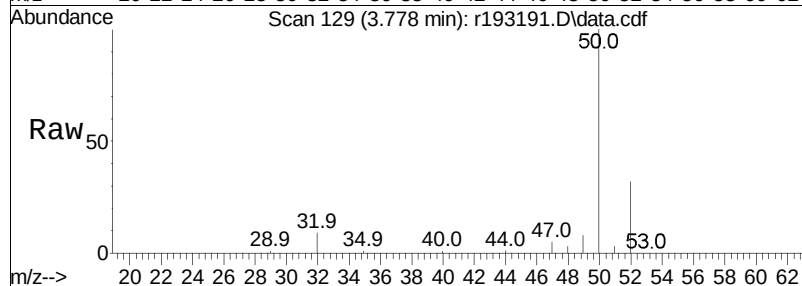
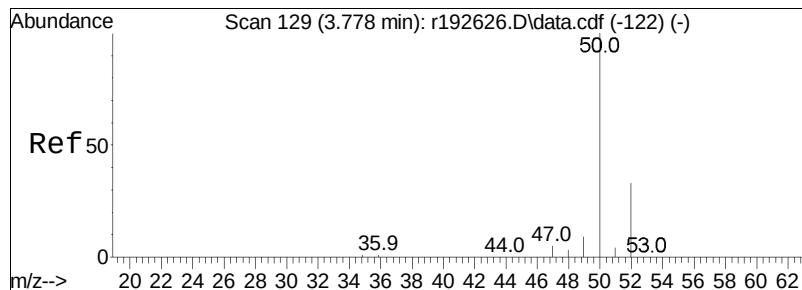




#5
 dichlorodifluoromethane
 Concen: 8.90 ppbV
 RT: 3.568 min Scan# 94
 Delta R.T. 0.006 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

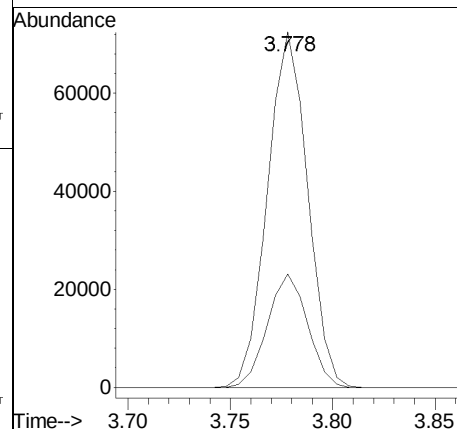
Tgt Ion	Ratio	Lower	Upper
85	100		
87	32.6	25.9	38.9

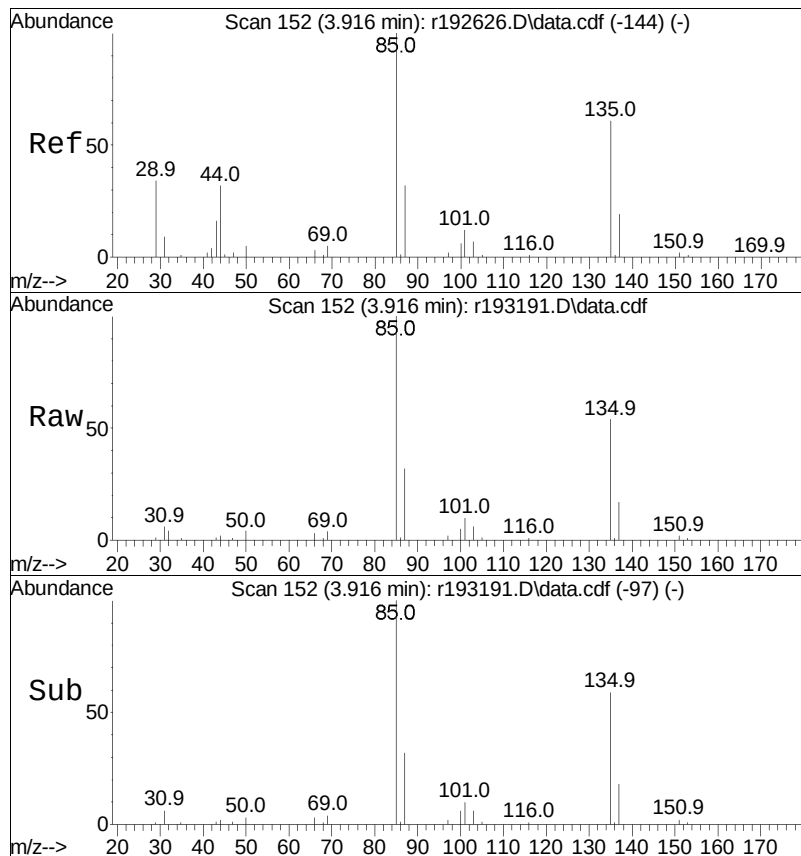




#6
 chloromethane
 Concen: 9.47 ppbV
 RT: 3.778 min Scan# 129
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

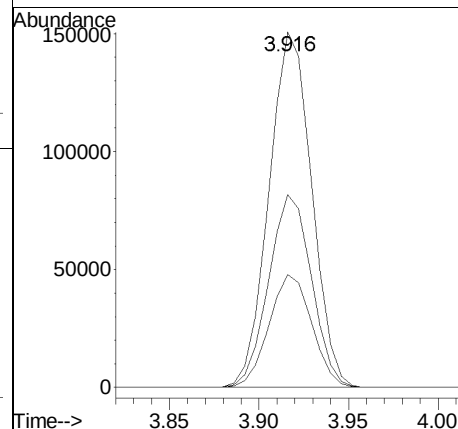
Tgt Ion	Ratio	Lower	Upper
50	100		
52	31.9	26.3	39.5

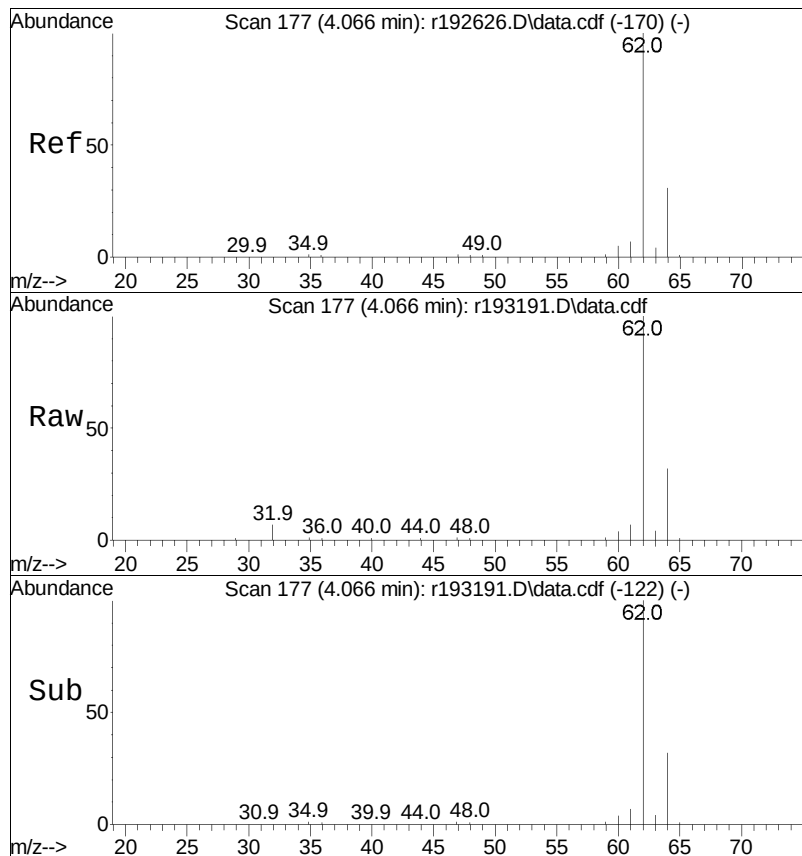




#7
 Freon-114
 Concen: 10.33 ppbV
 RT: 3.916 min Scan# 152
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

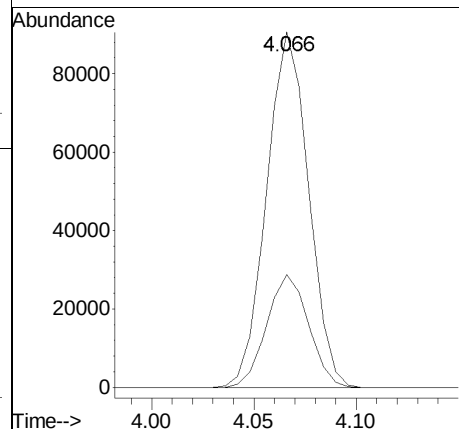
Tgt Ion:	85	Resp:	249950
Ion Ratio	Lower	Upper	
85	100		
87	31.8	24.6	37.0
135	54.3	48.5	72.7

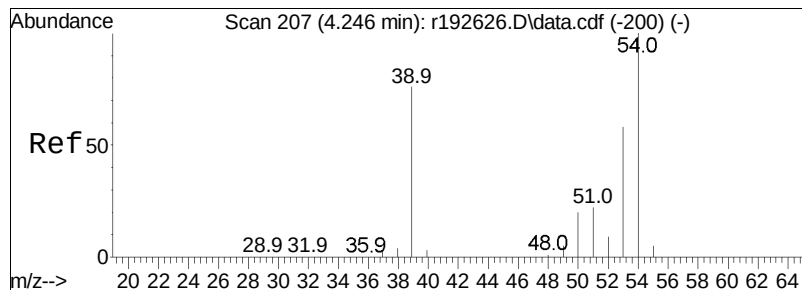




#9
 vinyl chloride
 Concen: 9.96 ppbV
 RT: 4.066 min Scan# 177
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

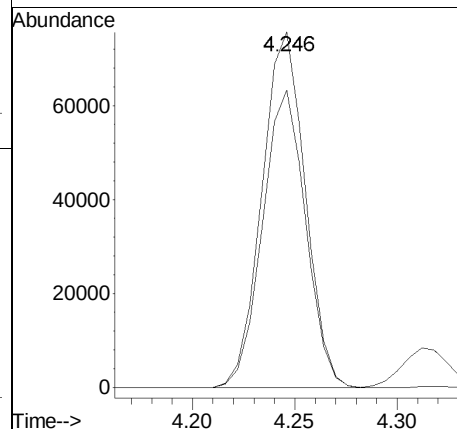
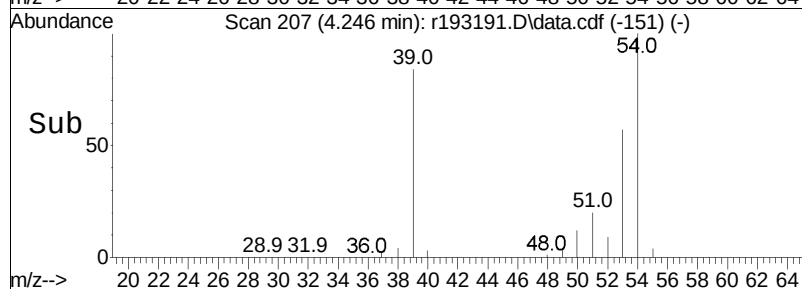
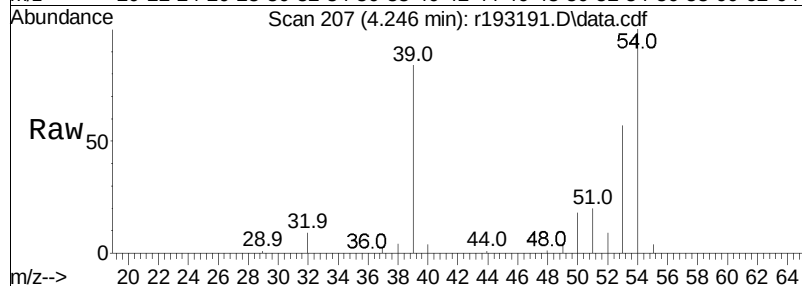
Tgt	Ion	Resp	Lower	Upper
62	100	128997		
64	31.8	25.8	38.6	

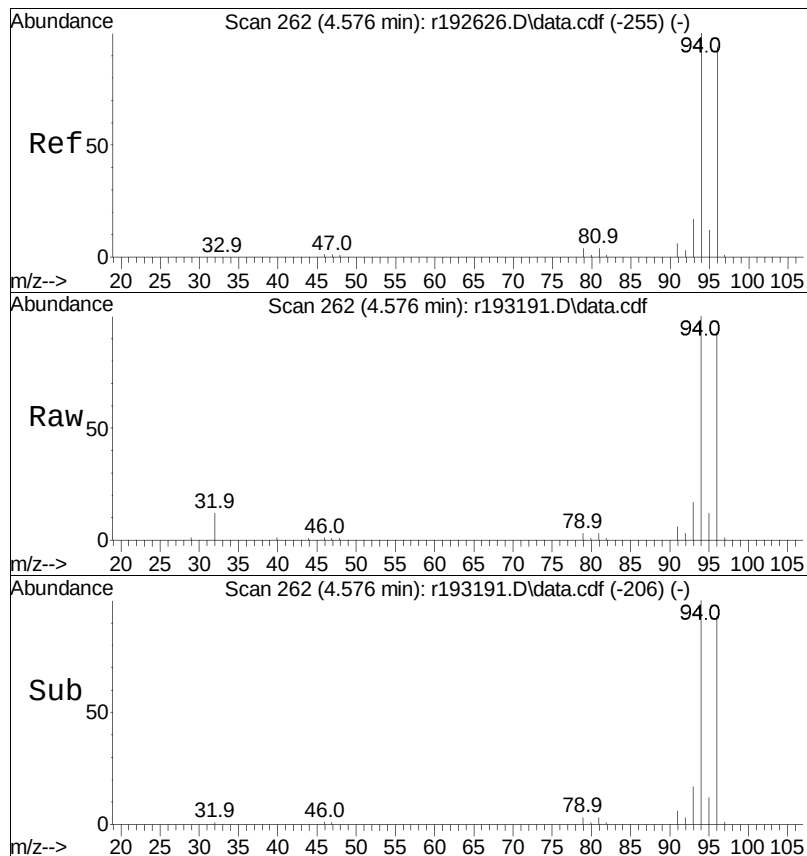




#10
 1,3-butadiene
 Concen: 9.94 ppbV
 RT: 4.246 min Scan# 207
 Delta R.T. 0.006 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

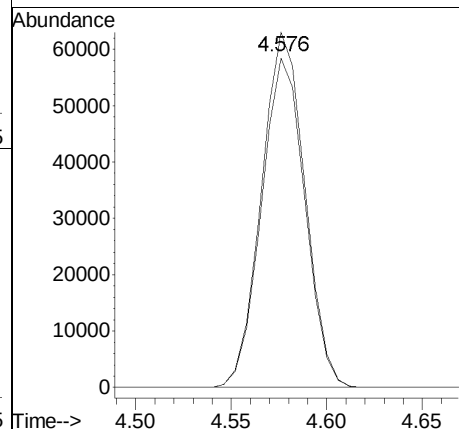
Tgt Ion	Ratio	Lower	Upper
54	100		
39	83.7	65.3	97.9

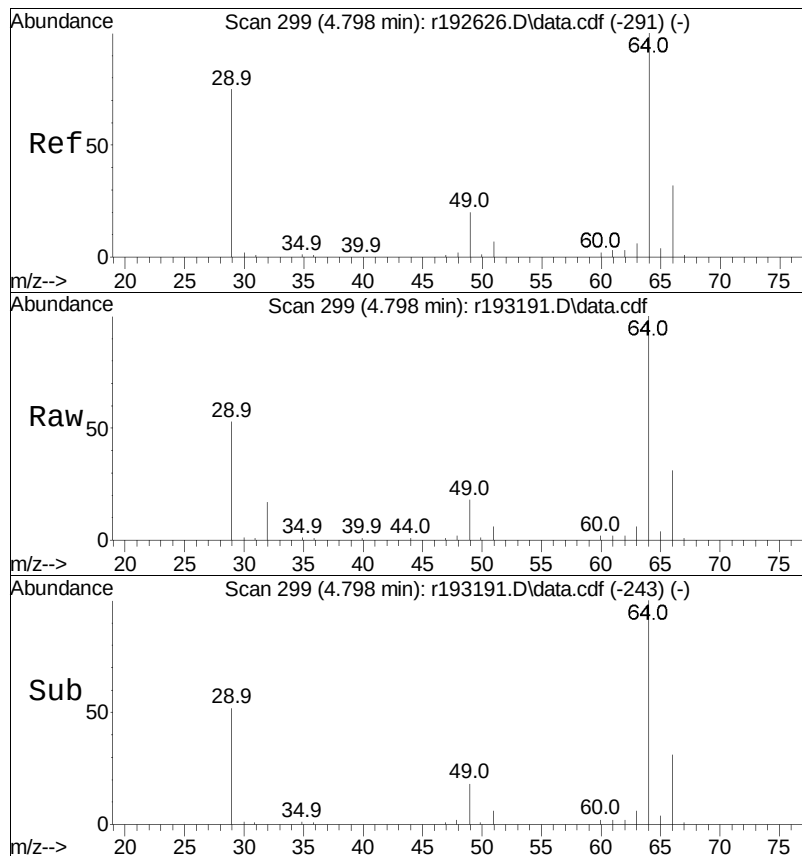




#13
bromomethane
Concen: 9.72 ppbV
RT: 4.576 min Scan# 262
Delta R.T. 0.006 min
Lab File: r193191.D
Acq: 20 Mar 2020 12:51 PM

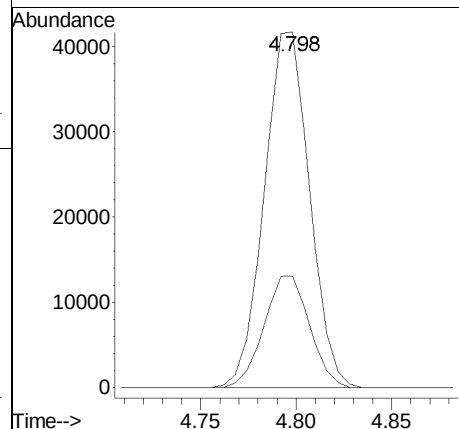
Tgt Ion	Ratio	Lower	Upper
94	100		
96	92.7	73.6	110.4

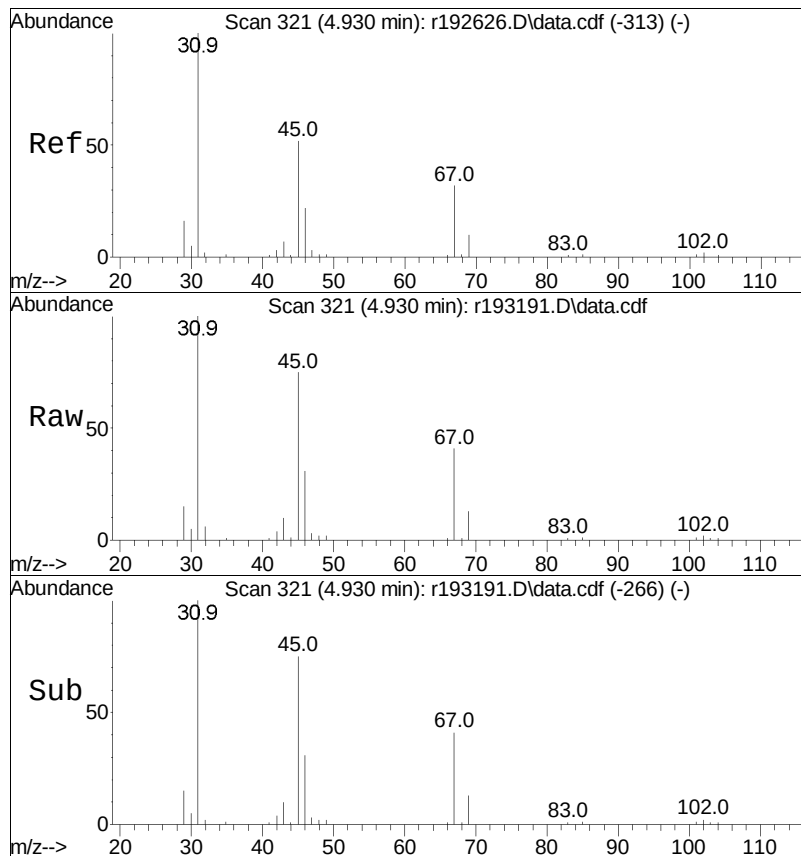




#14
 chloroethane
 Concen: 10.11 ppbV
 RT: 4.798 min Scan# 299
 Delta R.T. 0.006 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

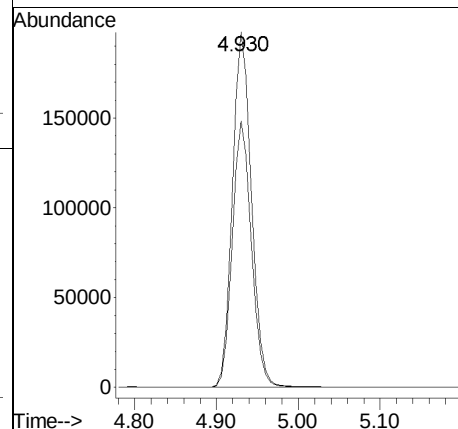
Tgt Ion	Ratio	Lower	Upper
64	100		
66	31.4	28.5	42.7

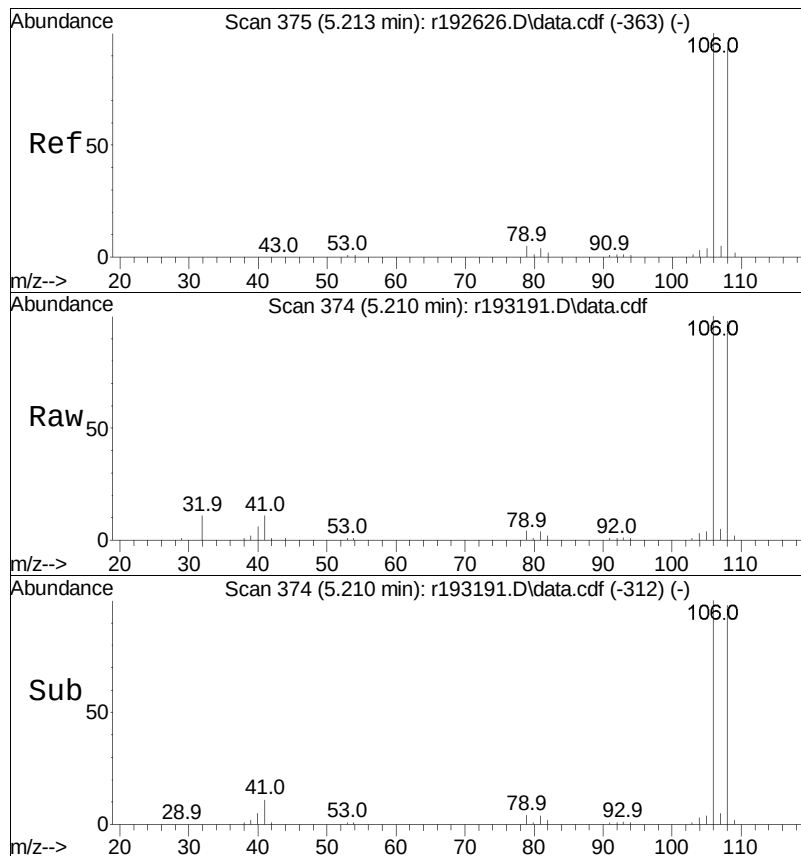




#15
ethanol
Concen: 37.76 ppbV
RT: 4.930 min Scan# 321
Delta R.T. 0.000 min
Lab File: r193191.D
Acq: 20 Mar 2020 12:51 PM

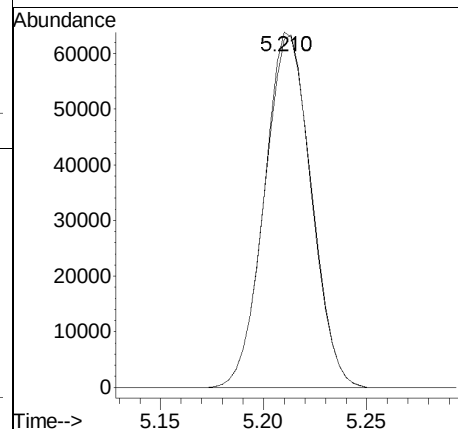
Tgt	Ion	Ratio	Lower	Upper
31	100			
45	75.0	40.6	60.8#	

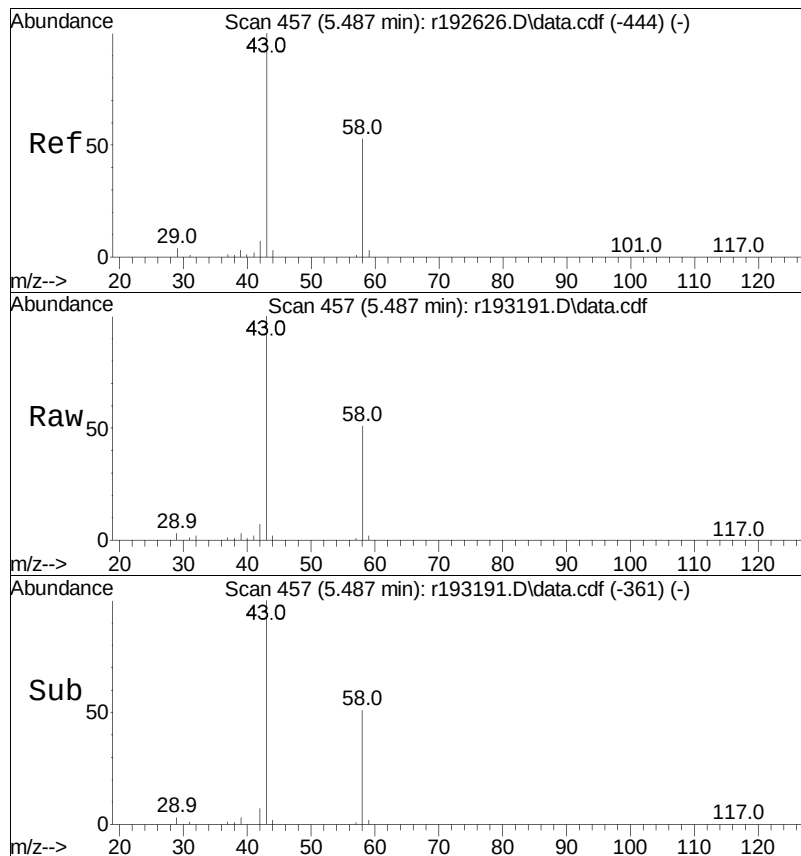




#17
 vinyl bromide
 Concen: 9.12 ppbV
 RT: 5.210 min Scan# 374
 Delta R.T. 0.003 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

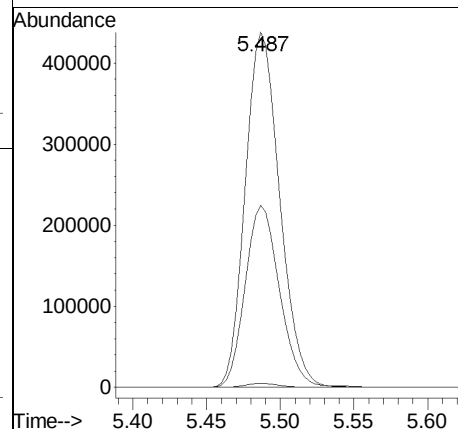
Tgt Ion	106	108	Ratio	Lower	Upper
Resp:	101012				
Ion	100				
Ratio	98.0			72.3	108.5

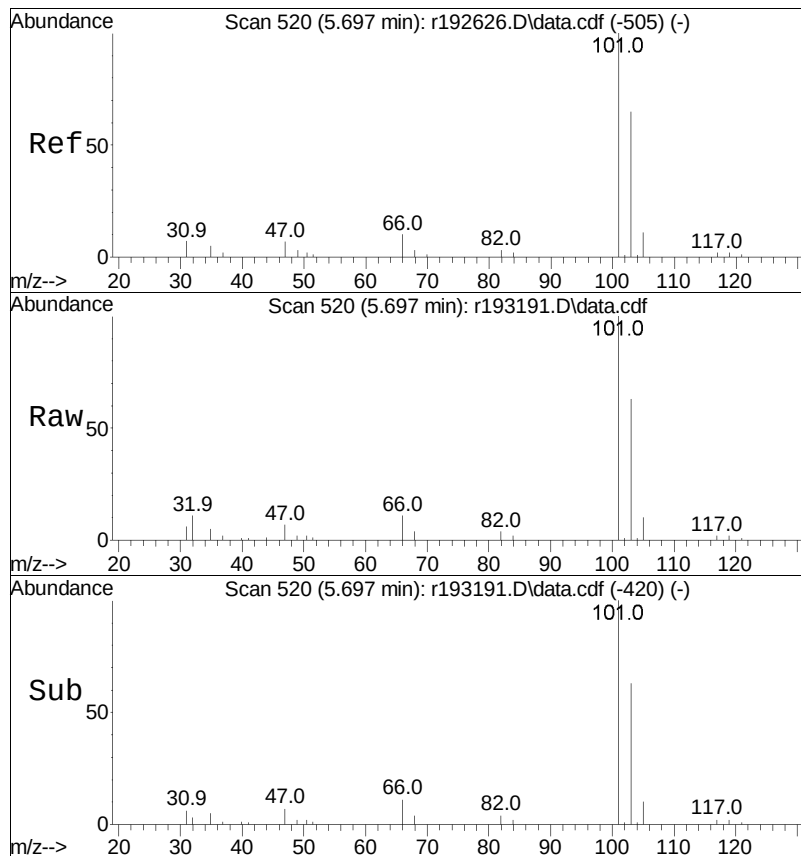




#19
acetone
Concen: 45.58 ppbV
RT: 5.487 min Scan# 457
Delta R.T. -0.010 min
Lab File: r193191.D
Acq: 20 Mar 2020 12:51 PM

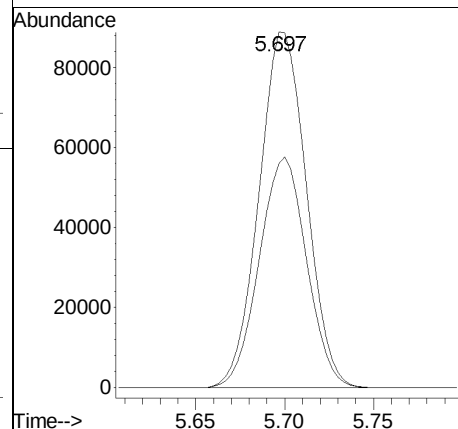
Tgt	Ion	Ratio	Resp	Lower	Upper
43	100		712336		
58	51.2	42.0		63.0	
57	1.2	1.4		2.0	

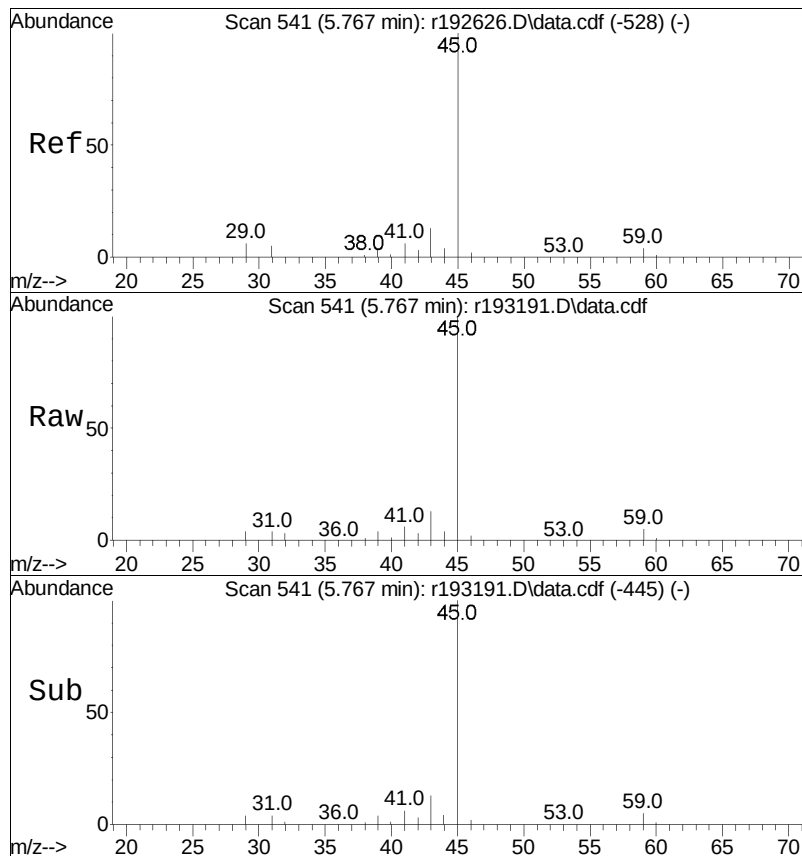




#21
 trichlorofluoromethane
 Concen: 9.61 ppbV
 RT: 5.697 min Scan# 520
 Delta R.T. 0.003 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

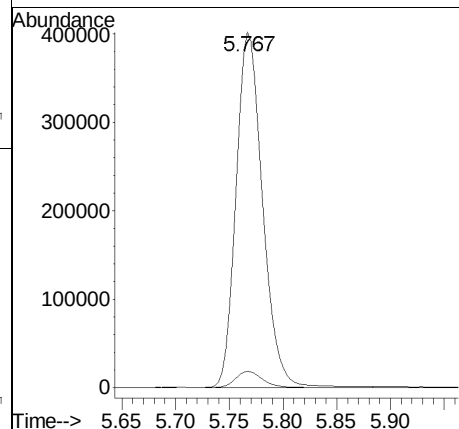
Tgt	Ion	Ratio	Lower	Upper
101	100			
103	63.0	51.4	77.2	

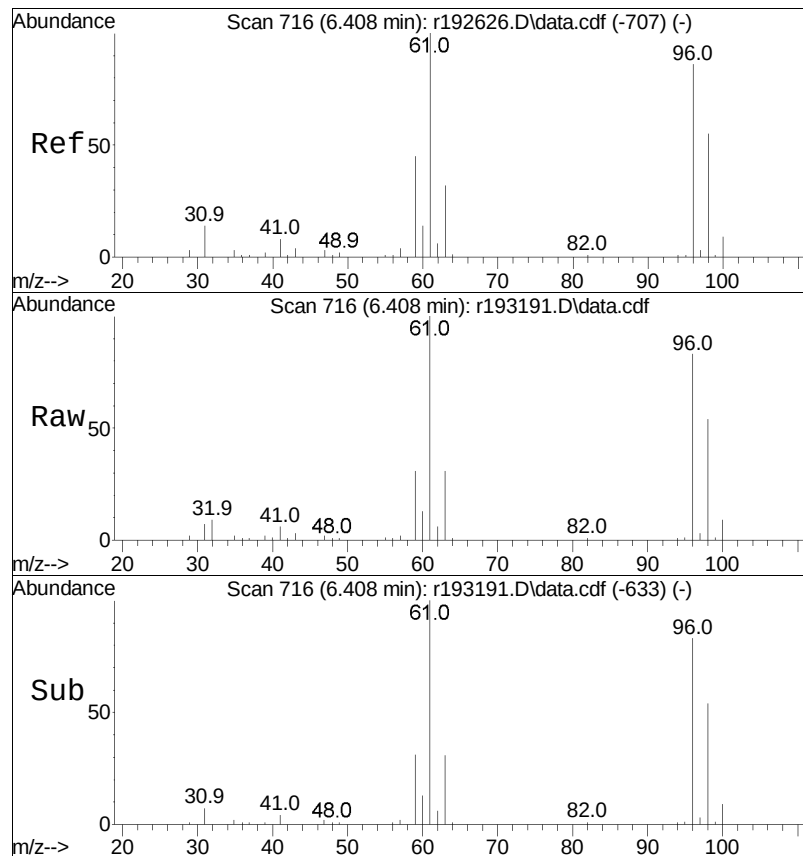




#22
 isopropyl alcohol
 Concen: 23.26 ppbV
 RT: 5.767 min Scan# 541
 Delta R.T. -0.010 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

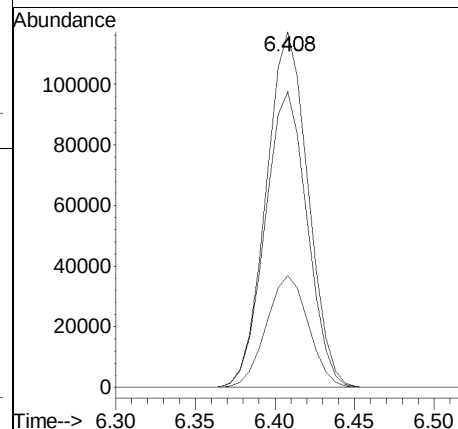
Tgt Ion	Ratio	Lower	Upper
45	100		
59	4.5	3.7	5.5

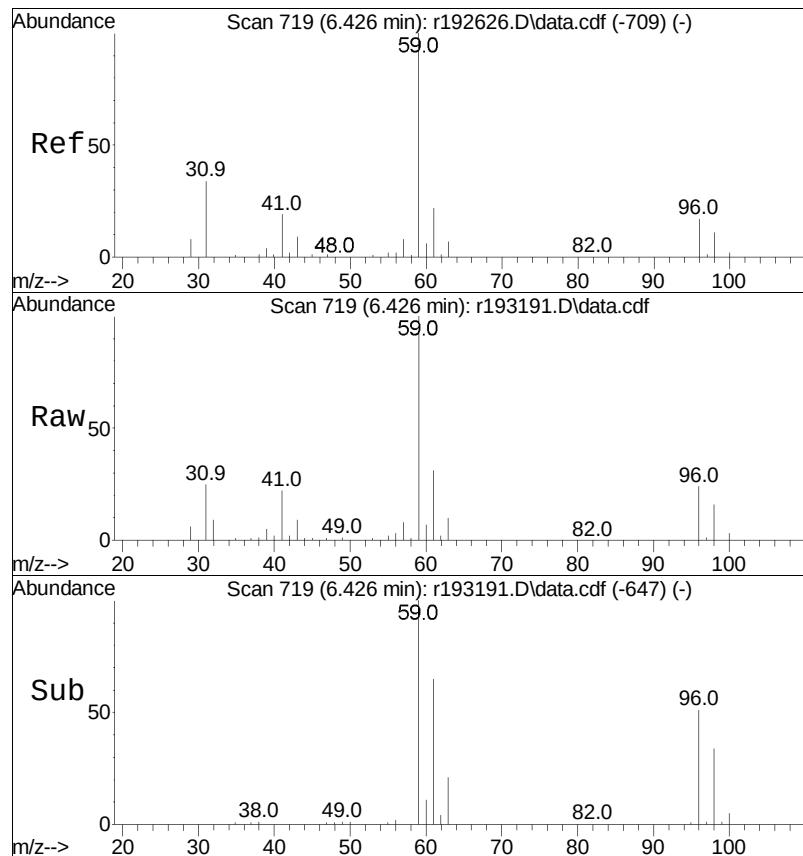




#26
 1,1-dichloroethene
 Concen: 10.90 ppbV
 RT: 6.408 min Scan# 716
 Delta R.T. 0.006 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

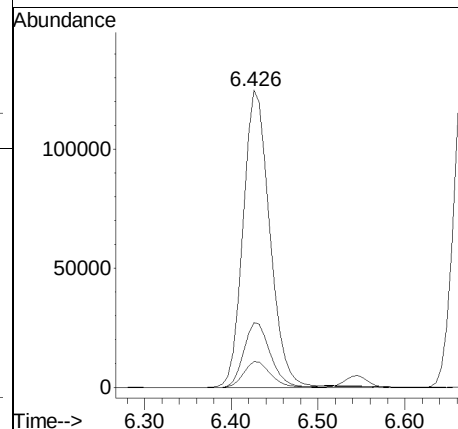
Tgt Ion:	61	Resp:	215216
Ion Ratio	Lower	Upper	
61	100		
96	83.2	67.5	101.3
63	31.5	29.9	44.9

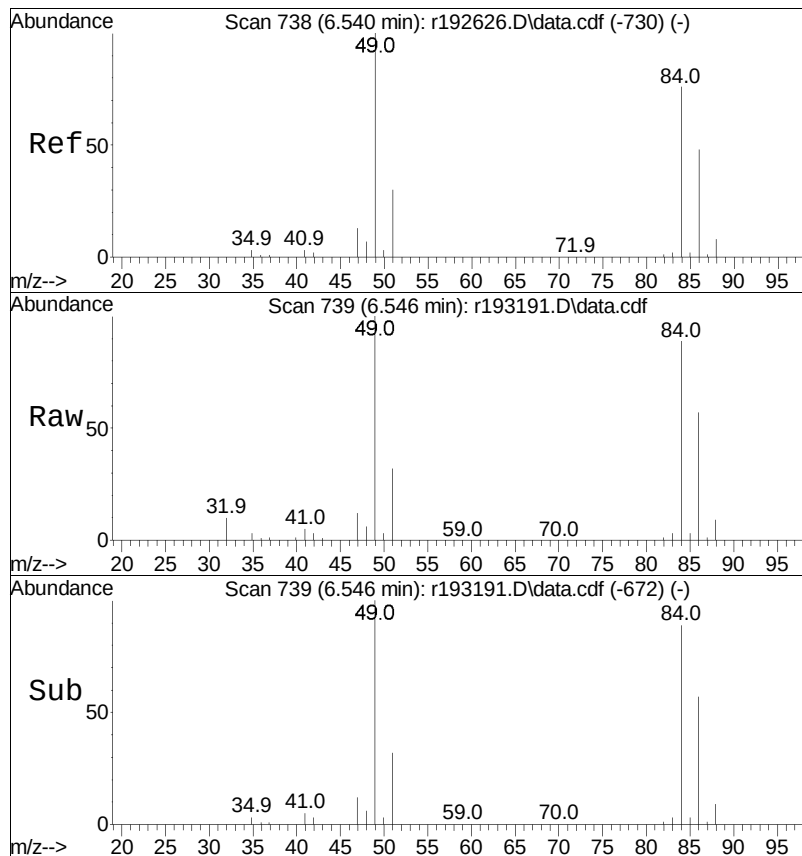




#27
 tertiary butyl alcohol
 Concen: 9.81 ppbV
 RT: 6.426 min Scan# 719
 Delta R.T. -0.024 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

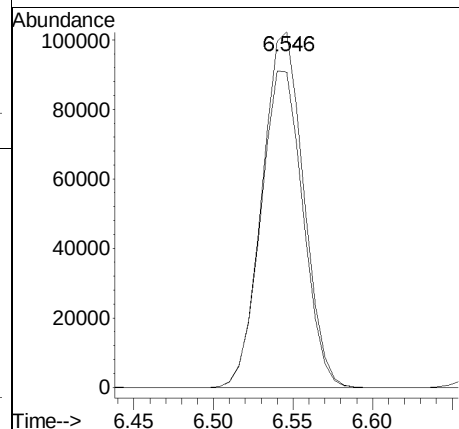
Tgt Ion	Ratio	Lower	Upper
59	100		
41	21.8	18.8	28.2
43	8.7	9.8	14.8

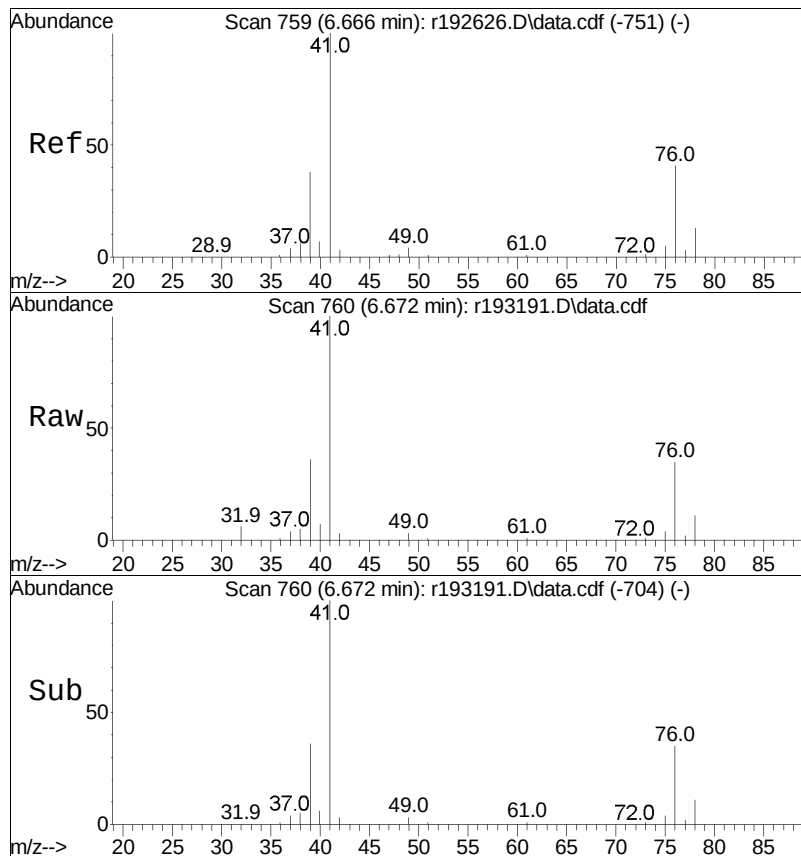




#28
 methylene chloride
 Concen: 9.69 ppbV
 RT: 6.546 min Scan# 739
 Delta R.T. 0.012 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

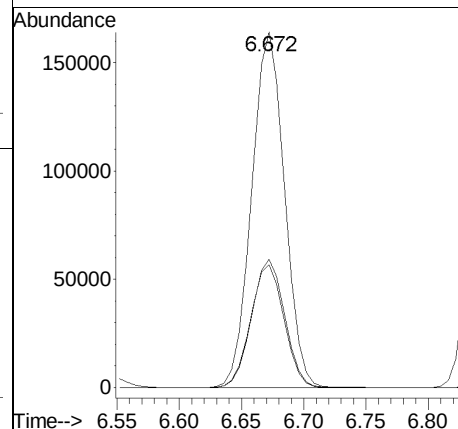
Tgt Ion:	49	Resp:	185196
Ion Ratio	Lower	Upper	
49	100		
84	88.7	59.8	89.6

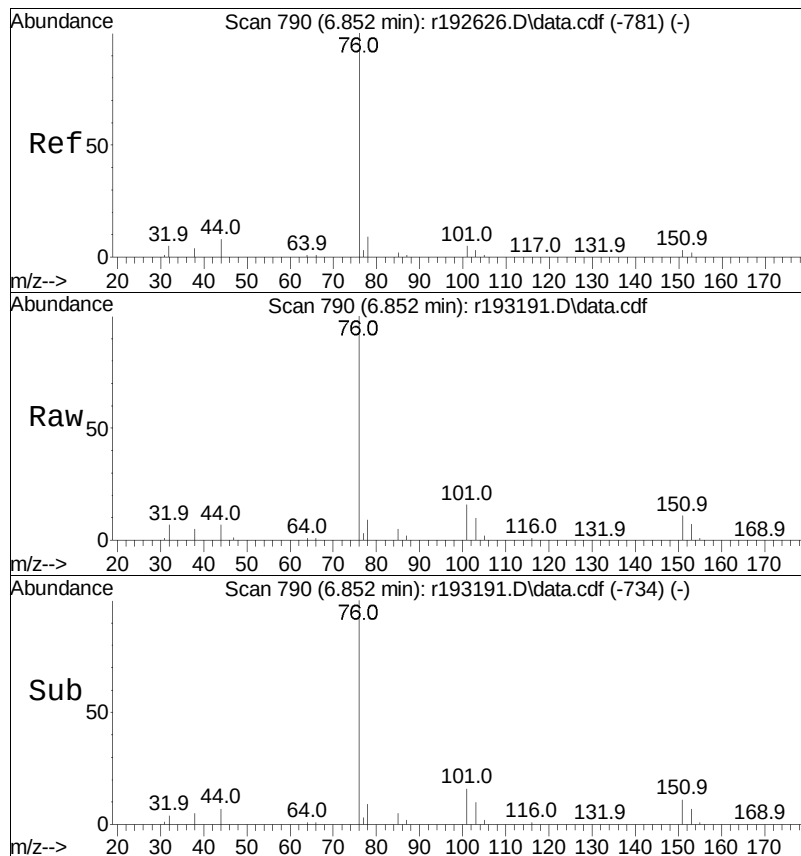




#29
 3-chloropropene
 Concen: 13.03 ppbV
 RT: 6.672 min Scan# 760
 Delta R.T. 0.006 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

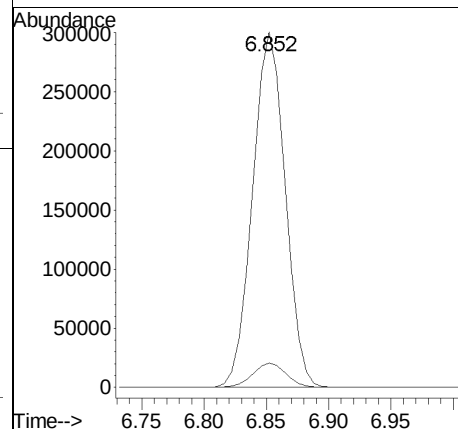
Tgt Ion:	41	Resp:	299903
Ion Ratio	Lower	Upper	
41	100		
39	36.1	31.4	47.2
76	34.5	31.4	47.0

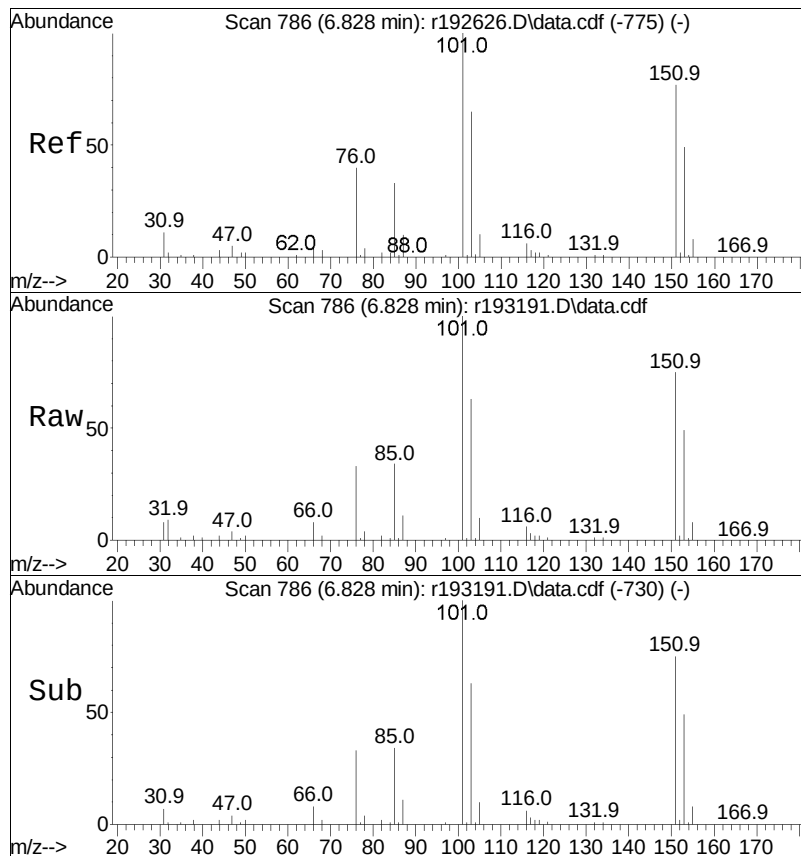




#30
 carbon disulfide
 Concen: 10.30 ppbV
 RT: 6.852 min Scan# 790
 Delta R.T. 0.006 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

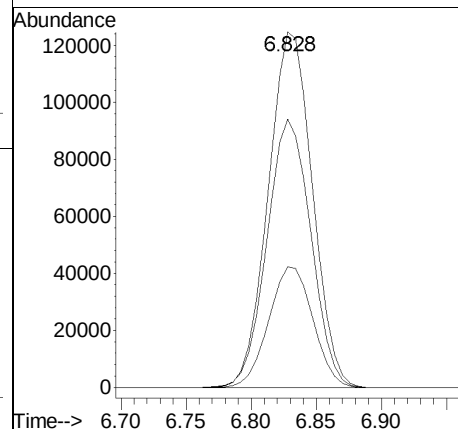
Tgt Ion	Ratio	Lower	Upper
76	100		
44	6.9	12.3	18.5#

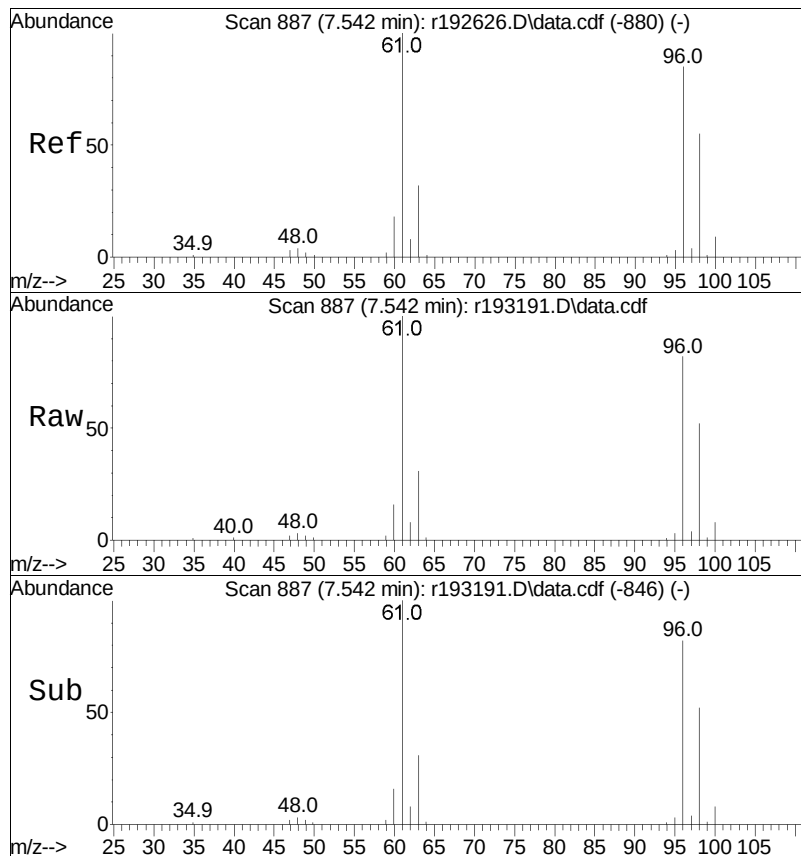




#31
 Freon 113
 Concen: 10.55 ppbV
 RT: 6.828 min Scan# 786
 Delta R.T. 0.006 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

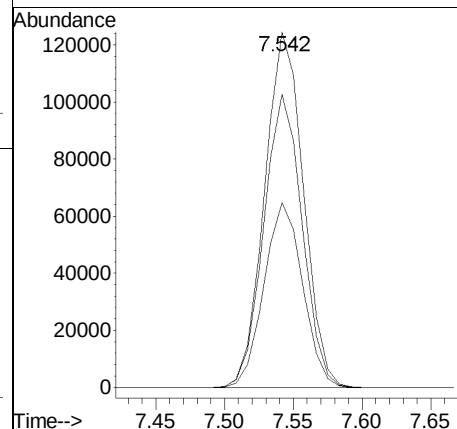
Tgt Ion	Ratio	Resp	Lower	Upper
101	100	293948		
85	33.9		26.7	40.1
151	75.5		63.4	95.2

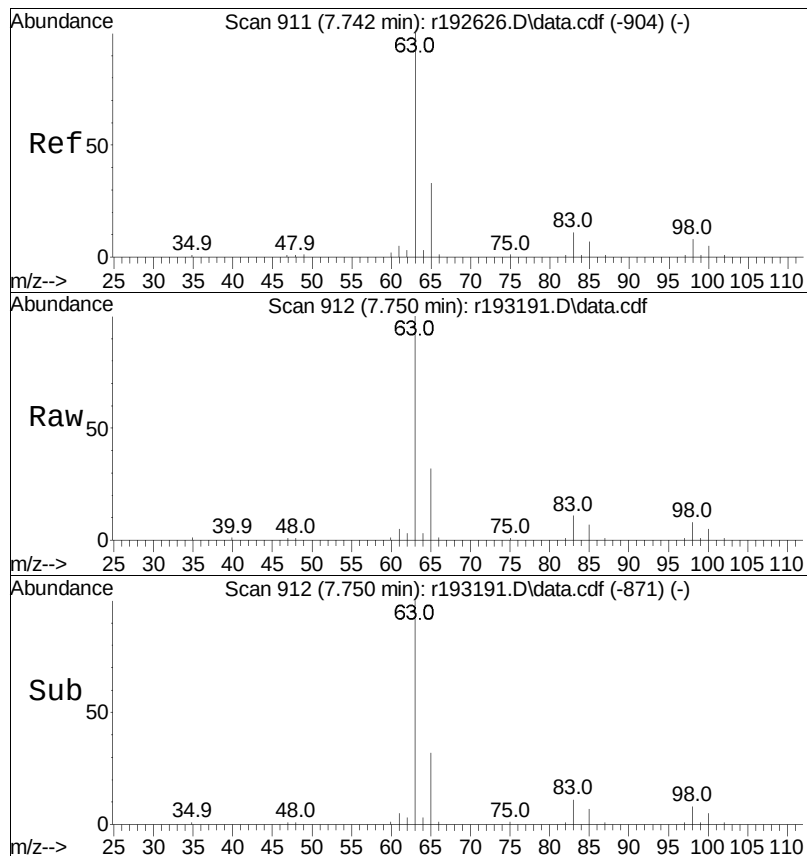




#32
 trans-1,2-dichloroethene
 Concen: 10.79 ppbV
 RT: 7.542 min Scan# 887
 Delta R.T. 0.008 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

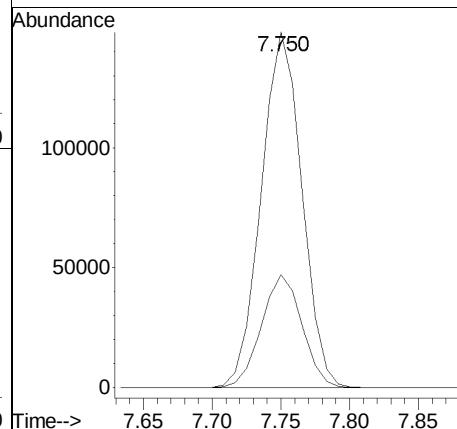
Tgt Ion:	61	Resp:	244273
Ion Ratio	Lower	Upper	
61	100		
96	82.5	68.0	102.0
98	52.0	44.0	66.0

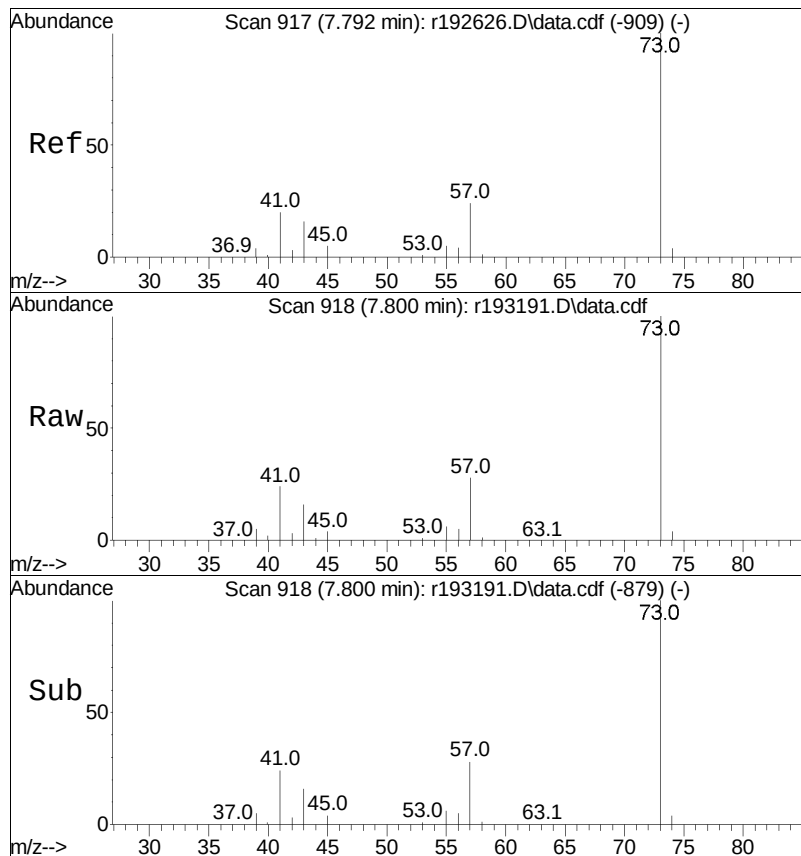




#33
 1,1-dichloroethane
 Concen: 11.01 ppbV
 RT: 7.750 min Scan# 912
 Delta R.T. 0.008 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

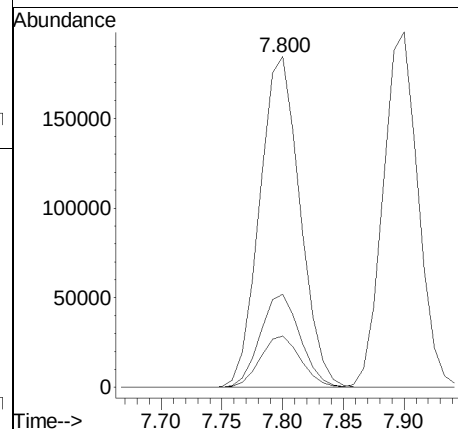
Tgt	Ion	Ratio	Lower	Upper
63	100			
65	31.7	26.5	39.7	

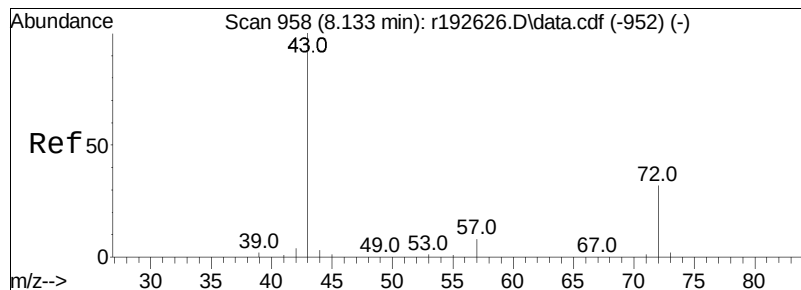




#34
 MTBE
 Concen: 9.54 ppbV
 RT: 7.800 min Scan# 918
 Delta R.T. -0.008 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

Tgt Ion:	73	Resp:	426408
Ion Ratio	Lower	Upper	
73	100		
57	28.2	19.8	29.6
43	15.6	13.2	19.8





#36

2-butanone

Concen: 11.22 ppbV

RT: 8.142 min Scan# 959

Delta R.T. -0.017 min

Lab File: r193191.D

Acq: 20 Mar 2020 12:51 PM

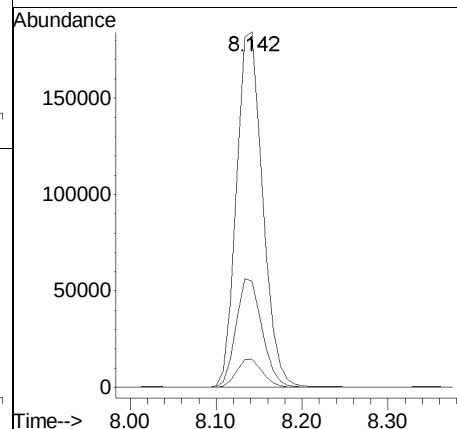
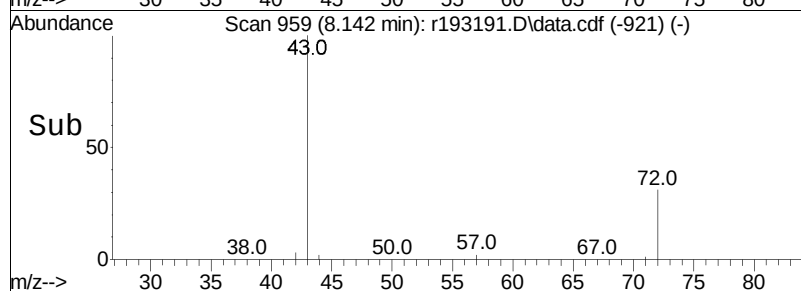
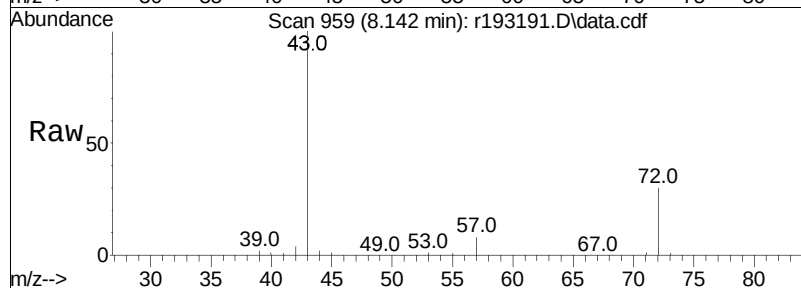
Tgt Ion: 43 Resp: 392946

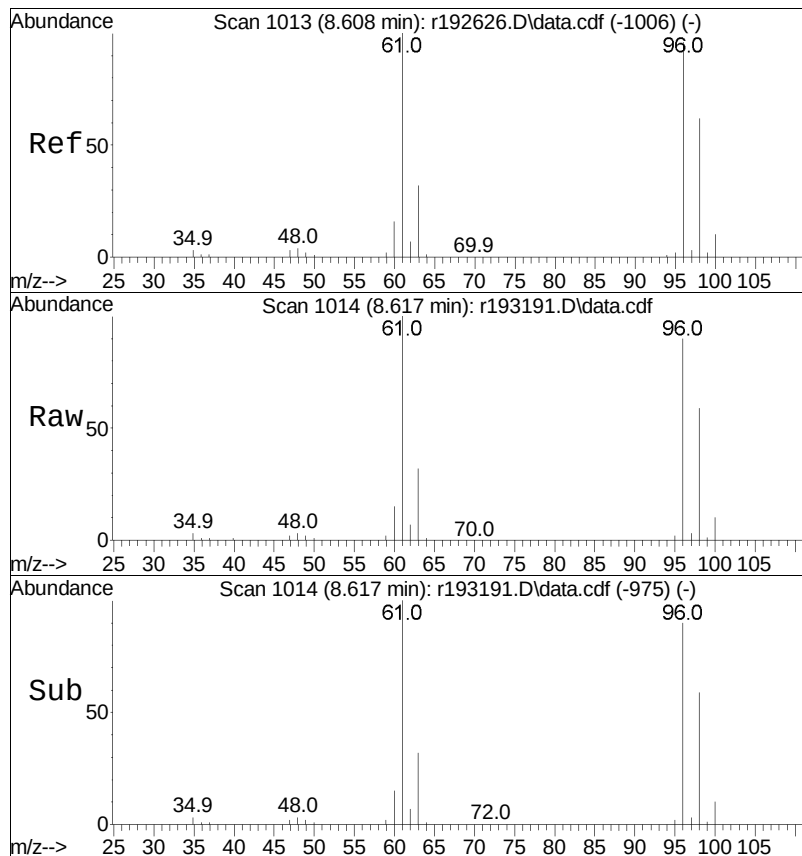
Ion Ratio Lower Upper

43 100

72 29.9 27.7 41.5

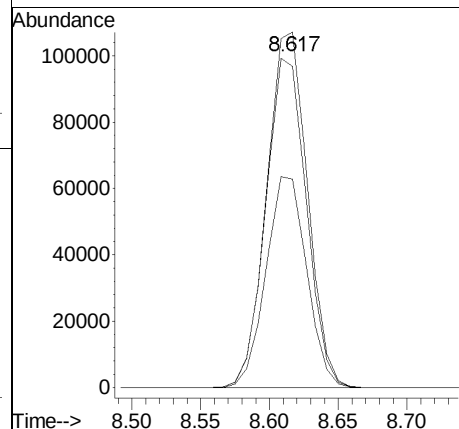
57 7.9 6.3 9.5

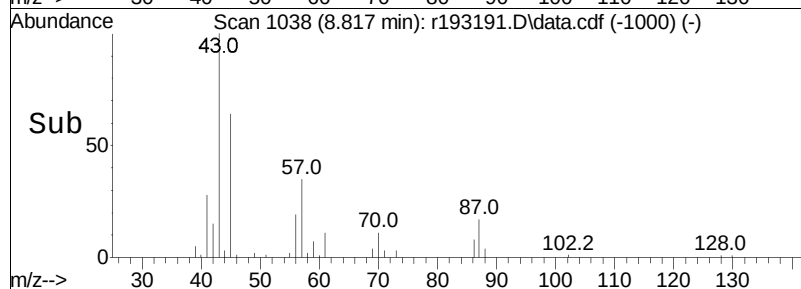
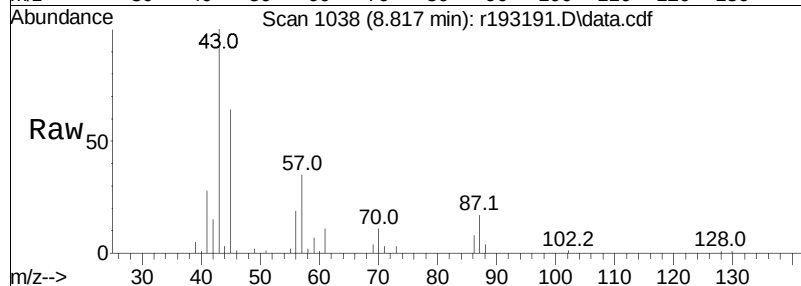
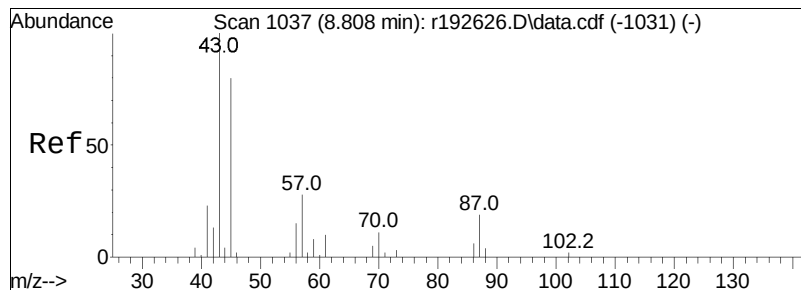




#37
 cis-1,2-dichloroethene
 Concen: 11.27 ppbV
 RT: 8.617 min Scan# 1014
 Delta R.T. 0.008 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

Tgt Ion:	61	Resp:	221113
Ion Ratio	Lower	Upper	
61	100		
96	90.3	77.4	116.0
98	58.6	51.0	76.6





#38

Ethyl Acetate

Concen: 12.45 ppbV

RT: 8.817 min Scan# 1038

Delta R.T. -0.017 min

Lab File: r193191.D

Acq: 20 Mar 2020 12:51 PM

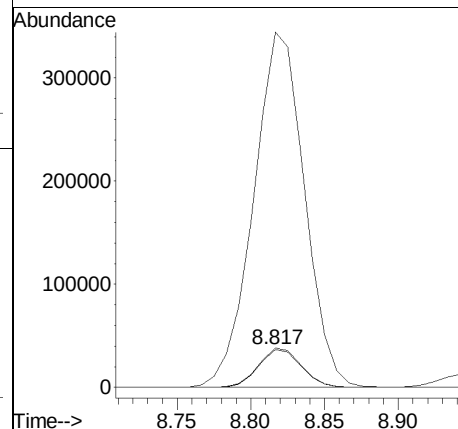
Tgt Ion: 61 Resp: 74226

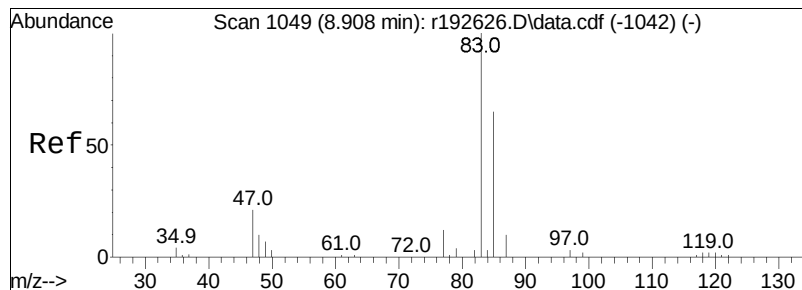
Ion Ratio Lower Upper

61 100

70 103.8 86.6 130.0

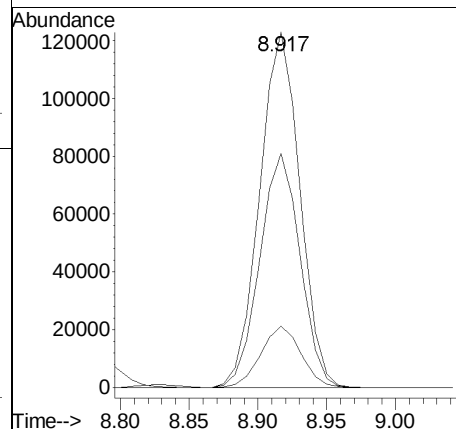
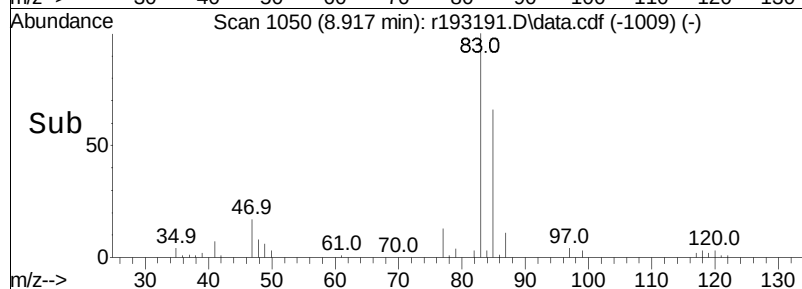
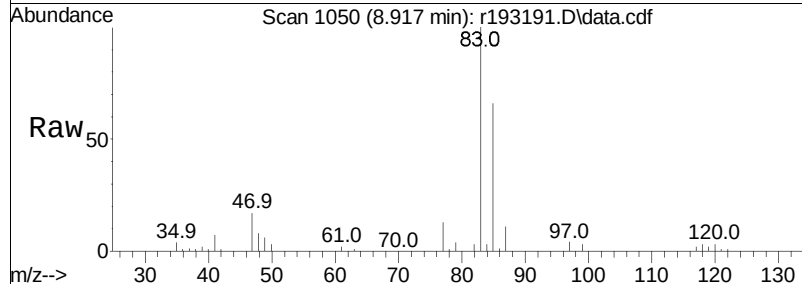
43 936.9 819.5 1229.3

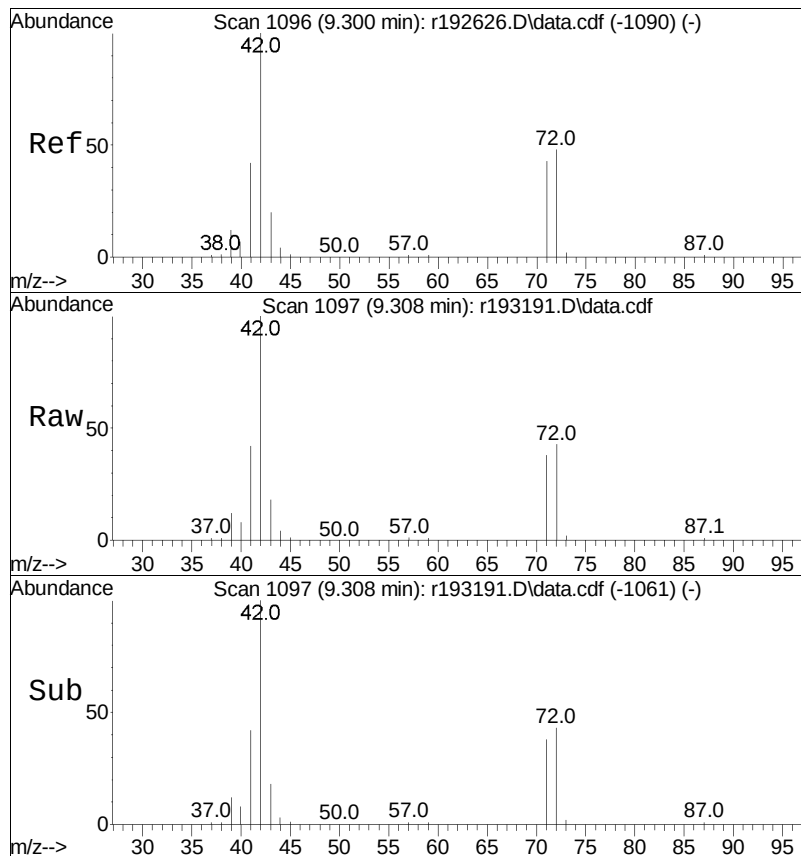




#39
chloroform
Concen: 10.25 ppbV
RT: 8.917 min Scan# 1050
Delta R.T. 0.008 min
Lab File: r193191.D
Acq: 20 Mar 2020 12:51 PM

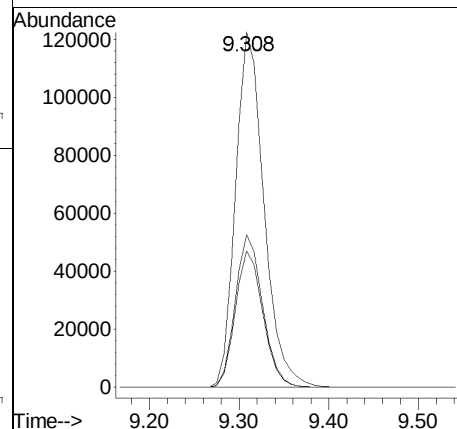
Tgt Ion	Ratio	Lower	Upper
83	100		
85	65.8	50.1	75.1
47	17.3	17.6	26.4

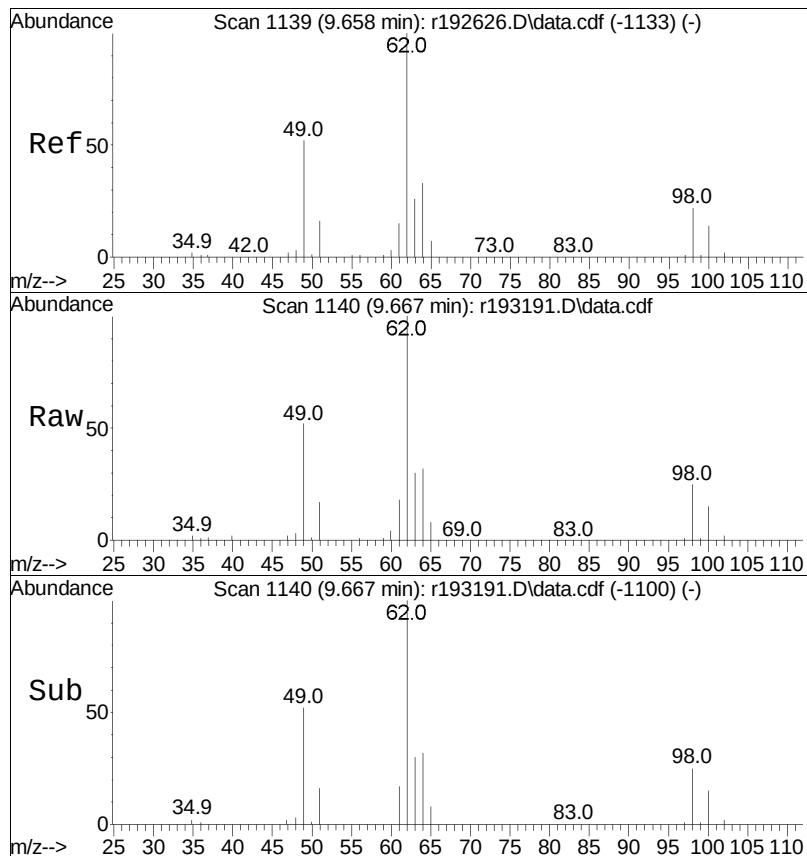




#40
 Tetrahydrofuran
 Concen: 11.47 ppbV
 RT: 9.308 min Scan# 1097
 Delta R.T. -0.033 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

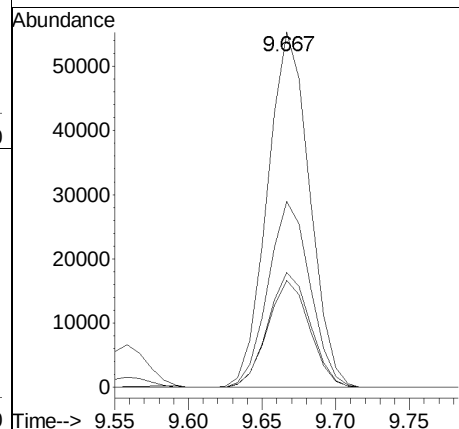
Tgt Ion:	42	Resp:	269982
Ion Ratio	Lower	Upper	
42	100		
71	38.4	32.5	48.7
72	43.0	33.7	50.5

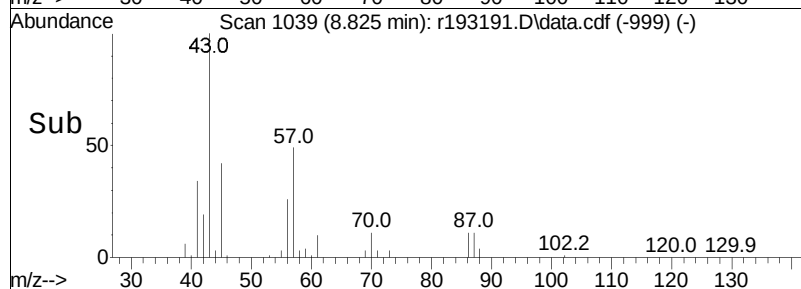
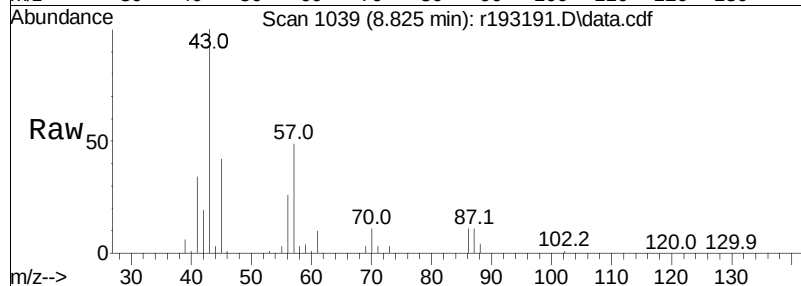
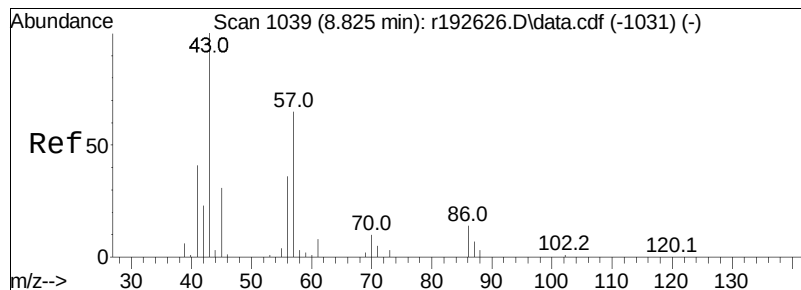




#42
 1,2-dichloroethane
 Concen: 9.26 ppbV
 RT: 9.667 min Scan# 1140
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

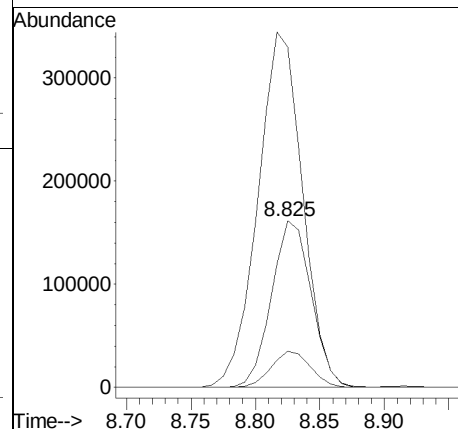
Tgt Ion:	62	Resp:	110185
Ion Ratio	Lower	Upper	
62	100		
64	32.4	27.9	41.9
49	52.3	40.5	60.7
63	30.1	20.3	30.5

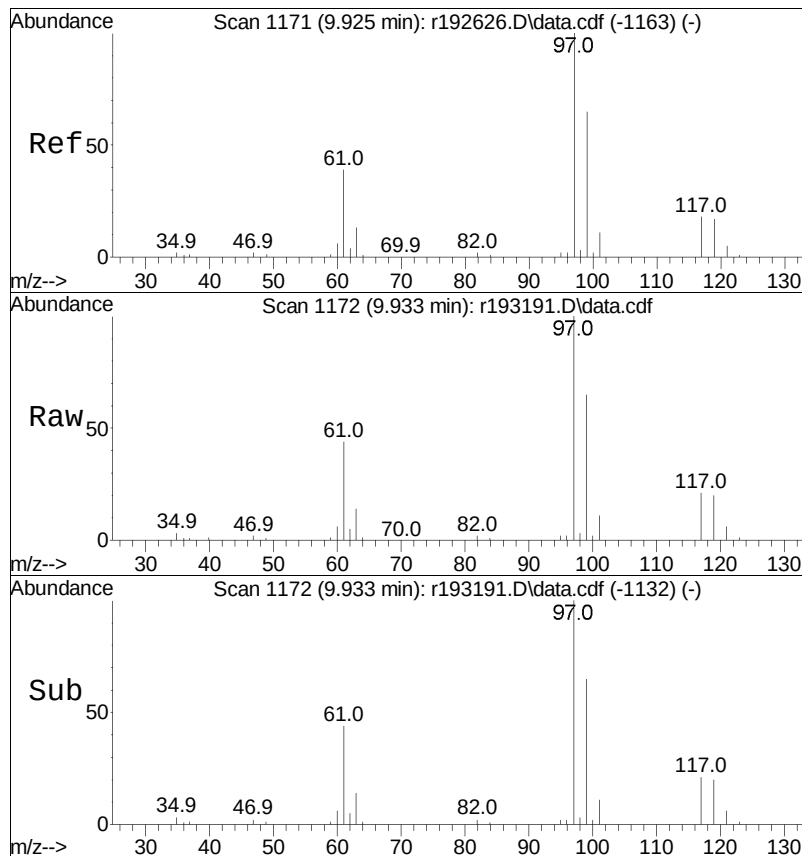




#44
hexane
Concen: 10.01 ppbV
RT: 8.825 min Scan# 1039
Delta R.T. 0.000 min
Lab File: r193191.D
Acq: 20 Mar 2020 12:51 PM

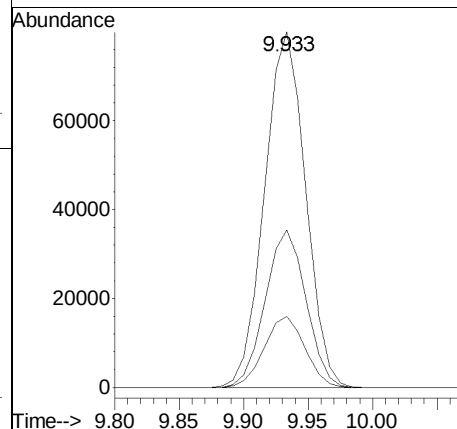
Tgt	Ion	Resp	Lower	Upper
57	100			
43	204.2	159.3	238.9	
86	21.7	15.7	23.5	

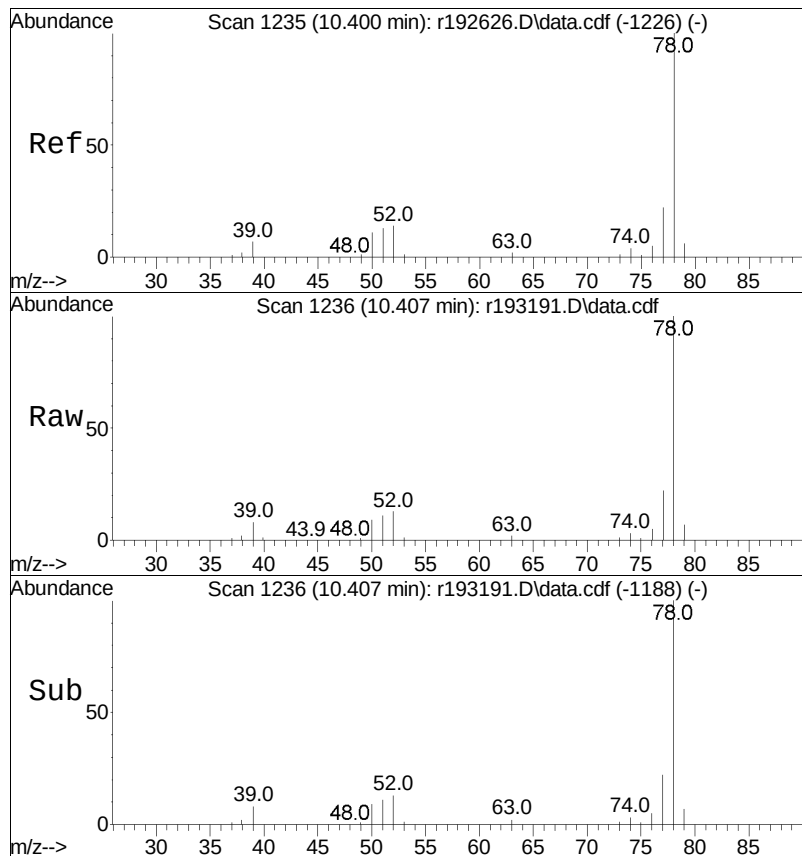




#48
 1,1,1-trichloroethane
 Concen: 7.92 ppbV
 RT: 9.933 min Scan# 1172
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

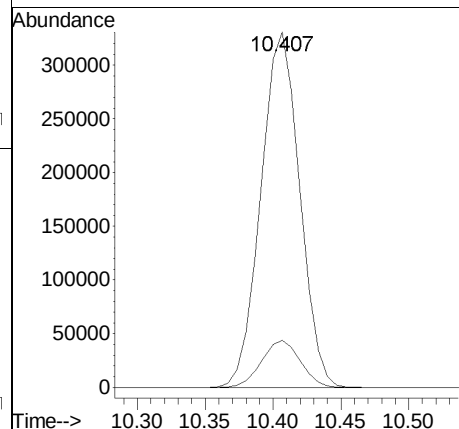
Tgt Ion	Ratio	Lower	Upper
97	100		
61	44.3	30.0	45.0
119	20.0	14.0	21.0

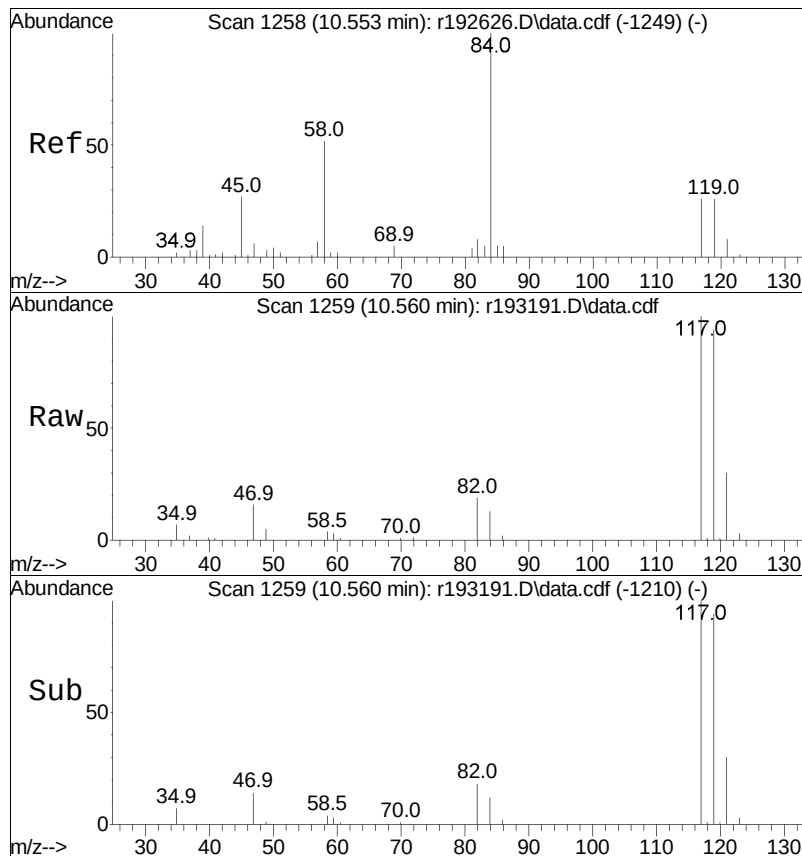




#50
benzene
Concen: 9.60 ppbV
RT: 10.407 min Scan# 1236
Delta R.T. 0.007 min
Lab File: r193191.D
Acq: 20 Mar 2020 12:51 PM

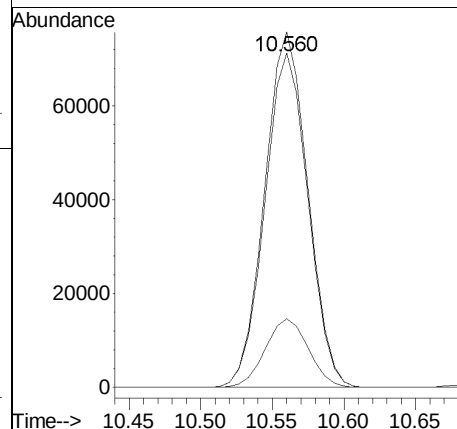
Tgt Ion	Ratio	Lower	Upper
78	100		
52	13.3	11.4	17.2

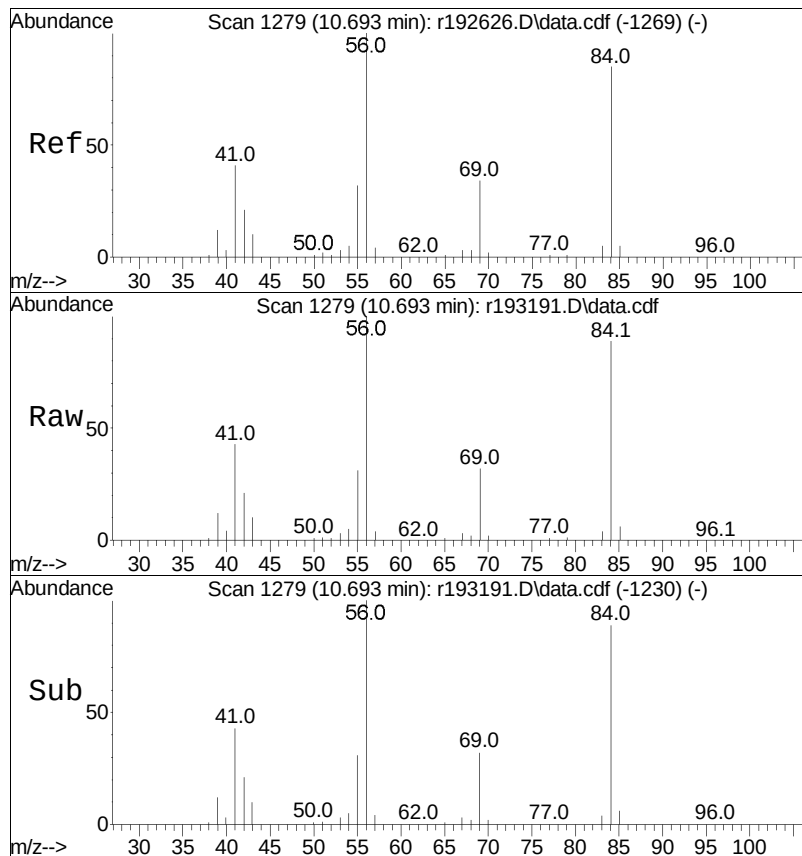




#52
 carbon tetrachloride
 Concen: 8.66 ppbV
 RT: 10.560 min Scan# 1259
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

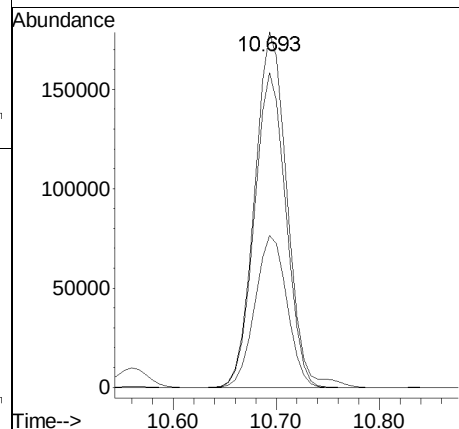
Tgt Ion:	117	Resp:	158780
Ion Ratio	Lower	Upper	
117	100		
119	94.1	85.4	128.2
82	19.3	22.6	33.8#

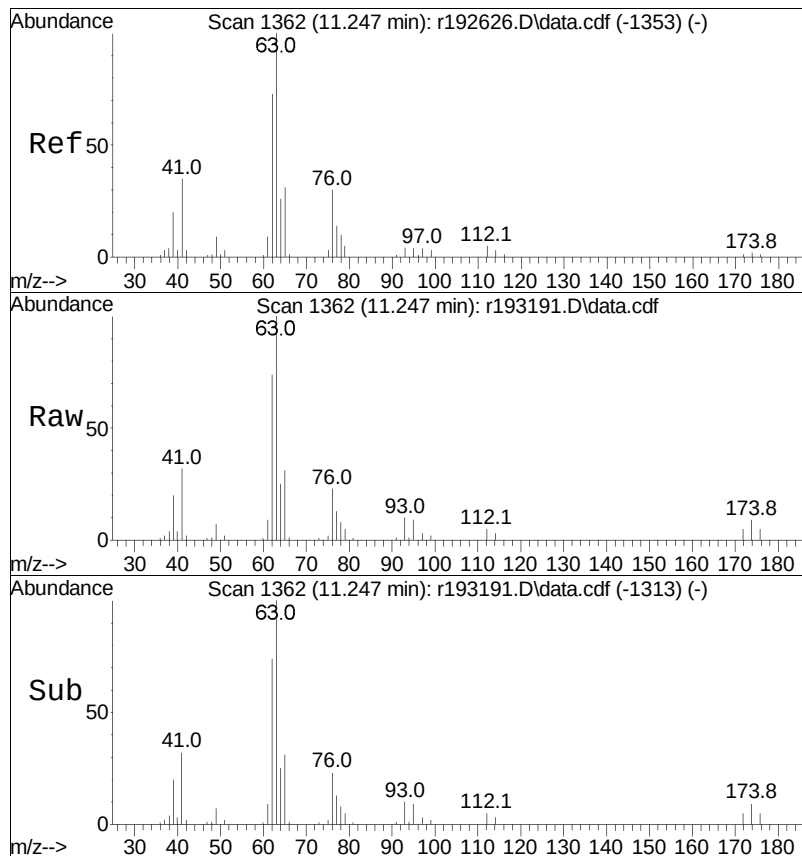




#53
cyclohexane
Concen: 10.29 ppbV
RT: 10.693 min Scan# 1279
Delta R.T. 0.000 min
Lab File: r193191.D
Acq: 20 Mar 2020 12:51 PM

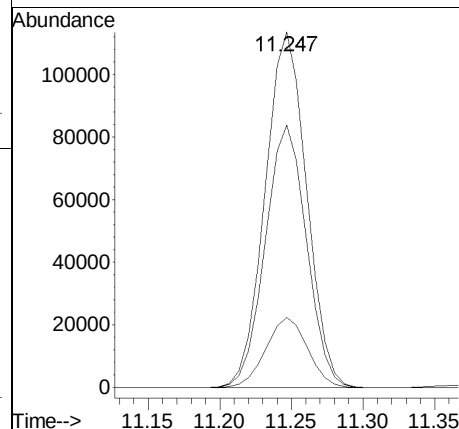
Tgt	Ion	Ratio	Lower	Upper
56	100			
84	88.6	69.8	104.6	
41	42.8	32.1	48.1	

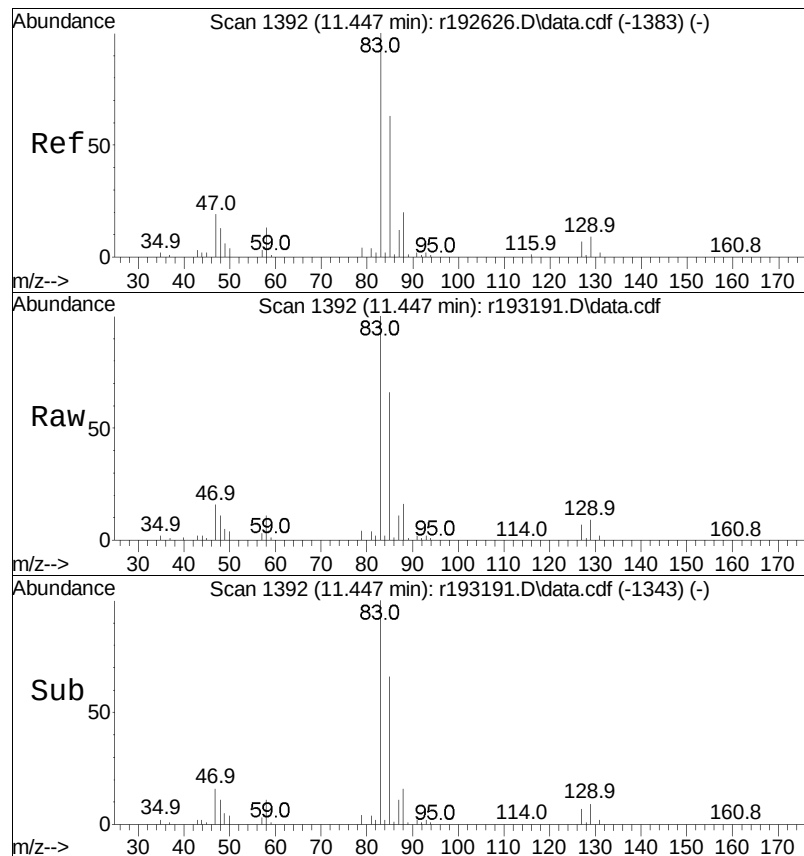




#56
 1,2-dichloropropane
 Concen: 10.44 ppbV
 RT: 11.247 min Scan# 1362
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

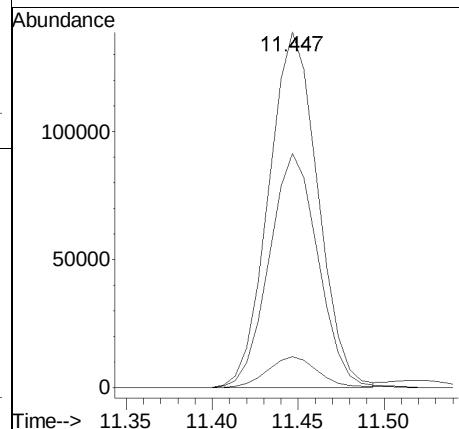
Tgt Ion:	63	Resp:	228409
Ion Ratio	Lower	Upper	
63	100		
62	73.8	58.1	87.1
39	19.7	17.6	26.4

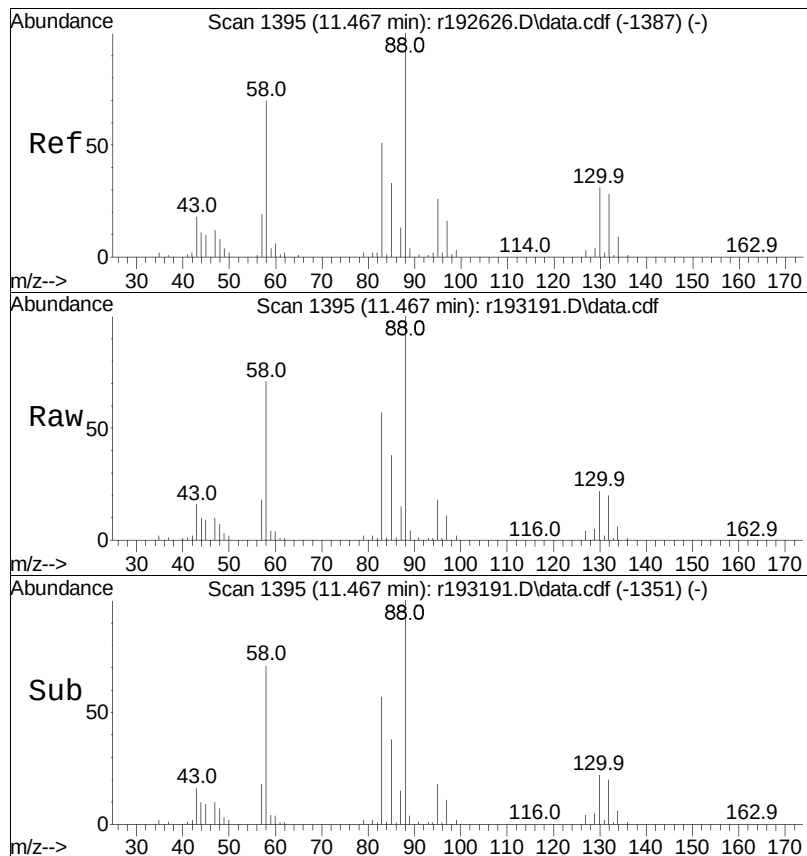




#57
 bromodichloromethane
 Concen: 9.25 ppbV
 RT: 11.447 min Scan# 1392
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

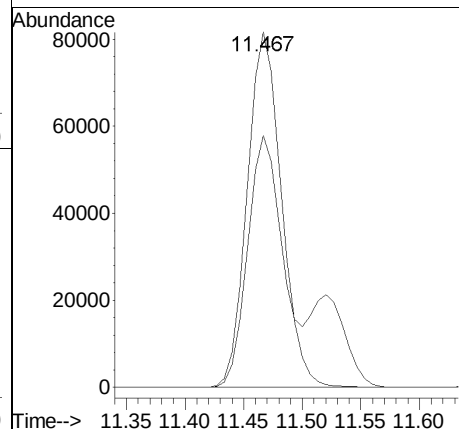
Tgt Ion	Ratio	Lower	Upper
83	100		
85	65.9	49.1	73.7
129	8.7	7.8	11.6

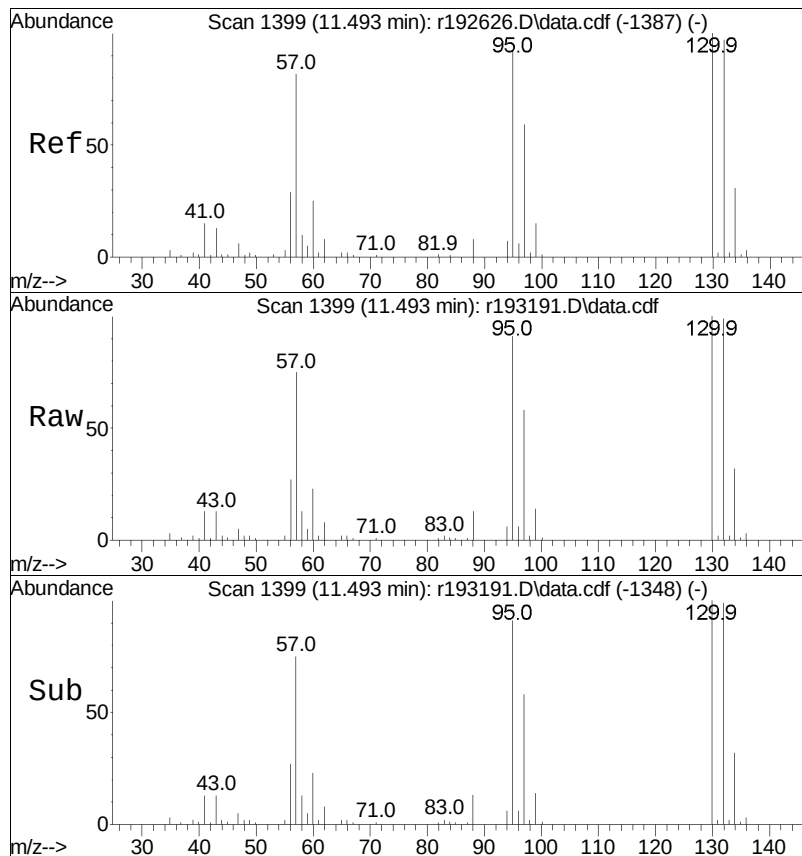




#58
 1,4-dioxane
 Concen: 10.71 ppbV
 RT: 11.467 min Scan# 1395
 Delta R.T. -0.033 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

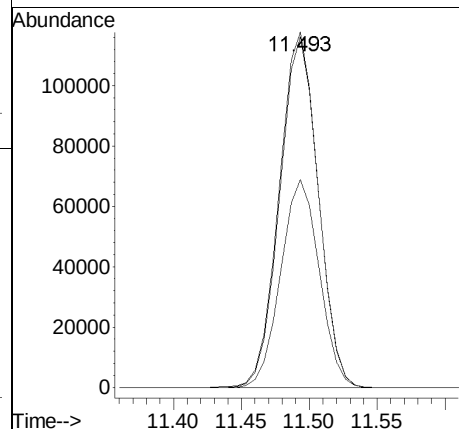
Tgt Ion	Ratio	Lower	Upper
88	100		
58	70.9	70.5	105.7

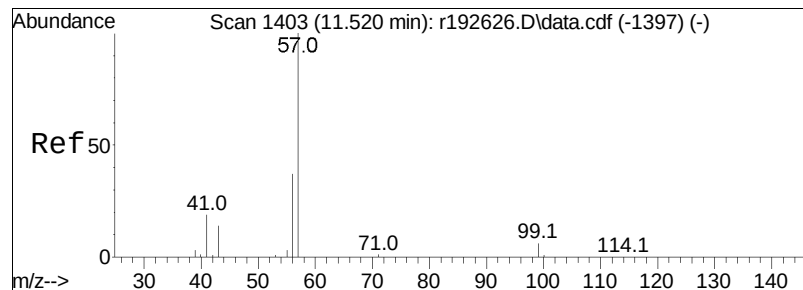




#59
trichloroethene
Concen: 9.60 ppbV
RT: 11.493 min Scan# 1399
Delta R.T. 0.007 min
Lab File: r193191.D
Acq: 20 Mar 2020 12:51 PM

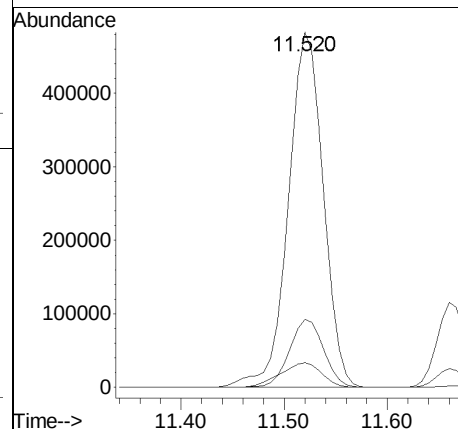
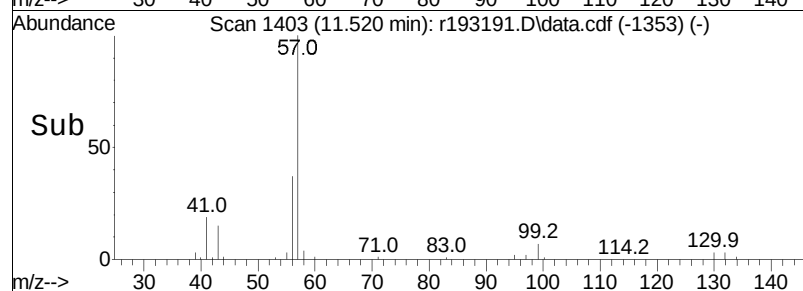
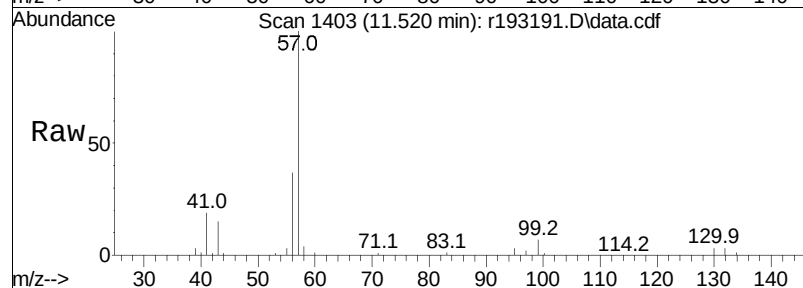
Tgt Ion	Ratio	Resp	Lower	Upper
130	100	234179		
132	98.7	73.8	110.8	
97	58.5	46.9	70.3	

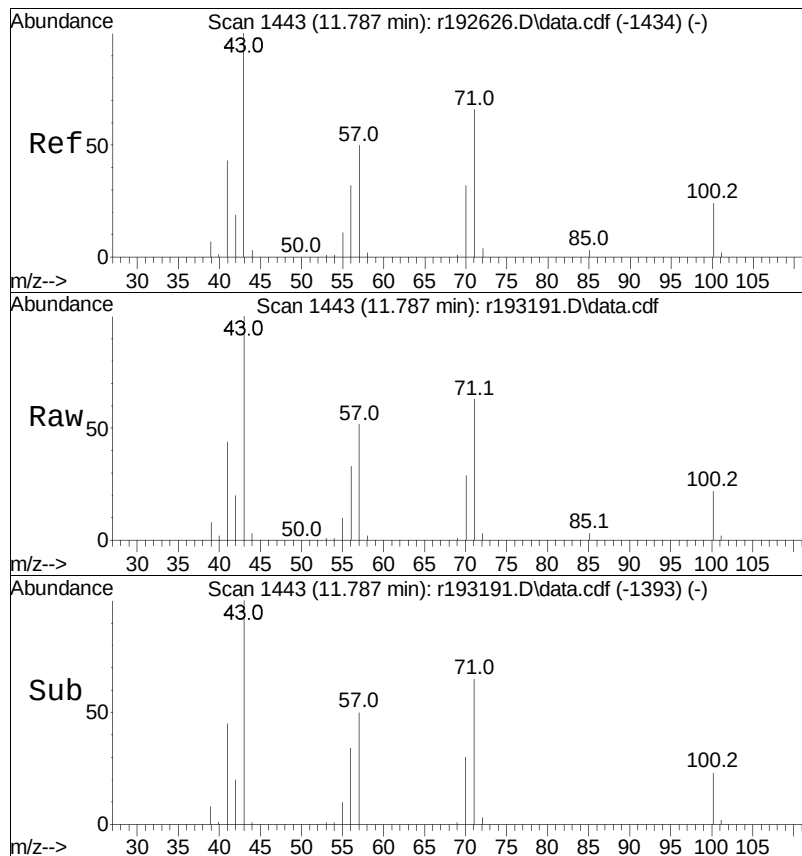




#60
 2,2,4-trimethylpentane
 Concen: 10.37 ppbV
 RT: 11.520 min Scan# 1403
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

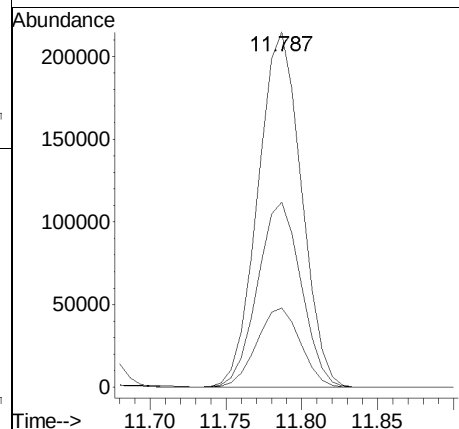
Tgt Ion	Ratio	Lower	Upper
57	100		
99	6.9	6.0	9.0
41	19.2	15.6	23.4

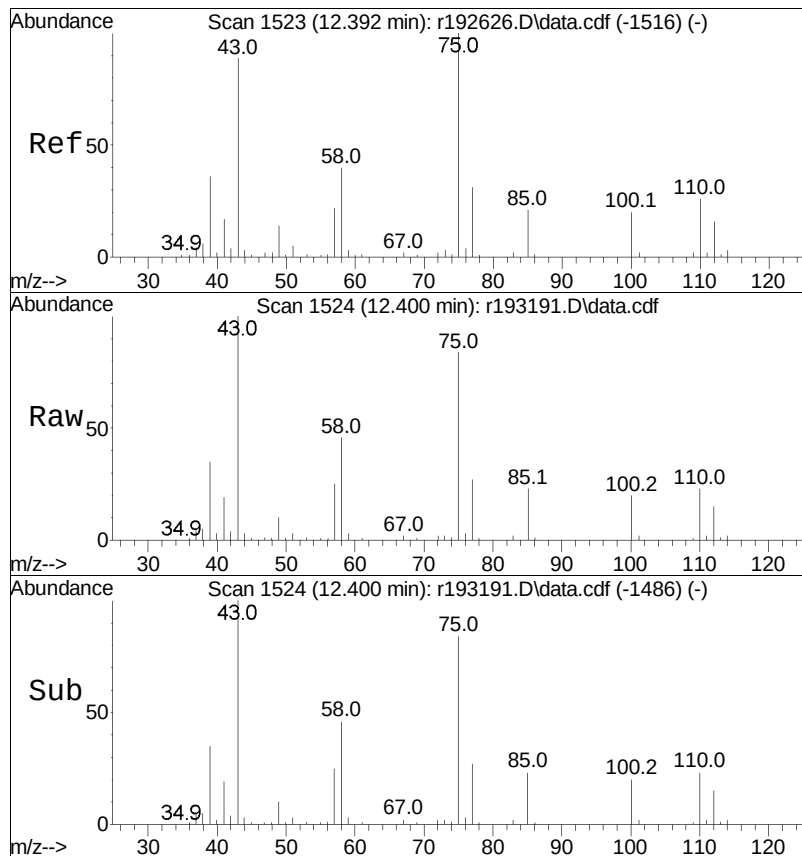




#62
 heptane
 Concen: 10.12 ppbV
 RT: 11.787 min Scan# 1443
 Delta R.T. 0.007 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

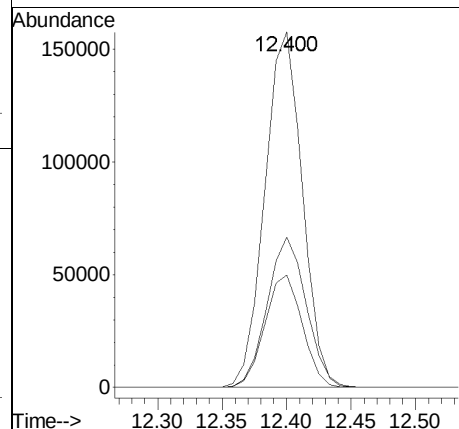
Tgt	Ion	Ratio	Lower	Upper
43	100			
57	52.1	41.0	61.6	
100	22.4	21.4	32.2	

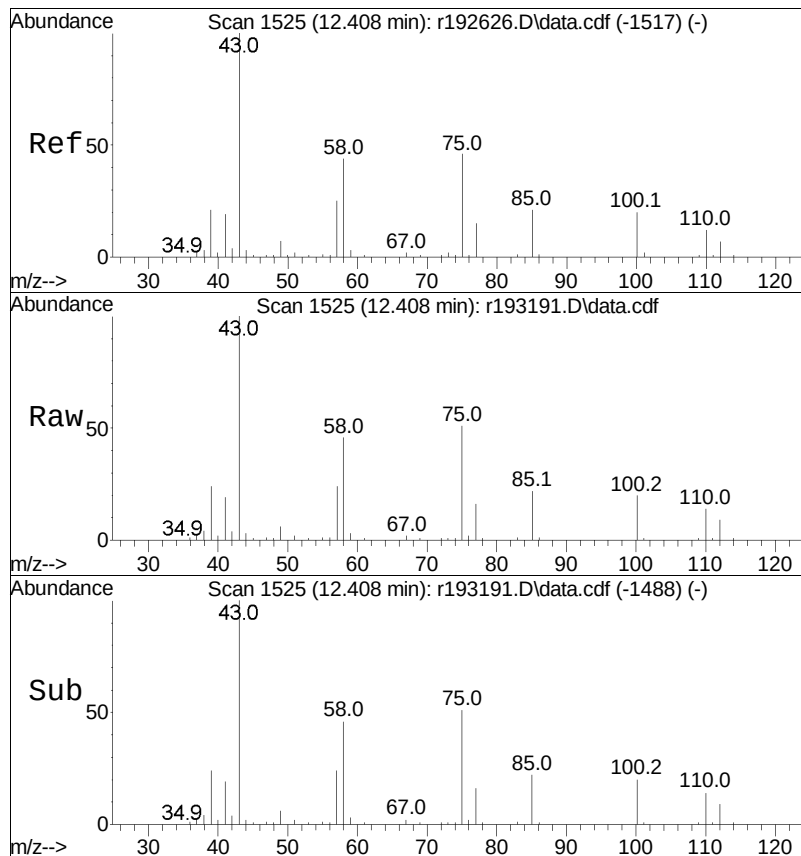




#63
 cis-1,3-dichloropropene
 Concen: 9.79 ppbV
 RT: 12.400 min Scan# 1524
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

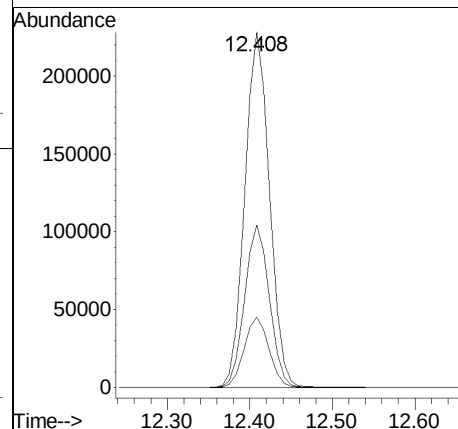
Tgt	Ion: 75	Resp:	318728
Ion	Ratio	Lower	Upper
75	100		
39	42.3	27.2	40.8#
77	31.6	24.5	36.7

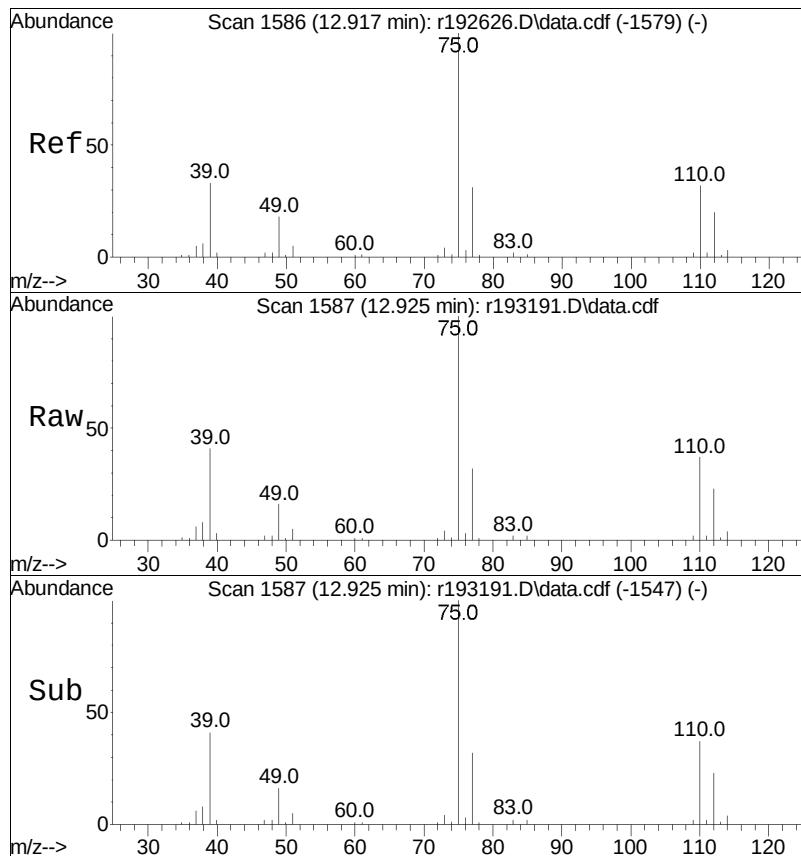




#64
 4-methyl-2-pentanone
 Concen: 10.41 ppbV
 RT: 12.408 min Scan# 1525
 Delta R.T. -0.025 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

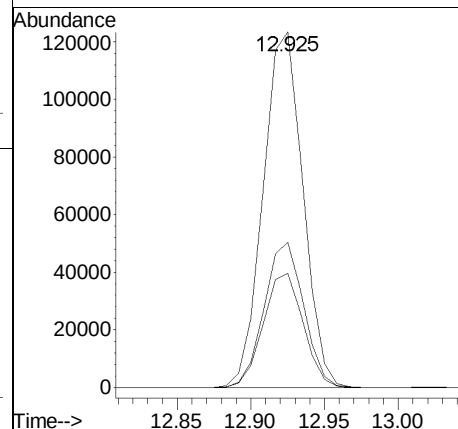
Tgt Ion	Ratio	Lower	Upper
43	100		
58	45.7	32.9	49.3
100	19.8	15.4	23.2

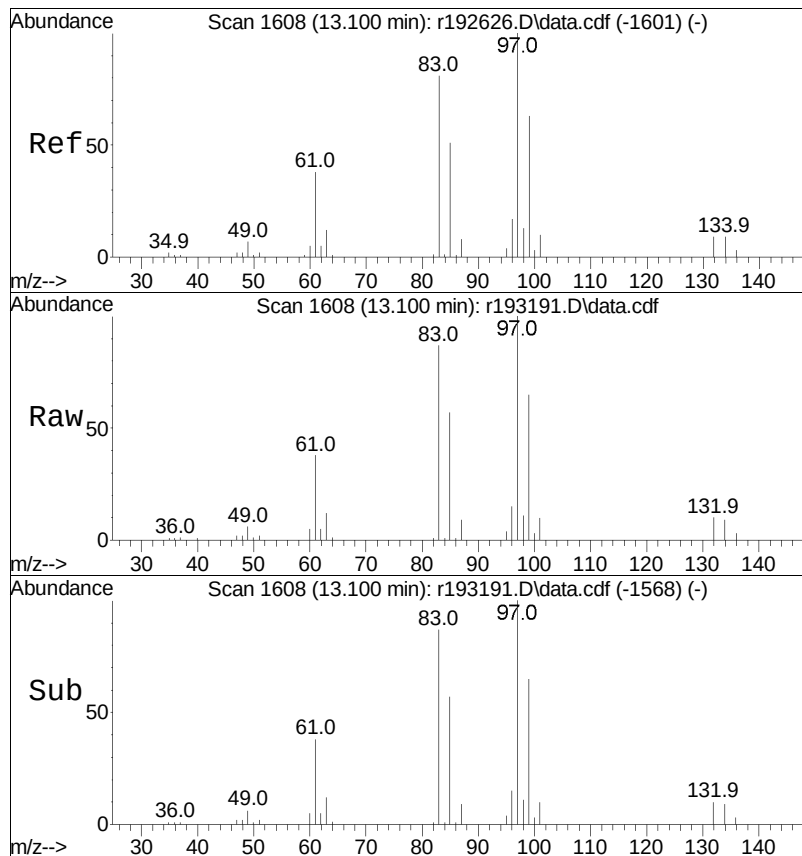




#65
 trans-1,3-dichloropropene
 Concen: 7.91 ppbV
 RT: 12.925 min Scan# 1587
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

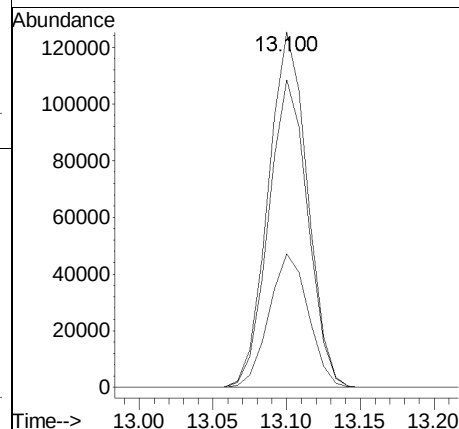
Tgt Ion	Ratio	Lower	Upper
75	100		
77	32.1	25.4	38.2
39	40.9	30.6	46.0

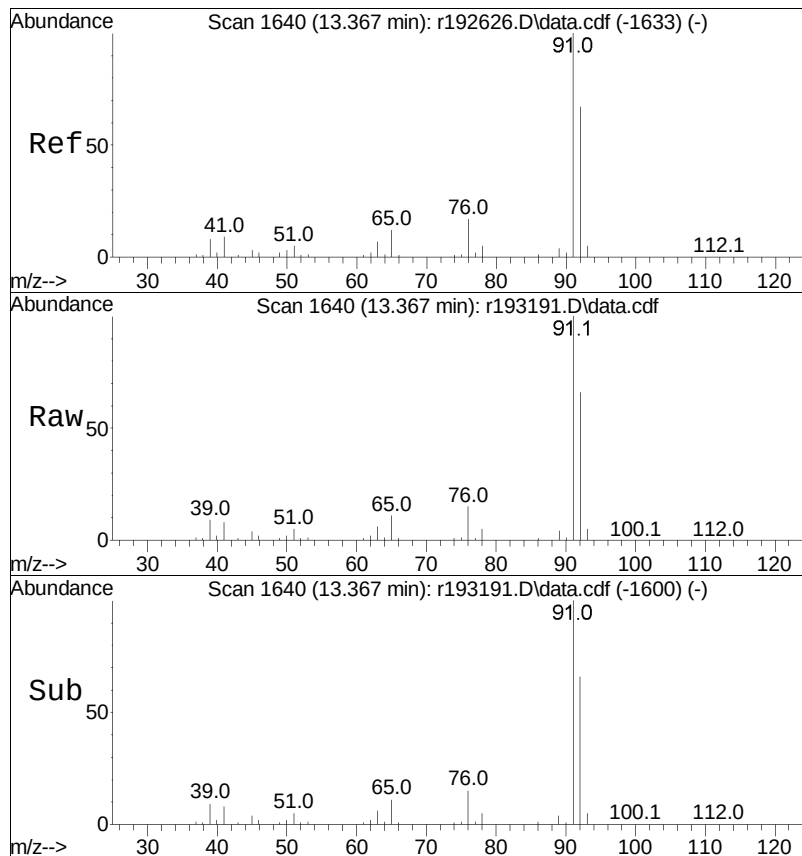




#66
 1,1,2-trichloroethane
 Concen: 9.74 ppbV
 RT: 13.100 min Scan# 1608
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

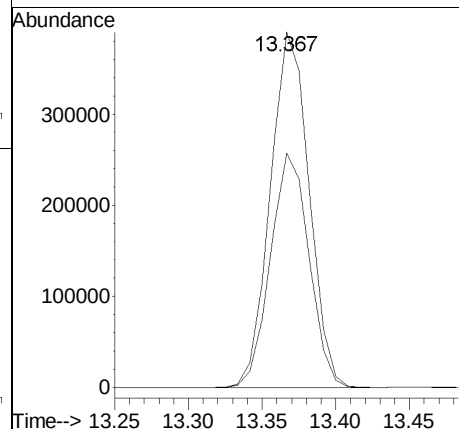
Tgt Ion	Ratio	Lower	Upper
97	100		
83	86.6	65.8	98.8
61	37.6	31.1	46.7

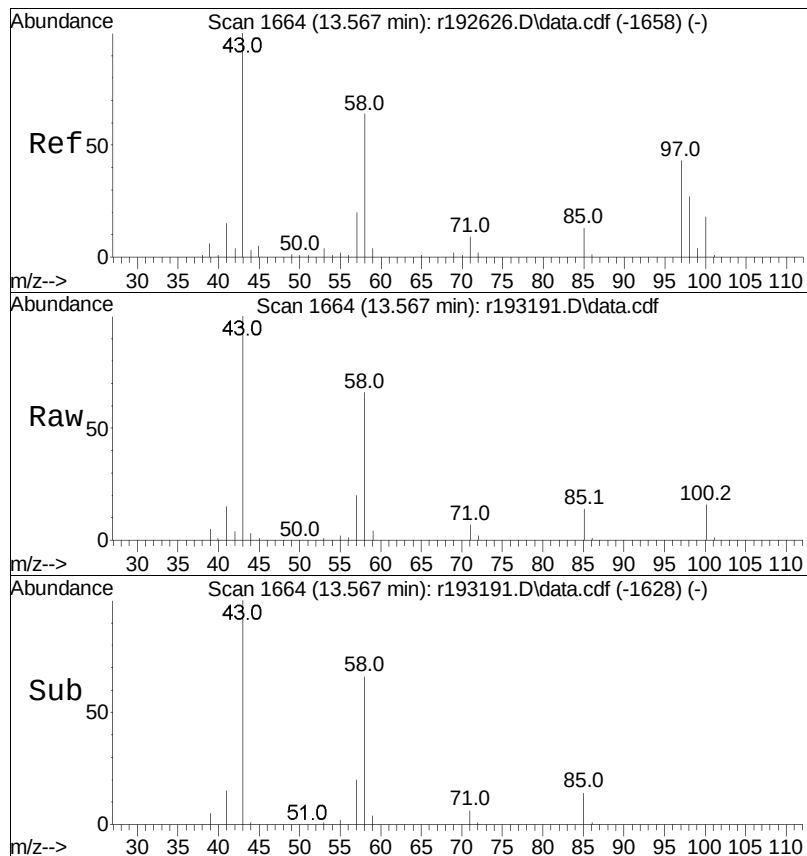




#68
toluene
Concen: 10.82 ppbV
RT: 13.367 min Scan# 1640
Delta R.T. 0.000 min
Lab File: r193191.D
Acq: 20 Mar 2020 12:51 PM

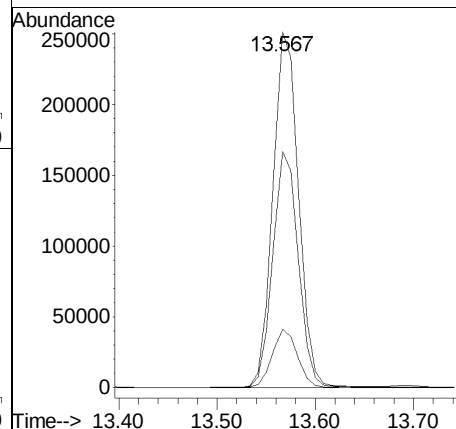
Tgt	Ion	Resp	Lower	Upper
91	100	712092		
92	65.9	53.3	79.9	

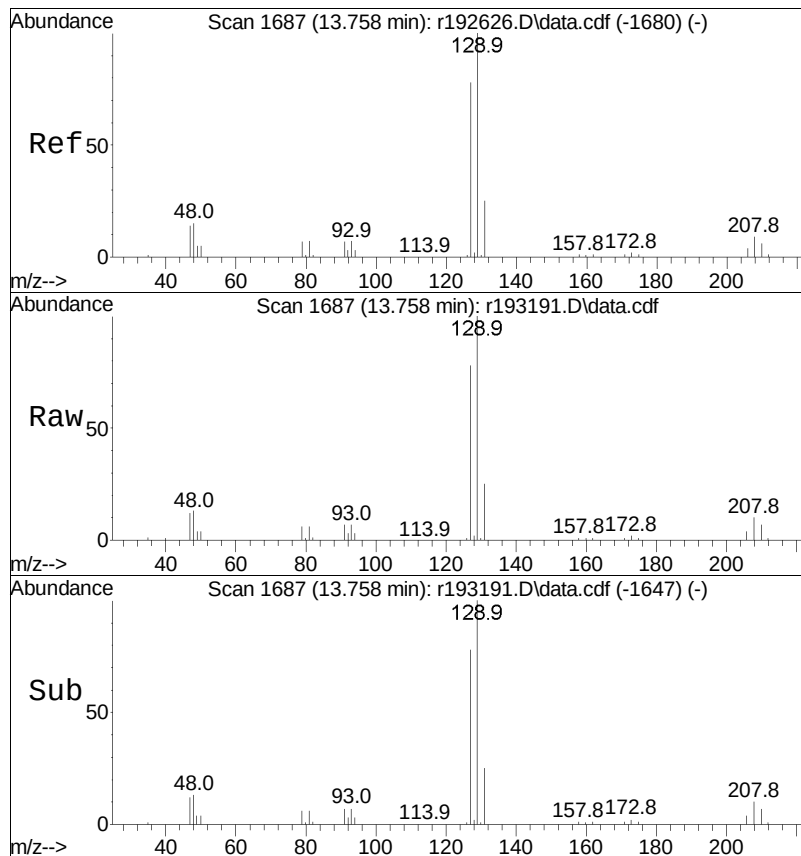




#72
 2-hexanone
 Concen: 11.92 ppbV
 RT: 13.567 min Scan# 1664
 Delta R.T. -0.033 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

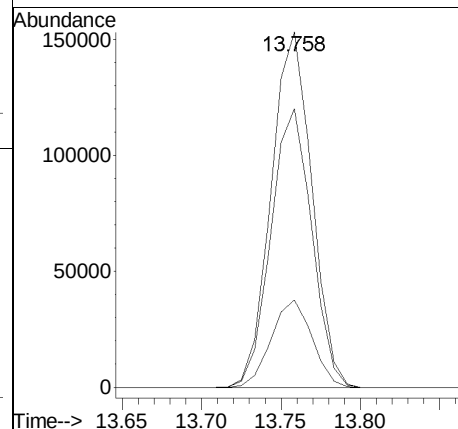
Tgt Ion:	43	Resp:	455782
Ion Ratio	Lower	Upper	
43	100		
58	66.4	62.6	94.0
100	16.3	26.5	39.7#

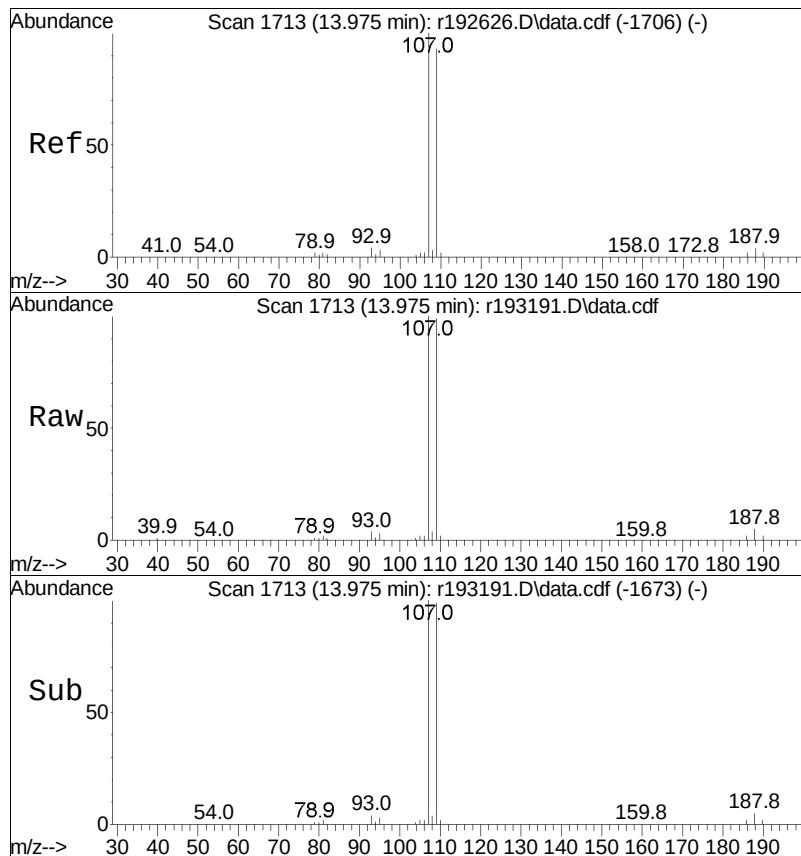




#74
 dibromochloromethane
 Concen: 10.81 ppbV
 RT: 13.758 min Scan# 1687
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

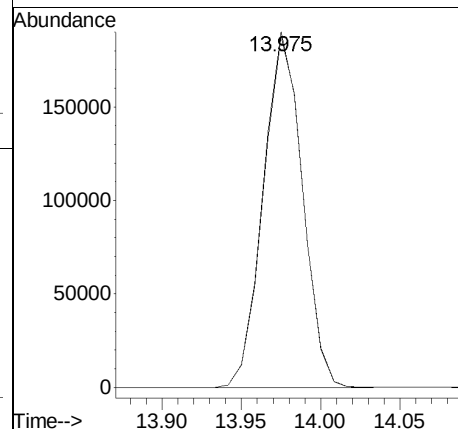
Tgt Ion	Ratio	Resp	Lower	Upper
129	100	273299		
127	78.4		60.9	91.3
131	24.6		19.7	29.5

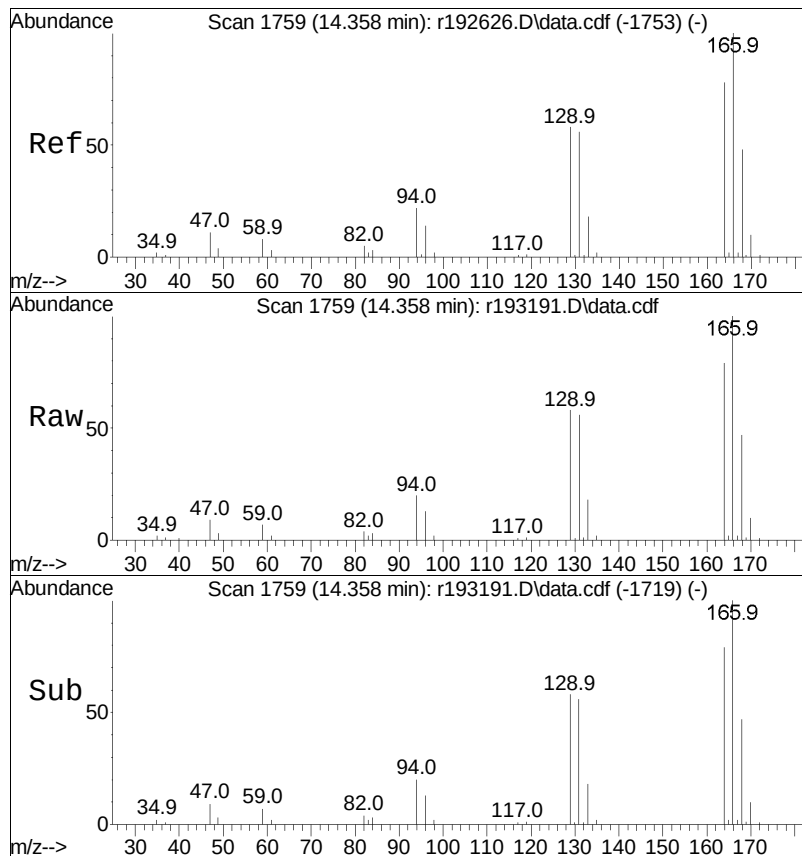




#75
 1,2-dibromoethane
 Concen: 10.79 ppbV
 RT: 13.975 min Scan# 1713
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

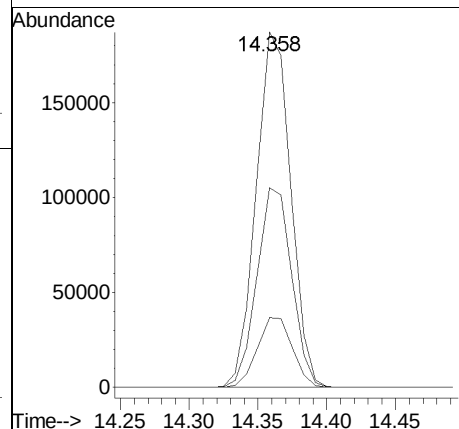
Tgt	Ion	Ratio	Lower	Upper
107	100			
109	98.9	76.4	114.6	

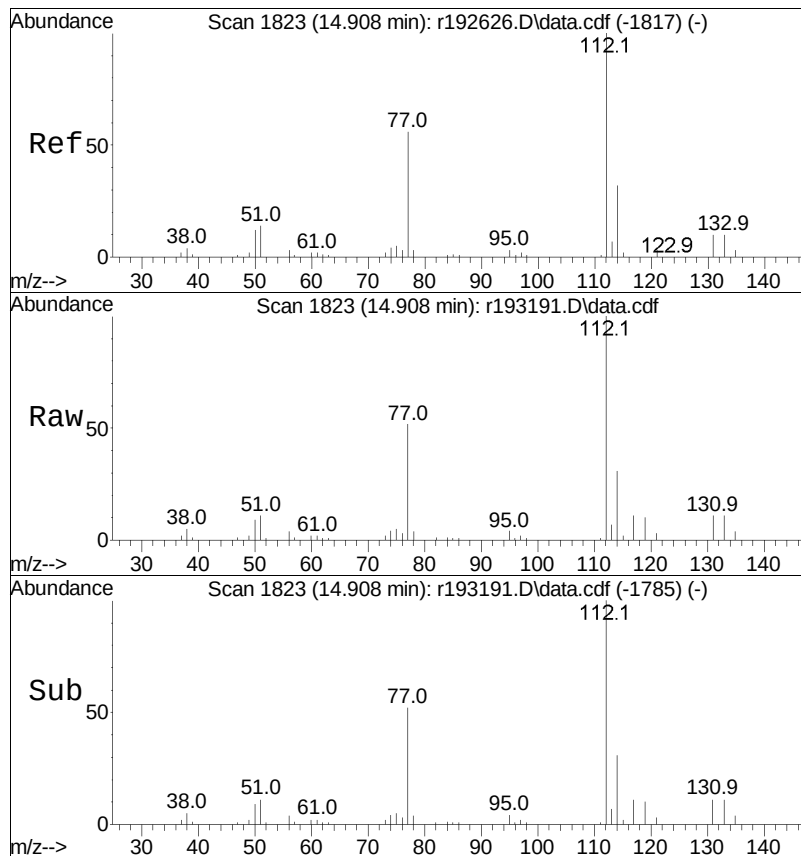




#78
 tetrachloroethene
 Concen: 11.34 ppbV
 RT: 14.358 min Scan# 1759
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

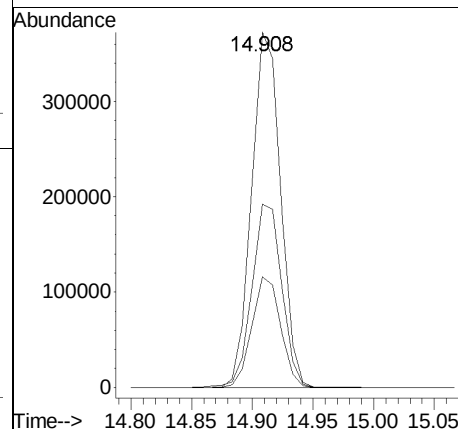
Tgt Ion	Ratio	Lower	Upper
166	100		
131	56.2	46.4	69.6
94	19.6	18.5	27.7

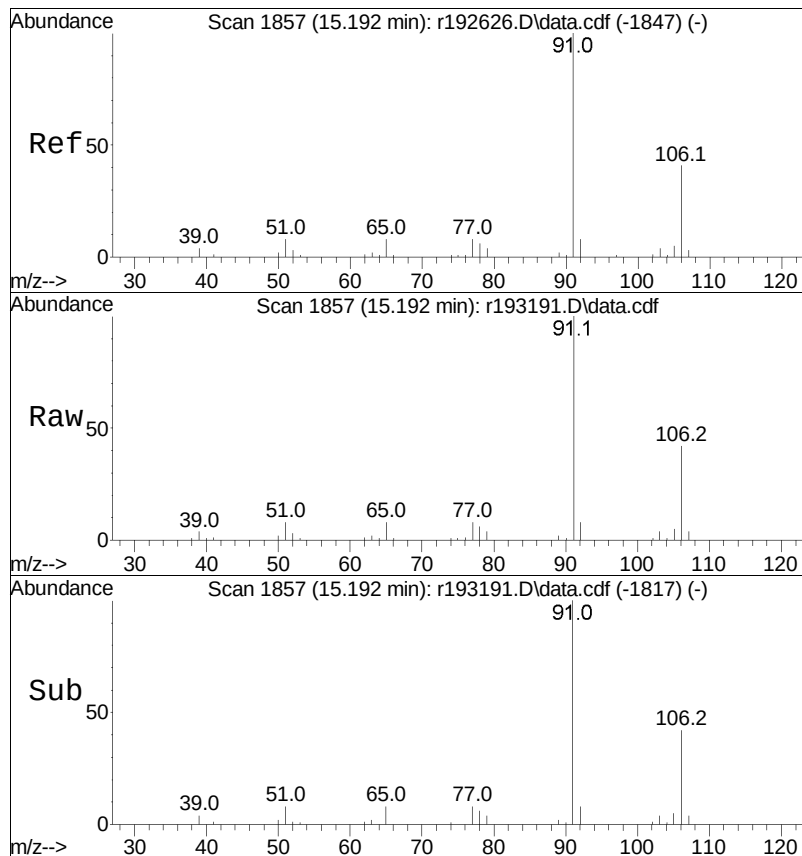




#80
chlorobenzene
Concen: 11.81 ppbV
RT: 14.908 min Scan# 1823
Delta R.T. 0.000 min
Lab File: r193191.D
Acq: 20 Mar 2020 12:51 PM

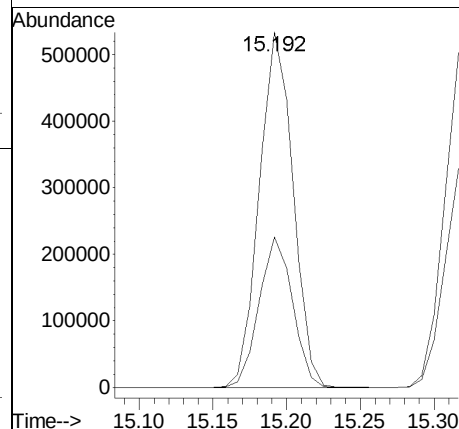
Tgt	Ion	Ratio	Lower	Upper
112	100			
114	31.1	25.1	37.7	
77	51.5	46.2	69.2	

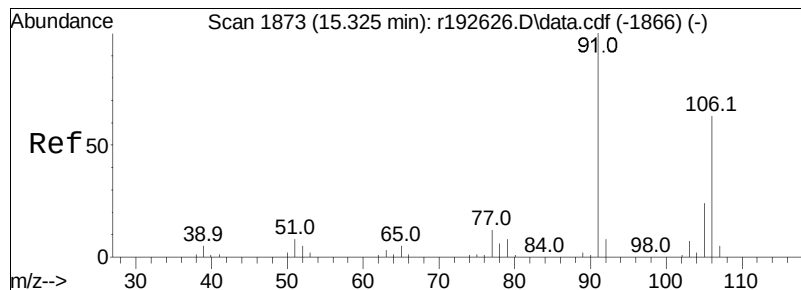




#81
ethylbenzene
Concen: 10.76 ppbV
RT: 15.192 min Scan# 1857
Delta R.T. 0.000 min
Lab File: r193191.D
Acq: 20 Mar 2020 12:51 PM

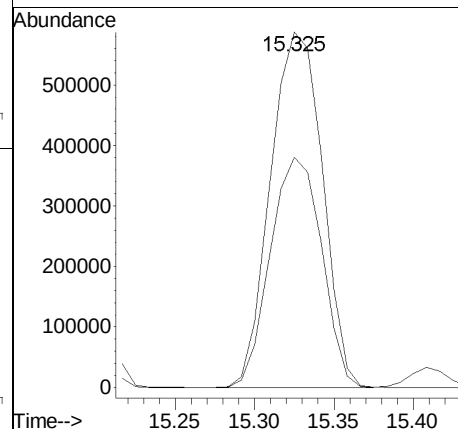
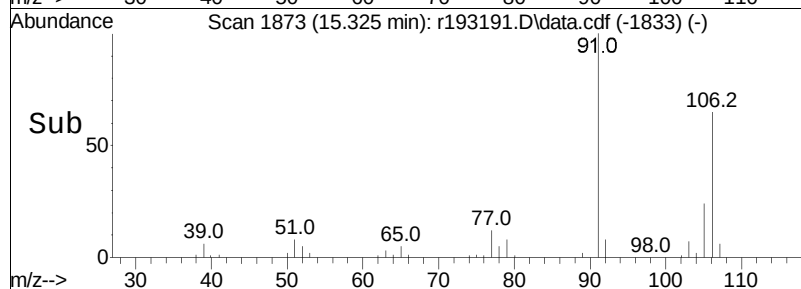
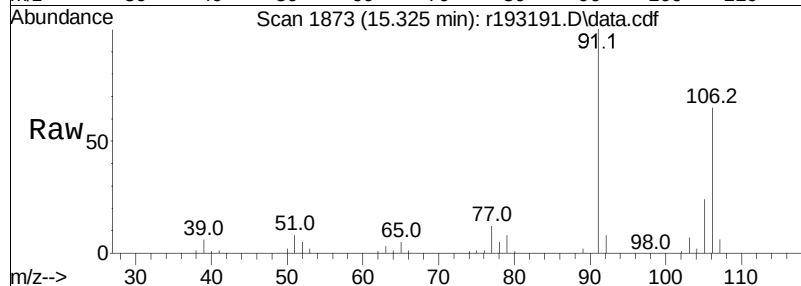
Tgt	Ion	Resp	Lower	Upper
91	100	848602		
106	42.3	32.9	49.3	

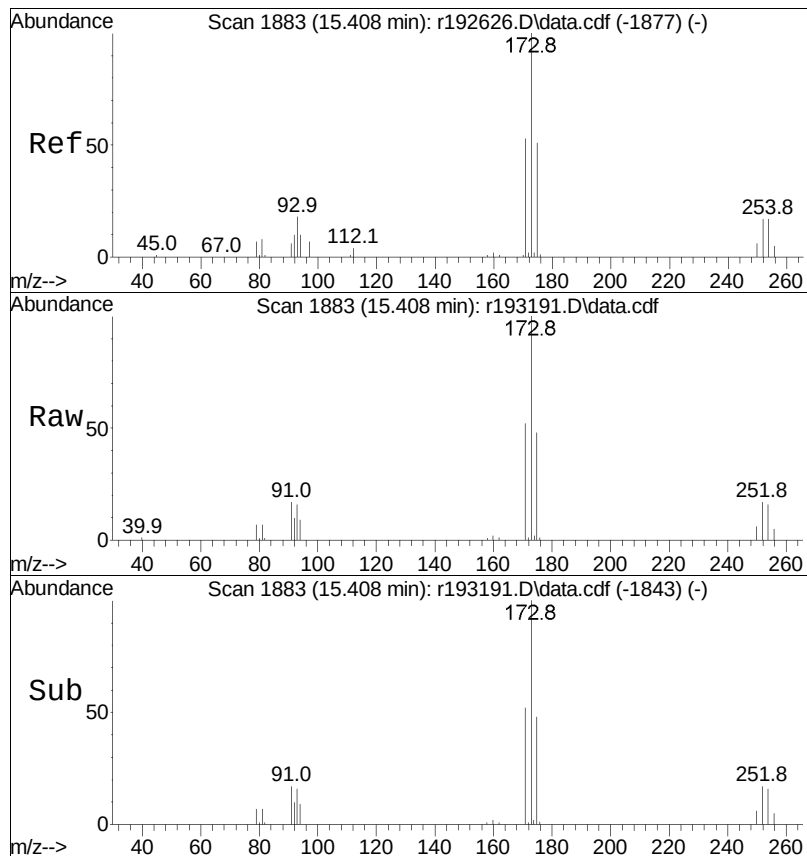




#83
 m+p-xylene
 Concen: 21.51 ppbV
 RT: 15.325 min Scan# 1873
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

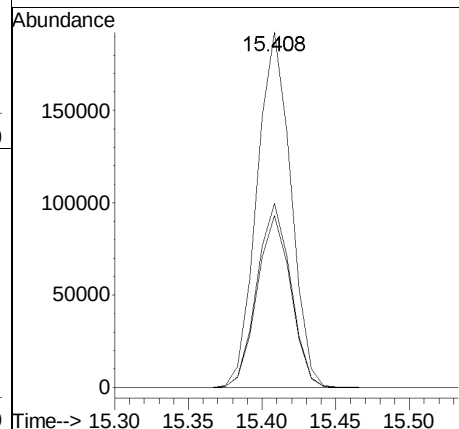
Tgt Ion: 91 Resp: 1337977
 Ion Ratio Lower Upper
 91 100
 106 64.8 51.0 76.4

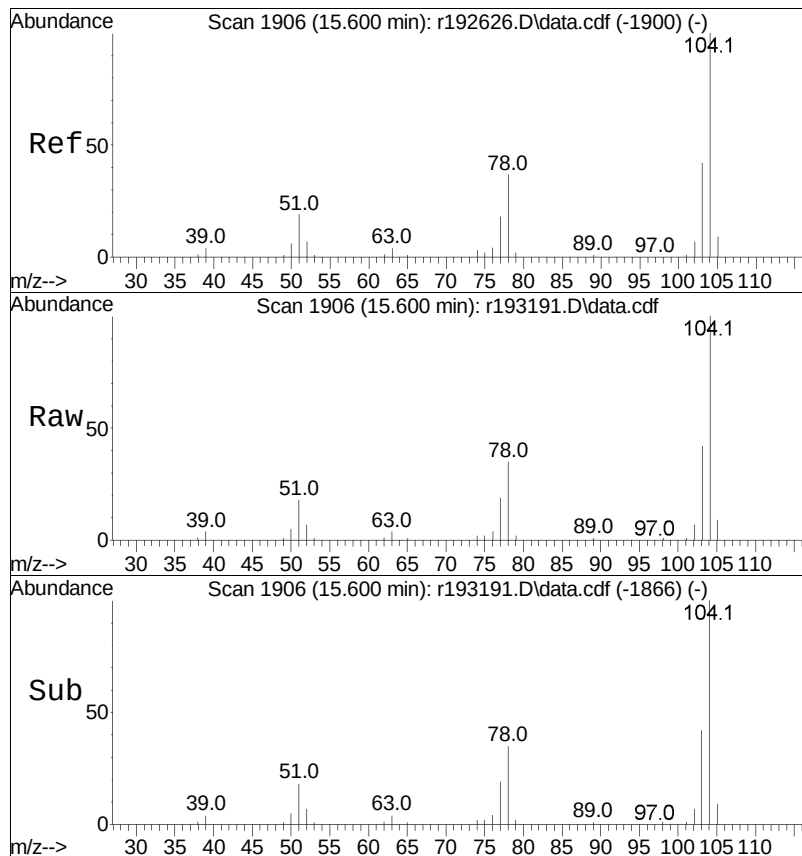




#84
bromoform
Concen: 11.02 ppbV
RT: 15.408 min Scan# 1883
Delta R.T. 0.000 min
Lab File: r193191.D
Acq: 20 Mar 2020 12:51 PM

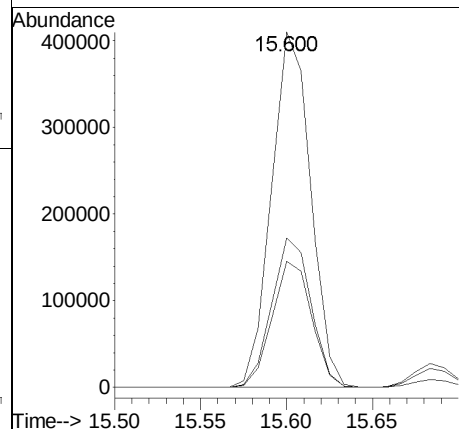
Tgt Ion	Ratio	Resp	Lower	Upper
173	100	307610		
175	48.4		38.0	57.0
171	51.8		43.2	64.8

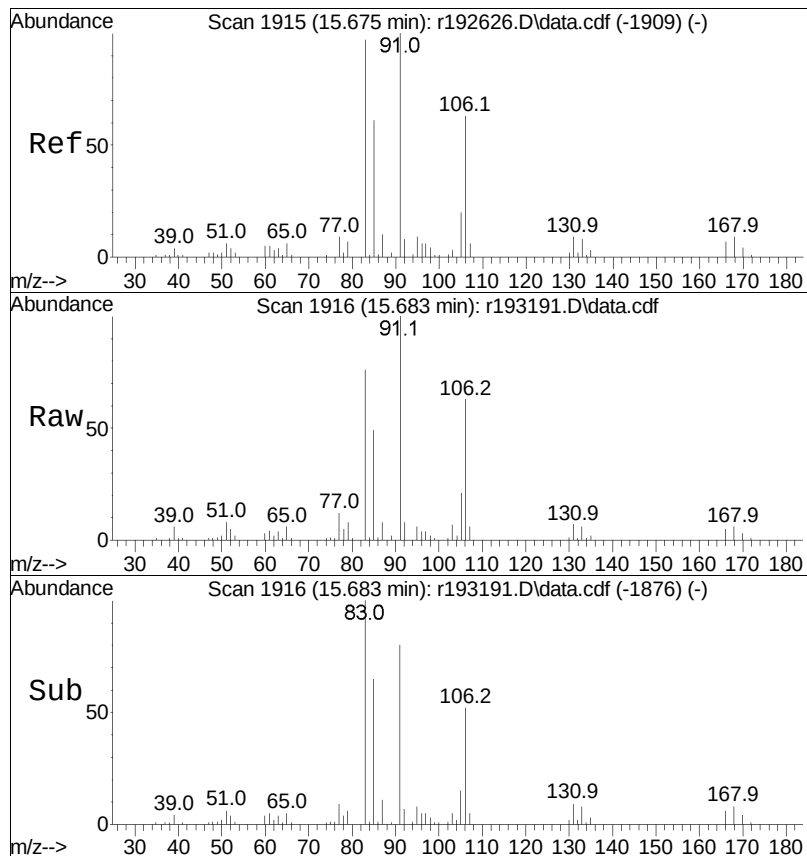




#85
styrene
Concen: 10.79 ppbV
RT: 15.600 min Scan# 1906
Delta R.T. 0.000 min
Lab File: r193191.D
Acq: 20 Mar 2020 12:51 PM

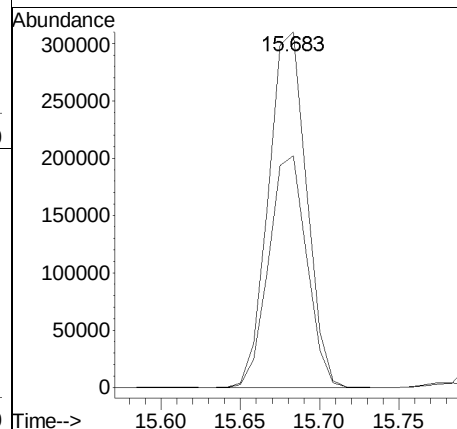
Tgt Ion	Ratio	Lower	Upper
104	100		
103	42.1	33.4	50.0
78	35.5	30.6	46.0

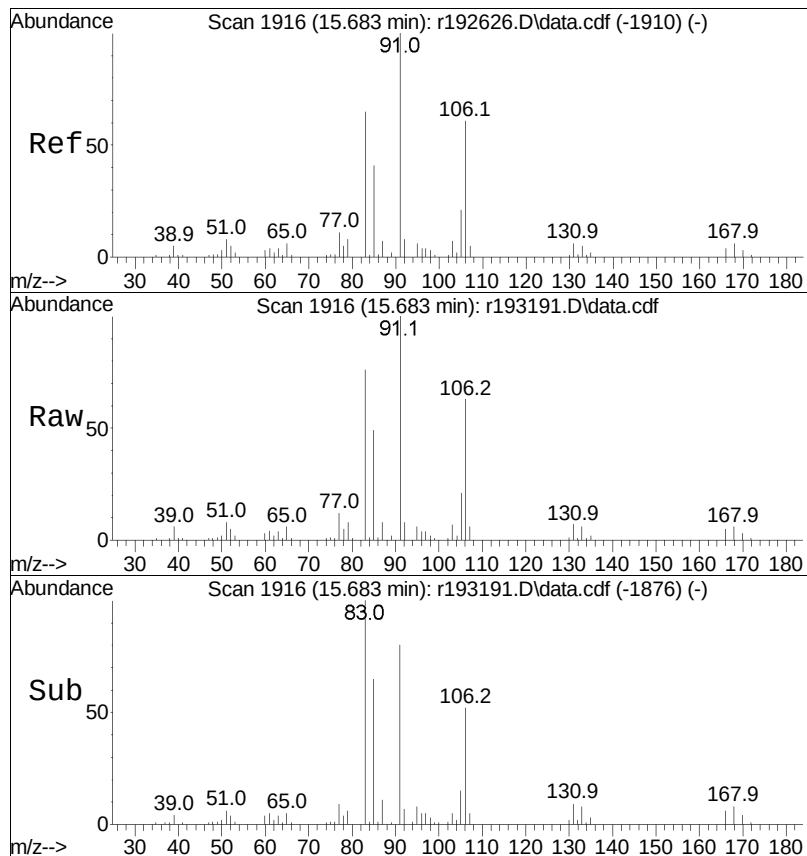




#86
 1,1,2,2-tetrachloroethane
 Concen: 12.04 ppbV
 RT: 15.683 min Scan# 1916
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

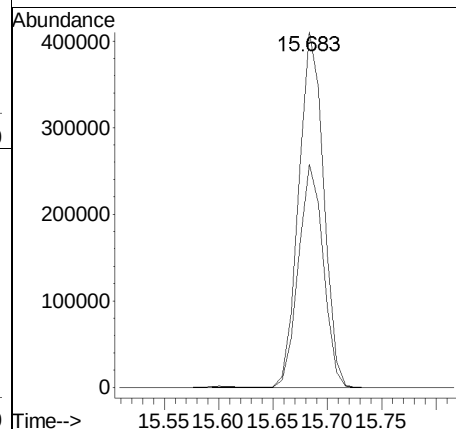
Tgt Ion:	83	Resp:	516728
Ion Ratio	Lower	Upper	
83	100		
85	65.2	49.4	74.2

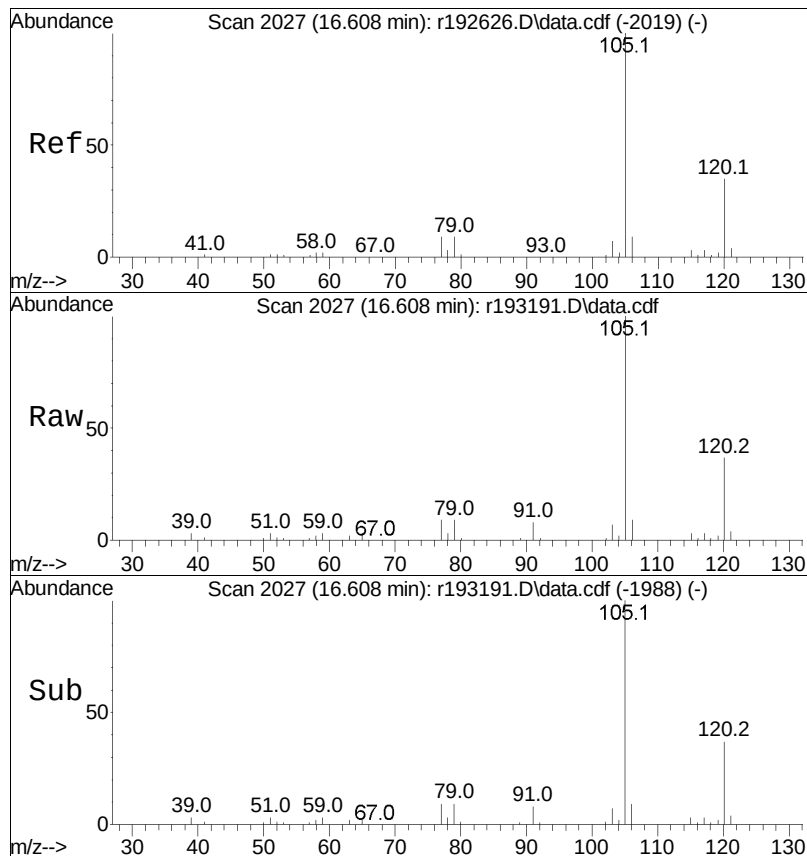




#87
 o-xylene
 Concen: 10.69 ppbV
 RT: 15.683 min Scan# 1916
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

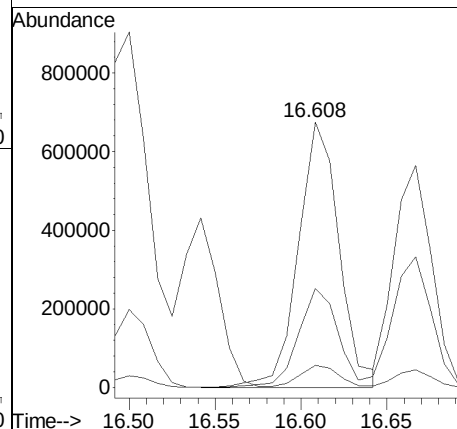
Tgt Ion:	91	Resp:	652185
Ion Ratio	Lower	Upper	
91	100		
106	62.8	47.8	71.8

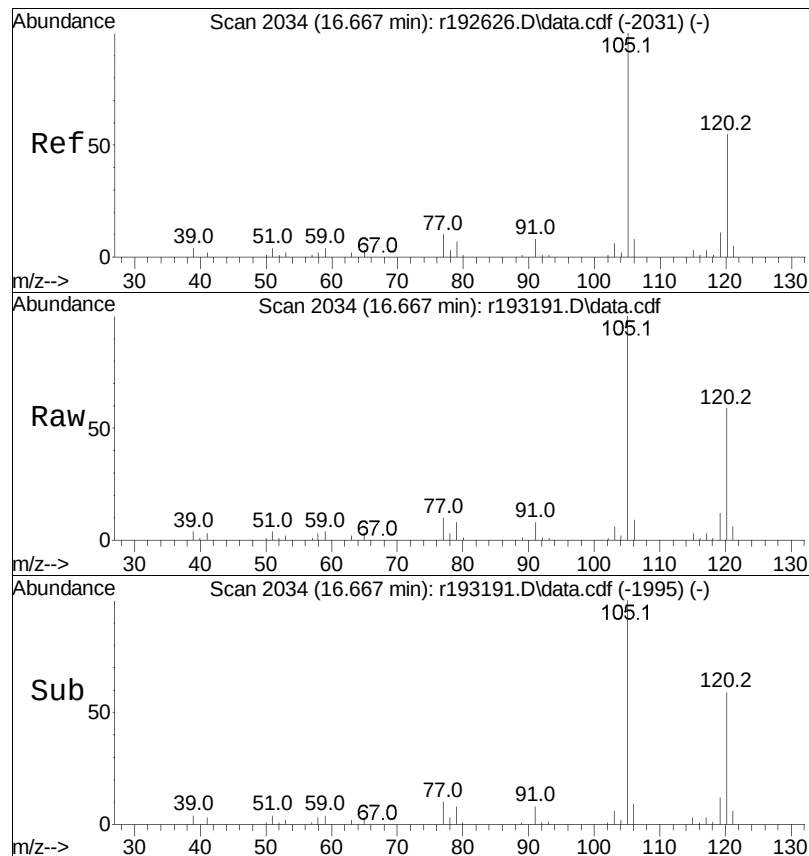




#96
 4-ethyl toluene
 Concen: 10.73 ppbV
 RT: 16.608 min Scan# 2027
 Delta R.T. -0.008 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

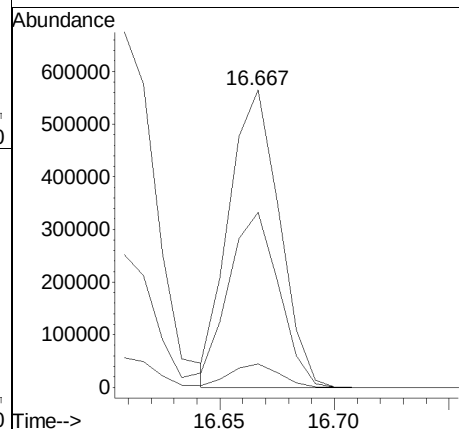
Tgt Ion	Ratio	Lower	Upper
105	100		
120	37.3	27.2	40.8
91	8.3	7.0	10.4

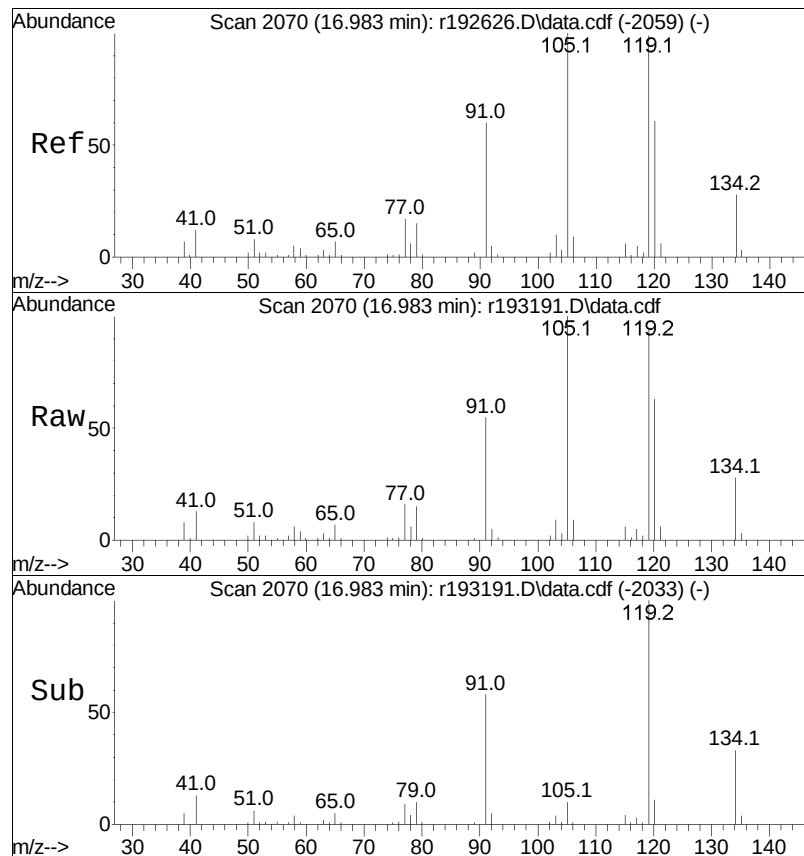




#97
 1,3,5-trimethylbenzene
 Concen: 10.41 ppbV
 RT: 16.667 min Scan# 2034
 Delta R.T. -0.008 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

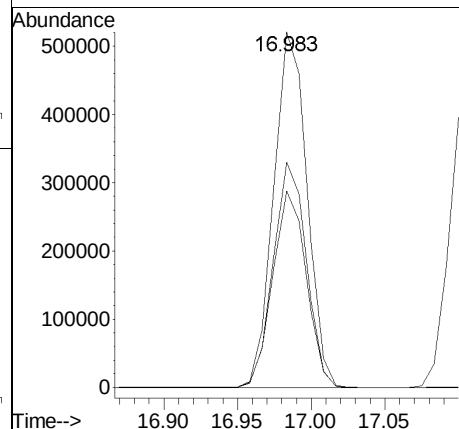
Tgt Ion	Ratio	Lower	Upper
105	100		
120	58.8	42.6	64.0
91	7.9	6.6	9.8

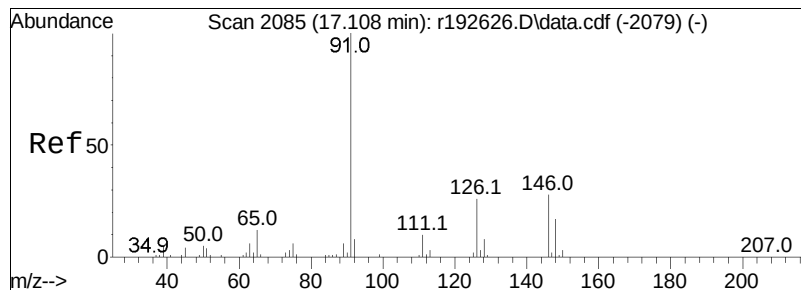




#99
 1,2,4-trimethylbenzene
 Concen: 10.63 ppbV
 RT: 16.983 min Scan# 2070
 Delta R.T. -0.008 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

Tgt Ion:	105	Resp:	816769
Ion Ratio	Lower	Upper	
105	100		
120	63.3	49.2	73.8
91	55.2	49.9	74.9





#101

Benzyl Chloride

Concen: 10.91 ppbV

RT: 17.108 min Scan# 2085

Delta R.T. 0.000 min

Lab File: r193191.D

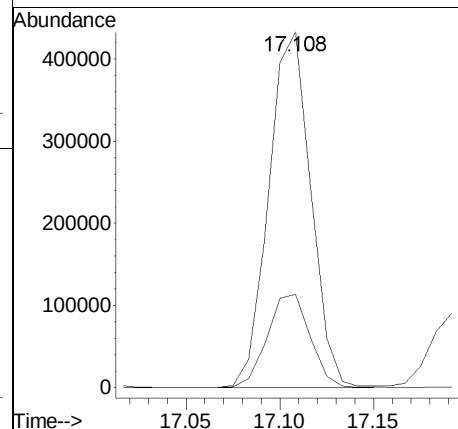
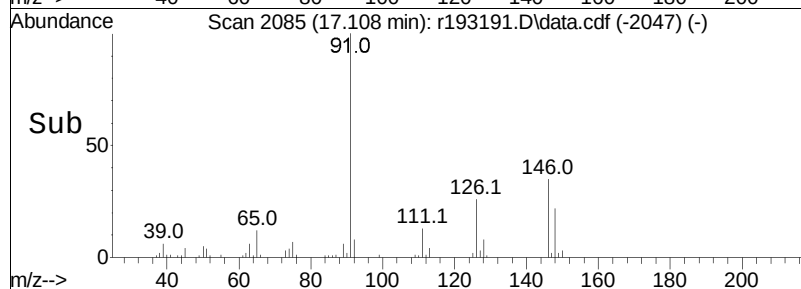
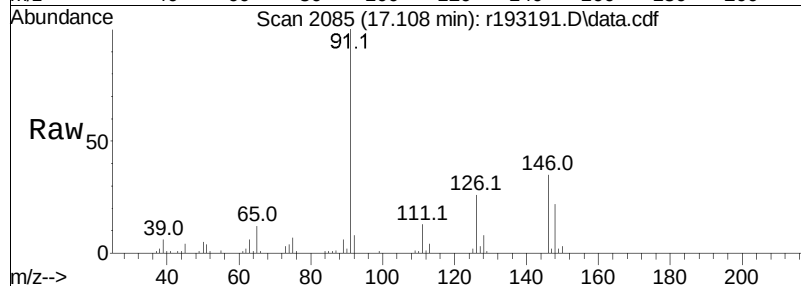
Acq: 20 Mar 2020 12:51 PM

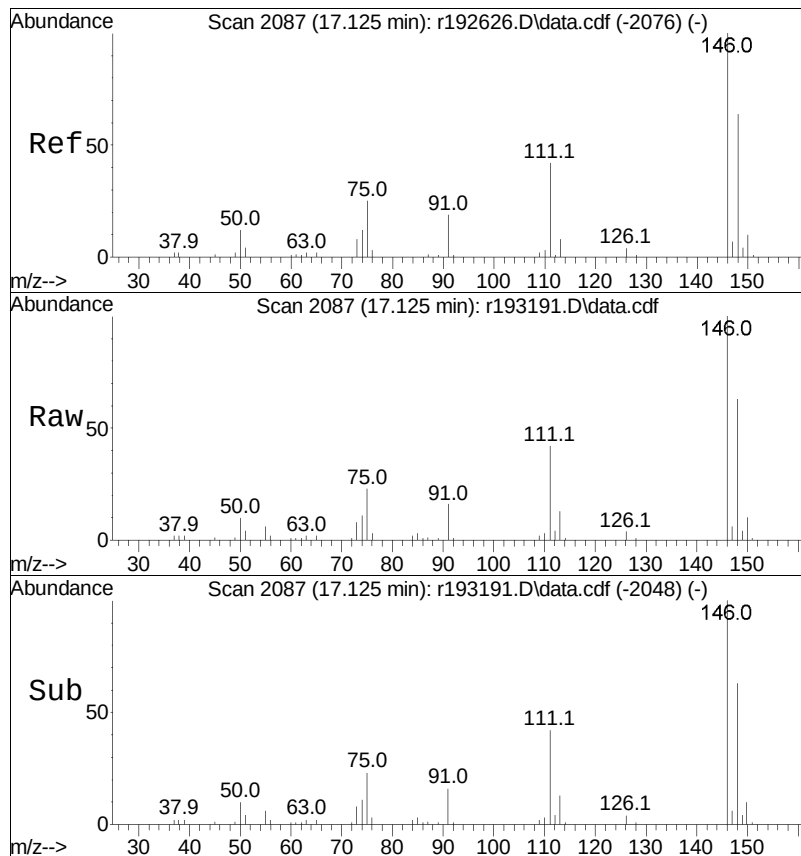
Tgt Ion: 91 Resp: 675058

Ion Ratio Lower Upper

91 100

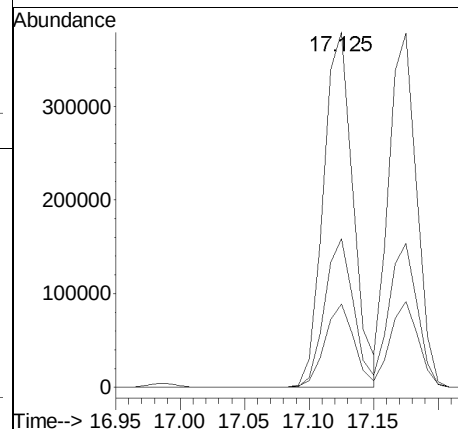
126 26.2 20.5 30.7

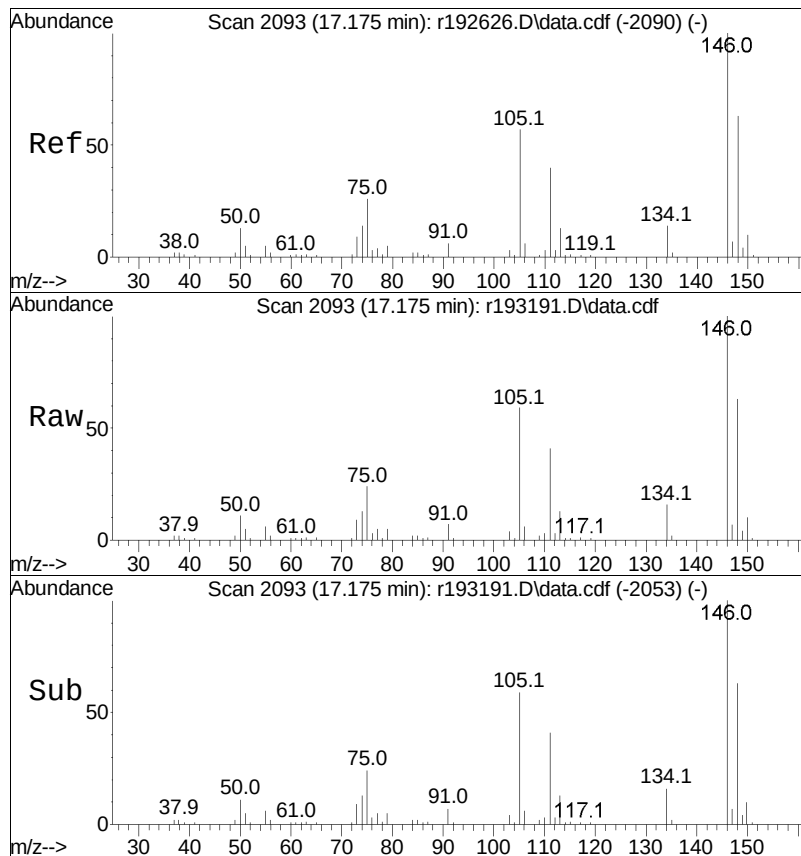




#102
 1,3-dichlorobenzene
 Concen: 11.60 ppbV
 RT: 17.125 min Scan# 2087
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

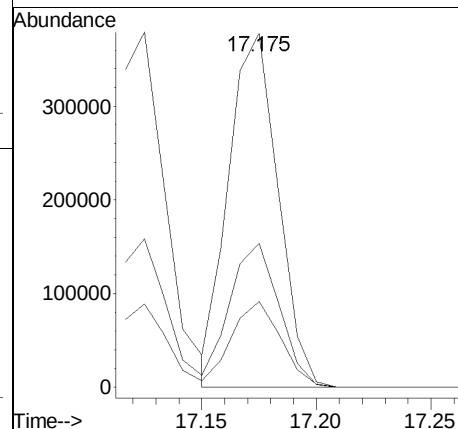
Tgt Ion	Ratio	Lower	Upper
146	100		
111	41.8	33.6	50.4
75	23.5	20.6	30.8

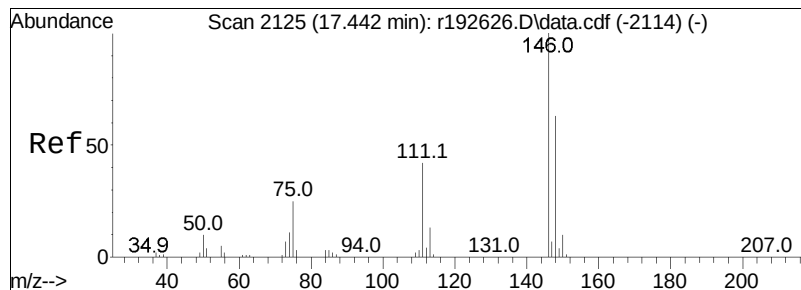




#103
 1,4-dichlorobenzene
 Concen: 11.28 ppbV
 RT: 17.175 min Scan# 2093
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

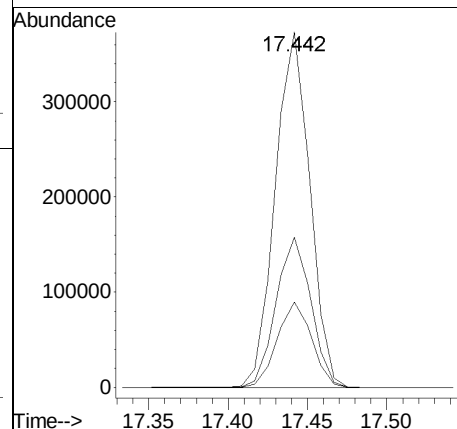
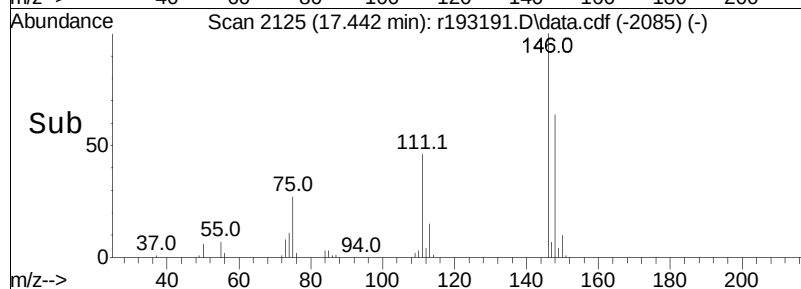
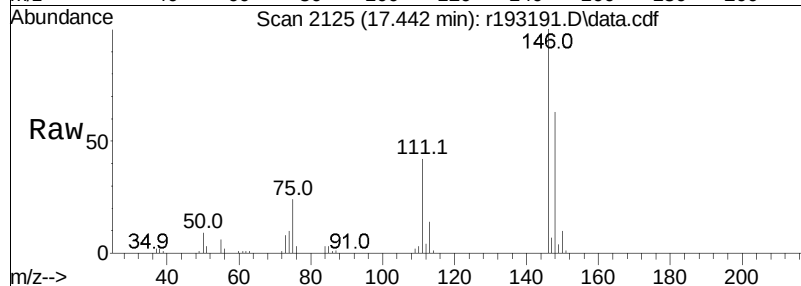
Tgt Ion	Ratio	Lower	Upper
146	100		
111	40.7	31.1	46.7
75	24.3	20.6	31.0

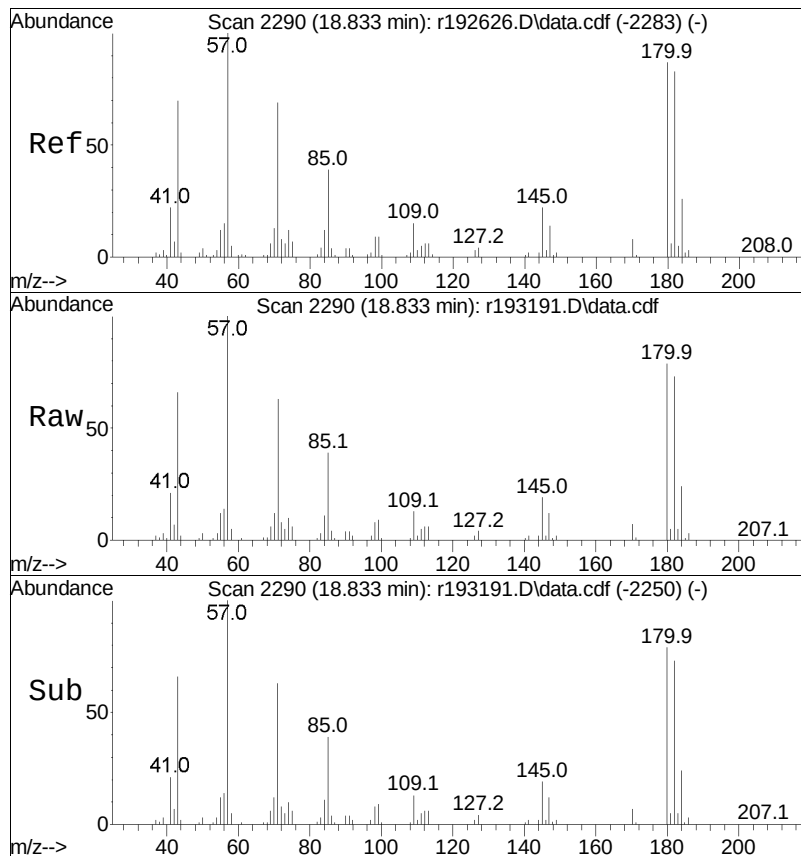




#107
 1,2-dichlorobenzene
 Concen: 11.33 ppbV
 RT: 17.442 min Scan# 2125
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

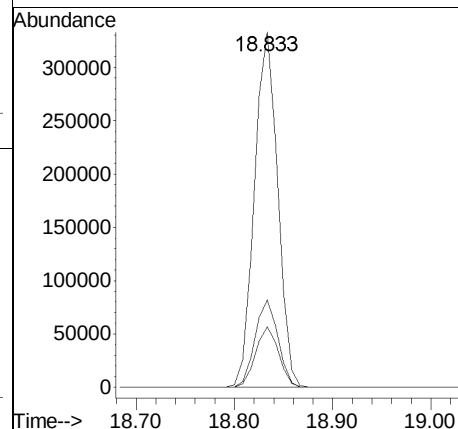
Tgt Ion	Ratio	Lower	Upper
146	100		
111	42.3	33.1	49.7
75	24.0	20.9	31.3

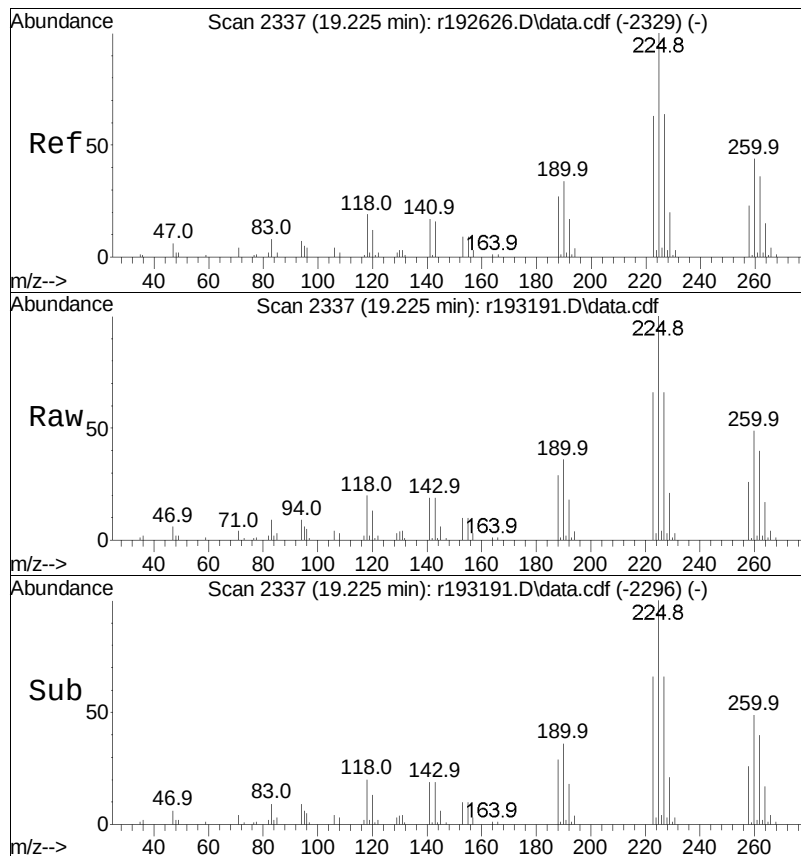




#115
 1,2,4-trichlorobenzene
 Concen: 12.49 ppbV
 RT: 18.833 min Scan# 2290
 Delta R.T. 0.000 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

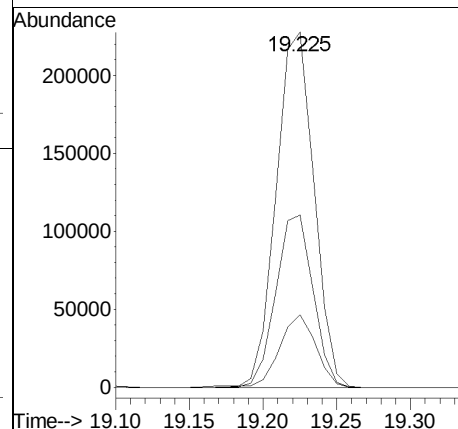
Tgt Ion:	180	Resp:	547929
Ion Ratio	Lower	Upper	
180	100		
145	24.6	21.0	31.4
109	17.1	14.3	21.5





#119
 hexachlorobutadiene
 Concen: 10.65 ppbV
 RT: 19.225 min Scan# 2337
 Delta R.T. 0.008 min
 Lab File: r193191.D
 Acq: 20 Mar 2020 12:51 PM

Tgt	Ion:225	Resp:	406023
Ion	Ratio	Lower	Upper
225	100		
260	48.5	34.8	52.2
118	20.5	15.2	22.8



Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38754.D
 Acq On : 20 Mar 2020 1:32 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353541-3,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:43:06 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	bromochloromethane	10.000	10.000	0.0	95	0.03
2	chlorodifluoromethane	10.000	8.320	16.8	80	0.02
3	propylene	10.000	12.568	-25.7	122	0.02
4	propane	10.000	8.357	16.4	80	0.02
5	dichlorodifluoromethane	10.000	10.640	-6.4	101	0.02
6 C	chloromethane	10.000	11.933	-19.3	115	0.02
7	Freon-114	10.000	11.822	-18.2	112	0.02
8 C	methanol	50.000	52.962	-5.9	99	0.02
9 C	vinyl chloride	10.000	11.513	-15.1	114	0.02
10 C	1,3-butadiene	10.000	10.739	-7.4	104	0.02
11	butane	10.000	12.639	-26.4	123	0.02
13 C	bromomethane	10.000	12.008	-20.1	117	0.02
14 C	chloroethane	10.000	12.115	-21.2	121	0.03
15	ethanol	50.000	50.027	-0.1	91	0.02
16	dichlorofluoromethane	10.000	12.031	-20.3	116	0.02
17 C	vinyl bromide	10.000	11.803	-18.0	113	0.02
18 C	acrolein	10.000	9.009	9.9	88	0.02
19	acetone	50.000	57.892	-15.8	107	0.03
20 C	acetonitrile	10.000	11.358	-13.6	114	0.02
21	trichlorofluoromethane	10.000	12.270	-22.7	120	0.03
22	isopropyl alcohol	25.000	31.270	-25.1	119	0.03
23 C	acrylonitrile	10.000	10.125	-1.3	99	0.03
24	pentane	10.000	13.899	-39.0#	125	0.03
25	ethyl ether	10.000	8.953	10.5	88	0.03
26 C	1,1-dichloroethene	10.000	10.825	-8.2	111	0.03
27	tertiary butyl alcohol	10.000	9.346	6.5	87	0.02
28 C	methylene chloride	10.000	10.990	-9.9	99	0.03
29 C	3-chloropropene	10.000	12.578	-25.8	122	0.03
30 C	carbon disulfide	10.000	9.590	4.1	91	0.03
31	Freon 113	10.000	10.969	-9.7	105	0.02
32	trans-1,2-dichloroethene	10.000	10.801	-8.0	103	0.03
33 C	1,1-dichloroethane	10.000	11.553	-15.5	113	0.03
34 C	MTBE	10.000	10.565	-5.6	99	0.03
35 C	vinyl acetate	10.000	12.258	-22.6	113	0.03
36 C	2-butanone	10.000	12.017	-20.2	115	0.03
37	cis-1,2-dichloroethene	10.000	11.501	-15.0	112	0.03
38	Ethyl Acetate	10.000	11.676	-16.8	115	0.03
39 C	chloroform	10.000	10.239	-2.4	97	0.03
40	Tetrahydrofuran	10.000	11.689	-16.9	113	0.03

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38754.D
 Acq On : 20 Mar 2020 1:32 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353541-3,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:43:06 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41	2,2-dichloropropane	10.000	9.498	5.0	87	0.03
42 C	1,2-dichloroethane	10.000	11.184	-11.8	106	0.03
43 I	1,4-difluorobenzene	10.000	10.000	0.0	94	0.03
44 C	hexane	10.000	10.311	-3.1	98	0.03
45	diisopropyl ether	10.000	9.611	3.9	92	0.03
46	tert-butyl ethyl ether	10.000	9.819	1.8	92	0.03
48 C	1,1,1-trichloroethane	10.000	11.348	-13.5	106	0.03
49	1,1-dichloropropene	10.000	9.904	1.0	92	0.03
50 C	benzene	10.000	9.732	2.7	93	0.03
52 C	carbon tetrachloride	10.000	10.765	-7.7	96	0.03
53	cyclohexane	10.000	10.077	-0.8	97	0.03
54	tert-amyl methyl ether	10.000	9.936	0.6	91	0.03
55	dibromomethane	10.000	10.263	-2.6	97	0.03
56 C	1,2-dichloropropane	10.000	12.262	-22.6	118	0.03
57	bromodichloromethane	10.000	9.885	1.2	91	0.03
58 C	1,4-dioxane	10.000	11.035	-10.4	105	0.03
59 C	trichloroethene	10.000	11.995	-19.9	114	0.03
60 C	2,2,4-trimethylpentane	10.000	10.581	-5.8	100	0.03
61	methyl methacrylate	10.000	9.528	4.7	79	0.03
62	heptane	10.000	12.312	-23.1	115	0.03
63 C	cis-1,3-dichloropropene	10.000	11.071	-10.7	103	0.03
64 C	4-methyl-2-pentanone	10.000	12.784	-27.8	116	0.03
65	trans-1,3-dichloropropene	10.000	9.578	4.2	88	0.03
66 C	1,1,2-trichloroethane	10.000	11.527	-15.3	111	0.03
67 I	chlorobenzene-D5	10.000	10.000	0.0	87	0.02
68 C	toluene	10.000	12.007	-20.1	109	0.03
71	1,3-dichloropropane	10.000	10.355	-3.6	89	0.03
72	2-hexanone	10.000	14.029	-40.3#	114	0.03
74	dibromochloromethane	10.000	12.935	-29.4	110	0.02
75 C	1,2-dibromoethane	10.000	11.247	-12.5	99	0.02
76	butyl acetate	10.000	10.198	-2.0	87	0.03
77	octane	10.000	10.159	-1.6	89	0.03
78 C	tetrachloroethene	10.000	11.519	-15.2	102	0.02
79	1,1,1,2-tetrachloroethane	10.000	11.547	-15.5	100	0.02
80 C	chlorobenzene	10.000	11.441	-14.4	101	0.03
81 C	ethylbenzene	10.000	12.181	-21.8	108	0.02
83 C	m+p-xylene	20.000	24.782	-23.9	108	0.03

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38754.D
 Acq On : 20 Mar 2020 1:32 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353541-3,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:43:06 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
84 C	bromoform	10.000	11.876	-18.8	97	0.02
85 C	styrene	10.000	11.498	-15.0	99	0.02
86 C	1,1,2,2-tetrachloroethane	10.000	12.390	-23.9	105	0.03
87 C	o-xylene	10.000	12.932	-29.3	111	0.03
88	1,2,3-trichloropropane	10.000	10.143	-1.4	86	0.02
89	nonane	10.000	11.999	-20.0	102	0.03
91 C	isopropylbenzene	10.000	10.863	-8.6	93	0.03
92	bromobenzene	10.000	10.109	-1.1	84	0.03
93	2-chlorotoluene	10.000	11.332	-13.3	99	0.02
94	n-propylbenzene	10.000	11.320	-13.2	97	0.03
95	4-chlorotoluene	10.000	11.196	-12.0	97	0.02
96	4-ethyl toluene	10.000	11.539	-15.4	97	0.02
97	1,3,5-trimethylbenzene	10.000	12.097	-21.0	104	0.02
98	tert-butylbenzene	10.000	11.810	-18.1	95	0.03
99	1,2,4-trimethylbenzene	10.000	12.988	-29.9	106	0.03
100	decane	10.000	11.197	-12.0	93	0.02
101 C	Benzyl Chloride	10.000	12.634	-26.3	93	0.03
102	1,3-dichlorobenzene	10.000	12.104	-21.0	103	0.03
103 C	1,4-dichlorobenzene	10.000	12.115	-21.2	98	0.02
104	sec-butylbenzene	10.000	11.013	-10.1	90	0.02
106	p-isopropyltoluene	10.000	10.956	-9.6	85	0.02
107	1,2-dichlorobenzene	10.000	12.085	-20.9	103	0.02
108	n-butylbenzene	10.000	12.027	-20.3	96	0.02
111 C	1,2-dibromo-3-chloropropane	10.000	11.516	-15.2	85	0.03
112	undecane	10.000	11.620	-16.2	92	0.03
114	dodecane	10.000	11.903	-19.0	86	0.02
115 C	1,2,4-trichlorobenzene	10.000	13.816	-38.2#	101	0.02
116	naphthalene	10.000	12.417	-24.2	89	0.02
117	1,2,3-trichlorobenzene	10.000	11.679	-16.8	82	0.02
119 C	hexachlorobutadiene	10.000	14.611	-46.1#	120	0.02

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 0 CCC's out = 2

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38754.D
 Acq On : 20 Mar 2020 1:32 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353541-3,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:43:06 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320T\r38754.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.583	49	353543	10.000	ppbV	0.03
Standard Area = 353543			Recovery =	100.00%		
43) 1,4-difluorobenzene	11.847	114	970632	10.000	ppbV	0.03
Standard Area = 970632			Recovery =	100.00%		
67) chlorobenzene-D5	16.567	54	139948	10.000	ppbV	0.02
Standard Area = 139948			Recovery =	100.00%		

System Monitoring Compounds

Target Compounds					Qvalue	
5) dichlorodifluoromethane	4.000	85	340013	10.640	ppbV	99
6) chloromethane	4.180	50	175228	11.933	ppbV	96
7) Freon-114	4.306	85	459629	11.822	ppbV	94
9) vinyl chloride	4.438	62	197192	11.513	ppbV	97
10) 1,3-butadiene	4.606	54	184419	10.739	ppbV	87
13) bromomethane	4.924	94	170280	12.008	ppbV	95
14) chloroethane	5.146	64	105516	12.115	ppbV	97
15) ethanol	5.320	31	688947	50.027	ppbV #	80
17) vinyl bromide	5.570	106	192187	11.803	ppbV	99
19) acetone	5.880	43	1327673	57.892	ppbV #	84
21) trichlorofluoromethane	6.090	101	305977	12.270	ppbV	98
22) isopropyl alcohol	6.213	45	916909	31.270	ppbV #	96
26) 1,1-dichloroethene	6.864	61	254062	10.825	ppbV	92
27) tertiary butyl alcohol	6.942	59	328459	9.346	ppbV	98
28) methylene chloride	7.032	49	242639	10.990	ppbV	99
29) 3-chloropropene	7.170	41	364211	12.578	ppbV	93
30) carbon disulfide	7.320	76	618756	9.590	ppbV	97
31) Freon 113	7.356	101	373192	10.969	ppbV	99
32) trans-1,2-dichloroethene	8.158	61	296925	10.801	ppbV	97
33) 1,1-dichloroethane	8.392	63	374044	11.553	ppbV	100
34) MTBE	8.475	73	592185	10.565	ppbV	97
36) 2-butanone	8.875	43	522608	12.017	ppbV	96
37) cis-1,2-dichloroethene	9.392	61	272820	11.501	ppbV	97
38) Ethyl Acetate	9.692	61	84761	11.676	ppbV	99
39) chloroform	9.742	83	351512	10.239	ppbV	97
40) Tetrahydrofuran	10.183	42	318057	11.689	ppbV	94
42) 1,2-dichloroethane	10.592	62	211882	11.184	ppbV	96

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38754.D
 Acq On : 20 Mar 2020 1:32 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353541-3,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:43:06 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320T\r38754.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) hexane	9.650	57	371246	10.311	ppbV	97
48) 1,1,1-trichloroethane	10.875	97	311625	11.348	ppbV	98
50) benzene	11.407	78	683936	9.732	ppbV	99
52) carbon tetrachloride	11.580	117	274453	10.765	ppbV	97
53) cyclohexane	11.720	56	393017	10.077	ppbV	94
56) 1,2-dichloropropane	12.360	63	261176	12.262	ppbV	99
57) bromodichloromethane	12.593	83	370778	9.885	ppbV	98
58) 1,4-dioxane	12.627	88	177883	11.035	ppbV	100
59) trichloroethene	12.640	130	314176	11.995	ppbV	98
60) 2,2,4-trimethylpentane	12.687	57	1212430	10.581	ppbV	95
62) heptane	13.007	43	554356	12.312	ppbV	92
63) cis-1,3-dichloropropene	13.658	75	377301	11.071	ppbV	96
64) 4-methyl-2-pentanone	13.692	43	648864	12.784	ppbV	94
65) trans-1,3-dichloropropene	14.275	75	303555	9.578	ppbV	95
66) 1,1,2-trichloroethane	14.475	97	268889	11.527	ppbV	94
68) toluene	14.792	91	852731	12.007	ppbV	100
72) 2-hexanone	15.067	43	584802	14.029	ppbV #	87
74) dibromochloromethane	15.233	129	396414	12.935	ppbV	99
75) 1,2-dibromoethane	15.483	107	380331	11.247	ppbV	99
78) tetrachloroethene	15.950	166	359495	11.519	ppbV	93
80) chlorobenzene	16.608	112	647553	11.441	ppbV	97
81) ethylbenzene	16.958	91	1030325	12.181	ppbV	95
83) m+p-xylene	17.117	91	1716028	24.782	ppbV	94
84) bromoform	17.183	173	339273	11.876	ppbV	100
85) styrene	17.442	104	710531	11.498	ppbV	98
86) 1,1,2,2-tetrachloroethane	17.533	83	598789	12.390	ppbV	99
87) o-xylene	17.533	91	877460	12.932	ppbV	95
96) 4-ethyl toluene	18.592	105	1260588	11.539	ppbV	97
97) 1,3,5-trimethylbenzene	18.650	105	1074869	12.097	ppbV	96
99) 1,2,4-trimethylbenzene	18.983	105	1073784	12.988	ppbV	95
101) Benzyl Chloride	19.100	91	730511	12.634	ppbV	98
102) 1,3-dichlorobenzene	19.108	146	615768	12.104	ppbV	99
103) 1,4-dichlorobenzene	19.158	146	586145	12.115	ppbV	97
107) 1,2-dichlorobenzene	19.433	146	586153	12.085	ppbV	100
115) 1,2,4-trichlorobenzene	20.900	180	417816	13.816	ppbV	100
119) hexachlorobutadiene	21.333	225	547909	14.611	ppbV	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38754.D
 Acq On : 20 Mar 2020 1:32 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353541-3,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

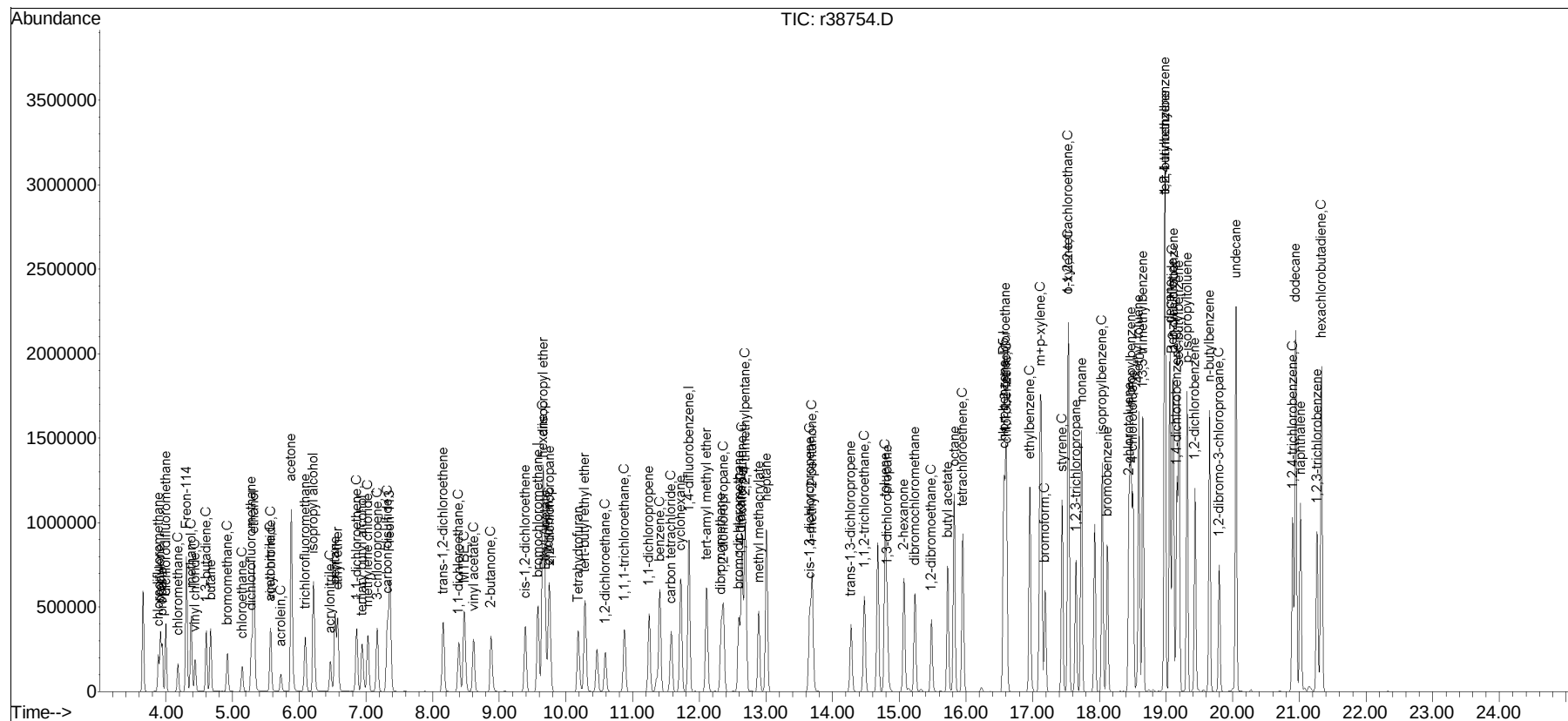
Quant Time: Mar 20 14:43:06 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

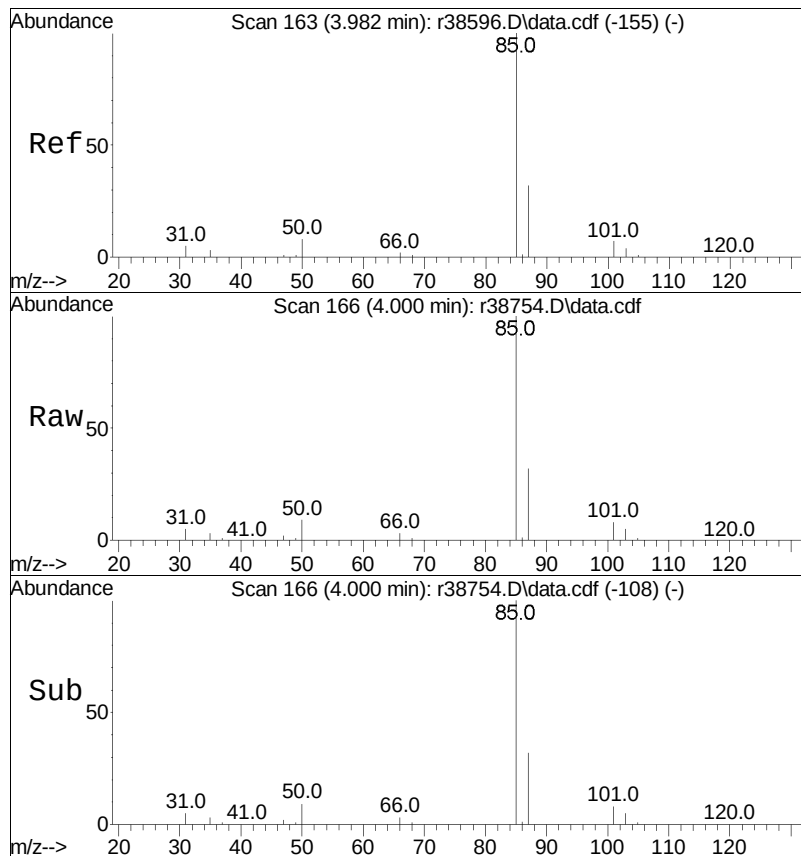
CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320T\r38754.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)


```
Data Path   : O:\Forensics\Data\Airpiano3\2020\03\200320T\
Data File  : r38754.D
Acq On     : 20 Mar 2020    1:32 PM
Operator   : AIRPIANO3:EW
Sample     : WG1353541-3,3,250,250
Misc       : WG1353541,ICAL16594
ALS Vial   : 0    Sample Multiplier: 1
```

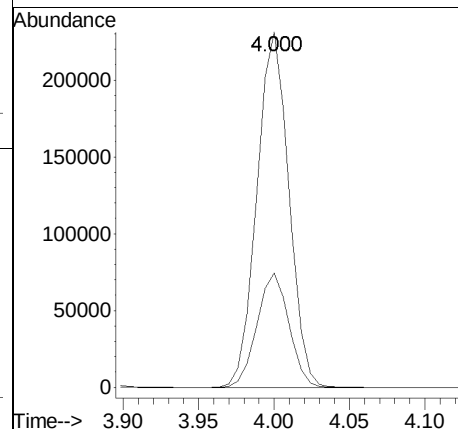
Quant Time: Mar 20 14:43:06 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Mar 12 17:27:58 2020
Response via : Initial Calibration

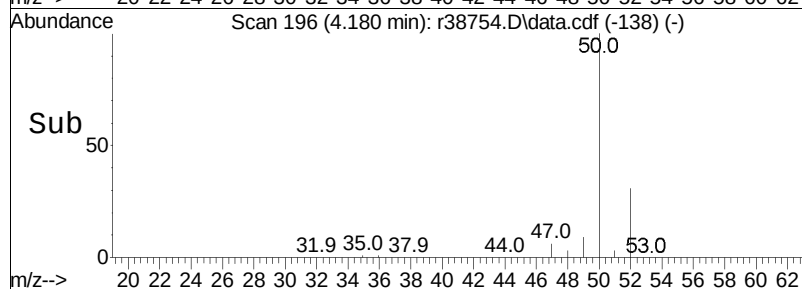
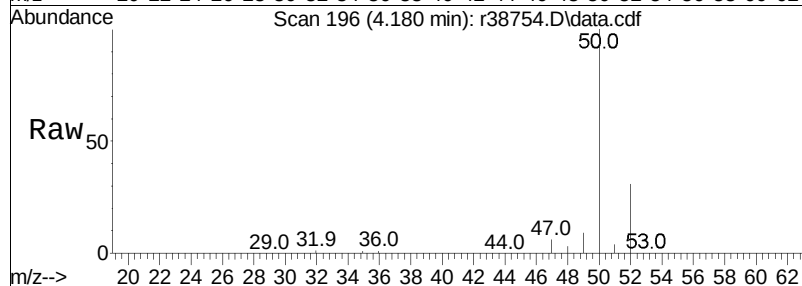
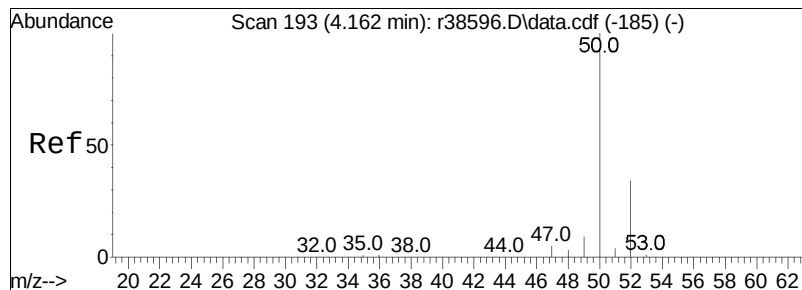




#5
dichlorodifluoromethane
Concen: 10.64 ppbV
RT: 4.000 min Scan# 166
Delta R.T. 0.018 min
Lab File: r38754.D
Acq: 20 Mar 2020 1:32 PM

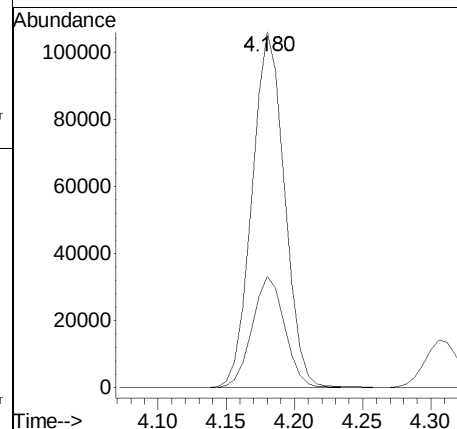
Tgt Ion	Ratio	Lower	Upper
85	100		
87	32.2	25.4	38.0

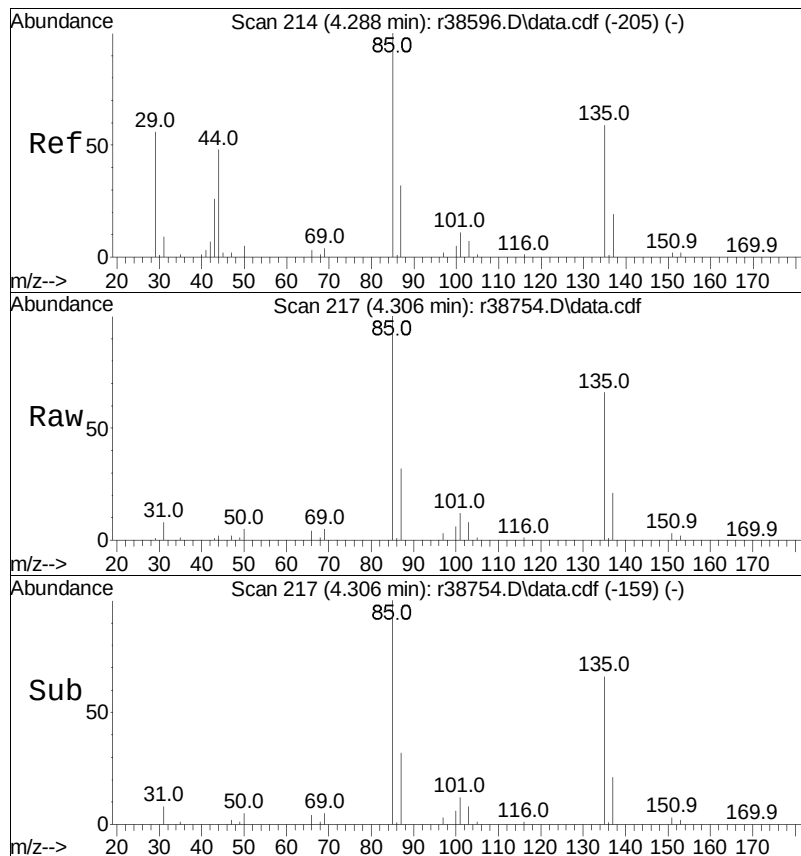




#6
 chloromethane
 Concen: 11.93 ppbV
 RT: 4.180 min Scan# 196
 Delta R.T. 0.018 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

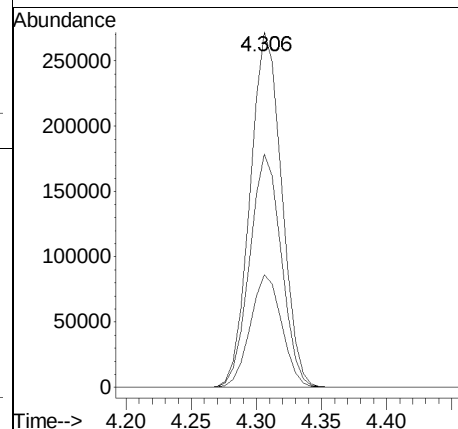
Tgt	Ion	Ratio	Lower	Upper
50	100			
52	31.3	26.9	40.3	

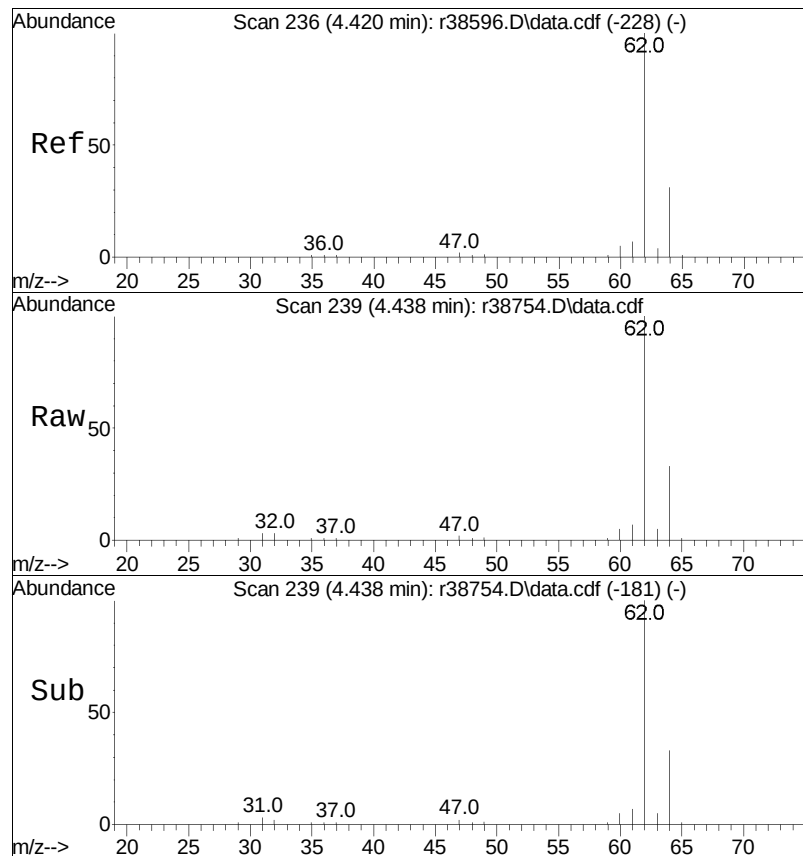




#7
 Freon-114
 Concen: 11.82 ppbV
 RT: 4.306 min Scan# 217
 Delta R.T. 0.018 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

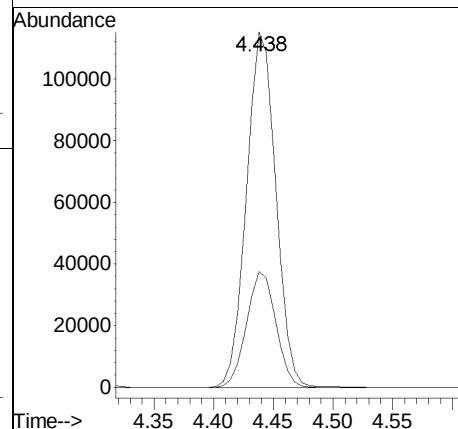
Tgt Ion:	85	Resp:	459629
Ion Ratio	Lower	Upper	
85	100		
87	31.7	25.4	38.0
135	65.6	47.1	70.7

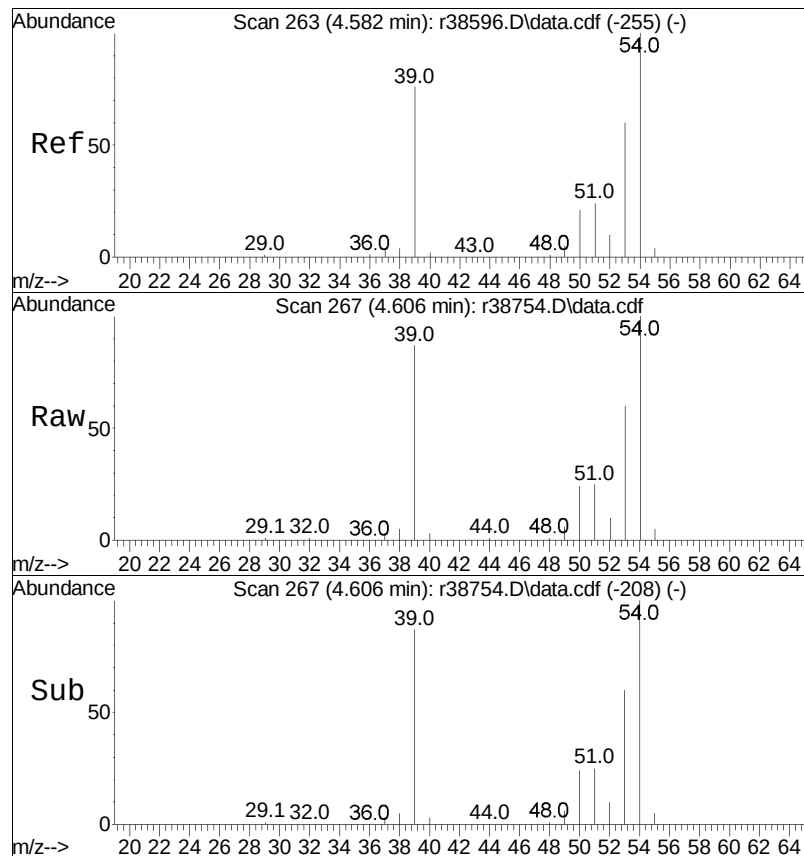




#9
 vinyl chloride
 Concen: 11.51 ppbV
 RT: 4.438 min Scan# 239
 Delta R.T. 0.018 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

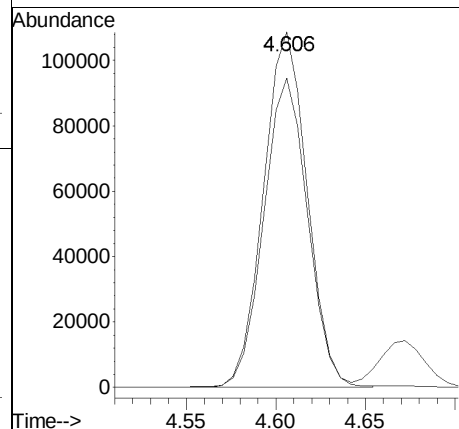
Tgt Ion	Ratio	Lower	Upper
62	100		
64	32.6	24.6	36.8

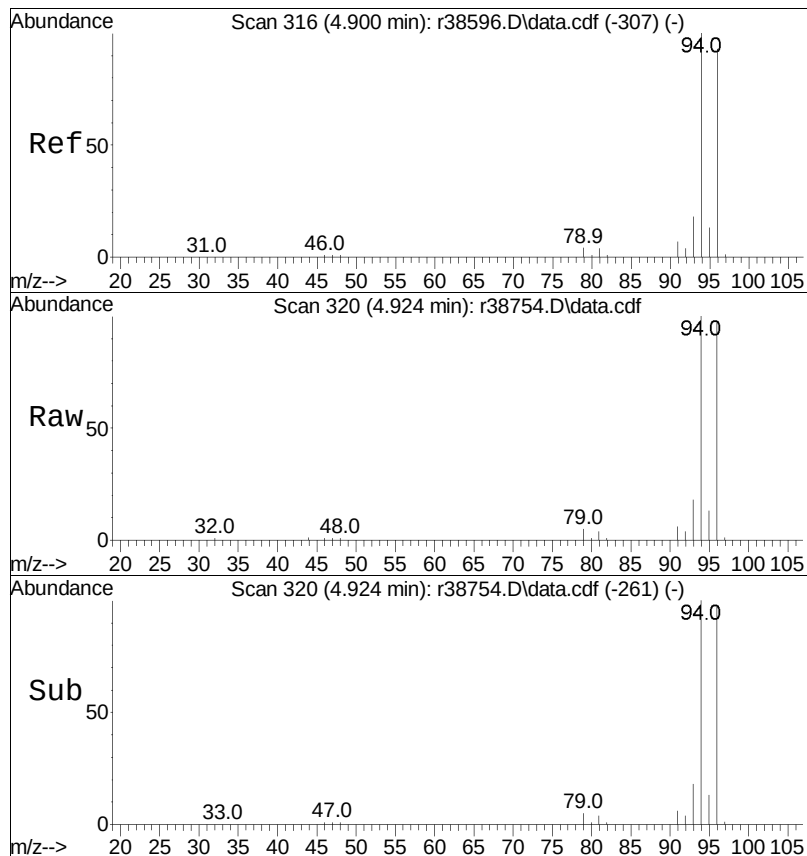




#10
 1,3-butadiene
 Concen: 10.74 ppbV
 RT: 4.606 min Scan# 267
 Delta R.T. 0.024 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

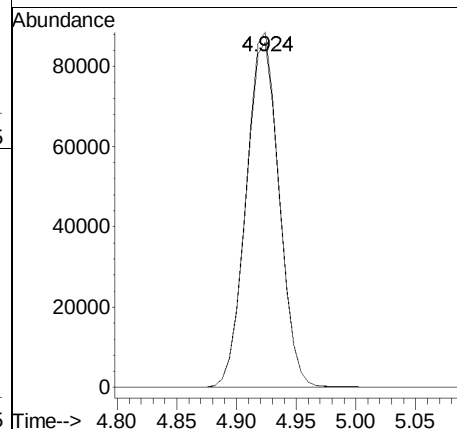
Tgt	Ion	Resp	Lower	Upper
54	100	184419		
39	87.0	60.9	91.3	

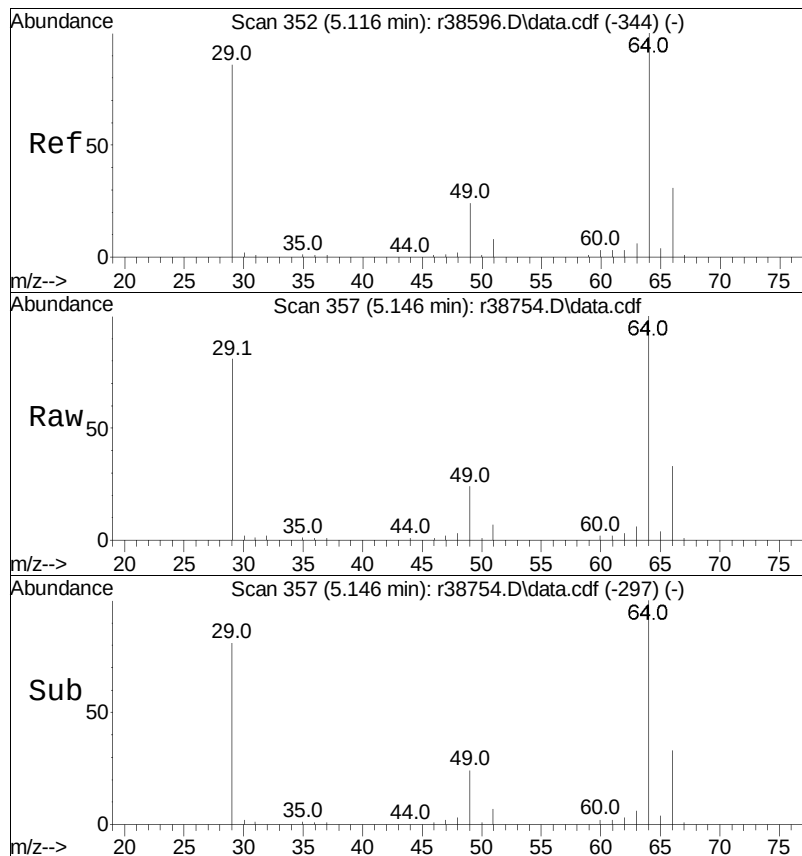




#13
 bromomethane
 Concen: 12.01 ppbV
 RT: 4.924 min Scan# 320
 Delta R.T. 0.024 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

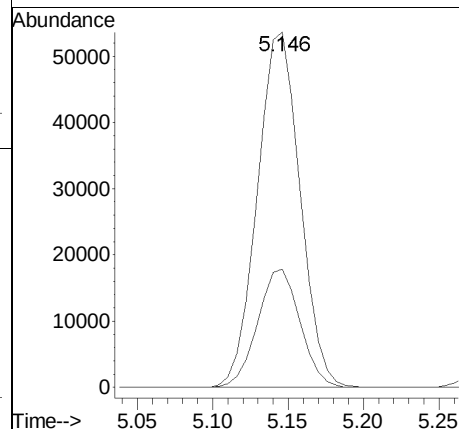
Tgt Ion	Ratio	Lower	Upper
94	100		
96	97.2	74.2	111.4

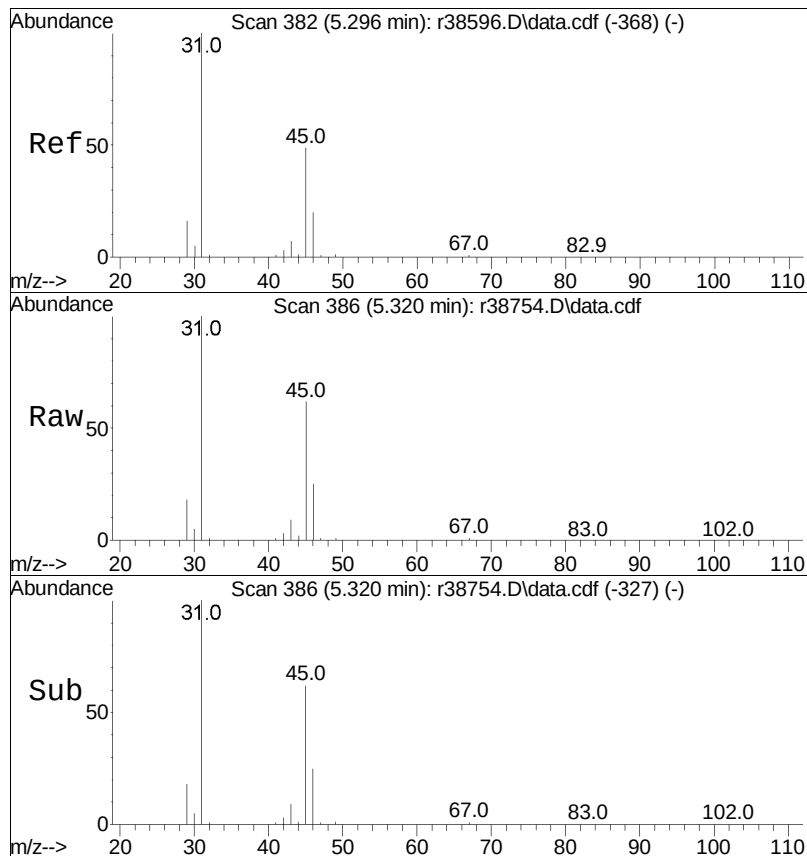




#14
 chloroethane
 Concen: 12.11 ppbV
 RT: 5.146 min Scan# 357
 Delta R.T. 0.030 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

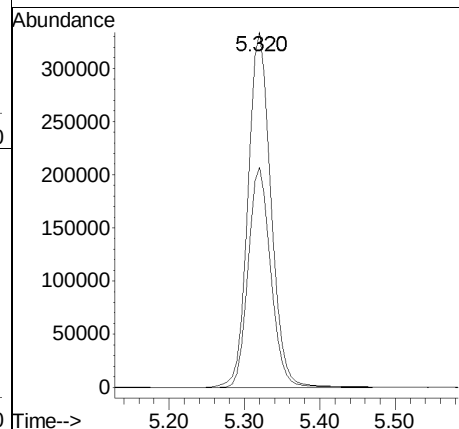
Tgt Ion	Ratio	Lower	Upper
64	100		
66	33.3	25.1	37.7

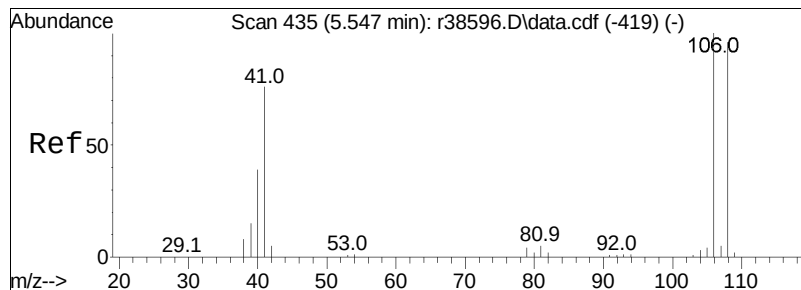




#15
 ethanol
 Concen: 50.03 ppbV
 RT: 5.320 min Scan# 386
 Delta R.T. 0.024 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

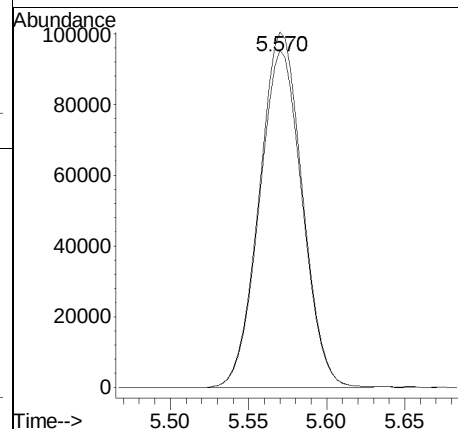
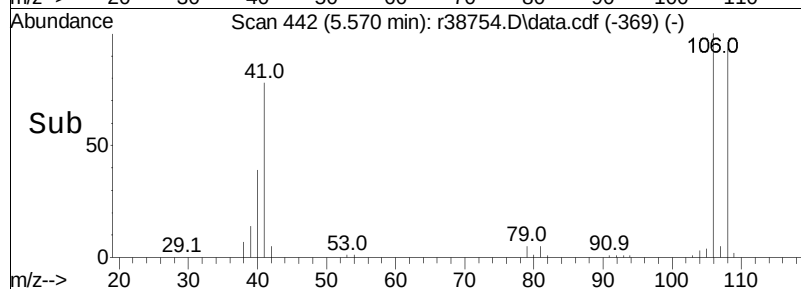
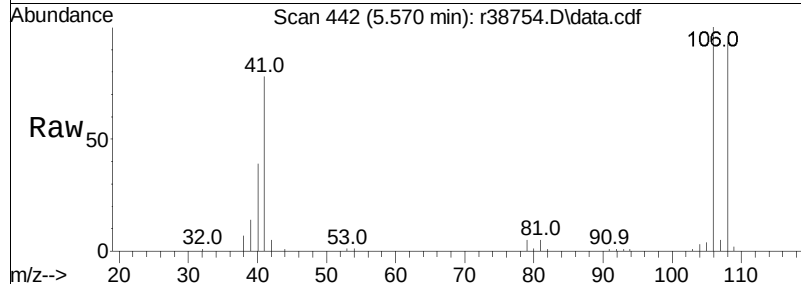
Tgt Ion:	31	Resp:	688947
Ion Ratio	Lower	Upper	
31	100		
45	62.0	39.0	58.4#

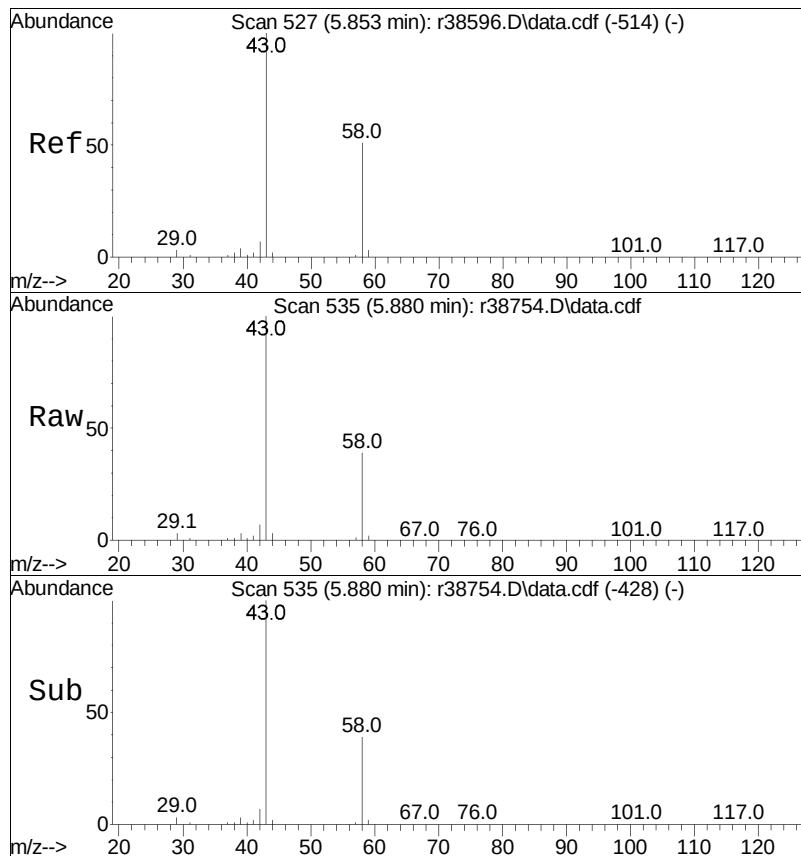




#17
 vinyl bromide
 Concen: 11.80 ppbV
 RT: 5.570 min Scan# 442
 Delta R.T. 0.023 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

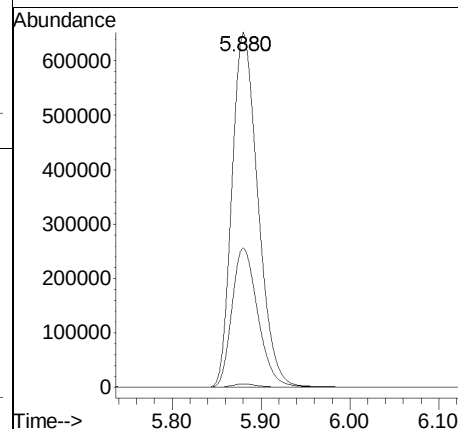
Tgt Ion	Ratio	Lower	Upper
106	100		
108	95.0	76.8	115.2

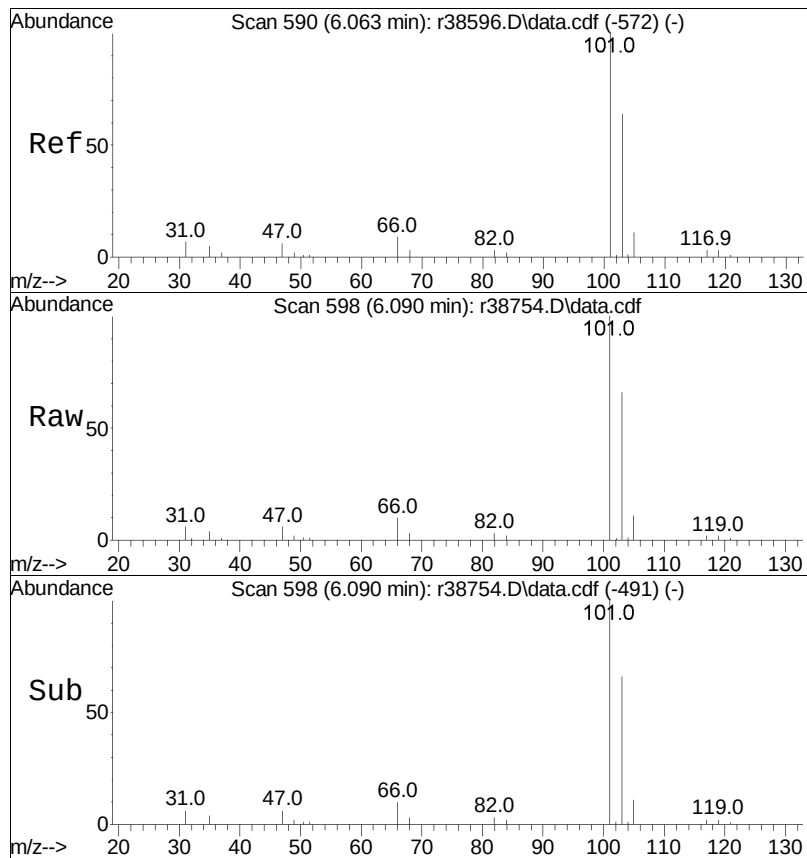




#19
acetone
Concen: 57.89 ppbV
RT: 5.880 min Scan# 535
Delta R.T. 0.027 min
Lab File: r38754.D
Acq: 20 Mar 2020 1:32 PM

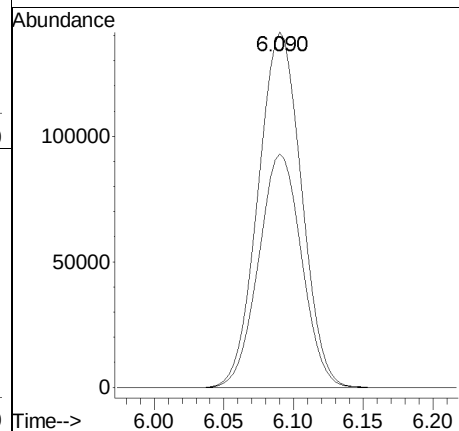
Tgt Ion	Ratio	Lower	Upper
43	100		
58	39.4	40.6	60.8#
57	1.0	1.0	1.6#

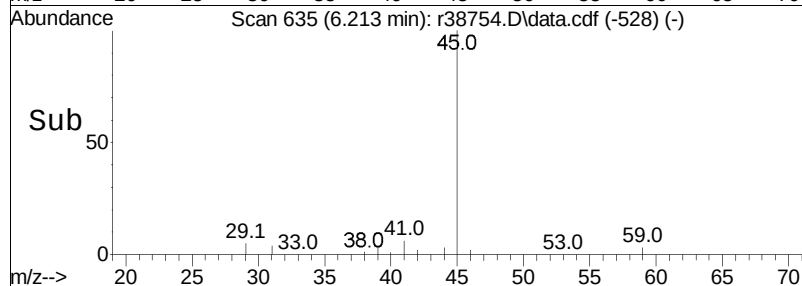
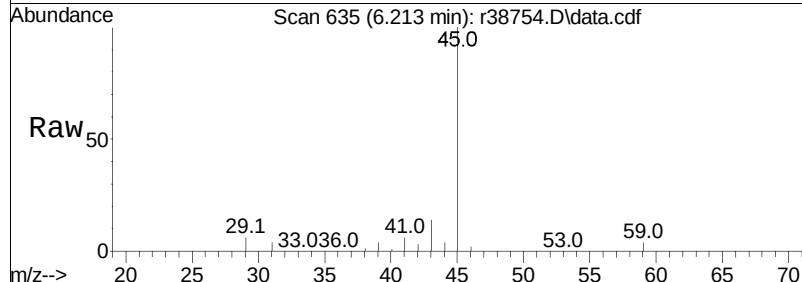
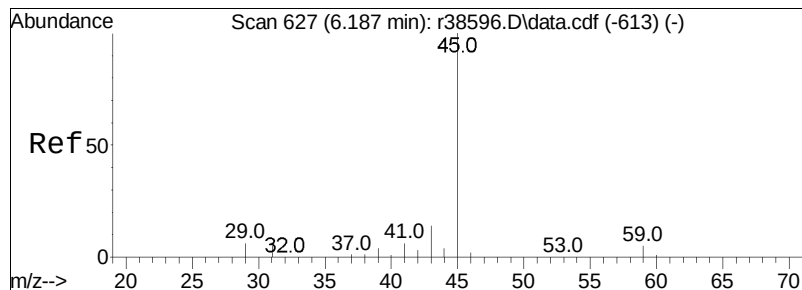




#21
 trichlorofluoromethane
 Concen: 12.27 ppbV
 RT: 6.090 min Scan# 598
 Delta R.T. 0.027 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

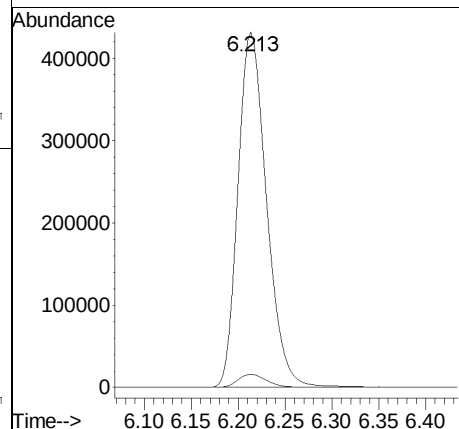
Tgt	Ion	Ratio	Lower	Upper
101	101	100		
103	65.7	51.4	77.0	

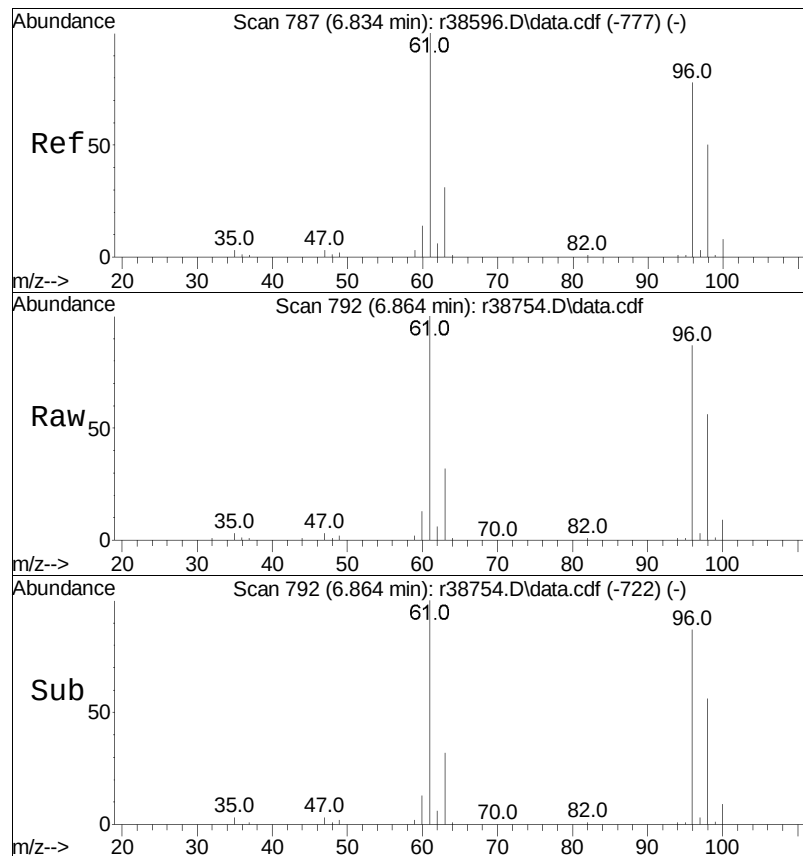




#22
isopropyl alcohol
Concen: 31.27 ppbV
RT: 6.213 min Scan# 635
Delta R.T. 0.027 min
Lab File: r38754.D
Acq: 20 Mar 2020 1:32 PM

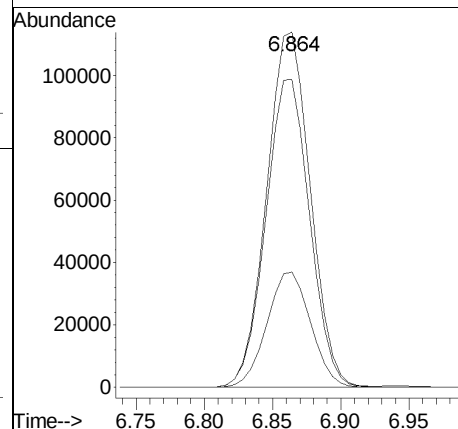
Tgt Ion:	45	59	Ratio	100	3.7	Resp:	916909	Lower	3.9	Upper	5.9#

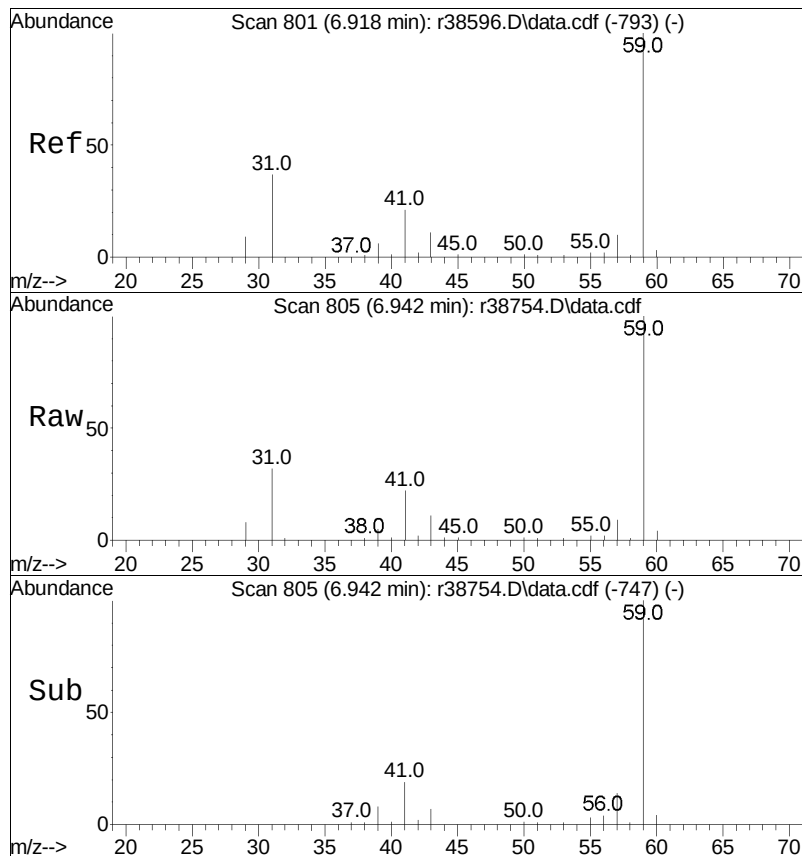




#26
 1,1-dichloroethene
 Concen: 10.83 ppbV
 RT: 6.864 min Scan# 792
 Delta R.T. 0.030 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

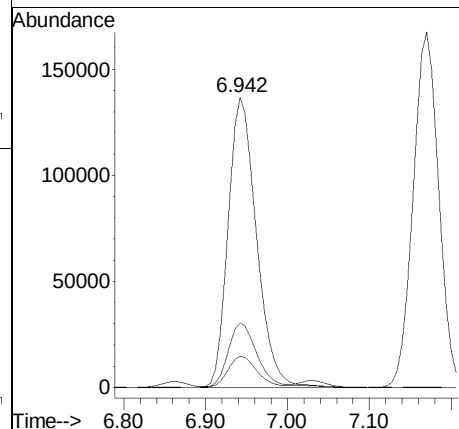
Tgt	Ion: 61	Resp:	254062
Ion	Ratio	Lower	Upper
61	100		
96	86.6	62.4	93.6
63	32.5	24.4	36.6

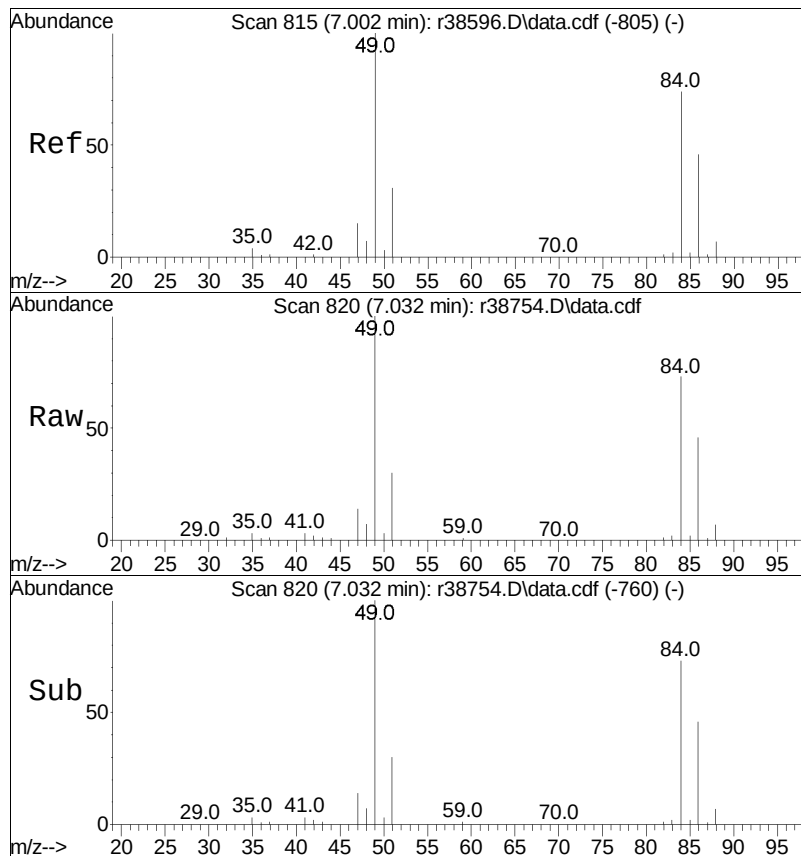




#27
 tertiary butyl alcohol
 Concen: 9.35 ppbV
 RT: 6.942 min Scan# 805
 Delta R.T. 0.024 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

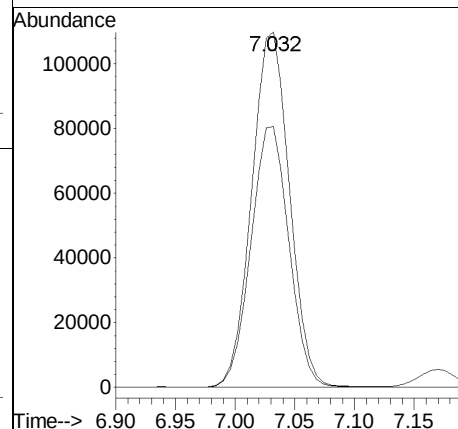
Tgt Ion:	59	Resp:	328459
Ion Ratio	Lower	Upper	
59	100		
41	22.3	16.9	25.3
43	10.8	8.9	13.3

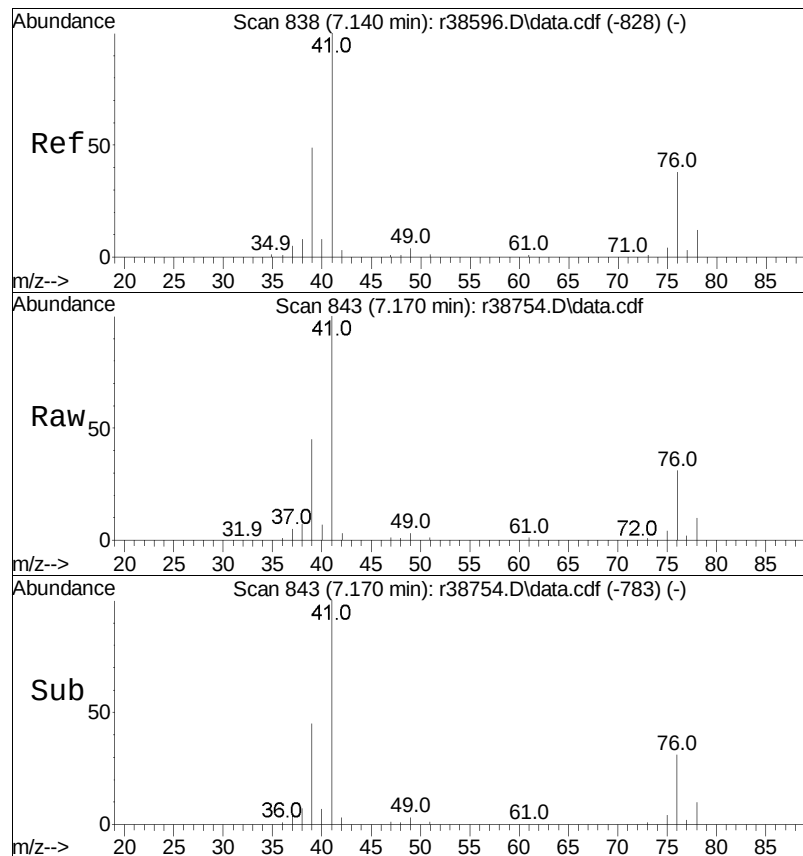




#28
 methylene chloride
 Concen: 10.99 ppbV
 RT: 7.032 min Scan# 820
 Delta R.T. 0.030 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

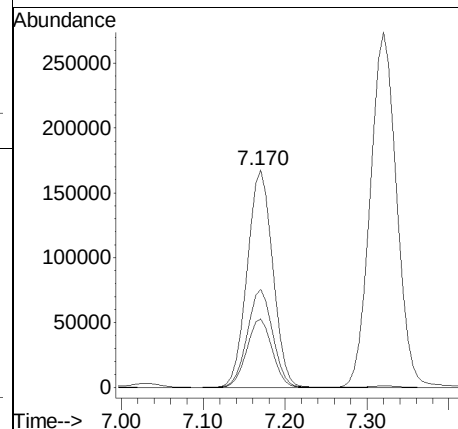
Tgt Ion:	49	84	Ratio	Lower	Upper
Resp:	242639				
	100				
	73.4		59.3	88.9	

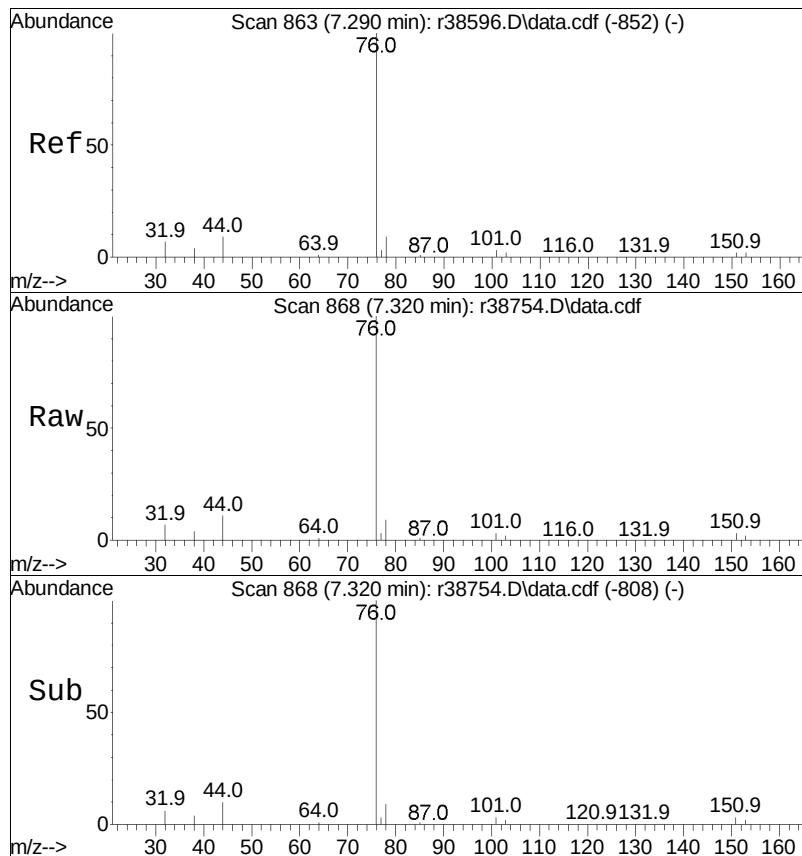




#29
 3-chloropropene
 Concen: 12.58 ppbV
 RT: 7.170 min Scan# 843
 Delta R.T. 0.030 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

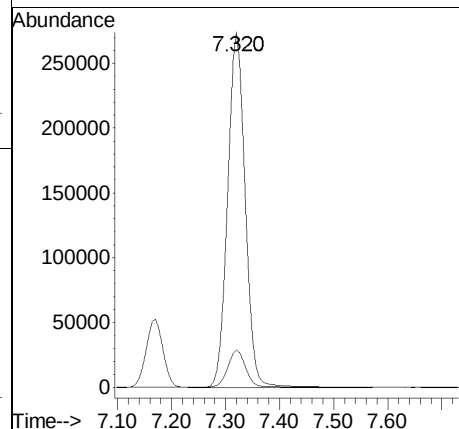
Tgt Ion:	41	Resp:	364211
Ion Ratio	Lower	Upper	
41	100		
39	45.2	38.8	58.2
76	31.5	30.0	45.0

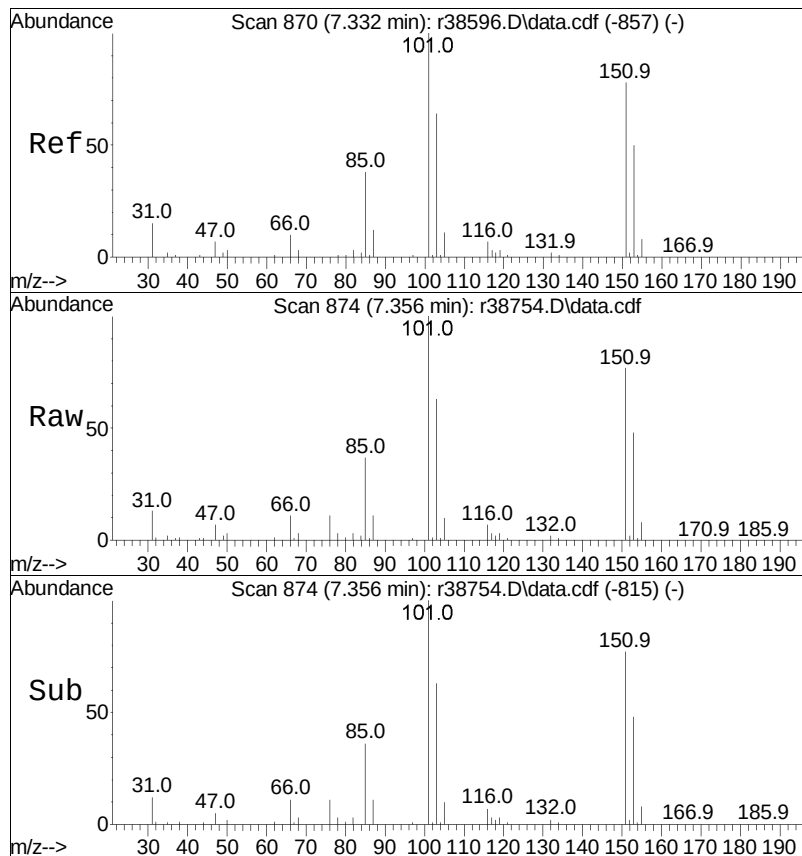




#30
 carbon disulfide
 Concen: 9.59 ppbV
 RT: 7.320 min Scan# 868
 Delta R.T. 0.030 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

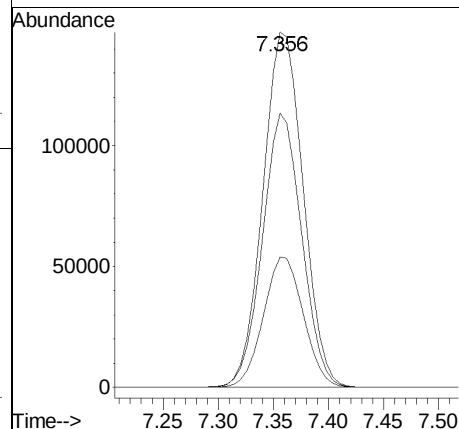
Tgt Ion	Ratio	Lower	Upper
76	100		
44	10.6	7.4	11.2

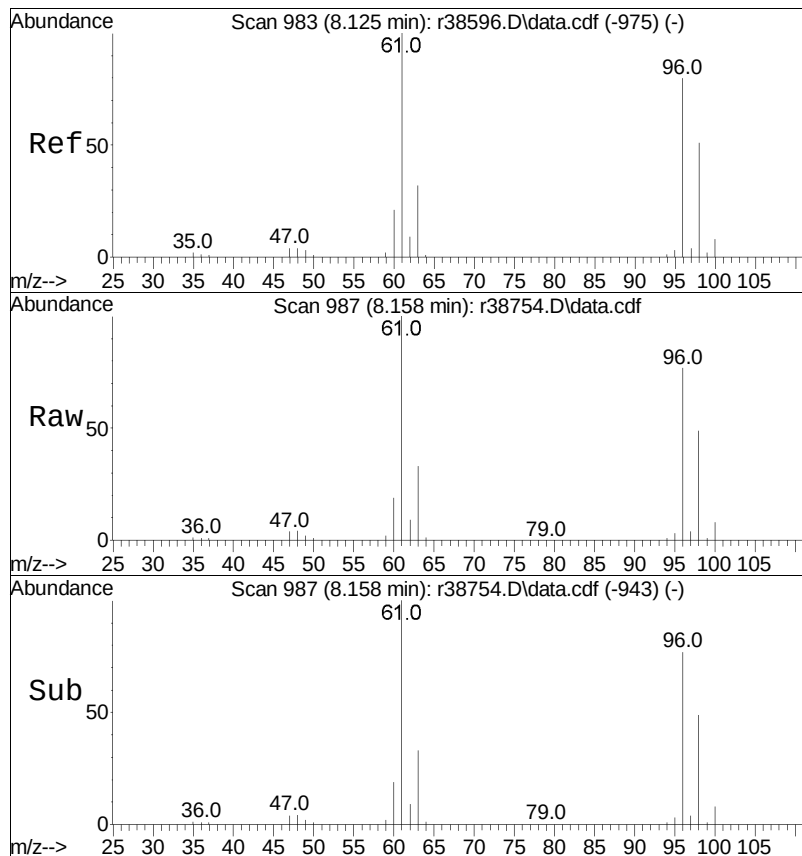




#31
 Freon 113
 Concen: 10.97 ppbV
 RT: 7.356 min Scan# 874
 Delta R.T. 0.024 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

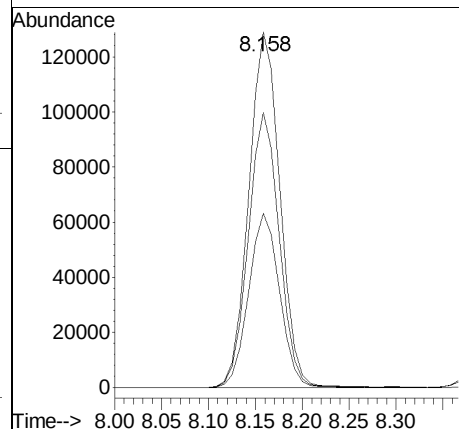
Tgt	Ion:101	Resp:	373192
Ion	Ratio	Lower	Upper
101	100		
85	36.7	30.6	45.8
151	77.2	62.4	93.6

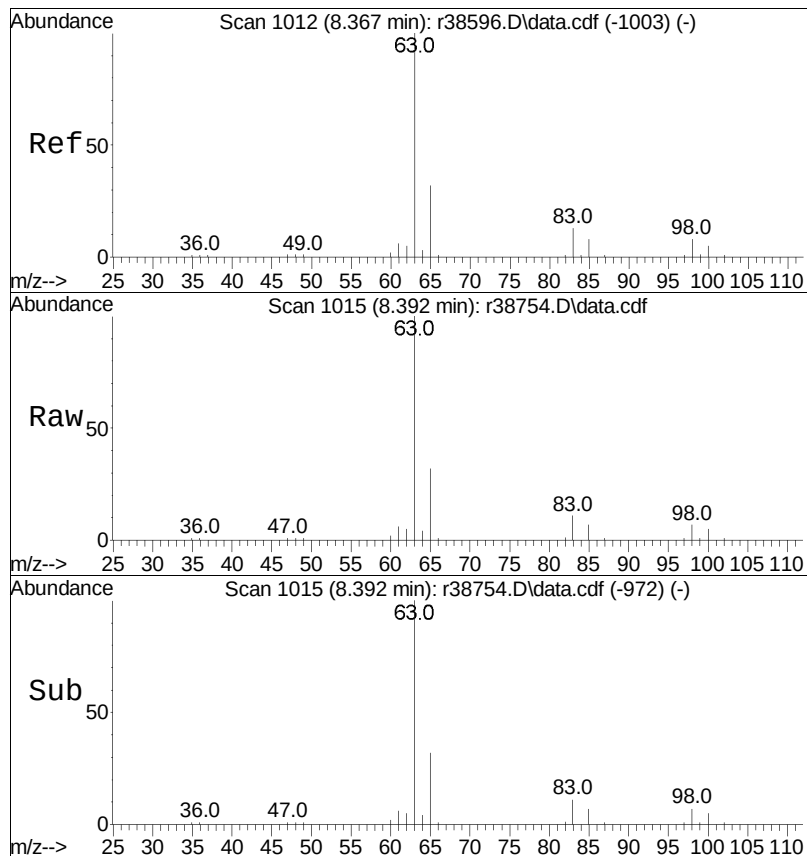




#32
 trans-1,2-dichloroethene
 Concen: 10.80 ppbV
 RT: 8.158 min Scan# 987
 Delta R.T. 0.033 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

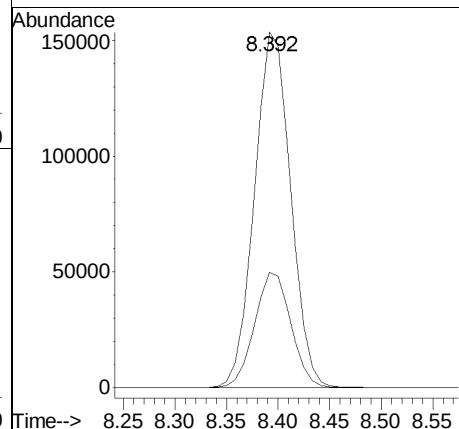
Tgt Ion:	61	Resp:	296925
Ion Ratio	Lower	Upper	
61	100		
96	77.3	64.2	96.4
98	49.0	41.1	61.7

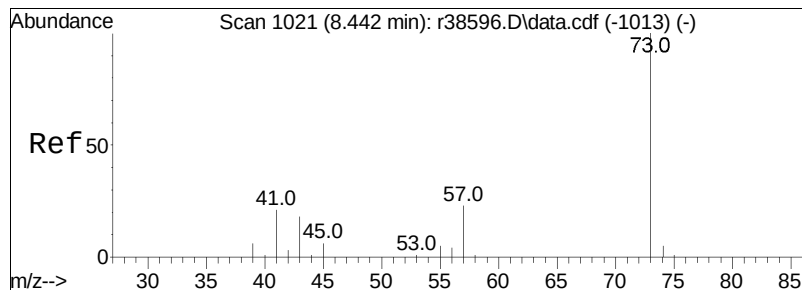




#33
 1,1-dichloroethane
 Concen: 11.55 ppbV
 RT: 8.392 min Scan# 1015
 Delta R.T. 0.025 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

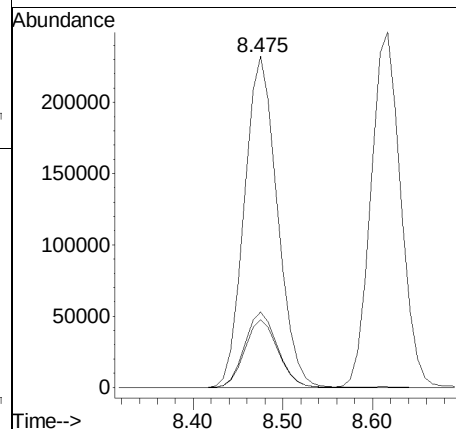
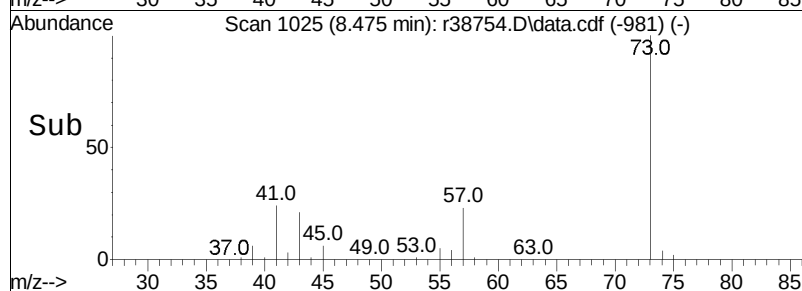
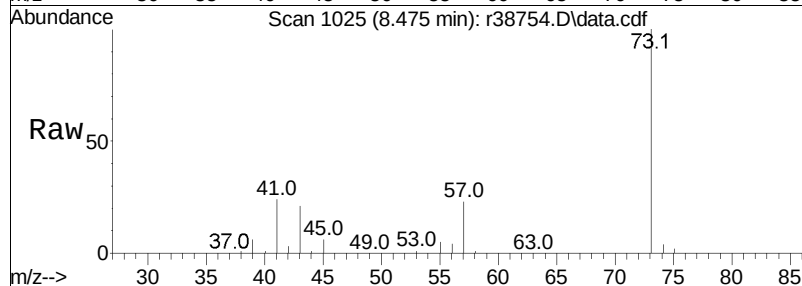
Tgt Ion:	63	Resp:	374044
Ion Ratio	Lower	Upper	
63	100		
65	32.4	25.8	38.6

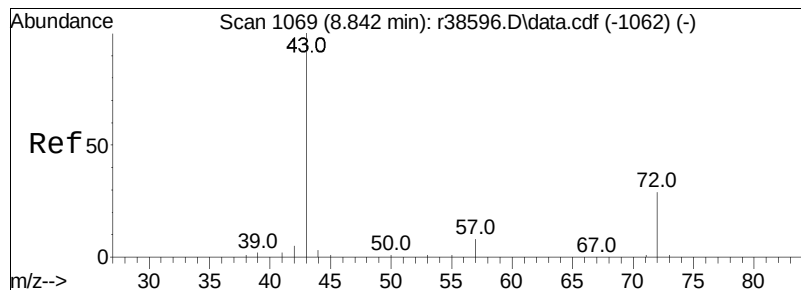




#34
MTBE
Concen: 10.56 ppbV
RT: 8.475 min Scan# 1025
Delta R.T. 0.033 min
Lab File: r38754.D
Acq: 20 Mar 2020 1:32 PM

Tgt Ion	Ratio	Lower	Upper
73	100		
57	22.8	18.7	28.1
43	20.5	14.6	21.8





#36

2-butanone

Concen: 12.02 ppbV

RT: 8.875 min Scan# 1073

Delta R.T. 0.033 min

Lab File: r38754.D

Acq: 20 Mar 2020 1:32 PM

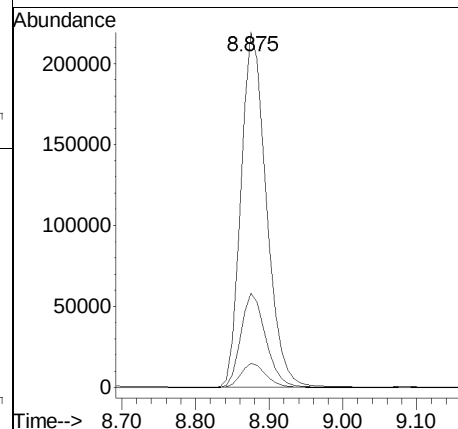
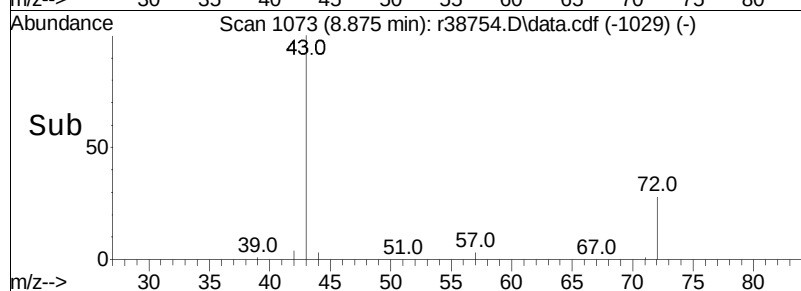
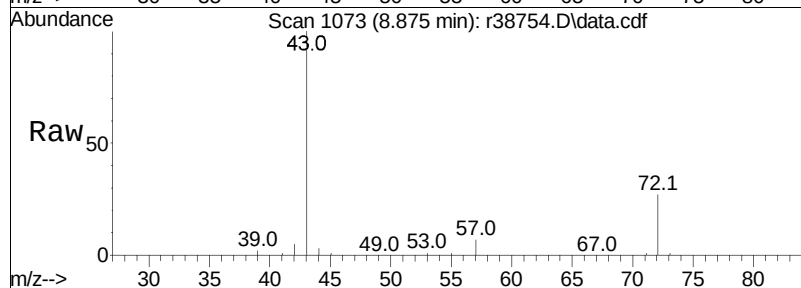
Tgt Ion: 43 Resp: 522608

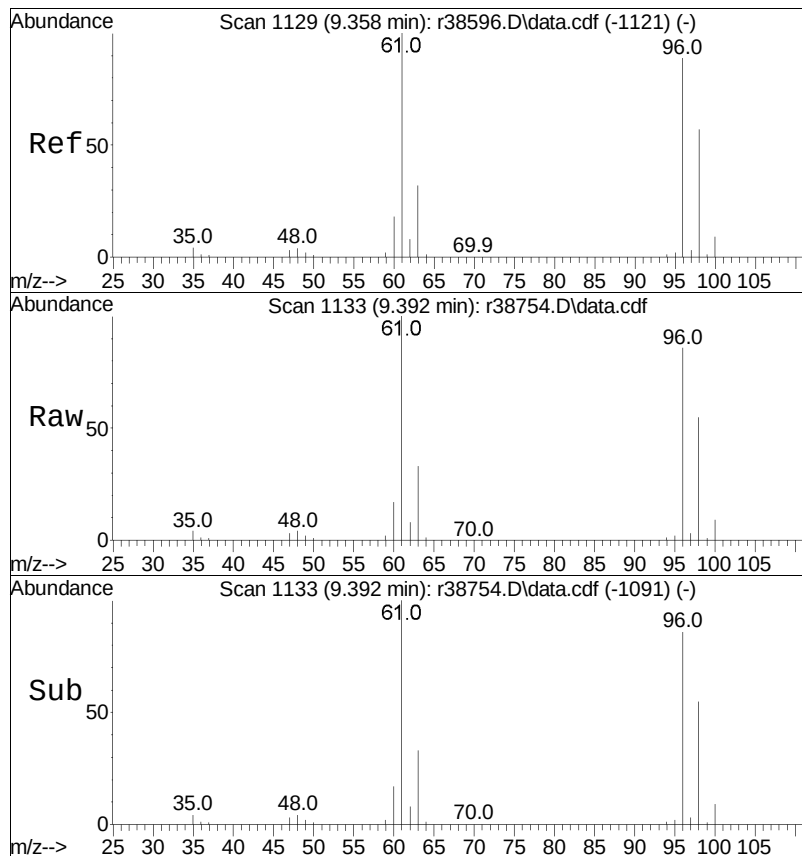
Ion Ratio Lower Upper

43 100

72 26.5 23.1 34.7

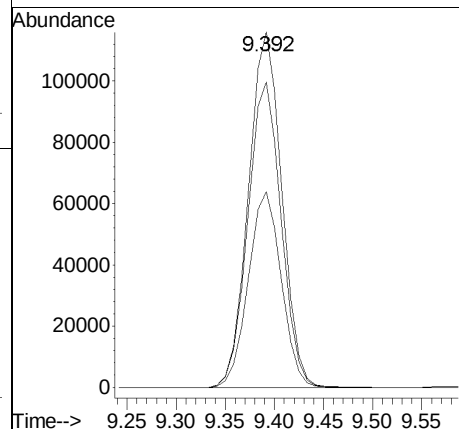
57 6.8 6.3 9.5

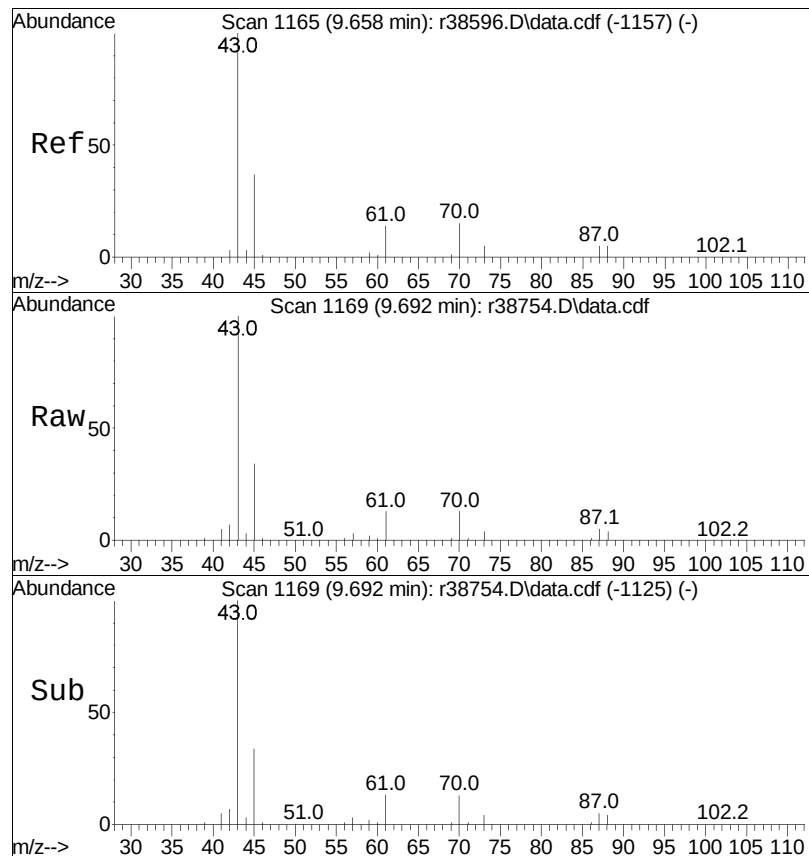




#37
 cis-1,2-dichloroethene
 Concen: 11.50 ppbV
 RT: 9.392 min Scan# 1133
 Delta R.T. 0.033 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

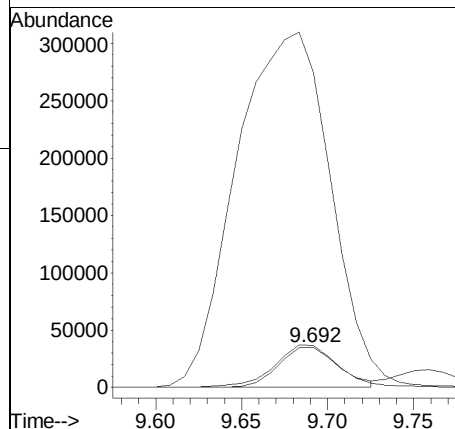
Tgt Ion:	61	Resp:	272820
Ion Ratio	Lower	Upper	
61	100		
96	85.9	71.2	106.8
98	55.1	45.4	68.0

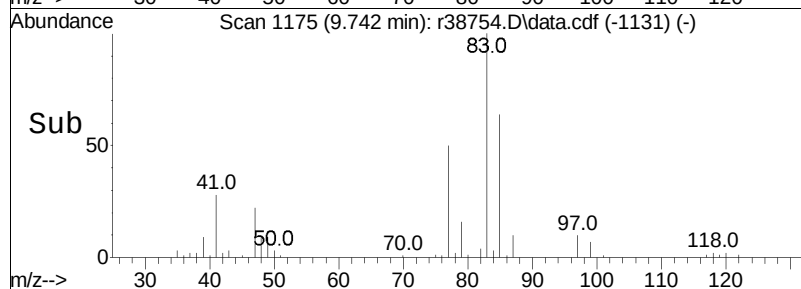
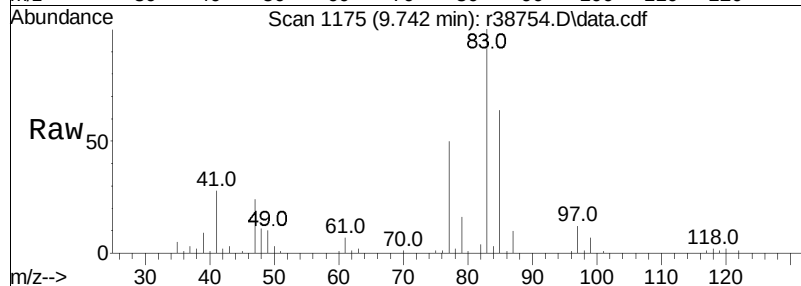
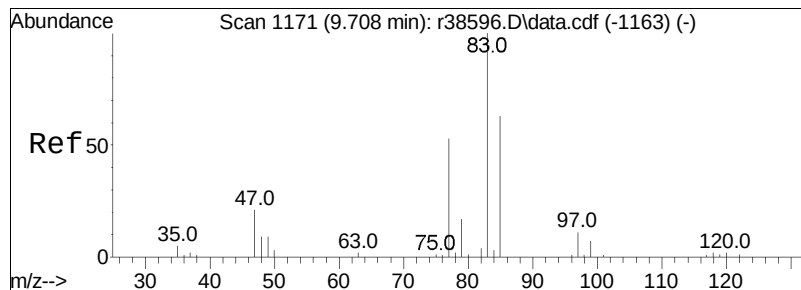




#38
 Ethyl Acetate
 Concen: 11.68 ppbV
 RT: 9.692 min Scan# 1169
 Delta R.T. 0.033 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

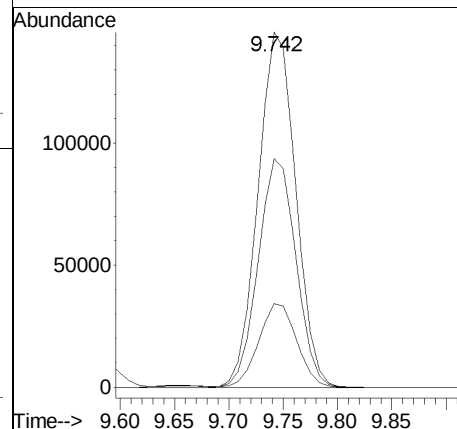
Tgt Ion:	61	Resp:	84761
Ion Ratio	Lower	Upper	
61	100		
70	104.3	85.8	128.6
43	785.7	631.4	947.2

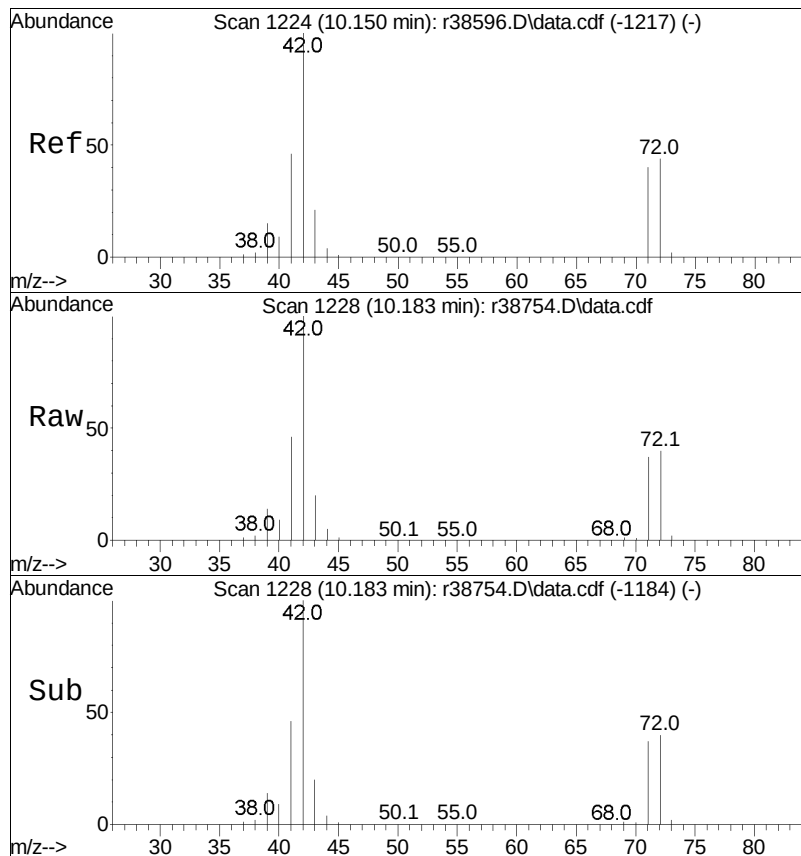




#39
chloroform
Concen: 10.24 ppbV
RT: 9.742 min Scan# 1175
Delta R.T. 0.033 min
Lab File: r38754.D
Acq: 20 Mar 2020 1:32 PM

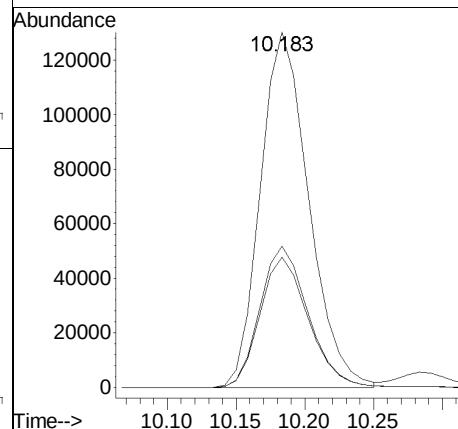
Tgt	Ion	Ratio	Resp	Lower	Upper
83	100		351512		
85	64.4	50.4		75.6	
47	23.6	16.9		25.3	

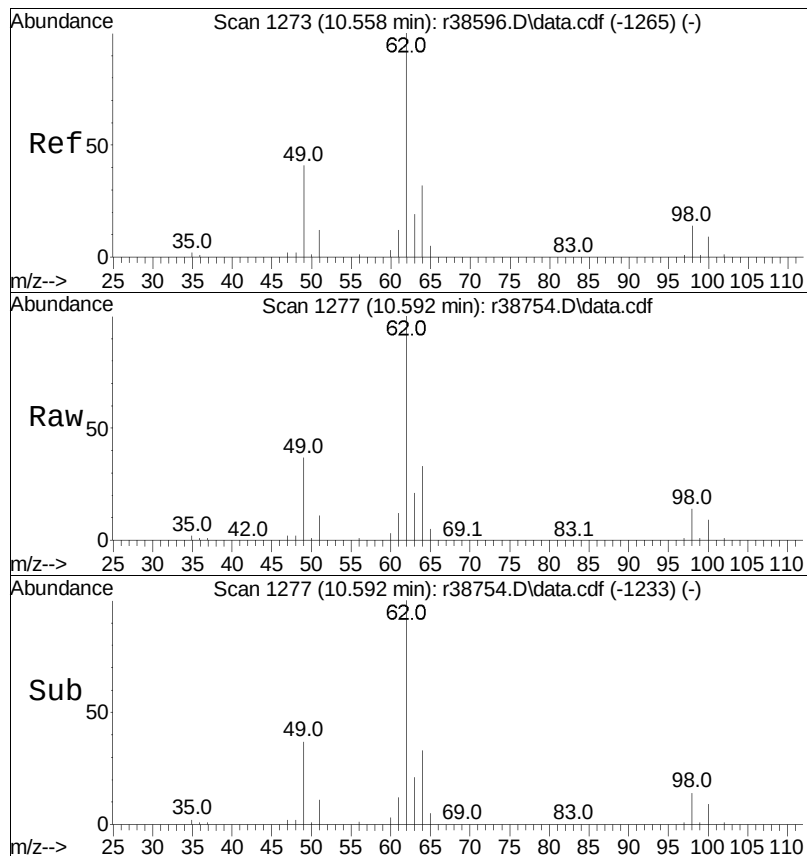




#40
Tetrahydrofuran
Concen: 11.69 ppbV
RT: 10.183 min Scan# 1228
Delta R.T. 0.033 min
Lab File: r38754.D
Acq: 20 Mar 2020 1:32 PM

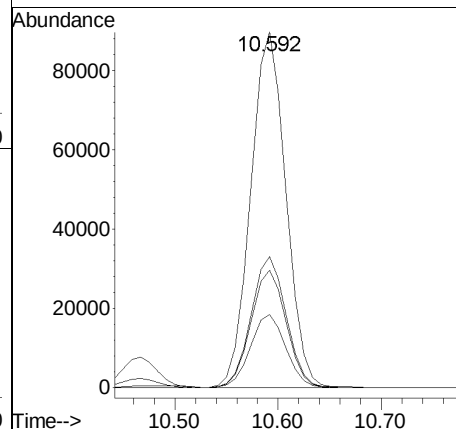
Tgt Ion	Ratio	Lower	Upper
42	100		
71	36.7	31.8	47.8
72	39.8	35.2	52.8

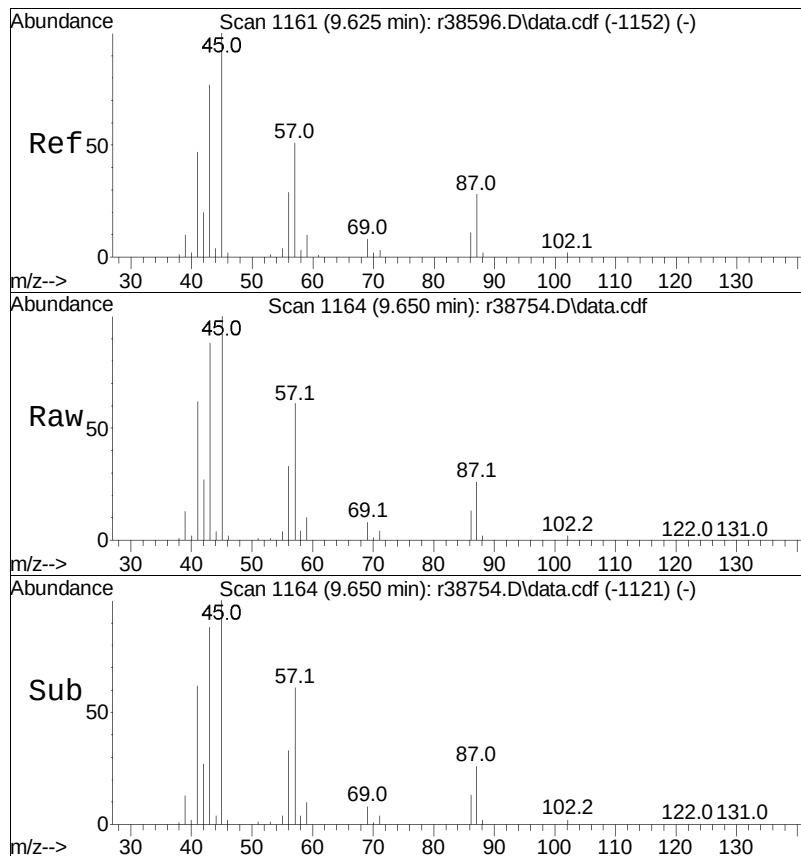




#42
 1,2-dichloroethane
 Concen: 11.18 ppbV
 RT: 10.592 min Scan# 1277
 Delta R.T. 0.033 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

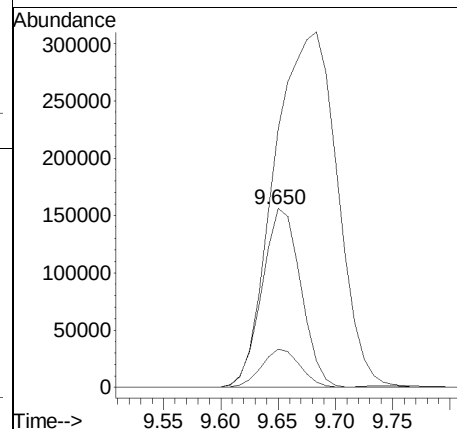
Tgt	Ion: 62	Resp:	211882
Ion	Ratio	Lower	Upper
62	100		
64	33.0	25.4	38.0
49	36.8	32.6	48.8
63	20.6	15.5	23.3

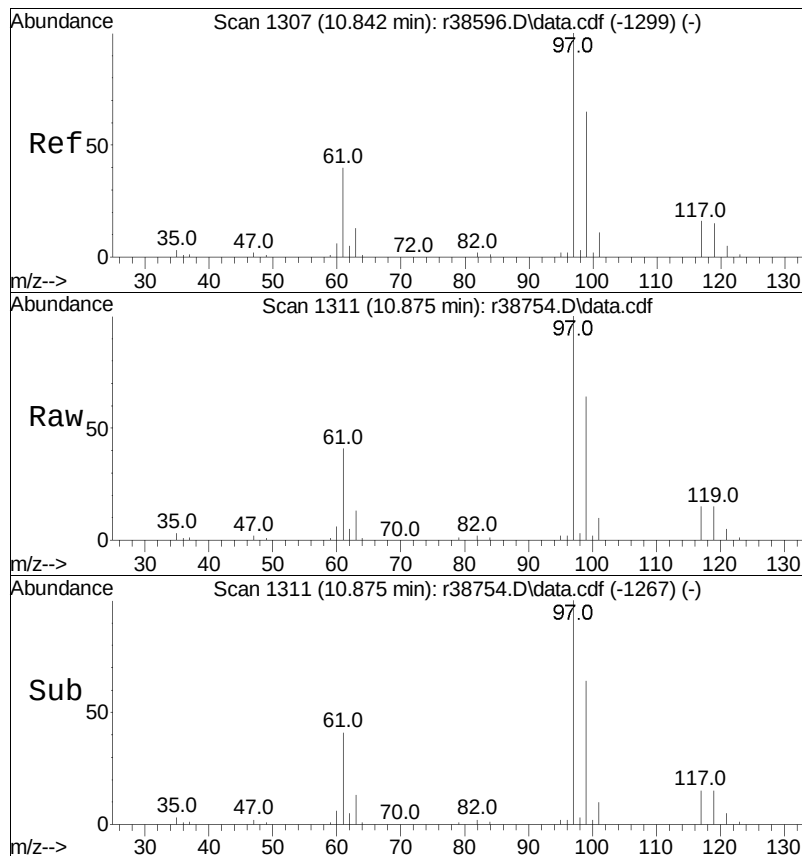




#44
hexane
Concen: 10.31 ppbV
RT: 9.650 min Scan# 1164
Delta R.T. 0.025 min
Lab File: r38754.D
Acq: 20 Mar 2020 1:32 PM

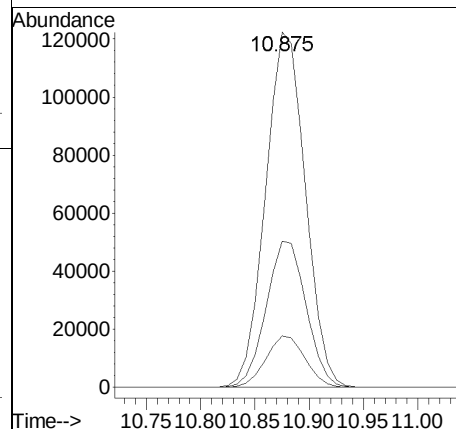
Tgt Ion	Ratio	Lower	Upper
57	100		
43	144.5	119.3	178.9
86	21.5	17.0	25.6

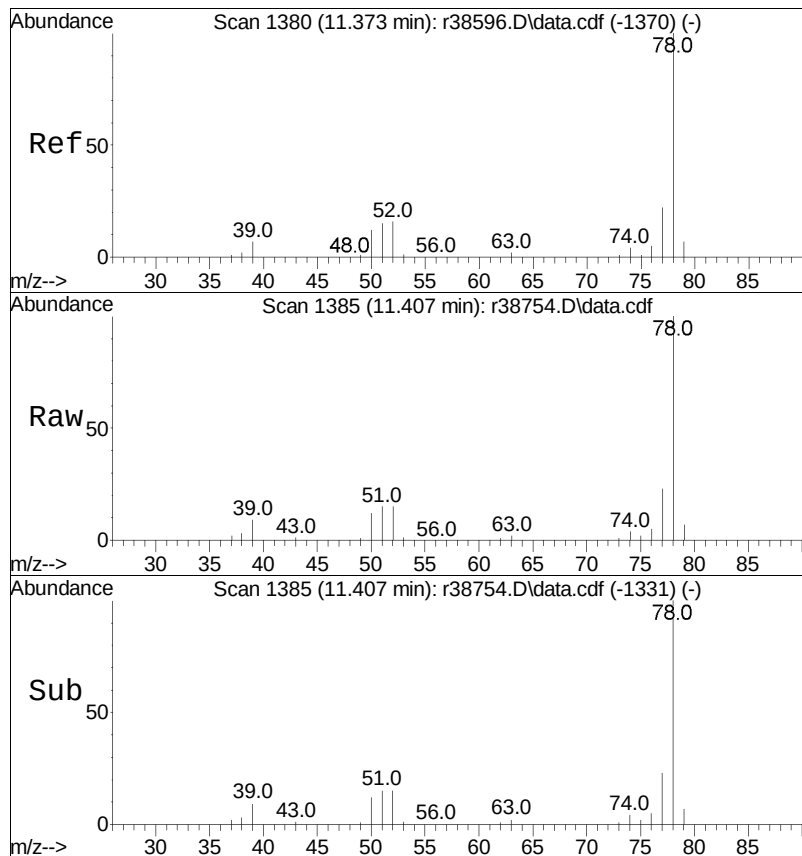




#48
 1,1,1-trichloroethane
 Concen: 11.35 ppbV
 RT: 10.875 min Scan# 1311
 Delta R.T. 0.033 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

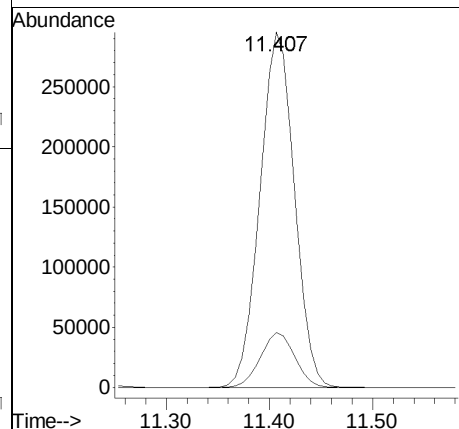
Tgt Ion	Ratio	Lower	Upper
97	100		
61	41.2	31.8	47.8
119	14.5	11.8	17.6

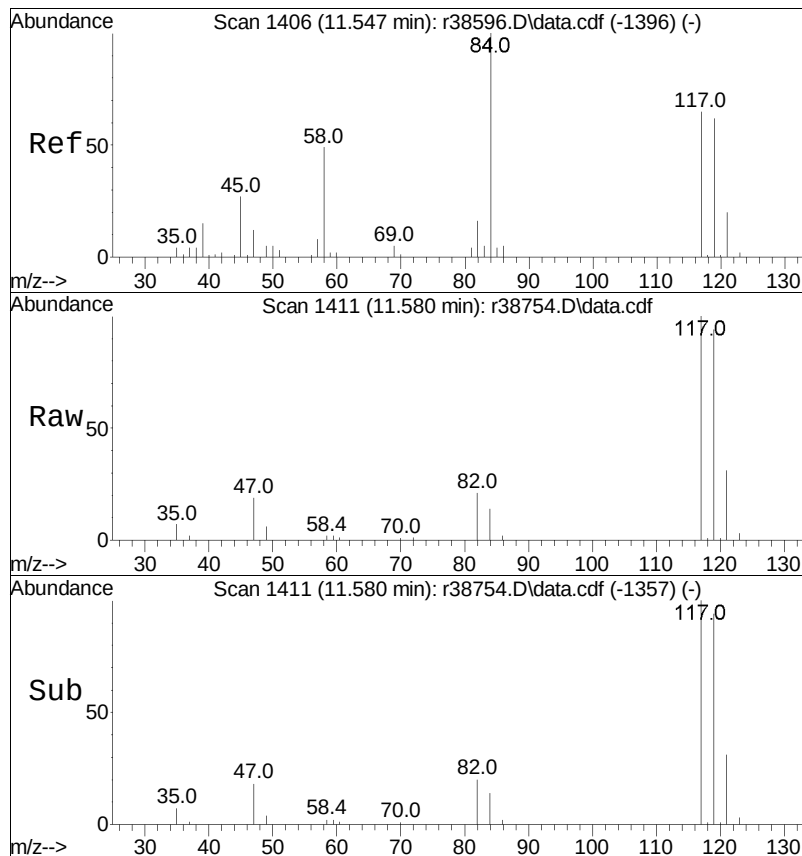




#50
benzene
Concen: 9.73 ppbV
RT: 11.407 min Scan# 1385
Delta R.T. 0.033 min
Lab File: r38754.D
Acq: 20 Mar 2020 1:32 PM

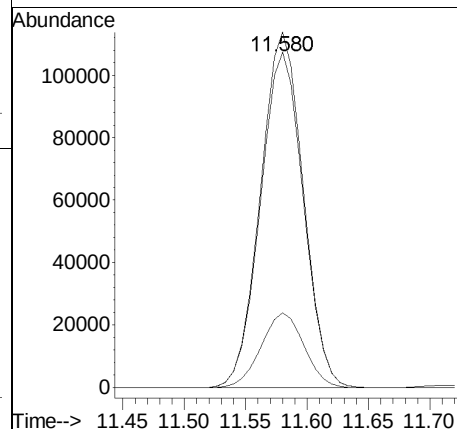
Tgt	Ion	Ratio	Lower	Upper
78	100			
52	15.4	12.6	18.8	

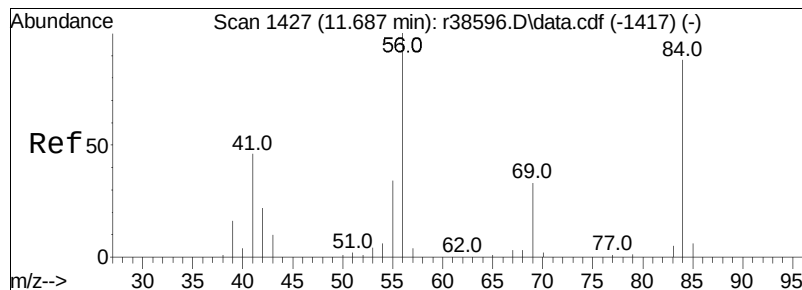




#52
carbon tetrachloride
Concen: 10.76 ppbV
RT: 11.580 min Scan# 1411
Delta R.T. 0.033 min
Lab File: r38754.D
Acq: 20 Mar 2020 1:32 PM

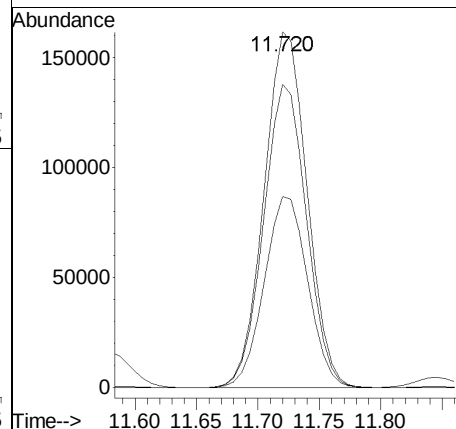
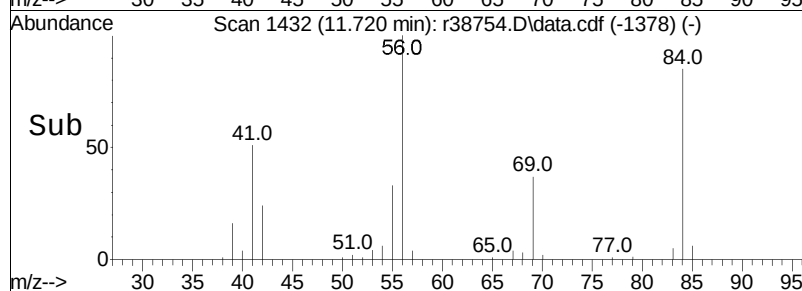
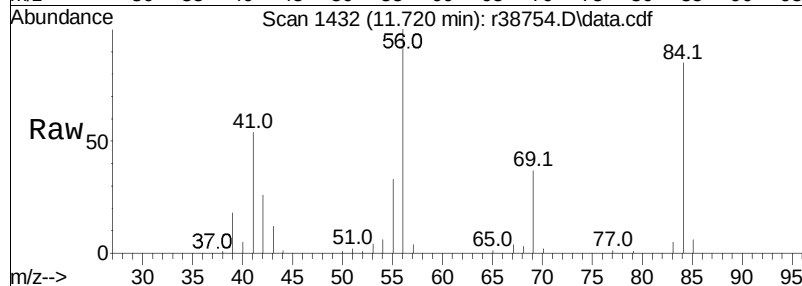
Tgt	Ion:117	Resp:	274453
Ion	Ratio	Lower	Upper
117	100		
119	94.3	76.6	114.8
82	21.0	20.1	30.1

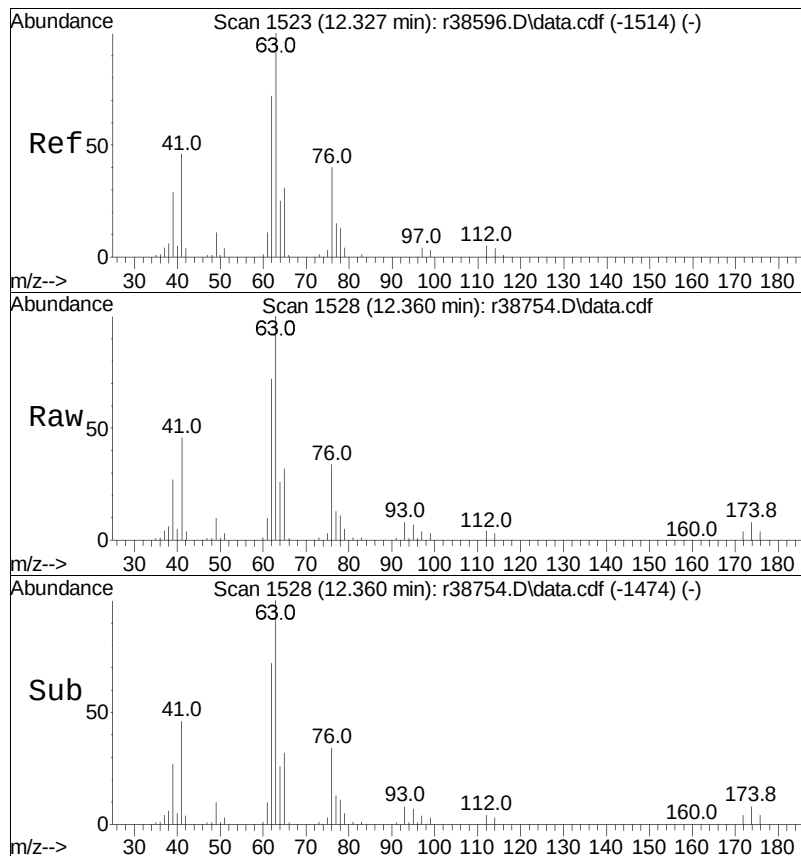




#53
cyclohexane
Concen: 10.08 ppbV
RT: 11.720 min Scan# 1432
Delta R.T. 0.033 min
Lab File: r38754.D
Acq: 20 Mar 2020 1:32 PM

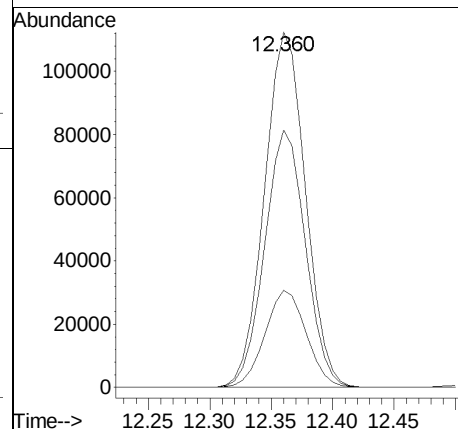
Tgt Ion	Ratio	Lower	Upper
56	100		
84	85.3	70.2	105.2
41	53.7	36.9	55.3

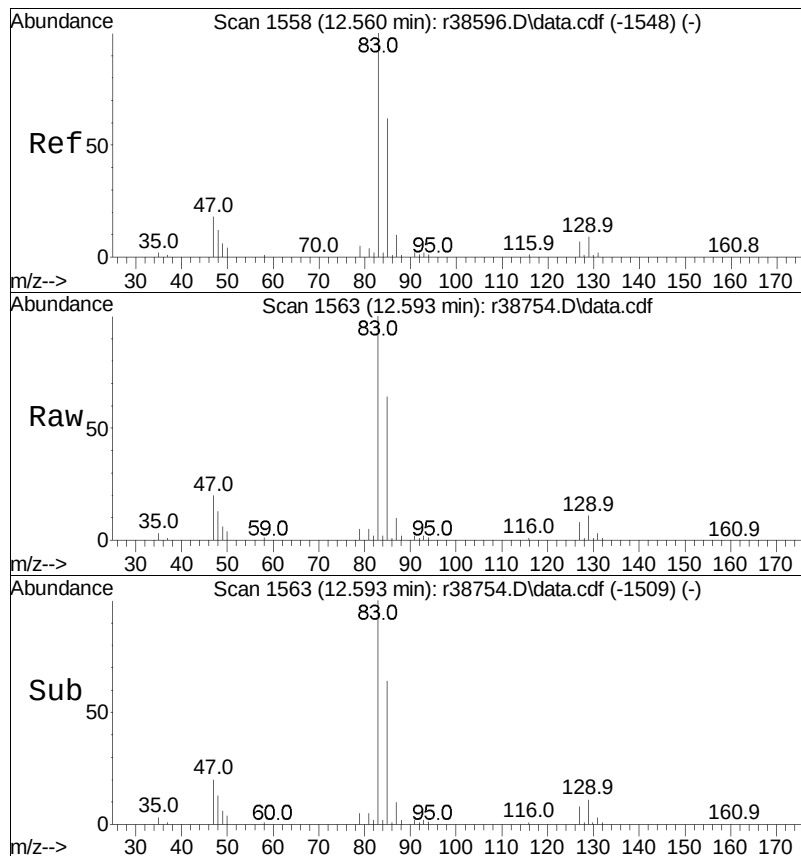




#56
 1,2-dichloropropane
 Concen: 12.26 ppbV
 RT: 12.360 min Scan# 1528
 Delta R.T. 0.033 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

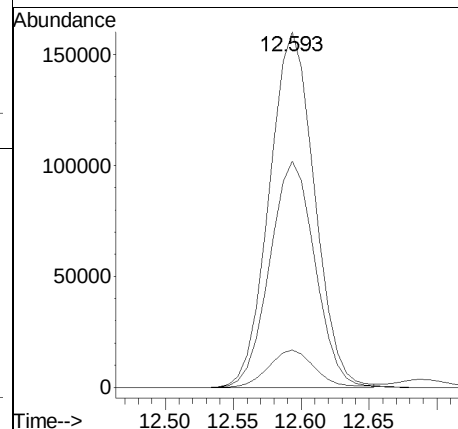
Tgt Ion:	63	Resp:	261176
Ion Ratio	Lower	Upper	
63	100		
62	72.5	57.7	86.5
39	27.3	23.3	34.9

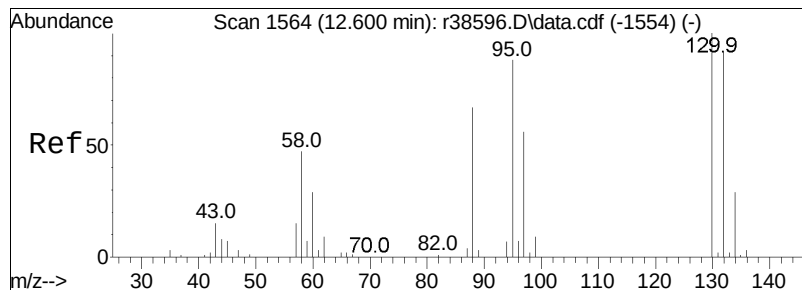




#57
 bromodichloromethane
 Concen: 9.89 ppbV
 RT: 12.593 min Scan# 1563
 Delta R.T. 0.033 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

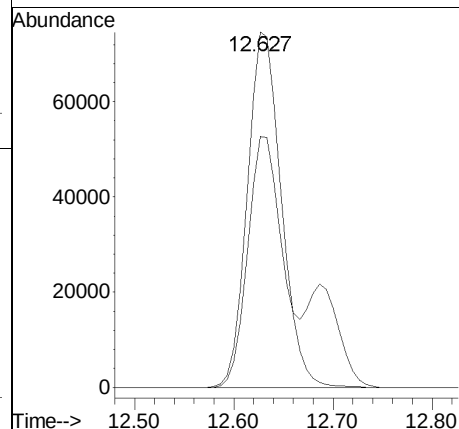
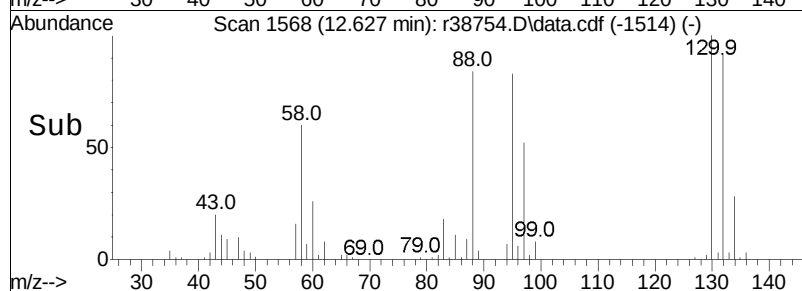
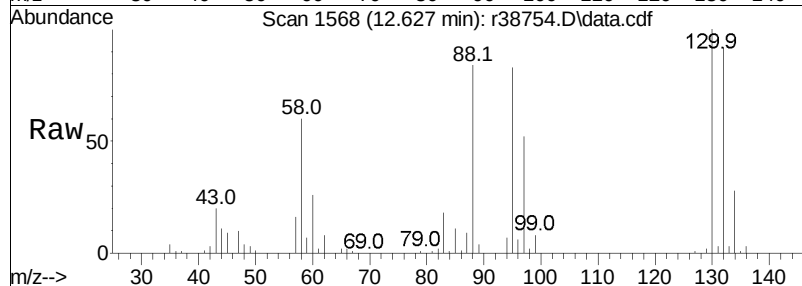
Tgt Ion	Ratio	Lower	Upper
83	100		
85	63.7	50.0	75.0
129	10.5	7.2	10.8

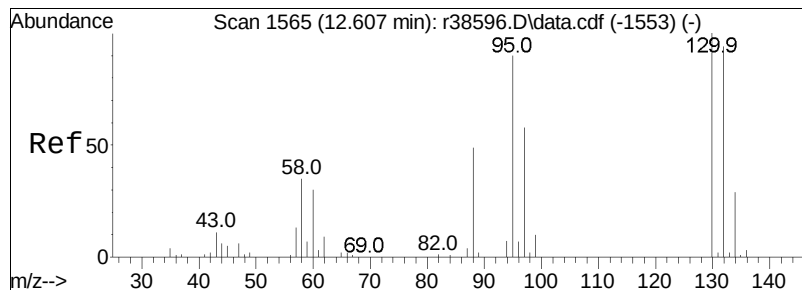




#58
 1,4-dioxane
 Concen: 11.03 ppbV
 RT: 12.627 min Scan# 1568
 Delta R.T. 0.027 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

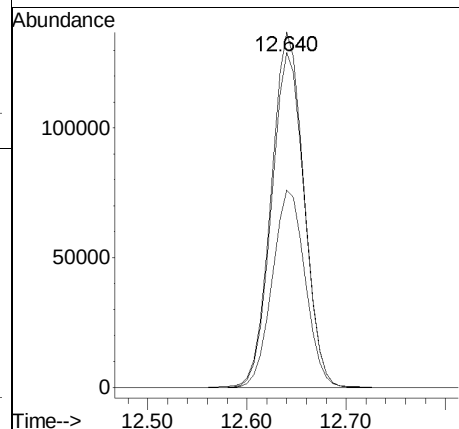
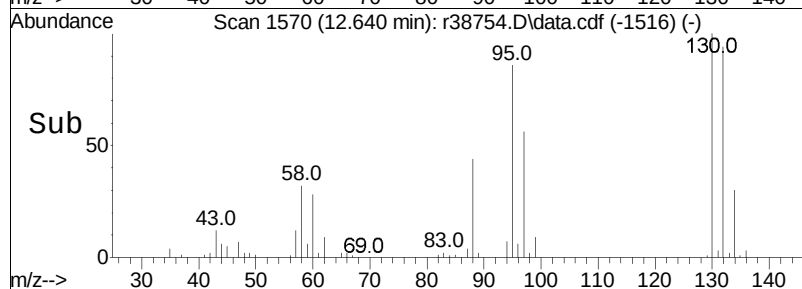
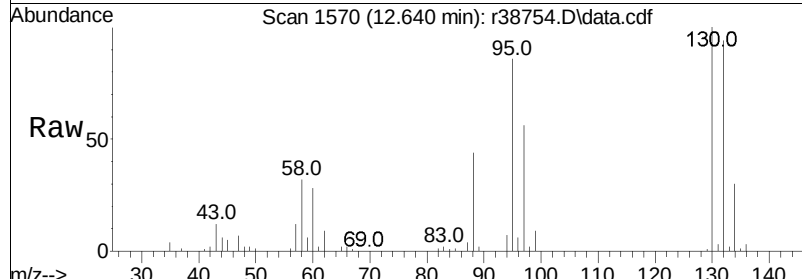
Tgt	Ion	Ratio	Lower	Upper
88	100			
58	70.6	56.6	85.0	

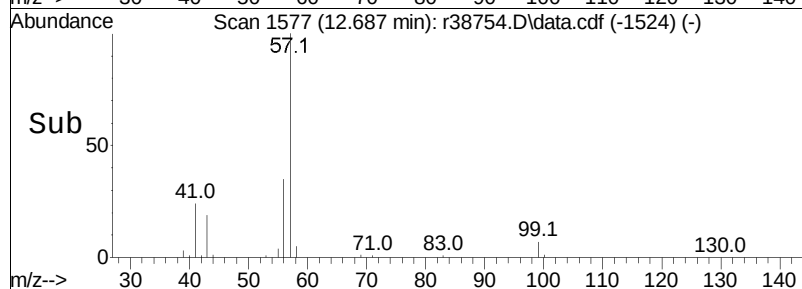
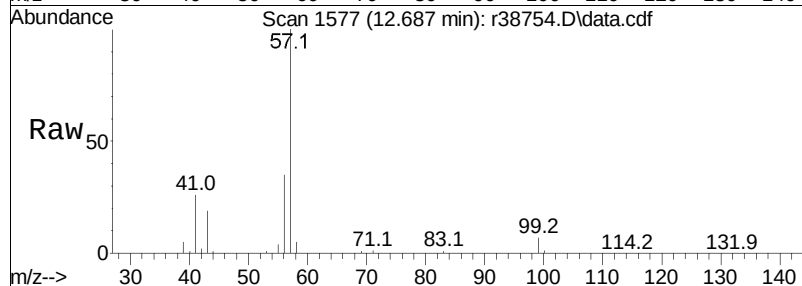
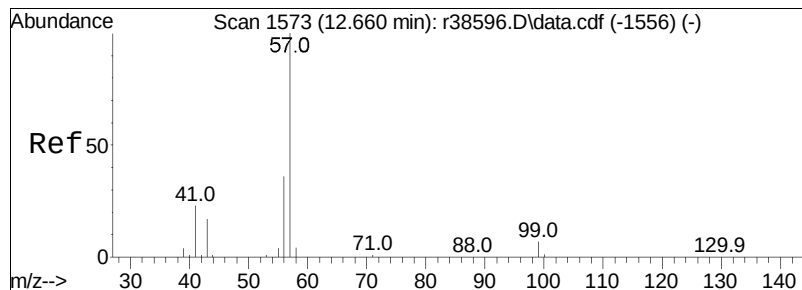




#59
trichloroethene
Concen: 12.00 ppbV
RT: 12.640 min Scan# 1570
Delta R.T. 0.033 min
Lab File: r38754.D
Acq: 20 Mar 2020 1:32 PM

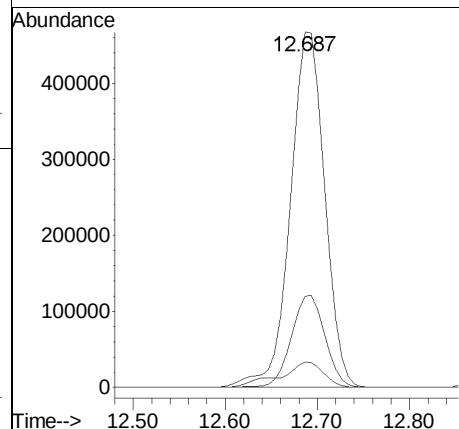
Tgt	Ion	Ratio	Resp	Lower	Upper
130	100		314176		
132	94.3	75.0	112.4		
97	55.5	46.6	69.8		

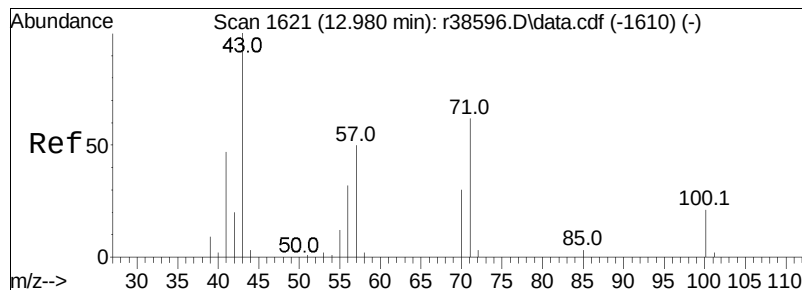




#60
 2,2,4-trimethylpentane
 Concen: 10.58 ppbV
 RT: 12.687 min Scan# 1577
 Delta R.T. 0.027 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

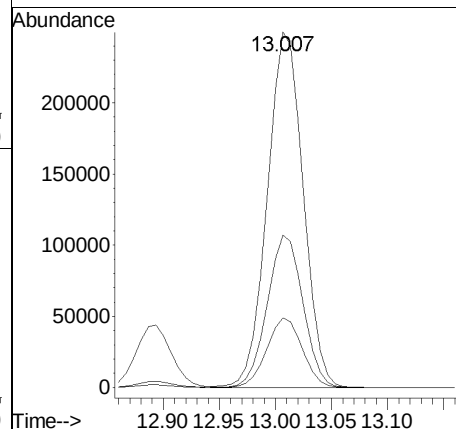
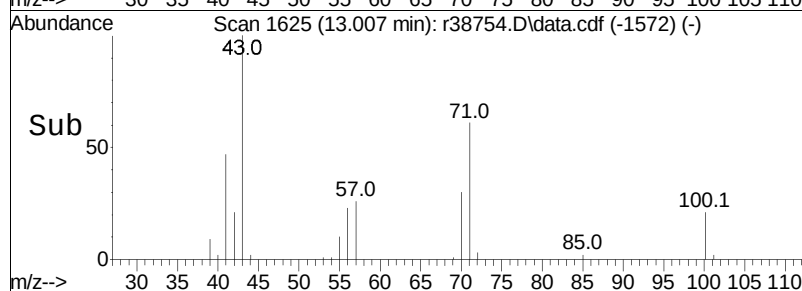
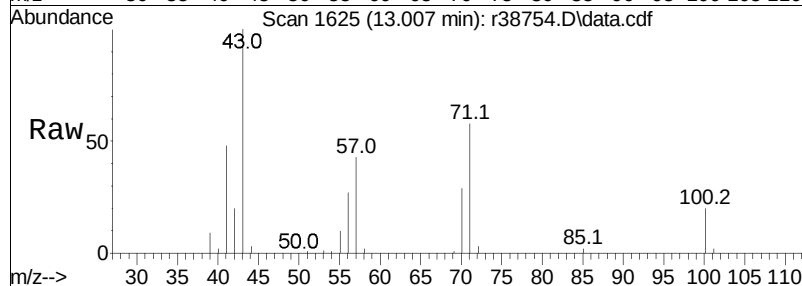
Tgt Ion	Ratio	Lower	Upper
57	100		
99	7.1	5.4	8.2
41	25.7	18.2	27.2

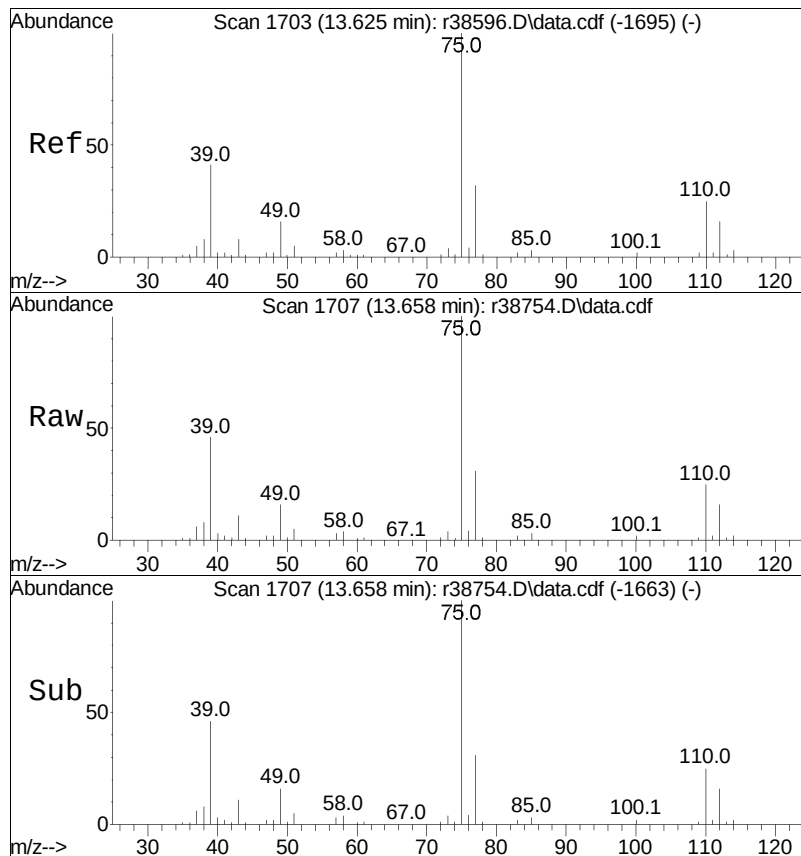




#62
heptane
Concen: 12.31 ppbV
RT: 13.007 min Scan# 1625
Delta R.T. 0.027 min
Lab File: r38754.D
Acq: 20 Mar 2020 1:32 PM

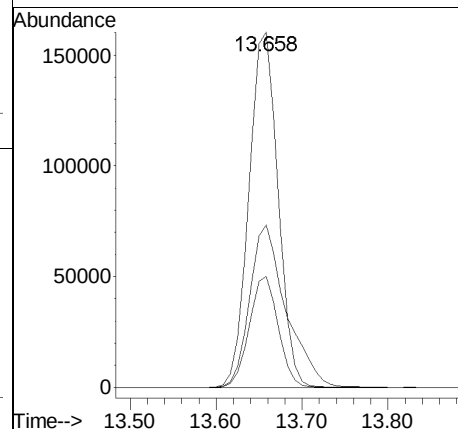
Tgt	Ion	Ratio	Lower	Upper
43	100			
57	42.8	39.8	59.6	
100	19.6	17.3	25.9	

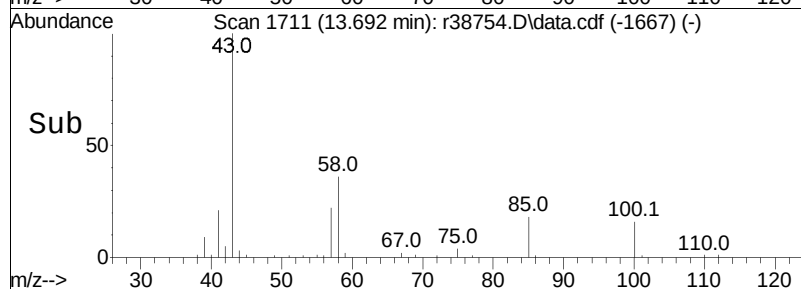
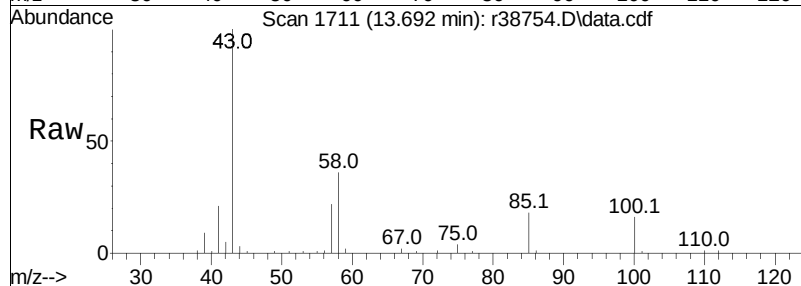
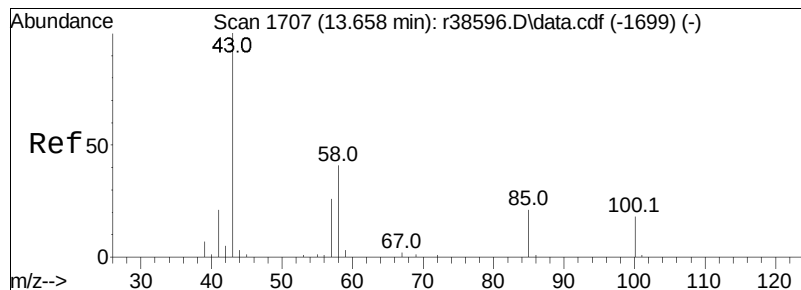




#63
 cis-1,3-dichloropropene
 Concen: 11.07 ppbV
 RT: 13.658 min Scan# 1707
 Delta R.T. 0.033 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

Tgt Ion	Ratio	Lower	Upper
75	100		
39	45.7	33.0	49.6
77	31.3	25.4	38.0





#64

4-methyl-2-pentanone

Concen: 12.78 ppbV

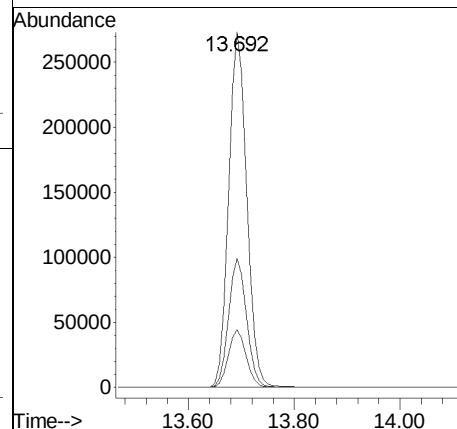
RT: 13.692 min Scan# 1711

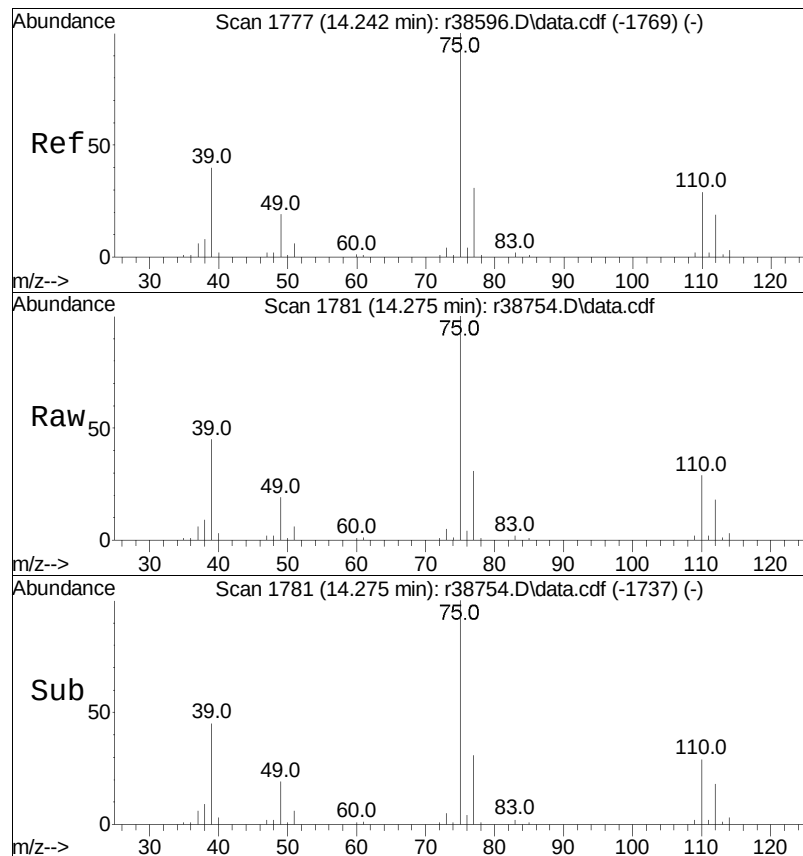
Delta R.T. 0.033 min

Lab File: r38754.D

Acq: 20 Mar 2020 1:32 PM

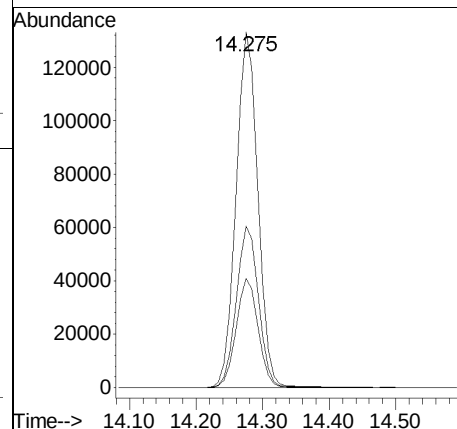
Tgt Ion:	43	Resp:	648864
Ion Ratio	Lower	Upper	
43	100		
58	36.3	32.5	48.7
100	16.2	14.7	22.1

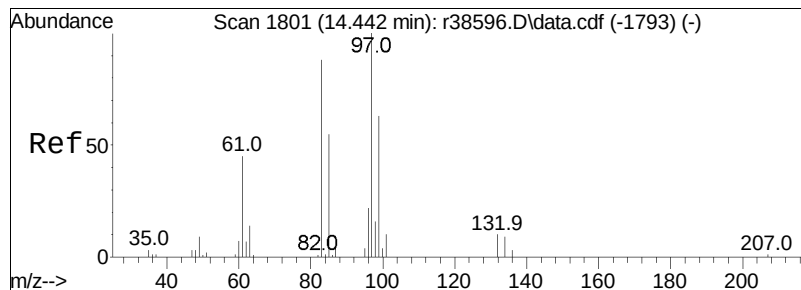




#65
 trans-1,3-dichloropropene
 Concen: 9.58 ppbV
 RT: 14.275 min Scan# 1781
 Delta R.T. 0.033 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

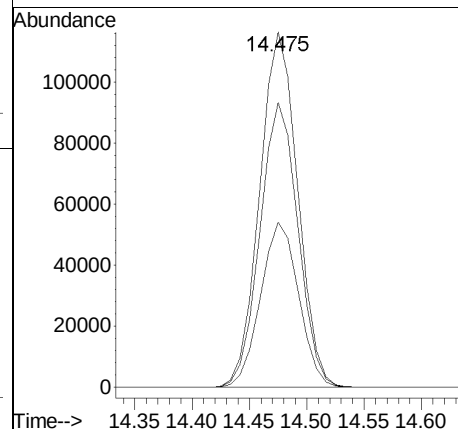
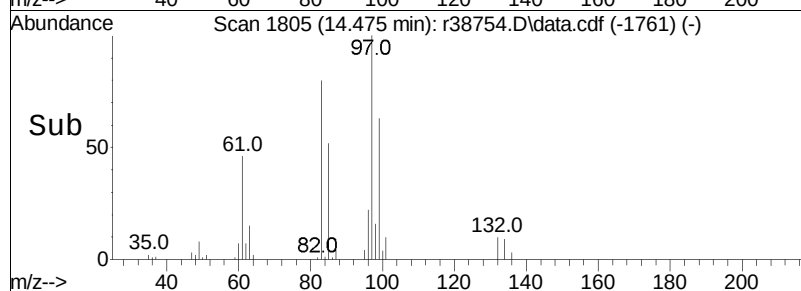
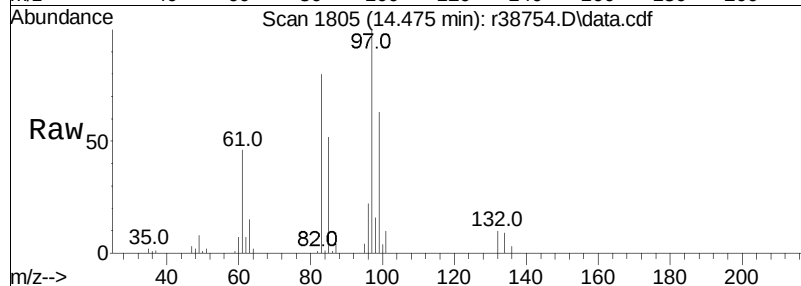
Tgt Ion	Ratio	Lower	Upper
75	100		
77	30.8	25.2	37.8
39	45.4	32.3	48.5

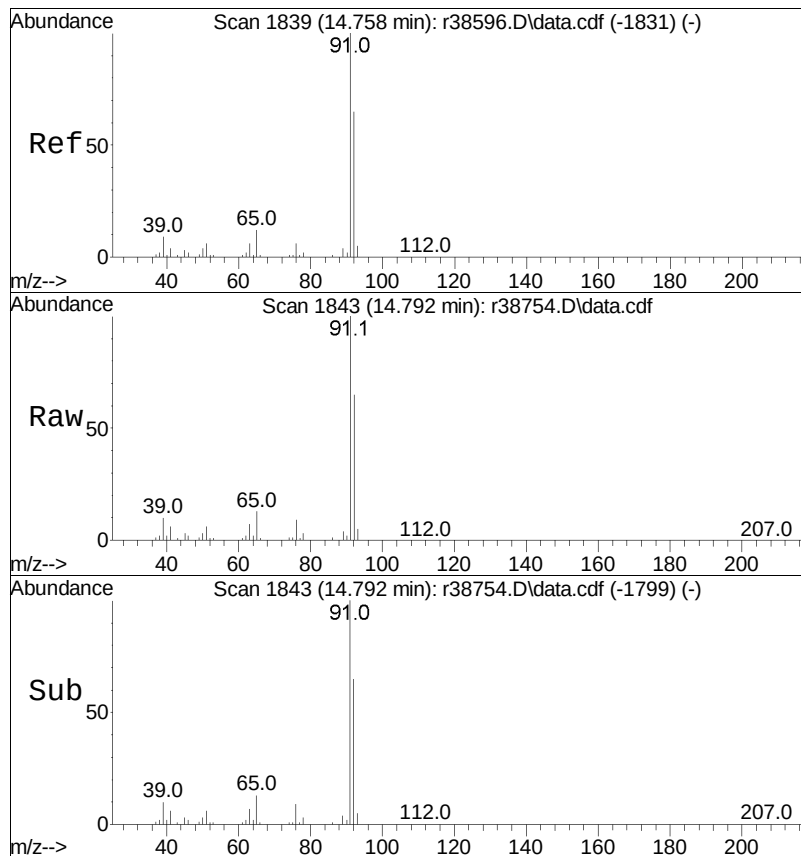




#66
 1,1,2-trichloroethane
 Concen: 11.53 ppbV
 RT: 14.475 min Scan# 1805
 Delta R.T. 0.033 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

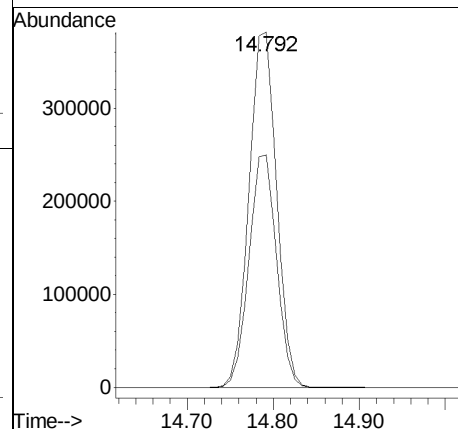
Tgt Ion	Ratio	Resp	Lower	Upper
97	100	268889		
83	80.2		70.2	105.4
61	46.5		36.3	54.5

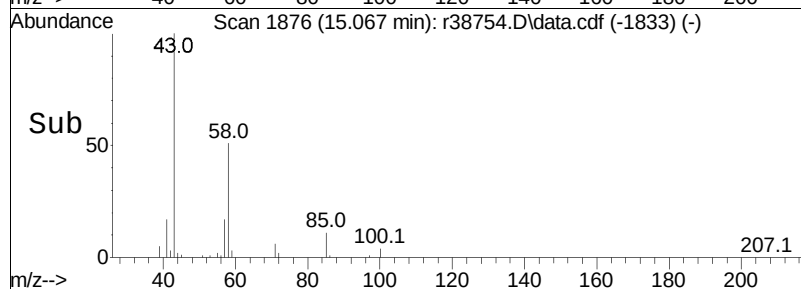
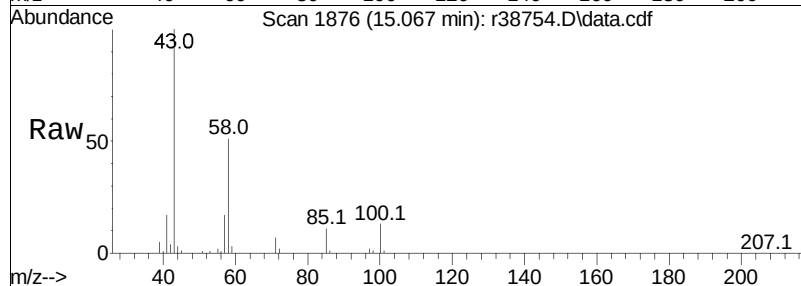
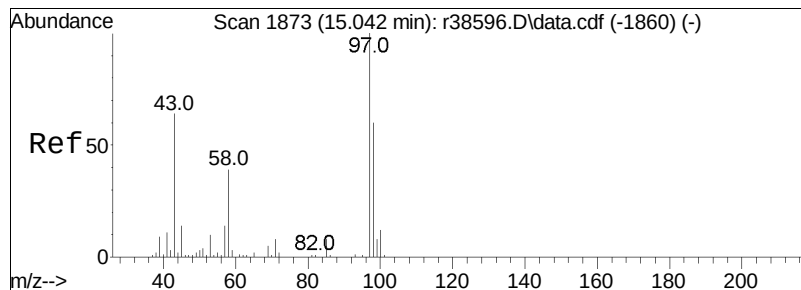




#68
toluene
Concen: 12.01 ppbV
RT: 14.792 min Scan# 1843
Delta R.T. 0.033 min
Lab File: r38754.D
Acq: 20 Mar 2020 1:32 PM

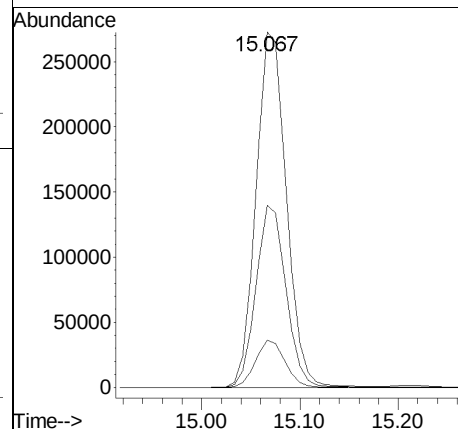
Tgt Ion:	91	Resp:	852731
Ion Ratio	Lower	Upper	
91	100		
92	65.4	52.4	78.6

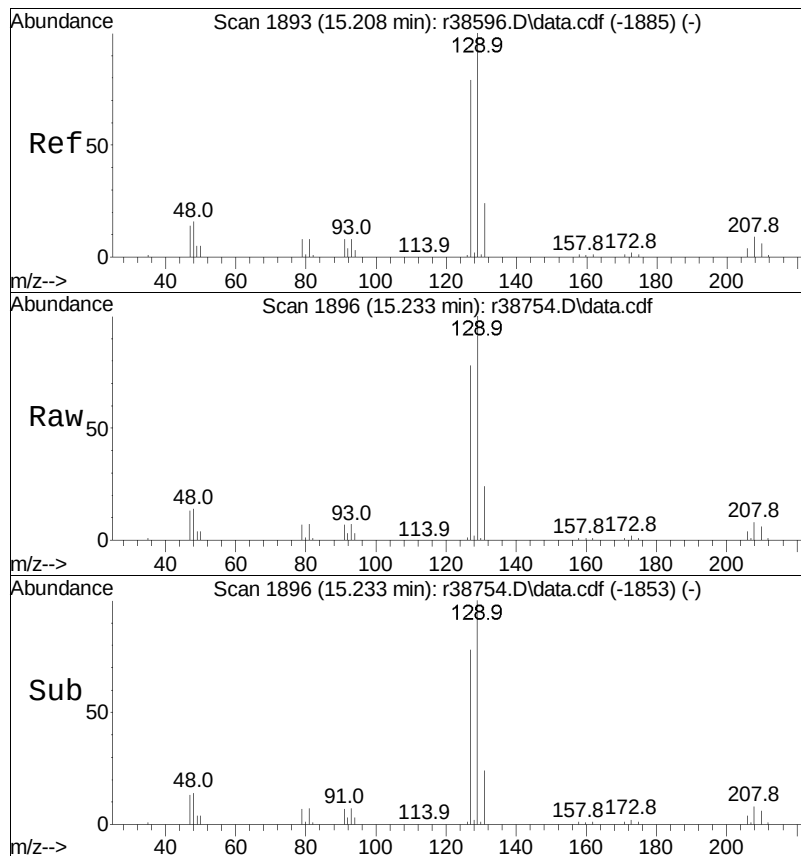




#72
 2-hexanone
 Concen: 14.03 ppbV
 RT: 15.067 min Scan# 1876
 Delta R.T. 0.025 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

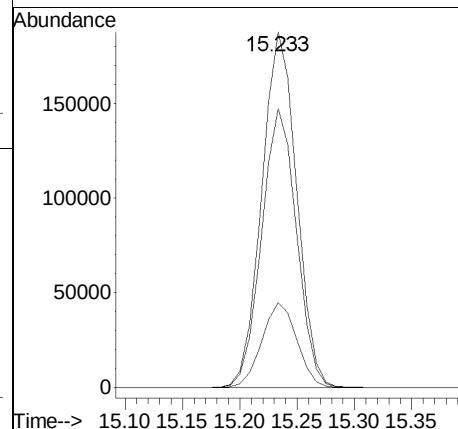
Tgt Ion:	43	58	100	Ratio	Lower	Upper
43	100					
58	51.2	49.3			73.9	
100	13.3	14.9			22.3#	

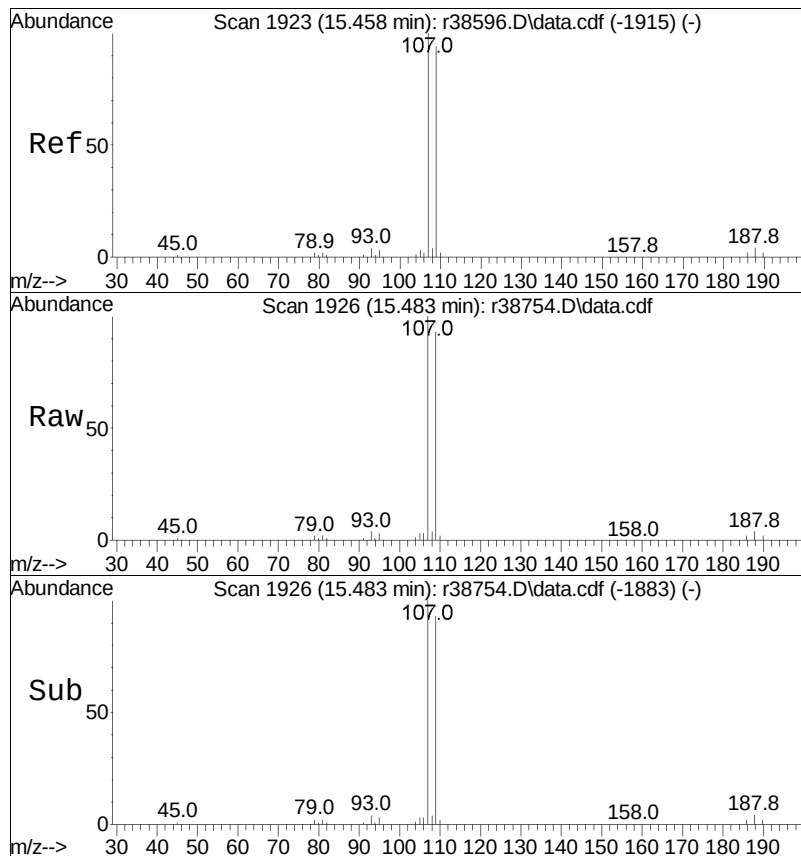




#74
 dibromochloromethane
 Concen: 12.94 ppbV
 RT: 15.233 min Scan# 1896
 Delta R.T. 0.025 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

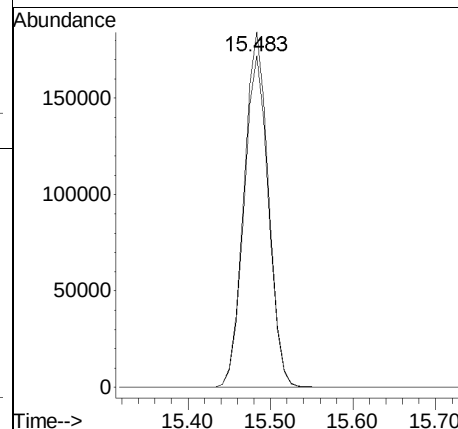
Tgt Ion	Ratio	Lower	Upper
129	100		
127	78.5	63.5	95.3
131	23.9	19.3	28.9

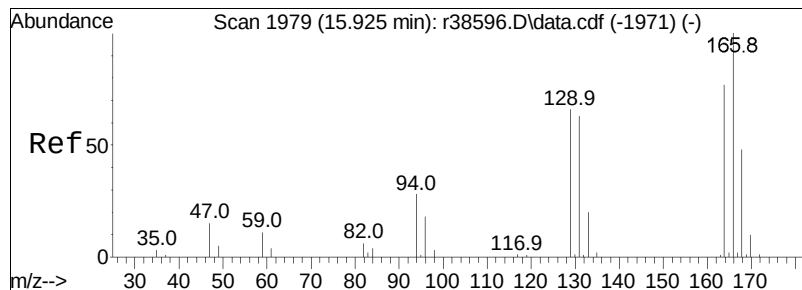




#75
 1,2-dibromoethane
 Concen: 11.25 ppbV
 RT: 15.483 min Scan# 1926
 Delta R.T. 0.025 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

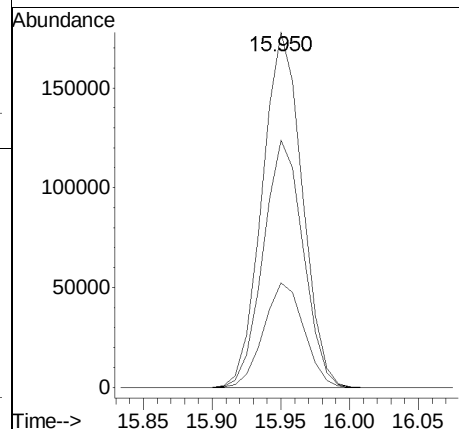
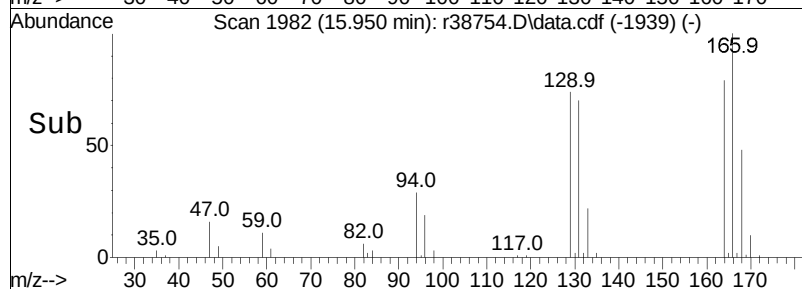
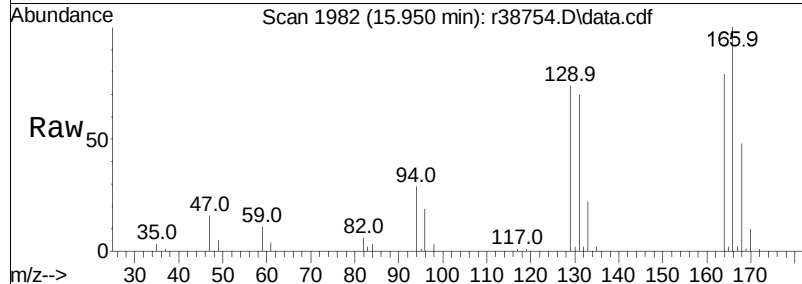
Tgt Ion	Ratio	Lower	Upper
107	100		
109	93.4	75.2	112.8

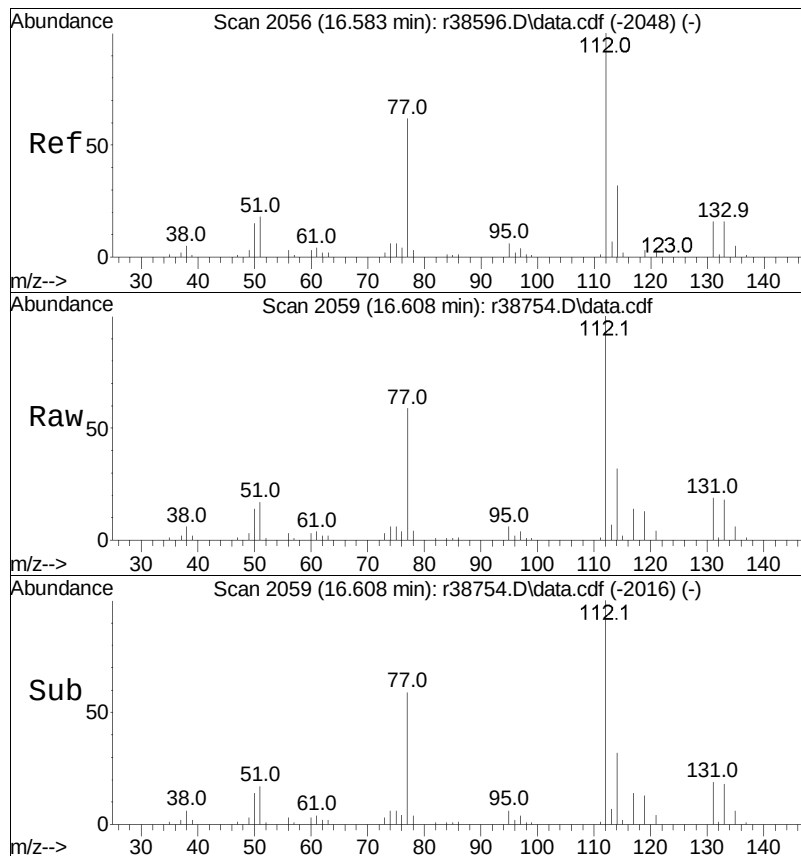




#78
 tetrachloroethene
 Concen: 11.52 ppbV
 RT: 15.950 min Scan# 1982
 Delta R.T. 0.025 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

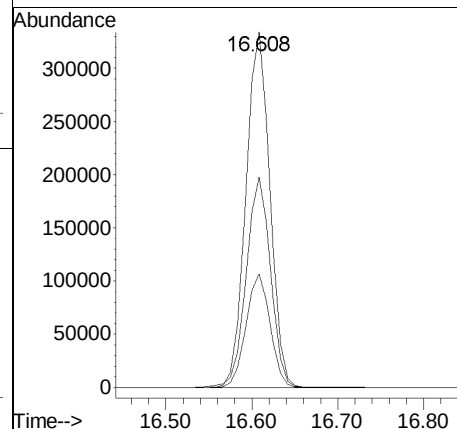
Tgt Ion	Ratio	Lower	Upper
166	100		
131	69.5	50.3	75.5
94	29.4	22.5	33.7

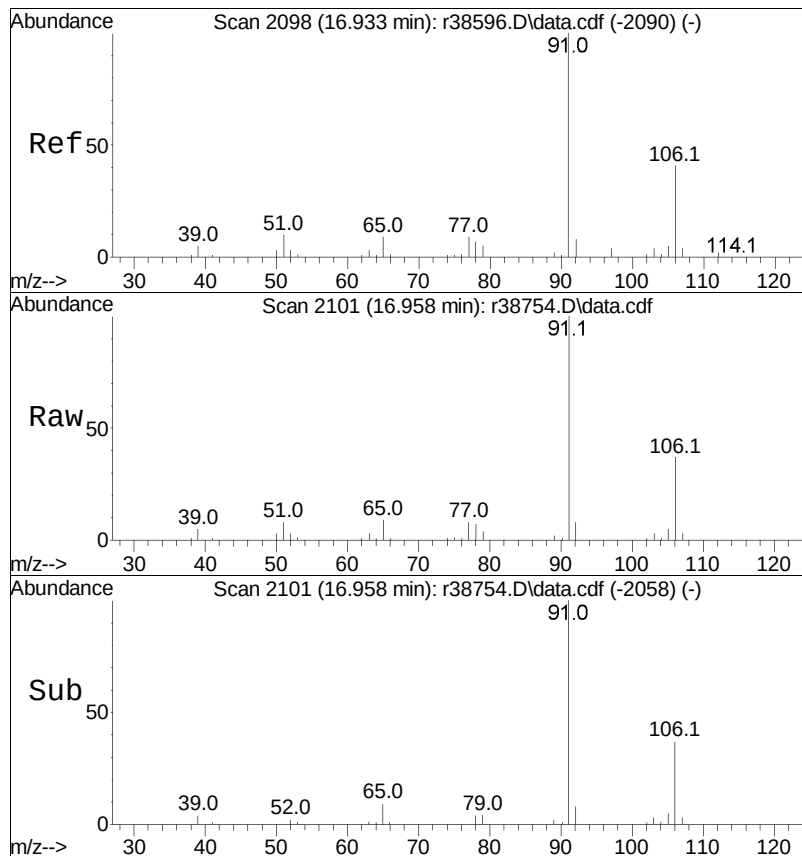




#80
chlorobenzene
Concen: 11.44 ppbV
RT: 16.608 min Scan# 2059
Delta R.T. 0.025 min
Lab File: r38754.D
Acq: 20 Mar 2020 1:32 PM

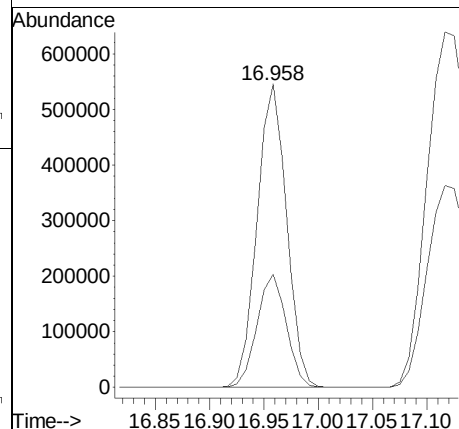
Tgt	Ion	Ratio	Lower	Upper
112	100			
114	31.9	25.7	38.5	
77	59.1	49.9	74.9	

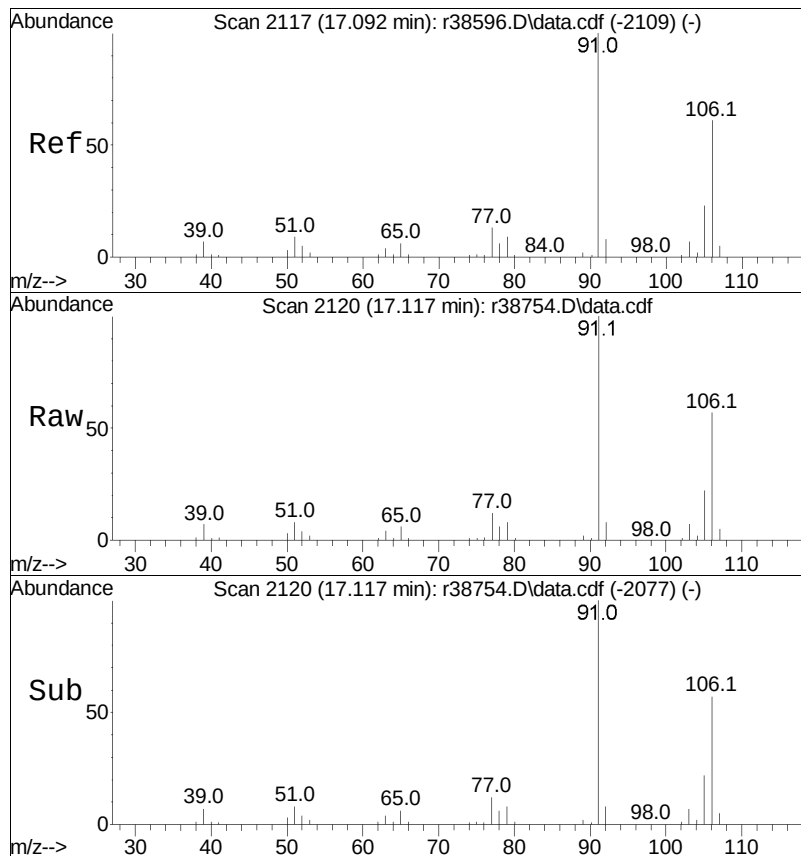




#81
ethylbenzene
Concen: 12.18 ppbV
RT: 16.958 min Scan# 2101
Delta R.T. 0.025 min
Lab File: r38754.D
Acq: 20 Mar 2020 1:32 PM

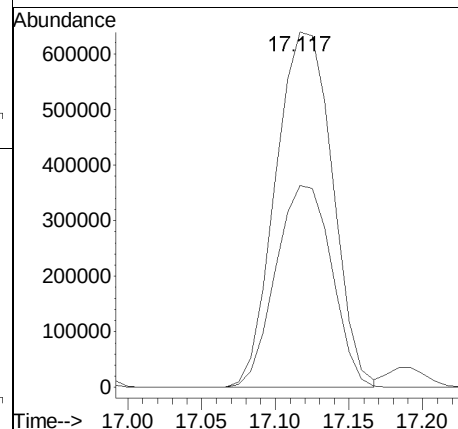
Tgt Ion	Ratio	Lower	Upper
91	100		
106	37.3	32.6	48.8

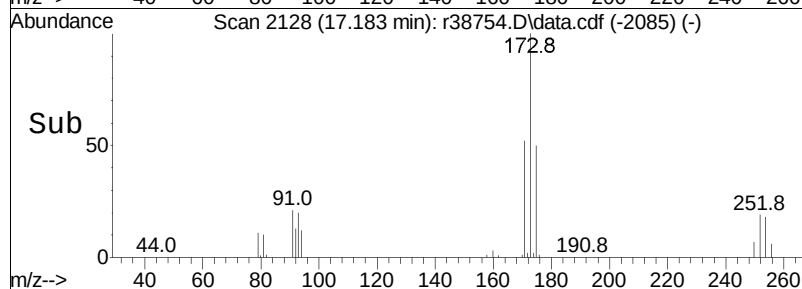
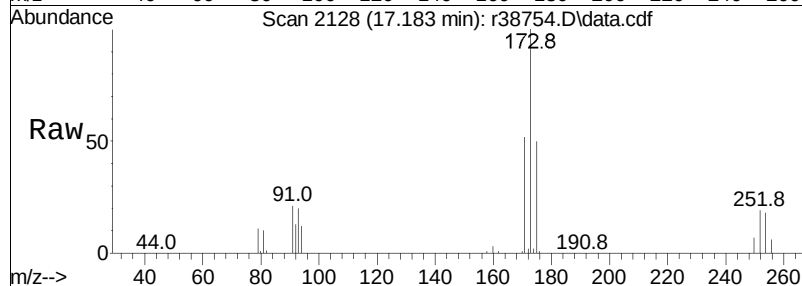
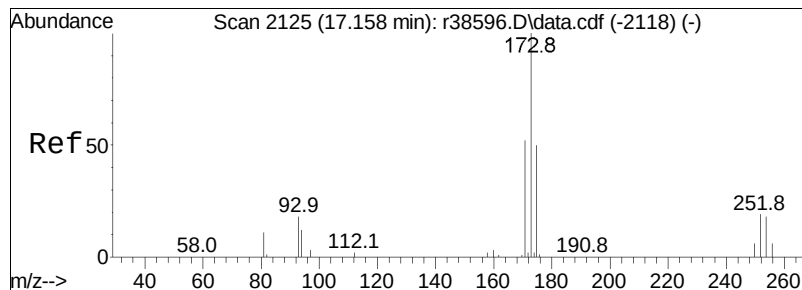




#83
 m+p-xylene
 Concen: 24.78 ppbV
 RT: 17.117 min Scan# 2120
 Delta R.T. 0.025 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

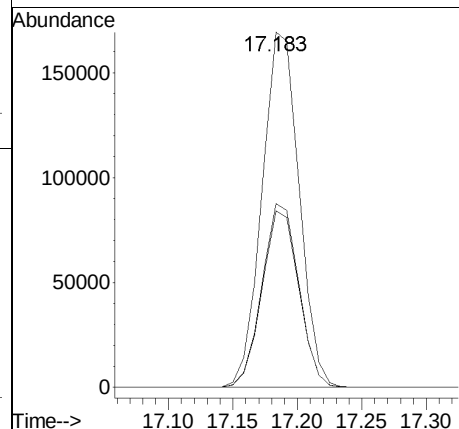
Tgt Ion:	91	Resp:	1716028
Ion Ratio	Lower	Upper	
91	100		
106	56.8	49.0	73.6

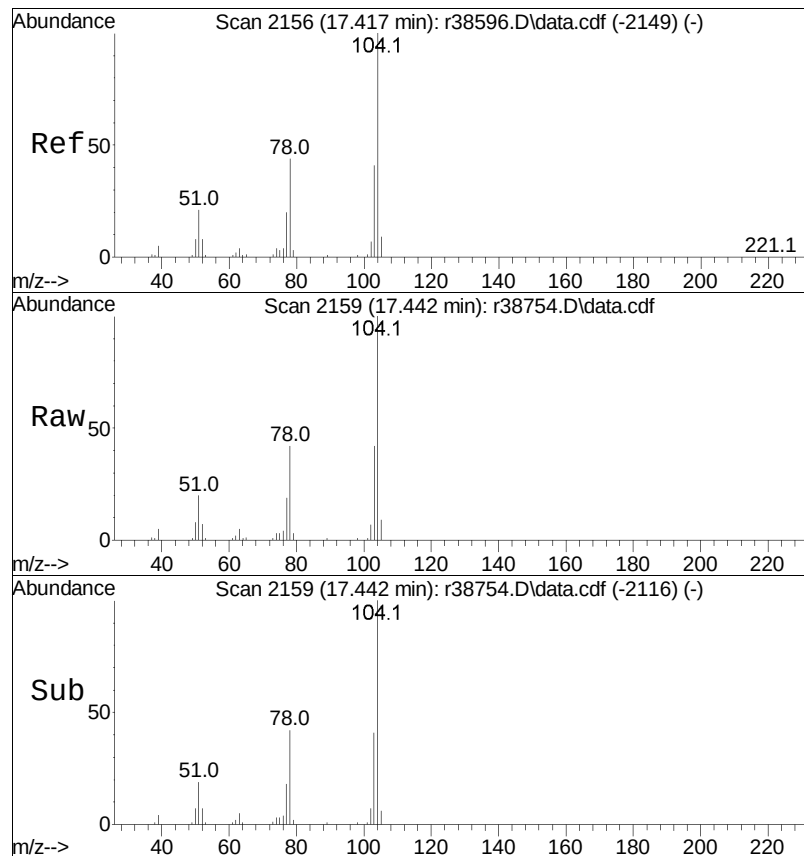




#84
bromoform
Concen: 11.88 ppbV
RT: 17.183 min Scan# 2128
Delta R.T. 0.025 min
Lab File: r38754.D
Acq: 20 Mar 2020 1:32 PM

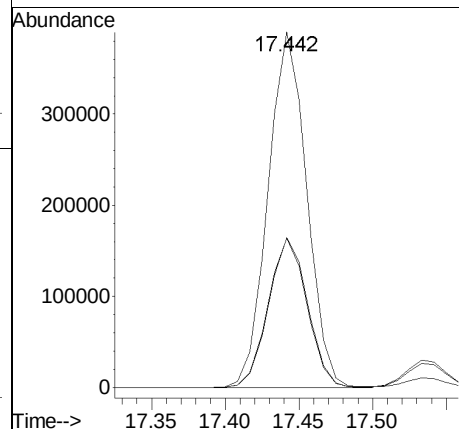
Tgt Ion	Ratio	Lower	Upper
173	100		
175	49.7	39.8	59.8
171	51.7	41.4	62.0

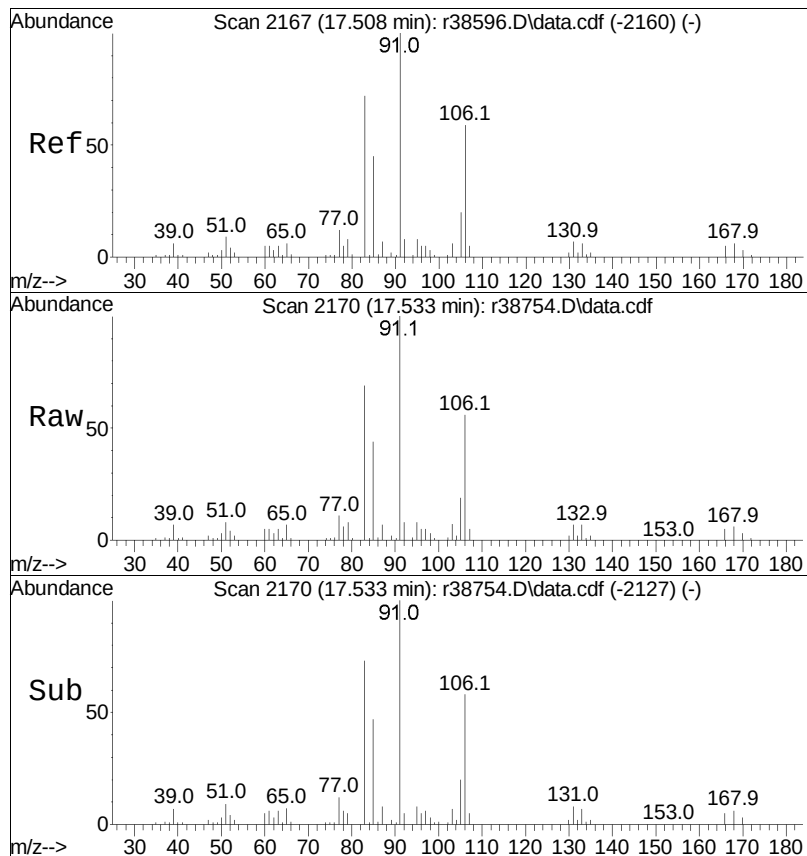




#85
styrene
Concen: 11.50 ppbV
RT: 17.442 min Scan# 2159
Delta R.T. 0.025 min
Lab File: r38754.D
Acq: 20 Mar 2020 1:32 PM

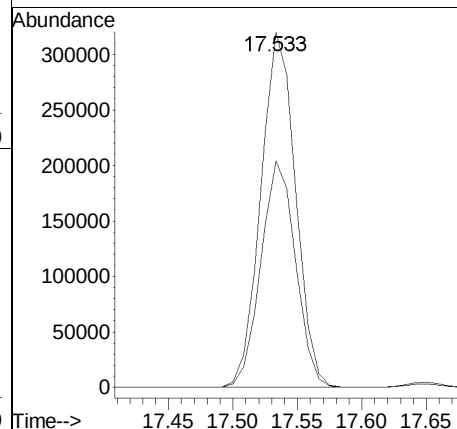
Tgt	Ion	Ratio	Resp	Lower	Upper
104	100		710531		
103	42.0	33.1		49.7	
78	42.2	35.0		52.6	

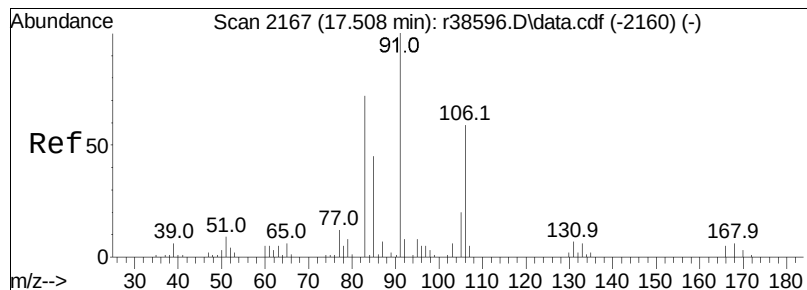




#86
 1,1,2,2-tetrachloroethane
 Concen: 12.39 ppbV
 RT: 17.533 min Scan# 2170
 Delta R.T. 0.025 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

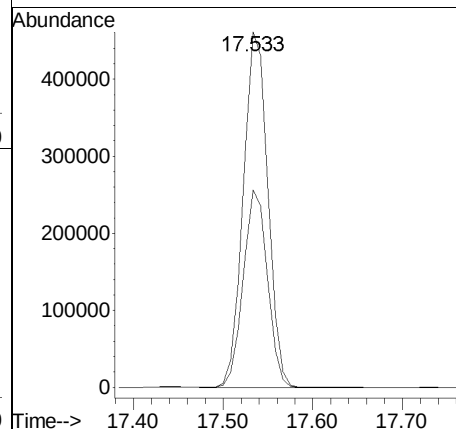
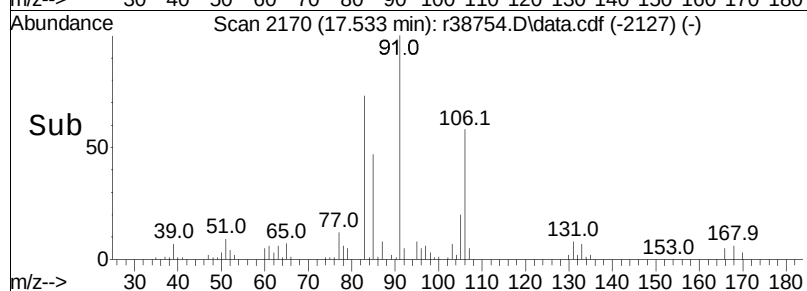
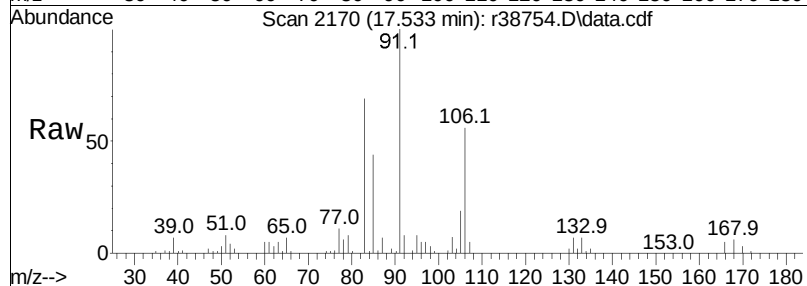
Tgt Ion:	83	Resp:	598789
Ion Ratio	Lower	Upper	
83	100		
85	63.7	50.4	75.6

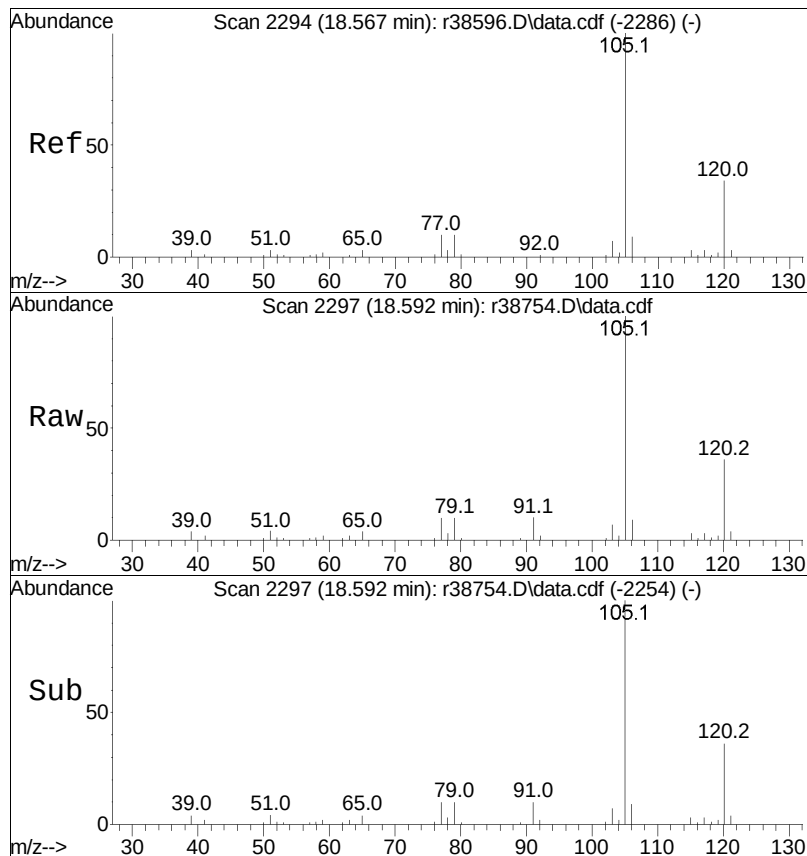




#87
o-xylene
Concen: 12.93 ppbV
RT: 17.533 min Scan# 2170
Delta R.T. 0.025 min
Lab File: r38754.D
Acq: 20 Mar 2020 1:32 PM

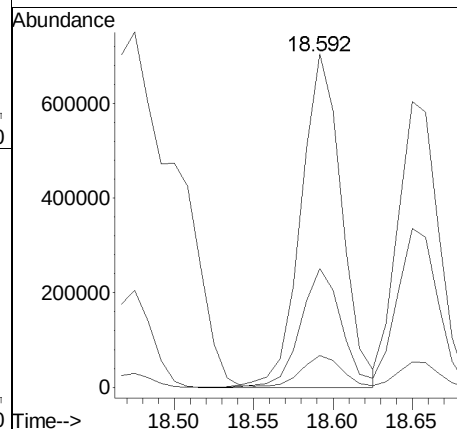
Tgt Ion: 91 Resp: 877460
Ion Ratio Lower Upper
91 100
106 55.6 47.4 71.0

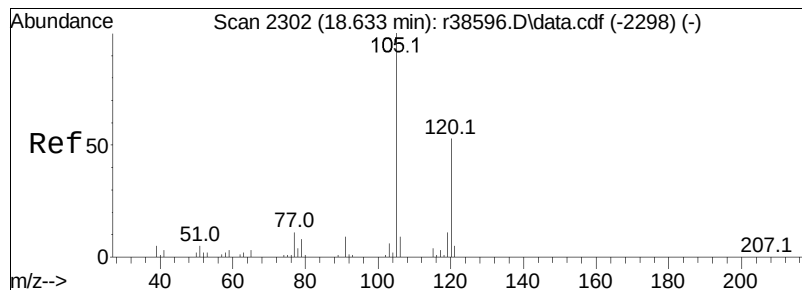




#96
 4-ethyl toluene
 Concen: 11.54 ppbV
 RT: 18.592 min Scan# 2297
 Delta R.T. 0.025 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

Tgt Ion:	105	Resp:	1260588
Ion Ratio	Lower	Upper	
105	100		
120	35.7	27.0	40.4
91	9.6	7.4	11.0





#97

1,3,5-trimethylbenzene

Concen: 12.10 ppbV

RT: 18.650 min Scan# 2304

Delta R.T. 0.017 min

Lab File: r38754.D

Acq: 20 Mar 2020 1:32 PM

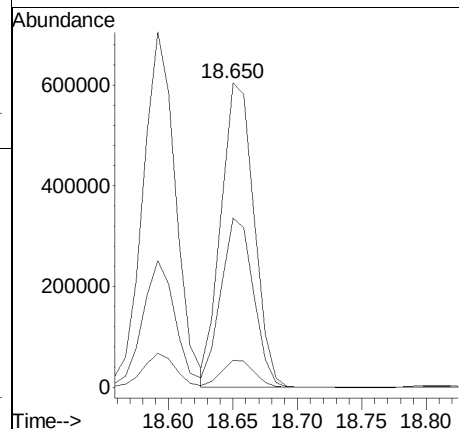
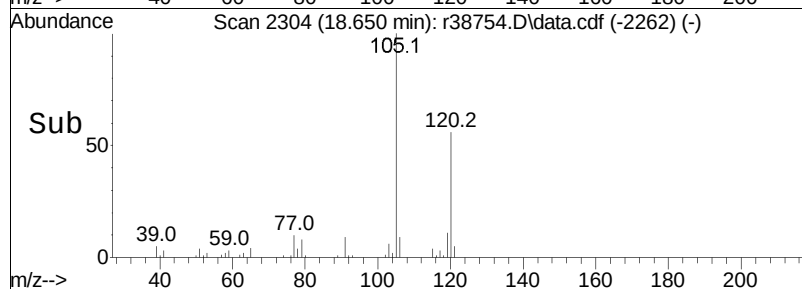
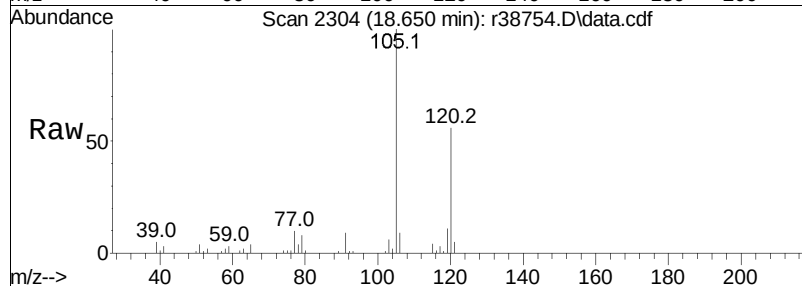
Tgt Ion:105 Resp: 1074869

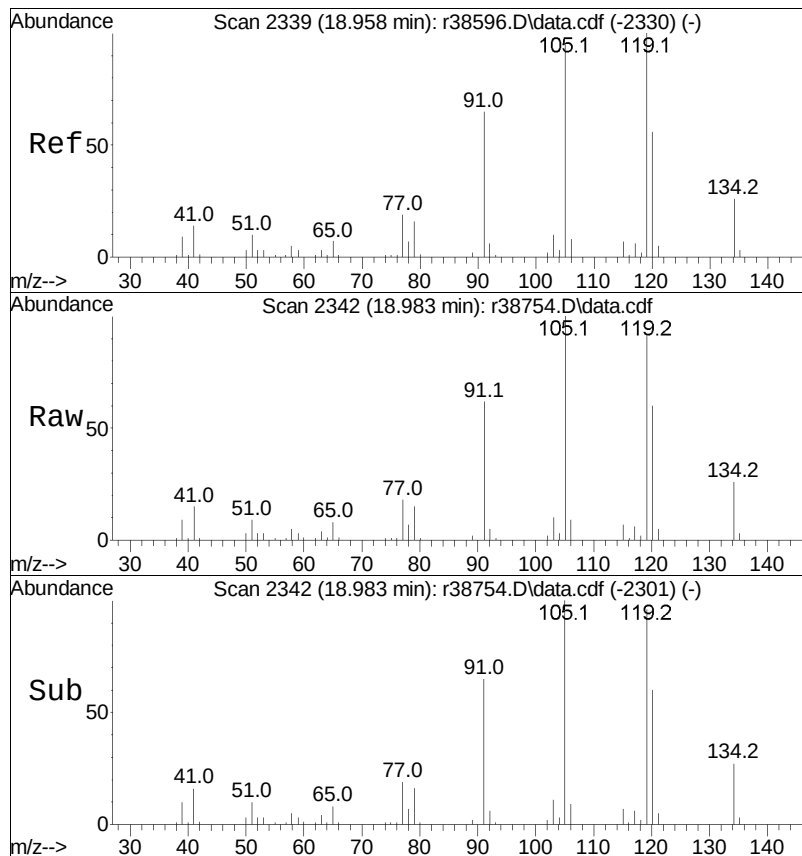
Ion Ratio Lower Upper

105 100

120 55.6 41.6 62.4

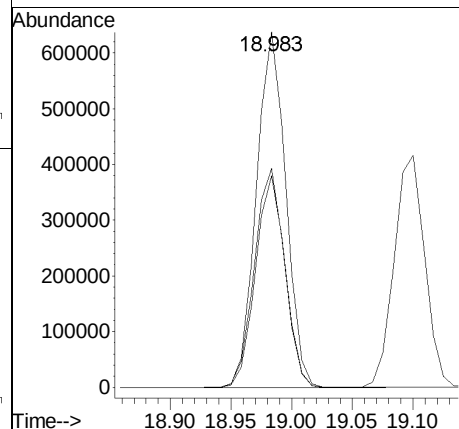
91 8.9 7.0 10.4

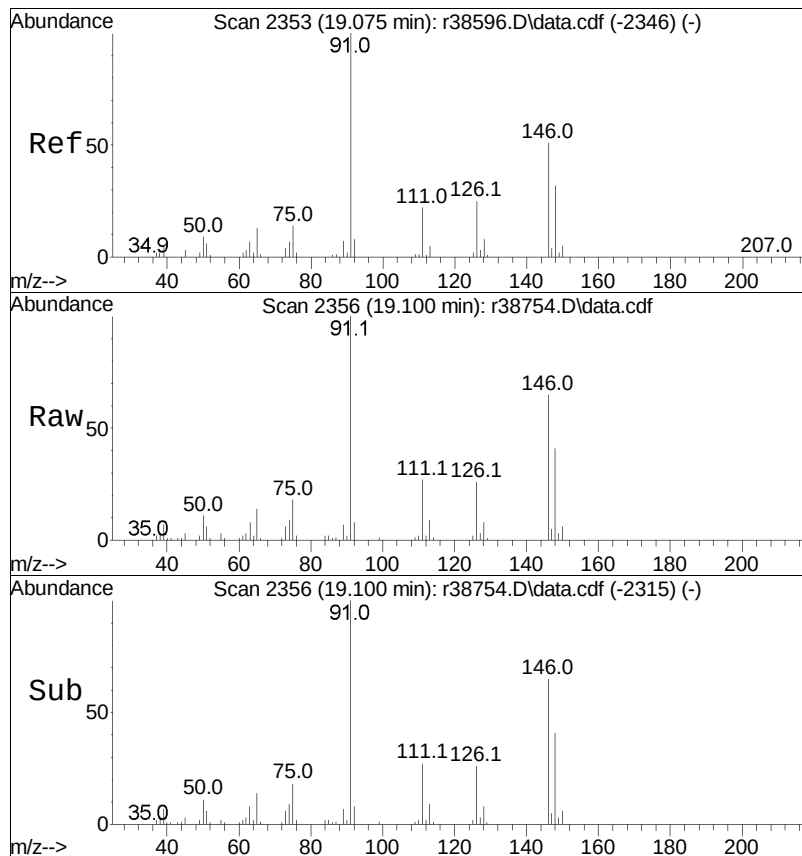




#99
 1,2,4-trimethylbenzene
 Concen: 12.99 ppbV
 RT: 18.983 min Scan# 2342
 Delta R.T. 0.025 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

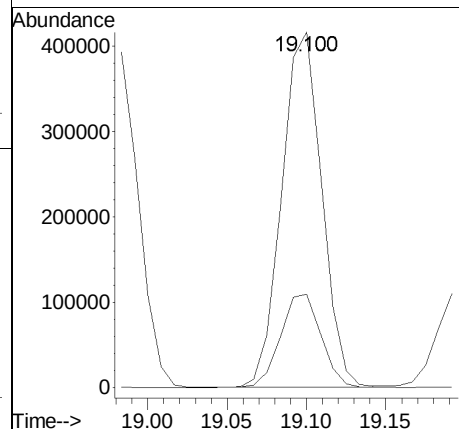
Tgt Ion:	105	Resp:	1073784
Ion Ratio	Lower	Upper	
105	100		
120	59.5	47.1	70.7
91	61.6	55.0	82.6

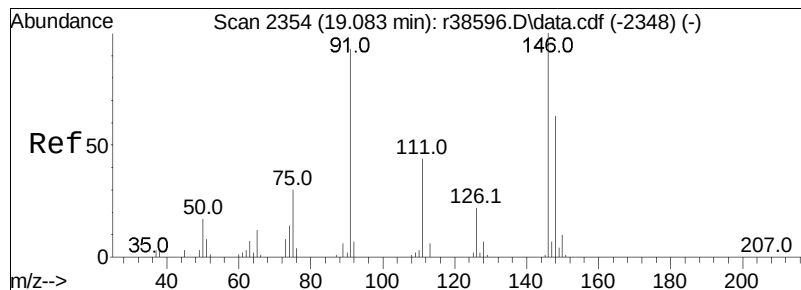




#101
 Benzyl Chloride
 Concen: 12.63 ppbV
 RT: 19.100 min Scan# 2356
 Delta R.T. 0.025 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

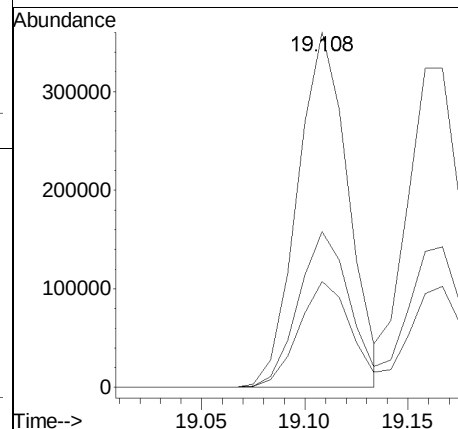
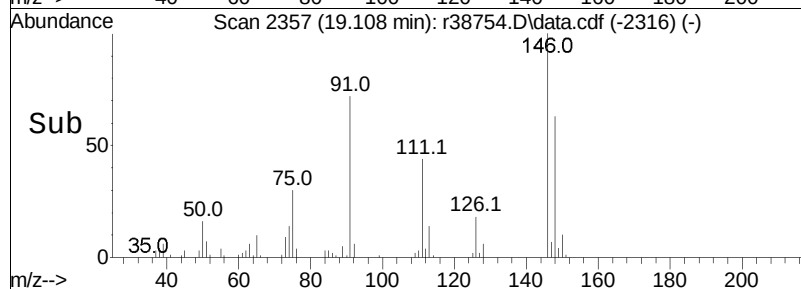
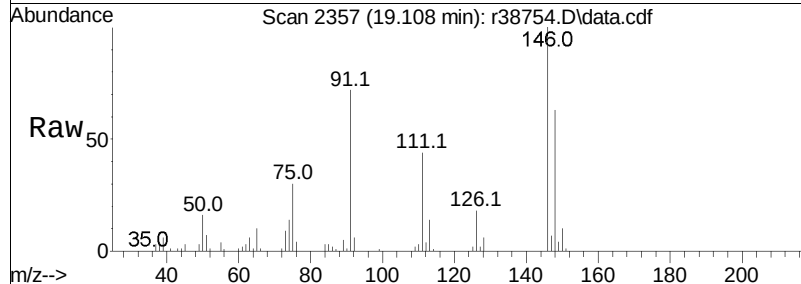
Tgt	Ion	Resp	730511
Ion	Ratio	Lower	Upper
91	100		
126	26.2	20.1	30.1

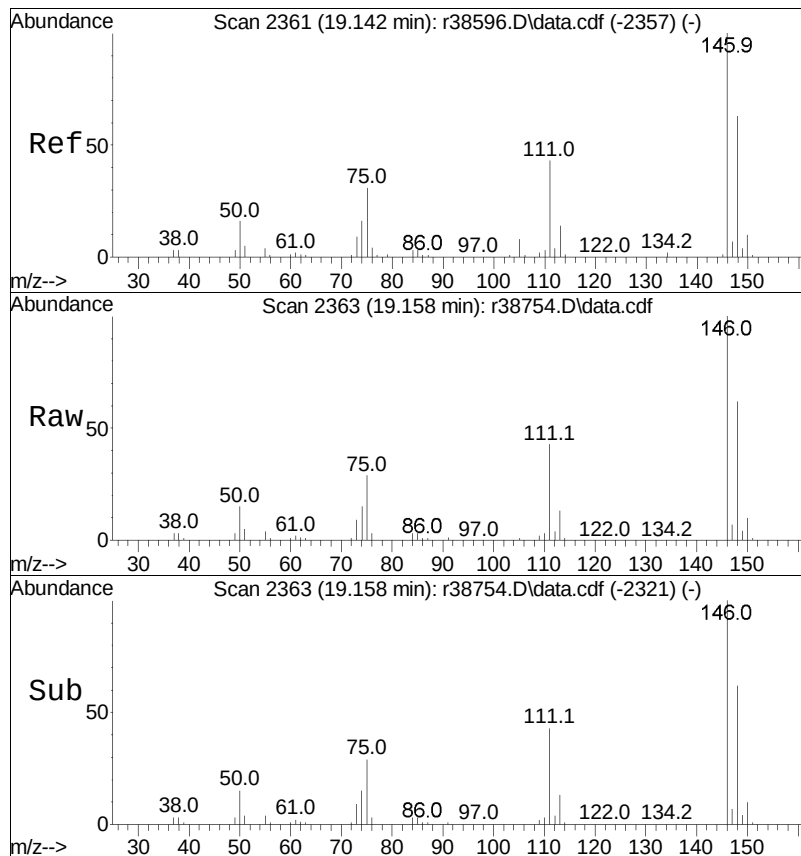




#102
 1,3-dichlorobenzene
 Concen: 12.10 ppbV
 RT: 19.108 min Scan# 2357
 Delta R.T. 0.025 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

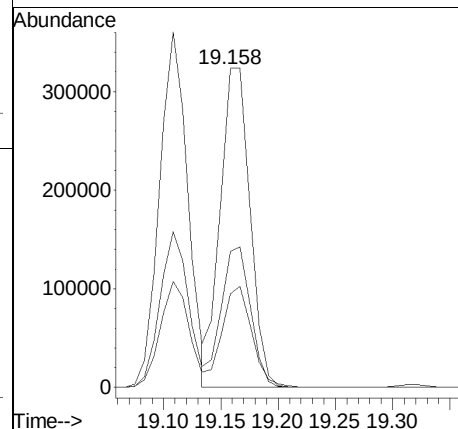
Tgt	Ion:146	Resp:	615768
Ion	Ratio	Lower	Upper
146	100		
111	43.8	35.5	53.3
75	29.8	23.8	35.6

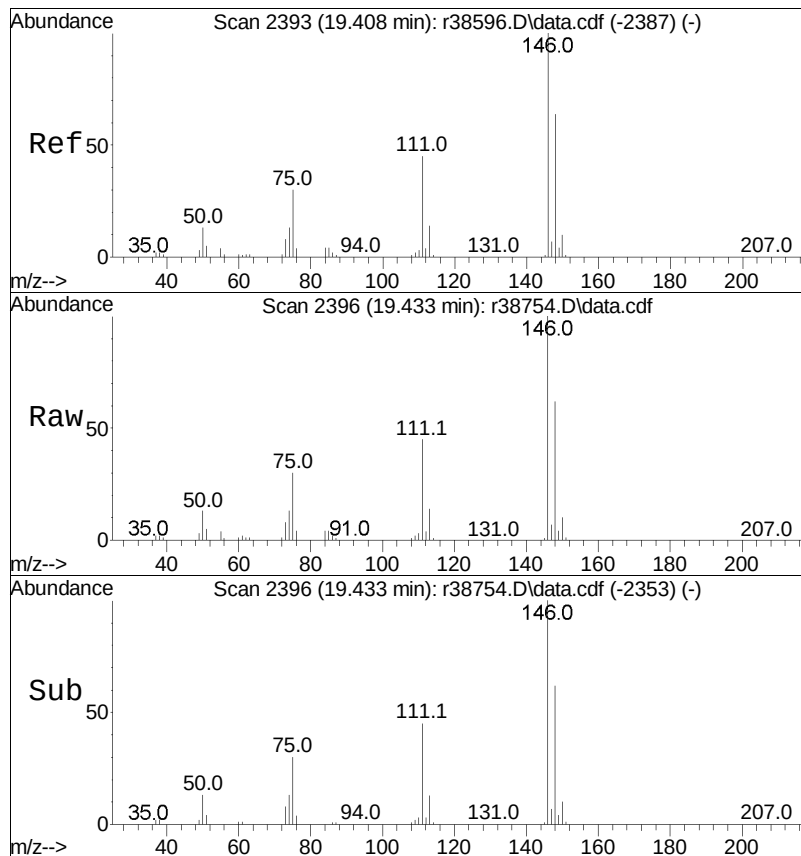




#103
 1,4-dichlorobenzene
 Concen: 12.12 ppbV
 RT: 19.158 min Scan# 2363
 Delta R.T. 0.017 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

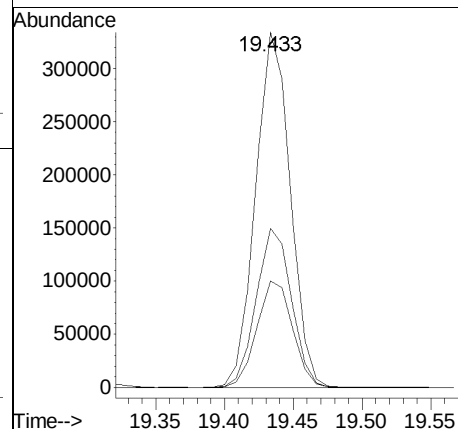
Tgt Ion	Ratio	Lower	Upper
146	100		
111	42.6	34.9	52.3
75	29.4	25.2	37.8

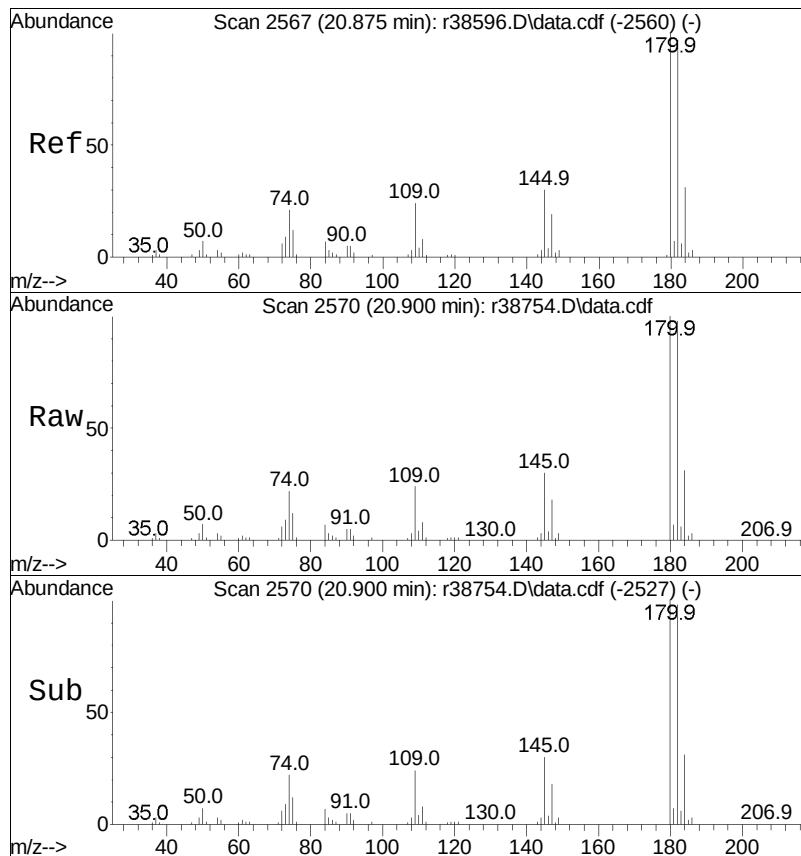




#107
 1,2-dichlorobenzene
 Concen: 12.08 ppbV
 RT: 19.433 min Scan# 2396
 Delta R.T. 0.025 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

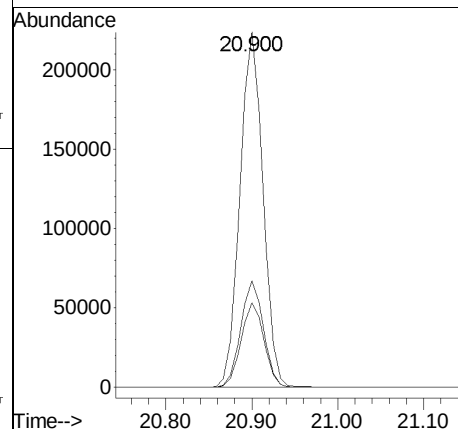
Tgt Ion	Ratio	Lower	Upper
146	100		
111	44.8	36.0	54.0
75	29.9	24.0	36.0

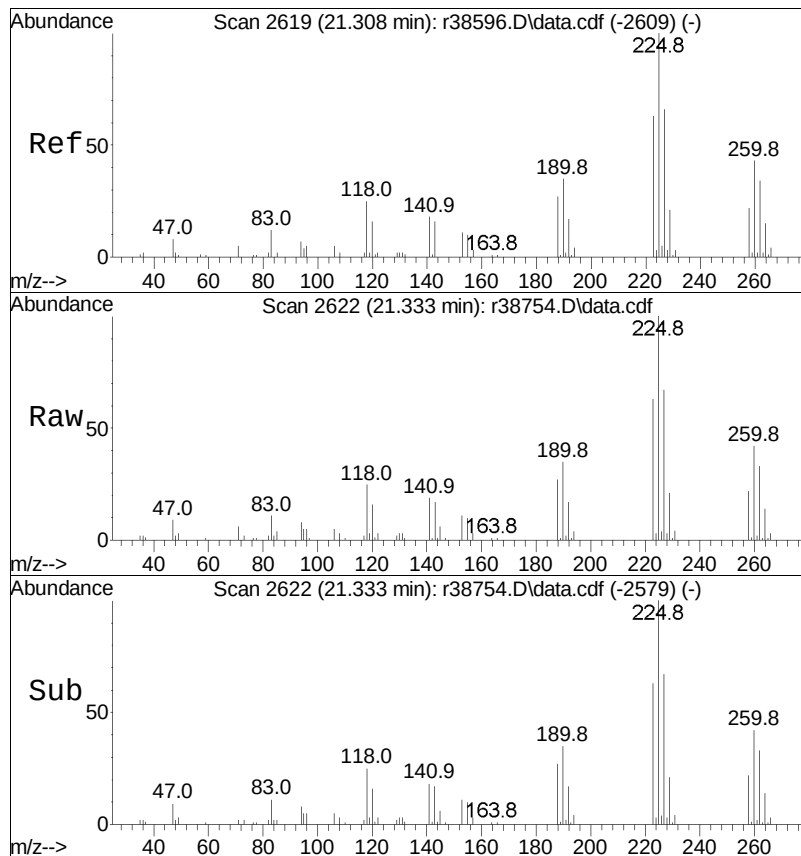




#115
 1,2,4-trichlorobenzene
 Concen: 13.82 ppbV
 RT: 20.900 min Scan# 2570
 Delta R.T. 0.025 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

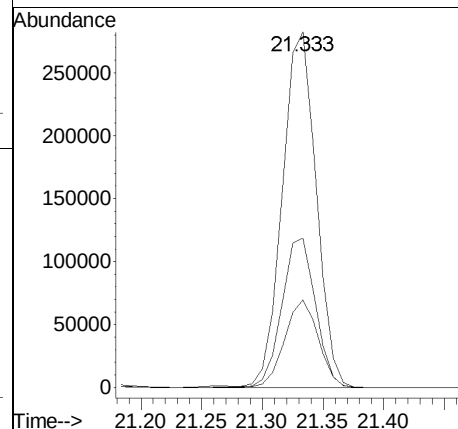
Tgt Ion	Ratio	Lower	Upper
180	100		
145	30.0	23.8	35.6
109	23.8	19.0	28.4





#119
 hexachlorobutadiene
 Concen: 14.61 ppbV
 RT: 21.333 min Scan# 2622
 Delta R.T. 0.025 min
 Lab File: r38754.D
 Acq: 20 Mar 2020 1:32 PM

Tgt	Ion	Ratio	Resp	Lower	Upper
225	100		547909		
260	42.0	34.4		51.6	
118	24.7	20.2		30.2	



Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38760.D
 Acq On : 20 Mar 2020 7:03 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353541-5,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 18:26:07 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320T\r38754.D
 Sub List : T015-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.583	49	387385	10.000	ppbV	0.03
Standard Area = 353543			Recovery = 109.57%			
43) 1,4-difluorobenzene	11.847	114	1015739	10.000	ppbV	0.03
Standard Area = 970632			Recovery = 104.65%			
67) chlorobenzene-D5	16.567	54	143702	10.000	ppbV	0.02
Standard Area = 139948			Recovery = 102.68%			

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	4.000	85	15396	0.440	ppbV	99
6) chloromethane	4.186	50	13080	0.813	ppbV	96
7) Freon-114	4.312		0	N.D.		
10) 1,3-butadiene	4.612	54	26934	1.431	ppbV	95
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	5.326	31	1691621	112.105	ppbV #	85
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.900	43	368049M6	14.646	ppbV	
21) trichlorofluoromethane	6.097	101	5652	0.207	ppbV	96
22) isopropyl alcohol	6.223	45	501655	15.614	ppbV	97
27) tertiary butyl alcohol	6.972	59	3327	0.086	ppbV #	1
28) methylene chloride	7.038	49	3131	0.129	ppbV	93
29) 3-chloropropene	0.000		0	N.D.	d	
30) carbon disulfide	7.326		0	N.D.		
31) Freon 113	7.368	101	2394	0.064	ppbV	90
32) trans-1,2-dichloroethene	8.100		0	N.D.		
33) 1,1-dichloroethane	0.000		0	N.D.	d	
34) MTBE	0.000		0	N.D.	d	
36) 2-butanone	8.892	43	52289	1.097	ppbV	97
38) Ethyl Acetate	0.000		0	N.D.	d	
39) chloroform	9.750	83	2737M4	0.073	ppbV	
40) Tetrahydrofuran	10.208	42	12522	0.420	ppbV	96
42) 1,2-dichloroethane	0.000		0	N.D.	d	
44) hexane	9.658	57	2094813	55.598	ppbV #	47
50) benzene	11.413	78	491062	6.677	ppbV	99
53) cyclohexane	11.727	56	977209	23.943	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
 Data File : r38760.D
 Acq On : 20 Mar 2020 7:03 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353541-5,3,250,250
 Misc : WG1353541,ICAL16594
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 18:26:07 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 17:27:58 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320T\r38754.D
 Sub List : T015-NY-7-SIM - .

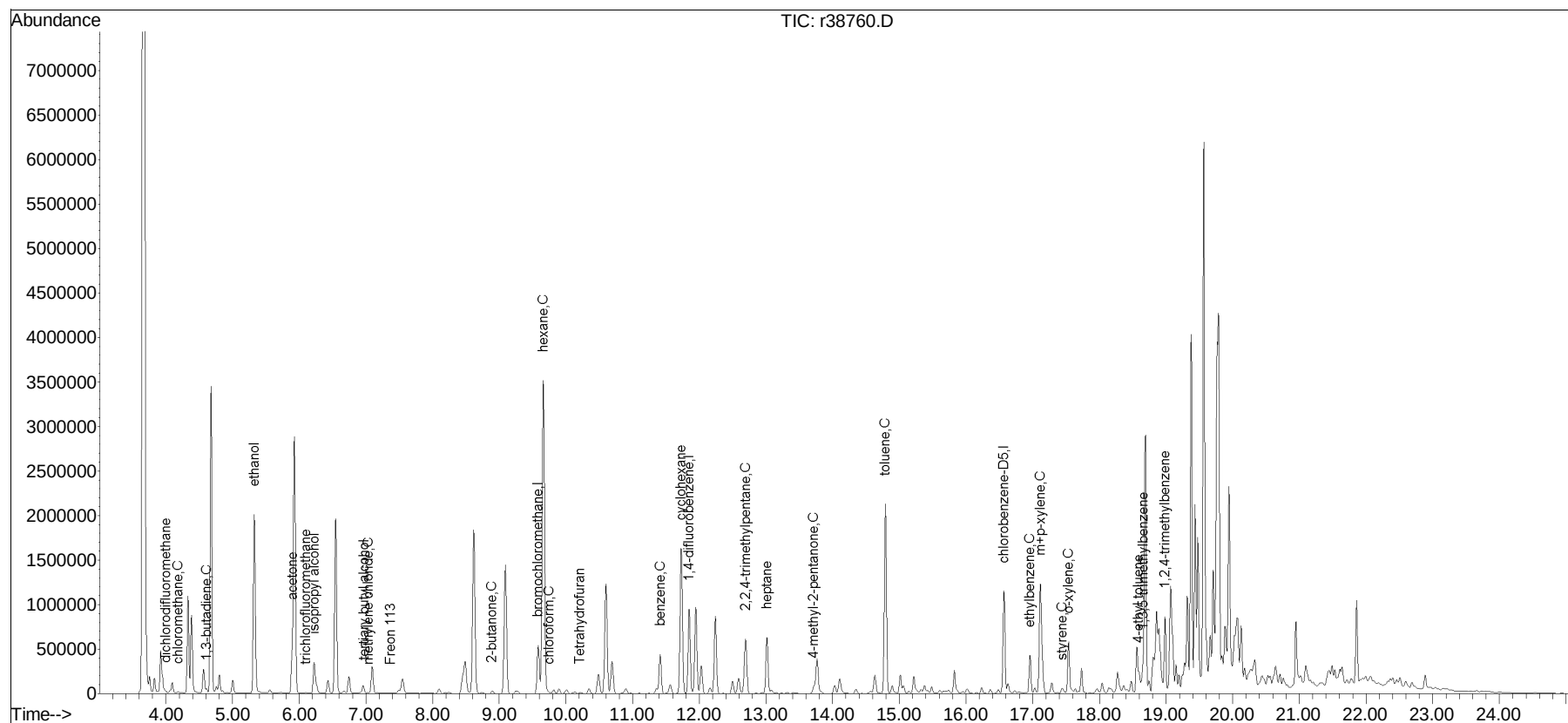
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,2-dichloropropane	0.000		0	N.D.	d	
57) bromodichloromethane	0.000		0	N.D.	d	
58) 1,4-dioxane	0.000		0	N.D.		
60) 2,2,4-trimethylpentane	12.693	57	616199	5.139	ppbV #	88
62) heptane	13.013	43	363040	7.705	ppbV	92
63) cis-1,3-dichloropropene	0.000		0	N.D.		
64) 4-methyl-2-pentanone	13.717	43	35353	0.666	ppbV #	89
65) trans-1,3-dichloropropene	0.000		0	N.D.		
66) 1,1,2-trichloroethane	0.000		0	N.D.	d	
68) toluene	14.792	91	1827164	25.055	ppbV	100
72) 2-hexanone	0.000		0	N.D.	d	
74) dibromochloromethane	0.000		0	N.D.		
75) 1,2-dibromoethane	0.000		0	N.D.		
80) chlorobenzene	0.000		0	N.D.	d	
81) ethylbenzene	16.958	91	362734	4.176	ppbV	95
83) m+p-xylene	17.117	91	1056494	14.859	ppbV	95
84) bromoform	0.000		0	N.D.		
85) styrene	17.442	104	19911	0.314	ppbV	99
86) 1,1,2,2-tetrachloroethane	0.000		0	N.D.	d	
87) o-xylene	17.542	91	404052	5.799	ppbV	92
96) 4-ethyl toluene	18.592	105	110428M6	0.984	ppbV	
97) 1,3,5-trimethylbenzene	18.658	105	122815	1.346	ppbV	97
99) 1,2,4-trimethylbenzene	18.983	105	442091	5.208	ppbV #	56
101) Benzyl Chloride	0.000		0	N.D.	d	
102) 1,3-dichlorobenzene	0.000		0	N.D.	d	
103) 1,4-dichlorobenzene	19.167		0	N.D.		
107) 1,2-dichlorobenzene	0.000		0	N.D.		
115) 1,2,4-trichlorobenzene	20.908		0	N.D.		
119) hexachlorobutadiene	0.000		0	N.D.		

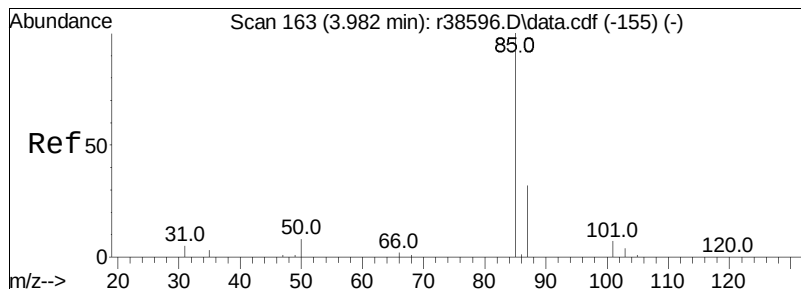
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : T015-NY-7-SIM - .\Airpiano3\2020\03\200320T\r38754.D

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320T\
Data File : r38760.D
Acq On : 20 Mar 2020 7:03 PM
Operator : AIRPIANO3:EW
Sample : WG1353541-5, 3, 250, 250
Misc : WG1353541, ICAL16594
ALS Vial : 0 Sample Multiplier: 1

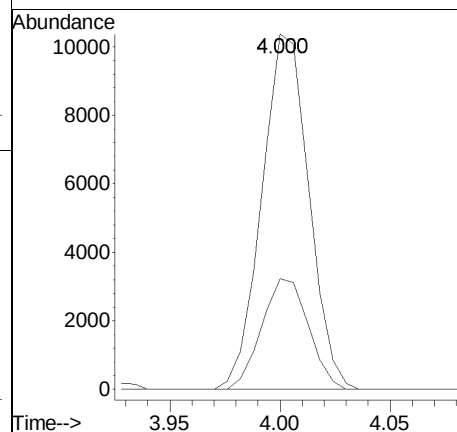
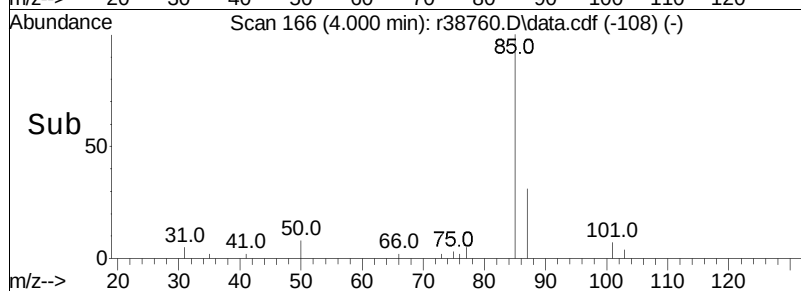
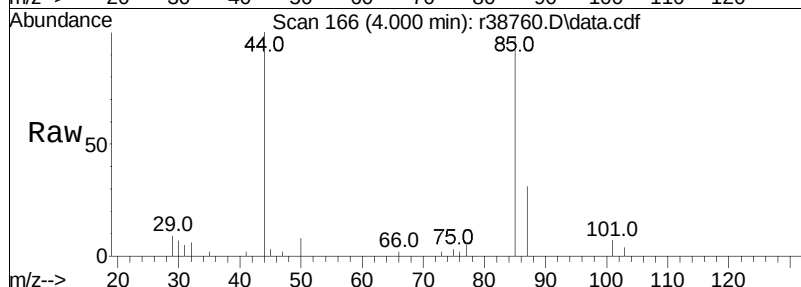
Quant Time: Mar 21 18:26:07 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320T\TFS3_200312.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Mar 12 17:27:58 2020
Response via : Initial Calibration

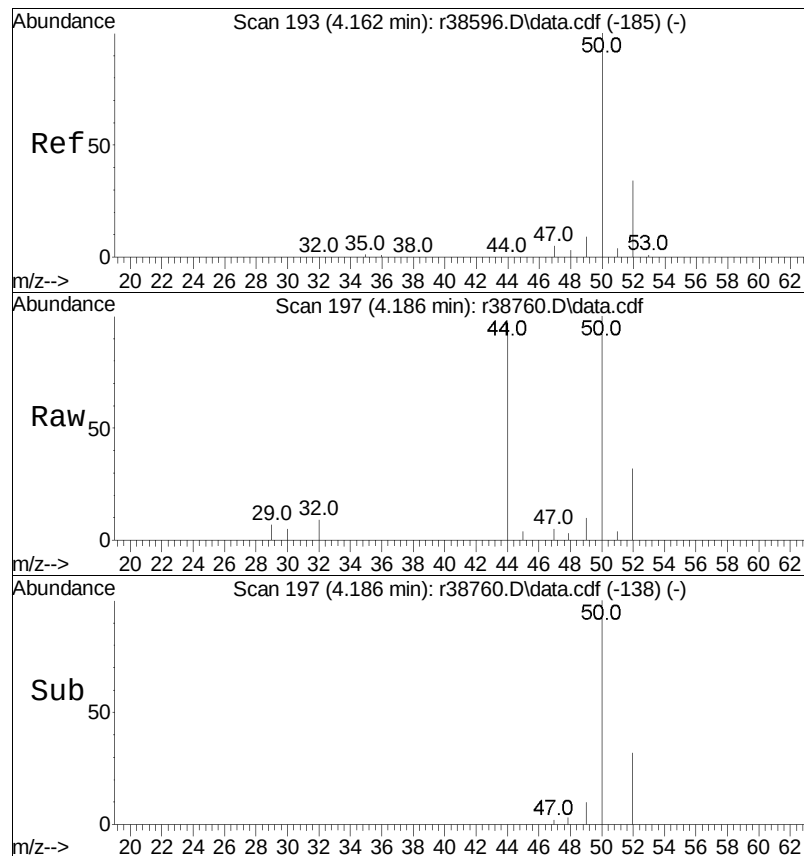




#5
dichlorodifluoromethane
Concen: 0.44 ppbV
RT: 4.000 min Scan# 166
Delta R.T. 0.018 min
Lab File: r38760.D
Acq: 20 Mar 2020 7:03 PM

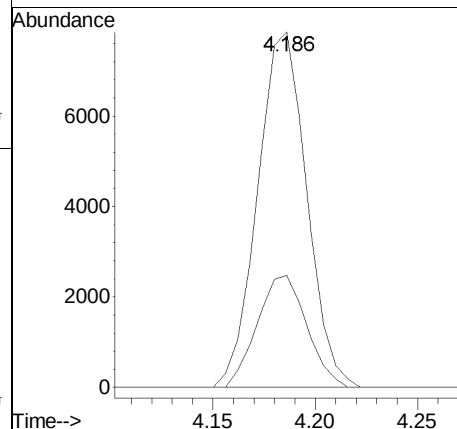
Tgt Ion: 85 Resp: 15396
Ion Ratio Lower Upper
85 100
87 31.2 25.4 38.0

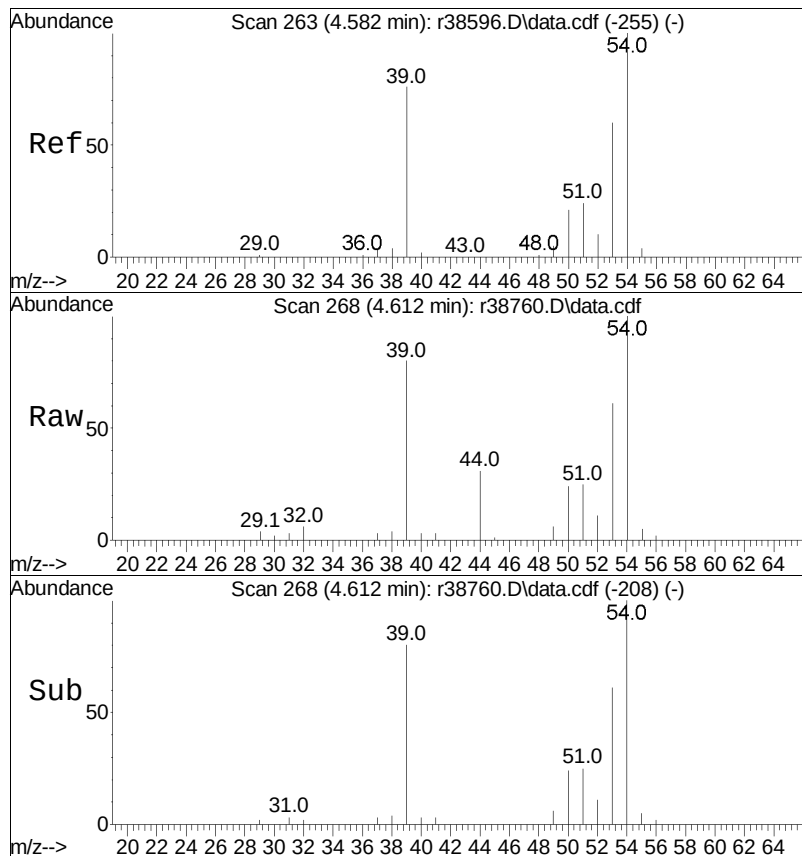




#6
 chloromethane
 Concen: 0.81 ppbV
 RT: 4.186 min Scan# 197
 Delta R.T. 0.024 min
 Lab File: r38760.D
 Acq: 20 Mar 2020 7:03 PM

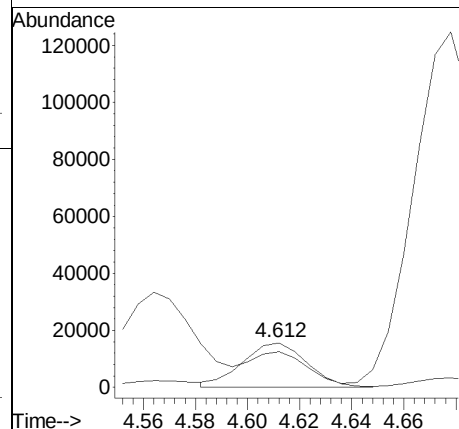
Tgt	Ion	Ratio	Lower	Upper
50	100			
52	31.5	26.9	40.3	

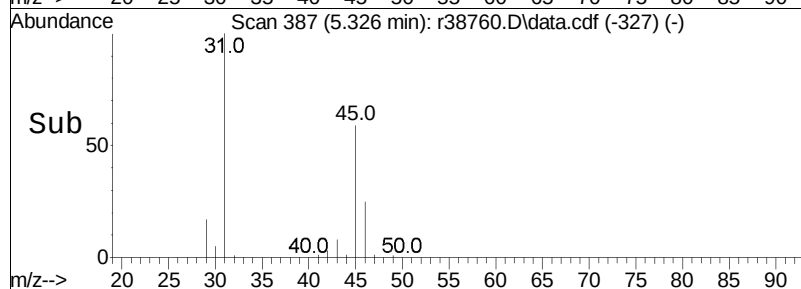
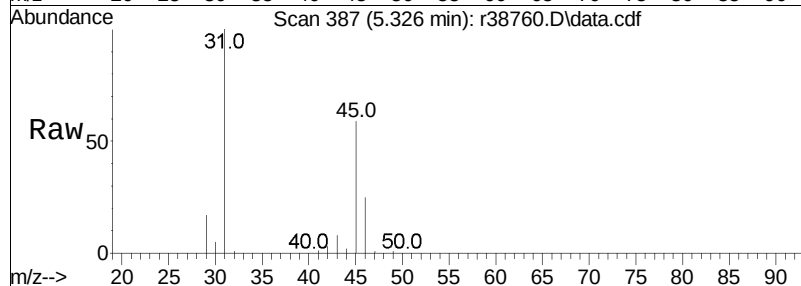
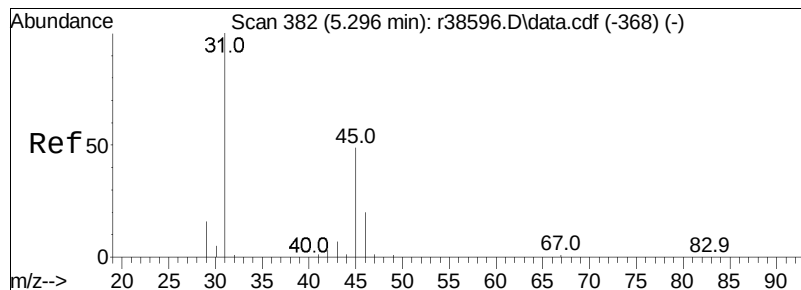




#10
 1,3-butadiene
 Concen: 1.43 ppbV
 RT: 4.612 min Scan# 268
 Delta R.T. 0.030 min
 Lab File: r38760.D
 Acq: 20 Mar 2020 7:03 PM

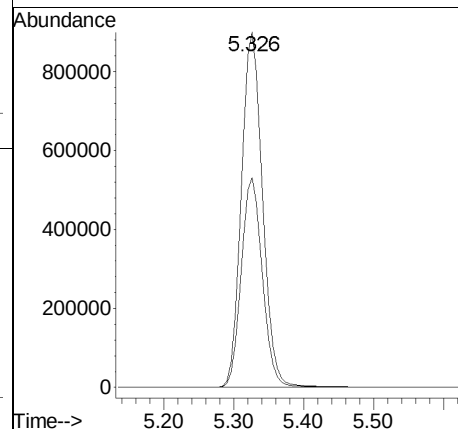
Tgt Ion:	54	Resp:	26934
Ion Ratio	Lower	Upper	
54	100		
39	80.2	60.9	91.3

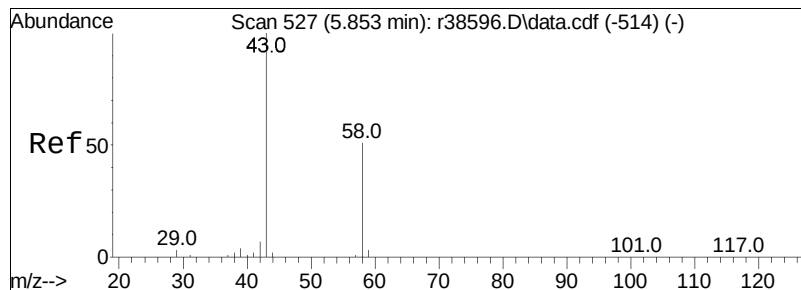




#15
ethanol
Concen: 112.11 ppbV
RT: 5.326 min Scan# 387
Delta R.T. 0.030 min
Lab File: r38760.D
Acq: 20 Mar 2020 7:03 PM

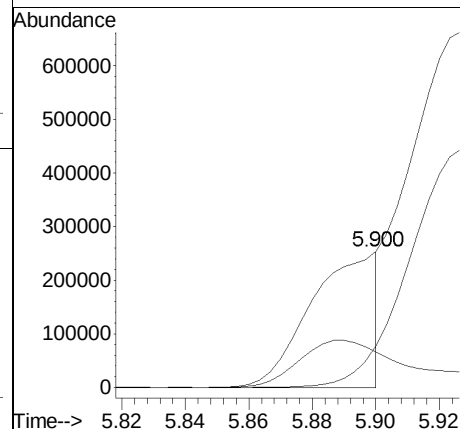
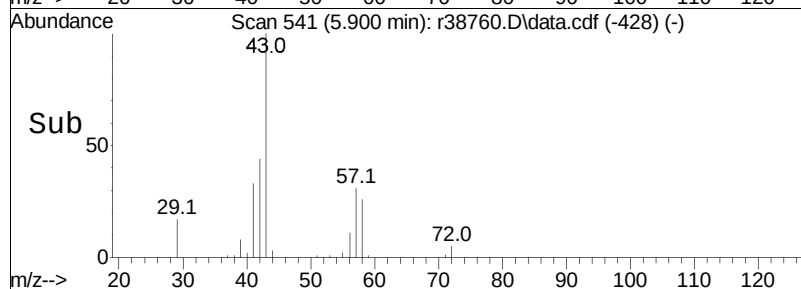
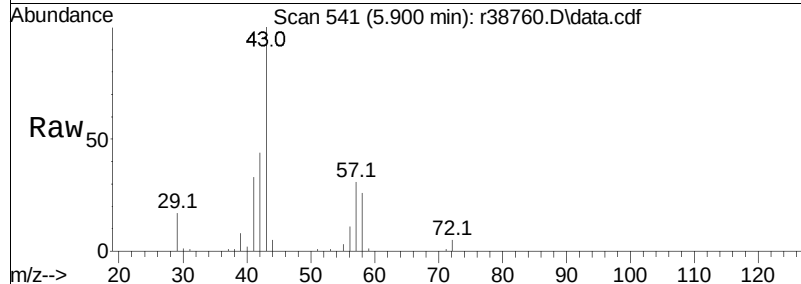
Tgt Ion	31	45	Ratio	Lower	Upper
31	100				
45	59.1			39.0	58.4#

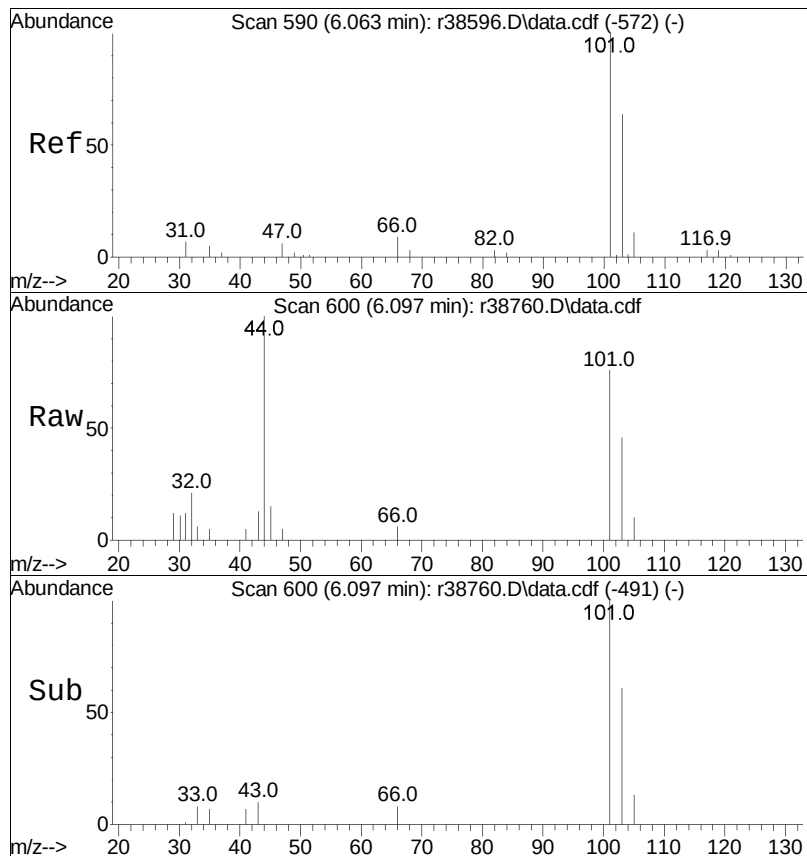




#19
acetone
Concen: 14.65 ppbV m
RT: 5.900 min Scan# 541
Delta R.T. 0.047 min
Lab File: r38760.D
Acq: 20 Mar 2020 7:03 PM

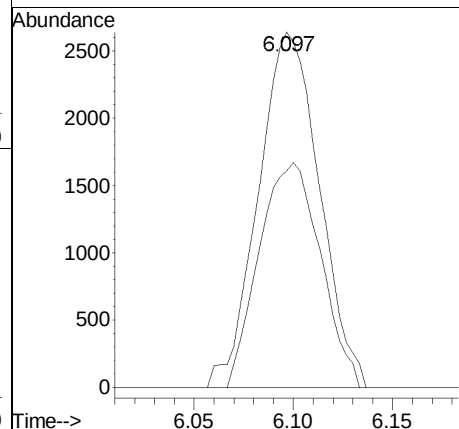
Tgt Ion	Ratio	Lower	Upper
43	100		
58	26.1	40.6	60.8#
57	30.5	1.0	1.6#

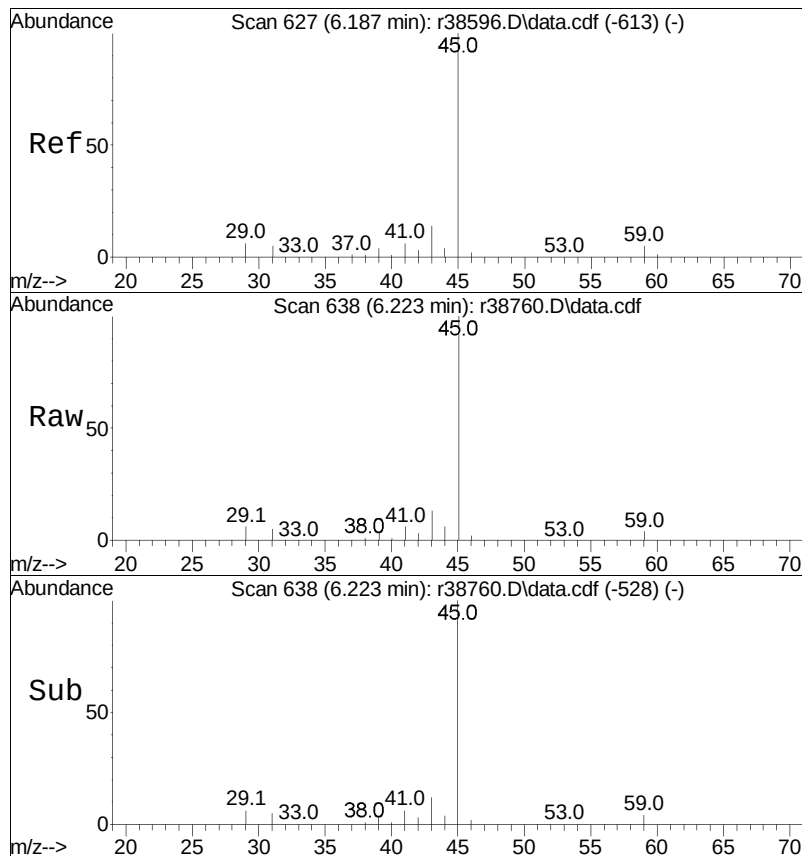




#21
 trichlorofluoromethane
 Concen: 0.21 ppbV
 RT: 6.097 min Scan# 600
 Delta R.T. 0.033 min
 Lab File: r38760.D
 Acq: 20 Mar 2020 7:03 PM

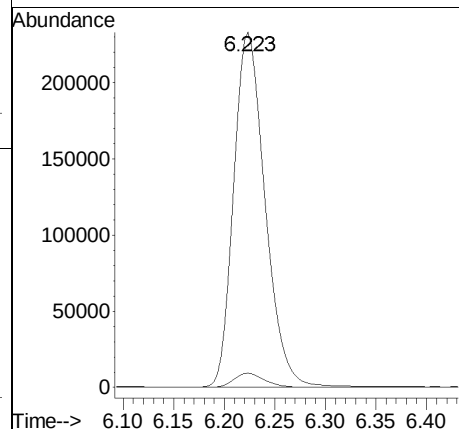
Tgt	Ion	Ratio	Lower	Upper
101	101	100		
103	61.0	51.4	51.4	77.0

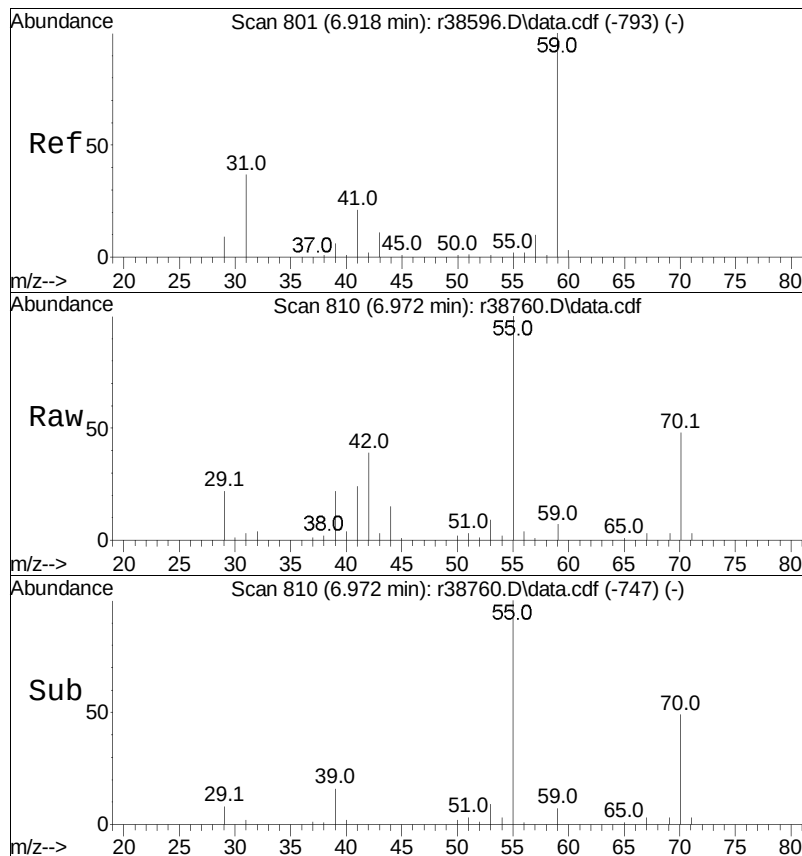




#22
 isopropyl alcohol
 Concen: 15.61 ppbV
 RT: 6.223 min Scan# 638
 Delta R.T. 0.037 min
 Lab File: r38760.D
 Acq: 20 Mar 2020 7:03 PM

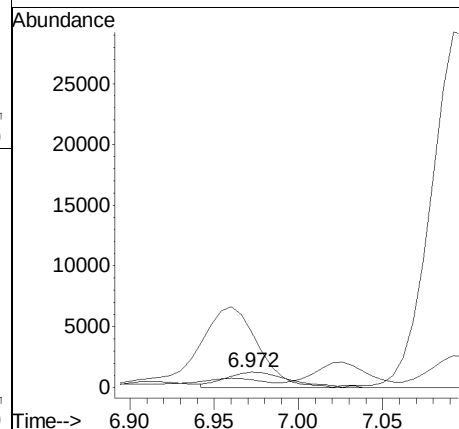
Tgt Ion	Ratio	Lower	Upper
45	100		
59	4.0	3.9	5.9

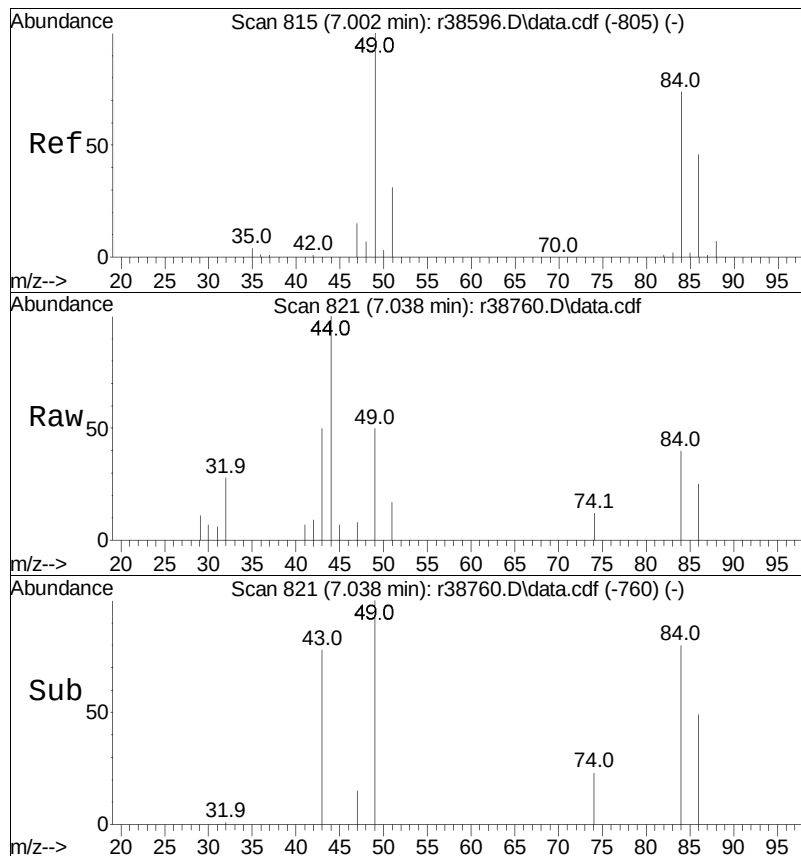




#27
 tertiary butyl alcohol
 Concen: 0.09 ppbV
 RT: 6.972 min Scan# 810
 Delta R.T. 0.054 min
 Lab File: r38760.D
 Acq: 20 Mar 2020 7:03 PM

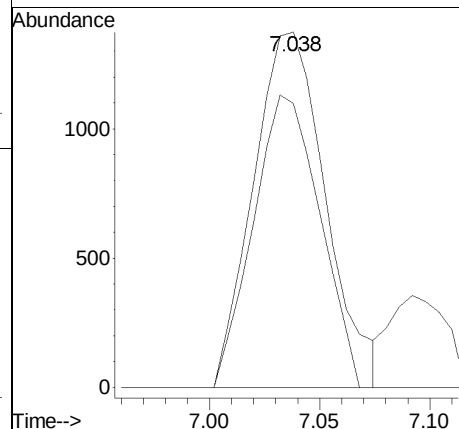
Tgt Ion:	59	Resp:	3327
Ion Ratio	Lower	Upper	
59	100		
41	362.6	16.9	25.3#
43	49.8	8.9	13.3#

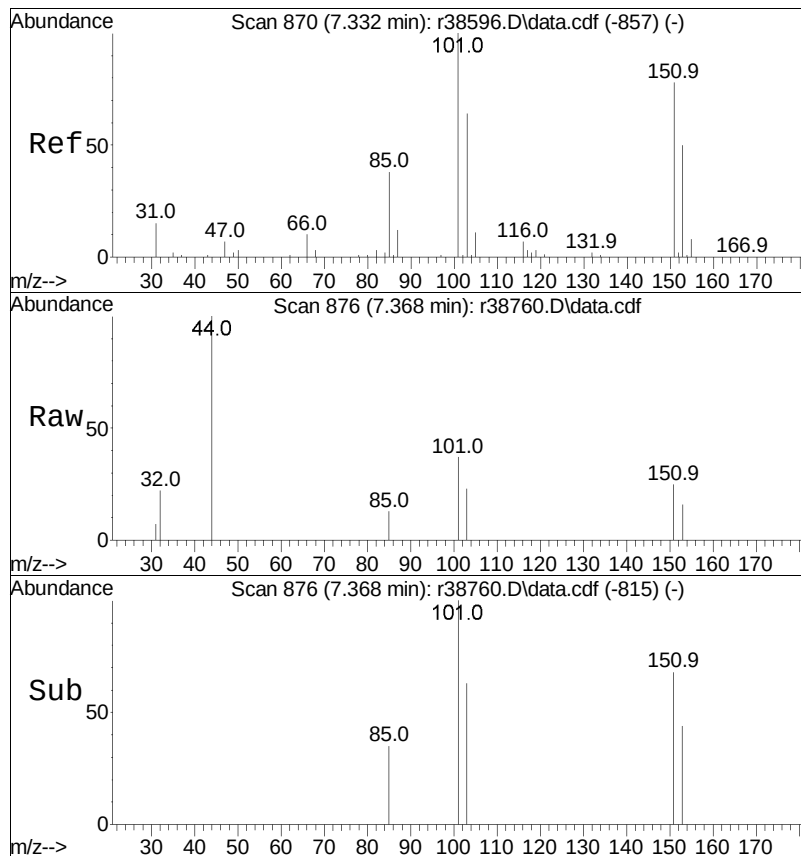




#28
 methylene chloride
 Concen: 0.13 ppbV
 RT: 7.038 min Scan# 821
 Delta R.T. 0.036 min
 Lab File: r38760.D
 Acq: 20 Mar 2020 7:03 PM

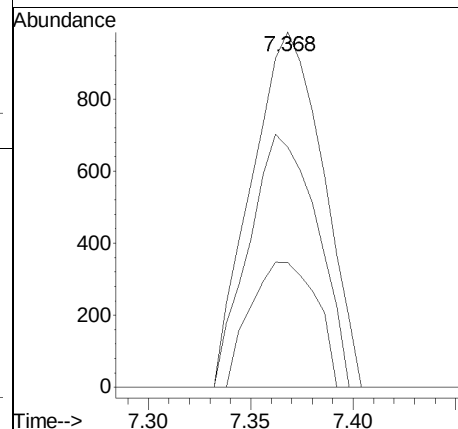
Tgt Ion:	49	84	Ratio	Lower	Upper
Resp:	3131				
Ion Ratio	100	79.9			
			59.3		88.9

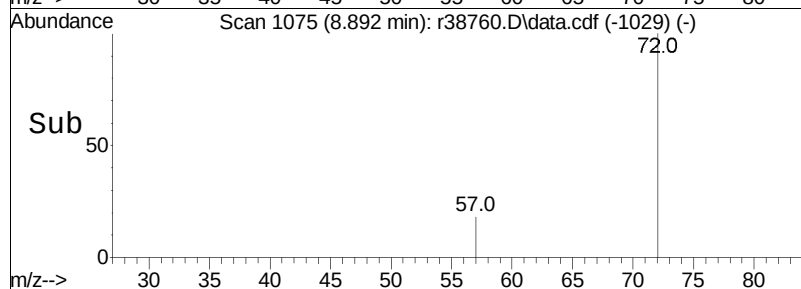
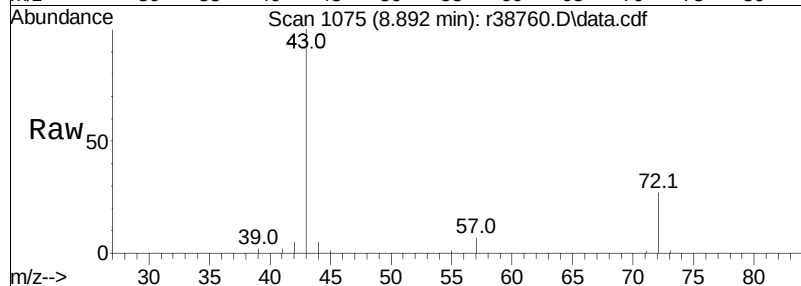
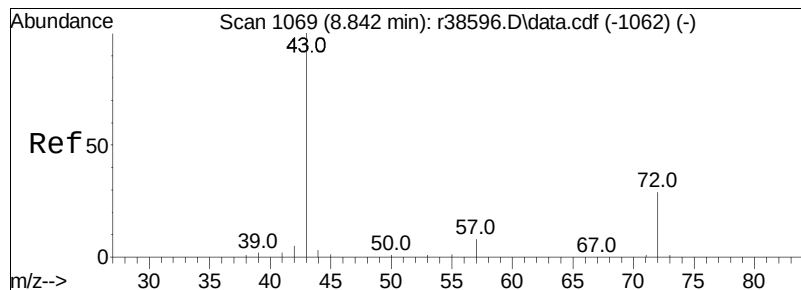




#31
 Freon 113
 Concen: 0.06 ppbV
 RT: 7.368 min Scan# 876
 Delta R.T. 0.036 min
 Lab File: r38760.D
 Acq: 20 Mar 2020 7:03 PM

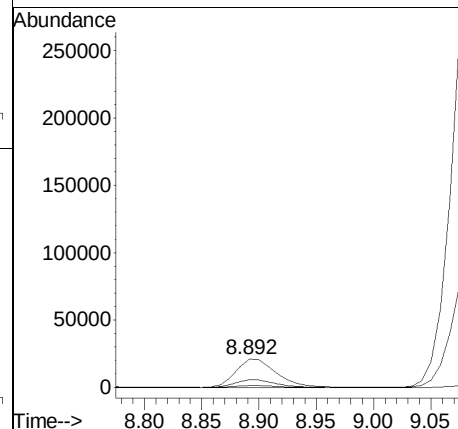
Tgt Ion:	101	Resp:	2394
Ion Ratio	Lower	Upper	
101	100		
85	35.1	30.6	45.8
151	67.6	62.4	93.6

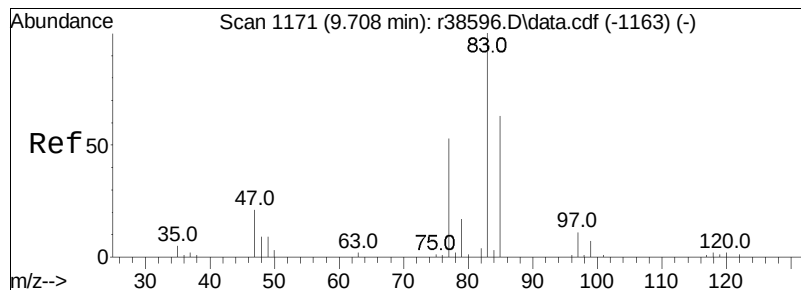




#36
2-butanone
Concen: 1.10 ppbV
RT: 8.892 min Scan# 1075
Delta R.T. 0.050 min
Lab File: r38760.D
Acq: 20 Mar 2020 7:03 PM

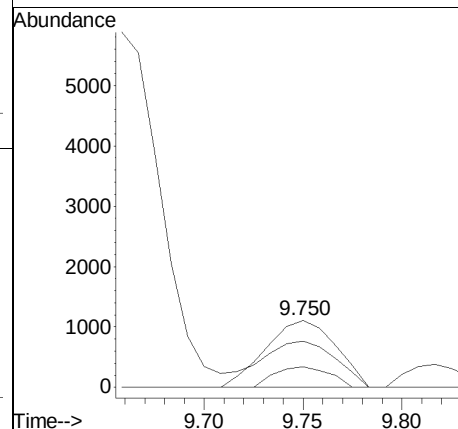
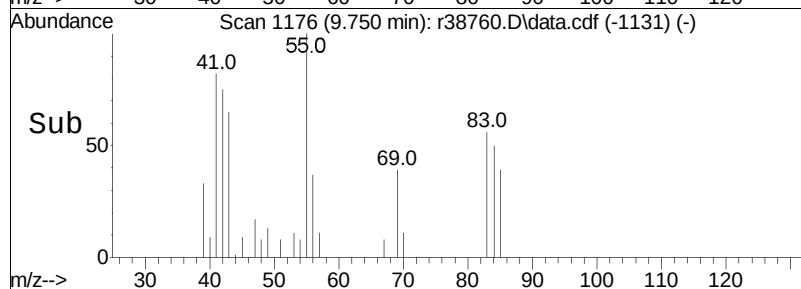
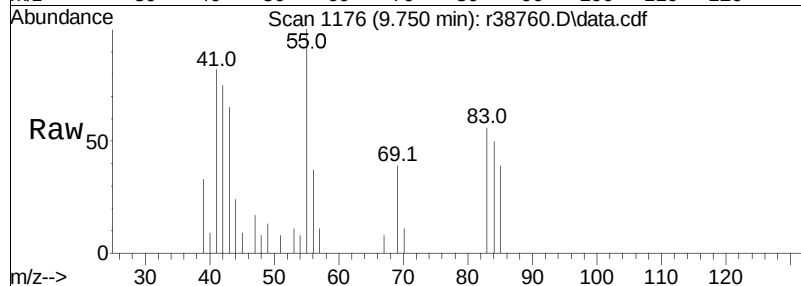
Tgt Ion	Ratio	Lower	Upper
43	100		
72	27.1	23.1	34.7
57	6.8	6.3	9.5

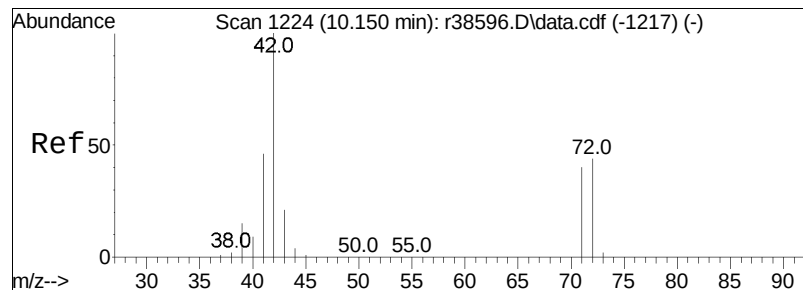




#39
 chloroform
 Concen: 0.07 ppbV m
 RT: 9.750 min Scan# 1176
 Delta R.T. 0.042 min
 Lab File: r38760.D
 Acq: 20 Mar 2020 7:03 PM

Tgt Ion	Ratio	Resp	Lower	Upper
83	100	2737		
85	69.2		50.4	75.6
47	30.9		16.9	25.3





#40

Tetrahydrofuran

Concen: 0.42 ppbV

RT: 10.208 min Scan# 1231

Delta R.T. 0.058 min

Lab File: r38760.D

Acq: 20 Mar 2020 7:03 PM

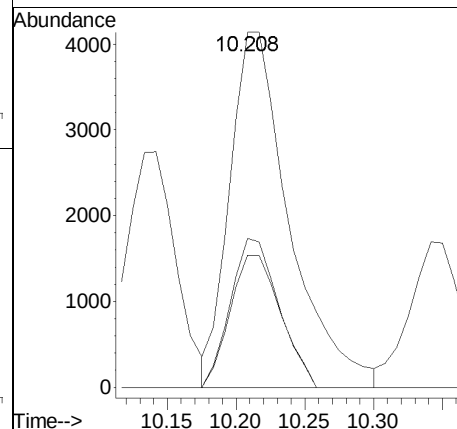
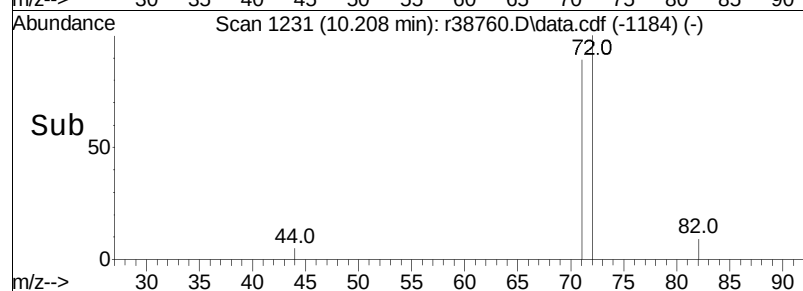
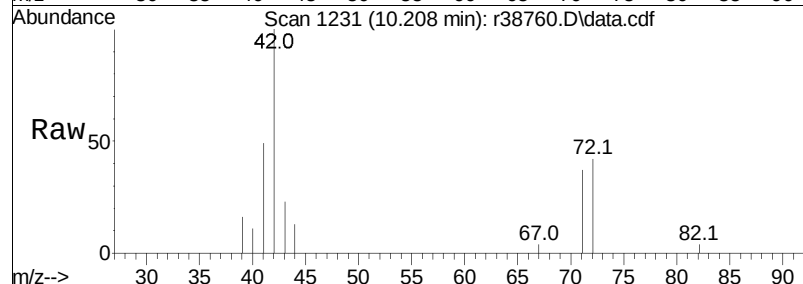
Tgt Ion: 42 Resp: 12522

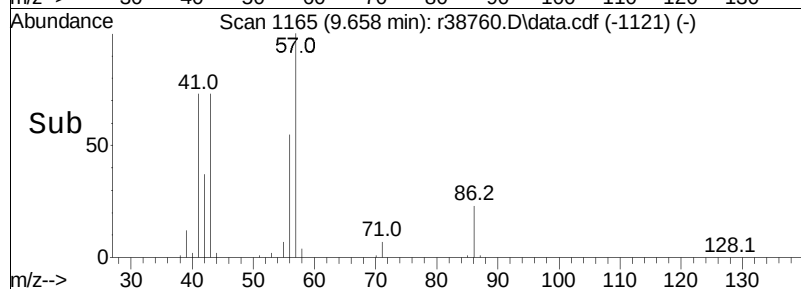
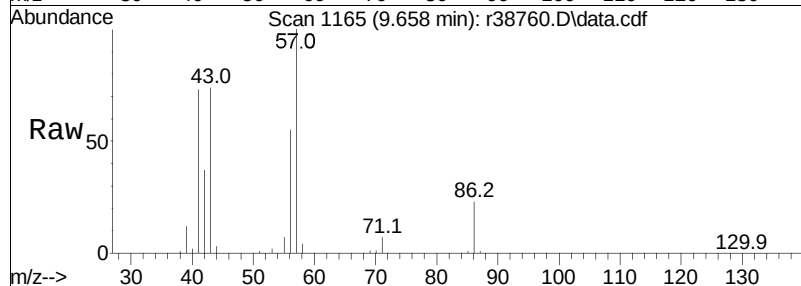
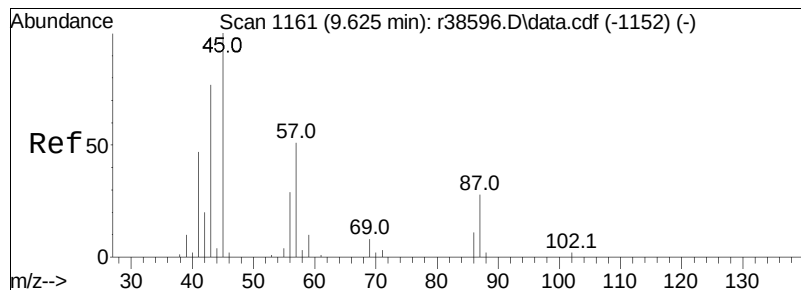
Ion Ratio Lower Upper

42 100

71 37.3 31.8 47.8

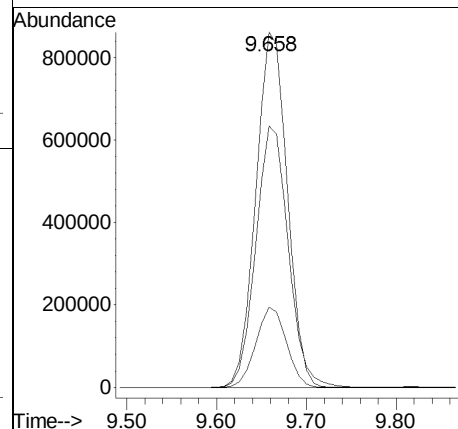
72 42.0 35.2 52.8

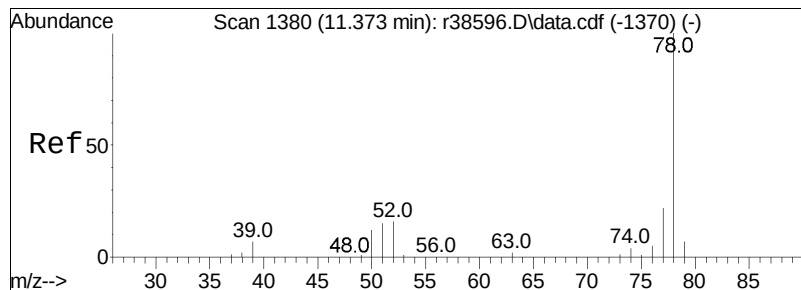




#44
hexane
Concen: 55.60 ppbV
RT: 9.658 min Scan# 1165
Delta R.T. 0.033 min
Lab File: r38760.D
Acq: 20 Mar 2020 7:03 PM

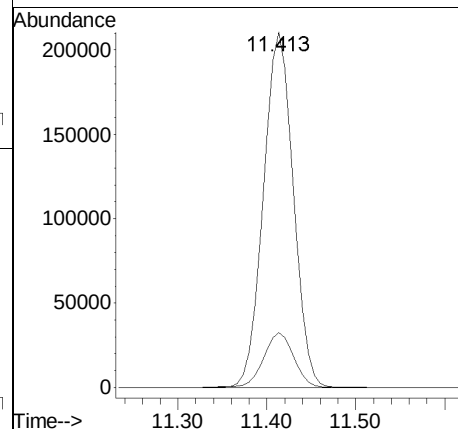
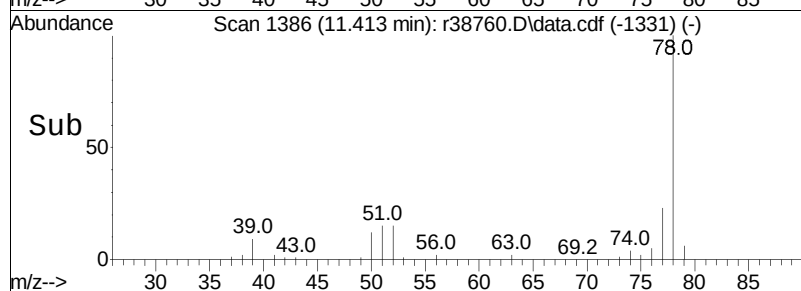
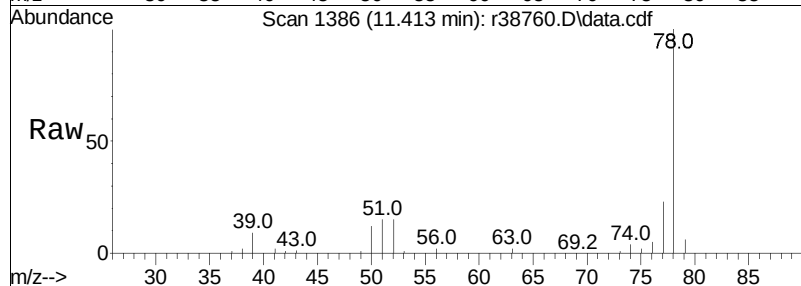
Tgt	Ion	Ratio	Lower	Upper
57	100			
43	73.5	119.3	178.9#	
86	22.6	17.0	25.6	

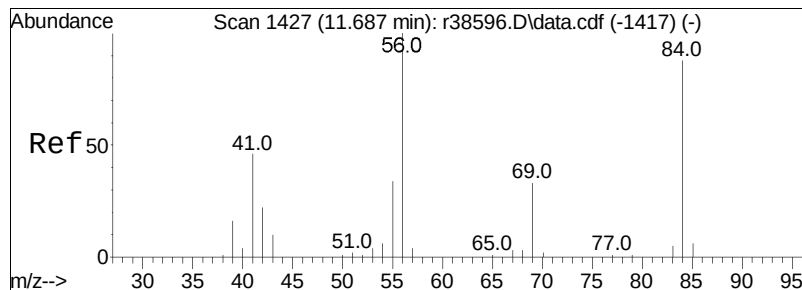




#50
benzene
Concen: 6.68 ppbV
RT: 11.413 min Scan# 1386
Delta R.T. 0.040 min
Lab File: r38760.D
Acq: 20 Mar 2020 7:03 PM

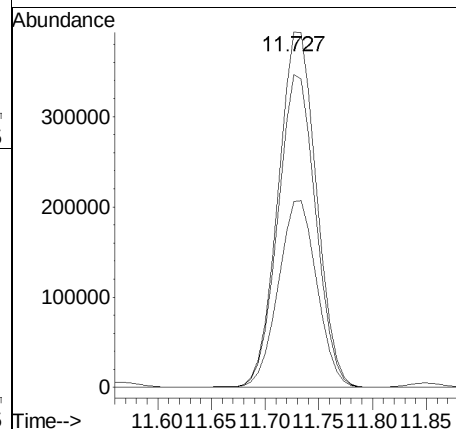
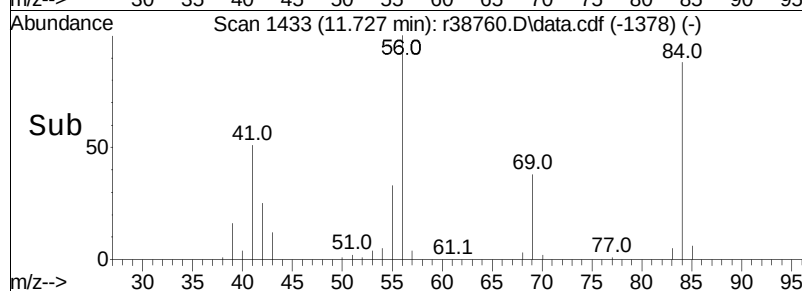
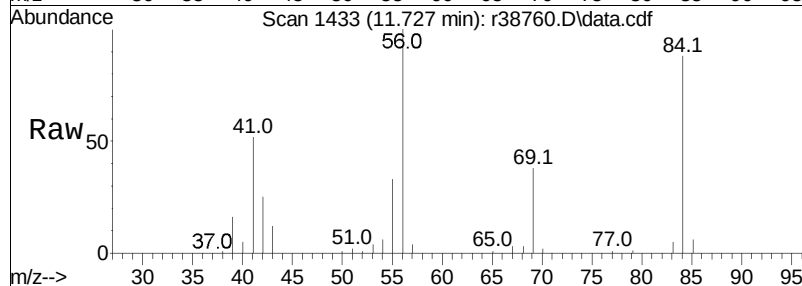
Tgt Ion	Ratio	Lower	Upper
78	100		
52	15.4	12.6	18.8

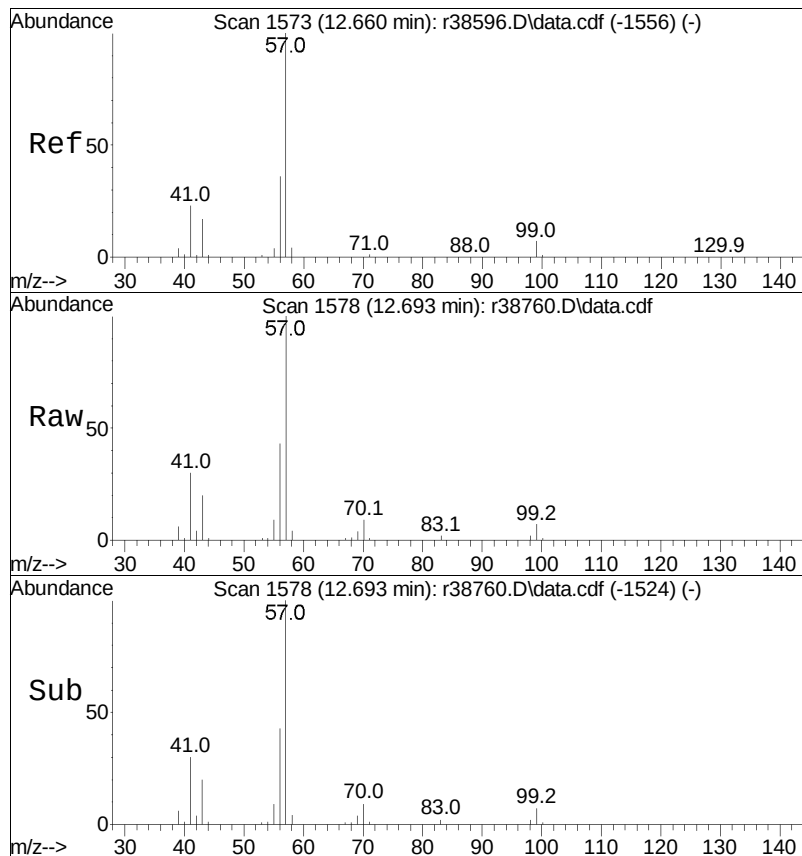




#53
cyclohexane
Concen: 23.94 ppbV
RT: 11.727 min Scan# 1433
Delta R.T. 0.040 min
Lab File: r38760.D
Acq: 20 Mar 2020 7:03 PM

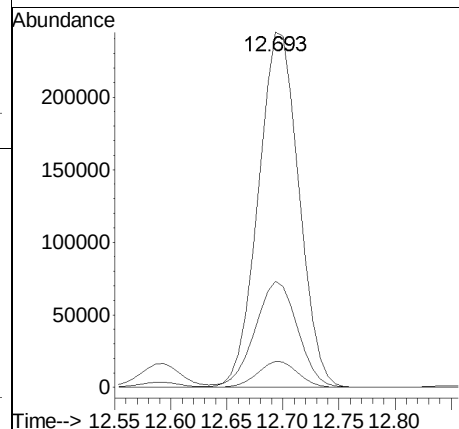
Tgt	Ion: 56	Resp: 977209
Ion	Ratio	Lower Upper
56	100	
84	88.0	70.2 105.2
41	52.3	36.9 55.3

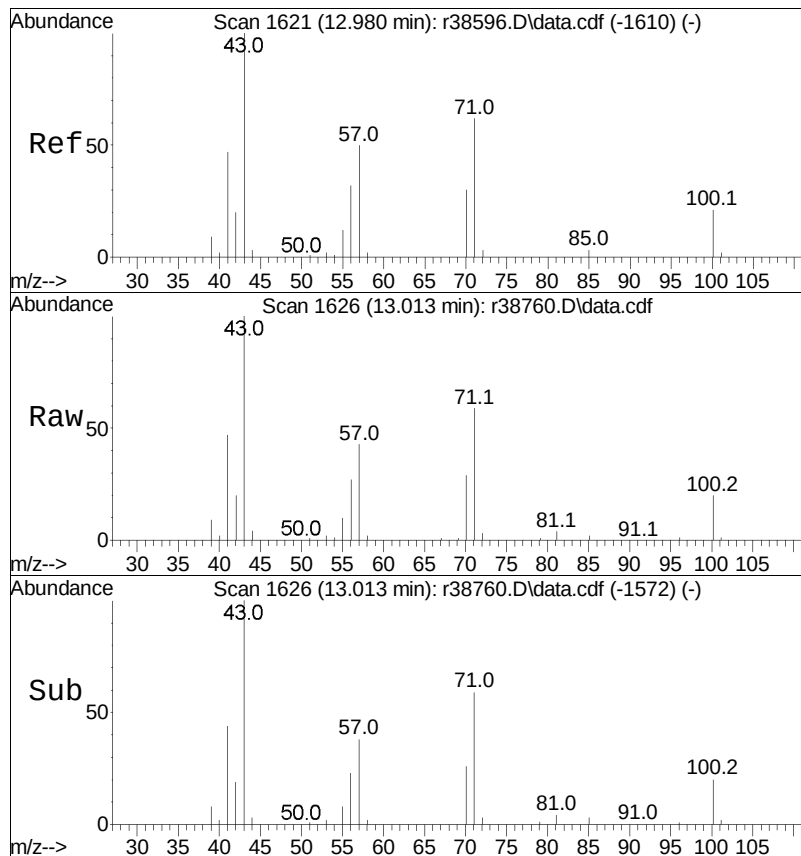




#60
 2,2,4-trimethylpentane
 Concen: 5.14 ppbV
 RT: 12.693 min Scan# 1578
 Delta R.T. 0.033 min
 Lab File: r38760.D
 Acq: 20 Mar 2020 7:03 PM

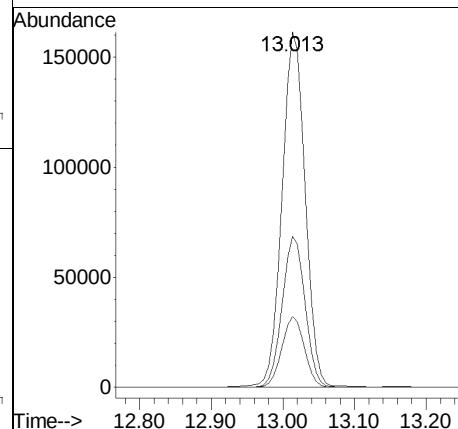
Tgt	Ion: 57	Resp: 616199
Ion	Ratio	Lower Upper
57	100	
99	7.4	5.4 8.2
41	29.9	18.2 27.2#

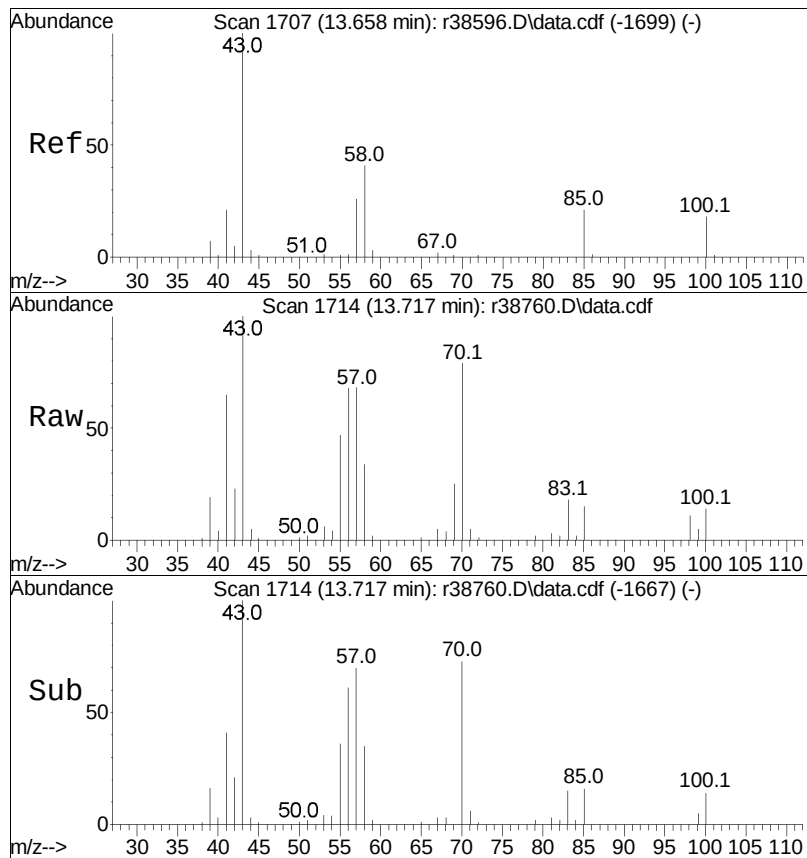




#62
 heptane
 Concen: 7.70 ppbV
 RT: 13.013 min Scan# 1626
 Delta R.T. 0.033 min
 Lab File: r38760.D
 Acq: 20 Mar 2020 7:03 PM

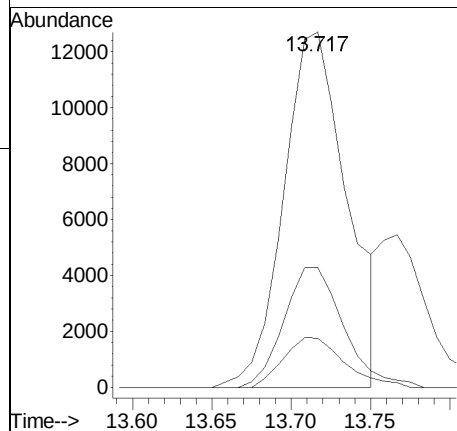
Tgt	Ion: 43	Resp: 363040
Ion	Ratio	Lower Upper
43	100	
57	42.5	39.8 59.6
100	20.0	17.3 25.9

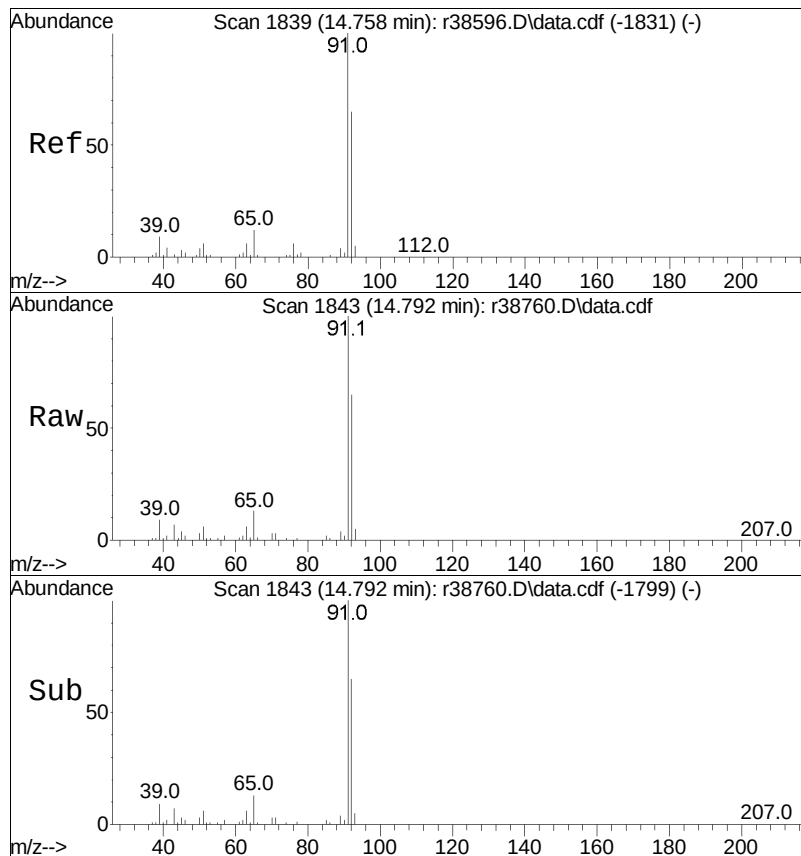




#64
 4-methyl-2-pentanone
 Concen: 0.67 ppbV
 RT: 13.717 min Scan# 1714
 Delta R.T. 0.058 min
 Lab File: r38760.D
 Acq: 20 Mar 2020 7:03 PM

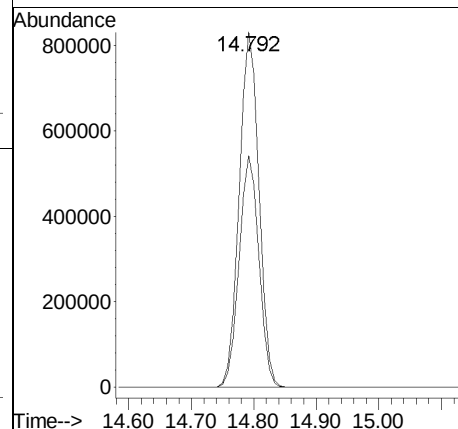
Tgt	Ion	Ratio	Lower	Upper
43	100			
58	33.8	32.5	48.7	
100	13.9	14.7	22.1	#

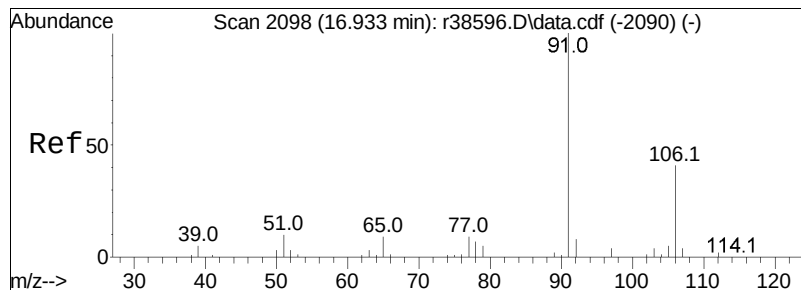




#68
toluene
Concen: 25.06 ppbV
RT: 14.792 min Scan# 1843
Delta R.T. 0.033 min
Lab File: r38760.D
Acq: 20 Mar 2020 7:03 PM

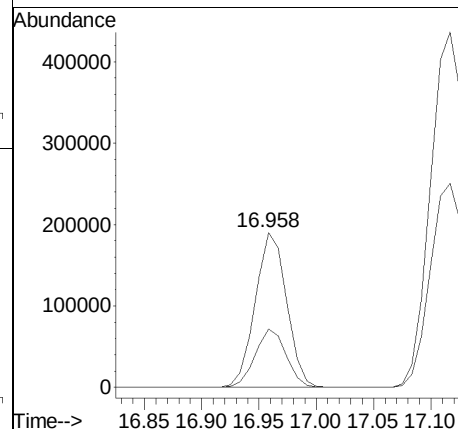
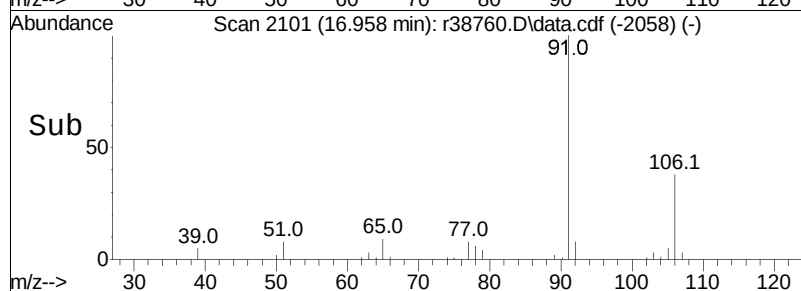
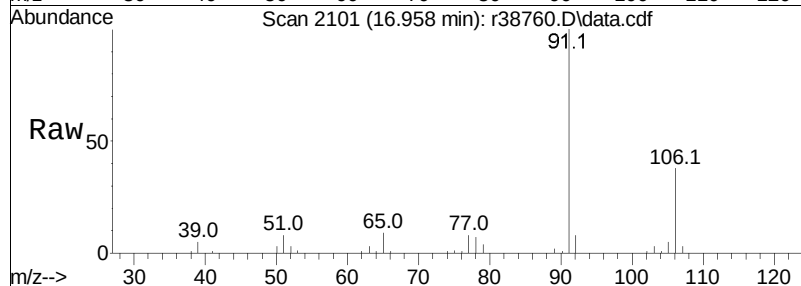
Tgt Ion: 91 Resp: 1827164
Ion Ratio Lower Upper
91 100
92 65.2 52.4 78.6

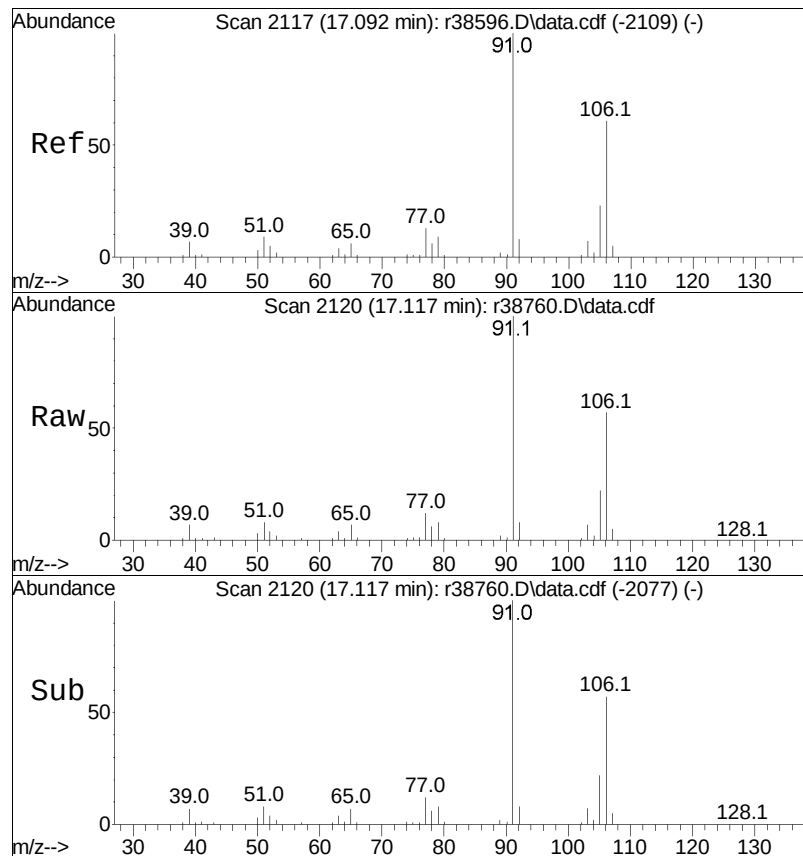




#81
ethylbenzene
Concen: 4.18 ppbV
RT: 16.958 min Scan# 2101
Delta R.T. 0.025 min
Lab File: r38760.D
Acq: 20 Mar 2020 7:03 PM

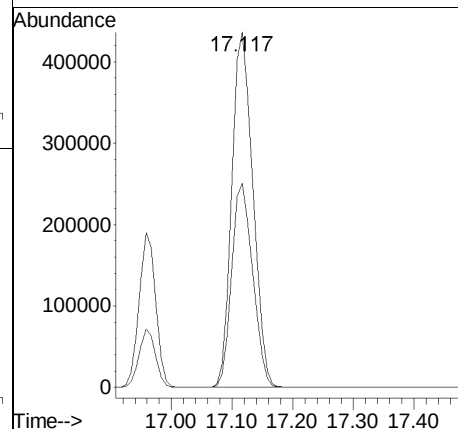
Tgt Ion	Ratio	Lower	Upper
91	100		
106	37.8	32.6	48.8

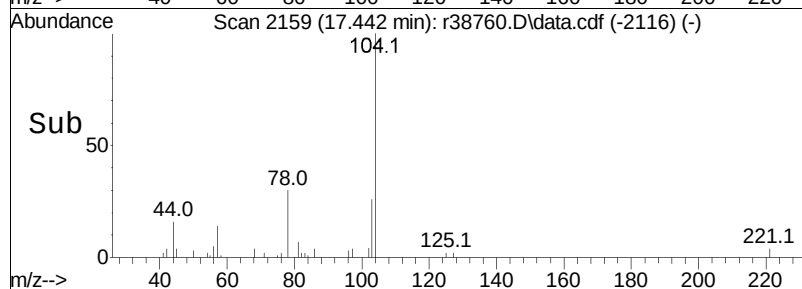
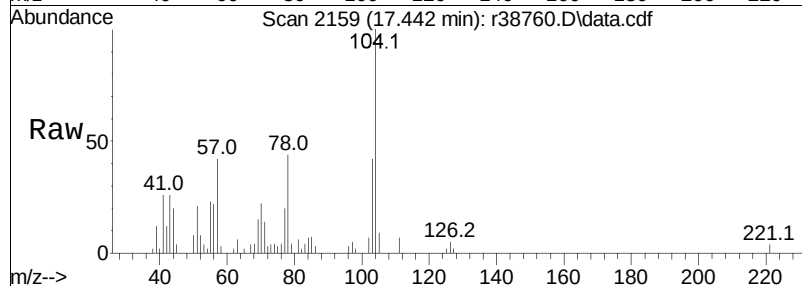
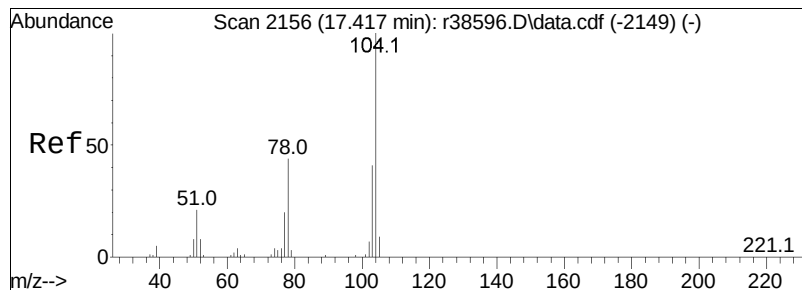




#83
 m+p-xylene
 Concen: 14.86 ppbV
 RT: 17.117 min Scan# 2120
 Delta R.T. 0.025 min
 Lab File: r38760.D
 Acq: 20 Mar 2020 7:03 PM

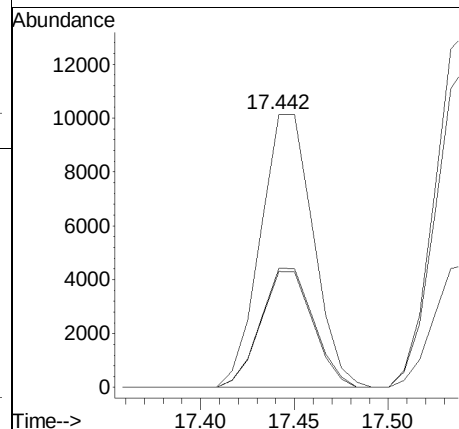
Tgt Ion	Ratio	Lower	Upper
91	100		
106	57.4	49.0	73.6

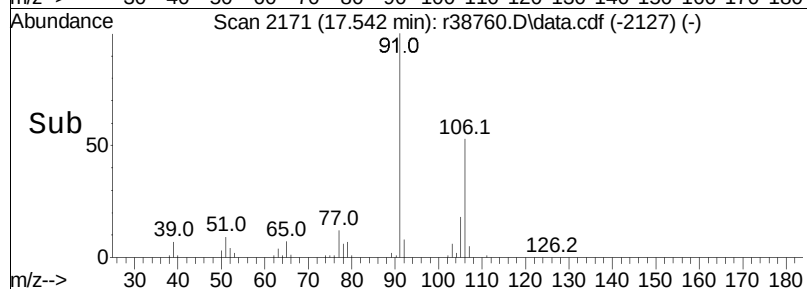
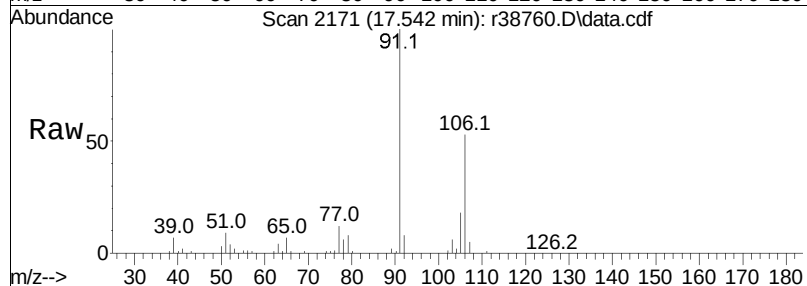
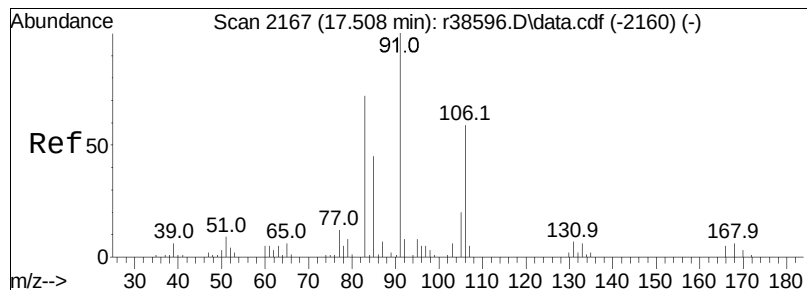




#85
styrene
Concen: 0.31 ppbV
RT: 17.442 min Scan# 2159
Delta R.T. 0.025 min
Lab File: r38760.D
Acq: 20 Mar 2020 7:03 PM

Tgt Ion	Ratio	Resp	Lower	Upper
104	100	19911		
103	42.4		33.1	49.7
78	43.6		35.0	52.6





#87

o-xylene

Concen: 5.80 ppbV

RT: 17.542 min Scan# 2171

Delta R.T. 0.033 min

Lab File: r38760.D

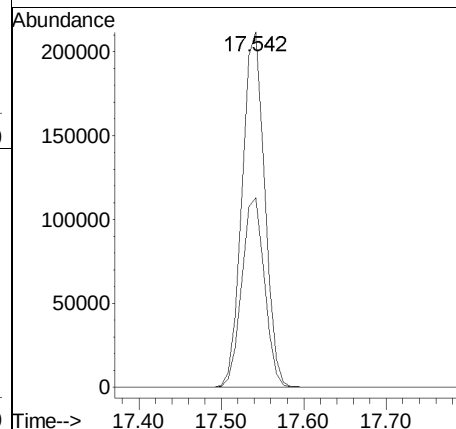
Acq: 20 Mar 2020 7:03 PM

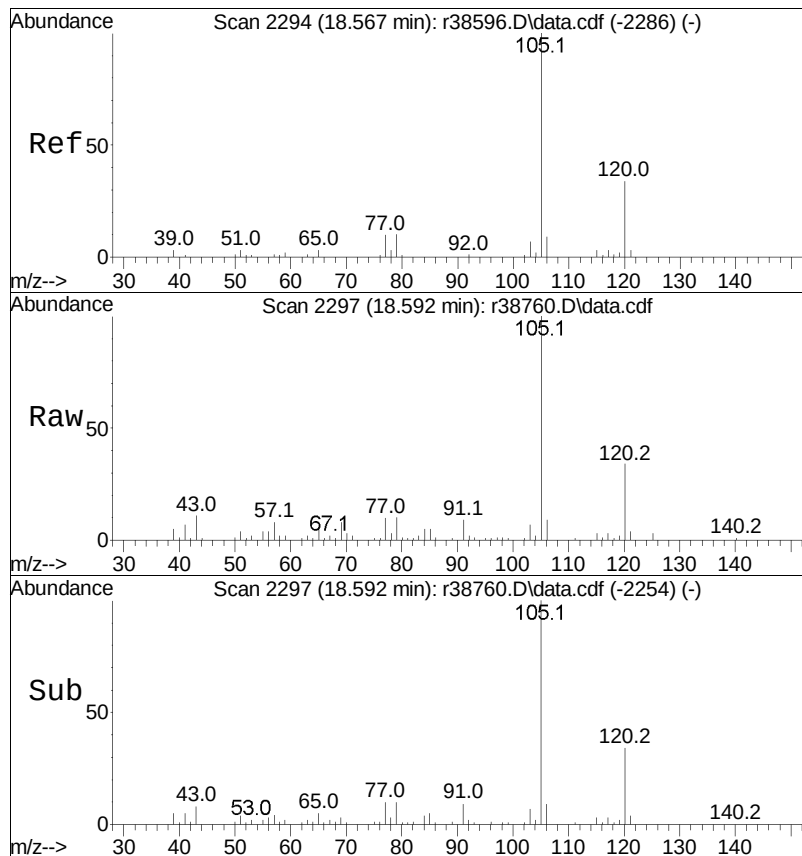
Tgt Ion: 91 Resp: 404052

Ion Ratio Lower Upper

91 100

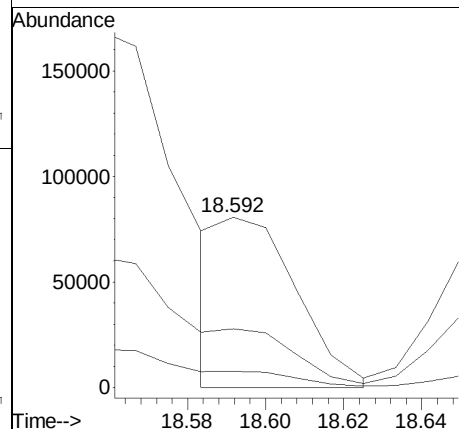
106 53.4 47.4 71.0

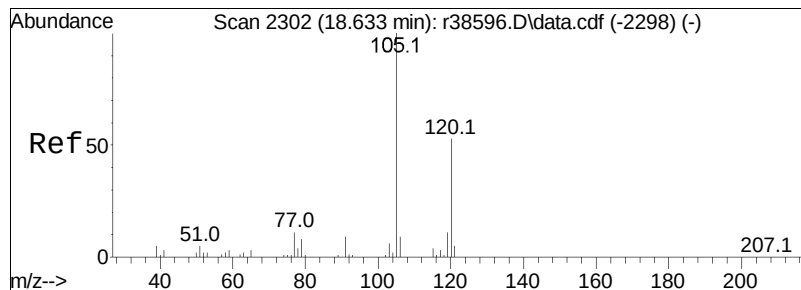




#96
 4-ethyl toluene
 Concen: 0.98 ppbV m
 RT: 18.592 min Scan# 2297
 Delta R.T. 0.025 min
 Lab File: r38760.D
 Acq: 20 Mar 2020 7:03 PM

Tgt Ion:	105	Resp:	110428
Ion Ratio	Lower	Upper	
105	100		
120	34.5	27.0	40.4
91	9.5	7.4	11.0





#97

1,3,5-trimethylbenzene

Concen: 1.35 ppbV

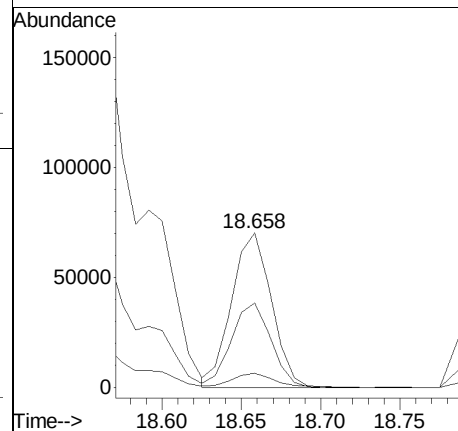
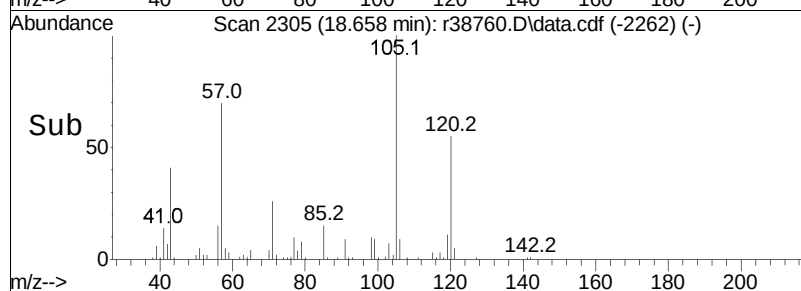
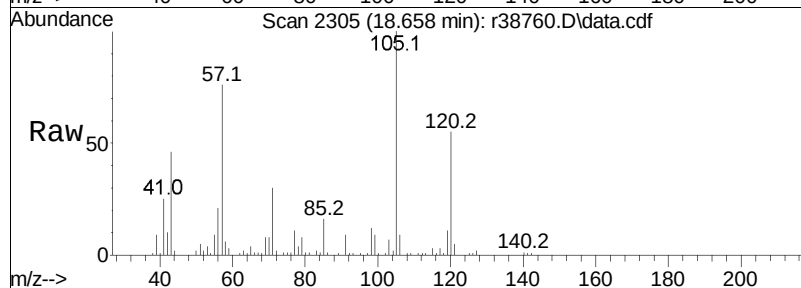
RT: 18.658 min Scan# 2305

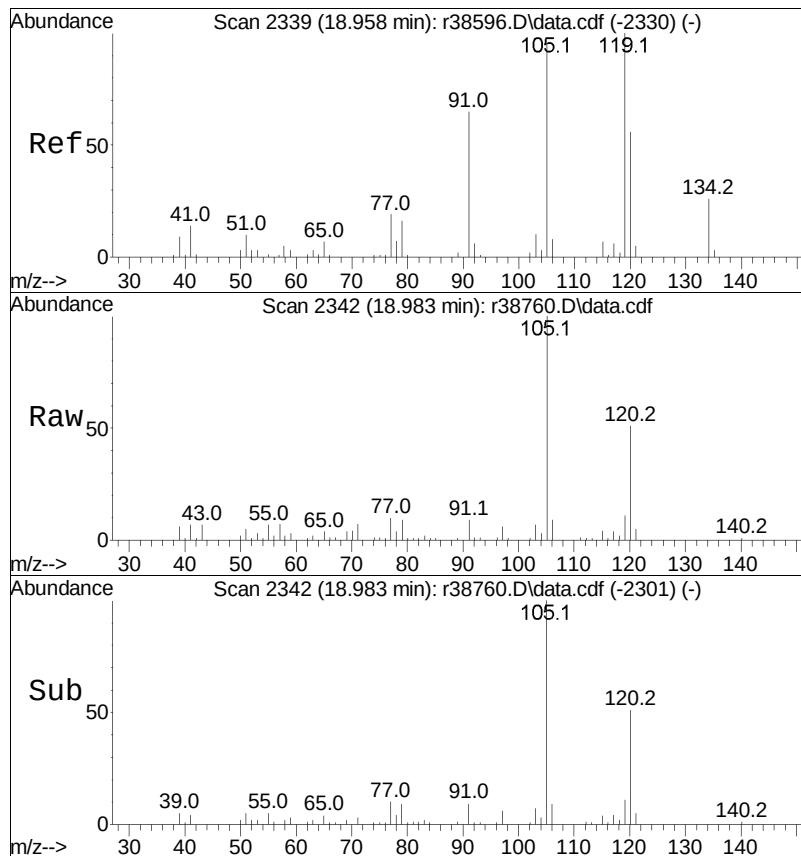
Delta R.T. 0.025 min

Lab File: r38760.D

Acq: 20 Mar 2020 7:03 PM

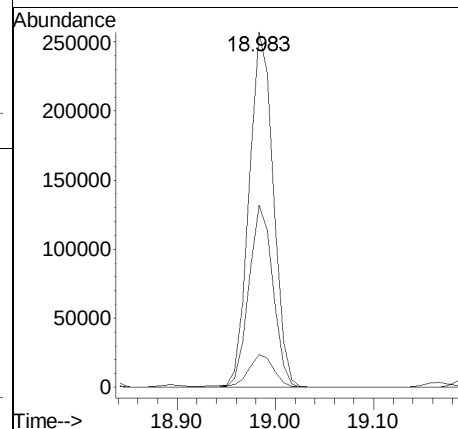
Tgt	Ion:105	Resp:	122815
Ion	Ratio	Lower	Upper
105	100		
120	54.6	41.6	62.4
91	9.1	7.0	10.4





#99
 1,2,4-trimethylbenzene
 Concen: 5.21 ppbV
 RT: 18.983 min Scan# 2342
 Delta R.T. 0.025 min
 Lab File: r38760.D
 Acq: 20 Mar 2020 7:03 PM

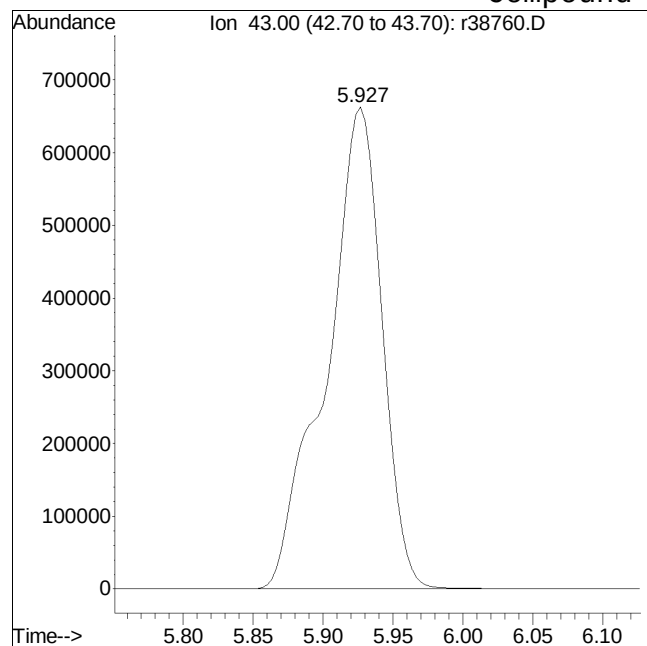
Tgt Ion:	105	Resp:	442091
Ion Ratio	Lower	Upper	
105	100		
120	51.2	47.1	70.7
91	9.2	55.0	82.6#



Manual Integration Report

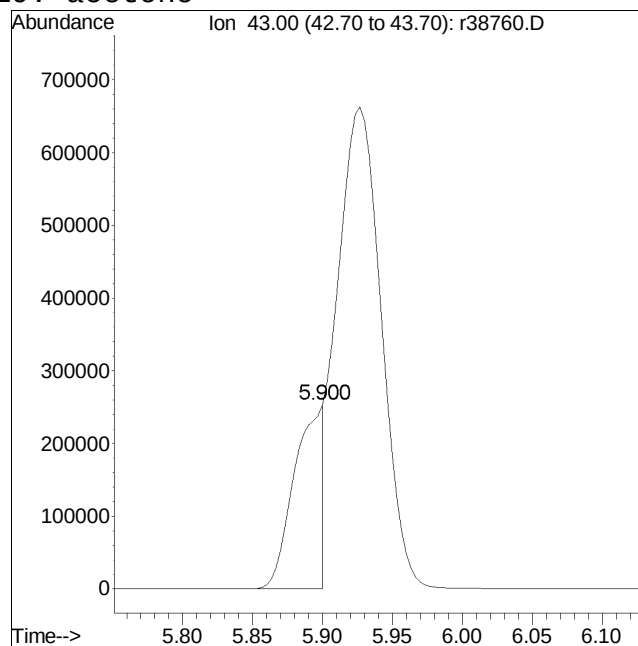
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200312.M
Data File : r38760.D Operator : AIRPIAN03:EW
Date Inj'd : 3/20/2020 0:7: 3 Instrument :
Sample : WG1353541-5,3,250,250 Quant Date : 3/21/2020 8:05 am

Compound #19: acetone



Original Peak Response = 1823143

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

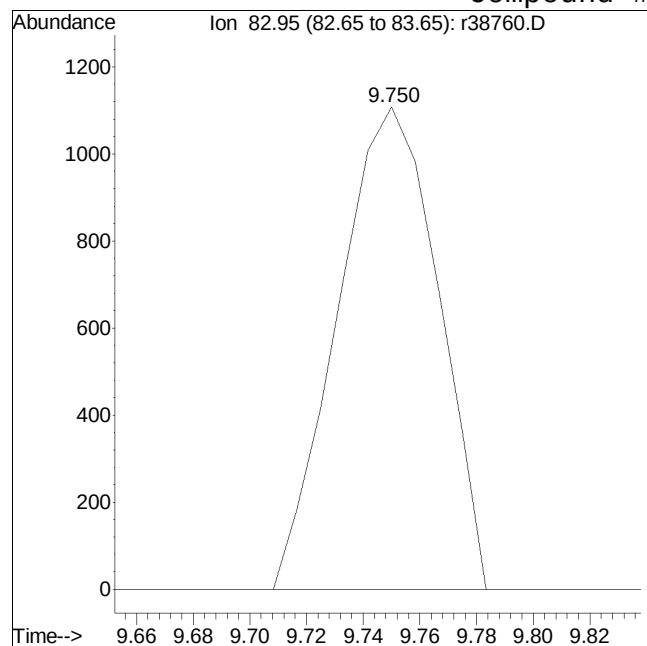


Manual Peak Response = 368049 M6

Manual Integration Report

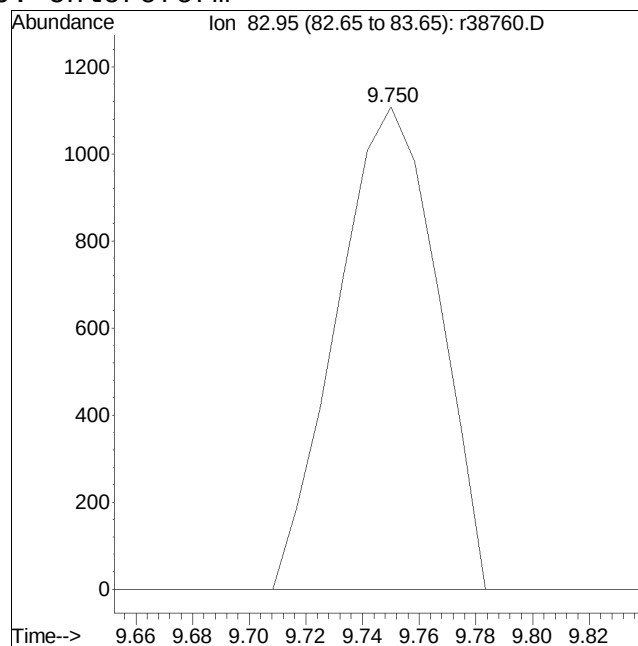
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200312.M
Data File : r38760.D Operator : AIRPIAN03:EW
Date Inj'd : 3/20/2020 0:7: 3 Instrument :
Sample : WG1353541-5,3,250,250 Quant Date : 3/21/2020 8:05 am

Compound #39: chloroform



Original Peak Response = 2737

M4 = Poor automated baseline construction.

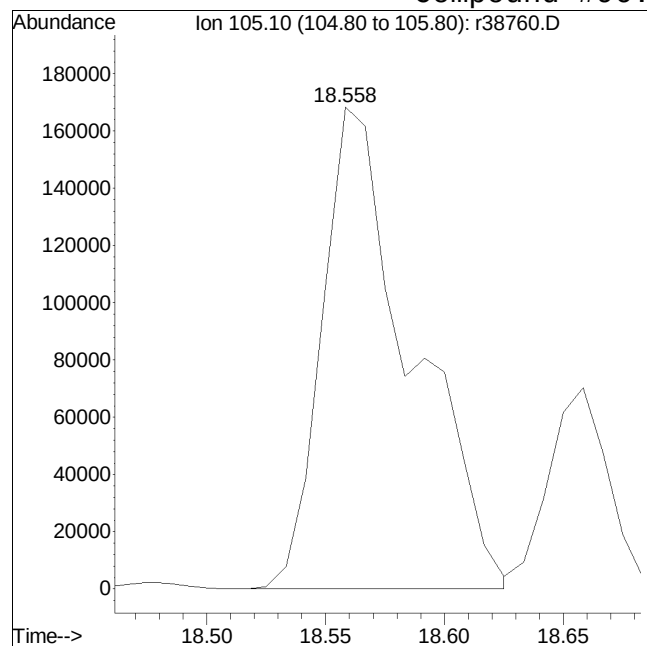


Manual Peak Response = 2737 M4

Manual Integration Report

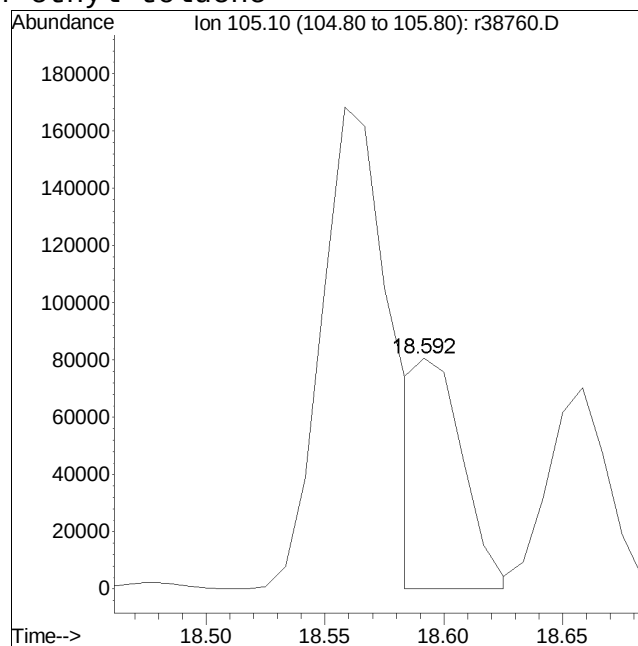
Data Path : 0:\Forensics\Data\AirpianoQMethod : TFS3_200312.M
Data File : r38760.D Operator : AIRPIAN03:EW
Date Inj'd : 3/20/2020 0:7: 3 Instrument :
Sample : WG1353541-5,3,250,250 Quant Date : 3/21/2020 8:05 am

Compound #96: 4-ethyl toluene



Original Peak Response = 441969

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).



Manual Peak Response = 110428 M6

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193198.D
 Acq On : 20 Mar 2020 7:17 PM
 Operator : AIRLAB19:EW
 Sample : WG1353556-5,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 20:12:50 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\03\200320T\r193190.D
 Sub List : T015-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	8.792	49	350711	10.000	ppbV	0.00
Standard Area = 288364			Recovery =	121.62%		
43) 1,4-difluorobenzene	10.753	114	1038160	10.000	ppbV	0.00
Standard Area = 940727			Recovery =	110.36%		
67) chlorobenzene-D5	14.883	54	131953	10.000	ppbV	0.00
Standard Area = 108860			Recovery =	121.21%		

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) dichlorodifluoromethane	3.568	85	9846	0.501	ppbV	100
6) chloromethane	3.778	50	6975	0.555	ppbV	99
7) Freon-114	0.000		0	N.D.	d	
10) 1,3-butadiene	4.246		0	N.D.		
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	4.936	31	146956	14.341	ppbV #	67
17) vinyl bromide	0.000		0	N.D.		
19) acetone	5.503	43	44811	2.379	ppbV	97
21) trichlorofluoromethane	5.700	101	4487	0.217	ppbV	100
22) isopropyl alcohol	5.787	45	37325	1.043	ppbV	99
27) tertiary butyl alcohol	0.000		0	N.D.	d	
28) methylene chloride	6.546	49	5360	0.233	ppbV	90
29) 3-chloropropene	0.000		0	N.D.	d	
30) carbon disulfide	6.858		0	N.D.		
31) Freon 113	6.834	101	1993	0.059	ppbV	95
32) trans-1,2-dichloroethene	0.000		0	N.D.		
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	0.000		0	N.D.		
36) 2-butanone	8.175	43	13906	0.329	ppbV	95
38) Ethyl Acetate	8.842	61	2999	0.418	ppbV #	54
39) chloroform	8.917	83	2161	0.074	ppbV #	93
40) Tetrahydrofuran	9.358	42	3518	0.124	ppbV	100
42) 1,2-dichloroethane	0.000		0	N.D.		
44) hexane	8.833	57	12564	0.330	ppbV #	60
50) benzene	10.413	78	20020	0.267	ppbV	99
53) cyclohexane	10.700	56	4222	0.101	ppbV #	94
56) 1,2-dichloropropane	0.000		0	N.D.		
57) bromodichloromethane	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
 Data File : r193198.D
 Acq On : 20 Mar 2020 7:17 PM
 Operator : AIRLAB19:EW
 Sample : WG1353556-5,3,250,250
 Misc : WG1353556,ICAL16553
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 20:12:50 2020
 Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Tue Feb 25 10:21:40 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airlab19\2020\03\200320T\r193190.D
 Sub List : T015-NY-7-SIM - .

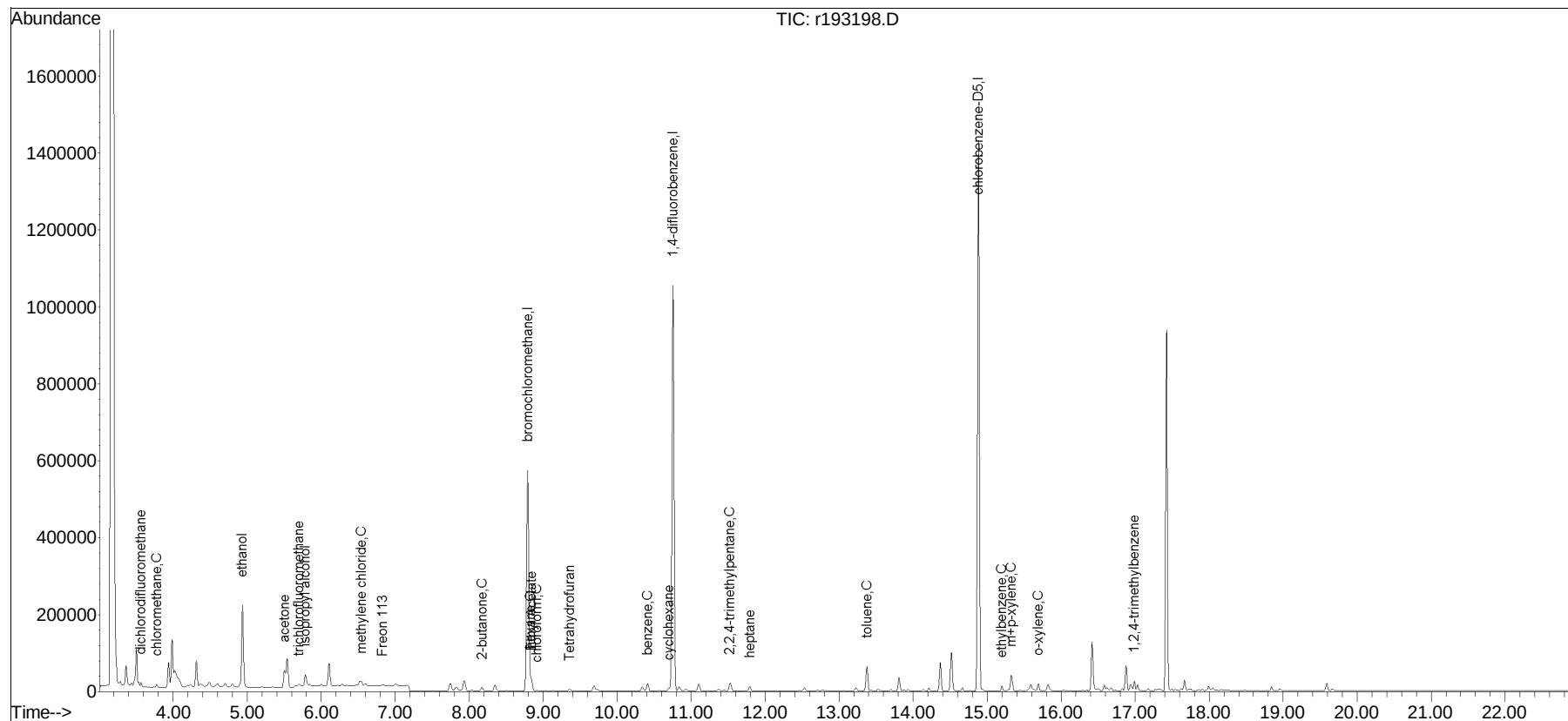
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
58)	1,4-dioxane	0.000		0	N.D.		
60)	2,2,4-trimethylpentane	11.527	57	22103	0.184	ppbV	95
62)	heptane	11.793	43	6093	0.131	ppbV	97
63)	cis-1,3-dichloropropene	0.000		0	N.D.		
64)	4-methyl-2-pentanone	0.000		0	N.D.	d	
65)	trans-1,3-dichloropropene	0.000		0	N.D.		
66)	1,1,2-trichloroethane	0.000		0	N.D.		
68)	toluene	13.375	91	46498	0.579	ppbV	99
72)	2-hexanone	0.000		0	N.D.	d	
74)	dibromochloromethane	0.000		0	N.D.		
75)	1,2-dibromoethane	0.000		0	N.D.		
80)	chlorobenzene	0.000		0	N.D.	d	
81)	ethylbenzene	15.200	91	9858	0.102	ppbV	99
83)	m+p-xylene	15.325	91	27002	0.355	ppbV	98
84)	bromoform	0.000		0	N.D.		
85)	styrene	15.608		0	N.D.		
86)	1,1,2,2-tetrachloroethane	0.000		0	N.D.	d	
87)	o-xylene	15.692	91	10622	0.142	ppbV	96
96)	4-ethyl toluene	16.617		0	N.D.		
97)	1,3,5-trimethylbenzene	16.667		0	N.D.		
99)	1,2,4-trimethylbenzene	16.992	105	13625	0.145	ppbV #	60
101)	Benzyl Chloride	0.000		0	N.D.	d	
102)	1,3-dichlorobenzene	0.000		0	N.D.	d	
103)	1,4-dichlorobenzene	17.183		0	N.D.		
107)	1,2-dichlorobenzene	0.000		0	N.D.		
115)	1,2,4-trichlorobenzene	18.842		0	N.D.		
119)	hexachlorobutadiene	0.000		0	N.D.		

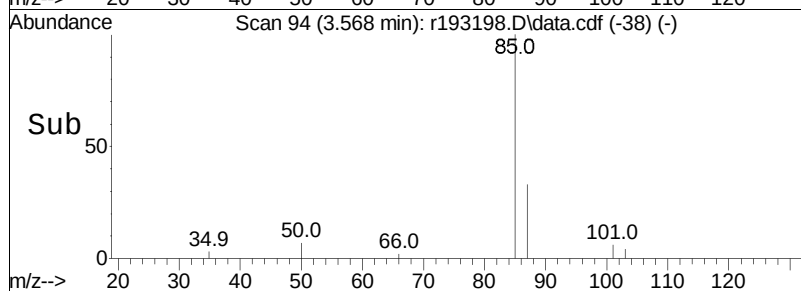
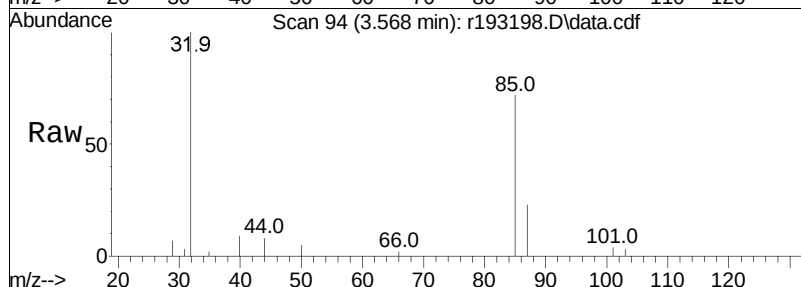
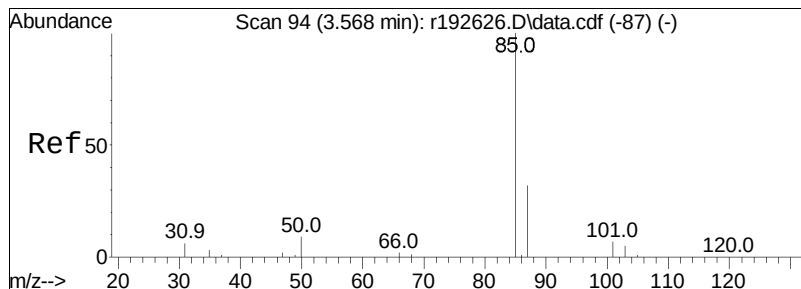
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : T015-NY-7-SIM - .\Airlab19\2020\03\200320T\r193190.D

Data Path : 0:\Forensics\Data\Airlab19\2020\03\200320T\
Data File : r193198.D
Acq On : 20 Mar 2020 7:17 PM
Operator : AIRLAB19:EW
Sample : WG1353556-5,3,250,250
Misc : WG1353556,ICAL16553
ALS Vial : 0 Sample Multiplier: 1

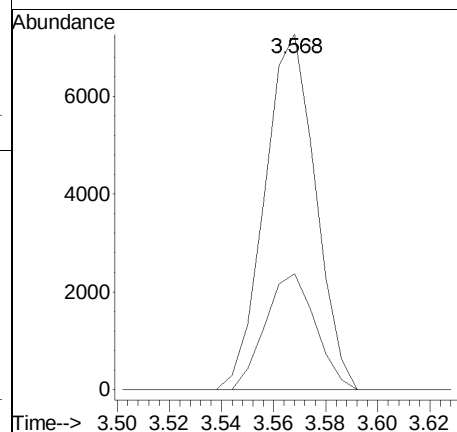
Quant Time: Mar 21 20:12:50 2020
Quant Method : 0:\Forensics\Data\Airlab19\2020\03\200320T\TFS19_200224.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Tue Feb 25 10:21:40 2020
Response via : Initial Calibration

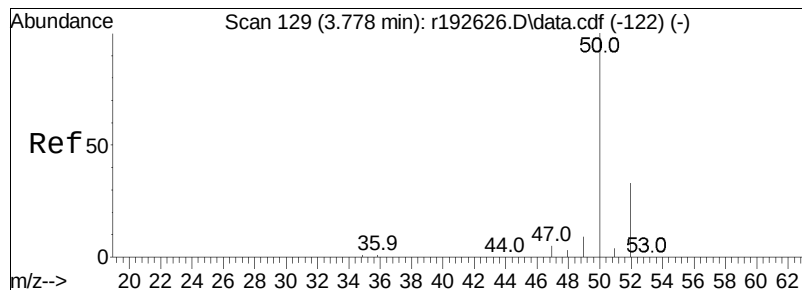




#5
dichlorodifluoromethane
Concen: 0.50 ppbV
RT: 3.568 min Scan# 94
Delta R.T. 0.006 min
Lab File: r193198.D
Acq: 20 Mar 2020 7:17 PM

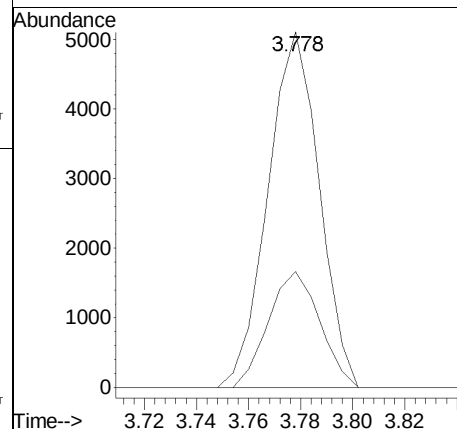
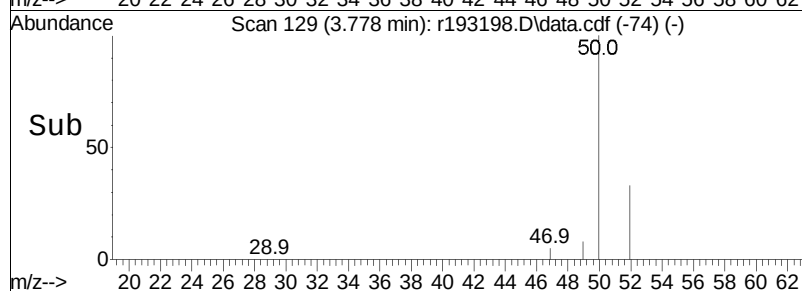
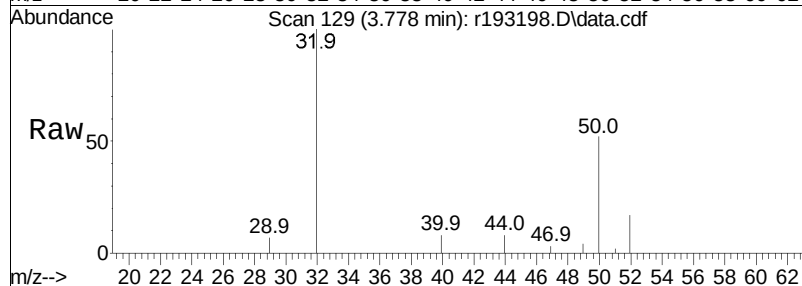
Tgt Ion: 85 Resp: 9846
Ion Ratio Lower Upper
85 100
87 32.6 25.9 38.9

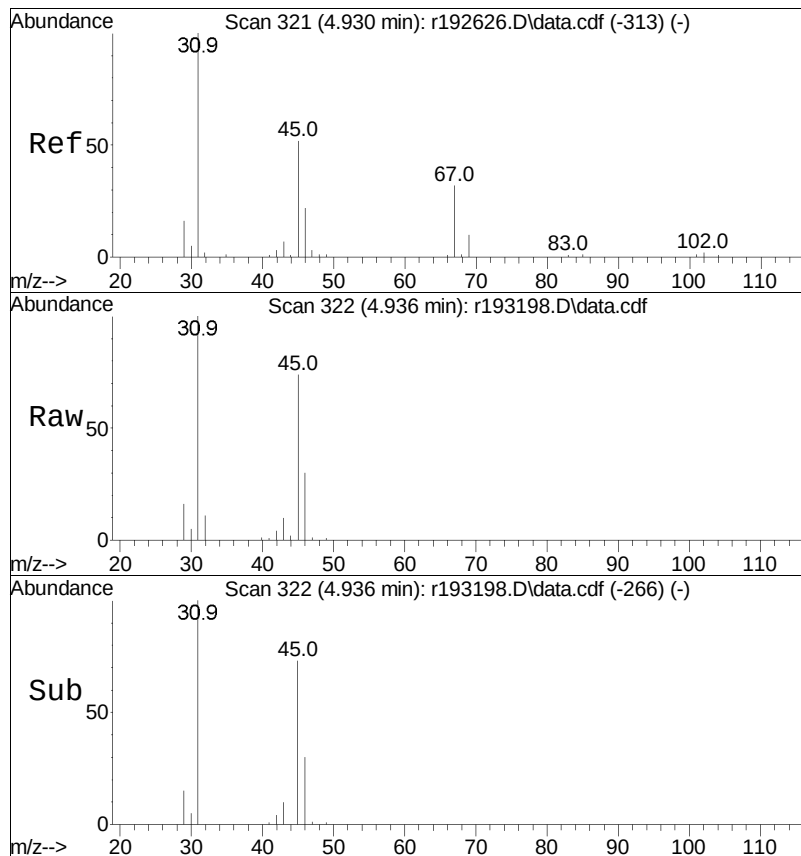




#6
 chloromethane
 Concen: 0.55 ppbV
 RT: 3.778 min Scan# 129
 Delta R.T. 0.000 min
 Lab File: r193198.D
 Acq: 20 Mar 2020 7:17 PM

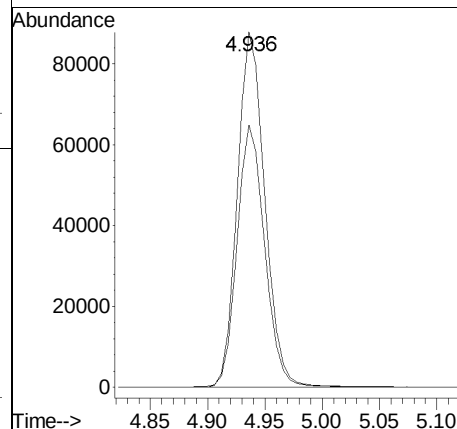
Tgt Ion	Ratio	Lower	Upper
50	100		
52	32.6	26.3	39.5

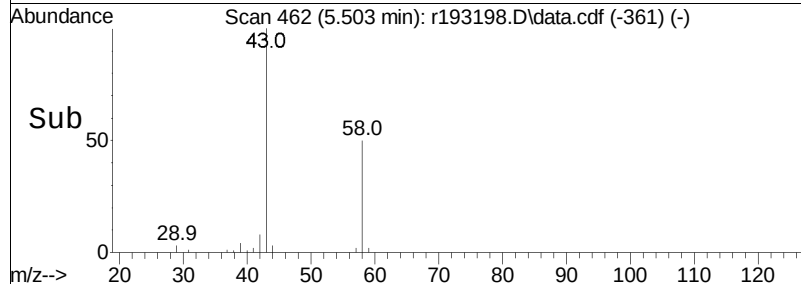
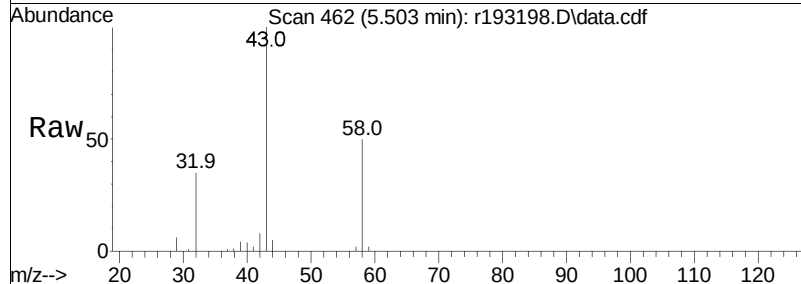
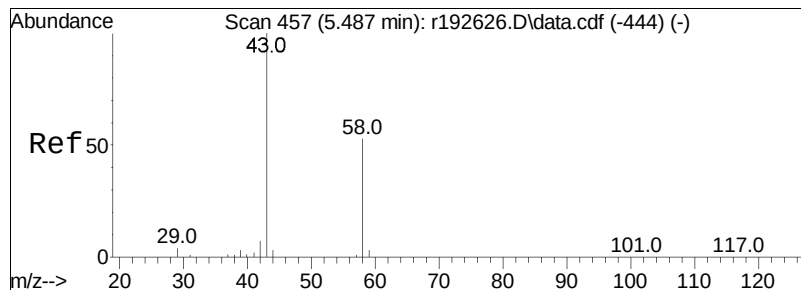




#15
 ethanol
 Concen: 14.34 ppbV
 RT: 4.936 min Scan# 322
 Delta R.T. 0.006 min
 Lab File: r193198.D
 Acq: 20 Mar 2020 7:17 PM

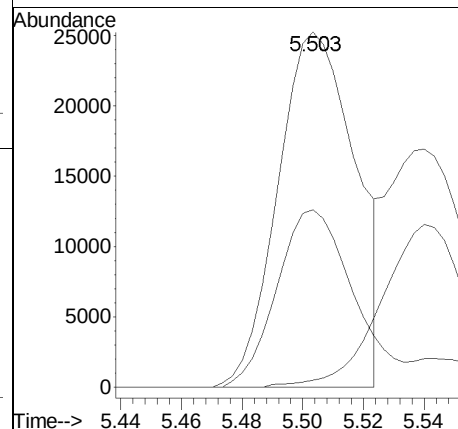
Tgt Ion	Ratio	Lower	Upper
31	100		
45	73.8	40.6	60.8#

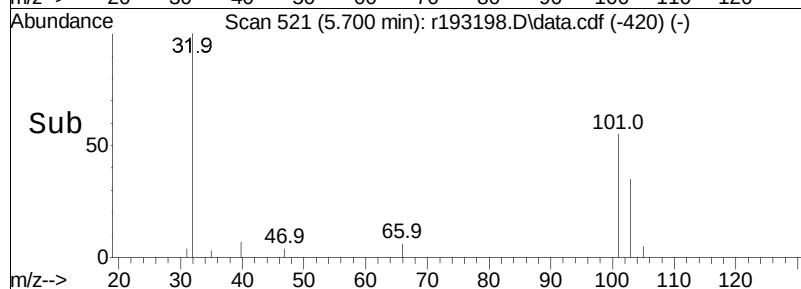
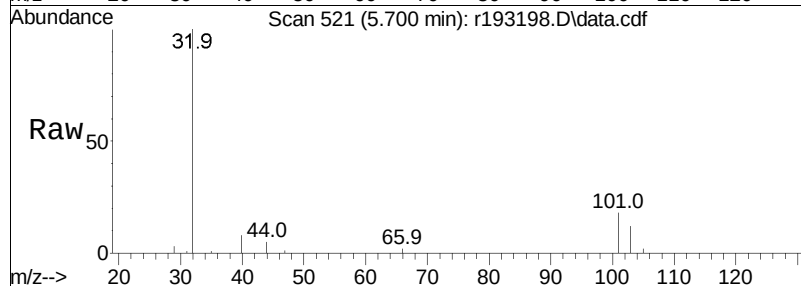
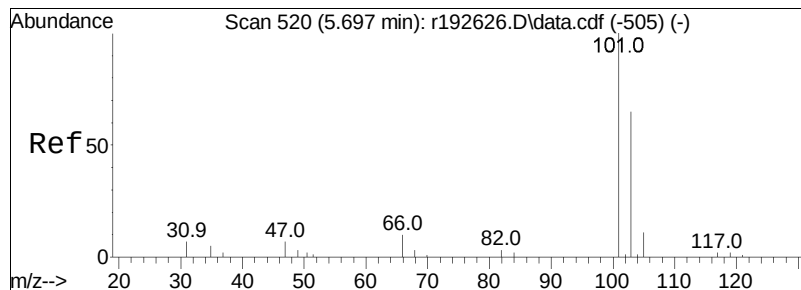




#19
acetone
Concen: 2.38 ppbV
RT: 5.503 min Scan# 462
Delta R.T. 0.007 min
Lab File: r193198.D
Acq: 20 Mar 2020 7:17 PM

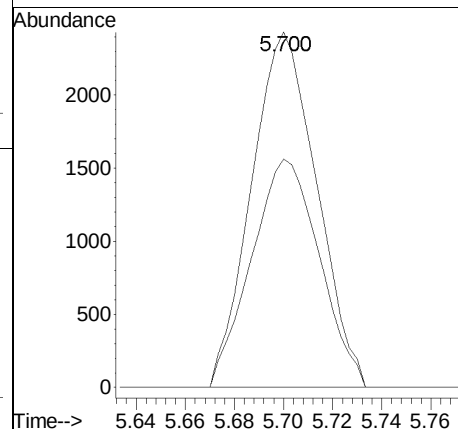
Tgt Ion	Ratio	Lower	Upper
43	100		
58	50.0	42.0	63.0
57	2.0	1.4	2.0

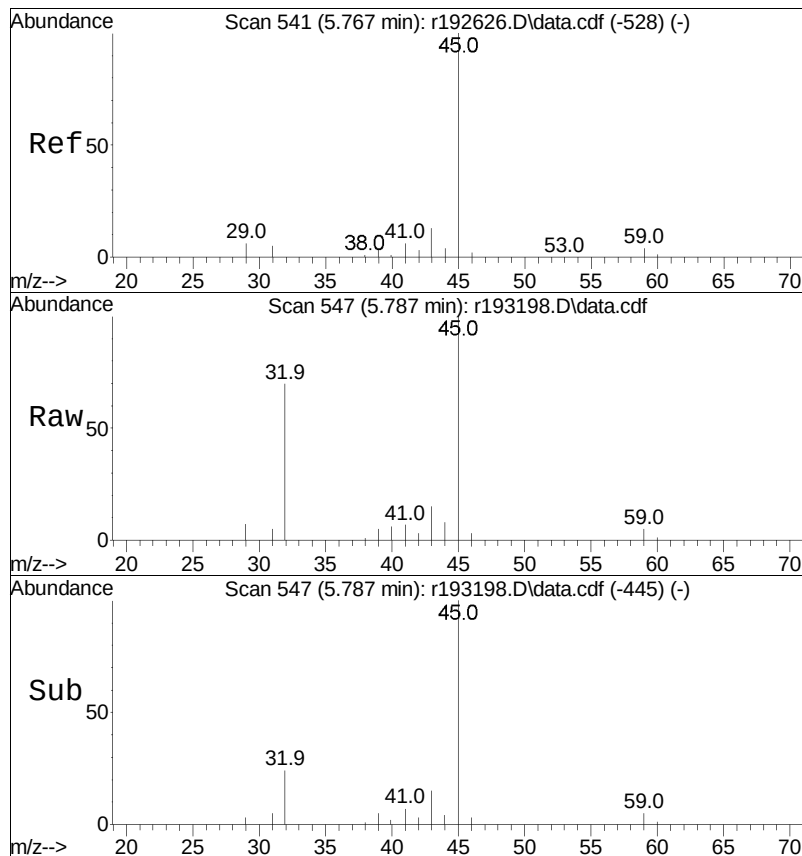




#21
 trichlorofluoromethane
 Concen: 0.22 ppbV
 RT: 5.700 min Scan# 521
 Delta R.T. 0.007 min
 Lab File: r193198.D
 Acq: 20 Mar 2020 7:17 PM

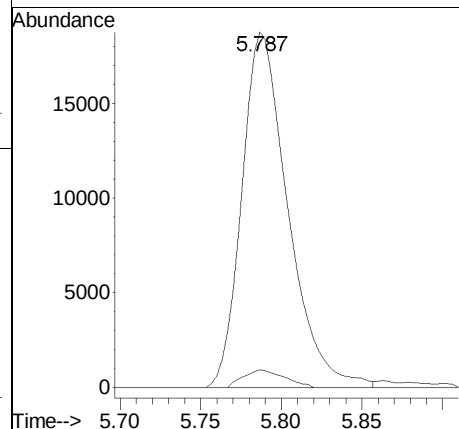
Tgt Ion	Ratio	Lower	Upper
101	100		
103	64.3	51.4	77.2

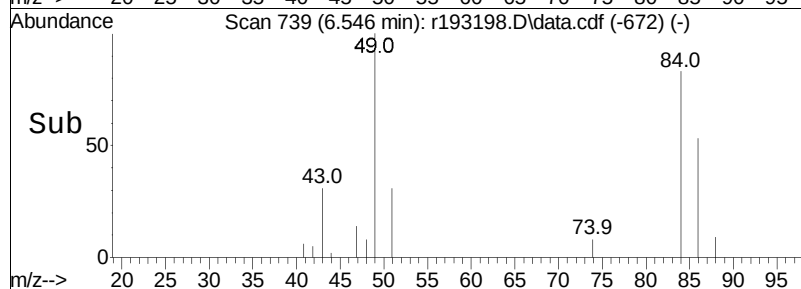
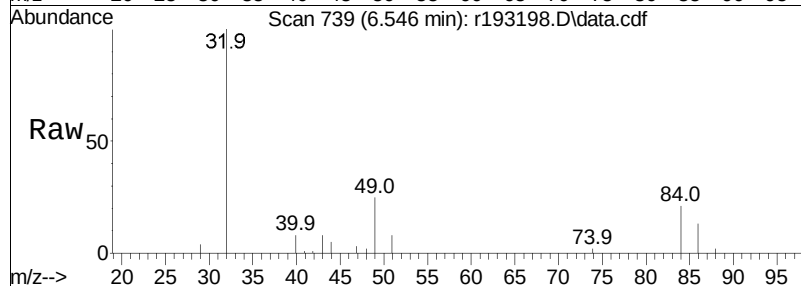
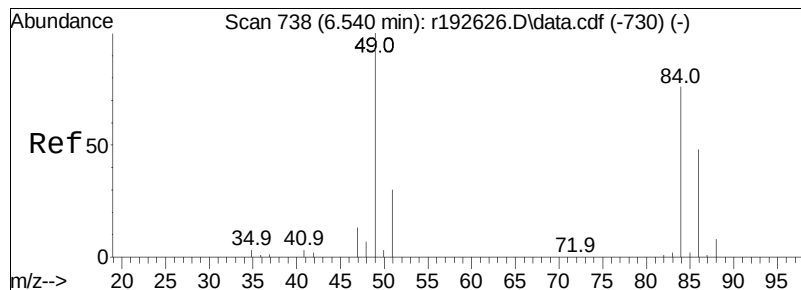




#22
 isopropyl alcohol
 Concen: 1.04 ppbV
 RT: 5.787 min Scan# 547
 Delta R.T. 0.010 min
 Lab File: r193198.D
 Acq: 20 Mar 2020 7:17 PM

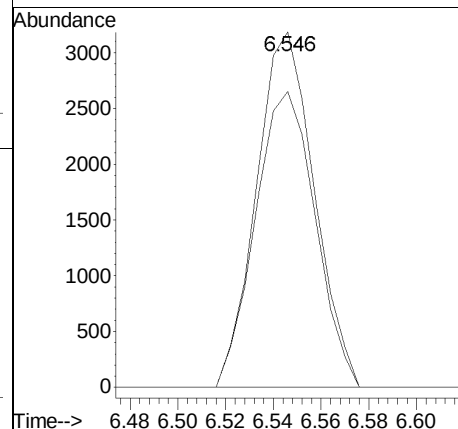
Tgt Ion	Ratio	Lower	Upper
45	100		
59	5.0	3.7	5.5

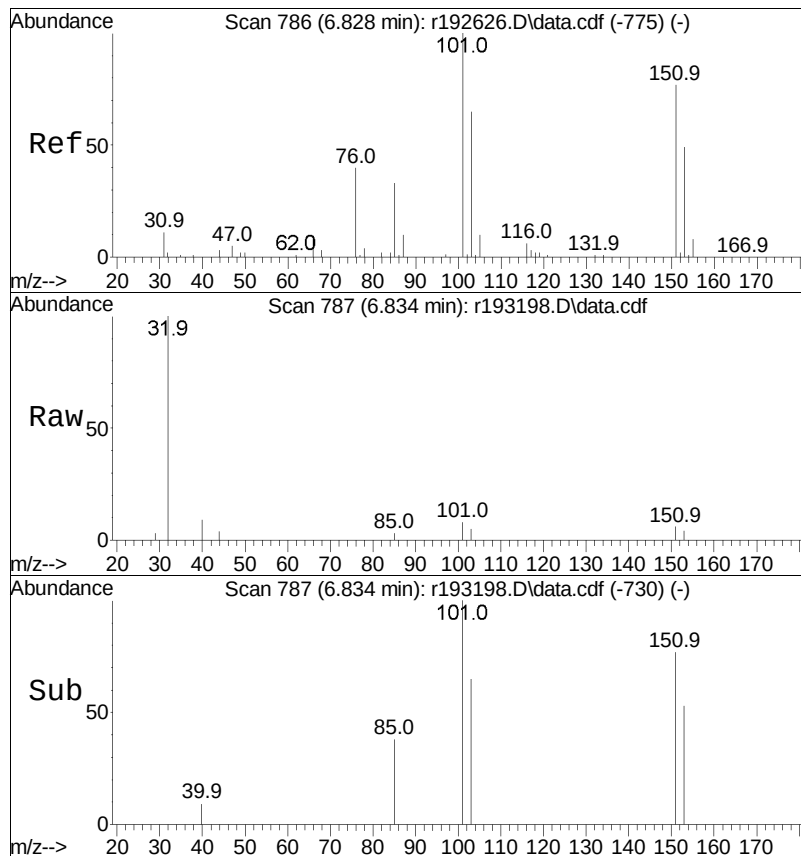




#28
 methylene chloride
 Concen: 0.23 ppbV
 RT: 6.546 min Scan# 739
 Delta R.T. 0.012 min
 Lab File: r193198.D
 Acq: 20 Mar 2020 7:17 PM

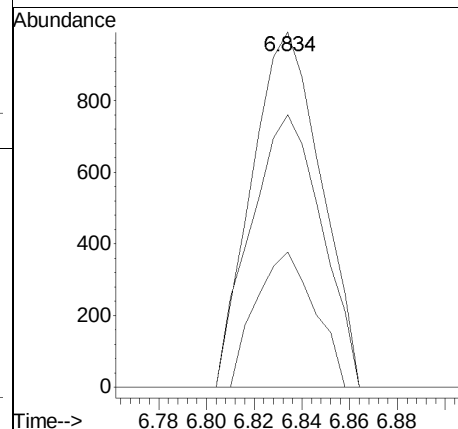
Tgt Ion:	49	84	Ratio	Lower	Upper
Resp:	5360				
Ion Ratio	100	83.3			
			59.8	89.6	

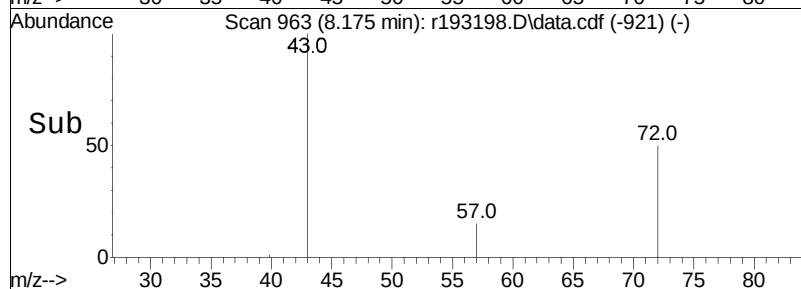
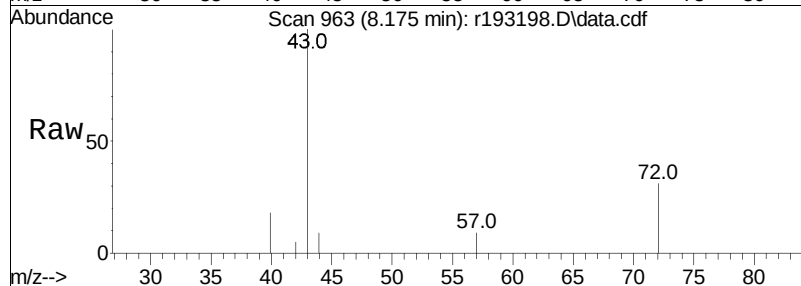
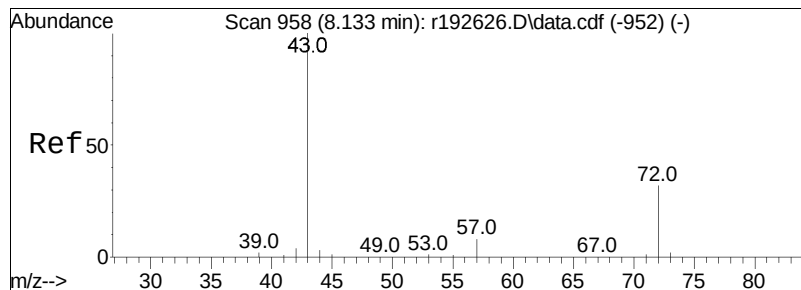




#31
 Freon 113
 Concen: 0.06 ppbV
 RT: 6.834 min Scan# 787
 Delta R.T. 0.012 min
 Lab File: r193198.D
 Acq: 20 Mar 2020 7:17 PM

Tgt Ion:101	Resp:	1993
Ion Ratio	Lower	Upper
101 100		
85 38.0	26.7	40.1
151 76.7	63.4	95.2





#36

2-butanone

Concen: 0.33 ppbV

RT: 8.175 min Scan# 963

Delta R.T. 0.017 min

Lab File: r193198.D

Acq: 20 Mar 2020 7:17 PM

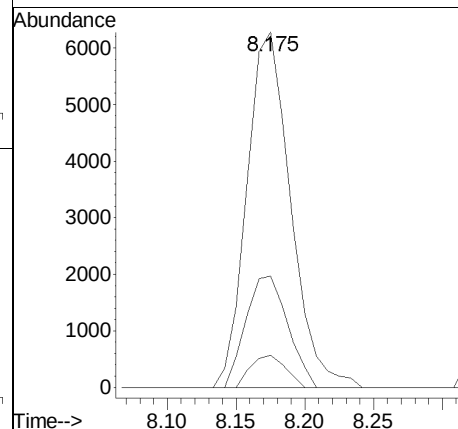
Tgt Ion: 43 Resp: 13906

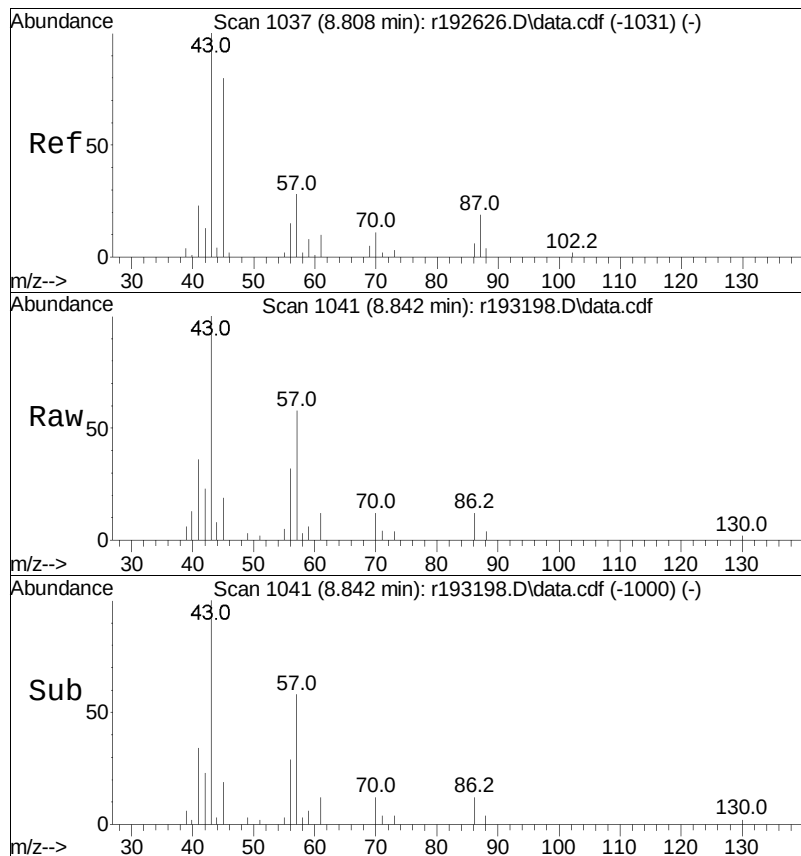
Ion Ratio Lower Upper

43 100

72 31.3 27.7 41.5

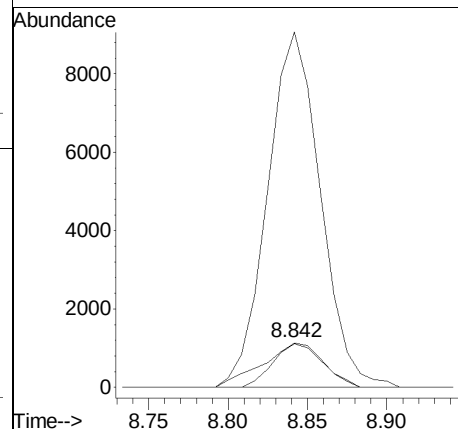
57 9.1 6.3 9.5

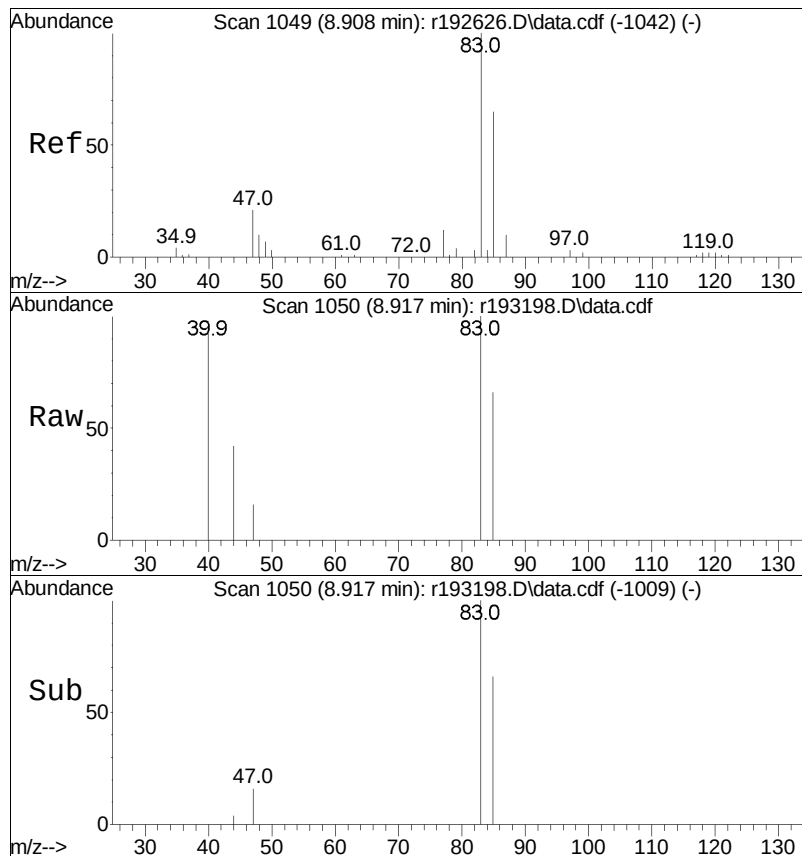




#38
 Ethyl Acetate
 Concen: 0.42 ppbV
 RT: 8.842 min Scan# 1041
 Delta R.T. 0.008 min
 Lab File: r193198.D
 Acq: 20 Mar 2020 7:17 PM

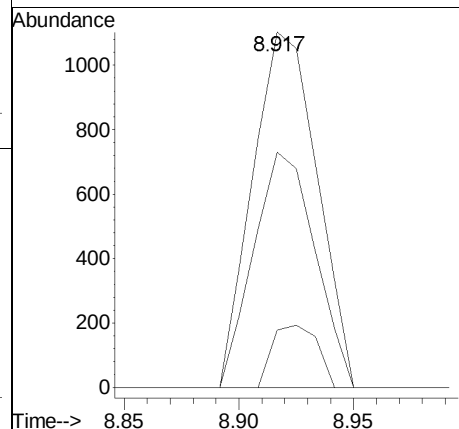
Tgt	Ion	Ratio	Lower	Upper
61	100			
70	98.3	86.6	130.0	
43	800.5	819.5	1229.3#	

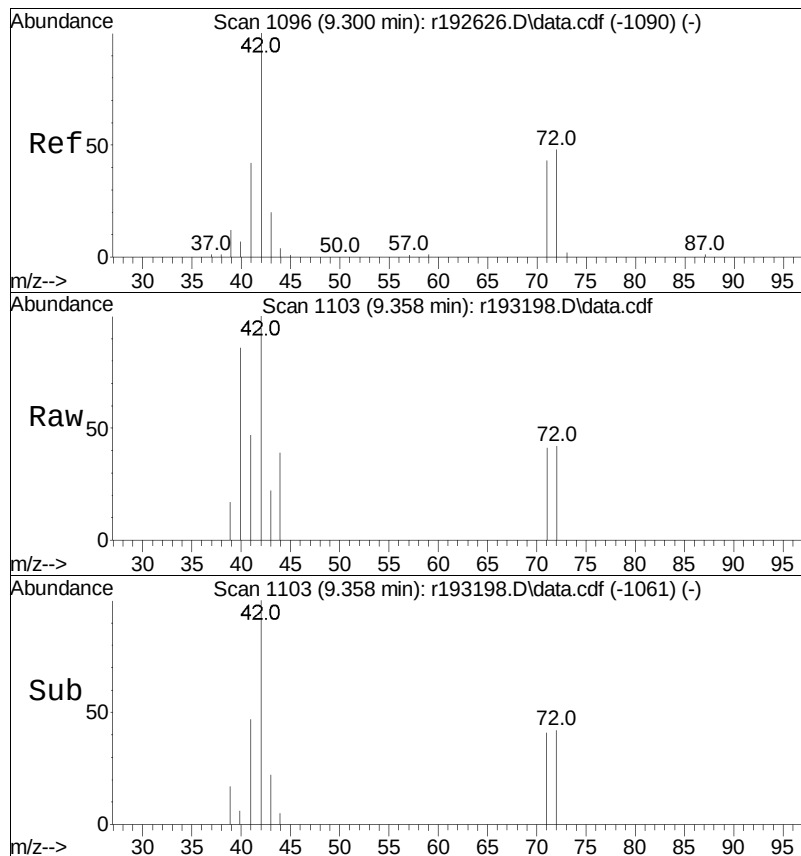




#39
chloroform
Concen: 0.07 ppbV
RT: 8.917 min Scan# 1050
Delta R.T. 0.008 min
Lab File: r193198.D
Acq: 20 Mar 2020 7:17 PM

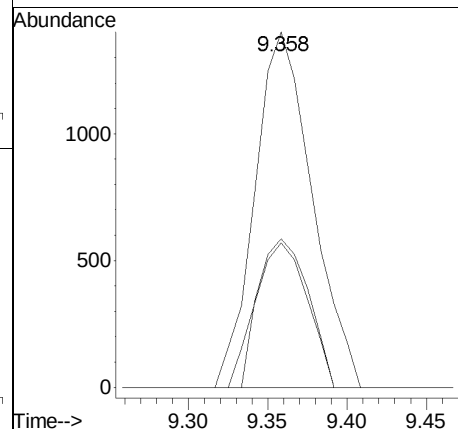
Tgt Ion	Ratio	Lower	Upper
83	100		
85	66.2	50.1	75.1
47	16.1	17.6	26.4

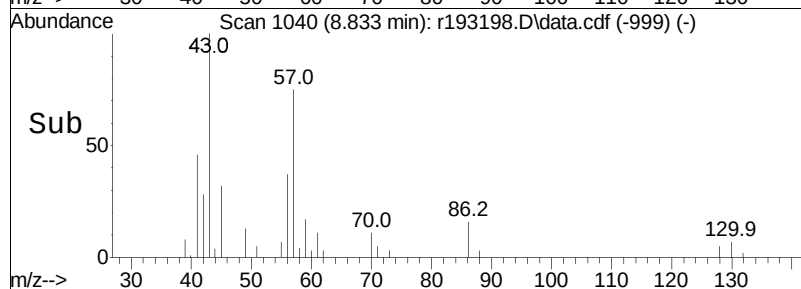
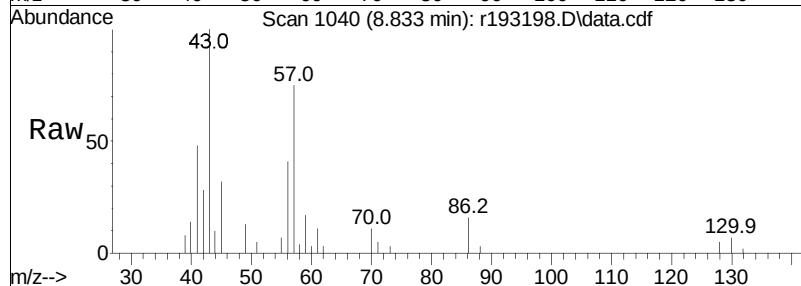
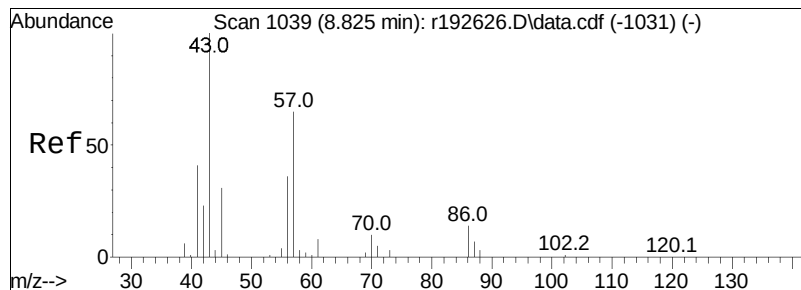




#40
 Tetrahydrofuran
 Concen: 0.12 ppbV
 RT: 9.358 min Scan# 1103
 Delta R.T. 0.017 min
 Lab File: r193198.D
 Acq: 20 Mar 2020 7:17 PM

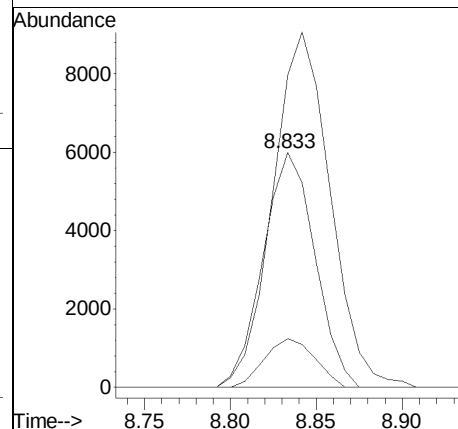
Tgt Ion:	42	Resp:	3518
Ion Ratio	Lower	Upper	
42	100		
71	40.7	32.5	48.7
72	41.8	33.7	50.5

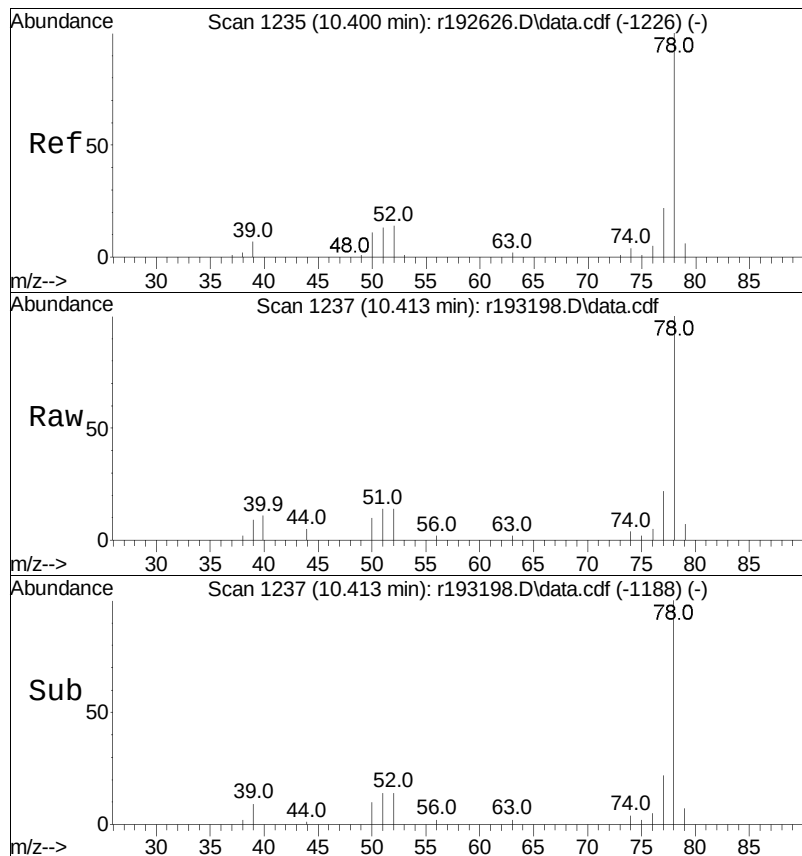




#44
hexane
Concen: 0.33 ppbV
RT: 8.833 min Scan# 1040
Delta R.T. 0.008 min
Lab File: r193198.D
Acq: 20 Mar 2020 7:17 PM

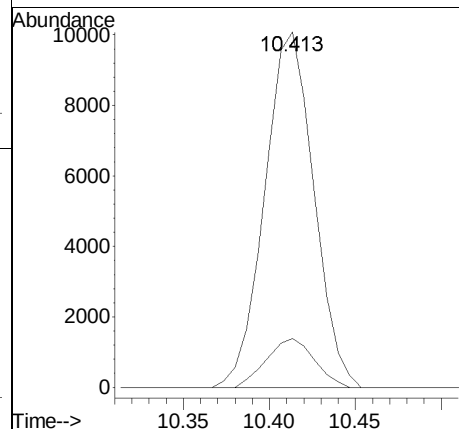
Tgt	Ion	Resp	Lower	Upper
57	100			
43	133.0	159.3	238.9#	
86	20.8	15.7	23.5	

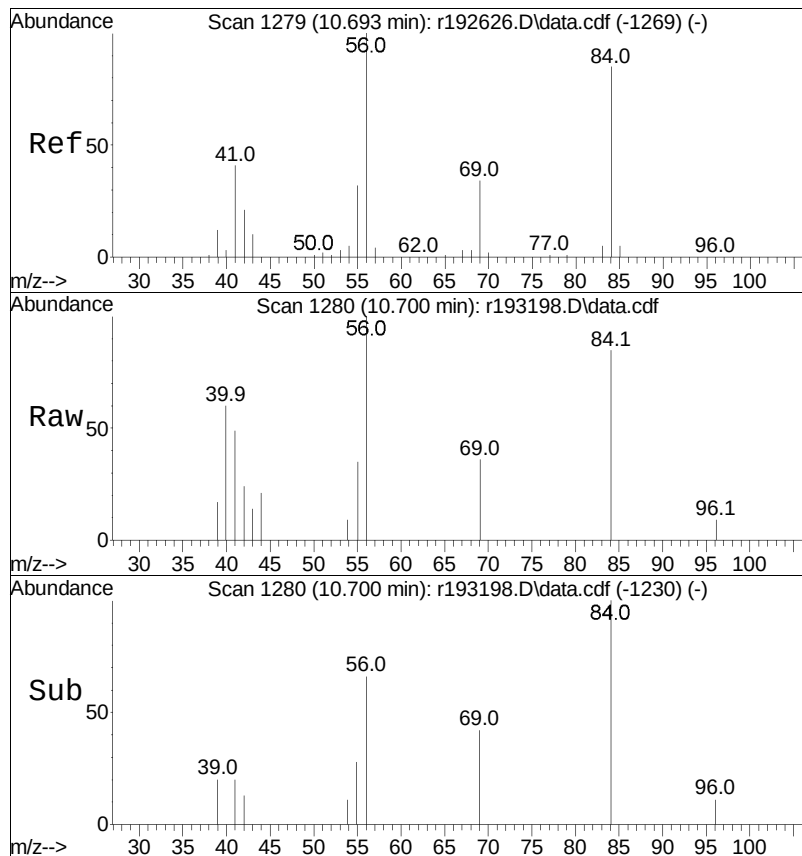




#50
benzene
Concen: 0.27 ppbV
RT: 10.413 min Scan# 1237
Delta R.T. 0.013 min
Lab File: r193198.D
Acq: 20 Mar 2020 7:17 PM

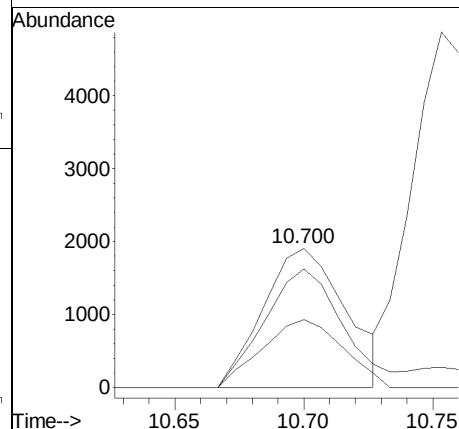
Tgt Ion	Ratio	Lower	Upper
78	100		
52	13.8	11.4	17.2

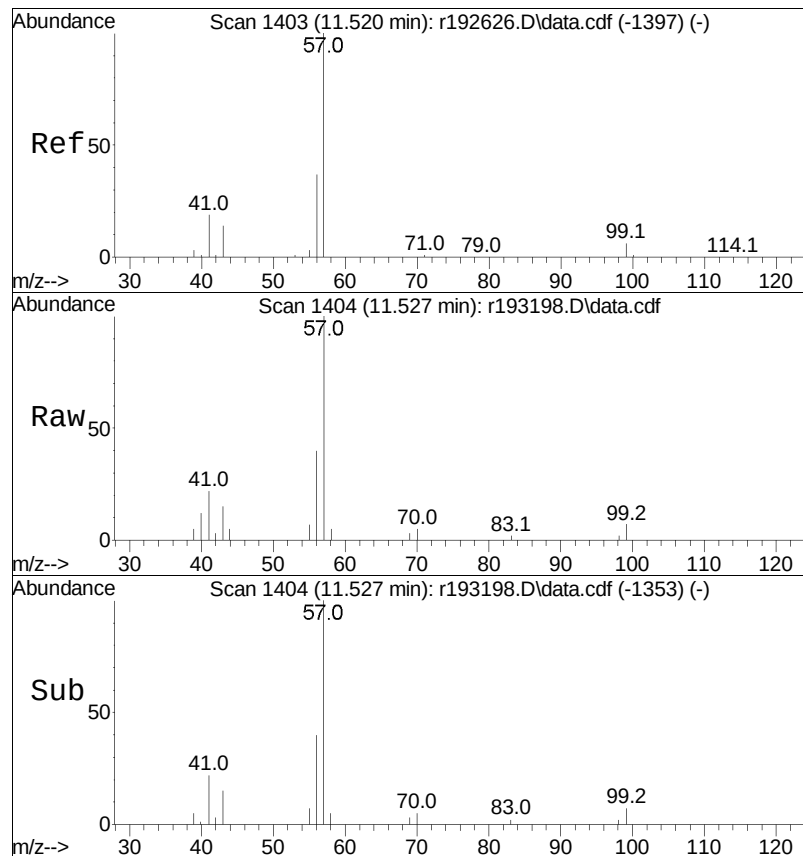




#53
cyclohexane
Concen: 0.10 ppbV
RT: 10.700 min Scan# 1280
Delta R.T. 0.007 min
Lab File: r193198.D
Acq: 20 Mar 2020 7:17 PM

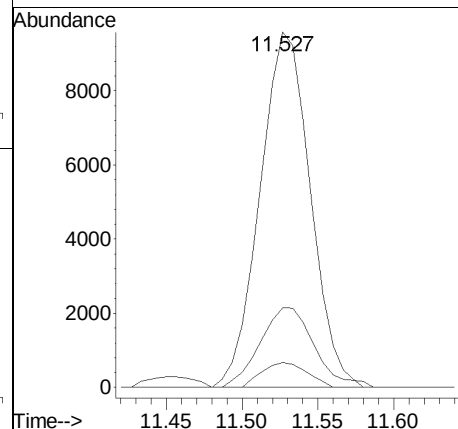
Tgt	Ion: 56	Resp:	4222
Ion	Ratio	Lower	Upper
56	100		
84	85.3	69.8	104.6
41	48.8	32.1	48.1#

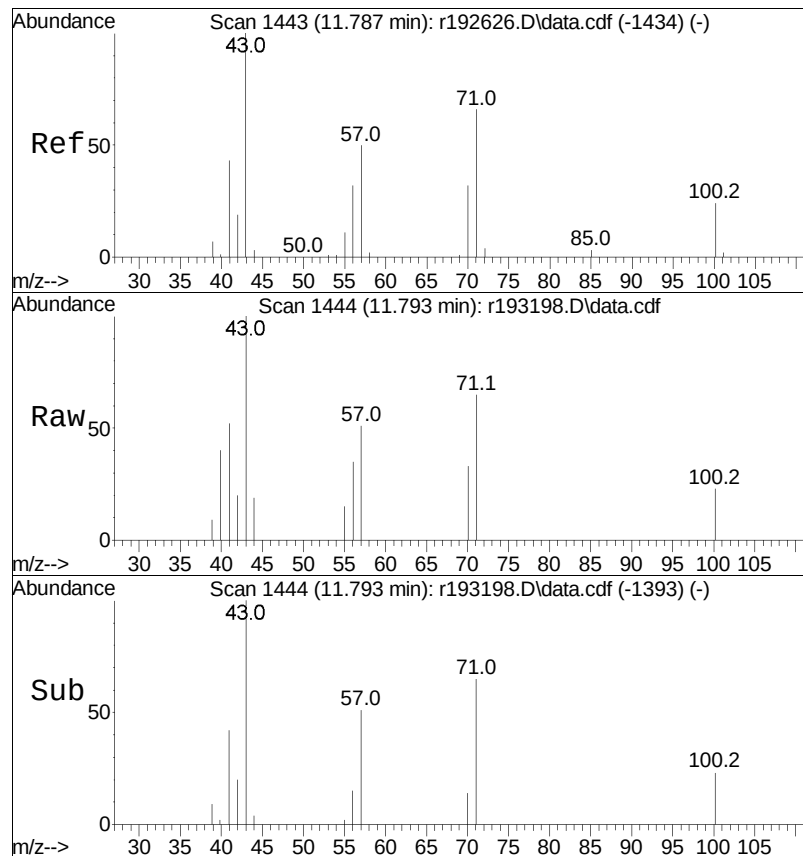




#60
 2,2,4-trimethylpentane
 Concen: 0.18 ppbV
 RT: 11.527 min Scan# 1404
 Delta R.T. 0.007 min
 Lab File: r193198.D
 Acq: 20 Mar 2020 7:17 PM

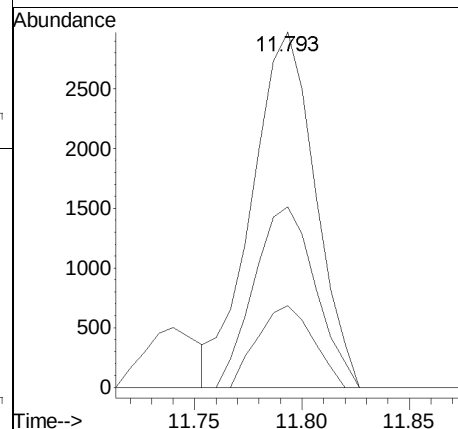
Tgt Ion:	57	Resp:	22103
Ion Ratio	Lower	Upper	
57	100		
99	7.0	6.0	9.0
41	22.4	15.6	23.4

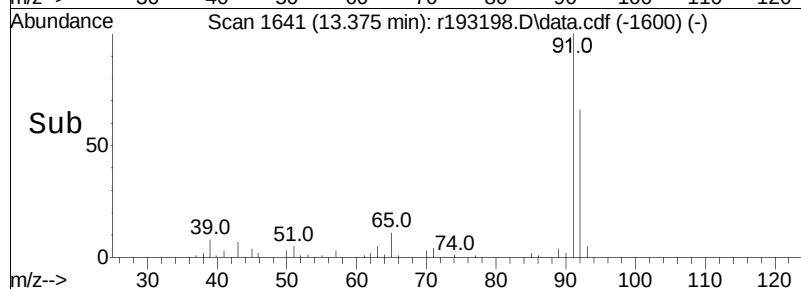
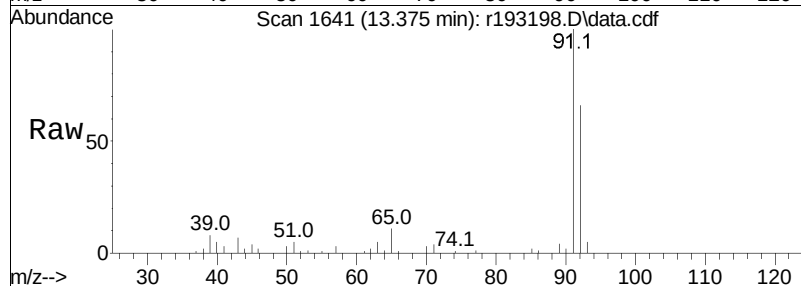
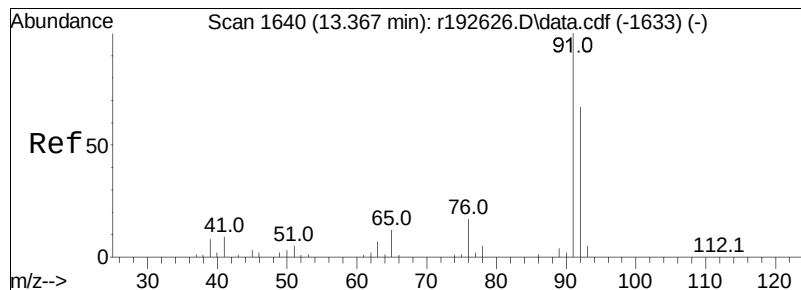




#62
 heptane
 Concen: 0.13 ppbV
 RT: 11.793 min Scan# 1444
 Delta R.T. 0.013 min
 Lab File: r193198.D
 Acq: 20 Mar 2020 7:17 PM

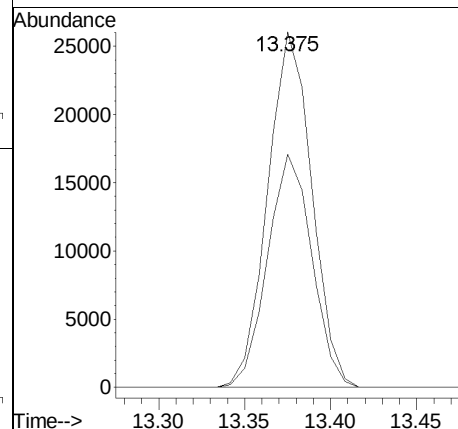
Tgt Ion	Ratio	Lower	Upper
43	100		
57	50.8	41.0	61.6
100	23.1	21.4	32.2

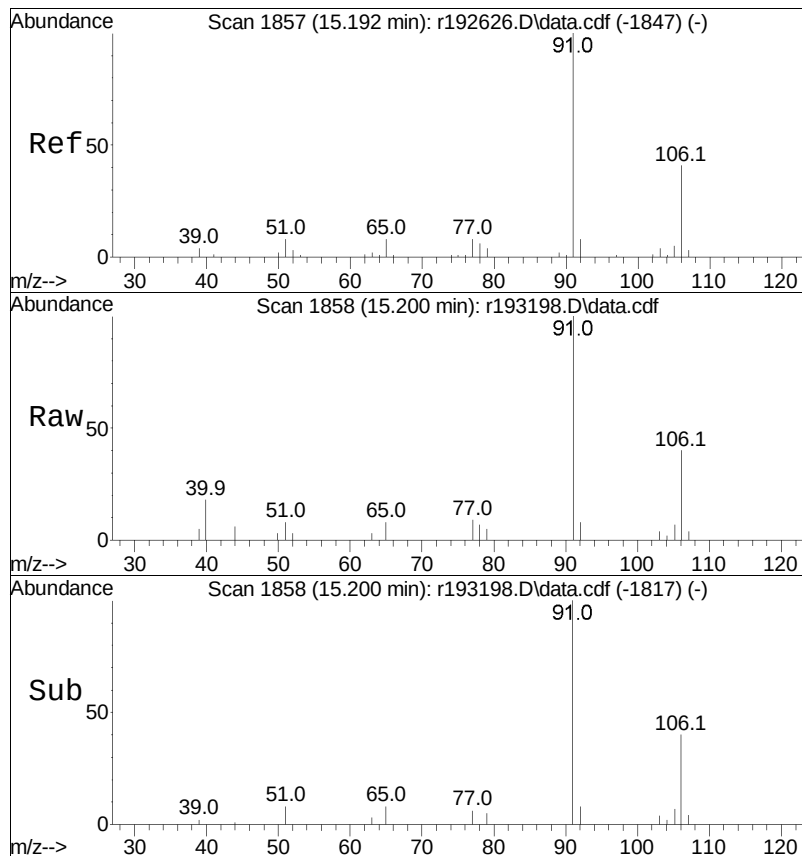




#68
toluene
Concen: 0.58 ppbV
RT: 13.375 min Scan# 1641
Delta R.T. 0.008 min
Lab File: r193198.D
Acq: 20 Mar 2020 7:17 PM

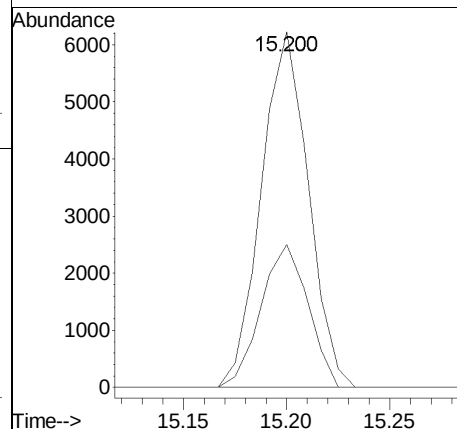
Tgt	Ion	Ratio	Lower	Upper
91	100			
92	65.6	53.3	79.9	

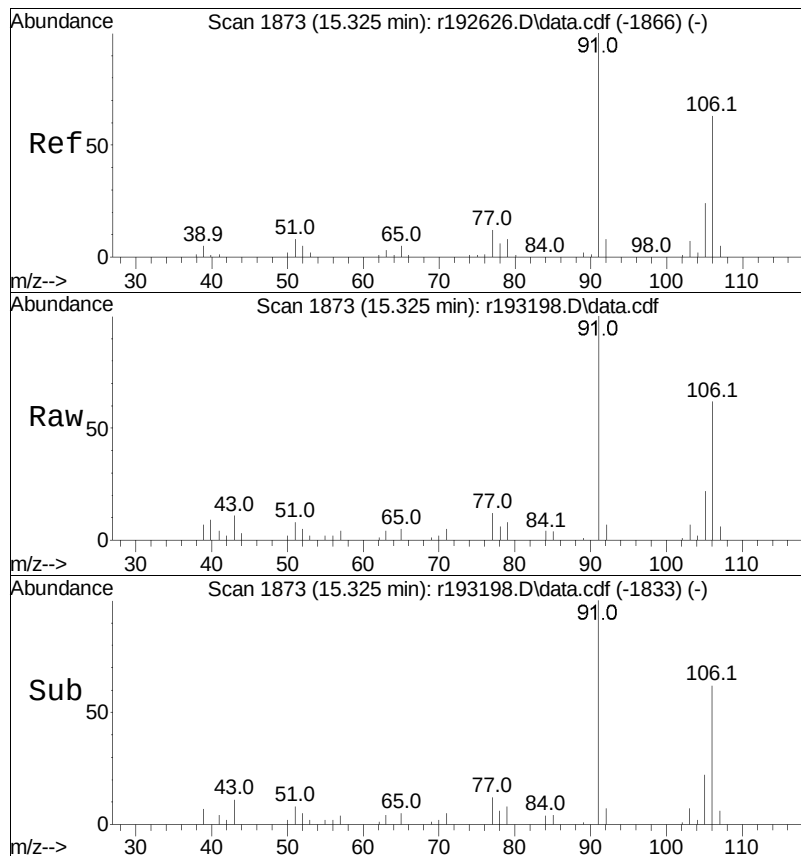




#81
ethylbenzene
Concen: 0.10 ppbV
RT: 15.200 min Scan# 1858
Delta R.T. 0.008 min
Lab File: r193198.D
Acq: 20 Mar 2020 7:17 PM

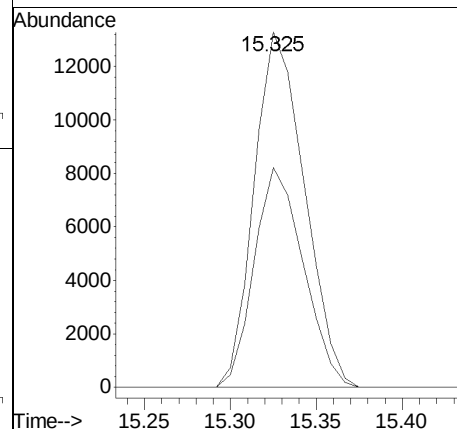
Tgt Ion	Ratio	Lower	Upper
91	100		
106	40.2	32.9	49.3

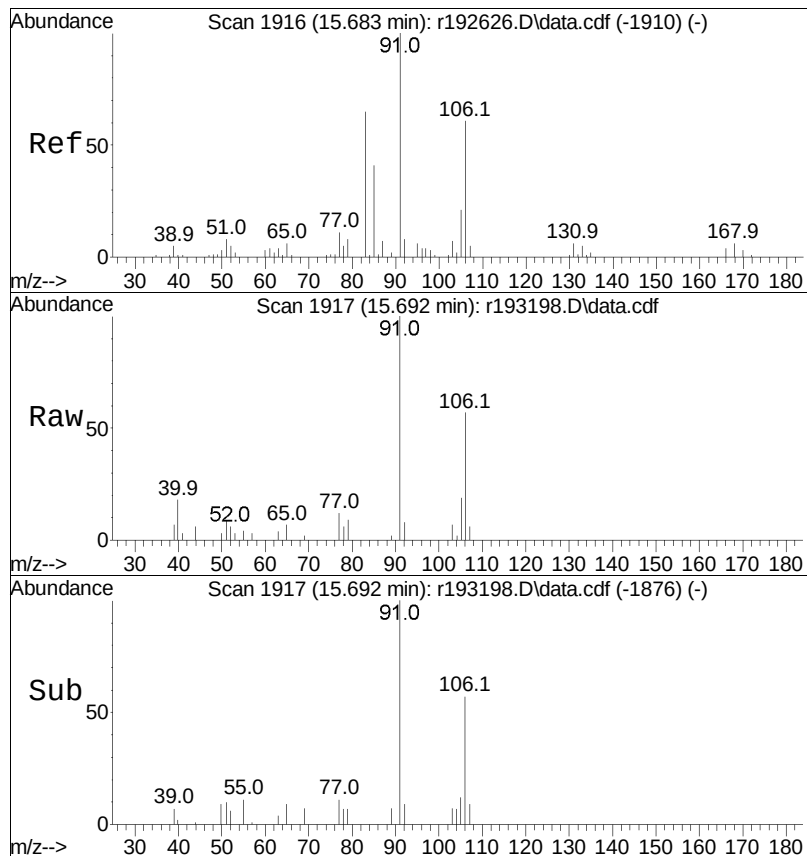




#83
 m+p-xylene
 Concen: 0.36 ppbV
 RT: 15.325 min Scan# 1873
 Delta R.T. 0.000 min
 Lab File: r193198.D
 Acq: 20 Mar 2020 7:17 PM

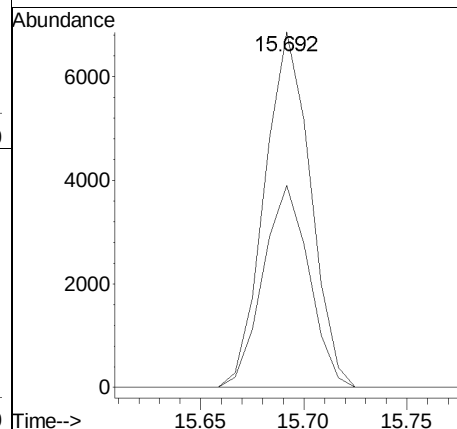
Tgt	Ion	Resp	Lower	Upper
91	100	27002		
106	61.9	51.0	76.4	

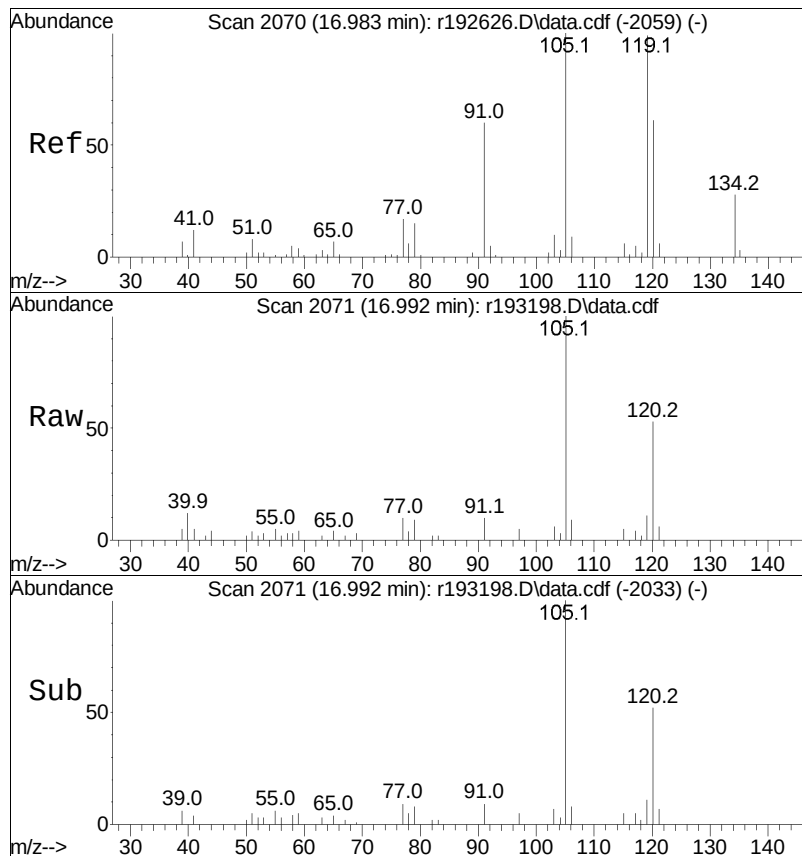




#87
 o-xylene
 Concen: 0.14 ppbV
 RT: 15.692 min Scan# 1917
 Delta R.T. 0.008 min
 Lab File: r193198.D
 Acq: 20 Mar 2020 7:17 PM

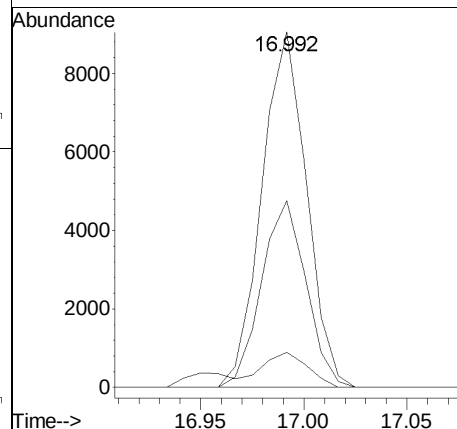
Tgt Ion:	91	Resp:	10622
Ion Ratio	Lower	Upper	
91	100		
106	56.8	47.8	71.8





#99
 1,2,4-trimethylbenzene
 Concen: 0.15 ppbV
 RT: 16.992 min Scan# 2071
 Delta R.T. 0.000 min
 Lab File: r193198.D
 Acq: 20 Mar 2020 7:17 PM

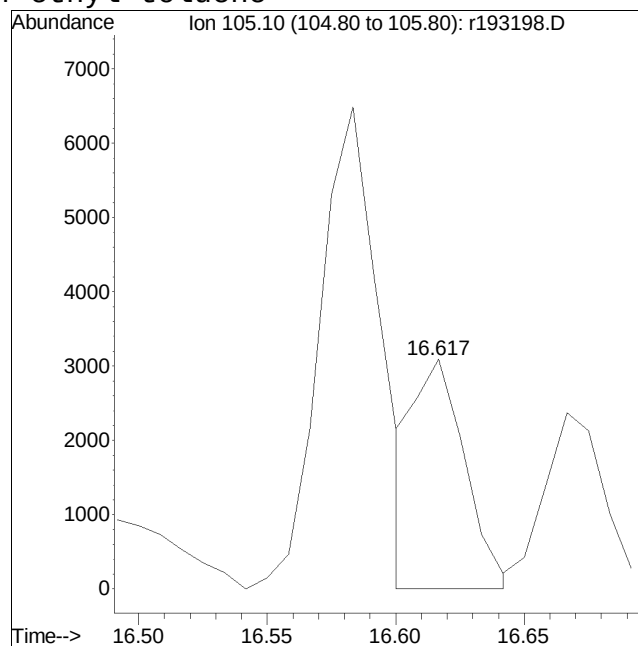
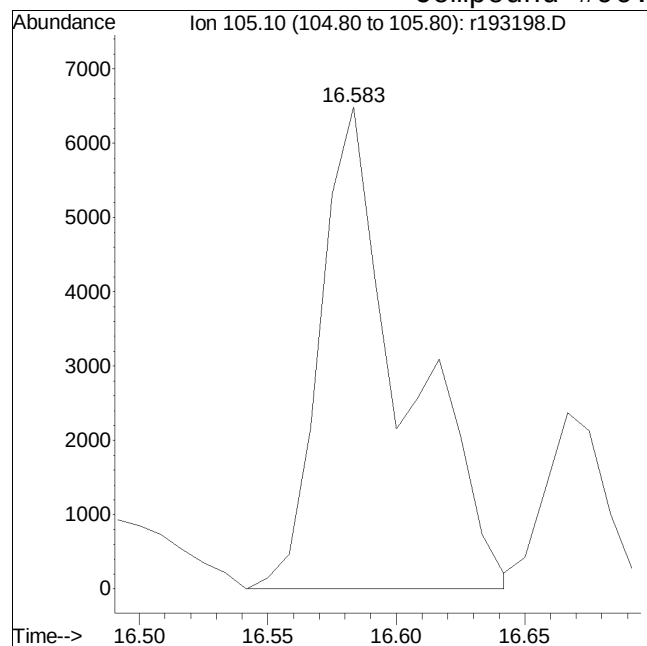
Tgt Ion:	105	Resp:	13625
Ion Ratio	Lower	Upper	
105	100		
120	52.6	49.2	73.8
91	9.9	49.9	74.9#



Manual Integration Report

Data Path : 0:\Forensics\Data\Airlab19QMethod : TFS19_200224.M
Data File : r193198.D Operator : AIRLAB19:EW
Date Inj'd : 3/20/2020 0:7: 7 Instrument :
Sample : WG1353556-5,3,250,250 Quant Date : 3/21/2020 7:53 am

Compound #96: 4-ethyl toluene



Original Peak Response = 14798

Manual Peak Response = 4337 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Calculation of Volatile Organic Compounds in Air

The instrument will calculate the concentration (ppbv). If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

$$\text{Result, ppbv} = C_s \times \text{DF}$$

Where:

C_s = Concentration of sample (ppbv)

DF = Dilution Factor

Calculation of Instrument Dilution Factor

For dilutions, smaller sample volumes (< 250mL) are analyzed. The smallest volume that can be analyzed with accuracy is 10 mL.

Samples that arrive at the laboratory with pressures below -15 inches Hg must be pressurized with zero air to greater than -15 inches Hg. This pressurization results in a dilution factor.

Calculation of Dilution Factor

$$\text{DF} = V_{\text{cf}} / V_{\text{ci}}$$

Where:

V_{ci} = volume of air in canister prior to pressurization, L

P =

Conversion of ppbv to $\mu\text{g}/\text{m}^3$

$$\mu\text{g}/\text{m}^3 = (\text{ppbv}) \times \text{MW} / 24.47$$

Where:

24.47 = molar gas constant (g/g-mole)

MW = molecular weight of the compound of interest

Dilution Factor for Pressurization of Subatmospheric Samples: Three Steps

Step 1: Calculate the volume in the canister prior to pressurization (Assume a 2.7 liter canister is used).

Dilution Factor for Pressurization of Subatmospheric Samples: Three Steps

Step 1: Calculate the volume in the canister prior to pressurization (Assume a 2.7 liter canister is used).

$$V_{ci} = 2.7 * PI / 14.696$$

Step 2: Calculate the volume in the canister after pressurization.

$$V_{cf} = 2.7 * PF / 14.696$$

Step 3: Calculate the dilution factor.

$$DF = V_{cf} / V_{ci}$$

Where:

V_{ci} = volume of air in canister prior to pressurization, L

PI = pressure reading of canister prior to pressurization (psia)

V_{cf} = volume of air in canister after pressurization, L

PF = pressure reading of canister after pressurization (psia)

DF = dilution factor

14.696 = atmospheric pressure (psia)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Mar 27 2020, 03:50 pm

Work Group: WG1353541 for Department: 3 GC/MS

Created: 20-MAR-20 Due: Operator: EW

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2011723-05	0A001	S T015-LL	AIR	DONE	U	0412	0323	S0	Can-2.7
L2011723-06	IA001	S T015-LL	AIR	DONE	U	0412	0323	S0	Can-2.7
L2011818-01	SVE-INF1	S T015-LL	SOIL_VAPOR	DONE	U	0415	0323	S0	Can-6
L2011818-02	SVE-INF2	S T015-LL	SOIL_VAPOR	DONE	U	0415	0323	S0	Can-6
L2011818-03	SVE-INF3	S T015-LL	SOIL_VAPOR	DONE	U	0415	0323	S0	Can-6
L2011818-04	GAC-INF	S T015-LL	SOIL_VAPOR	DONE	U	0415	0323	S0	Can-6
L2011818-05	GAC-EFF	S T015-LL	SOIL_VAPOR	DONE	U	0415	0323	S0	Can-6
L2011818-06	SSDS-INF	S T015-LL	SOIL_VAPOR	DONE	U	0415	0323	S0	Can-6
L2011818-07	DUP-3-16-20	S T015-LL	SOIL_VAPOR	DONE	U	0415	0323	S0	Can-6
L2012074-01	IA-8	S T015-LL	AIR	DONE	U	0416	0323	S0	Can-2.7
L2012074-02	IA-7	S T015-LL	AIR	DONE	U	0416	0323	S0	Can-2.7
L2012074-03	IA-10	S T015-LL	AIR	DONE	U	0416	0323	S0	Can-2.7
L2012074-04	IA-6	S T015-LL	AIR	DONE	U	0416	0323	S0	Can-2.7
L2012074-05	IA-9	S T015-LL	AIR	DONE	U	0416	0323	S0	Can-2.7
WG1353541-1	MS BFB Tune Standard	S T015-LL	AIR	DONE	U				
WG1353541-1	MS BFB Tune Standard	S T015-LL	SOIL_VAPOR	DONE	U				
WG1353541-2	Continuing Calibrati	S T015-LL	SOIL_VAPOR	DONE	U				
WG1353541-2	Continuing Calibrati	S T015-LL	AIR	DONE	U				
WG1353541-3	Laboratory Control S	S T015-LL	SOIL_VAPOR	DONE	U				
WG1353541-3	Laboratory Control S	S T015-LL	AIR	DONE	U				
WG1353541-4	Laboratory Method Bl	S T015-LL	AIR	DONE	U				
WG1353541-4	Laboratory Method Bl	S T015-LL	SOIL_VAPOR	DONE	U				
WG1353541-5	Duplicate Sample	S T015-LL	AIR	DONE	U				
WG1353541-5	Duplicate Sample	S T015-LL	SOIL_VAPOR	DONE	U				
Comments:									
WG1353541-5	L2011723-06								

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Mar 27 2020, 03:50 pm

Work Group: WG1353556 for Department: 3 GC/MS

Created: 20-MAR-20 Due: Operator: EW

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2011420-01	25P-IAN-20200312	S T015-LL	AIR	DONE	U	0412	0320	S0	Can-6
L2011420-02	25P-IA-BASEMENT-20200312	S T015-LL	AIR	DONE	U	0412	0320	S0	Can-6
L2011420-03	25P-IAS-20200312	S T015-LL	AIR	DONE	U	0412	0320	S0	Can-6
L2011420-04	25P-IF-20200312	S T015-LL	AIR	DONE	U	0412	0320	S0	Can-6
L2011420-05	25P-2B-20200312	S T015-LL	AIR	DONE	U	0412	0320	S0	Can-6
L2011420-06	25P-1STHW-20200312	S T015-LL	AIR	DONE	U	0412	0320	S0	Can-6
L2011420-07	25P-3G-20200312	S T015-LL	AIR	DONE	U	0412	0320	S0	Can-6
L2011420-08	25P-4G-20200312	S T015-LL	AIR	DONE	U	0412	0320	S0	Can-6
L2011676-01	SS-1(031320)	S T015-LL	SOIL_VAPOR	DONE	U	0412	0320	S0	Can-2.7
L2011676-02	SS-2(031320)	S T015-LL	SOIL_VAPOR	DONE	U	0412	0320	S0	Can-2.7
L2011676-03	SS-3(031320)	S T015-LL	SOIL_VAPOR	DONE	U	0412	0320	S0	Can-2.7
L2011676-04	SS-4(031320)	S T015-LL	SOIL_VAPOR	DONE	U	0412	0320	S0	Can-2.7
L2011723-01	SS001	S T015-LL	SOIL_VAPOR	DONE	U	0412	0323	S0	Can-2.7
L2011723-02	SV001	S T015-LL	SOIL_VAPOR	DONE	U	0412	0323	S0	Can-2.7
L2011723-03	SV002	S T015-LL	SOIL_VAPOR	DONE	U	0412	0323	S0	Can-2.7
L2011723-04	SV003	S T015-LL	SOIL_VAPOR	DONE	U	0412	0323	S0	Can-2.7
WG1353556-1	MS BFB Tune Standard	S T015-LL	AIR	DONE	U				
WG1353556-1	MS BFB Tune Standard	S T015-LL	SOIL_VAPOR	DONE	U				
WG1353556-2	Continuing Calibrati	S T015-LL	SOIL_VAPOR	DONE	U				
WG1353556-2	Continuing Calibrati	S T015-LL	AIR	DONE	U				
WG1353556-3	Laboratory Control S	S T015-LL	SOIL_VAPOR	DONE	U				
WG1353556-3	Laboratory Control S	S T015-LL	AIR	DONE	U				
WG1353556-4	Laboratory Method Bl	S T015-LL	SOIL_VAPOR	DONE	U				
WG1353556-4	Laboratory Method Bl	S T015-LL	AIR	DONE	U				
WG1353556-5	Duplicate Sample	S T015-LL	AIR	DONE	U				
WG1353556-5	Duplicate Sample	S T015-LL	SOIL_VAPOR	DONE	U				
Comments:									
WG1353556-5	L2011420-03								

Alpha Analytical Air Lab Instrument Run Log

Instrument ID: AIRLAB19

Internal Standard/Surrogate IDs: SS19-030 / SS19-022

Date: 02/24/2020

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: AR

Sequence File Name: 200224.S

SIM ICAL#		Full Scan ICAL#		APH ICAL#			
AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/ sublist	Leak Check Pass ? Y/ N
1	BA19022401	TO15_SFS.qgm	R192615.qgd	250 mL			NA
1	BA19022402	TO15_SFS.qgm	R192616.qgd	250 mL			NA
1	BA19022303	TO15_SFS.qgm	R192617.qgd	250 mL			NA
1	TA19022401	TO15_SFS.qgm	R192618.qgd	250 mL	TUNE		NA
5	ITO15-SIMSTD0.02	TO15_SFS.qgm	R192619.qgd	50 mL SS20-004D	SIM ONLY		NA
5	ITO15-SIMSTD0.05	TO15_SFS.qgm	R192620.qgd	125 mL SS20-004D	SIM ONLY		NA
5	ITO15-SIMSTD0.1	TO15_SFS.qgm	R192621.qgd	250 mL SS20-004D	SIM ONLY		NA
6	ITO15-SIMSTD0.2	TO15_SFS.qgm	R192622.qgd	50 mL SS20-004C			NA
6	ITO15-SIMSTD0.5	TO15_SFS.qgm	R192623.qgd	125 mL SS20-004C			NA
6	ITO15-SIMSTD1.0	TO15_SFS.qgm	R192624.qgd	250 mL SS20-004C			NA
7	ITO15-SIMSTD5.0	TO15_SFS.qgm	R192625.qgd	125 mL SS20-004B1			NA
7	ITO15-SIMSTD010	TO15_SFS.qgm	R192626.qgd	250 mL SS20-004B1			NA
8	ITO15-SIMSTD020	TO15_SFS.qgm	R192627.qgd	50 mL SS20-004A			NA
8	ITO15-SIMSTD050	TO15_SFS.qgm	R192628.qgd	125 mL SS20-004A			NA
8	ITO15-LLSTD100	TO15_SFS.qgm	R192629.qgd	250 mL SS20-004A	NOT USED FOR SIM		NA
1	BA19022401	TO15_SFS.qgm	R192630.qgd	250 mL			NA
1	BA19022402	TO15_SFS.qgm	R192631.qgd	250 mL			NA
2	CTO15-LLSTD010	TO15_SFS.qgm	R192632.qgd	250 mL SS20-006A	FULL SCAN ICV		NA
2	CTO15-SIMSTD5.0	TO15_SFS.qgm	R192633.qgd	125 mL SS20-006A	SIM ICV		NA

Alpha Analytical Air Lab Instrument Run Log

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,250 { Lab sample ID, dept #, actual
volume analyzed (mL), nominal
volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume
analyzed

Alpha Analytical Air Lab Instrument Run Log

Instrument ID: Airpiano3

Internal Standard/Surrogate IDs: SS20-009 / SS19-022

Date: 03/12/20

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: TS

Sequence File Name: 200312.S

SIM ICAL#		Full Scan ICAL#		APH ICAL#			
AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/sublist	Leak Check Pass ? Y/N
1	BA3031201	TO15_SFS.qgm	R38585.qgd	250 mL			NA
1	BA3031202	TO15_SFS.qgm	R38586.qgd	250 mL			NA
1	BA3031203	TO15_SFS.qgm	R38587.qgd	250 mL			NA
1	TA3031201	TO15_SFS.qgm	R38588.qgd	250 mL	TUNE		NA
5	ITO15-SIMSTD0.02	TO15_SFS.qgm	R38589.qgd	50 mL SS20-003D	SIM ONLY		NA
5	ITO15-SIMSTD0.05	TO15_SFS.qgm	R38590.qgd	125 mL SS20-003D	SIM ONLY		NA
5	ITO15-SIMSTD0.1	TO15_SFS.qgm	R38591.qgd	250 mL SS20-003D	SIM ONLY		NA
6	ITO15-SIMSTD0.2	TO15_SFS.qgm	R38592.qgd	50 mL SS20-003C			NA
6	ITO15-SIMSTD0.5	TO15_SFS.qgm	R38593.qgd	125 mL SS20-003C			NA
6	ITO15-SIMSTD1.0	TO15_SFS.qgm	R38594.qgd	250 mL SS20-003C			NA
7	ITO15-SIMSTD5.0	TO15_SFS.qgm	R38595.qgd	125 mL SS20-003B1			NA
7	ITO15-SIMSTD010	TO15_SFS.qgm	R38596.qgd	250 mL SS20-003B1			NA
8	ITO15-SIMSTD020	TO15_SFS.qgm	R38597.qgd	50 mL SS20-003A			NA
8	ITO15-SIMSTD050	TO15_SFS.qgm	R38598.qgd	125 mL SS20-003A			NA
8	ITO15-LLSTD100	TO15_SFS.qgm	R38599.qgd	250 mL SS20-003A	LL ONLY		NA
1	BA3031201	TO15_SFS.qgm	R38600.qgd	250 mL			NA
1	BA3031202	TO15_SFS.qgm	R38601.qgd	250 mL			NA
2	CTO15-LLSTD010	TO15_SFS.qgm	R38602.qgd	250 mL SS20-006B	LL ICV		NA
2	CTO15-SIMSTD5.0	TO15_SFS.qgm	R38603.qgd	125 mL SS20-006B	SIM ICV		NA

[illegible]

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

Alpha Analytical Air Lab Instrument Run Log

Instrument ID: Airpiano3 Internal Standard/Surrogate IDs: SS20-009 / SS19-022

Date: 03/20/20 Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: EW Sequence File Name: 200320.S

SIM ICAL# 16593		Full Scan ICAL# 16594		APH ICAL#16592			
AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/sublist	Leak Check Pass ? Y/N
1	TA3032001	TO15_SFS.qgm	R38753.qgd	250 mL	TUNE		NA
3	CTO15-LLSTD010	TO15_SFS.qgm	R38754.qgd	250 mL SS20-006B	LL LCS		NA
3	CTO15-SIMSTD5.0	TO15_SFS.qgm	R38755.qgd	125 mL SS20-006B	SIM LCS		NA
1	BA3032001	TO15_SFS.qgm	R38756.qgd	250 mL	BLANK FAILED		NA
1	BA3032002	TO15_SFS.qgm	R38757.qgd	250 mL	BLANK		NA
1	L2011723-05,3,250,250	TO15_SFS.qgm	R38758.qgd	WG1353541,ICAL16594		NY / 7-SIM	Y
2	L2011723-06,3,250,250	TO15_SFS.qgm	R38759.qgd	WG1353541,ICAL16594		NY / 7-SIM	Y
2	L2011723-06DUP,3,250,250	TO15_SFS.qgm	R38760.qgd	WG1353541,ICAL16594	LL / SIM DUP	NY / 7-SIM	Y
3	L2012074-01,3,250,250	TO15_SFS.qgm	R38761.qgd	WG1353541,ICAL16594		NY / 7-SIM	Y
4	L2012074-02,3,250,250	TO15_SFS.qgm	R38762.qgd	WG1353541,ICAL16594		NY / 7-SIM	Y
5	L2012074-03,3,250,250	TO15_SFS.qgm	R38763.qgd	WG1353541,ICAL16594		NY / 7-SIM	Y
6	L2012074-04,3,250,250	TO15_SFS.qgm	R38764.qgd	WG1353541,ICAL16594		NY / 7-SIM	Y
7	L2012074-05,3,250,250	TO15_SFS.qgm	R38765.qgd	WG1353541,ICAL16594		NY / 7-SIM	Y
8	L2011818-01,3,250,250	TO15_SFS.qgm	R38766.qgd	WG1353541,ICAL16594		NY	Y
9	L2011818-02,3,250,250	TO15_SFS.qgm	R38767.qgd	WG1353541,ICAL16594		NY	Y
10	L2011818-03,3,250,250	TO15_SFS.qgm	R38768.qgd	WG1353541,ICAL16594		NY	Y
11	L2011818-04,3,250,250	TO15_SFS.qgm	R38769.qgd	WG1353541,ICAL16594		NY	Y
12	L2011818-05,3,250,250	TO15_SFS.qgm	R38770.qgd	WG1353541,ICAL16594		NY	Y
13	L2011818-06,3,250,250	TO15_SFS.qgm	R38771.qgd	WG1353541,ICAL16594	IPA OVERCAL	NY	Y
14	L2011818-07D,3,215,250	TO15_SFS.qgm	R38772.qgd	WG1353541,ICAL16594		NY	Y
15	L2011546-02,3,250,250	TO15_SFS.qgm	R38773.qgd	WG1353539,ICAL16594		MCP	Y

Alpha Analytical Air Lab

Instrument Run Log

[illegible]

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information:	L1301234-01,3,250,250	{ Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL)}

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

Alpha Analytical Air Lab Instrument Run Log

Instrument ID: AIRLAB19

Internal Standard/Surrogate IDs: SS19-030 / SS19-022

Date: 03/20/2020

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: EW

Sequence File Name: 200320.S

SIM ICAL# 16555		Full Scan ICAL# 16553		APH ICAL# 16556			
AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/ sublst	Leak Check Pass ? Y/N
1	TA19032001	TO15_SFS.qgm	R193189.qgd	250 mL	TUNE		NA
2	CA19032001	TO15_SFS.qgm	R193190.qgd	250 mL SS20-004B2	LL CC		NA
3	CTO15-LLSTD010	TO15_SFS.qgm	R193191.qgd	250 mL SS20-006G	LL LCS		NA
3	CTO15-SIMSTD5.0	TO15_SFS.qgm	R193192.qgd	125 mL SS20-006G	SIM LCS		NA
1	BA19032001	TO15_SFS.qgm	R193193.qgd	250 mL	BLANK FAILED		NA
1	BA19032002	TO15_SFS.qgm	R193194.qgd	250 mL	BLANK		NA
1	L2011420-01,3,250,250	TO15_SFS.qgm	R193195.qgd	WG1353556,ICAL16553		NY / 7-SIM	Y
2	L2011420-02,3,250,250	TO15_SFS.qgm	R193196.qgd	WG1353556,ICAL16553		NY / 7-SIM	Y
3	L2011420-03,3,250,250	TO15_SFS.qgm	R193197.qgd	WG1353556,ICAL16553		NY / 7-SIM	Y
3	L2011420-03DUP,3,250,250	TO15_SFS.qgm	R193198.qgd	WG1353556,ICAL16553	LL / SIM DUP	NY / 7-SIM	Y
4	L2011420-04,3,250,250	TO15_SFS.qgm	R193199.qgd	WG1353556,ICAL16553		NY / 7-SIM	Y
5	L2011420-05,3,250,250	TO15_SFS.qgm	R193200.qgd	WG1353556,ICAL16553		NY / 7-SIM	Y
6	L2011420-06,3,250,250	TO15_SFS.qgm	R193201.qgd	WG1353556,ICAL16553		NY / 7-SIM	Y
7	L2011420-07,3,250,250	TO15_SFS.qgm	R193202.qgd	WG1353556,ICAL16553		NY / 7-SIM	Y
8	L2011420-08,3,250,250	TO15_SFS.qgm	R193203.qgd	WG1353556,ICAL16553		NY / 7-SIM	Y
9	L2011676-01D,3,80,250	TO15_SFS.qgm	R193204.qgd	WG1353556,ICAL16553		NY	Y
10	L2011676-02,3,250,250	TO15_SFS.qgm	R193205.qgd	WG1353556,ICAL16553		NY	Y
11	L2011676-03,3,250,250	TO15_SFS.qgm	R193206.qgd	WG1353556,ICAL16553		NY	Y
12	L2011676-04,3,250,250	TO15_SFS.qgm	R193207.qgd	WG1353556,ICAL16553		NY	Y
13	L2011723-01,3,250,250	TO15_SFS.qgm	R193208.qgd	WG1353556,ICAL16553		NY	Y
14	L2011723-02D,3,75,250	TO15_SFS.qgm	R193209.qgd	WG1353556,ICAL16553		NY	Y

Alpha Analytical Air Lab

Instrument Run Log

[illegible]

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,250 { Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

GC/MS VOA
Air Analysis
Selective Ion Monitoring

Volatiles QC Summary

Lab Duplicate Sample Summary

Form 3

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Client Sample ID : IA001
 Lab Sample ID : L2011723-06
 Lab File ID : R38759_EV2
 Dup Sample ID : WG1353543-5

Lab Number : L2011723
 Project Number : MHD1801
 Matrix : AIR
 Analysis Date : 03/20/20 18:16
 DUP File ID : r38760_Ev2
 DUP Analysis Date : 03/20/20 19:03

Parameter	Sample Concentration (ppbV)	Duplicate Concentration (ppbV)	RPD	RPD Limit
Vinyl chloride	ND	ND	NC	25
1,1-Dichloroethene	ND	ND	NC	25
cis-1,2-Dichloroethene	ND	ND	NC	25
1,1,1-Trichloroethane	ND	ND	NC	25
Carbon tetrachloride	0.061	0.054	12	25
Trichloroethene	ND	ND	NC	25
Tetrachloroethene	0.239	0.236	1	25

Form 3

Air Volatiles

File ID :

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R			
Vinyl chloride	5	5.29	106				-	70-130	25
1,1-Dichloroethene	5	5.23	105				-	70-130	25
cis-1,2-Dichloroethene	5	5.31	106				-	70-130	25
1,1,1-Trichloroethane	5	5.11	102				-	70-130	25
Carbon tetrachloride	5	4.69	94				-	70-130	25
Trichloroethene	5	5.56	111				-	70-130	25
Tetrachloroethene	5	5.38	108				-	70-130	25

Method Blank Summary
Form 4
Air Volatiles

Client : P. W. Grosser
Project Name : MHD1801
Lab Sample ID : WG1353543-4
Instrument ID : AIRPIANO3
Matrix : AIR

Lab Number : L2011723
Project Number : MHD1801
Lab File ID : r38757_Ev2
Analysis Date : 03/20/20 16:20

Client Sample No.	Lab Sample ID	Analysis Date
WG1353543-3LCS	WG1353543-3	03/20/20 14:11
OA001	L2011723-05	03/20/20 17:35
IA001	L2011723-06	03/20/20 18:16
IA001DUP	WG1353543-5	03/20/20 19:03

Instrument Performance Check (Tune) Summary

Form 5

Air Volatiles

Bromofluorobenzene (BFB)

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRPIANO3
 Tune Standard : WG1350409-1

Lab Number : L2011723
 Project Number : MHD1801
 Analysis Date : 03/12/20 09:50
 Tune File ID : r38588_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	14.5
75	30.0 - 66.0% of mass 95	39.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.8 (1.1)1
174	50.0 - 120.0% of mass 95	75.2
175	4.0 - 9.0% of mass 174	5.6 (7.4)1
176	93.0 - 101% of mass 174	71.7 (95.4)1
177	5.0 - 9.0% of mass 176	4.9 (6.8)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD0.02	R1293581-1	R38589_EV2	03/12/20 10:28
STD0.05	R1293581-2	R38590_EV2	03/12/20 11:06
STD0.1	R1293581-3	R38591_EV2	03/12/20 11:47
STD0.2	R1293581-4	R38592_EV2	03/12/20 12:25
STD0.5	R1293581-5	R38593_EV2	03/12/20 13:03
STD1.0	R1293581-6	R38594_EV2	03/12/20 13:44
STD5.0	R1293581-7	R38595_EV2	03/12/20 14:23
STD010	R1293581-8	R38596_EV2	03/12/20 15:04
STD020	R1293581-9	R38597_EV2	03/12/20 15:41
STD050	R1293581-10	R38598_EV2	03/12/20 16:20
ICV Quant	R1293581-11	R38603_EV2	03/13/20 00:45

Instrument Performance Check (Tune) Summary

Form 5

Air Volatiles

Bromofluorobenzene (BFB)

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRPIANO3
 Tune Standard : WG1353543-1

Lab Number : L2011723
 Project Number : MHD1801
 Analysis Date : 03/20/20 12:51
 Tune File ID : r38753_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	8.0 - 40.0% of mass 95	13.2
75	30.0 - 66.0% of mass 95	36.4
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.6 (.9)1
174	50.0 - 120.0% of mass 95	71.1
175	4.0 - 9.0% of mass 174	5 (7.1)1
176	93.0 - 101% of mass 174	67.3 (94.6)1
177	5.0 - 9.0% of mass 176	4.5 (6.7)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1353543-2CCAL	WG1353543-2	R38755_EV2	03/20/20 14:11
WG1353543-3LCS	WG1353543-3	R38755_EV2	03/20/20 14:11
WG1353543-4BLANK	WG1353543-4	R38757_EV2	03/20/20 16:20
OA001	L2011723-05	R38758_EV2	03/20/20 17:35
IA001	L2011723-06	R38759_EV2	03/20/20 18:16
WG1353543-5DUP	WG1353543-5	R38760_EV2	03/20/20 19:03

Internal Standard Area and RT Summary

Form 8a

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRPIANO3
 Sample No : WG1353543-2

Lab Number : L2011723
 Project Number : MHD1801
 Analysis Date : 03/20/20 14:11
 Lab File ID : R38755_EV2

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	RT	Area	RT	Area	RT
WG1353543-2	225089	9.58	642201	11.84	90362	16.56
Upper Limit	315125	9.91	899081	12.17	126507	16.89
Lower Limit	135053	9.25	385321	11.51	54217	16.23
Sample ID						
WG1353543-3 LCS	225089	9.58	642201	11.84	90362	16.56
WG1353543-4 BLANK	211260	9.58	605199	11.85	75324	16.53
OA001	210440	9.58	596473	11.85	80231	16.57
IA001	217760	9.58	617296	11.85	83178	16.57
IA001 DUP	238534	9.58	652384	11.85	86728	16.57

Area Upper Limit = +40% of internal standard area
 Area Lower Limit = - 40% of internal standard area

RT Upper Limit = +0.33 minutes of internal standard RT
 RT Lower Limit = -0.33 minutes of internal standard RT

* Values outside of QC limits





Date Created: 11/22/19
Created By: Jason Hebert
File: PM7756-1
Page: 1

Volatile Organics in Air by TO-15 SIM (AIR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
1,1,1-Trichloroethane	71-55-6	0.02	0.0083	ppbV	70-130	25		25	25			
1,1,1,2-Tetrachloroethane	630-20-6	0.02	0.0053	ppbV	70-130	25		25	25			
1,1,2,2-Tetrachloroethane	79-34-5	0.02	0.0056	ppbV	70-130	25		25	25			
1,1,2-Trichloroethane	79-00-5	0.02	0.0058	ppbV	70-130	25		25	25			
1,1-Dichloroethane	75-34-3	0.02	0.0073	ppbV	70-130	25		25	25			
1,1-Dichloroethene	75-35-4	0.02	0.0084	ppbV	70-130	25		25	25			
1,2,4-Trimethylbenzene	95-63-6	0.02	0.0043	ppbV	70-130	25		25	25			
1,2-Dibromoethane	106-93-4	0.02	0.008	ppbV	70-130	25		25	25			
1,2-Dichlorobenzene	95-50-1	0.02	0.016	ppbV	70-130	25		25	25			
1,2-Dichloroethane	107-06-2	0.02	0.0097	ppbV	70-130	25		25	25			
1,2-Dichloropropane	78-87-5	0.02	0.0054	ppbV	70-130	25		25	25			
1,3,5-Trimethylbenzene	108-67-8	0.02	0.0056	ppbV	70-130	25		25	25			
1,3-Butadiene	106-99-0	0.02	0.0097	ppbV	70-130	25		25	25			
1,3-Dichlorobenzene	541-73-1	0.02	0.011	ppbV	70-130	25		25	25			
1,4-Dichlorobenzene	106-46-7	0.02	0.012	ppbV	70-130	25		25	25			
1,4-Dioxane	123-91-1	0.1	0.032	ppbV	70-130	25		25	25			
2,2,4-Trimethylpentane	540-84-1	0.2	0.0063	ppbV	70-130	25		25	25			
2-Hexanone	591-78-6	0.2	0.015	ppbV	70-130	25		25	25			
3-Chloropropene	107-05-1	0.2	0.0067	ppbV	70-130	25		25	25			
4-Ethyltoluene	622-96-8	0.02	0.0042	ppbV	70-130	25		25	25			
Benzene	71-43-2	0.1	0.005	ppbV	70-130	25		25	25			
Benzyl chloride	100-44-7	0.2	0.0072	ppbV	70-130	25		25	25			
Bromodichloromethane	75-27-4	0.02	0.0067	ppbV	70-130	25		25	25			
Bromoform	75-25-2	0.02	0.0065	ppbV	70-130	25		25	25			
Bromomethane	74-83-9	0.02	0.0085	ppbV	70-130	25		25	25			
Carbon disulfide	75-15-0	0.2	0.043	ppbV	70-130	25		25	25			
Carbon tetrachloride	56-23-5	0.02	0.0105	ppbV	70-130	25		25	25			
Chlorobenzene	108-90-7	0.1	0.0064	ppbV	70-130	25		25	25			
Chloroethane	75-00-3	0.1	0.0135	ppbV	70-130	25		25	25			
Chloroform	67-66-3	0.02	0.0089	ppbV	70-130	25		25	25			
Chloromethane	74-87-3	0.2	0.024	ppbV	70-130	25		25	25			
cis-1,2-Dichloroethene	156-59-2	0.02	0.0096	ppbV	70-130	25		25	25			
trans-1,2-Dichloroethene	156-60-5	0.02	0.0076	ppbV	70-130	25		25	25			
1,2-Dichloroethene (total)	540-59-0	0.02	0.0076	ppbV				25	25			
cis-1,3-Dichloropropene	10061-01-5	0.02	0.007	ppbV	70-130	25		25	25			
1,3-Dichloropropene, Total	542-75-6	0.02	0.007	ppbV				25	25			
Cyclohexane	110-82-7	0.2	0.0064	ppbV	70-130	25		25	25			
Dibromochloromethane	124-48-1	0.02	0.0086	ppbV	70-130	25		25	25			
Dichlorodifluoromethane	75-71-8	0.2	0.018	ppbV	70-130	25		25	25			
Ethyl Alcohol	64-17-5	5	0.666	ppbV	40-160	25		25	25			
Ethyl Acetate	141-78-6	0.5	0.0307	ppbV	70-130	25		25	25			
Ethylbenzene	100-41-4	0.02	0.0049	ppbV	70-130	25		25	25			

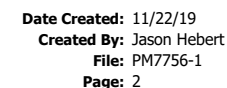
Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.



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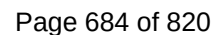
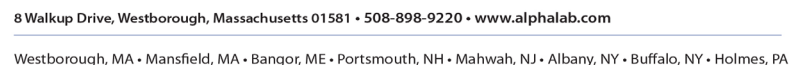
Westborough, MA • Mansfield, MA • Bangor, ME • Portsmouth, NH • Mahwah, NJ • Albany, NY • Buffalo, NY • Holmes, PA





Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.



Volatiles Sample Data

Results Summary

Form 1

Volatile Organics in Air by SIM

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-05
 Client ID : OA001
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R38758_EV2
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:29
 Date Received : 03/16/20
 Date Analyzed : 03/20/20 17:35
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.062	0.020	--	0.390	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	0.041	0.020	--	0.278	0.136	--	

Results Summary

Form 1

Volatile Organics in Air by SIM

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-06
 Client ID : IA001
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R38759_EV2
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:30
 Date Received : 03/16/20
 Date Analyzed : 03/20/20 18:16
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.061	0.020	--	0.384	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	0.239	0.020	--	1.62	0.136	--	

Results Summary

Form 1

Volatile Organics in Air by SIM

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : WG1353543-4
 Client ID : WG1353543-4BLANK
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R38757_EV2
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : NA
 Date Received : NA
 Date Analyzed : 03/20/20 16:20
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	ND	0.020	--	ND	0.126	--	U
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	ND	0.020	--	ND	0.136	--	U

Results Summary

Form 1

Volatile Organics in Air by SIM

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : WG1353543-5
 Client ID : IA001DUP
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R38760_EV2
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:30
 Date Received : 03/16/20
 Date Analyzed : 03/20/20 19:03
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.054	0.020	--	0.340	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	0.236	0.020	--	1.60	0.136	--	

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\
 Data File : r38758_Ev2.D
 Acq On : 20 Mar 2020 5:35 PM
 Operator : AIRPIAN03:EW
 Sample : L2011723-05,3,250,250
 Misc : WG1353543,ICAL16593
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 19:10:27 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:48:11 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\r38755_Ev2.D
 Sub List : 7-NY-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.575	49	210440	10.000	ppbV	# 0.03
Standard Area = 225089			Recovery =		93.49%	
33) 1,4-difluorobenzene	11.847	114	596473	10.000	ppbV	0.04
Standard Area = 642201			Recovery =		92.88%	
51) chlorobenzene-D5	16.567	54	80231	10.000	ppbV	0.03
Standard Area = 90362			Recovery =		88.79%	

System Monitoring Compounds

Target Compounds					Qvalue
6) vinyl chloride	0.000		0	N.D.	
17) 1,1-dichloroethene	0.000		0	N.D.	d
28) cis-1,2-dichloroethene	0.000		0	N.D.	
36) 1,1,1-trichloroethane	10.867		0	N.D.	
38) carbon tetrachloride	11.580	117	1085	0.062	ppbV 98
44) trichloroethene	0.000		0	N.D.	d
57) tetrachloroethene	15.950	166	749	0.041	ppbV # 87

 (#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : 7-NY-SIM - .\Data\Airpiano3\2020\03\200320SIM\r38755_Ev2.D

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\

Data File : r38758_Ev2.D

Acq On : 20 Mar 2020 5:35 PM

Operator : AIRPIANO3:EW

Sample : L2011723-05,3,250,250

Misc : WG1353543,ICAL16593

ALS Vial : 0 Sample Multiplier: 1

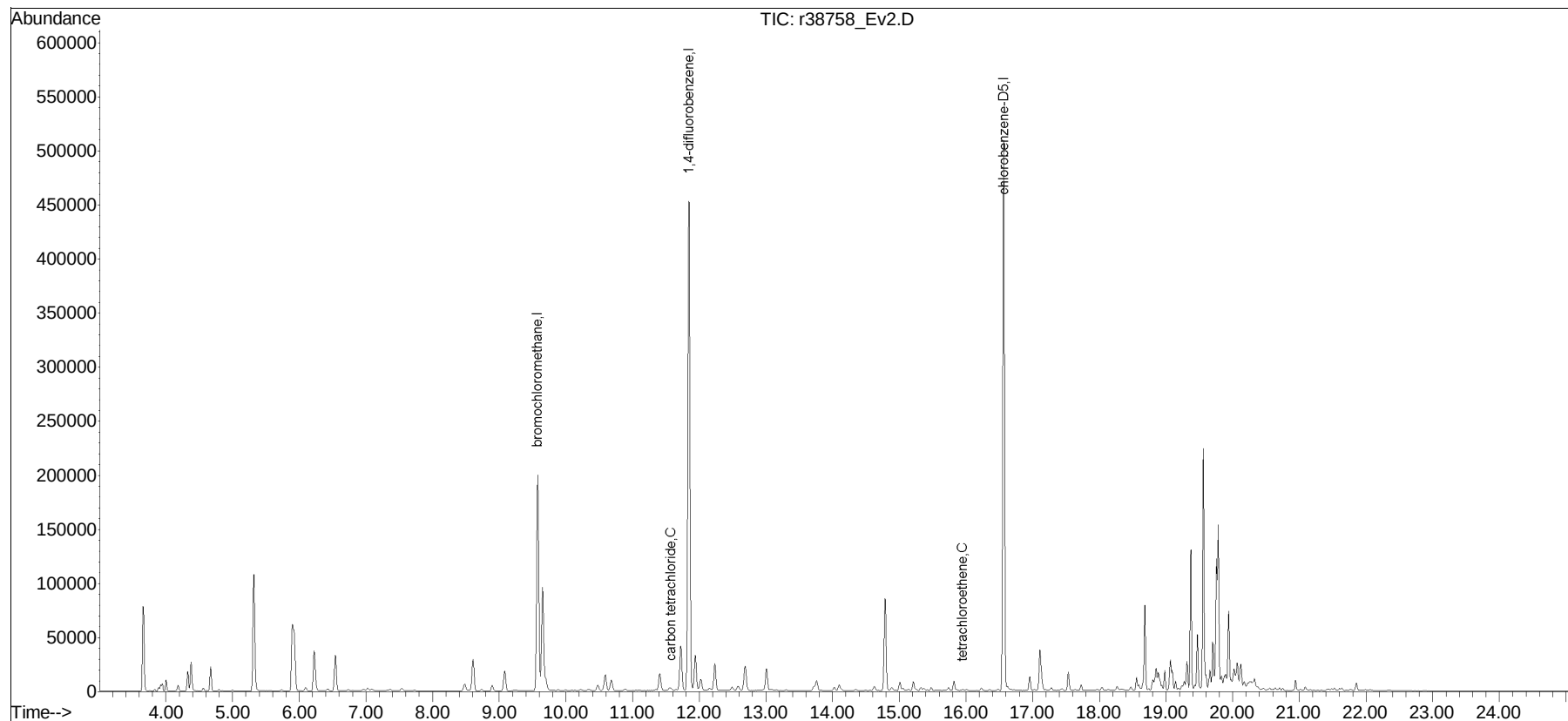
Quant Time: Mar 21 19:10:27 2020

Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M

Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis

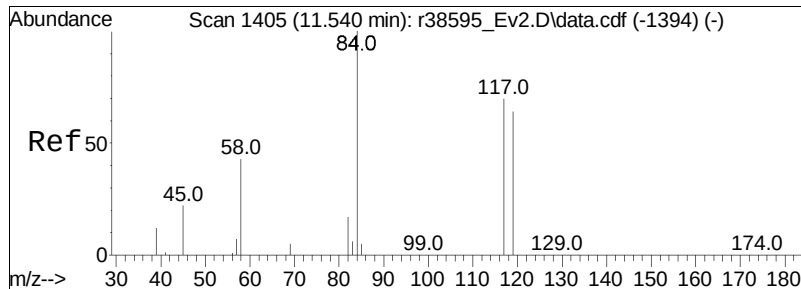
QLast Update : Thu Mar 12 16:48:11 2020

Response via : Initial Calibration



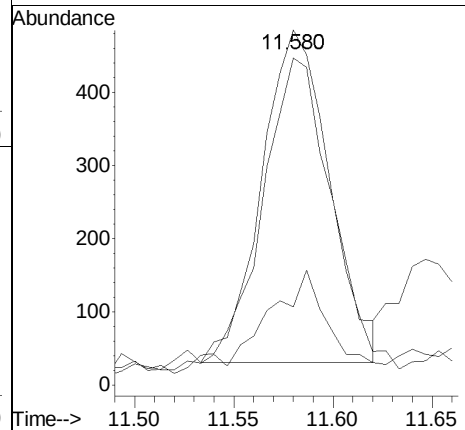
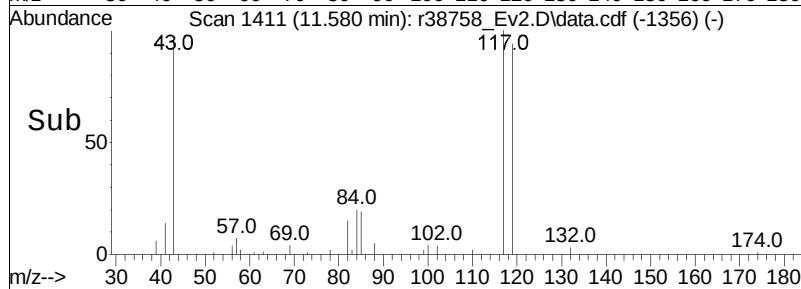
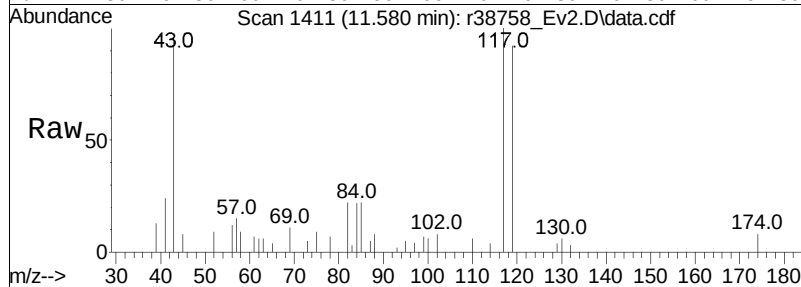
TSIM3_200312.M Sat Mar 21 19:13:53 2020

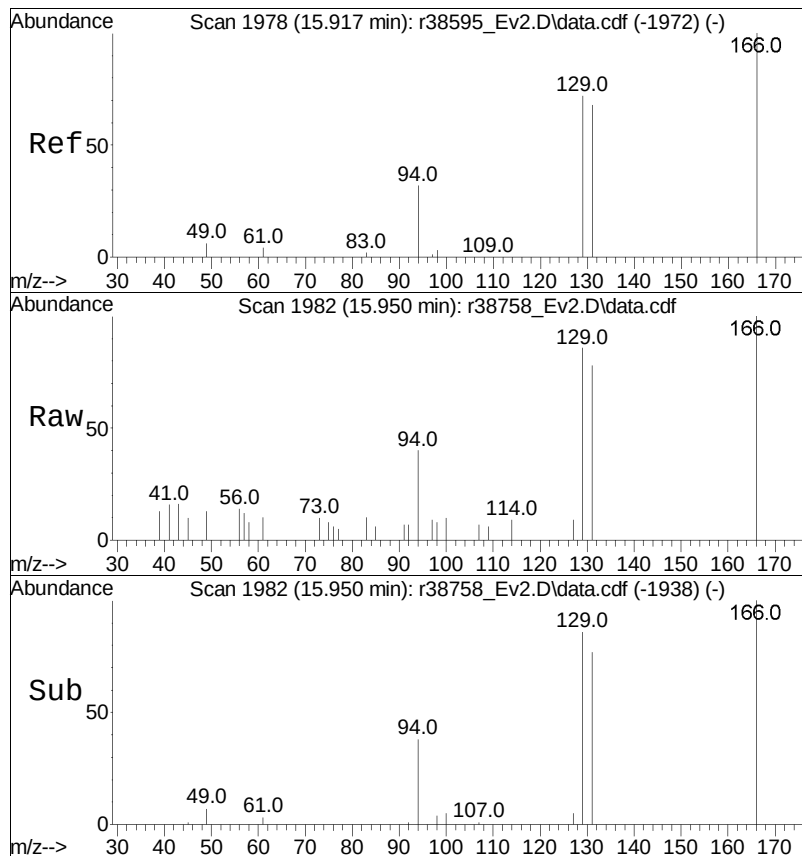
Page: 2



#38
 carbon tetrachloride
 Concen: 0.06 ppbV
 RT: 11.580 min Scan# 1411
 Delta R.T. 0.040 min
 Lab File: r38758_Ev2.D
 Acq: 20 Mar 2020 5:35 PM

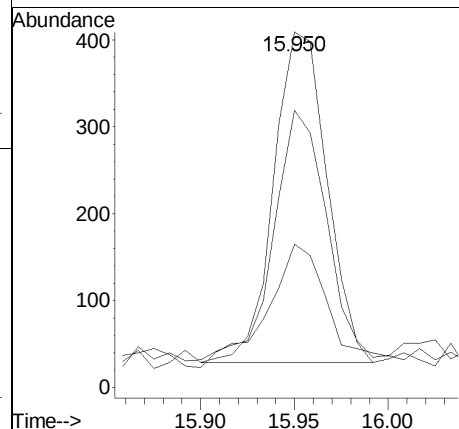
Tgt Ion	Ratio	Resp	Lower	Upper
117	100			
119	92.2	73.0	109.4	
82	22.1	19.1	28.7	





#57
 tetrachloroethene
 Concen: 0.04 ppbV
 RT: 15.950 min Scan# 1982
 Delta R.T. 0.033 min
 Lab File: r38758_Ev2.D
 Acq: 20 Mar 2020 5:35 PM

Tgt	Ion:166	Resp:	749
Ion	Ratio	Lower	Upper
166	100		
131	78.0	54.6	82.0
94	40.3	25.7	38.5#



Manual Integration Report

Data Path : 0:\Forensics\Data\AirpianoQMethod : TSIM3_200312.M
Data File : r38758_Ev2.D Operator : AIRPIAN03:EW
Date Inj'd : 3/20/2020 0:5: 5 Instrument :
Sample : L2011723-05,3,250,250 Quant Date : 3/21/2020 7:09 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\
 Data File : r38759_Ev2.D
 Acq On : 20 Mar 2020 6:16 PM
 Operator : AIRPIAN03:EW
 Sample : L2011723-06,3,250,250
 Misc : WG1353543,ICAL16593
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 19:10:46 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:48:11 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\r38755_Ev2.D
 Sub List : 7-NY-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.575	49	217760	10.000	ppbV	0.03
Standard Area = 225089			Recovery =		96.74%	
33) 1,4-difluorobenzene	11.847	114	617296	10.000	ppbV	0.04
Standard Area = 642201			Recovery =		96.12%	
51) chlorobenzene-D5	16.567	54	83178	10.000	ppbV	0.03
Standard Area = 90362			Recovery =		92.05%	

System Monitoring Compounds

Target Compounds					Qvalue
6) vinyl chloride	0.000		0	N.D.	
17) 1,1-dichloroethene	0.000		0	N.D.	d
28) cis-1,2-dichloroethene	0.000		0	N.D.	
36) 1,1,1-trichloroethane	0.000		0	N.D.	
38) carbon tetrachloride	11.580	117	1118	0.061	ppbV 96
44) trichloroethene	12.647		0	N.D.	
57) tetrachloroethene	15.958	166	4506	0.239	ppbV 98

 (#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : 7-NY-SIM - .\Data\Airpiano3\2020\03\200320SIM\r38755_Ev2.D

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\

Data File : r38759_Ev2.D

Acq On : 20 Mar 2020 6:16 PM

Operator : AIRPIANO3:EW

Sample : L2011723-06,3,250,250

Misc : WG1353543,ICAL16593

ALS Vial : 0 Sample Multiplier: 1

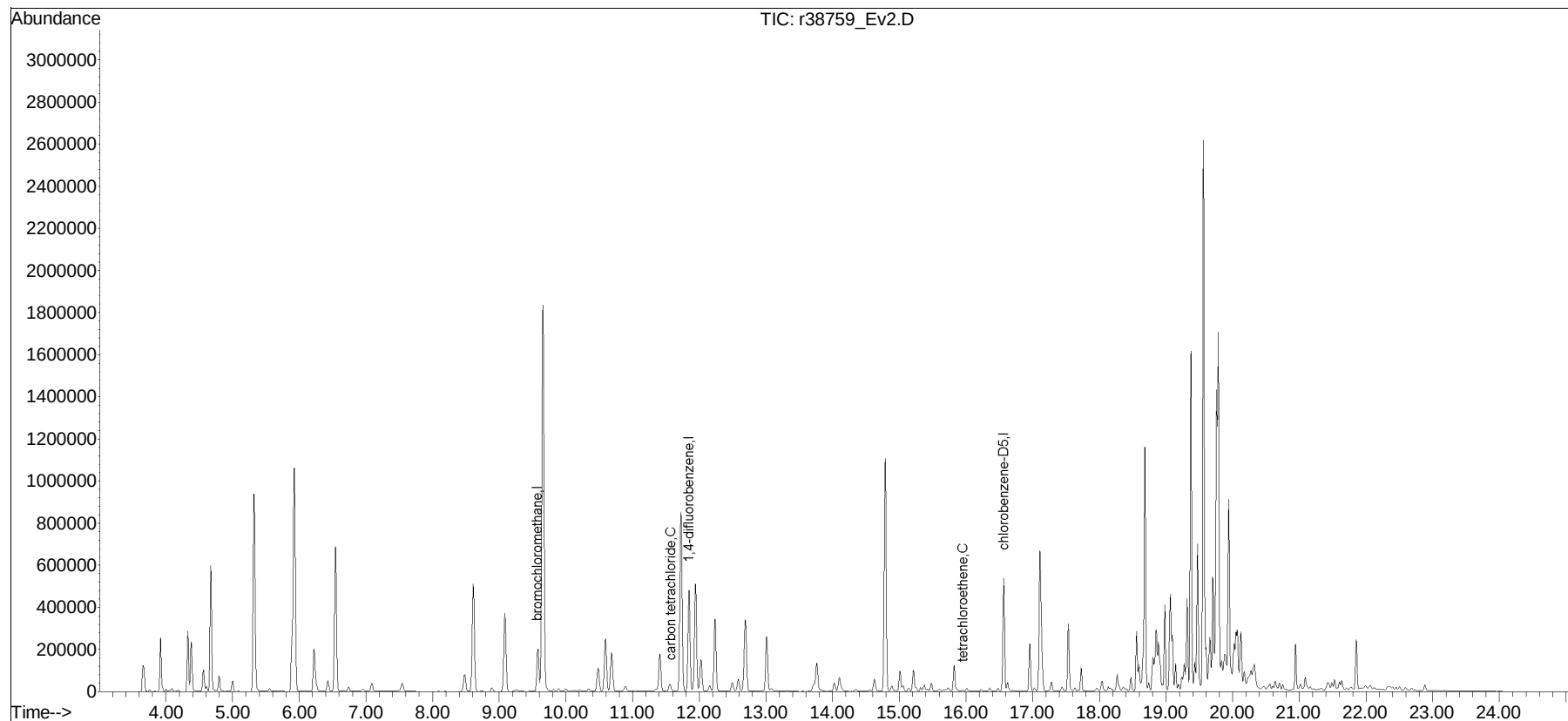
Quant Time: Mar 21 19:10:46 2020

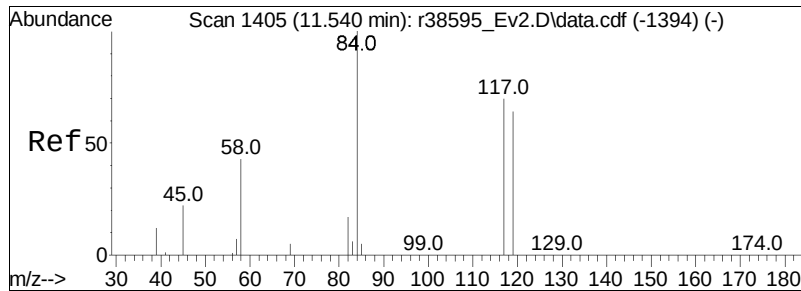
Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M

Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis

QLast Update : Thu Mar 12 16:48:11 2020

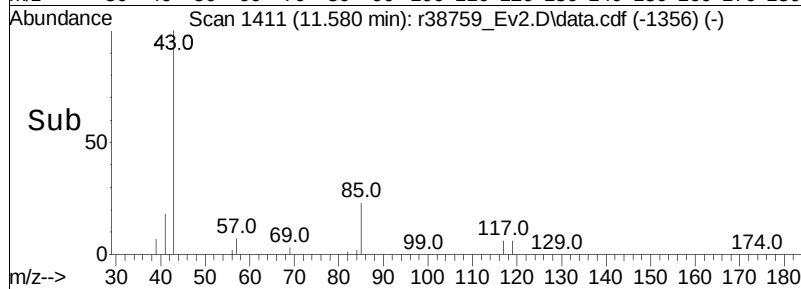
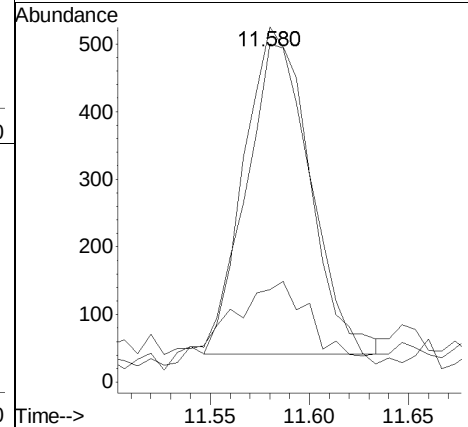
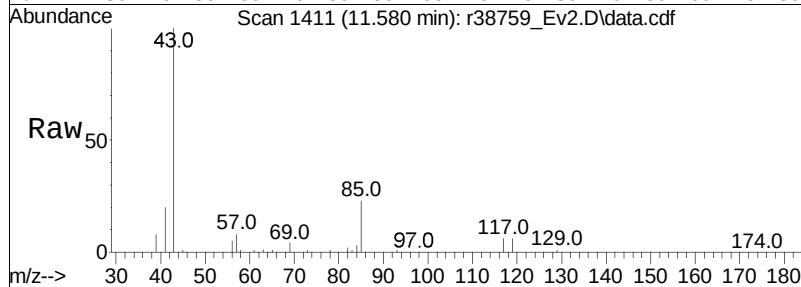
Response via : Initial Calibration

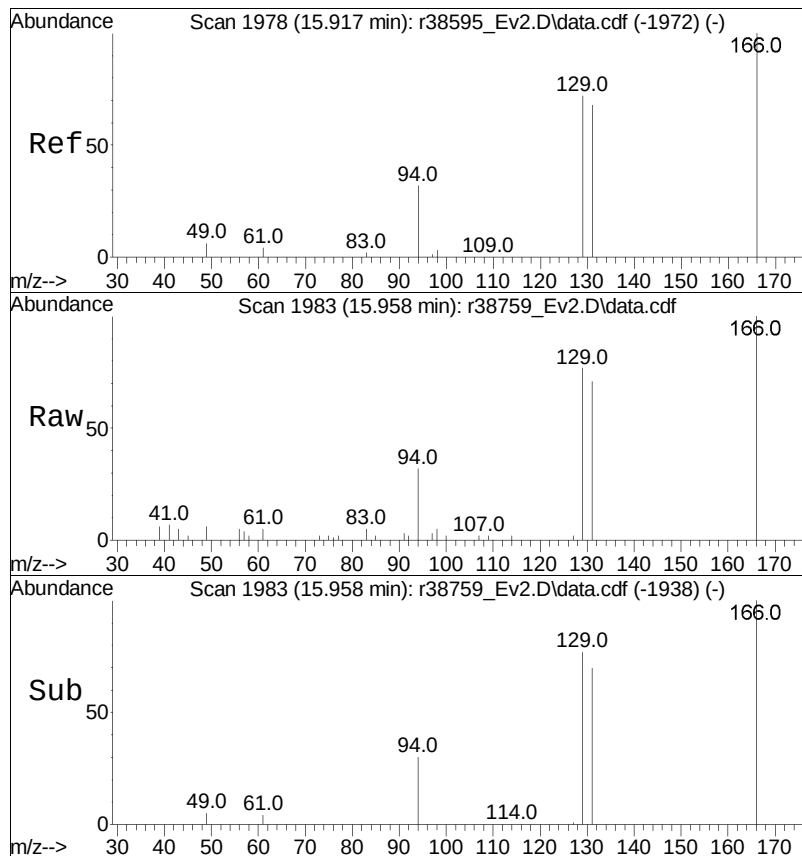




#38
 carbon tetrachloride
 Concen: 0.06 ppbV
 RT: 11.580 min Scan# 1411
 Delta R.T. 0.040 min
 Lab File: r38759_Ev2.D
 Acq: 20 Mar 2020 6:16 PM

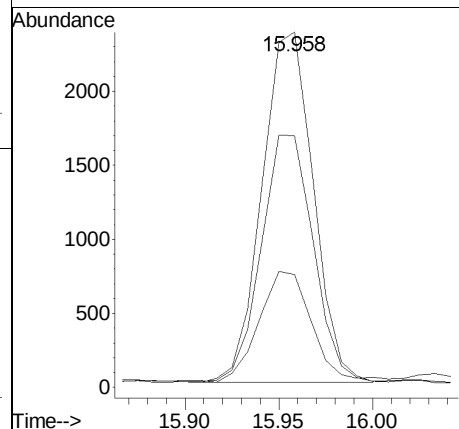
Tgt Ion	Ratio	Resp	Lower	Upper
117	100			
119	95.2	73.0	109.4	
82	26.1	19.1	28.7	





#57
 tetrachloroethene
 Concen: 0.24 ppbV
 RT: 15.958 min Scan# 1983
 Delta R.T. 0.042 min
 Lab File: r38759_Ev2.D
 Acq: 20 Mar 2020 6:16 PM

Tgt	Ion:166	Resp:	4506
Ion	Ratio	Lower	Upper
166	100		
131	70.8	54.6	82.0
94	31.8	25.7	38.5



Manual Integration Report

Data Path : 0:\Forensics\Data\AirpianoQMethod : TSIM3_200312.M
Data File : r38759_Ev2.D Operator : AIRPIAN03:EW
Date Inj'd : 3/20/2020 0:6: 6 Instrument :
Sample : L2011723-06,3,250,250 Quant Date : 3/21/2020 7:09 pm

There are no manual integrations or false positives in this file.

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary

Form 6

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRPIANO3
 Calibration dates : 03/12/20 10:28 03/12/20 16:20

Lab Number : L2011723
 Project Number : MHD1801
 Ical Ref : ICAL16593

Calibration Files

0.02=r38589_Ev2.D 0.05=r38590_Ev2.D 0.1 =r38591_Ev2.D 0.2 =r38592_Ev2.D 0.5 =r38593_Ev2.D
 1.0 =r38594_Ev2.D 5.0 =r38595_Ev2.D 10.0=r38596_Ev2.D 20.0=r38597_Ev2.D 50.0=r38598_Ev2.D

Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
1) I bromochloromethane	-----ISTD-----											
2) propylene				0.507	0.519	0.520	0.469	0.444	0.440	0.395	0.4706	10.06
3) dichlorodifluoromethane				1.113	1.096	1.085	0.970	0.930	0.911	0.693	0.9710	15.26
4) C chloromethane				0.484	0.477	0.474	0.425	0.410	0.413	0.347	0.4327	11.39
5) Freon-114		1.402	1.383	1.393	1.369	1.354	1.209	1.151	1.114	0.836	1.2457	15.23
6) C vinyl chloride	0.679	0.561	0.556	0.559	0.544	0.541	0.487	0.477	0.491	0.435	0.5328	12.52
7) C 1,3-butadiene	0.591	0.563	0.527	0.542	0.523	0.529	0.491	0.479	0.489	0.423	0.5155	9.18
8) C bromomethane	0.536	0.500	0.465	0.484	0.473	0.464	0.417	0.407	0.417	0.361	0.4524	11.41
9) C chloroethane	0.292	0.292	0.274	0.278	0.276	0.274	0.244	0.239	0.248	0.221	0.2639	9.14
10) ethanol					0.523	0.467	0.409	0.398	0.445	0.283	0.4208	19.28
11) C vinyl bromide				0.566	0.542	0.545	0.498	0.486	0.563	0.394	0.5131	11.87
12) C acrolein		0.242	0.287	0.273	0.268	0.260	0.241	0.239	0.266	0.225	0.2555	7.82
13) acetone				0.767	0.727	0.708	0.701	0.667	0.769	0.432	0.6815	17.04
14) trichlorofluoromethane		0.845	0.835	0.823	0.834	0.817	0.740	0.715	0.906	0.543	0.7843	13.62
15) isopropyl alcohol				1.018	0.922	0.886	0.885	0.849	1.018	0.628	0.8864	14.84
16) C acrylonitrile			0.443	0.458	0.468	0.472	0.443	0.437	0.497	0.406	0.4532	6.00
17) C 1,1-dichloroethene	0.860	0.664	0.708	0.742	0.705	0.697	0.636	0.618	0.731	0.648	0.7010	9.88
18) tertiary butyl alcohol				1.071	1.052	1.003	0.923	1.012	1.037	0.958	1.0080	5.20
19) C methylene chloride					0.640	0.641	0.600	0.656	0.678	0.616	0.6385	4.35
20) C 3-chloropropene				0.908	0.871	0.873	0.809	0.803	0.814	0.735	0.8304	6.99
21) C carbon disulfide				2.051	2.022	2.005	1.869	1.847	1.858	1.632	1.8978	7.63
22) Freon 113		1.131	1.109	1.141	1.104	1.098	1.002	0.983	0.993	0.862	1.0469	8.84
23) trans-1,2-dichloroethene	0.930	0.857	0.823	0.889	0.865	0.853	0.795	0.784	0.790	0.708	0.8294	7.60
24) C 1,1-dichloroethane	0.969	1.006	0.996	1.038	1.006	0.996	0.910	0.898	0.915	0.824	0.9558	6.95
25) C MTBE	1.806	1.770	1.692	1.806	1.764	1.760	1.653	1.632	1.621	1.404	1.6909	7.24
26) C vinyl acetate					1.451	1.435	1.379	1.375	1.392	1.243	1.3794	5.33
27) C 2-butanone				1.404	1.358	1.349	1.257	1.242	1.243	1.107	1.2800	7.78
28) cis-1,2-dichloroethene	0.892	0.773	0.723	0.761	0.745	0.731	0.677	0.668	0.687	0.615	0.7271	10.35
29) Ethyl Acetate				0.213	0.222	0.219	0.201	0.206	0.206	0.194	0.2089	4.71
30) C chloroform	1.138	1.119	1.080	1.117	1.095	1.090	0.997	0.990	1.013	0.868	1.0506	7.93
31) Tetrahydrofuran				0.817	0.817	0.822	0.772	0.768	0.776	0.705	0.7824	5.30
32) C 1,2-dichloroethane	0.776	0.611	0.666	0.643	0.617	0.607	0.556	0.548	0.547	0.458	0.6030	14.10
33) I 1,4-difluorobenzene	-----ISTD-----											
34) C hexane				0.388	0.383	0.378	0.356	0.346	0.353	0.314	0.3599	7.17
35) s 1,2-dichloroethane-D4	0.168	0.170	0.170	0.174	0.172	0.172	0.172	0.168	0.159	0.145	0.1672	5.25
36) C 1,1,1-trichloroethane	0.336	0.336	0.321	0.323	0.317	0.315	0.288	0.281	0.280	0.251	0.3048	9.30



Initial Calibration Summary

Form 6

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRPIANO3
 Calibration dates : 03/12/20 10:28 03/12/20 16:20

Lab Number : L2011723
 Project Number : MHD1801
 Ical Ref : ICAL16593

Calibration Files

0.02=r38589_Ev2.D 0.05=r38590_Ev2.D 0.1 =r38591_Ev2.D 0.2 =r38592_Ev2.D 0.5 =r38593_Ev2.D
 1.0 =r38594_Ev2.D 5.0 =r38595_Ev2.D 10.0=r38596_Ev2.D 20.0=r38597_Ev2.D 50.0=r38598_Ev2.D

	Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
37)	C benzene		0.898	0.810	0.822	0.775	0.761	0.701	0.685	0.711	0.637	0.7554	10.70
38)	C carbon tetrachloride	0.336	0.310	0.308	0.317	0.309	0.306	0.285	0.281	0.277	0.217	0.2946	11.08
39)	cyclohexane				0.420	0.413	0.403	0.386	0.376	0.390	0.361	0.3929	5.23
40)	Dibromomethane		0.275	0.239	0.221	0.207	0.203	0.189	0.184	0.181	0.156	0.2061	17.18
41)	C 1,2-dichloropropane	0.282	0.253	0.239	0.248	0.239	0.232	0.217	0.211	0.217	0.195	0.2332	10.65
42)	bromodichloromethane	0.475	0.429	0.407	0.419	0.417	0.413	0.393	0.388	0.390	0.339	0.4071	8.52
43)	C 1,4-dioxane			0.175	0.184	0.170	0.169	0.165	0.163	0.167	0.160	0.1692	4.41
44)	C trichloroethene	0.286	0.305	0.291	0.309	0.301	0.290	0.276	0.271	0.276	0.249	0.2854	6.29
45)	C 2,2,4-trimethylpentane				1.265	1.244	1.237	1.165	1.109	1.133	1.006	1.1657	7.90
46)	heptane				0.498	0.495	0.493	0.468	0.454	0.456	0.393	0.4653	7.88
47)	C cis-1,3-dichloropropene	0.321	0.321	0.322	0.341	0.340	0.340	0.324	0.324	0.330	0.287	0.3249	4.82
48)	C 4-methyl-2-pentanone					0.546	0.553	0.531	0.520	0.520	0.451	0.5200	7.02
49)	trans-1,3-dichloropropene	0.327	0.354	0.339	0.373	0.369	0.367	0.346	0.342	0.351	0.308	0.3477	5.77
50)	C 1,1,2-trichloroethane	0.328	0.261	0.246	0.263	0.256	0.258	0.238	0.234	0.239	0.213	0.2536	11.93
51)	I chlorobenzene-D5	-----ISTD-----											
52)	C toluene		6.305	5.753	5.960	5.858	5.747	5.131	5.121	5.306	4.758	5.5487	8.92
53)	s toluene-D8	4.741	4.861	4.872	5.013	5.025	5.000	4.946	4.989	4.861	4.917	4.9225	1.83
54)	2-hexanone				3.219	3.340	3.469	3.299	3.254	3.133	2.342	3.1508	11.79
55)	dibromochloromethane	2.152	2.206	2.225	2.383	2.385	2.421	2.340	2.372	2.403	2.138	2.3025	4.78
56)	C 1,2-dibromoethane	3.112	2.666	2.563	2.786	2.766	2.766	2.504	2.542	2.655	2.362	2.6720	7.66
57)	C tetrachloroethene	2.544	2.269	2.228	2.378	2.385	2.352	2.124	2.118	2.238	2.006	2.2644	6.96
58)	1,1,1,2-tetrachloroethane	1.866	1.889	1.774	1.892	1.894	1.888	1.748	1.742	1.754	1.505	1.7954	6.77
59)	C chlorobenzene	4.410	4.376	4.383	4.621	4.623	4.619	4.175	4.227	4.545	3.987	4.3966	4.91
60)	C ethylbenzene	7.352	6.512	6.398	6.855	6.848	6.844	6.217	6.192	6.411	5.618	6.5249	7.33
61)	C m+p-xylene	6.443	5.621	5.360	5.729	5.741	5.743	5.178	5.165	5.274	4.430	5.4684	9.63
62)	C bromoform	2.173	1.758	1.790	1.948	2.002	2.060	2.059	2.111	2.188	1.903	1.9992	7.45
63)	C styrene	5.078	4.841	4.683	4.614	4.753	4.822	4.597	4.648	4.946	4.462	4.7443	3.84
64)	C 1,1,2,2-tetrachloroethane	3.811	3.509	3.523	3.931	3.960	3.985	3.593	3.635	3.823	3.105	3.6875	7.37
65)	C o-xylene	6.107	5.597	5.360	5.765	5.791	5.786	5.207	5.167	5.188	4.198	5.4165	9.83
66)	1,2,3-Trichloropropane	3.149	2.861	2.911	3.141	3.194	3.174	3.012	3.037	3.052	2.700	3.0230	5.25
67)	s bromofluorobenzene	3.019	3.012	2.995	3.106	3.143	3.146	3.239	3.414	3.074	3.309	3.1456	4.38
68)	C isopropylbenzene				8.064	8.142	8.091	7.607	7.503	7.548	6.394	7.6214	7.97
69)	Bromobenzene				3.998	4.109	4.084	3.950	3.989	4.069	3.497	3.9566	5.32
70)	4-ethyl toluene	7.760	7.695	7.768	8.650	8.932	9.040	8.553	8.534	8.480	7.180	8.2592	7.44
71)	1,3,5-trimethylbenzene	7.469	6.387	6.632	7.287	7.468	7.413	6.899	6.844	6.978	5.731	6.9108	8.02
72)	tert-butylbenzene				6.911	7.084	7.067	6.712	6.737	6.519	4.919	6.5641	11.48

Initial Calibration Summary

Form 6

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRPIANO3
 Calibration dates : 03/12/20 10:28 03/12/20 16:20

Lab Number : L2011723
 Project Number : MHD1801
 Ical Ref : ICAL16593

Calibration Files

0.02=r38589_Ev2.D 0.05=r38590_Ev2.D 0.1 =r38591_Ev2.D 0.2 =r38592_Ev2.D 0.5 =r38593_Ev2.D
 1.0 =r38594_Ev2.D 5.0 =r38595_Ev2.D 10.0=r38596_Ev2.D 20.0=r38597_Ev2.D 50.0=r38598_Ev2.D

	Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
73)	1,2,4-trimethylbenzene	6.621	6.134	6.176	6.929	7.226	7.318	6.694	6.607	6.350	4.739	6.4792	11.27
74) C	Benzyl Chloride				3.336	3.915	4.320	4.698	5.039	5.019	4.248	4.3678	14.08
75)	1,3-dichlorobenzene	3.461	3.366	3.509	3.776	3.888	3.992	3.787	3.862	3.919	3.375	3.6936	6.50
76) C	1,4-dichlorobenzene	3.748	3.214	3.568	3.564	3.737	3.818	3.651	3.784	3.947	3.380	3.6411	5.99
77)	sec-butylbenzene				1.008	1.039	1.047	1.007	0.996	0.962	0.779	0.9769	9.40
78)	p-isopropyltoluene				7.942	8.207	8.333	8.211	8.220	7.737	5.822	7.7817	11.41
79)	1,2-dichlorobenzene	3.340	3.085	3.301	3.589	3.735	3.827	3.582	3.636	3.780	3.348	3.5223	6.89
80)	n-butylbenzene				6.248	6.722	6.990	6.927	6.973	6.596	5.552	6.5728	7.93
81) C	1,2,4-trichlorobenzene		1.534	1.536	1.454	1.736	2.137	2.292	2.536	2.367	2.442	2.0039	21.76
82)	naphthalene		7.760	6.706	5.403	5.752	6.434	7.583	8.217	6.921	6.809	6.8428	13.41
83)	1,2,3-trichlorobenzene		1.817	1.878	1.896	2.078	2.335	2.757	3.022	2.546	2.538	2.3186	18.48
84) C	hexachlorobutadiene		2.527	2.529	2.893	3.009	3.026	2.775	2.750	2.488	2.091	2.6763	11.19



Response Factor Report

Method Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
Method File : TSIM3_200312.M
Title : T0-14A/T0-15 SIM/Full Scan Analysis
Last Update : Thu Mar 12 16:48:11 2020
Response Via : Initial Calibration

Calibration Files

0.02=r38589_Ev2.D 0.05=r38590_Ev2.D 0.1 =r38591_Ev2.D 0.2 =r38592_Ev2.D 0.5 =r38593_Ev2.D
1.0 =r38594_Ev2.D 5.0 =r38595_Ev2.D 10.0=r38596_Ev2.D 20.0=r38597_Ev2.D 50.0=r38598_Ev2.D

Compound		0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
-----ISTD-----													
1) I	bromochloromethane												
2)	propylene				0.507	0.519	0.520	0.469	0.444	0.440	0.395	0.4706	10.06
3)	dichlorodifluorome...				1.113	1.096	1.085	0.970	0.930	0.911	0.693	0.9710	15.26
4) C	chloromethane				0.484	0.477	0.474	0.425	0.410	0.413	0.347	0.4327	11.39
5)	Freon-114		1.402	1.383	1.393	1.369	1.354	1.209	1.151	1.114	0.836	1.2457	15.23
6) C	vinyl chloride	0.679	0.561	0.556	0.559	0.544	0.541	0.487	0.477	0.491	0.435	0.5328	12.52
7) C	1,3-butadiene	0.591	0.563	0.527	0.542	0.523	0.529	0.491	0.479	0.489	0.423	0.5155	9.18
8) C	bromomethane	0.536	0.500	0.465	0.484	0.473	0.464	0.417	0.407	0.417	0.361	0.4524	11.41
9) C	chloroethane	0.292	0.292	0.274	0.278	0.276	0.274	0.244	0.239	0.248	0.221	0.2639	9.14
10)	ethanol					0.523	0.467	0.409	0.398	0.445	0.283	0.4208	19.28
11) C	vinyl bromide				0.566	0.542	0.545	0.498	0.486	0.563	0.394	0.5131	11.87
12) C	acrolein		0.242	0.287	0.273	0.268	0.260	0.241	0.239	0.266	0.225	0.2555	7.82
13)	acetone				0.767	0.727	0.708	0.701	0.667	0.769	0.432	0.6815	17.04
14)	trichlorofluoromet...		0.845	0.835	0.823	0.834	0.817	0.740	0.715	0.906	0.543	0.7843	13.62
15)	isopropyl alcohol				1.018	0.922	0.886	0.885	0.849	1.018	0.628	0.8864	14.84
16) C	acrylonitrile			0.443	0.458	0.468	0.472	0.443	0.437	0.497	0.406	0.4532	6.00
17) C	1,1-dichloroethene	0.860	0.664	0.708	0.742	0.705	0.697	0.636	0.618	0.731	0.648	0.7010	9.88
18)	tertiary butyl alc...				1.071	1.052	1.003	0.923	1.012	1.037	0.958	1.0080	5.20
19) C	methylene chloride					0.640	0.641	0.600	0.656	0.678	0.616	0.6385	4.35
20) C	3-chloropropene				0.908	0.871	0.873	0.809	0.803	0.814	0.735	0.8304	6.99
21) C	carbon disulfide				2.051	2.022	2.005	1.869	1.847	1.858	1.632	1.8978	7.63
22)	Freon 113		1.131	1.109	1.141	1.104	1.098	1.002	0.983	0.993	0.862	1.0469	8.84
23)	trans-1,2-dichloro...	0.930	0.857	0.823	0.889	0.865	0.853	0.795	0.784	0.790	0.708	0.8294	7.60
24) C	1,1-dichloroethane	0.969	1.006	0.996	1.038	1.006	0.996	0.910	0.898	0.915	0.824	0.9558	6.95
25) C	MTBE	1.806	1.770	1.692	1.806	1.764	1.760	1.653	1.632	1.621	1.404	1.6909	7.24
26) C	vinyl acetate					1.451	1.435	1.379	1.375	1.392	1.243	1.3794	5.33
27) C	2-butanone				1.404	1.358	1.349	1.257	1.242	1.243	1.107	1.2800	7.78
28)	cis-1,2-dichloroet...	0.892	0.773	0.723	0.761	0.745	0.731	0.677	0.668	0.687	0.615	0.7271	10.35
29)	Ethyl Acetate				0.213	0.222	0.219	0.201	0.206	0.206	0.194	0.2089	4.71
30) C	chloroform	1.138	1.119	1.080	1.117	1.095	1.090	0.997	0.990	1.013	0.868	1.0506	7.93
31)	Tetrahydrofuran				0.817	0.817	0.822	0.772	0.768	0.776	0.705	0.7824	5.30

Response Factor Report

Method Path : O:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
Method File : TSIM3_200312.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Thu Mar 12 16:48:11 2020
Response Via : Initial Calibration

Calibration Files

0.02=r38589_Ev2.D 0.05=r38590_Ev2.D 0.1 =r38591_Ev2.D 0.2 =r38592_Ev2.D 0.5 =r38593_Ev2.D
1.0 =r38594_Ev2.D 5.0 =r38595_Ev2.D 10.0=r38596_Ev2.D 20.0=r38597_Ev2.D 50.0=r38598_Ev2.D

	Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
32) C	1,2-dichloroethane	0.776	0.611	0.666	0.643	0.617	0.607	0.556	0.548	0.547	0.458	0.6030	14.10
33) I	1,4-difluorobenzene	-----ISTD-----											
34) C	hexane				0.388	0.383	0.378	0.356	0.346	0.353	0.314	0.3599	7.17
35) s	1,2-dichloroethane-D4	0.168	0.170	0.170	0.174	0.172	0.172	0.172	0.168	0.159	0.145	0.1672	5.25
36) C	1,1,1-trichloroethane	0.336	0.336	0.321	0.323	0.317	0.315	0.288	0.281	0.280	0.251	0.3048	9.30
37) C	benzene		0.898	0.810	0.822	0.775	0.761	0.701	0.685	0.711	0.637	0.7554	10.70
38) C	carbon tetrachloride	0.336	0.310	0.308	0.317	0.309	0.306	0.285	0.281	0.277	0.217	0.2946	11.08
39)	cyclohexane				0.420	0.413	0.403	0.386	0.376	0.390	0.361	0.3929	5.23
40)	Dibromomethane		0.275	0.239	0.221	0.207	0.203	0.189	0.184	0.181	0.156	0.2061	17.18
41) C	1,2-dichloropropane	0.282	0.253	0.239	0.248	0.239	0.232	0.217	0.211	0.217	0.195	0.2332	10.65
42)	bromodichloromethane	0.475	0.429	0.407	0.419	0.417	0.413	0.393	0.388	0.390	0.339	0.4071	8.52
43) C	1,4-dioxane			0.175	0.184	0.170	0.169	0.165	0.163	0.167	0.160	0.1692	4.41
44) C	trichloroethene	0.286	0.305	0.291	0.309	0.301	0.290	0.276	0.271	0.276	0.249	0.2854	6.29
45) C	2,2,4-trimethylpen...				1.265	1.244	1.237	1.165	1.109	1.133	1.006	1.1657	7.90
46)	heptane				0.498	0.495	0.493	0.468	0.454	0.456	0.393	0.4653	7.88
47) C	cis-1,3-dichloropr...	0.321	0.321	0.322	0.341	0.340	0.340	0.324	0.324	0.330	0.287	0.3249	4.82
48) C	4-methyl-2-pentanone					0.546	0.553	0.531	0.520	0.520	0.451	0.5200	7.02
49)	trans-1,3-dichloro...	0.327	0.354	0.339	0.373	0.369	0.367	0.346	0.342	0.351	0.308	0.3477	5.77
50) C	1,1,2-trichloroethane	0.328	0.261	0.246	0.263	0.256	0.258	0.238	0.234	0.239	0.213	0.2536	11.93
51) I	chlorobenzene-D5	-----ISTD-----											
52) C	toluene		6.305	5.753	5.960	5.858	5.747	5.131	5.121	5.306	4.758	5.5487	8.92
53) s	toluene-D8	4.741	4.861	4.872	5.013	5.025	5.000	4.946	4.989	4.861	4.917	4.9225	1.83
54)	2-hexanone				3.219	3.340	3.469	3.299	3.254	3.133	2.342	3.1508	11.79
55)	dibromochloromethane	2.152	2.206	2.225	2.383	2.385	2.421	2.340	2.372	2.403	2.138	2.3025	4.78
56) C	1,2-dibromoethane	3.112	2.666	2.563	2.786	2.766	2.766	2.504	2.542	2.655	2.362	2.6720	7.66
57) C	tetrachloroethene	2.544	2.269	2.228	2.378	2.385	2.352	2.124	2.118	2.238	2.006	2.2644	6.96
58)	1,1,1,2-tetrachlor...	1.866	1.889	1.774	1.892	1.894	1.888	1.748	1.742	1.754	1.505	1.7954	6.77
59) C	chlorobenzene	4.410	4.376	4.383	4.621	4.623	4.619	4.175	4.227	4.545	3.987	4.3966	4.91
60) C	ethylbenzene	7.352	6.512	6.398	6.855	6.848	6.844	6.217	6.192	6.411	5.618	6.5249	7.33
61) C	m+p-xylene	6.443	5.621	5.360	5.729	5.741	5.743	5.178	5.165	5.274	4.430	5.4684	9.63

Response Factor Report

Method Path : O:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
Method File : TSIM3_200312.M
Title : T0-14A/T0-15 SIM/Full Scan Analysis
Last Update : Thu Mar 12 16:48:11 2020
Response Via : Initial Calibration

Calibration Files

0.02=r38589_Ev2.D 0.05=r38590_Ev2.D 0.1 =r38591_Ev2.D 0.2 =r38592_Ev2.D 0.5 =r38593_Ev2.D
1.0 =r38594_Ev2.D 5.0 =r38595_Ev2.D 10.0=r38596_Ev2.D 20.0=r38597_Ev2.D 50.0=r38598_Ev2.D

	Compound	0.02	0.05	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
62)	C bromoform	2.173	1.758	1.790	1.948	2.002	2.060	2.059	2.111	2.188	1.903	1.9992	7.45
63)	C styrene	5.078	4.841	4.683	4.614	4.753	4.822	4.597	4.648	4.946	4.462	4.7443	3.84
64)	C 1,1,2,2-tetrachlor...	3.811	3.509	3.523	3.931	3.960	3.985	3.593	3.635	3.823	3.105	3.6875	7.37
65)	C o-xylene	6.107	5.597	5.360	5.765	5.791	5.786	5.207	5.167	5.188	4.198	5.4165	9.83
66)	1,2,3-Trichloropro...	3.149	2.861	2.911	3.141	3.194	3.174	3.012	3.037	3.052	2.700	3.0230	5.25
67)	s bromofluorobenzene	3.019	3.012	2.995	3.106	3.143	3.146	3.239	3.414	3.074	3.309	3.1456	4.38
68)	C isopropylbenzene				8.064	8.142	8.091	7.607	7.503	7.548	6.394	7.6214	7.97
69)	Bromobenzene				3.998	4.109	4.084	3.950	3.989	4.069	3.497	3.9566	5.32
70)	4-ethyl toluene	7.760	7.695	7.768	8.650	8.932	9.040	8.553	8.534	8.480	7.180	8.2592	7.44
71)	1,3,5-trimethylben...	7.469	6.387	6.632	7.287	7.468	7.413	6.899	6.844	6.978	5.731	6.9108	8.02
72)	tert-butylbenzene				6.911	7.084	7.067	6.712	6.737	6.519	4.919	6.5641	11.48
73)	1,2,4-trimethylben...	6.621	6.134	6.176	6.929	7.226	7.318	6.694	6.607	6.350	4.739	6.4792	11.27
74)	C Benzyl Chloride				3.336	3.915	4.320	4.698	5.039	5.019	4.248	4.3678	14.08
75)	1,3-dichlorobenzene	3.461	3.366	3.509	3.776	3.888	3.992	3.787	3.862	3.919	3.375	3.6936	6.50
76)	C 1,4-dichlorobenzene	3.748	3.214	3.568	3.564	3.737	3.818	3.651	3.784	3.947	3.380	3.6411	5.99
77)	sec-butylbenzene				1.008	1.039	1.047	1.007	0.996	0.962	0.779	0.9769	9.40
78)	p-isopropyltoluene				7.942	8.207	8.333	8.211	8.220	7.737	5.822	7.7817	11.41
79)	1,2-dichlorobenzene	3.340	3.085	3.301	3.589	3.735	3.827	3.582	3.636	3.780	3.348	3.5223	6.89
80)	n-butylbenzene				6.248	6.722	6.990	6.927	6.973	6.596	5.552	6.5728	7.93
81)	C 1,2,4-trichloroben...		1.534	1.536	1.454	1.736	2.137	2.292	2.536	2.367	2.442	2.0039	21.76
82)	naphthalene		7.760	6.706	5.403	5.752	6.434	7.583	8.217	6.921	6.809	6.8428	13.41
83)	1,2,3-trichloroben...		1.817	1.878	1.896	2.078	2.335	2.757	3.022	2.546	2.538	2.3186	18.48
84)	C hexachlorobutadiene		2.527	2.529	2.893	3.009	3.026	2.775	2.750	2.488	2.091	2.6763	11.19

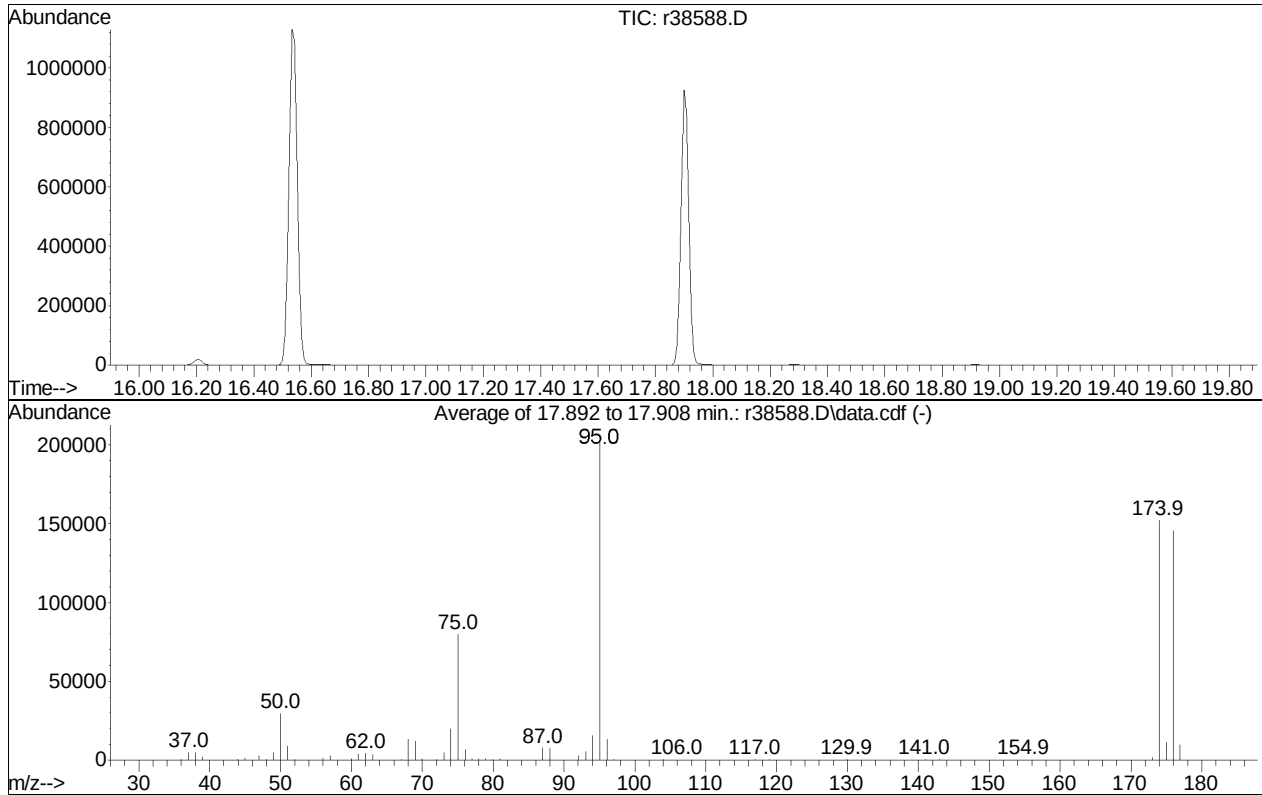
(#) = Out of Range

BFB

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38588.D
 Acq On : 12 Mar 2020 9:50 AM
 Operator : AIRPIANO3:RY
 Sample : WG1350409-1,3,250,250
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Thu Mar 12 16:48:11 2020



Spectrum Information: Average of 17.892 to 17.908 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	14.5	29472	PASS
75	95	30	66	39.3	79731	PASS
95	95	100	100	100.0	202734	PASS
96	95	5	9	6.6	13477	PASS
173	174	0.00	2	1.1	1647	PASS
174	95	50	120	75.2	152363	PASS
175	174	4	9	7.4	11319	PASS
176	174	93	101	95.4	145430	PASS
177	176	5	9	6.8	9839	PASS

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38589_Ev2.D
 Acq On : 12 Mar 2020 10:28 AM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.02
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:32:39 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.53	49	220953	10.000	ppbV	0.00
Standard Area = 228204			Recovery =		96.82%	
33) 1,4-difluorobenzene	11.80	114	640498	10.000	ppbV	0.00
Standard Area = 659248			Recovery =		97.16%	
51) chlorobenzene-D5	16.53	54	94324	10.000	ppbV	0.00
Standard Area = 98040			Recovery =		96.21%	
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.43	65	107832	9.777	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		97.77%	
53) toluene-D8	14.64	98	447216	9.586	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		95.86%	
67) bromofluorobenzene	17.90	95	284732	9.320	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		93.20%	
Target Compounds						
					Qvalue	
2) propylene	3.89	41	296	0.029	ppbV	98
3) dichlorodifluoromethane	3.98	85	541	0.025	ppbV	94
4) chloromethane	4.16	50	279	0.030	ppbV #	87
5) Freon-114	4.28	85	667	0.025	ppbV	95
6) vinyl chloride	4.41	62	300	0.028	ppbV #	84
7) 1,3-butadiene	4.58	54	261	0.024	ppbV	94
8) bromomethane	4.89	94	237	0.026	ppbV	93
9) chloroethane	5.11	64	129	0.024	ppbV #	68
10) ethanol	5.30	31	6140	0.679	ppbV	98
11) vinyl bromide	5.55	106	175	0.016	ppbV	98
12) acrolein	5.70	56	172M4	0.032	ppbV	
13) acetone	5.88	43	3248	0.210	ppbV #	96
14) trichlorofluoromethane	6.06	101	319	0.020	ppbV	88
15) isopropyl alcohol	6.21	45	2323	0.119	ppbV #	92
16) acrylonitrile	6.44	53	252M4	0.026	ppbV	
17) 1,1-dichloroethene	6.82	61	380	0.027	ppbV #	90
18) tertiary butyl alcohol	6.95	59	667	0.033	ppbV #	92
19) methylene chloride	6.99	49	409	0.031	ppbV	93
20) 3-chloropropene	7.13	41	371	0.021	ppbV #	89
21) carbon disulfide	7.28	76	918	0.022	ppbV #	1
22) Freon 113	7.33	101	584	0.026	ppbV	95
23) trans-1,2-dichloroethene	8.12	61	411	0.023	ppbV	92

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38589_Ev2.D
 Acq On : 12 Mar 2020 10:28 AM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.02
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:32:39 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.35	63	428	0.021	ppbV #	83
25) MTBE	8.47	73	798	0.022	ppbV #	68
26) vinyl acetate	8.58	43	750	0.025	ppbV #	78
27) 2-butanone	8.88	43	730	0.026	ppbV #	86
28) cis-1,2-dichloroethene	9.35	61	394	0.026	ppbV	95
29) Ethyl Acetate	9.68	61	123	0.028	ppbV #	9
30) chloroform	9.70	83	503	0.023	ppbV #	89
31) Tetrahydrofuran	10.19	42	443	0.026	ppbV #	81
32) 1,2-dichloroethane	10.55	62	343	0.028	ppbV #	75
34) hexane	9.61	57	556	0.024	ppbV #	65
36) 1,1,1-trichloroethane	10.84	97	431	0.023	ppbV #	76
37) benzene	11.36	78	1504	0.034	ppbV	95
38) carbon tetrachloride	11.54	117	430	0.024	ppbV #	74
39) cyclohexane	11.68	56	564	0.023	ppbV	89
40) Dibromomethane	12.29	93	528	0.044	ppbV #	96
41) 1,2-dichloropropane	12.33	63	361	0.026	ppbV #	83
42) bromodichloromethane	12.55	83	608	0.024	ppbV #	90
43) 1,4-dioxane	12.64	88	348M3	0.033	ppbV	
44) trichloroethene	12.61	130	367	0.021	ppbV	94
45) 2,2,4-trimethylpentane	12.65	57	1755	0.024	ppbV #	90
46) heptane	12.97	43	768	0.026	ppbV #	92
47) cis-1,3-dichloropropene	14.24	75	411	0.020	ppbV #	80
48) 4-methyl-2-pentanone	13.68	43	687	0.020	ppbV	91
49) trans-1,3-dichloropropene	13.62	75	419	0.019	ppbV #	77
50) 1,1,2-trichloroethane	14.43	97	420	0.028	ppbV #	80
52) toluene	14.75	91	1491	0.031	ppbV	95
54) 2-hexanone	15.07	43	536	0.017	ppbV #	88
55) dibromochloromethane	15.20	129	406	0.018	ppbV #	92
56) 1,2-dibromoethane	15.45	107	587	0.025	ppbV	94
57) tetrachloroethene	15.92	166	480	0.024	ppbV #	89
58) 1,1,1,2-tetrachloroethane	16.56	131	352	0.021	ppbV	93
59) chlorobenzene	16.57	112	832	0.021	ppbV	95
60) ethylbenzene	16.93	91	1387	0.024	ppbV	95
61) m+p-xylene	17.08	91	2431	0.050	ppbV	98
62) bromoform	17.16	173	410	0.021	ppbV	94
63) styrene	17.41	104	958	0.022	ppbV	94
64) 1,1,2,2-tetrachloroethane	17.51	83	719	0.021	ppbV	100
65) o-xylene	17.50	91	1152	0.023	ppbV	100
66) 1,2,3-Trichloropropane	17.62	75	594	0.021	ppbV #	91

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38589_Ev2.D
 Acq On : 12 Mar 2020 10:28 AM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.02
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:32:39 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) isopropylbenzene	18.01	105	1543	0.022	ppbV	99
69) Bromobenzene	18.08	77	718	0.019	ppbV	90
70) 4-ethyl toluene	18.57	105	1464	0.018	ppbV #	94
71) 1,3,5-trimethylbenzene	18.63	105	1409	0.022	ppbV #	98
72) tert-butylbenzene	18.95	119	1175	0.019	ppbV	96
73) 1,2,4-trimethylbenzene	18.95	105	1249	0.020	ppbV	95
74) Benzyl Chloride	19.07	91	585M3	0.013	ppbV	
75) 1,3-dichlorobenzene	19.08	146	653	0.018	ppbV #	91
76) 1,4-dichlorobenzene	19.13	146	707M3	0.021	ppbV	
77) sec-butylbenzene	19.17	105	1654	0.017	ppbV	92
78) p-isopropyltoluene	19.29	119	1524	0.020	ppbV	96
79) 1,2-dichlorobenzene	19.41	146	630	0.019	ppbV #	86
80) n-butylbenzene	19.63	91	980	0.015	ppbV	95
81) 1,2,4-trichlorobenzene	20.88	180	311	0.014	ppbV	92
82) naphthalene	20.99	128	2682	0.037	ppbV #	93
83) 1,2,3-trichlorobenzene	21.24	180	464	0.018	ppbV #	88
84) hexachlorobutadiene	21.31	225	487	0.019	ppbV #	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38589_Ev2.D
 Acq On : 12 Mar 2020 10:28 AM
 Operator : AIRPIANO3:RY
 Sample : IT015-SIMSTD0.02
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:32:39 2020

Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312

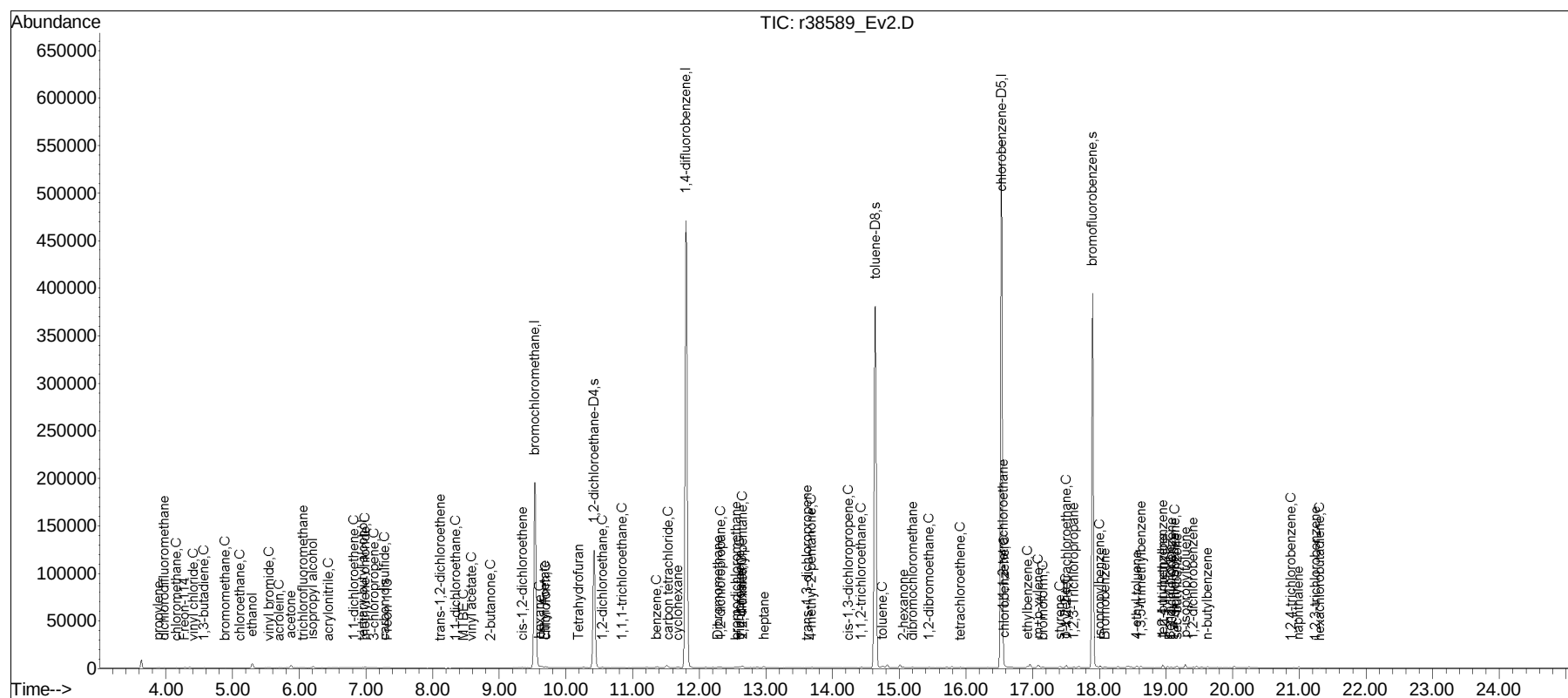
.. .M

Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis

QLast Update : Thu Mar 12 16:27:33 2020

Response via : Initial Calibration

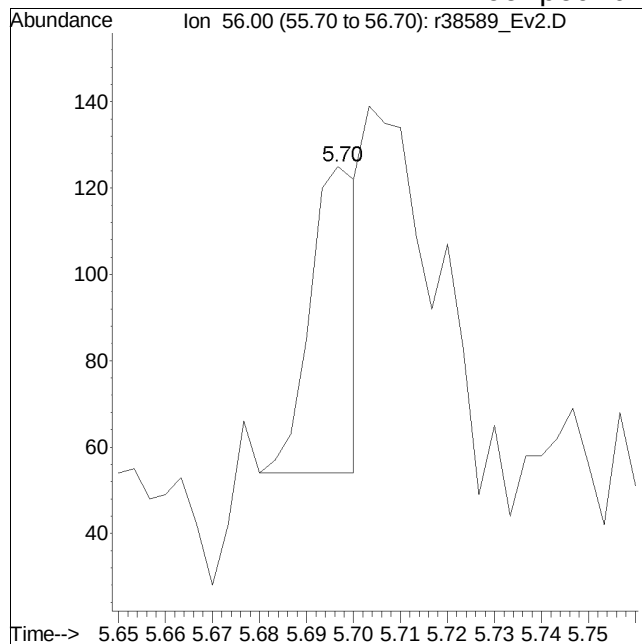
Sub List : Default - All compounds listed 20\03\200312SIM_I\r38595_Ev2.D



Manual Integration/Negative Proof Report

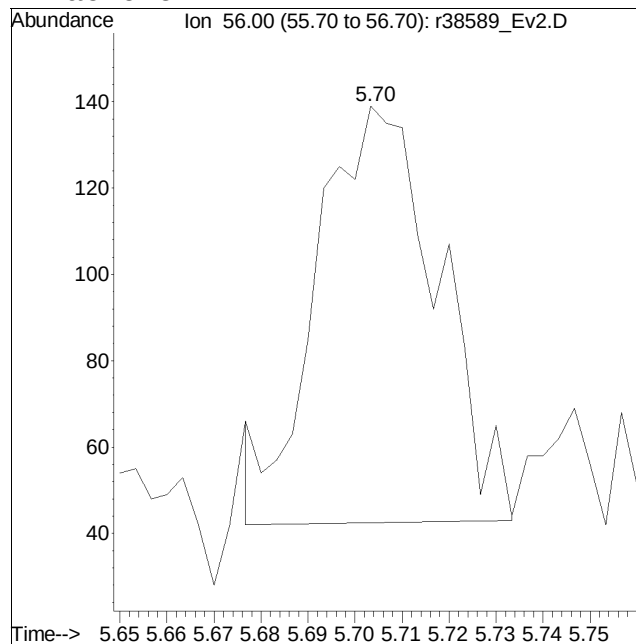
Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
Data File : r38589_Ev2.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:0: 8 Instrument :
Sample : IT015-SIMSTD0.02 Quant Date : 3/12/2020 4:27 pm

Compound #12: acrolein



Original Peak Response = 50

M4 = Poor automated baseline construction.

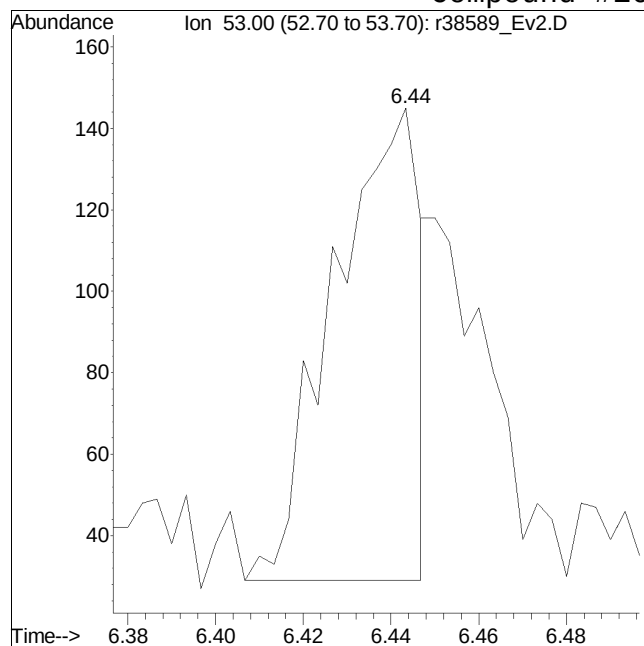


Manual Peak Response = 172 M4

Manual Integration/Negative Proof Report

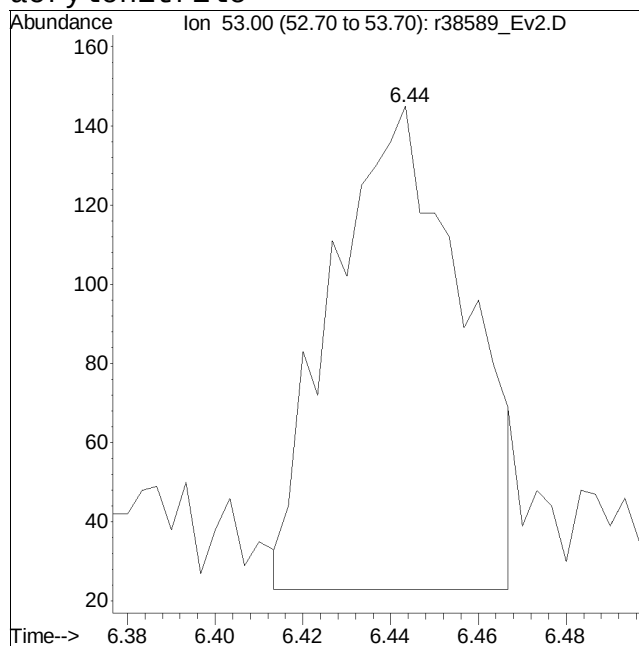
Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
Data File : r38589_Ev2.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:0: 8 Instrument :
Sample : IT015-SIMSTD0.02 Quant Date : 3/12/2020 4:27 pm

Compound #16: acrylonitrile



Original Peak Response = 157

M4 = Poor automated baseline construction.

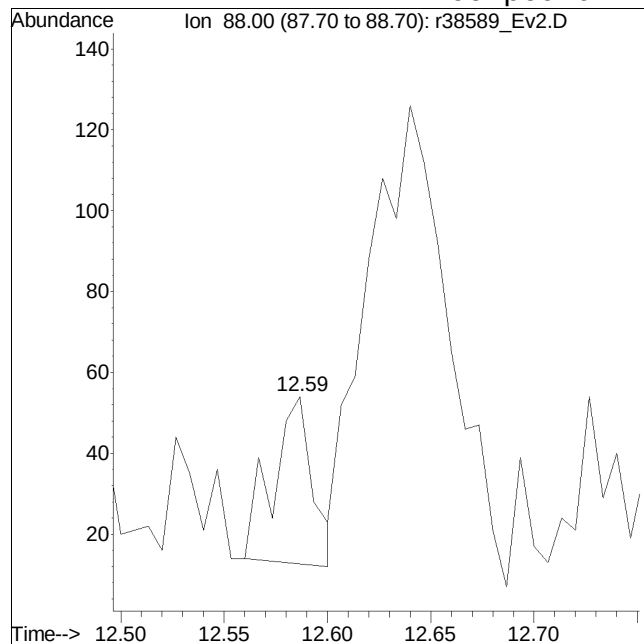


Manual Peak Response = 252 M4

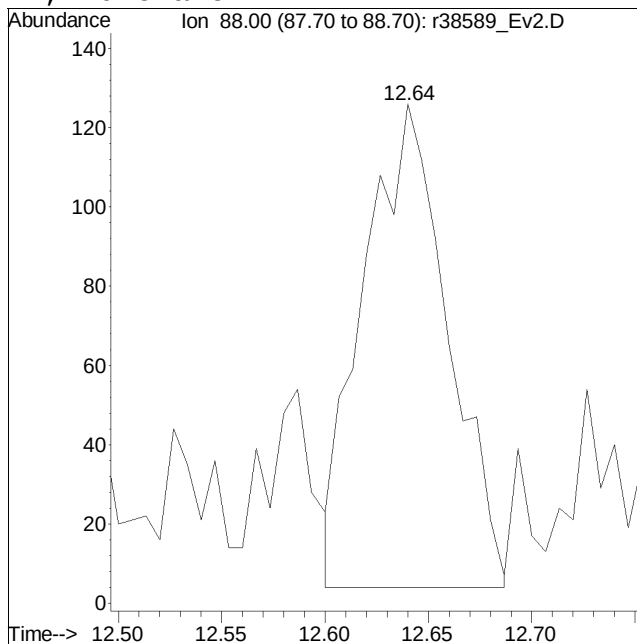
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
 Data File : r38589_Ev2.D Operator : AIRPIAN03:RY
 Date Inj'd : 3/12/2020 0:0: 8 Instrument :
 Sample : IT015-SIMSTD0.02 Quant Date : 3/12/2020 4:27 pm

Compound #43: 1,4-dioxane



Original Peak Response = 55



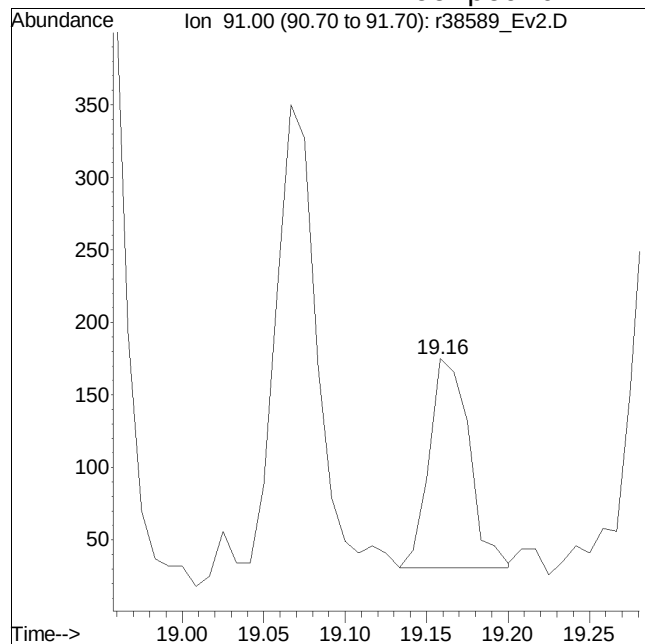
Manual Peak Response = 348 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

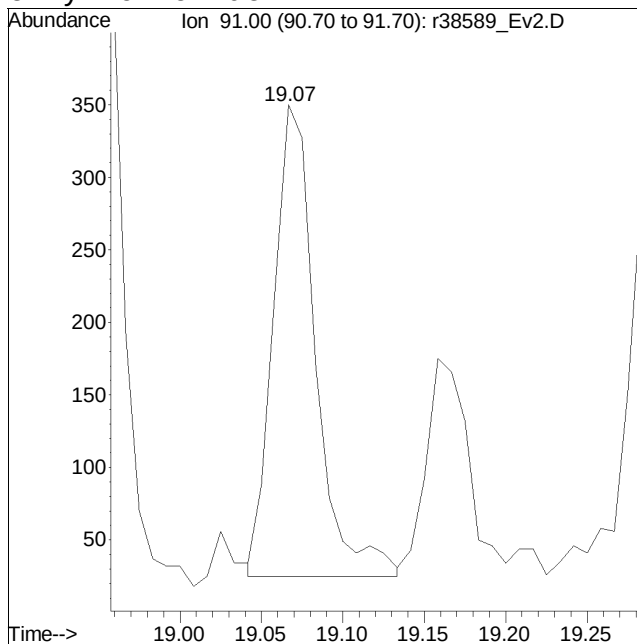
Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
 Data File : r38589_Ev2.D Operator : AIRPIAN03:RY
 Date Inj'd : 3/12/2020 0:0: 8 Instrument :
 Sample : IT015-SIMSTD0.02 Quant Date : 3/12/2020 4:27 pm

Compound #74: Benzyl Chloride



Original Peak Response = 245

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

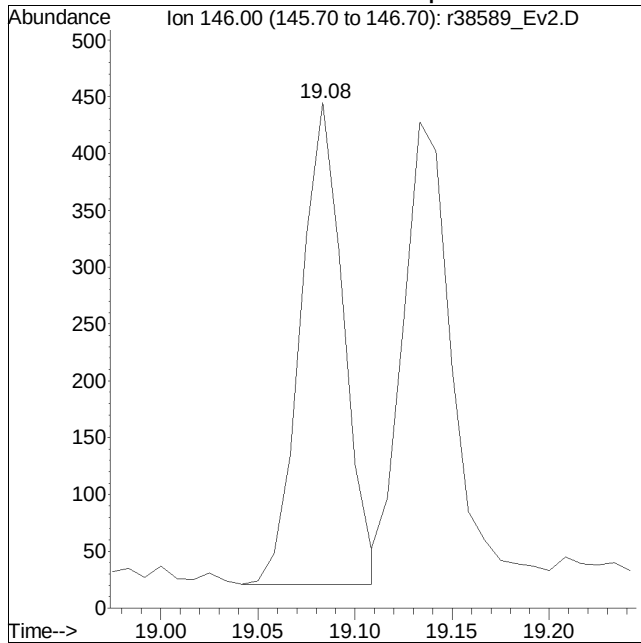


Manual Peak Response = 585 M3

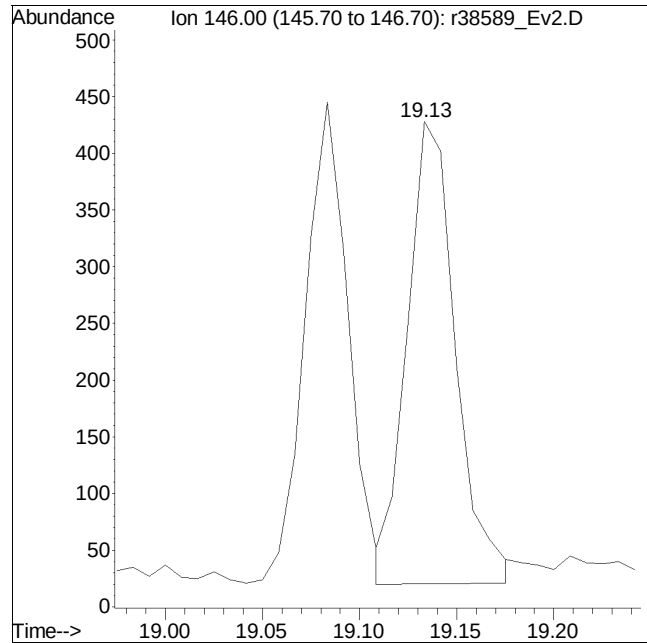
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
Data File : r38589_Ev2.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:0: 8 Instrument :
Sample : IT015-SIMSTD0.02 Quant Date : 3/12/2020 4:27 pm

Compound #76: 1,4-dichlorobenzene



Original Peak Response = 653



Manual Peak Response = 707 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38590_Ev2.D
 Acq On : 12 Mar 2020 11:06 AM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.05
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:34:43 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.53	49	221079	10.000	ppbV	0.00
Standard Area = 228204			Recovery =		96.88%	
33) 1,4-difluorobenzene	11.80	114	643361	10.000	ppbV	0.00
Standard Area = 659248			Recovery =		97.59%	
51) chlorobenzene-D5	16.53	54	94659	10.000	ppbV	0.00
Standard Area = 98040			Recovery =		96.55%	
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.42	65	109626	9.895	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		98.95%	
53) toluene-D8	14.64	98	460092	9.827	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		98.27%	
67) bromofluorobenzene	17.90	95	285090	9.298	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		92.98%	
Target Compounds						
					Qvalue	
2) propylene	3.89	41	620M4	0.060	ppbV	
3) dichlorodifluoromethane	3.98	85	1234	0.058	ppbV	98
4) chloromethane	4.16	50	591	0.063	ppbV	92
5) Freon-114	4.28	85	1550	0.058	ppbV	97
6) vinyl chloride	4.41	62	620	0.058	ppbV	95
7) 1,3-butadiene	4.58	54	622	0.057	ppbV	91
8) bromomethane	4.89	94	553	0.060	ppbV	98
9) chloroethane	5.11	64	323	0.060	ppbV	96
10) ethanol	5.29	31	7146	0.789	ppbV	99
11) vinyl bromide	5.54	106	585	0.053	ppbV	98
12) acrolein	5.70	56	267	0.050	ppbV #	76
13) acetone	5.87	43	5682	0.367	ppbV #	98
14) trichlorofluoromethane	6.06	101	934	0.057	ppbV	99
15) isopropyl alcohol	6.20	45	3842	0.196	ppbV	97
16) acrylonitrile	6.43	53	487	0.050	ppbV	98
17) 1,1-dichloroethene	6.82	61	734	0.052	ppbV	96
18) tertiary butyl alcohol	6.94	59	1408	0.069	ppbV	96
19) methylene chloride	6.99	49	972	0.073	ppbV	97
20) 3-chloropropene	7.13	41	945	0.053	ppbV	95
21) carbon disulfide	7.28	76	2188	0.053	ppbV #	17
22) Freon 113	7.32	101	1250	0.056	ppbV	96
23) trans-1,2-dichloroethene	8.12	61	947	0.054	ppbV	93

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38590_Ev2.D
 Acq On : 12 Mar 2020 11:06 AM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.05
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:34:43 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312
 .M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24)	1,1-dichloroethane	8.35	63	1112	0.055	ppbV	92
25)	MTBE	8.46	73	1956	0.054	ppbV #	89
26)	vinyl acetate	8.57	43	1636	0.054	ppbV	96
27)	2-butanone	8.87	43	1580	0.057	ppbV #	97
28)	cis-1,2-dichloroethene	9.34	61	855	0.057	ppbV	95
29)	Ethyl Acetate	9.68	61	295	0.066	ppbV #	55
30)	chloroform	9.70	83	1237	0.056	ppbV #	93
31)	Tetrahydrofuran	10.18	42	890	0.052	ppbV	97
32)	1,2-dichloroethane	10.55	62	675	0.055	ppbV #	90
34)	hexane	9.61	57	1253	0.055	ppbV #	67
36)	1,1,1-trichloroethane	10.83	97	1081	0.058	ppbV	96
37)	benzene	11.36	78	2890	0.064	ppbV	97
38)	carbon tetrachloride	11.54	117	997	0.054	ppbV	98
39)	cyclohexane	11.69	56	1346	0.054	ppbV	98
40)	Dibromomethane	12.29	93	885	0.073	ppbV #	97
41)	1,2-dichloropropane	12.32	63	814	0.058	ppbV	93
42)	bromodichloromethane	12.55	83	1381	0.055	ppbV #	90
43)	1,4-dioxane	12.63	88	667	0.063	ppbV	89
44)	trichloroethene	12.59	130	981M4	0.055	ppbV	
45)	2,2,4-trimethylpentane	12.65	57	3898	0.052	ppbV	98
46)	heptane	12.97	43	1596	0.053	ppbV	95
47)	cis-1,3-dichloropropene	14.23	75	1033	0.050	ppbV	94
48)	4-methyl-2-pentanone	13.68	43	1714	0.050	ppbV	97
49)	trans-1,3-dichloropropene	13.62	75	1140	0.051	ppbV	95
50)	1,1,2-trichloroethane	14.43	97	840	0.055	ppbV	95
52)	toluene	14.75	91	2984	0.061	ppbV	97
54)	2-hexanone	15.07	43	1297	0.042	ppbV	96
55)	dibromochloromethane	15.20	129	1044	0.047	ppbV	97
56)	1,2-dibromoethane	15.45	107	1262	0.053	ppbV	99
57)	tetrachloroethene	15.92	166	1074M4	0.053	ppbV	
58)	1,1,1,2-tetrachloroethane	16.56	131	894	0.054	ppbV	95
59)	chlorobenzene	16.57	112	2071	0.052	ppbV	99
60)	ethylbenzene	16.93	91	3082	0.052	ppbV	100
61)	m+p-xylene	17.08	91	5321	0.109	ppbV	100
62)	bromoform	17.16	173	832	0.043	ppbV	98
63)	styrene	17.41	104	2291	0.053	ppbV	97
64)	1,1,2,2-tetrachloroethane	17.51	83	1661	0.049	ppbV	98
65)	o-xylene	17.50	91	2649	0.054	ppbV	100
66)	1,2,3-Trichloropropane	17.62	75	1354	0.047	ppbV #	89

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38590_Ev2.D
 Acq On : 12 Mar 2020 11:06 AM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.05
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:34:43 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) isopropylbenzene	18.02	105	3486	0.048	ppbV	99
69) Bromobenzene	18.09	77	1836	0.049	ppbV	97
70) 4-ethyl toluene	18.57	105	3642	0.045	ppbV	99
71) 1,3,5-trimethylbenzene	18.63	105	3023	0.046	ppbV	98
72) tert-butylbenzene	18.96	119	2826	0.044	ppbV	94
73) 1,2,4-trimethylbenzene	18.96	105	2903	0.046	ppbV	96
74) Benzyl Chloride	19.07	91	1387	0.031	ppbV	93
75) 1,3-dichlorobenzene	19.08	146	1593M4	0.044	ppbV	
76) 1,4-dichlorobenzene	19.14	146	1521	0.044	ppbV	95
77) sec-butylbenzene	19.17	105	4067	0.043	ppbV	100
78) p-isopropyltoluene	19.29	119	3266	0.042	ppbV	97
79) 1,2-dichlorobenzene	19.41	146	1460	0.043	ppbV	96
80) n-butylbenzene	19.63	91	2503	0.038	ppbV	98
81) 1,2,4-trichlorobenzene	20.88	180	726	0.033	ppbV #	91
82) naphthalene	20.99	128	3673	0.051	ppbV	97
83) 1,2,3-trichlorobenzene	21.24	180	860	0.033	ppbV	93
84) hexachlorobutadiene	21.31	225	1196	0.046	ppbV	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

```
Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
Data File : r38590_Ev2.D
Acq On    : 12 Mar 2020  11:06 AM
Operator  : AIRPIANO3:RY
Sample    : IT015-SIMSTD0.05
Misc      : WG1350409
ALS Vial  : 0    Sample Multiplier: 1
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Quant Time: Mar 12 16:34:43 2020

Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312

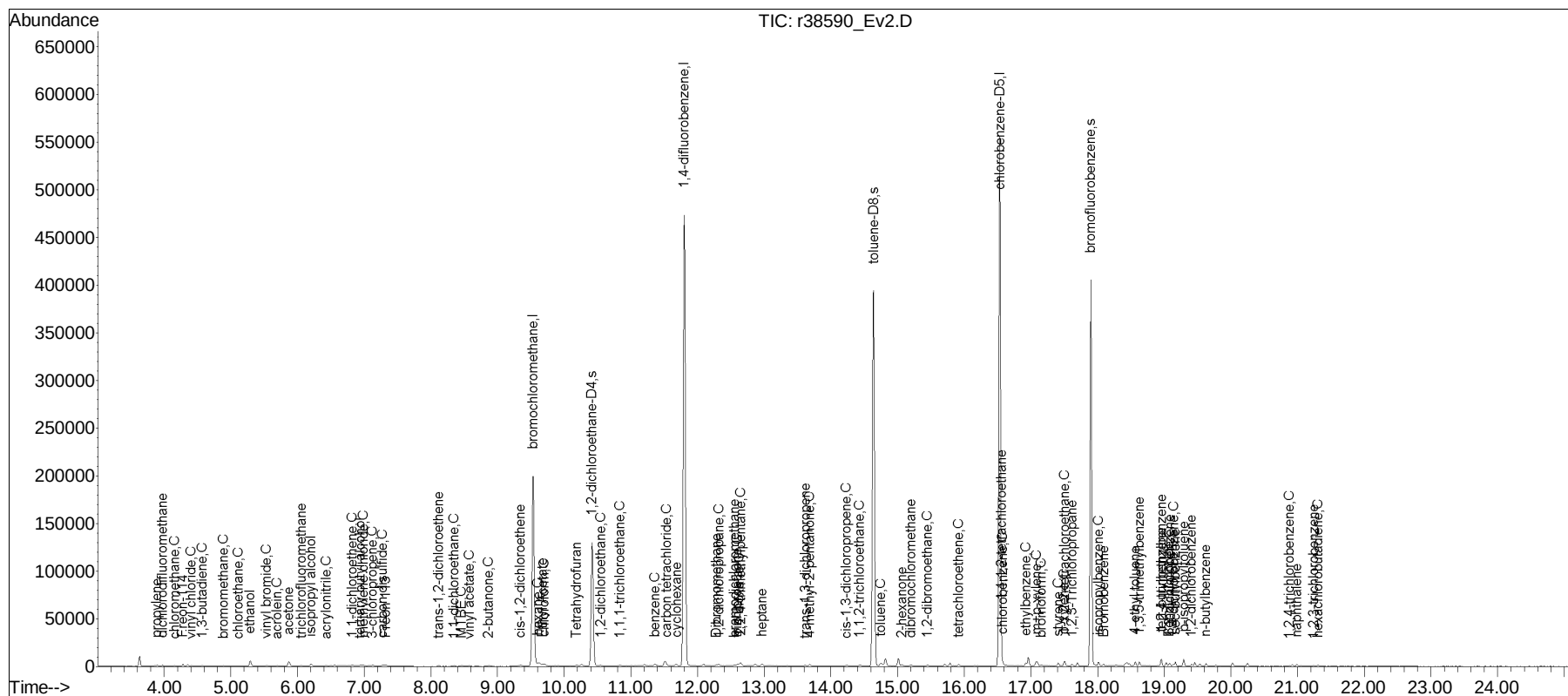
... M

Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis

QLast Update : Thu Mar 12 16:27:33 2020

Response via : Initial Calibration

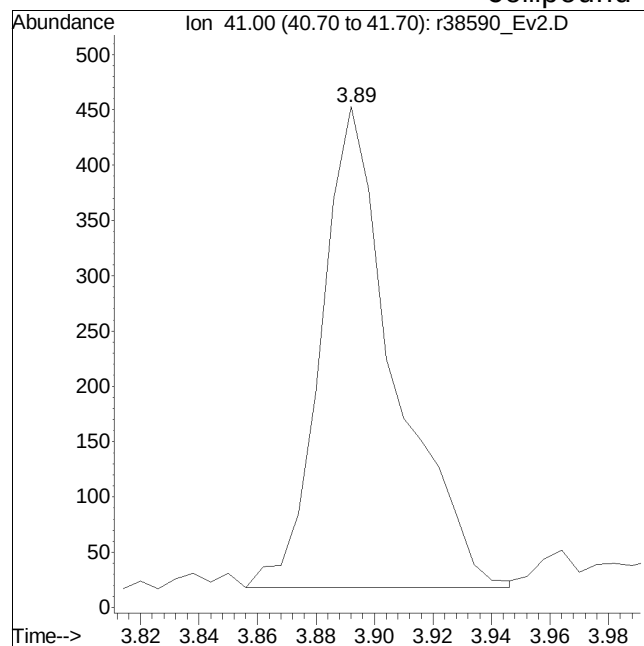
Sub List : Default - All compounds listed20\03\200312SIM_I\r38595_Ev2.D



Manual Integration/Negative Proof Report

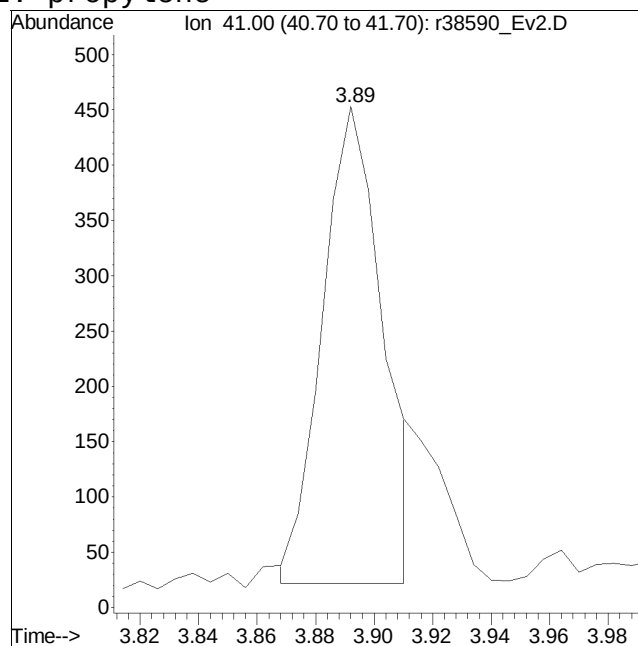
Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
Data File : r38590_Ev2.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:1: 6 Instrument :
Sample : IT015-SIMSTD0.05 Quant Date : 3/12/2020 4:27 pm

Compound #2: propylene



Original Peak Response = 768

M4 = Poor automated baseline construction.

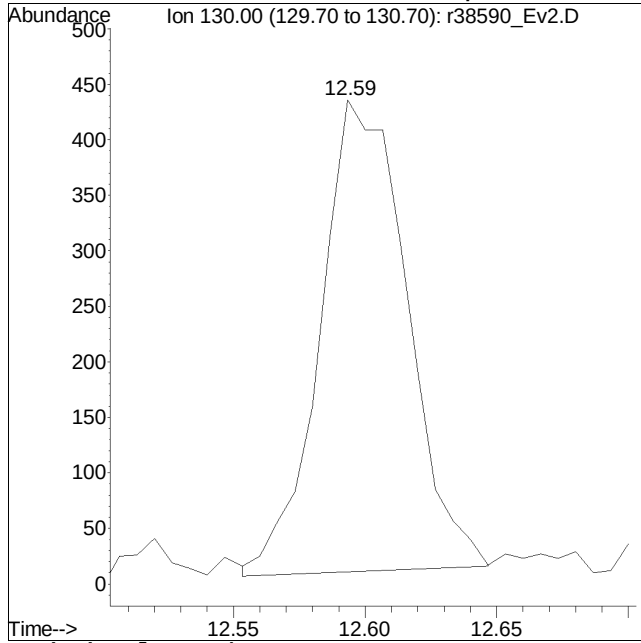


Manual Peak Response = 620 M4

Manual Integration/Negative Proof Report

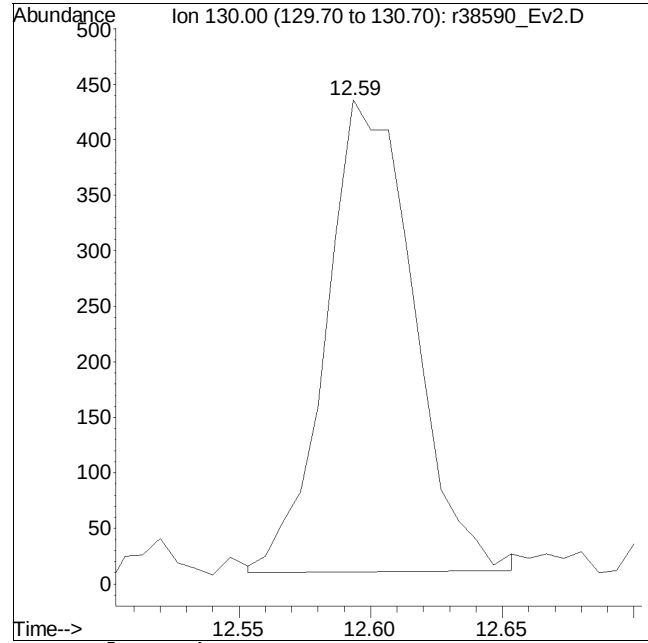
Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
Data File : r38590_Ev2.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:1: 6 Instrument :
Sample : IT015-SIMSTD0.05 Quant Date : 3/12/2020 4:27 pm

Compound #44: trichloroethene



Original Peak Response = 972

M4 = Poor automated baseline construction.

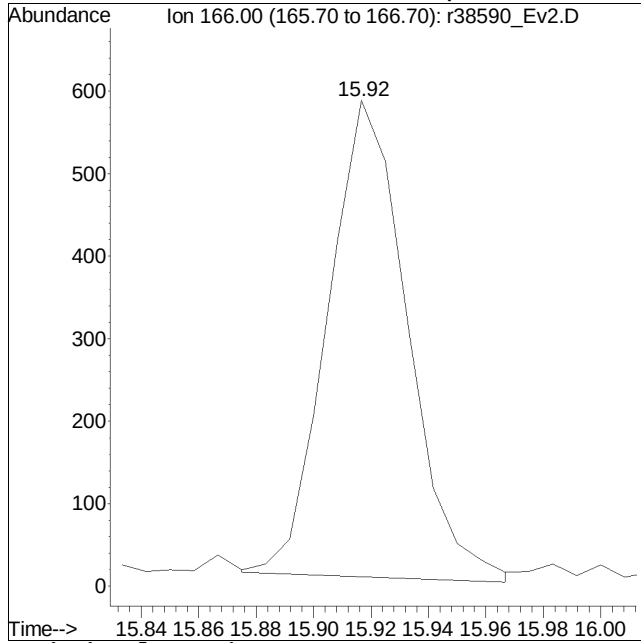


Manual Peak Response = 981 M4

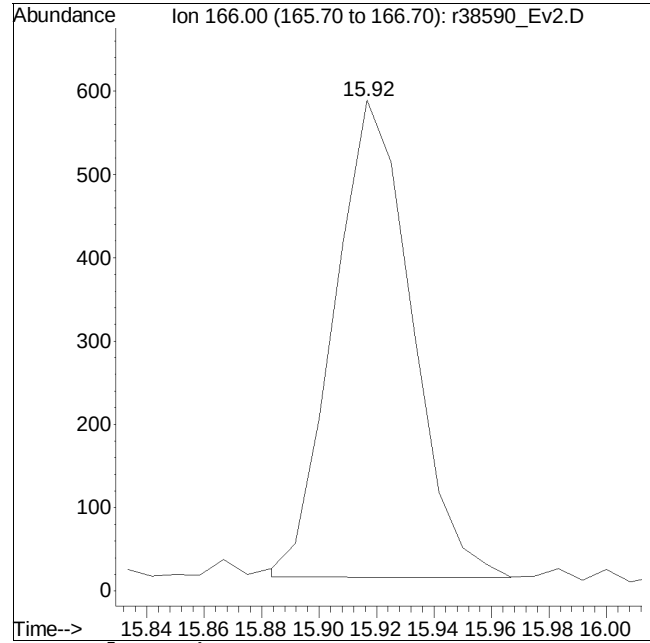
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
Data File : r38590_Ev2.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:1: 6 Instrument :
Sample : IT015-SIMSTD0.05 Quant Date : 3/12/2020 4:27 pm

Compound #57: tetrachloroethene



Original Peak Response = 1110



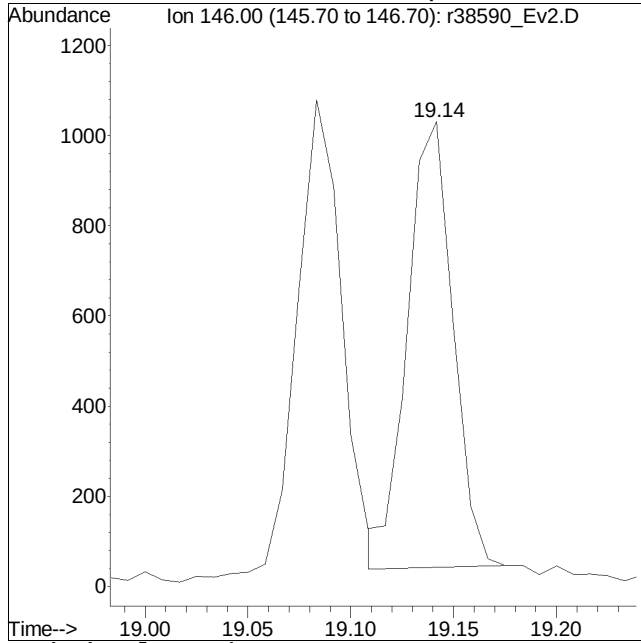
Manual Peak Response = 1074 M4

M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

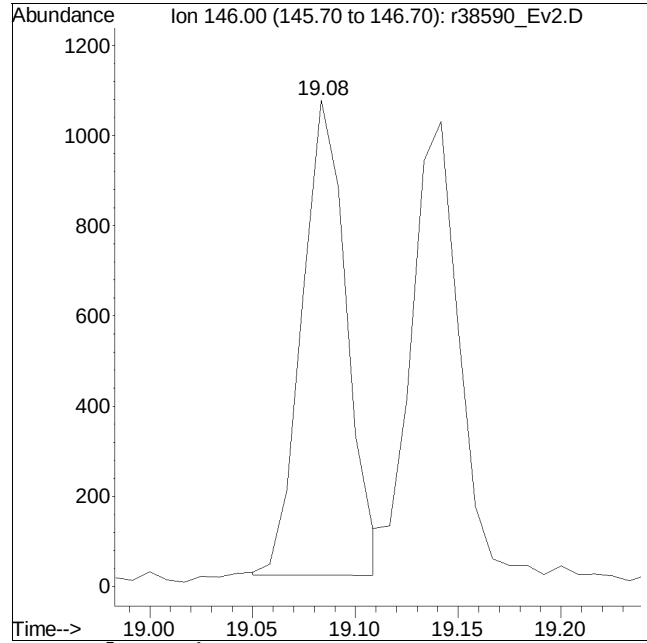
Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
Data File : r38590_Ev2.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:1: 6 Instrument :
Sample : IT015-SIMSTD0.05 Quant Date : 3/12/2020 4:27 pm

Compound #75: 1,3-dichlorobenzene



Original Peak Response = 1521

M4 = Poor automated baseline construction.



Manual Peak Response = 1593 M4

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38591_Ev2.D
 Acq On : 12 Mar 2020 11:47 AM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.1
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:35:37 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.53	49	222774	10.000	ppbV	0.00
Standard Area = 228204			Recovery =		97.62%	
33) 1,4-difluorobenzene	11.80	114	644735	10.000	ppbV	0.00
Standard Area = 659248			Recovery =		97.80%	
51) chlorobenzene-D5	16.53	54	94868	10.000	ppbV	0.00
Standard Area = 98040			Recovery =		96.76%	
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.43	65	109787	9.889	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		98.89%	
53) toluene-D8	14.64	98	462181	9.849	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		98.49%	
67) bromofluorobenzene	17.90	95	284121	9.246	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		92.46%	
Target Compounds						
					Qvalue	
2) propylene	3.89	41	1144M4	0.110	ppbV	
3) dichlorodifluoromethane	3.98	85	2447	0.113	ppbV	99
4) chloromethane	4.16	50	1188	0.126	ppbV	96
5) Freon-114	4.28	85	3081	0.114	ppbV	100
6) vinyl chloride	4.41	62	1238	0.114	ppbV	96
7) 1,3-butadiene	4.58	54	1173	0.107	ppbV	94
8) bromomethane	4.89	94	1036	0.112	ppbV	97
9) chloroethane	5.11	64	610	0.112	ppbV	96
10) ethanol	5.30	31	9555	1.048	ppbV	100
11) vinyl bromide	5.54	106	1149	0.104	ppbV	100
12) acrolein	5.70	56	639	0.119	ppbV #	88
13) acetone	5.87	43	9429	0.604	ppbV #	99
14) trichlorofluoromethane	6.06	101	1860	0.113	ppbV	93
15) isopropyl alcohol	6.20	45	6158	0.312	ppbV #	95
16) acrylonitrile	6.44	53	986	0.100	ppbV	98
17) 1,1-dichloroethene	6.82	61	1578	0.111	ppbV	98
18) tertiary butyl alcohol	6.94	59	2542	0.124	ppbV	98
19) methylene chloride	6.99	49	1537	0.115	ppbV	93
20) 3-chloropropene	7.13	41	1896	0.105	ppbV	96
21) carbon disulfide	7.28	76	4241	0.102	ppbV #	56
22) Freon 113	7.33	101	2470	0.111	ppbV	97
23) trans-1,2-dichloroethene	8.12	61	1834	0.104	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38591_Ev2.D
 Acq On : 12 Mar 2020 11:47 AM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.1
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:35:37 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.35	63	2218	0.109	ppbV	96
25) MTBE	8.46	73	3770	0.102	ppbV #	90
26) vinyl acetate	8.57	43	3231	0.105	ppbV	97
27) 2-butanone	8.87	43	3014	0.108	ppbV #	98
28) cis-1,2-dichloroethene	9.34	61	1611	0.107	ppbV	99
29) Ethyl Acetate	9.67	61	485	0.108	ppbV	84
30) chloroform	9.70	83	2406	0.108	ppbV	96
31) Tetrahydrofuran	10.18	42	1833	0.107	ppbV	97
32) 1,2-dichloroethane	10.55	62	1483	0.120	ppbV	95
34) hexane	9.61	57	2453	0.107	ppbV #	72
36) 1,1,1-trichloroethane	10.84	97	2070	0.112	ppbV	98
37) benzene	11.37	78	5220	0.116	ppbV	100
38) carbon tetrachloride	11.54	117	1988	0.108	ppbV	98
39) cyclohexane	11.68	56	2491	0.100	ppbV	97
40) Dibromomethane	12.29	93	1542	0.126	ppbV #	89
41) 1,2-dichloropropane	12.32	63	1539	0.110	ppbV	96
42) bromodichloromethane	12.55	83	2627	0.104	ppbV #	99
43) 1,4-dioxane	12.62	88	1130	0.106	ppbV	88
44) trichloroethene	12.60	130	1876	0.105	ppbV	96
45) 2,2,4-trimethylpentane	12.65	57	7652	0.102	ppbV	98
46) heptane	12.97	43	3036	0.101	ppbV	96
47) cis-1,3-dichloropropene	14.23	75	2073	0.099	ppbV	96
48) 4-methyl-2-pentanone	13.68	43	3279	0.096	ppbV	98
49) trans-1,3-dichloropropene	13.62	75	2188	0.098	ppbV	99
50) 1,1,2-trichloroethane	14.43	97	1588	0.104	ppbV	97
52) toluene	14.75	91	5458	0.112	ppbV	100
54) 2-hexanone	15.06	43	2801	0.089	ppbV	96
55) dibromochloromethane	15.20	129	2111	0.095	ppbV	98
56) 1,2-dibromoethane	15.45	107	2431	0.102	ppbV	98
57) tetrachloroethene	15.92	166	2114	0.105	ppbV	99
58) 1,1,1,2-tetrachloroethane	16.56	131	1683	0.101	ppbV	98
59) chlorobenzene	16.57	112	4158	0.105	ppbV	99
60) ethylbenzene	16.93	91	6070	0.103	ppbV	99
61) m+p-xylene	17.08	91	10169	0.207	ppbV	99
62) bromoform	17.16	173	1698	0.087	ppbV	99
63) styrene	17.41	104	4443	0.102	ppbV	99
64) 1,1,2,2-tetrachloroethane	17.51	83	3342	0.098	ppbV	98
65) o-xylene	17.50	91	5085	0.103	ppbV	99
66) 1,2,3-Trichloropropane	17.62	75	2762	0.097	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38591_Ev2.D
 Acq On : 12 Mar 2020 11:47 AM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.1
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:35:37 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	isopropylbenzene	18.02	105	6988	0.097	ppbV	97
69)	Bromobenzene	18.09	77	3619	0.097	ppbV	100
70)	4-ethyl toluene	18.57	105	7369	0.091	ppbV	98
71)	1,3,5-trimethylbenzene	18.63	105	6292	0.096	ppbV	98
72)	tert-butylbenzene	18.95	119	5769	0.091	ppbV	98
73)	1,2,4-trimethylbenzene	18.96	105	5859	0.092	ppbV	95
74)	Benzyl Chloride	19.07	91	2961	0.066	ppbV	98
75)	1,3-dichlorobenzene	19.08	146	3329	0.093	ppbV	95
76)	1,4-dichlorobenzene	19.14	146	3385	0.098	ppbV	94
77)	sec-butylbenzene	19.17	105	8392	0.088	ppbV	100
78)	p-isopropyltoluene	19.29	119	6539	0.084	ppbV	96
79)	1,2-dichlorobenzene	19.41	146	3132	0.092	ppbV	97
80)	n-butylbenzene	19.63	91	5087	0.077	ppbV	98
81)	1,2,4-trichlorobenzene	20.88	180	1457	0.067	ppbV	95
82)	naphthalene	20.99	128	6362	0.088	ppbV	100
83)	1,2,3-trichlorobenzene	21.24	180	1782	0.068	ppbV	97
84)	hexachlorobutadiene	21.31	225	2399	0.091	ppbV	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38591_Ev2.D
 Acq On : 12 Mar 2020 11:47 AM
 Operator : AIRPIANO3:RY
 Sample : IT015-SIMSTD0.1
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:35:37 2020

Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312

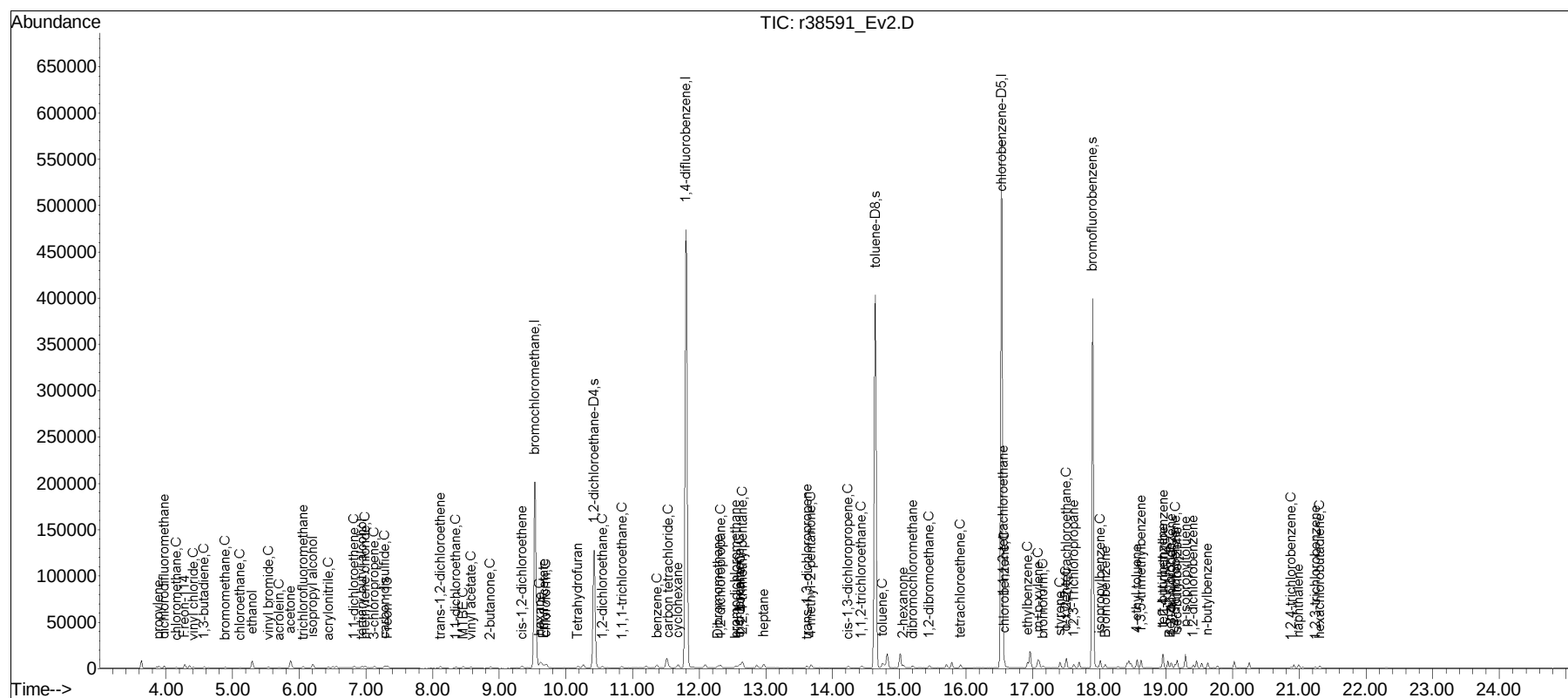
..M

Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis

QLast Update : Thu Mar 12 16:27:33 2020

Response via : Initial Calibration

Sub List : Default - All compounds listed 20\03\200312SIM_I\r38595_Ev2.D



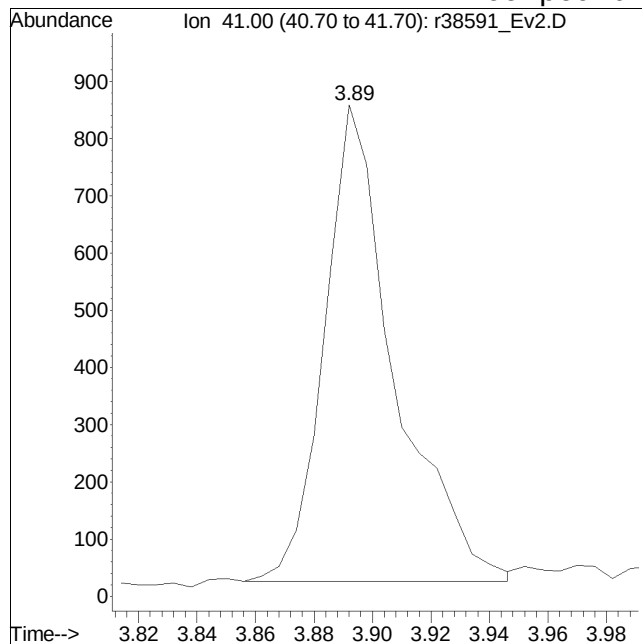
TSIM3_200312.M Thu Mar 12 17:20:08 2020

Page: 4

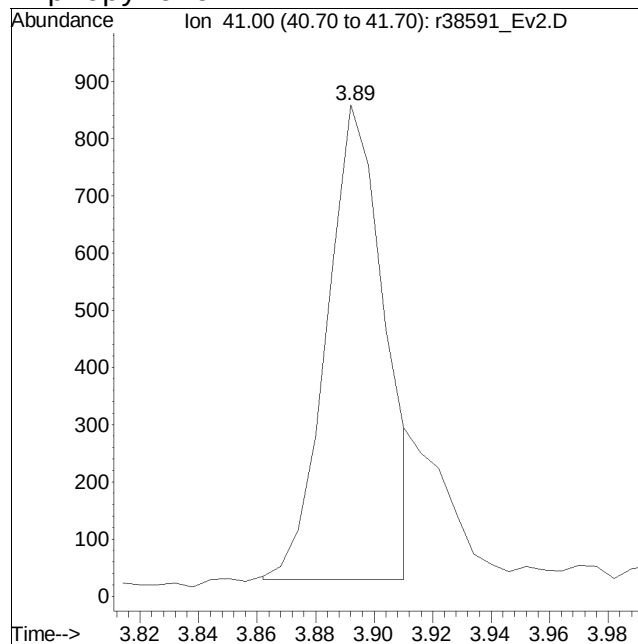
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
Data File : r38591_Ev2.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:1: 7 Instrument :
Sample : IT015-SIMSTD0.1 Quant Date : 3/12/2020 4:28 pm

Compound #2: propylene



Original Peak Response = 1385



Manual Peak Response = 1144 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38592_Ev2.D
 Acq On : 12 Mar 2020 12:25 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.2
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:37:05 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.53	49	221092	10.000	ppbV	0.00
Standard Area = 228204			Recovery =	96.88%		
33) 1,4-difluorobenzene	11.80	114	640756	10.000	ppbV	0.00
Standard Area = 659248			Recovery =	97.19%		
51) chlorobenzene-D5	16.52	54	93877	10.000	ppbV	0.00
Standard Area = 98040			Recovery =	95.75%		
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.42	65	111360	10.093	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.93%		
53) toluene-D8	14.64	98	470589	10.135	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	101.35%		
67) bromofluorobenzene	17.90	95	291607	9.590	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	95.90%		
Target Compounds						
					Qvalue	
2) propylene	3.89	41	2241M4	0.216	ppbV	
3) dichlorodifluoromethane	3.98	85	4923	0.230	ppbV	100
4) chloromethane	4.15	50	2141	0.228	ppbV	99
5) Freon-114	4.28	85	6160	0.230	ppbV	99
6) vinyl chloride	4.41	62	2472	0.230	ppbV	100
7) 1,3-butadiene	4.58	54	2395	0.221	ppbV	99
8) bromomethane	4.89	94	2138	0.232	ppbV	99
9) chloroethane	5.11	64	1231	0.228	ppbV	99
10) ethanol	5.29	31	14725	1.627	ppbV	99
11) vinyl bromide	5.54	106	2501	0.227	ppbV	99
12) acrolein	5.70	56	1206	0.227	ppbV	95
13) acetone	5.87	43	16964	1.094	ppbV #	99
14) trichlorofluoromethane	6.05	101	3641	0.222	ppbV	99
15) isopropyl alcohol	6.20	45	11251	0.575	ppbV	97
16) acrylonitrile	6.44	53	2026	0.207	ppbV	99
17) 1,1-dichloroethene	6.82	61	3282	0.233	ppbV	100
18) tertiary butyl alcohol	6.94	59	4735	0.232	ppbV #	90
19) methylene chloride	6.99	49	3006	0.227	ppbV	97
20) 3-chloropropene	7.13	41	4015	0.225	ppbV	100
21) carbon disulfide	7.28	76	9068	0.219	ppbV #	80
22) Freon 113	7.32	101	5044	0.228	ppbV	99
23) trans-1,2-dichloroethene	8.12	61	3930	0.224	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38592_Ev2.D
 Acq On : 12 Mar 2020 12:25 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.2
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:37:05 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.35	63	4591	0.228	ppbV	98
25) MTBE	8.45	73	7987	0.219	ppbV	94
26) vinyl acetate	8.57	43	6520	0.214	ppbV	99
27) 2-butanone	8.86	43	6210	0.224	ppbV	99
28) cis-1,2-dichloroethene	9.34	61	3366	0.225	ppbV	96
29) Ethyl Acetate	9.67	61	942	0.212	ppbV	83
30) chloroform	9.70	83	4937	0.224	ppbV	98
31) Tetrahydrofuran	10.18	42	3611	0.212	ppbV	94
32) 1,2-dichloroethane	10.55	62	2845	0.231	ppbV	97
34) hexane	9.61	57	4973	0.218	ppbV #	79
36) 1,1,1-trichloroethane	10.83	97	4144	0.225	ppbV	93
37) benzene	11.37	78	10532	0.235	ppbV	100
38) carbon tetrachloride	11.54	117	4061	0.222	ppbV	97
39) cyclohexane	11.68	56	5382	0.217	ppbV	98
40) Dibromomethane	12.29	93	2834	0.234	ppbV #	99
41) 1,2-dichloropropane	12.32	63	3176	0.229	ppbV	98
42) bromodichloromethane	12.55	83	5370	0.213	ppbV	99
43) 1,4-dioxane	12.61	88	2354	0.222	ppbV	93
44) trichloroethene	12.60	130	3954	0.224	ppbV	95
45) 2,2,4-trimethylpentane	12.65	57	16210	0.217	ppbV	98
46) heptane	12.97	43	6377	0.213	ppbV	98
47) cis-1,3-dichloropropene	14.24	75	4365	0.211	ppbV	99
48) 4-methyl-2-pentanone	13.68	43	7035	0.207	ppbV	99
49) trans-1,3-dichloropropene	13.62	75	4786	0.216	ppbV	100
50) 1,1,2-trichloroethane	14.43	97	3364	0.221	ppbV	98
52) toluene	14.75	91	11191	0.232	ppbV	100
54) 2-hexanone	15.05	43	6043	0.195	ppbV #	92
55) dibromochloromethane	15.20	129	4474	0.204	ppbV	99
56) 1,2-dibromoethane	15.45	107	5230	0.222	ppbV	99
57) tetrachloroethene	15.92	166	4465	0.224	ppbV	99
58) 1,1,1,2-tetrachloroethane	16.56	131	3553	0.217	ppbV	98
59) chlorobenzene	16.57	112	8676	0.221	ppbV	99
60) ethylbenzene	16.93	91	12871	0.221	ppbV	100
61) m+p-xylene	17.08	91	21511	0.443	ppbV	98
62) bromoform	17.16	173	3658	0.189	ppbV	100
63) styrene	17.41	104	8663	0.201	ppbV	99
64) 1,1,2,2-tetrachloroethane	17.50	83	7380	0.219	ppbV	99
65) o-xylene	17.50	91	10824	0.221	ppbV	98
66) 1,2,3-Trichloropropane	17.62	75	5897	0.209	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38592_Ev2.D
 Acq On : 12 Mar 2020 12:25 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.2
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:37:05 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) isopropylbenzene	18.01	105	15141	0.212	ppbV	97
69) Bromobenzene	18.08	77	7507	0.202	ppbV	99
70) 4-ethyl toluene	18.57	105	16241	0.202	ppbV	99
71) 1,3,5-trimethylbenzene	18.63	105	13681	0.211	ppbV	99
72) tert-butylbenzene	18.95	119	12976	0.206	ppbV	100
73) 1,2,4-trimethylbenzene	18.96	105	13009	0.207	ppbV	94
74) Benzyl Chloride	19.07	91	6263	0.142	ppbV	97
75) 1,3-dichlorobenzene	19.08	146	7090	0.199	ppbV	98
76) 1,4-dichlorobenzene	19.13	146	6691	0.195	ppbV	98
77) sec-butylbenzene	19.17	105	18930	0.200	ppbV	100
78) p-isopropyltoluene	19.29	119	14912	0.193	ppbV	98
79) 1,2-dichlorobenzene	19.41	146	6739	0.200	ppbV	98
80) n-butylbenzene	19.63	91	11731	0.180	ppbV	98
81) 1,2,4-trichlorobenzene	20.88	180	2730	0.127	ppbV	95
82) naphthalene	20.99	128	10144	0.142	ppbV	99
83) 1,2,3-trichlorobenzene	21.24	180	3559	0.138	ppbV	98
84) hexachlorobutadiene	21.31	225	5432	0.209	ppbV	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

```
Data Path   : O:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
Data File   : r38592_Ev2.D
Acq On      : 12 Mar 2020  12:25 PM
Operator    : AIRPIANO3:RY
Sample      : IT015-SIMSTD0.2
Misc        : WG1350409
ALS Vial    : 0      Sample Multiplier: 1
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Quant Time: Mar 12 16:37:05 2020

Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312

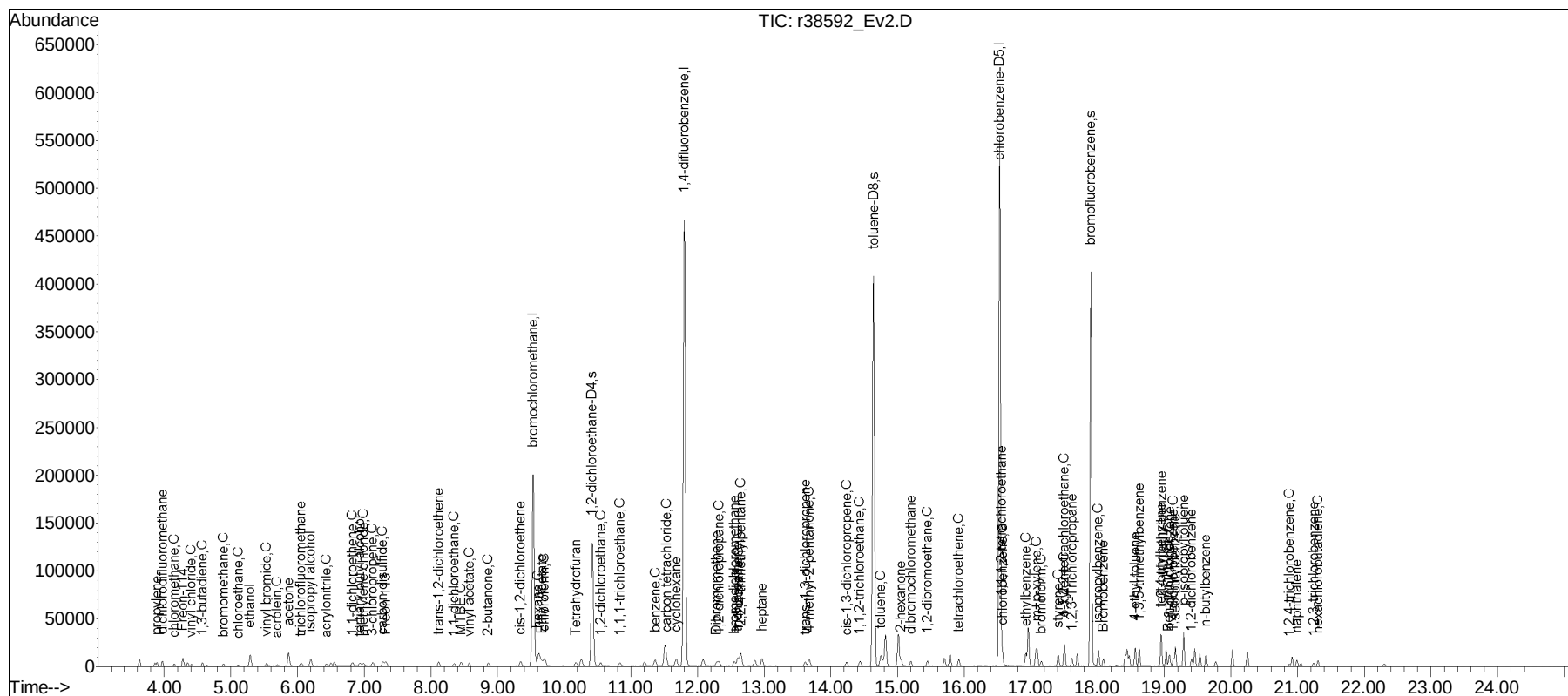
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Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis

QLast Update : Thu Mar 12 16:27:33 2020

Response via : Initial Calibration

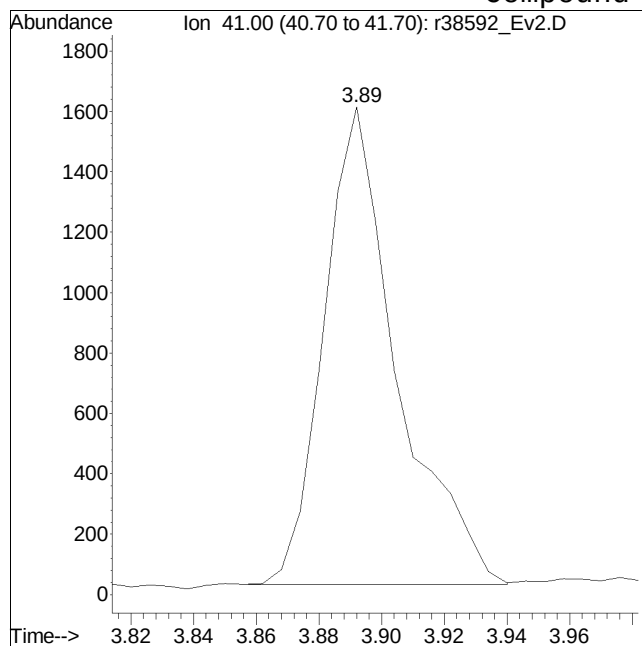
Sub List : Default - All compounds listed20\03\200312SIM I\r38595 Ev2.D



Manual Integration/Negative Proof Report

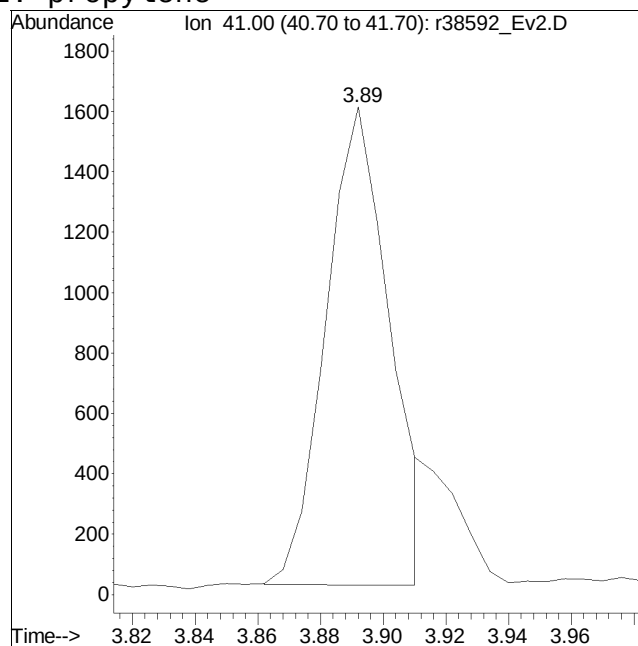
Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
Data File : r38592_Ev2.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:2: 5 Instrument :
Sample : IT015-SIMSTD0.2 Quant Date : 3/12/2020 4:28 pm

Compound #2: propylene



Original Peak Response = 2557

M4 = Poor automated baseline construction.



Manual Peak Response = 2241 M4

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38593_Ev2.D
 Acq On : 12 Mar 2020 1:03 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.5
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:38:54 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.53	49	222336	10.000	ppbV	0.00
Standard Area = 228204			Recovery =		97.43%	
33) 1,4-difluorobenzene	11.81	114	645804	10.000	ppbV	0.00
Standard Area = 659248			Recovery =		97.96%	
51) chlorobenzene-D5	16.53	54	93675	10.000	ppbV	0.00
Standard Area = 98040			Recovery =		95.55%	
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.43	65	111359	10.014	ppbV	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =		100.14%	
53) toluene-D8	14.64	98	470745	10.160	ppbV	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =		101.60%	
67) bromofluorobenzene	17.90	95	294407	9.703	ppbV	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =		97.03%	
Target Compounds						
					Qvalue	
2) propylene	3.89	41	5774M4	0.554	ppbV	
3) dichlorodifluoromethane	3.98	85	12183	0.565	ppbV	100
4) chloromethane	4.16	50	5299	0.561	ppbV	98
5) Freon-114	4.28	85	15218	0.566	ppbV	99
6) vinyl chloride	4.41	62	6042	0.558	ppbV	98
7) 1,3-butadiene	4.58	54	5813	0.533	ppbV	96
8) bromomethane	4.89	94	5261	0.567	ppbV	98
9) chloroethane	5.11	64	3071	0.566	ppbV	97
10) ethanol	5.29	31	29067	3.193	ppbV	100
11) vinyl bromide	5.54	106	6026	0.545	ppbV	99
12) acrolein	5.70	56	2984	0.558	ppbV	98
13) acetone	5.86	43	40421	2.593	ppbV	99
14) trichlorofluoromethane	6.06	101	9275	0.564	ppbV	99
15) isopropyl alcohol	6.20	45	25618	1.302	ppbV	100
16) acrylonitrile	6.43	53	5205	0.528	ppbV	99
17) 1,1-dichloroethene	6.83	61	7842	0.555	ppbV	99
18) tertiary butyl alcohol	6.93	59	11697	0.570	ppbV	99
19) methylene chloride	6.99	49	7116	0.533	ppbV	100
20) 3-chloropropene	7.13	41	9687	0.539	ppbV	99
21) carbon disulfide	7.28	76	22474	0.541	ppbV #	93
22) Freon 113	7.33	101	12274	0.551	ppbV	100
23) trans-1,2-dichloroethene	8.12	61	9616	0.544	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38593_Ev2.D
 Acq On : 12 Mar 2020 1:03 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.5
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:38:54 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.35	63	11188	0.553	ppbV	98
25) MTBE	8.45	73	19615	0.534	ppbV	98
26) vinyl acetate	8.57	43	16135	0.526	ppbV	100
27) 2-butanone	8.85	43	15093	0.540	ppbV	97
28) cis-1,2-dichloroethene	9.35	61	8278	0.550	ppbV	99
29) Ethyl Acetate	9.66	61	2472	0.553	ppbV	91
30) chloroform	9.70	83	12178	0.549	ppbV	98
31) Tetrahydrofuran	10.17	42	9082	0.529	ppbV	96
32) 1,2-dichloroethane	10.55	62	6864	0.555	ppbV	98
34) hexane	9.61	57	12369	0.538	ppbV	83
36) 1,1,1-trichloroethane	10.84	97	10234	0.551	ppbV	99
37) benzene	11.37	78	25009	0.553	ppbV	99
38) carbon tetrachloride	11.54	117	9973	0.541	ppbV	99
39) cyclohexane	11.68	56	13322	0.534	ppbV	99
40) Dibromomethane	12.29	93	6674	0.546	ppbV #	99
41) 1,2-dichloropropane	12.32	63	7725	0.552	ppbV	99
42) bromodichloromethane	12.55	83	13464	0.530	ppbV	98
43) 1,4-dioxane	12.61	88	5505	0.516	ppbV	97
44) trichloroethene	12.61	130	9715	0.545	ppbV	98
45) 2,2,4-trimethylpentane	12.65	57	40184	0.534	ppbV	98
46) heptane	12.97	43	15970	0.528	ppbV	99
47) cis-1,3-dichloropropene	14.24	75	10973	0.525	ppbV	99
48) 4-methyl-2-pentanone	13.67	43	17621	0.513	ppbV	99
49) trans-1,3-dichloropropene	13.62	75	11910	0.534	ppbV	99
50) 1,1,2-trichloroethane	14.44	97	8264	0.538	ppbV	98
52) toluene	14.75	91	27436	0.571	ppbV	100
54) 2-hexanone	15.05	43	15643	0.506	ppbV	94
55) dibromochloromethane	15.20	129	11171	0.510	ppbV	98
56) 1,2-dibromoethane	15.45	107	12955	0.552	ppbV	100
57) tetrachloroethene	15.92	166	11170	0.561	ppbV	100
58) 1,1,1,2-tetrachloroethane	16.56	131	8873	0.542	ppbV	99
59) chlorobenzene	16.57	112	21652	0.554	ppbV	99
60) ethylbenzene	16.93	91	32075	0.551	ppbV	99
61) m+p-xylene	17.08	91	53780	1.109	ppbV	98
62) bromoform	17.16	173	9378	0.486	ppbV	99
63) styrene	17.41	104	22261	0.517	ppbV	99
64) 1,1,2,2-tetrachloroethane	17.51	83	18546	0.551	ppbV	99
65) o-xylene	17.50	91	27123	0.556	ppbV	96
66) 1,2,3-Trichloropropane	17.62	75	14961	0.530	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38593_Ev2.D
 Acq On : 12 Mar 2020 1:03 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD0.5
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:38:54 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) isopropylbenzene	18.02	105	38134	0.535	ppbV	99
69) Bromobenzene	18.09	77	19244	0.520	ppbV	99
70) 4-ethyl toluene	18.57	105	41835	0.522	ppbV	98
71) 1,3,5-trimethylbenzene	18.63	105	34976	0.541	ppbV	98
72) tert-butylbenzene	18.95	119	33180	0.528	ppbV	99
73) 1,2,4-trimethylbenzene	18.95	105	33843	0.540	ppbV	97
74) Benzyl Chloride	19.07	91	18338	0.417	ppbV	99
75) 1,3-dichlorobenzene	19.08	146	18211	0.513	ppbV	99
76) 1,4-dichlorobenzene	19.13	146	17501	0.512	ppbV	99
77) sec-butylbenzene	19.17	105	48686	0.516	ppbV	100
78) p-isopropyltoluene	19.29	119	38438	0.500	ppbV	97
79) 1,2-dichlorobenzene	19.41	146	17496	0.521	ppbV	99
80) n-butylbenzene	19.63	91	31485	0.485	ppbV	100
81) 1,2,4-trichlorobenzene	20.88	180	8133	0.379	ppbV	98
82) naphthalene	20.99	128	26939	0.379	ppbV	99
83) 1,2,3-trichlorobenzene	21.24	180	9735	0.377	ppbV	98
84) hexachlorobutadiene	21.31	225	14093	0.542	ppbV	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

```
Data Path   : O:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
Data File  : r38593_Ev2.D
Acq On     : 12 Mar 2020   1:03 PM
Operator   : AIRPIANO3:RY
Sample     : IT015-SIMSTD0.5
Misc       : WG1350409
ALS Vial   : 0    Sample Multiplier: 1
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Quant Time: Mar 12 16:38:54 2020

Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312

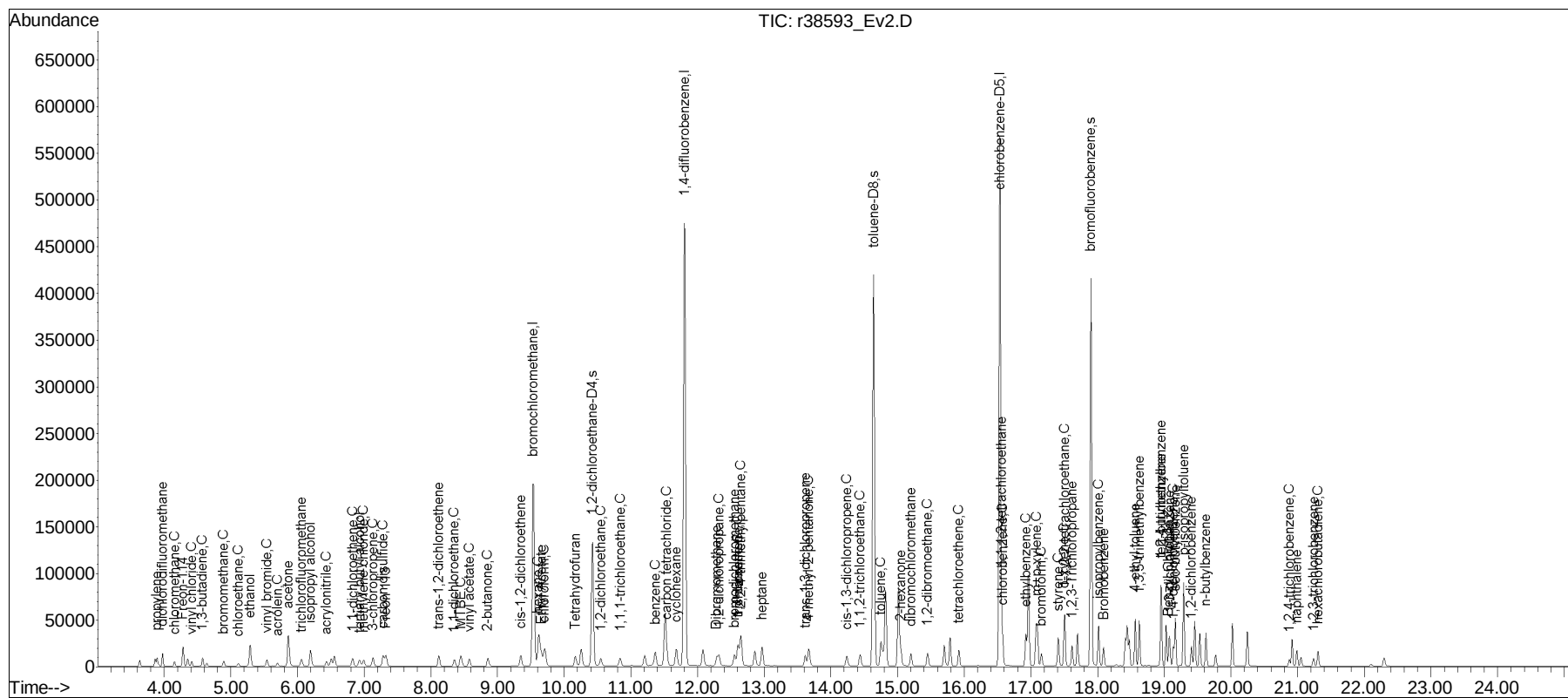
... M

Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis

QLast Update : Thu Mar 12 16:27:33 2020

Response via : Initial Calibration

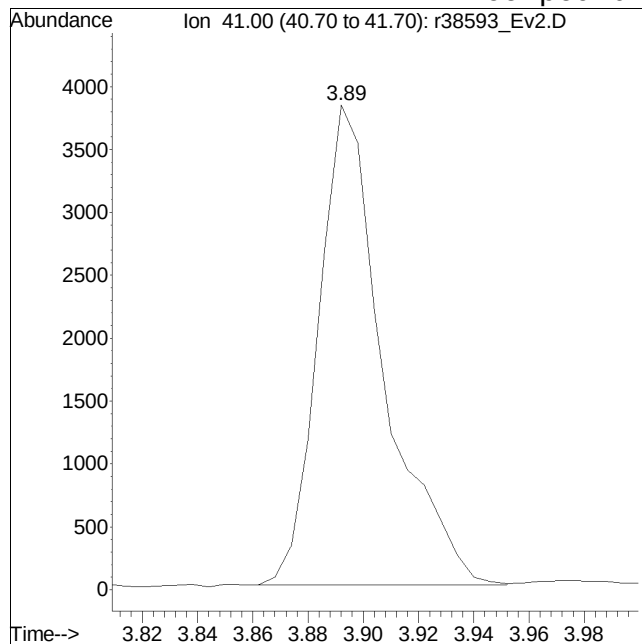
Sub List : Default - All compounds listed20\03\200312SIM_I\r38595_Ev2.D



Manual Integration/Negative Proof Report

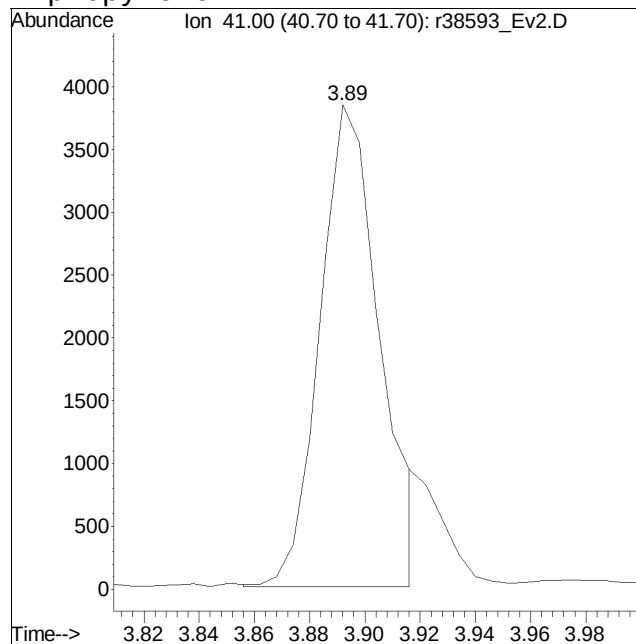
Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
Data File : r38593_Ev2.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:1: 3 Instrument :
Sample : IT015-SIMSTD0.5 Quant Date : 3/12/2020 4:28 pm

Compound #2: propylene



Original Peak Response = 6290

M4 = Poor automated baseline construction.



Manual Peak Response = 5774 M4

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38594_Ev2.D
 Acq On : 12 Mar 2020 1:44 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD1.0
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:40:28 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.53	49	223760	10.000	ppbV	0.00
Standard Area = 228204			Recovery =		98.05%	
33) 1,4-difluorobenzene	11.81	114	647135	10.000	ppbV	0.00
Standard Area = 659248			Recovery =		98.16%	
51) chlorobenzene-D5	16.53	54	93972	10.000	ppbV	0.00
Standard Area = 98040			Recovery =		95.85%	
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.43	65	111208	9.980	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		99.80%	
53) toluene-D8	14.64	98	469864	10.109	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		101.09%	
67) bromofluorobenzene	17.90	95	295653	9.713	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =		97.13%	
Target Compounds						
					Qvalue	
2) propylene	3.89	41	11632M4	1.109	ppbV	
3) dichlorodifluoromethane	3.98	85	24277	1.119	ppbV	100
4) chloromethane	4.16	50	10602	1.116	ppbV	99
5) Freon-114	4.28	85	30304	1.120	ppbV	99
6) vinyl chloride	4.41	62	12100	1.110	ppbV	100
7) 1,3-butadiene	4.58	54	11845	1.079	ppbV	99
8) bromomethane	4.89	94	10377	1.112	ppbV	100
9) chloroethane	5.11	64	6122	1.120	ppbV	98
10) ethanol	5.28	31	52257	5.704	ppbV	99
11) vinyl bromide	5.54	106	12184	1.094	ppbV	98
12) acrolein	5.70	56	5808	1.079	ppbV	99
13) acetone	5.86	43	79182	5.047	ppbV	100
14) trichlorofluoromethane	6.06	101	18283	1.104	ppbV	100
15) isopropyl alcohol	6.19	45	49548	2.502	ppbV	100
16) acrylonitrile	6.43	53	10571	1.066	ppbV	98
17) 1,1-dichloroethene	6.82	61	15600	1.097	ppbV	99
18) tertiary butyl alcohol	6.92	59	22447	1.086	ppbV	99
19) methylene chloride	6.99	49	14341	1.068	ppbV	99
20) 3-chloropropene	7.13	41	19540	1.080	ppbV	99
21) carbon disulfide	7.28	76	44870	1.073	ppbV	97
22) Freon 113	7.33	101	24561	1.096	ppbV	100
23) trans-1,2-dichloroethene	8.12	61	19081	1.073	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38594_Ev2.D
 Acq On : 12 Mar 2020 1:44 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD1.0
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:40:28 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312
 .M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.35	63	22285	1.095	ppbV	100
25) MTBE	8.44	73	39388	1.065	ppbV	97
26) vinyl acetate	8.57	43	32118	1.041	ppbV	100
27) 2-butanone	8.85	43	30196	1.074	ppbV	100
28) cis-1,2-dichloroethene	9.35	61	16361	1.081	ppbV	98
29) Ethyl Acetate	9.66	61	4898	1.088	ppbV	87
30) chloroform	9.70	83	24381	1.092	ppbV	99
31) Tetrahydrofuran	10.16	42	18400	1.065	ppbV	97
32) 1,2-dichloroethane	10.55	62	13584	1.091	ppbV	99
34) hexane	9.61	57	24486	1.062	ppbV	91
36) 1,1,1-trichloroethane	10.84	97	20360	1.093	ppbV	100
37) benzene	11.37	78	49241	1.086	ppbV	99
38) carbon tetrachloride	11.54	117	19795	1.072	ppbV	99
39) cyclohexane	11.68	56	26083	1.044	ppbV	99
40) Dibromomethane	12.29	93	13131	1.072	ppbV #	98
41) 1,2-dichloropropane	12.32	63	15002	1.070	ppbV	99
42) bromodichloromethane	12.55	83	26747	1.051	ppbV	100
43) 1,4-dioxane	12.61	88	10946	1.023	ppbV	97
44) trichloroethene	12.60	130	18763	1.051	ppbV	98
45) 2,2,4-trimethylpentane	12.65	57	80062	1.062	ppbV	99
46) heptane	12.97	43	31914	1.053	ppbV	100
47) cis-1,3-dichloropropene	14.23	75	22028	1.052	ppbV	97
48) 4-methyl-2-pentanone	13.66	43	35760	1.040	ppbV	100
49) trans-1,3-dichloropropene	13.62	75	23760	1.062	ppbV	100
50) 1,1,2-trichloroethane	14.44	97	16719	1.086	ppbV	99
52) toluene	14.75	91	54007	1.120	ppbV	100
54) 2-hexanone	15.04	43	32597	1.051	ppbV	93
55) dibromochloromethane	15.20	129	22755	1.035	ppbV	99
56) 1,2-dibromoethane	15.45	107	25992	1.105	ppbV	99
57) tetrachloroethene	15.92	166	22106	1.108	ppbV	99
58) 1,1,1,2-tetrachloroethane	16.56	131	17746	1.080	ppbV	99
59) chlorobenzene	16.57	112	43405	1.106	ppbV	100
60) ethylbenzene	16.93	91	64318	1.101	ppbV	99
61) m+p-xylene	17.09	91	107927	2.218	ppbV	98
62) bromoform	17.16	173	19354	1.000	ppbV	100
63) styrene	17.41	104	45309	1.049	ppbV	99
64) 1,1,2,2-tetrachloroethane	17.51	83	37448	1.109	ppbV	99
65) o-xylene	17.51	91	54368	1.111	ppbV	98
66) 1,2,3-Trichloropropane	17.62	75	29827	1.054	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38594_Ev2.D
 Acq On : 12 Mar 2020 1:44 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD1.0
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:40:28 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	isopropylbenzene	18.02	105	76030	1.064	ppbV	99
69)	Bromobenzene	18.09	77	38377	1.034	ppbV	100
70)	4-ethyl toluene	18.57	105	84953	1.057	ppbV	98
71)	1,3,5-trimethylbenzene	18.63	105	69665	1.075	ppbV	98
72)	tert-butylbenzene	18.96	119	66412	1.053	ppbV	97
73)	1,2,4-trimethylbenzene	18.96	105	68765	1.093	ppbV	95
74)	Benzyl Chloride	19.07	91	40600	0.920	ppbV	98
75)	1,3-dichlorobenzene	19.08	146	37509	1.054	ppbV	98
76)	1,4-dichlorobenzene	19.14	146	35881	1.046	ppbV	92
77)	sec-butylbenzene	19.17	105	98421	1.040	ppbV	99
78)	p-isopropyltoluene	19.29	119	78303	1.015	ppbV	98
79)	1,2-dichlorobenzene	19.41	146	35960	1.068	ppbV	98
80)	n-butylbenzene	19.63	91	65688	1.009	ppbV	98
81)	1,2,4-trichlorobenzene	20.88	180	20086	0.933	ppbV	99
82)	naphthalene	20.99	128	60461	0.848	ppbV	99
83)	1,2,3-trichlorobenzene	21.24	180	21942	0.847	ppbV	97
84)	hexachlorobutadiene	21.31	225	28437	1.090	ppbV	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

```
Data Path   : O:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
Data File   : r38594_Ev2.D
Acq On      : 12 Mar 2020    1:44 PM
Operator    : AIRPIANO3:RY
Sample      : IT015-SIMSTD1.0
Misc        : WG1350409
ALS Vial    : 0    Sample Multiplier: 1
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Quant Time: Mar 12 16:40:28 2020

Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312

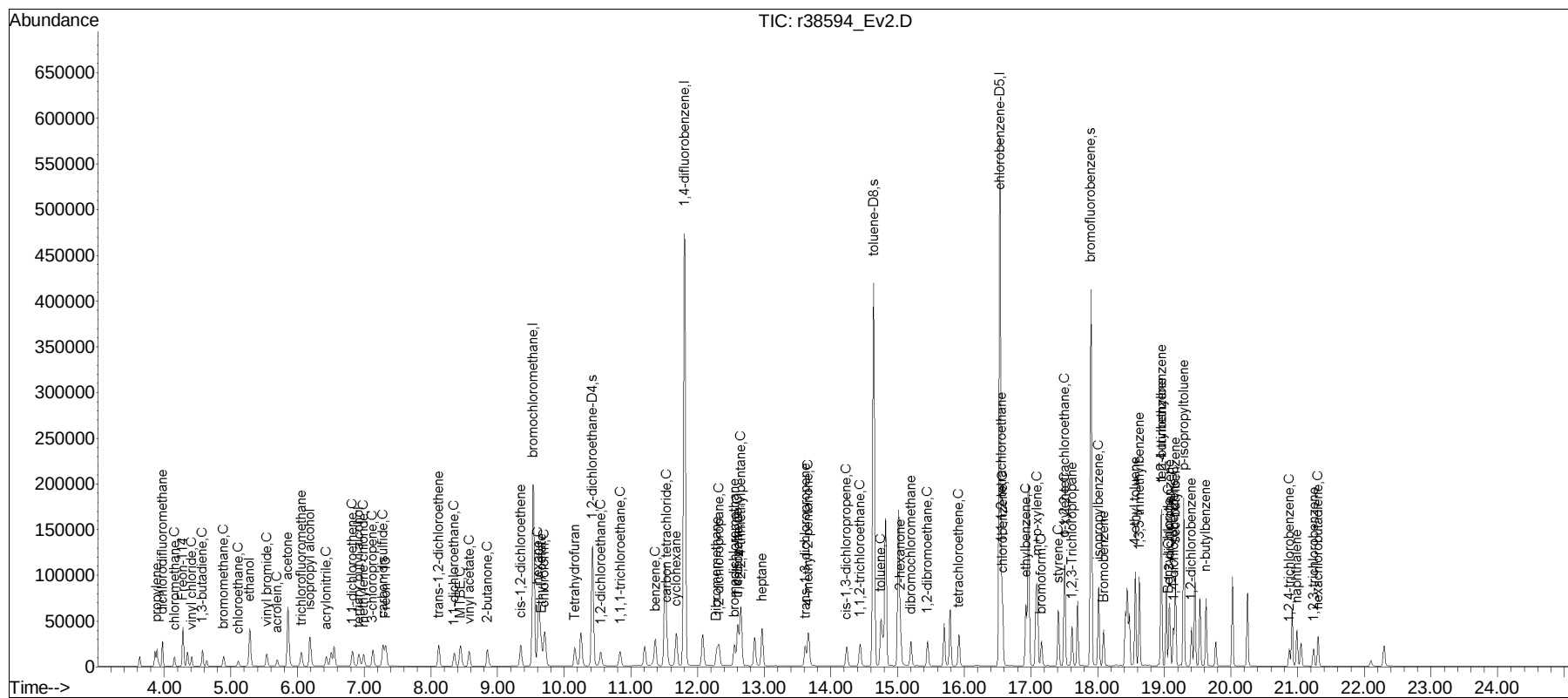
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Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis

QLast Update : Thu Mar 12 16:27:33 2020

Response via : Initial Calibration

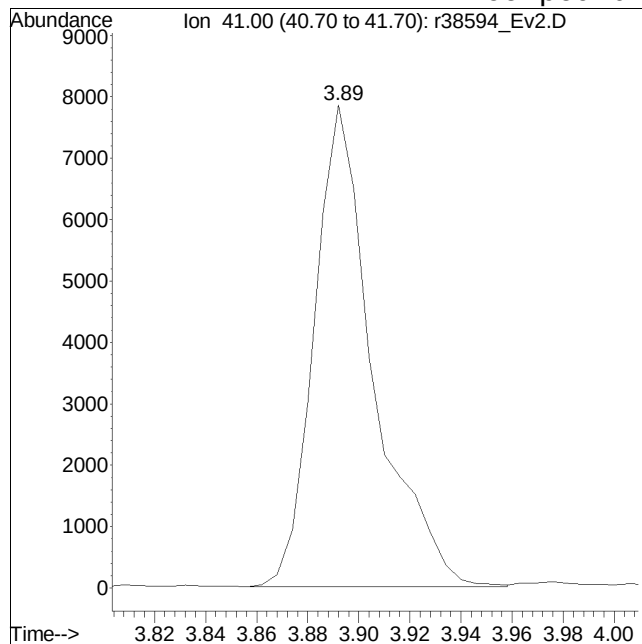
Sub List : Default - All compounds listed20\03\200312SIM_I\r38595_Ev2.D



Manual Integration/Negative Proof Report

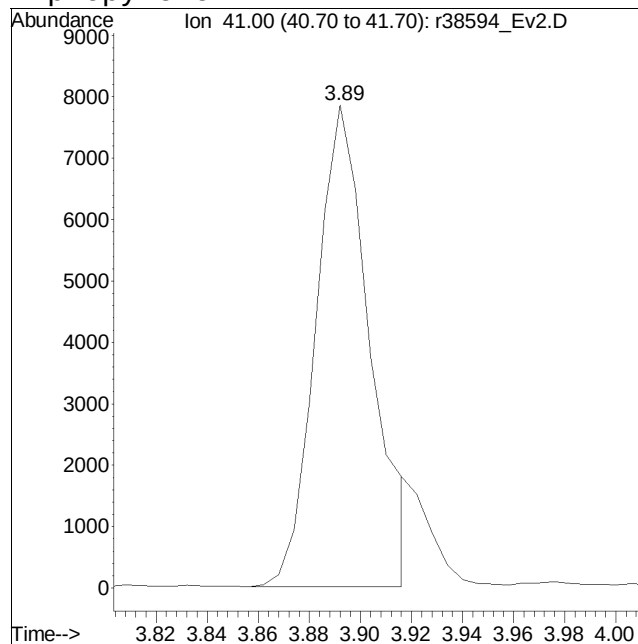
Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
Data File : r38594_Ev2.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:1: 4 Instrument :
Sample : IT015-SIMSTD1.0 Quant Date : 3/12/2020 4:28 pm

Compound #2: propylene



Original Peak Response = 12716

M4 = Poor automated baseline construction.



Manual Peak Response = 11632 M4

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38595_Ev2.D
 Acq On : 12 Mar 2020 2:23 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD5.0
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:26:27 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Fri Feb 14 15:18:57 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.54	49	228204	10.000	ppbV	-0.03
Standard Area = 228204			Recovery =	100.00%		
33) 1,4-difluorobenzene	11.81	114	659248	10.000	ppbV	-0.04
Standard Area = 659248			Recovery =	100.00%		
51) chlorobenzene-D5	16.53	54	98040	10.000	ppbV	-0.03
Standard Area = 98040			Recovery =	100.00%		
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.43	65	113521	9.815	ppbV	-0.04
Spiked Amount 10.000	Range 70 - 130		Recovery =	98.15%		
53) toluene-D8	14.64	98	484933	10.447	ppbV	-0.03
Spiked Amount 10.000	Range 70 - 130		Recovery =	104.47%		
67) bromofluorobenzene	17.90	95	317559	11.127	ppbV	-0.03
Spiked Amount 10.000	Range 70 - 130		Recovery =	111.27%		
Target Compounds						
					Qvalue	
2) propylene	3.89	41	53501M4	5.291	ppbV	
3) dichlorodifluoromethane	3.98	85	110627	4.414	ppbV	100
4) chloromethane	4.16	50	48451	4.219	ppbV	99
5) Freon-114	4.28	85	137985	4.194	ppbV	98
6) vinyl chloride	4.41	62	55584	4.090	ppbV	98
7) 1,3-butadiene	4.58	54	55983	4.301	ppbV	96
8) bromomethane	4.89	94	47587	4.035	ppbV	99
9) chloroethane	5.11	64	27866	3.883	ppbV	96
10) ethanol	5.28	31	233594	20.806	ppbV	90
11) vinyl bromide	5.54	106	56774	4.935	ppbV	99
12) acrolein	5.69	56	27446	4.181	ppbV	96
13) acetone	5.85	43	399998	22.779	ppbV	97
14) trichlorofluoromethane	6.06	101	84453	4.122	ppbV	98
15) isopropyl alcohol	6.18	45	252412	11.372	ppbV	99
16) acrylonitrile	6.43	53	50589	4.399	ppbV	99
17) 1,1-dichloroethene	6.83	61	72540	3.963	ppbV	96
18) tertiary butyl alcohol	6.91	59	105362	4.011	ppbV	98
19) methylene chloride	7.00	49	68457	4.605	ppbV	95
20) 3-chloropropene	7.13	41	92255	5.300	ppbV	98
21) carbon disulfide	7.28	76	213237	4.901	ppbV	100
22) Freon 113	7.33	101	114276	5.076	ppbV	97
23) trans-1,2-dichloroethene	8.12	61	90704	5.305	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38595_Ev2.D
 Acq On : 12 Mar 2020 2:23 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD5.0
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:26:27 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312
 .M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Fri Feb 14 15:18:57 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.35	63	103826	5.042	ppbV	99
25) MTBE	8.44	73	188611	5.074	ppbV	98
26) vinyl acetate	8.57	43	157393	5.068	ppbV	96
27) 2-butanone	8.84	43	143386	4.891	ppbV	96
28) cis-1,2-dichloroethene	9.35	61	77213	5.161	ppbV	99
29) Ethyl Acetate	9.65	61	22961	5.209	ppbV	86
30) chloroform	9.71	83	113800	4.759	ppbV	97
31) Tetrahydrofuran	10.14	42	88111	4.967	ppbV	100
32) 1,2-dichloroethane	10.55	62	63478	4.813	ppbV	99
34) hexane	9.61	57	117410	4.901	ppbV	83
36) 1,1,1-trichloroethane	10.84	97	94871	4.786	ppbV	98
37) benzene	11.37	78	230976	4.449	ppbV	98
38) carbon tetrachloride	11.54	117	94060	4.870	ppbV	99
39) cyclohexane	11.68	56	127302	4.984	ppbV	94
40) Dibromomethane	12.29	93	62392	4.594	ppbV #	96
41) 1,2-dichloropropane	12.32	63	71391	4.744	ppbV	97
42) bromodichloromethane	12.55	83	129613	4.733	ppbV	99
43) 1,4-dioxane	12.59	88	54495	4.948	ppbV	96
44) trichloroethene	12.61	130	90945	4.899	ppbV	100
45) 2,2,4-trimethylpentane	12.65	57	383967	5.048	ppbV	96
46) heptane	12.97	43	154368	4.737	ppbV	94
47) cis-1,3-dichloropropene	14.24	75	106654	4.827	ppbV	98
48) 4-methyl-2-pentanone	13.65	43	175175	4.754	ppbV	95
49) trans-1,3-dichloropropene	13.62	75	113914	4.762	ppbV	99
50) 1,1,2-trichloroethane	14.44	97	78404	4.898	ppbV	93
52) toluene	14.75	91	251536	4.775	ppbV	99
54) 2-hexanone	15.03	43	161727	4.640	ppbV	94
55) dibromochloromethane	15.20	129	114704	5.289	ppbV	99
56) 1,2-dibromoethane	15.45	107	122752	4.868	ppbV	99
57) tetrachloroethene	15.92	166	104101	5.006	ppbV	99
58) 1,1,1,2-tetrachloroethane	16.56	131	85688	5.132	ppbV	99
59) chlorobenzene	16.57	112	204665	5.061	ppbV	99
60) ethylbenzene	16.93	91	304769	5.186	ppbV	96
61) m+p-xylene	17.08	91	507675	10.237	ppbV	98
62) bromoform	17.16	173	100941	5.430	ppbV	99
63) styrene	17.41	104	225330	5.689	ppbV	98
64) 1,1,2,2-tetrachloroethane	17.50	83	176133	4.964	ppbV	100
65) o-xylene	17.50	91	255230	5.182	ppbV	99
66) 1,2,3-Trichloropropane	17.62	75	147626	5.078	ppbV	96

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38595_Ev2.D
 Acq On : 12 Mar 2020 2:23 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD5.0
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:26:27 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Fri Feb 14 15:18:57 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	isopropylbenzene	18.02	105	372895	5.762	ppbV	99
69)	Bromobenzene	18.08	77	193647	5.248	ppbV	98
70)	4-ethyl toluene	18.57	105	419251	6.038	ppbV	99
71)	1,3,5-trimethylbenzene	18.63	105	338175	5.825	ppbV	98
72)	tert-butylbenzene	18.95	119	329006	5.611	ppbV	99
73)	1,2,4-trimethylbenzene	18.95	105	328145	6.084	ppbV	94
74)	Benzyl Chloride	19.07	91	230274	5.909	ppbV	96
75)	1,3-dichlorobenzene	19.08	146	185632	5.781	ppbV	97
76)	1,4-dichlorobenzene	19.13	146	178993	5.774	ppbV	96
77)	sec-butylbenzene	19.17	105	493680	5.974	ppbV	100
78)	p-isopropyltoluene	19.29	119	402517	5.743	ppbV	99
79)	1,2-dichlorobenzene	19.41	146	175598	5.863	ppbV	96
80)	n-butylbenzene	19.63	91	339581	5.662	ppbV	97
81)	1,2,4-trichlorobenzene	20.88	180	112341	6.224	ppbV	99
82)	naphthalene	20.98	128	371725	6.117	ppbV	100
83)	1,2,3-trichlorobenzene	21.23	180	135153	6.204	ppbV	96
84)	hexachlorobutadiene	21.31	225	136030	5.433	ppbV	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

```
Data Path   : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
Data File   : r38595_Ev2.D
Acq On      : 12 Mar 2020    2:23 PM
Operator    : AIRPIANO3:RY
Sample      : IT015-SIMSTD5.0
Misc        : WG1350409
ALS Vial    : 0    Sample Multiplier: 1
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Quant Time: Mar 12 16:26:27 2020

Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312

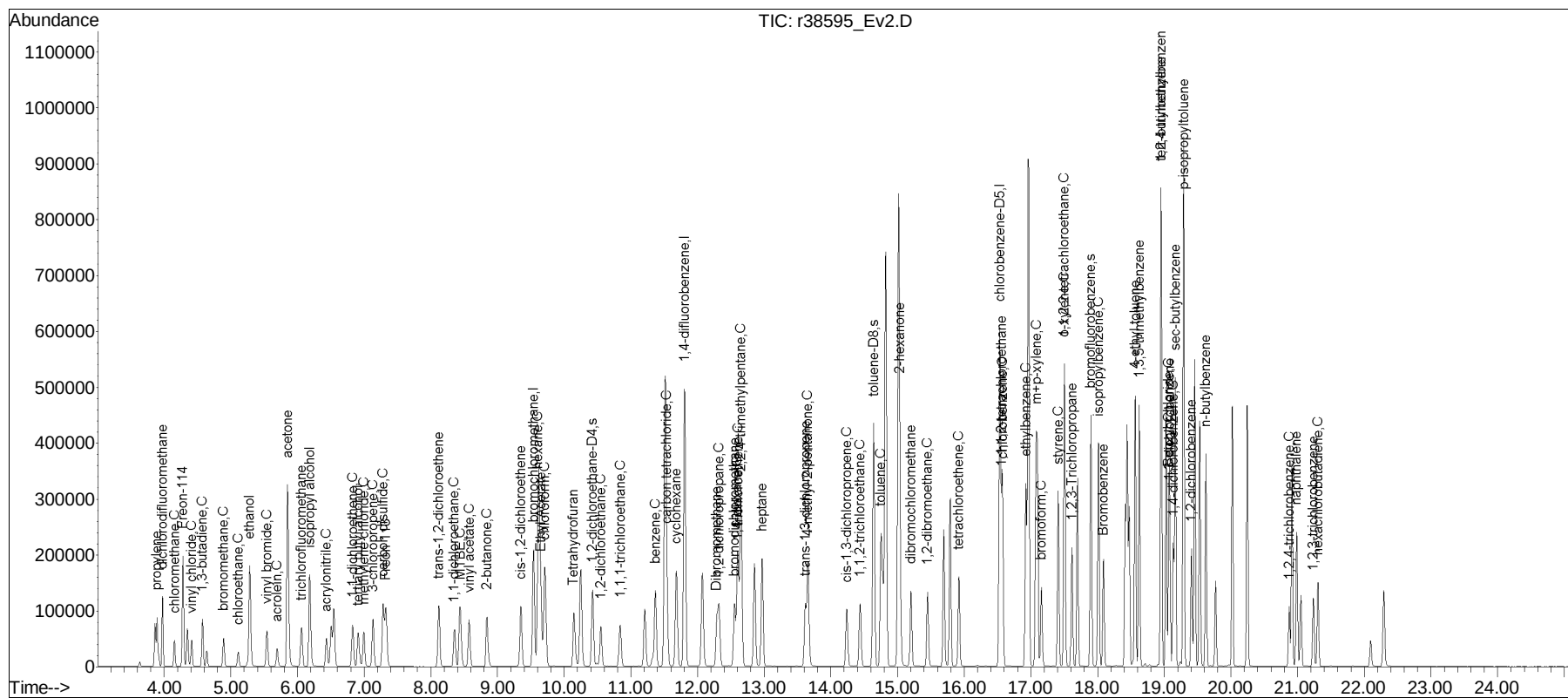
M

Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis

QLast Update : Fri Feb 14 15:18:57 2020

Response via : Initial Calibration

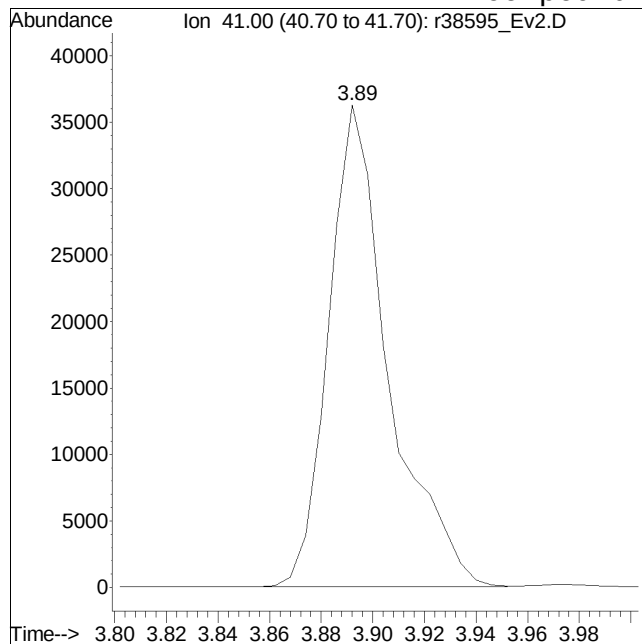
Sub List : Default - All compounds listed20\03\200312SIM_I\r38595_Ev2.D



Manual Integration/Negative Proof Report

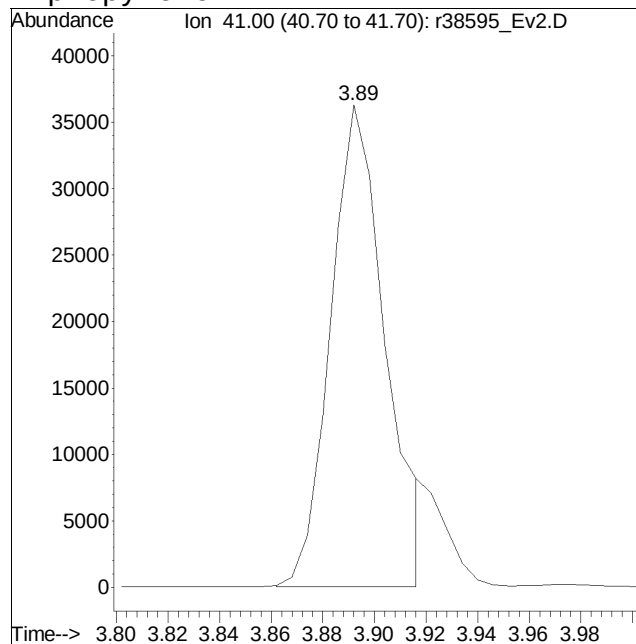
Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
Data File : r38595_Ev2.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:2: 3 Instrument :
Sample : IT015-SIMSTD5.0 Quant Date : 3/12/2020 4:26 pm

Compound #2: propylene



Original Peak Response = 58467

M4 = Poor automated baseline construction.



Manual Peak Response = 53501 M4

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38596_Ev2.D
 Acq On : 12 Mar 2020 3:04 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD010
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:42:23 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.54	49	235905	10.000	ppbV	0.00
Standard Area = 228204			Recovery =	103.37%		
33) 1,4-difluorobenzene	11.81	114	688971	10.000	ppbV	0.00
Standard Area = 659248			Recovery =	104.51%		
51) chlorobenzene-D5	16.53	54	100980	10.000	ppbV	0.00
Standard Area = 98040			Recovery =	103.00%		
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.43	65	115889	9.768	ppbV	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	97.68%		
53) toluene-D8	14.64	98	503813	10.087	ppbV	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	100.87%		
67) bromofluorobenzene	17.90	95	344719	10.539	ppbV	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	105.39%		
Target Compounds						
					Qvalue	
2) propylene	3.90	41	104724M4	9.468	ppbV	
3) dichlorodifluoromethane	3.98	85	219346	9.590	ppbV	99
4) chloromethane	4.16	50	96747	9.658	ppbV	100
5) Freon-114	4.28	85	271489	9.516	ppbV	99
6) vinyl chloride	4.41	62	112430	9.783	ppbV	99
7) 1,3-butadiene	4.58	54	113004	9.763	ppbV	98
8) bromomethane	4.89	94	95947	9.752	ppbV	98
9) chloroethane	5.12	64	56306	9.773	ppbV	98
10) ethanol	5.29	31	468944	48.550	ppbV	99
11) vinyl bromide	5.54	106	114633	9.766	ppbV	100
12) acrolein	5.70	56	56374	9.935	ppbV	99
13) acetone	5.85	43	786245	47.536	ppbV	98
14) trichlorofluoromethane	6.06	101	168588	9.655	ppbV	99
15) isopropyl alcohol	6.19	45	500832	23.993	ppbV	100
16) acrylonitrile	6.44	53	103159	9.863	ppbV	100
17) 1,1-dichloroethene	6.83	61	145886	9.727	ppbV	99
18) tertiary butyl alcohol	6.91	59	238758	10.960	ppbV #	94
19) methylene chloride	7.00	49	154834	10.940	ppbV	95
20) 3-chloropropene	7.13	41	189500	9.935	ppbV	99
21) carbon disulfide	7.28	76	435769	9.884	ppbV	100
22) Freon 113	7.33	101	231987	9.819	ppbV	100
23) trans-1,2-dichloroethene	8.13	61	185017	9.866	ppbV	94

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38596_Ev2.D
 Acq On : 12 Mar 2020 3:04 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD010
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:42:23 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.36	63	211785	9.866	ppbV	99
25) MTBE	8.43	73	385107	9.876	ppbV	98
26) vinyl acetate	8.57	43	324337	9.967	ppbV	100
27) 2-butanone	8.83	43	292925	9.881	ppbV	97
28) cis-1,2-dichloroethene	9.35	61	157575	9.871	ppbV	98
29) Ethyl Acetate	9.65	61	48676	10.254	ppbV	98
30) chloroform	9.71	83	233429	9.921	ppbV	99
31) Tetrahydrofuran	10.14	42	181102	9.941	ppbV	98
32) 1,2-dichloroethane	10.55	62	129294	9.852	ppbV	99
34) hexane	9.62	57	238133	9.704	ppbV	87
36) 1,1,1-trichloroethane	10.84	97	193739	9.770	ppbV	99
37) benzene	11.37	78	472180	9.780	ppbV	100
38) carbon tetrachloride	11.55	117	193442	9.839	ppbV	99
39) cyclohexane	11.68	56	259395	9.749	ppbV	99
40) Dibromomethane	12.29	93	126740	9.719	ppbV #	99
41) 1,2-dichloropropane	12.32	63	145500	9.751	ppbV	99
42) bromodichloromethane	12.56	83	267378	9.869	ppbV	98
43) 1,4-dioxane	12.59	88	112079	9.840	ppbV	100
44) trichloroethene	12.61	130	186412	9.806	ppbV	99
45) 2,2,4-trimethylpentane	12.65	57	764287	9.523	ppbV	100
46) heptane	12.97	43	312867	9.697	ppbV	98
47) cis-1,3-dichloropropene	14.24	75	222944	10.001	ppbV	99
48) 4-methyl-2-pentanone	13.65	43	358448	9.790	ppbV	99
49) trans-1,3-dichloropropene	13.62	75	235616	9.896	ppbV	100
50) 1,1,2-trichloroethane	14.44	97	161139	9.833	ppbV	100
52) toluene	14.75	91	517094	9.979	ppbV	100
54) 2-hexanone	15.03	43	328570	9.862	ppbV	98
55) dibromochloromethane	15.20	129	239495	10.136	ppbV	100
56) 1,2-dibromoethane	15.45	107	256662	10.150	ppbV	99
57) tetrachloroethene	15.93	166	213897	9.974	ppbV	98
58) 1,1,1,2-tetrachloroethane	16.56	131	175943	9.968	ppbV	100
59) chlorobenzene	16.57	112	426884	10.125	ppbV	100
60) ethylbenzene	16.93	91	625265	9.959	ppbV	100
61) m+p-xylene	17.09	91	1043096	19.948	ppbV	99
62) bromoform	17.16	173	213174	10.252	ppbV	99
63) styrene	17.41	104	469368	10.112	ppbV	99
64) 1,1,2,2-tetrachloroethane	17.50	83	367051	10.116	ppbV	100
65) o-xylene	17.51	91	521746	9.924	ppbV	96
66) 1,2,3-Trichloropropane	17.62	75	306646	10.084	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38596_Ev2.D
 Acq On : 12 Mar 2020 3:04 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD010
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:42:23 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) isopropylbenzene	18.02	105	757649	9.863	ppbV	98
69) Bromobenzene	18.09	77	402821	10.098	ppbV	100
70) 4-ethyl toluene	18.57	105	861782	9.978	ppbV	99
71) 1,3,5-trimethylbenzene	18.63	105	691080	9.920	ppbV	98
72) tert-butylbenzene	18.95	119	680282	10.037	ppbV	99
73) 1,2,4-trimethylbenzene	18.96	105	667129	9.869	ppbV	90
74) Benzyl Chloride	19.07	91	508868	10.727	ppbV	99
75) 1,3-dichlorobenzene	19.08	146	390028	10.200	ppbV	99
76) 1,4-dichlorobenzene	19.13	146	382121	10.363	ppbV	99
77) sec-butylbenzene	19.17	105	1005860	9.891	ppbV	99
78) p-isopropyltoluene	19.29	119	830046	10.011	ppbV	100
79) 1,2-dichlorobenzene	19.41	146	367113	10.149	ppbV	99
80) n-butylbenzene	19.63	91	704184	10.067	ppbV	99
81) 1,2,4-trichlorobenzene	20.88	180	256061	11.065	ppbV	99
82) naphthalene	20.99	128	829709	10.835	ppbV	98
83) 1,2,3-trichlorobenzene	21.23	180	305188	10.962	ppbV	98
84) hexachlorobutadiene	21.31	225	277658	9.909	ppbV	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

(QT Reviewed)

```
Data Path   : O:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
Data File   : r38596_Ev2.D
Acq On      : 12 Mar 2020    3:04 PM
Operator    : AIRPIANO3:RY
Sample      : IT015-SIMSTD010
Misc        : WG1350409
ALS Vial    : 0    Sample Multiplier: 1
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Quant Time: Mar 12 16:42:23 2020

Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312

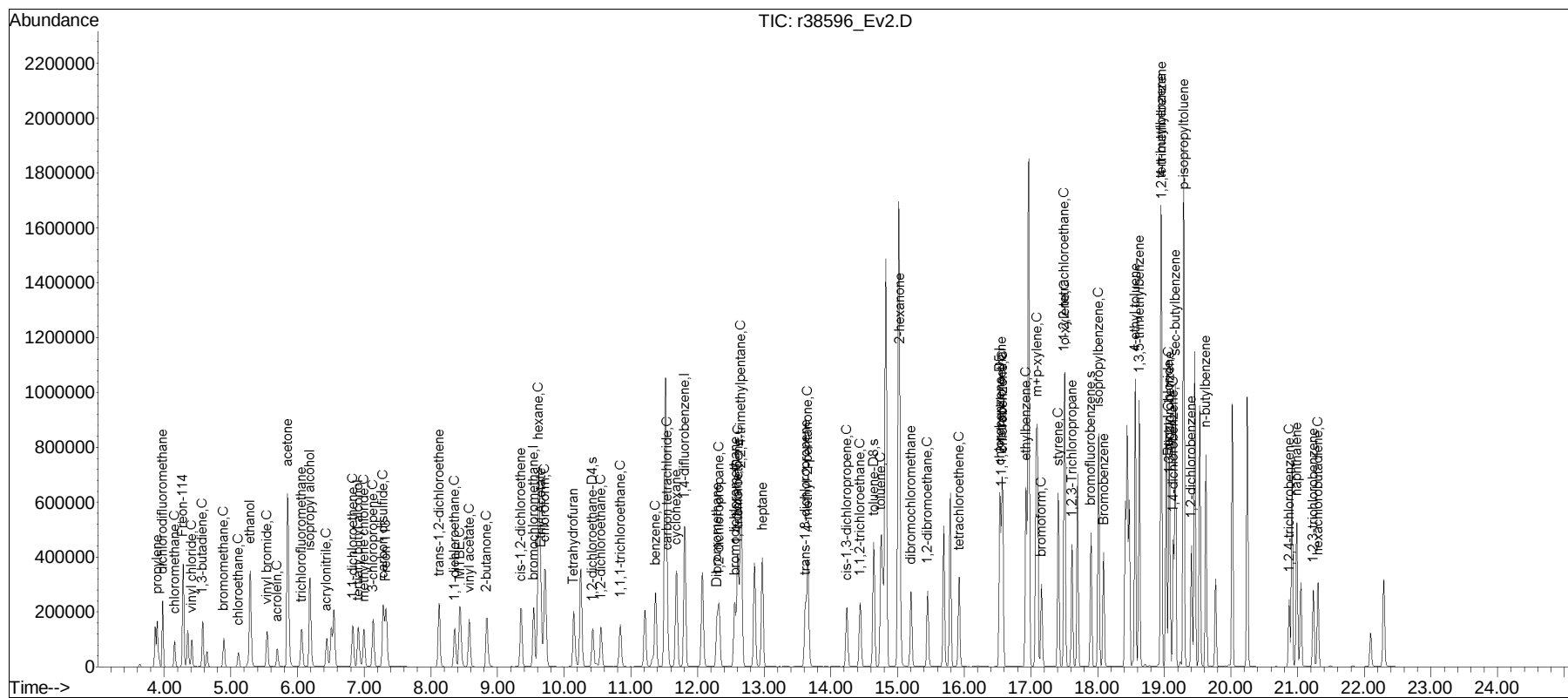
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Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis

QLast Update : Thu Mar 12 16:27:33 2020

Response via : Initial Calibration

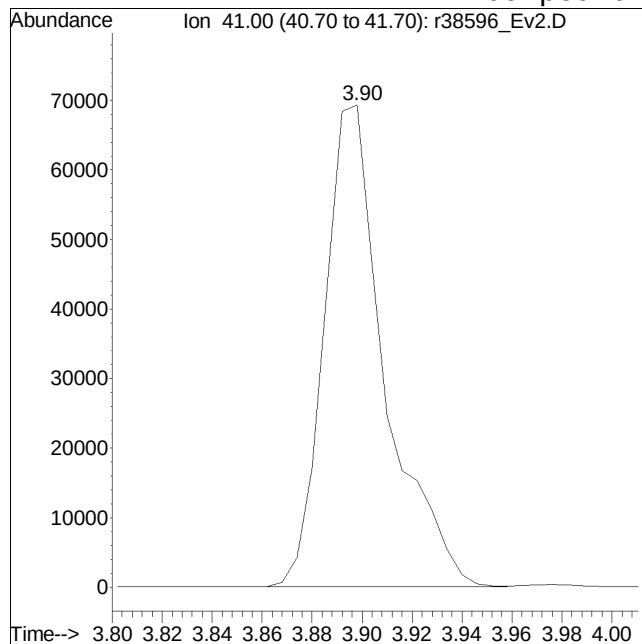
Sub List : Default - All compounds listed20\03\200312SIM I\r38595 Ev2.D



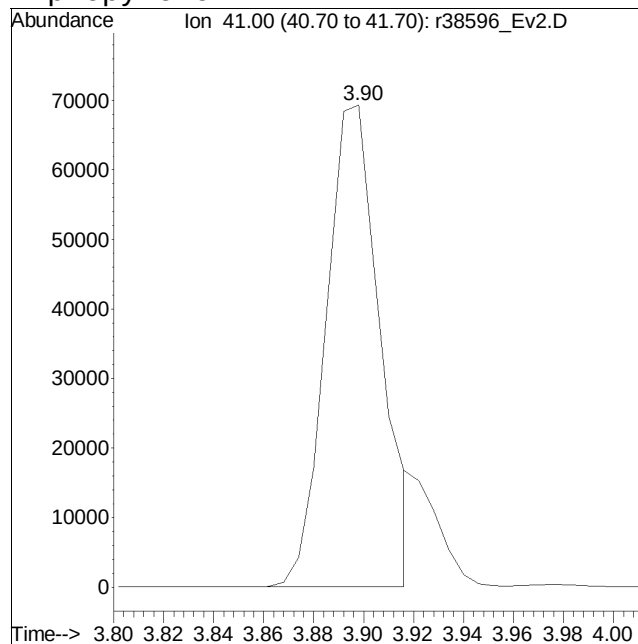
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
Data File : r38596_Ev2.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:3: 4 Instrument :
Sample : IT015-SIMSTD010 Quant Date : 3/12/2020 4:28 pm

Compound #2: propylene



Original Peak Response = 116940



Manual Peak Response = 104724 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38597_Ev2.D
 Acq On : 12 Mar 2020 3:41 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD020
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:44:37 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.54	49	246704	10.000	ppbV	0.00
Standard Area = 228204			Recovery = 108.11%			
33) 1,4-difluorobenzene	11.81	114	721734	10.000	ppbV	0.00
Standard Area = 659248			Recovery = 109.48%			
51) chlorobenzene-D5	16.53	54	103484	10.000	ppbV	0.00
Standard Area = 98040			Recovery = 105.55%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.43	65	115087	9.260	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 92.60%			
53) toluene-D8	14.64	98	503079	9.828	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.28%			
67) bromofluorobenzene	17.90	95	318110	9.490	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 94.90%			
Target Compounds						
					Qvalue	
2) propylene	3.89	41	216963M4	18.756	ppbV	
3) dichlorodifluoromethane	3.98	85	449454	18.791	ppbV	99
4) chloromethane	4.15	50	203565	19.432	ppbV	99
5) Freon-114	4.28	85	549846	18.430	ppbV	96
6) vinyl chloride	4.41	62	242106	20.145	ppbV	99
7) 1,3-butadiene	4.58	54	241130	19.921	ppbV	96
8) bromomethane	4.89	94	205927	20.014	ppbV	99
9) chloroethane	5.11	64	122477	20.328	ppbV	98
10) ethanol	5.29	31	1097895	108.689	ppbV	97
11) vinyl bromide	5.54	106	277552	22.611	ppbV	97
12) acrolein	5.69	56	131028	22.080	ppbV #	94
13) acetone	5.84	43	1897263	109.687	ppbV	93
14) trichlorofluoromethane	6.06	101	447033	24.482	ppbV	99
15) isopropyl alcohol	6.18	45	1255311	57.504	ppbV	98
16) acrylonitrile	6.43	53	245194	22.417	ppbV	95
17) 1,1-dichloroethene	6.83	61	360502	22.985	ppbV	98
18) tertiary butyl alcohol	6.89	59	511510	22.454	ppbV #	93
19) methylene chloride	7.00	49	334373	22.591	ppbV	97
20) 3-chloropropene	7.13	41	401426	20.125	ppbV	99
21) carbon disulfide	7.28	76	916982	19.889	ppbV	99
22) Freon 113	7.33	101	490045	19.833	ppbV	99
23) trans-1,2-dichloroethene	8.12	61	389696	19.871	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38597_Ev2.D
 Acq On : 12 Mar 2020 3:41 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD020
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:44:37 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312
 .M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.36	63	451572	20.116	ppbV	99
25) MTBE	8.43	73	799751	19.611	ppbV	98
26) vinyl acetate	8.57	43	686815	20.182	ppbV	100
27) 2-butanone	8.82	43	613199	19.779	ppbV	99
28) cis-1,2-dichloroethene	9.35	61	338896	20.300	ppbV	99
29) Ethyl Acetate	9.64	61	101729	20.491	ppbV	95
30) chloroform	9.71	83	499582	20.304	ppbV	99
31) Tetrahydrofuran	10.13	42	382843	20.096	ppbV	96
32) 1,2-dichloroethane	10.55	62	269952	19.669	ppbV	98
34) hexane	9.62	57	510000	19.838	ppbV #	79
36) 1,1,1-trichloroethane	10.84	97	403711	19.435	ppbV	99
37) benzene	11.37	78	1025695	20.281	ppbV	99
38) carbon tetrachloride	11.55	117	400212	19.432	ppbV	99
39) cyclohexane	11.69	56	563268	20.208	ppbV	97
40) Dibromomethane	12.29	93	261334	19.130	ppbV #	97
41) 1,2-dichloropropane	12.32	63	313483	20.055	ppbV	99
42) bromodichloromethane	12.55	83	563398	19.852	ppbV	99
43) 1,4-dioxane	12.59	88	240507	20.156	ppbV	99
44) trichloroethene	12.61	130	398534	20.014	ppbV	99
45) 2,2,4-trimethylpentane	12.65	57	1635346	19.452	ppbV	99
46) heptane	12.97	43	657671	19.458	ppbV	95
47) cis-1,3-dichloropropene	14.23	75	477040	20.428	ppbV	99
48) 4-methyl-2-pentanone	13.65	43	750051	19.555	ppbV	95
49) trans-1,3-dichloropropene	13.62	75	506110	20.291	ppbV	99
50) 1,1,2-trichloroethane	14.44	97	344538	20.070	ppbV	98
52) toluene	14.75	91	1098080	20.679	ppbV	100
54) 2-hexanone	15.03	43	648427	18.992	ppbV	95
55) dibromochloromethane	15.20	129	497362	20.540	ppbV	98
56) 1,2-dibromoethane	15.45	107	549442	21.203	ppbV	100
57) tetrachloroethene	15.93	166	463280	21.081	ppbV	96
58) 1,1,1,2-tetrachloroethane	16.56	131	362977	20.066	ppbV	99
59) chlorobenzene	16.57	112	940620	21.771	ppbV	98
60) ethylbenzene	16.93	91	1326925	20.624	ppbV	97
61) m+p-xylene	17.09	91	2183262	40.743	ppbV	96
62) bromoform	17.16	173	452748	21.247	ppbV	99
63) styrene	17.41	104	1023569	21.518	ppbV	99
64) 1,1,2,2-tetrachloroethane	17.50	83	791244	21.280	ppbV	99
65) o-xylene	17.51	91	1073776	19.929	ppbV	92
66) 1,2,3-Trichloropropane	17.62	75	631656	20.268	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38597_Ev2.D
 Acq On : 12 Mar 2020 3:41 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD020
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:44:37 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:27:33 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	isopropylbenzene	18.02	105	1562275	19.846	ppbV	95
69)	Bromobenzene	18.09	77	842063	20.598	ppbV	98
70)	4-ethyl toluene	18.57	105	1755086	19.830	ppbV	95
71)	1,3,5-trimethylbenzene	18.63	105	1444302	20.231	ppbV	93
72)	tert-butylbenzene	18.96	119	1349200	19.426	ppbV	99
73)	1,2,4-trimethylbenzene	18.96	105	1314264	18.972	ppbV	86
74)	Benzyl Chloride	19.07	91	1038715	21.367	ppbV	96
75)	1,3-dichlorobenzene	19.08	146	811137	20.699	ppbV	96
76)	1,4-dichlorobenzene	19.13	146	816915	21.619	ppbV	97
77)	sec-butylbenzene	19.17	105	1990310	19.097	ppbV	98
78)	p-isopropyltoluene	19.29	119	1601301	18.845	ppbV	99
79)	1,2-dichlorobenzene	19.41	146	782372	21.105	ppbV	97
80)	n-butylbenzene	19.63	91	1365197	19.044	ppbV	99
81)	1,2,4-trichlorobenzene	20.88	180	489973	20.660	ppbV	97
82)	naphthalene	20.99	128	1432486	18.254	ppbV	97
83)	1,2,3-trichlorobenzene	21.23	180	526898	18.467	ppbV	96
84)	hexachlorobutadiene	21.31	225	514846	17.928	ppbV	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38597_Ev2.D
 Acq On : 12 Mar 2020 3:41 PM
 Operator : AIRPIANO3:RY
 Sample : IT015-SIMSTD020
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:44:37 2020

Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312

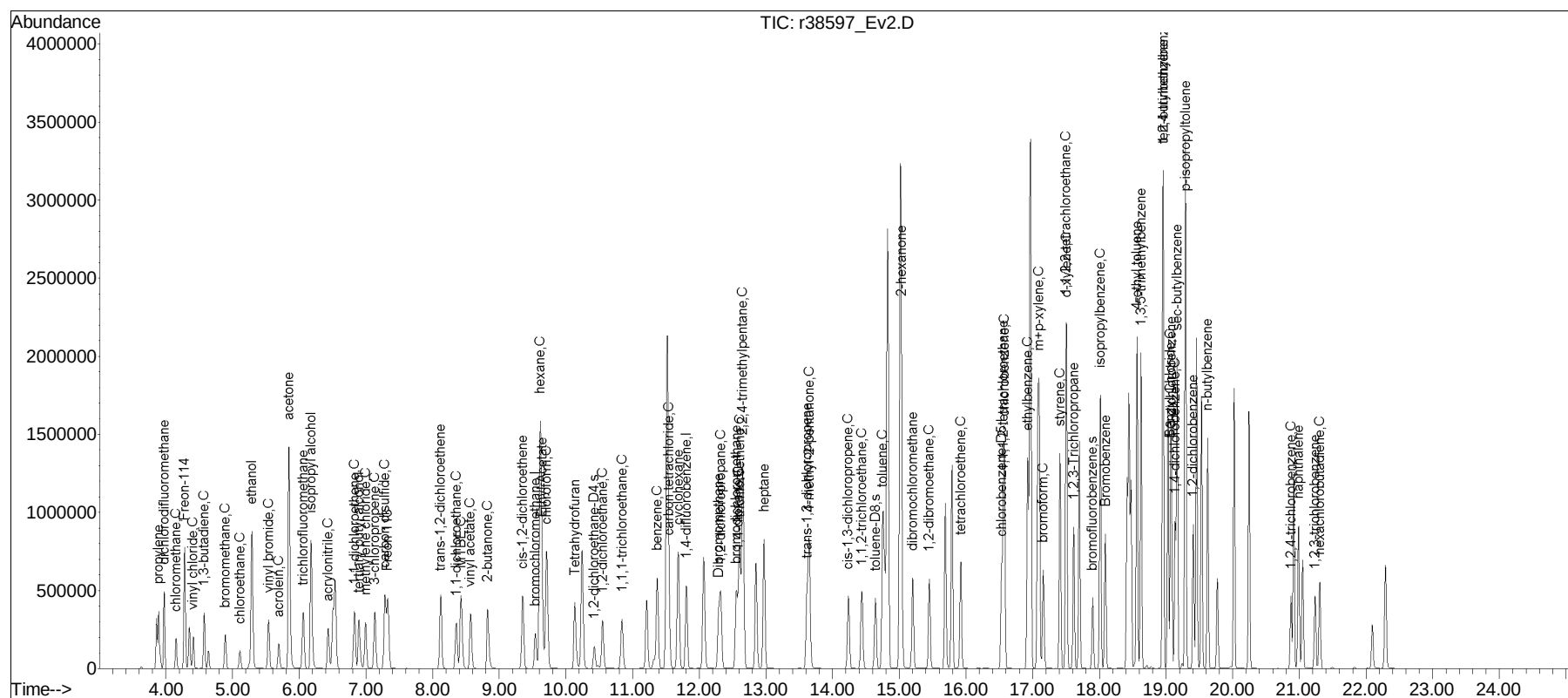
..M

Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis

QLast Update : Thu Mar 12 16:27:33 2020

Response via : Initial Calibration

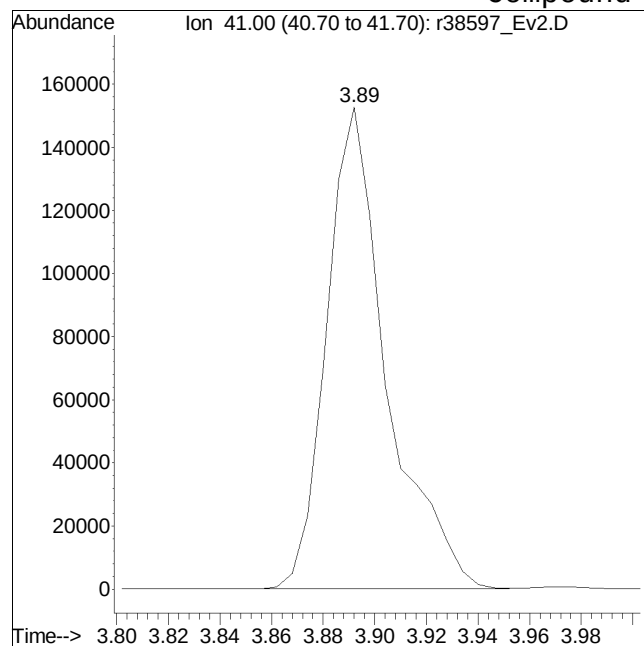
Sub List : Default - All compounds listed 20\03\200312SIM_I\r38595_Ev2.D



Manual Integration/Negative Proof Report

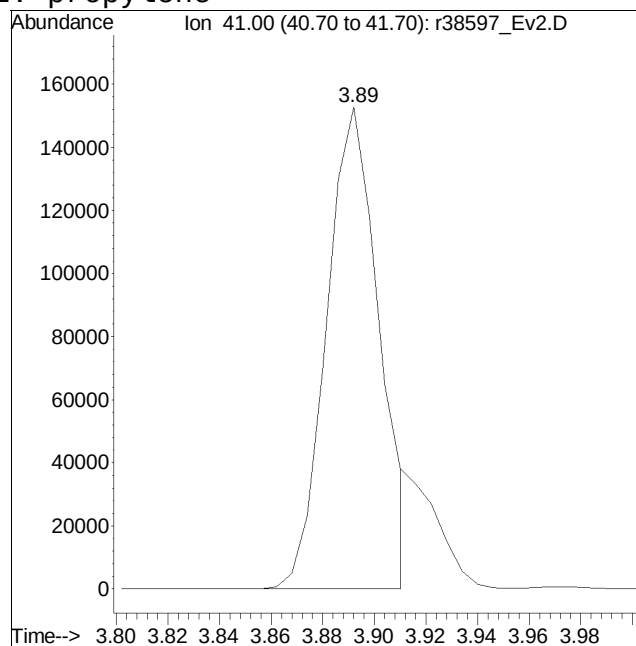
Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
Data File : r38597_Ev2.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:3: 1 Instrument :
Sample : IT015-SIMSTD020 Quant Date : 3/12/2020 4:29 pm

Compound #2: propylene



Original Peak Response = 246807

M4 = Poor automated baseline construction.



Manual Peak Response = 216963 M4

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38598_Ev2.D
 Acq On : 12 Mar 2020 4:20 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD050
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:47:49 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:45:29 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.54	49	255770	10.000	ppbV	0.00
Standard Area = 228204			Recovery =	112.08%		
33) 1,4-difluorobenzene	11.81	114	749542	10.000	ppbV	0.00
Standard Area = 659248			Recovery =	113.70%		
51) chlorobenzene-D5	16.53	54	105079	10.000	ppbV	0.00
Standard Area = 98040			Recovery =	107.18%		
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.43	65	108644	8.543	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	85.43%		
53) toluene-D8	14.64	98	516638	9.987	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	99.87%		
67) bromofluorobenzene	17.90	95	347673	10.579	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	105.79%		
Target Compounds						
					Qvalue	
2) propylene	3.89	41	505517M4	40.912	ppbV	
3) dichlorodifluoromethane	3.98	85	885663	34.035	ppbV	99
4) chloromethane	4.16	50	443879	38.825	ppbV	97
5) Freon-114	4.28	85	1068621	32.213	ppbV	91
6) vinyl chloride	4.41	62	556445	40.015	ppbV	99
7) 1,3-butadiene	4.58	54	540784	40.212	ppbV	96
8) bromomethane	4.89	94	461504	39.006	ppbV	98
9) chloroethane	5.12	64	282883	41.178	ppbV	93
10) ethanol	5.30	31	1807135	157.566	ppbV	99
11) vinyl bromide	5.54	106	503448	36.928	ppbV	98
12) acrolein	5.69	56	287635	43.375	ppbV	97
13) acetone	5.85	43	2759399	149.186	ppbV #	84
14) trichlorofluoromethane	6.06	101	694126	33.322	ppbV	100
15) isopropyl alcohol	6.19	45	2008048	84.464	ppbV	98
16) acrylonitrile	6.44	53	519757	44.190	ppbV	97
17) 1,1-dichloroethene	6.83	61	828787	45.841	ppbV	99
18) tertiary butyl alcohol	6.91	59	1224661	47.109	ppbV	96
19) methylene chloride	7.00	49	787704	47.896	ppbV	99
20) 3-chloropropene	7.13	41	939556	43.404	ppbV	97
21) carbon disulfide	7.28	76	2087384	42.024	ppbV	98
22) Freon 113	7.33	101	1102711	40.292	ppbV	97
23) trans-1,2-dichloroethene	8.13	61	905392	41.999	ppbV	93

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38598_Ev2.D
 Acq On : 12 Mar 2020 4:20 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD050
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:47:49 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:45:29 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.36	63	1053759	42.456	ppbV	100
25) MTBE	8.43	73	1795417	40.746	ppbV	95
26) vinyl acetate	8.57	43	1590127	44.199	ppbV	95
27) 2-butanone	8.83	43	1416093	42.303	ppbV	98
28) cis-1,2-dichloroethene	9.35	61	786066	41.552	ppbV	99
29) Ethyl Acetate	9.65	61	248596	45.990	ppbV	73
30) chloroform	9.71	83	1110027	40.525	ppbV	99
31) Tetrahydrofuran	10.13	42	901647	44.326	ppbV	97
32) 1,2-dichloroethane	10.55	62	586268	37.024	ppbV	95
34) hexane	9.62	57	1178457	42.789	ppbV	98
36) 1,1,1-trichloroethane	10.84	97	939792	40.342	ppbV #	97
37) benzene	11.37	78	2385430	41.318	ppbV	99
38) carbon tetrachloride	11.55	117	812118	35.733	ppbV	98
39) cyclohexane	11.69	56	1354739	45.403	ppbV	94
40) Dibromomethane	12.29	93	583469	36.647	ppbV #	93
41) 1,2-dichloropropane	12.33	63	729155	40.962	ppbV	97
42) bromodichloromethane	12.55	83	1269550	40.843	ppbV	99
43) 1,4-dioxane	12.59	88	601180	47.053	ppbV	97
44) trichloroethene	12.61	130	934900	43.104	ppbV	95
45) 2,2,4-trimethylpentane	12.65	57	3770336	42.190	ppbV	97
46) heptane	12.97	43	1474685	41.226	ppbV	92
47) cis-1,3-dichloropropene	14.24	75	1076197	43.627	ppbV	98
48) 4-methyl-2-pentanone	13.65	43	1688946	42.203	ppbV	92
49) trans-1,3-dichloropropene	13.62	75	1155540	43.790	ppbV	97
50) 1,1,2-trichloroethane	14.44	97	798761	41.296	ppbV	93
52) toluene	14.76	91	2499706	42.122	ppbV	99
54) 2-hexanone	15.03	43	1230734	35.649	ppbV #	87
55) dibromochloromethane	15.21	129	1123105	46.054	ppbV	98
56) 1,2-dibromoethane	15.45	107	1240862	43.631	ppbV	100
57) tetrachloroethene	15.93	166	1054030	43.744	ppbV #	94
58) 1,1,1,2-tetrachloroethane	16.56	131	790971	41.188	ppbV	97
59) chlorobenzene	16.57	112	2094649	44.875	ppbV	95
60) ethylbenzene	16.93	91	2951613	42.395	ppbV	95
61) m+p-xylene	17.09	91	4655228	79.341	ppbV	95
62) bromoform	17.16	173	999735	47.337	ppbV	98
63) styrene	17.41	104	2344403	46.718	ppbV	97
64) 1,1,2,2-tetrachloroethane	17.50	83	1631342	41.375	ppbV	99
65) o-xylene	17.51	91	2205760	37.810	ppbV	89
66) 1,2,3-Trichloropropane	17.62	75	1418399	44.128	ppbV	96

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38598_Ev2.D
 Acq On : 12 Mar 2020 4:20 PM
 Operator : AIRPIAN03:RY
 Sample : IT015-SIMSTD050
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:47:49 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:45:29 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) isopropylbenzene	18.02	105	3359591M3	40.854	ppbV	
69) Bromobenzene	18.09	77	1837525	43.358	ppbV	92
70) 4-ethyl toluene	18.57	105	3772270	42.844	ppbV	91
71) 1,3,5-trimethylbenzene	18.63	105	3011283	40.696	ppbV	88
72) tert-butylbenzene	18.96	119	2584189	35.963	ppbV	92
73) 1,2,4-trimethylbenzene	18.96	105	2489876	35.512	ppbV	86
74) Benzyl Chloride	19.07	91	2231707	48.403	ppbV	92
75) 1,3-dichlorobenzene	19.08	146	1773393	45.259	ppbV	94
76) 1,4-dichlorobenzene	19.14	146	1775868	46.049	ppbV #	90
77) sec-butylbenzene	19.17	105	4091429	38.552	ppbV	94
78) p-isopropyltoluene	19.29	119	3059021	35.904	ppbV	92
79) 1,2-dichlorobenzene	19.41	146	1759210	47.271	ppbV	95
80) n-butylbenzene	19.63	91	2916924	41.168	ppbV	96
81) 1,2,4-trichlorobenzene	20.88	180	1283098	62.649	ppbV	94
82) naphthalene	20.99	128	3577367	49.722	ppbV	96
83) 1,2,3-trichlorobenzene	21.24	180	1333359	55.382	ppbV #	90
84) hexachlorobutadiene	21.31	225	1098403	38.018	ppbV	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38598_Ev2.D
 Acq On : 12 Mar 2020 4:20 PM
 Operator : AIRPIANO3:RY
 Sample : IT015-SIMSTD050
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 12 16:47:49 2020

Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312

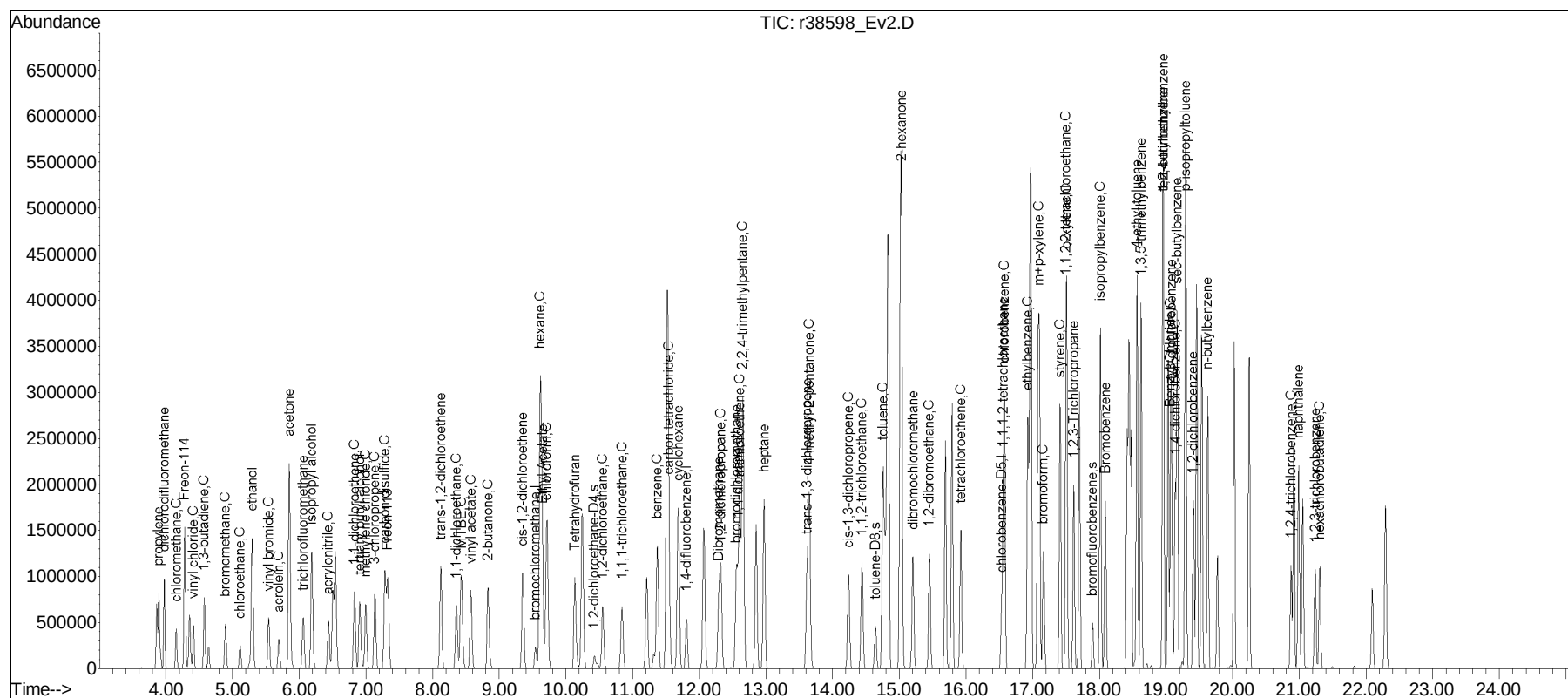
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Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis

QLast Update : Thu Mar 12 16:45:29 2020

Response via : Initial Calibration

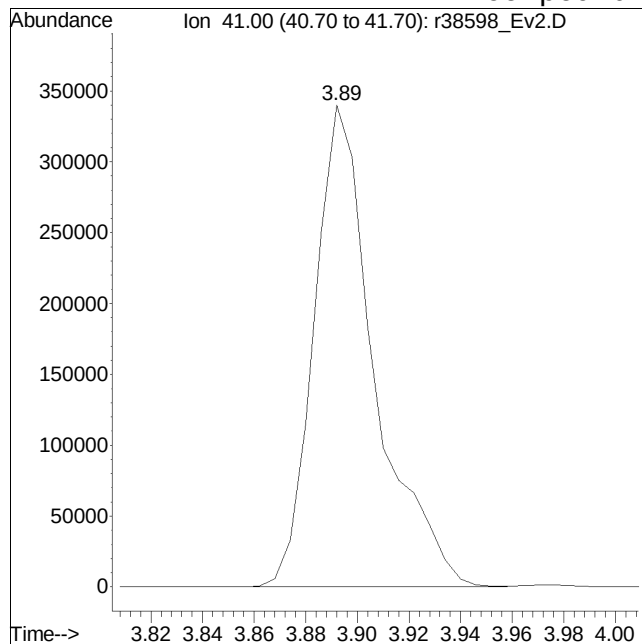
Sub List : Default - All compounds listed 20\03\200312SIM_I\r38598_Ev2.D



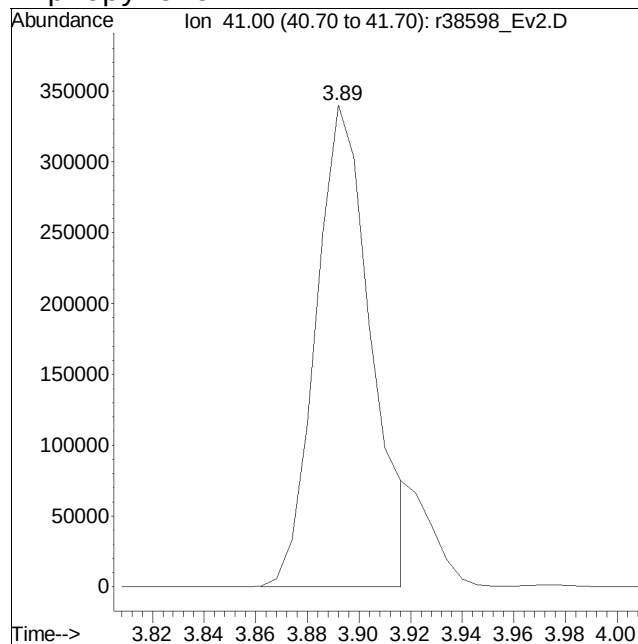
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
Data File : r38598_Ev2.D Operator : AIRPIAN03:RY
Date Inj'd : 3/12/2020 0:4: 0 Instrument :
Sample : IT015-SIMSTD050 Quant Date : 3/12/2020 4:46 pm

Compound #2: propylene



Original Peak Response = 554836



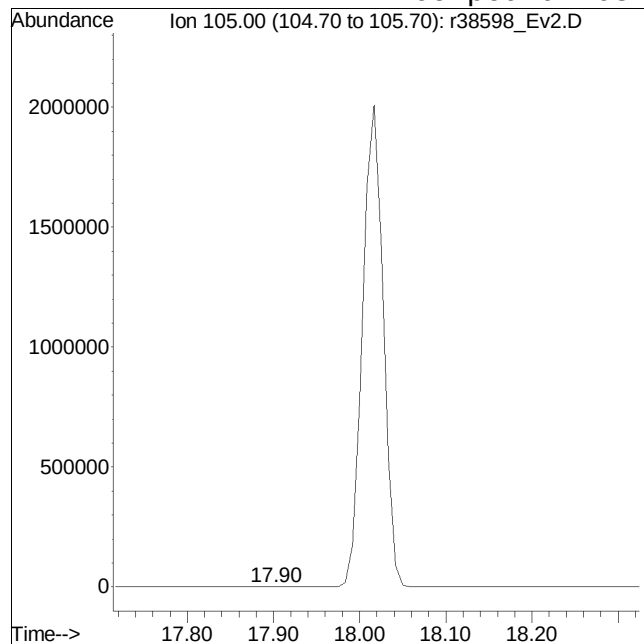
Manual Peak Response = 505517 M4

M4 = Poor automated baseline construction.

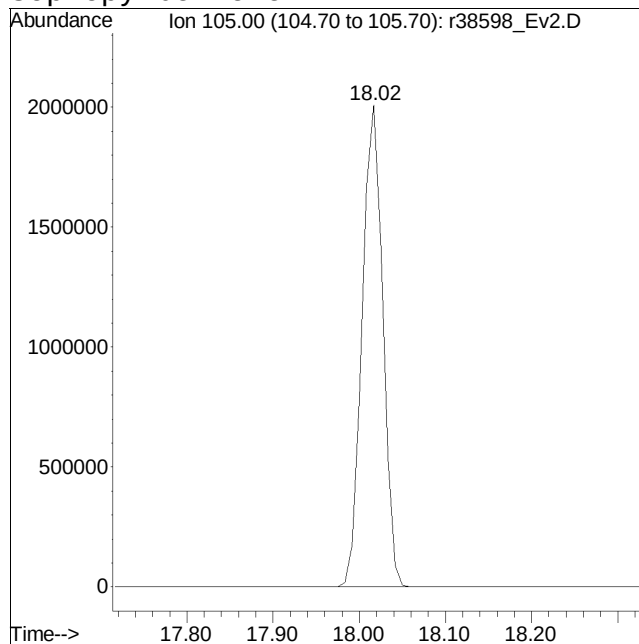
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
 Data File : r38598_Ev2.D Operator : AIRPIAN03:RY
 Date Inj'd : 3/12/2020 0:4: 0 Instrument :
 Sample : IT015-SIMSTD050 Quant Date : 3/12/2020 4:46 pm

Compound #68: isopropylbenzene



Original Peak Response = 317



Manual Peak Response = 3359591 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38603_Ev2.D
 Acq On : 13 Mar 2020 12:45 AM
 Operator : AIRPIAN03:AR
 Sample : CT015-SIMSTD5.0
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 13 04:55:58 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:48:11 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	bromochloromethane	1.000	1.000	0.0	99	0.00
2	propylene	0.471	0.481	-2.1	102	0.00
3	dichlorodifluoromethane	0.971	0.808	16.8	83	0.00
4 C	chloromethane	0.433	0.385	11.1	90	0.00
5	Freon-114	1.246	1.095	12.1	90	0.00
6 C	vinyl chloride	0.533	0.499	6.4	102	0.00
7 C	1,3-butadiene	0.515	0.492	4.5	99	0.00
8 C	bromomethane	0.452	0.413	8.6	98	0.00
9 C	chloroethane	0.264	0.251	4.9	102	0.00
10	ethanol	0.421	0.356	15.4	86	0.00
11 C	vinyl bromide	0.513	0.419	18.3	84	0.00
12 C	acrolein	0.255	0.219	14.1	90	0.00
13	acetone	0.682	0.483	29.2	68	0.00
14	trichlorofluoromethane	0.784	0.570	27.3	76	0.00
15	isopropyl alcohol	0.886	0.690	22.1	77	0.00
16 C	acrylonitrile	0.453	0.406	10.4	91	0.00
17 C	1,1-dichloroethene	0.701	0.618	11.8	96	0.00
18	tertiary butyl alcohol	1.008	0.855	15.2	92	0.00
19 C	methylene chloride	0.638	0.500	21.6	83	0.00
20 C	3-chloropropene	0.830	0.835	-0.6	102	0.00
21 C	carbon disulfide	1.898	1.704	10.2	90	0.00
22	Freon 113	1.047	0.976	6.8	97	0.00
23	trans-1,2-dichloroethene	0.829	0.786	5.2	98	0.00
24 C	1,1-dichloroethane	0.956	0.928	2.9	101	0.00
25 C	MTBE	1.691	1.494	11.6	90	0.00
26 C	vinyl acetate	1.379	1.301	5.7	93	0.00
27 C	2-butanone	1.280	1.196	6.6	94	0.00
28	cis-1,2-dichloroethene	0.727	0.724	0.4	106	0.00
29	Ethyl Acetate	0.209	0.224	-7.2	110	0.00
30 C	chloroform	1.051	1.026	2.4	102	0.00
31	Tetrahydrofuran	0.782	0.750	4.1	96	0.00
32 C	1,2-dichloroethane	0.603	0.479	20.6	85	0.00
33 I	1,4-difluorobenzene	1.000	1.000	0.0	108	0.00
34 C	hexane	0.360	0.367	-1.9	111	0.00
35 s	1,2-dichloroethane-D4	0.167	0.125	25.1	78	0.00
36 C	1,1,1-trichloroethane	0.305	0.236	22.6	88	0.00
37 C	benzene	0.755	0.672	11.0	103	0.00

TSIM3_200312.M Fri Mar 13 05:05:51 2020

1

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38603_Ev2.D
 Acq On : 13 Mar 2020 12:45 AM
 Operator : AIRPIAN03:AR
 Sample : CT015-SIMSTD5.0
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 13 04:55:58 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312
 .M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:48:11 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
38 C	carbon tetrachloride	0.295	0.246	16.6	93	0.00
39	cyclohexane	0.393	0.401	-2.0	112	0.00
40	Dibromomethane	0.206	0.160	22.3	91	0.00
41 C	1,2-dichloropropane	0.233	0.213	8.6	106	0.00
42	bromodichloromethane	0.407	0.360	11.5	99	0.00
43 C	1,4-dioxane	0.169	0.177	-4.7	115	0.00
44 C	trichloroethene	0.285	0.273	4.2	107	0.00
45 C	2,2,4-trimethylpentane	1.166	1.205	-3.3	111	0.00
46	heptane	0.465	0.412	11.4	95	0.00
47 C	cis-1,3-dichloropropene	0.325	0.260	20.0	87	0.00
48 C	4-methyl-2-pentanone	0.520	0.472	9.2	96	0.00
49	trans-1,3-dichloropropene	0.348	0.332	4.6	104	0.00
50 C	1,1,2-trichloroethane	0.254	0.229	9.8	104	0.00
51 I	chlorobenzene-D5	1.000	1.000	0.0	98	0.00
52 C	toluene	5.549	5.576	-0.5	107	0.00
53 s	toluene-D8	4.923	4.713	4.3	94	0.00
54	2-hexanone	3.151	3.169	-0.6	94	0.00
55	dibromochloromethane	2.302	2.434	-5.7	102	0.00
56 C	1,2-dibromoethane	2.672	2.637	1.3	103	0.00
57 C	tetrachloroethene	2.264	2.353	-3.9	109	0.00
58	1,1,1,2-tetrachloroethane	1.795	1.635	8.9	92	0.00
59 C	chlorobenzene	4.397	4.907	-11.6	115	0.00
60 C	ethylbenzene	6.525	6.797	-4.2	107	0.00
61 C	m+p-xylene	5.468	5.547	-1.4	105	0.00
62 C	bromoform	1.999	2.221	-11.1	106	0.00
63 C	styrene	4.744	5.036	-6.2	108	0.00
64 C	1,1,2,2-tetrachloroethane	3.687	4.369	-18.5	119	0.00
65 C	o-xylene	5.416	5.635	-4.0	106	0.00
66	1,2,3-Trichloropropane	3.023	2.785	7.9	91	0.00
67 s	bromofluorobenzene	3.146	3.051	3.0	93	0.00
68 C	isopropylbenzene	7.621	7.563	0.8	98	0.00
69	Bromobenzene	3.957	3.786	4.3	94	0.00
70	4-ethyl toluene	8.259	8.778	-6.3	101	0.00
71	1,3,5-trimethylbenzene	6.911	7.396	-7.0	105	0.00
72	tert-butylbenzene	6.564	6.911	-5.3	101	0.02
73	1,2,4-trimethylbenzene	6.479	7.410	-14.4	109	0.03
74 C	Benzyl Chloride	4.368	4.970	-13.8	104	0.02

TSIM3_200312.M Fri Mar 13 05:05:51 2020

2

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38603_Ev2.D
 Acq On : 13 Mar 2020 12:45 AM
 Operator : AIRPIAN03:AR
 Sample : CT015-SIMSTD5.0
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 13 04:55:58 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:48:11 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
75	1,3-dichlorobenzene	3.694	4.185	-13.3	109	0.03
76 C	1,4-dichlorobenzene	3.641	4.057	-11.4	109	0.03
77	sec-butylbenzene	9.769	9.676	1.0	94	0.02
78	p-isopropyltoluene	7.782	7.738	0.6	93	0.03
79	1,2-dichlorobenzene	3.522	4.026	-14.3	110	0.04
80	n-butylbenzene	6.573	6.836	-4.0	97	0.05
81 C	1,2,4-trichlorobenzene	2.004	3.073	-53.3#	132	0.05
82	naphthalene	6.843	7.666	-12.0	99	0.06
83	1,2,3-trichlorobenzene	2.319	2.850	-22.9	102	0.06
84 C	hexachlorobutadiene	2.676	3.404	-27.2	121	0.05

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38603_Ev2.D
 Acq On : 13 Mar 2020 12:45 AM
 Operator : AIRPIAN03:AR
 Sample : CT015-SIMSTD5.0
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 13 04:55:58 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:48:11 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	9.542	49	226183	10.000	ppbV	0.00
Standard Area = 228204			Recovery =	99.11%		
33) 1,4-difluorobenzene	11.807	114	710328	10.000	ppbV	0.00
Standard Area = 659248			Recovery =	107.75%		
51) chlorobenzene-D5	16.533	54	96331	10.000	ppbV	0.00
Standard Area = 98040			Recovery =	98.26%		
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	10.425	65	89067	7.500	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	75.00%		
53) toluene-D8	14.642	98	453969	9.574	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	95.74%		
67) bromofluorobenzene	17.900	95	293866	9.698	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	96.98%		
Target Compounds						
					Qvalue	
2) propylene	3.898	41	54443M4	5.115	ppbV	
3) dichlorodifluoromethane	3.976	85	91407	4.162	ppbV	99
4) chloromethane	4.156	50	43541	4.449	ppbV	98
5) Freon-114	4.282	85	123783	4.393	ppbV	97
6) vinyl chloride	4.414	62	56457	4.685	ppbV	99
7) 1,3-butadiene	4.582	54	55638	4.772	ppbV	92
8) bromomethane	4.894	94	46760	4.570	ppbV	97
9) chloroethane	5.116	64	28389	4.757	ppbV	91
10) ethanol	5.284	31	201108	21.131	ppbV	95
11) vinyl bromide	5.543	106	47434	4.087	ppbV	99
12) acrolein	5.697	56	24791	4.291	ppbV	95
13) acetone	5.850	43	272875	17.703	ppbV #	83
14) trichlorofluoromethane	6.060	101	64497	3.636	ppbV	99
15) isopropyl alcohol	6.183	45	195002	9.726	ppbV #	97
16) acrylonitrile	6.433	53	45870	4.475	ppbV	96
17) 1,1-dichloroethene	6.828	61	69880	4.407	ppbV	98
18) tertiary butyl alcohol	6.912	59	96645	4.239	ppbV	95
19) methylene chloride	6.996	49	56587	3.918	ppbV	92
20) 3-chloropropene	7.134	41	94429	5.028	ppbV	96
21) carbon disulfide	7.284	76	192720	4.490	ppbV	96
22) Freon 113	7.326	101	110341	4.660	ppbV	98
23) trans-1,2-dichloroethene	8.117	61	88877	4.738	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38603_Ev2.D
 Acq On : 13 Mar 2020 12:45 AM
 Operator : AIRPIAN03:AR
 Sample : CT015-SIMSTD5.0
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 13 04:55:58 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:48:11 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
24) 1,1-dichloroethane	8.350	63	104927	4.854	ppbV	98
25) MTBE	8.442	73	168903	4.416	ppbV #	93
26) vinyl acetate	8.575	43	147076	4.714	ppbV #	93
27) 2-butanone	8.842	43	135292	4.673	ppbV	99
28) cis-1,2-dichloroethene	9.350	61	81824	4.975	ppbV	98
29) Ethyl Acetate	9.650	61	25324	5.359	ppbV	72
30) chloroform	9.708	83	116067	4.884	ppbV	97
31) Tetrahydrofuran	10.142	42	84862	4.795	ppbV	98
32) 1,2-dichloroethane	10.550	62	54167	3.971	ppbV	94
34) hexane	9.608	57	130255	5.096	ppbV	82
36) 1,1,1-trichloroethane	10.842	97	83700	3.866	ppbV #	95
37) benzene	11.367	78	238839	4.451	ppbV	98
38) carbon tetrachloride	11.540	117	87427	4.178	ppbV #	98
39) cyclohexane	11.680	56	142254	5.098	ppbV	95
40) Dibromomethane	12.287	93	56726	3.875	ppbV #	96
41) 1,2-dichloropropane	12.320	63	75735	4.572	ppbV	95
42) bromodichloromethane	12.553	83	127773	4.418	ppbV	97
43) 1,4-dioxane	12.593	88	62743	5.220	ppbV	98
44) trichloroethene	12.607	130	97045	4.787	ppbV	95
45) 2,2,4-trimethylpentane	12.653	57	427876	5.168	ppbV	93
46) heptane	12.967	43	146170	4.423	ppbV	91
47) cis-1,3-dichloropropene	14.233	75	92378	4.003	ppbV	99
48) 4-methyl-2-pentanone	13.658	43	167552	4.536	ppbV #	89
49) trans-1,3-dichloropropene	13.617	75	118020	4.779	ppbV	97
50) 1,1,2-trichloroethane	14.442	97	81161	4.506	ppbV	92
52) toluene	14.750	91	268549	5.024	ppbV	100
54) 2-hexanone	15.033	43	152655	5.029	ppbV #	92
55) dibromochloromethane	15.200	129	117218	5.285	ppbV	98
56) 1,2-dibromoethane	15.450	107	127035	4.935	ppbV	98
57) tetrachloroethene	15.917	166	113336	5.196	ppbV	93
58) 1,1,1,2-tetrachloroethane	16.558	131	78743	4.553	ppbV	98
59) chlorobenzene	16.575	112	236344	5.580	ppbV	96
60) ethylbenzene	16.925	91	327397	5.209	ppbV	100
61) m+p-xylene	17.092	91	534396	10.145	ppbV	98
62) bromoform	17.158	173	106991	5.556	ppbV	99
63) styrene	17.408	104	242553	5.307	ppbV	98
64) 1,1,2,2-tetrachloroethane	17.500	83	210439	5.924	ppbV	99
65) o-xylene	17.508	91	271414	5.202	ppbV	95
66) 1,2,3-Trichloropropane	17.617	75	134118	4.606	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\
 Data File : r38603_Ev2.D
 Acq On : 13 Mar 2020 12:45 AM
 Operator : AIRPIAN03:AR
 Sample : CT015-SIMSTD5.0
 Misc : WG1350409
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 13 04:55:58 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:48:11 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\r38595_Ev2.D
 Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68) isopropylbenzene	18.017	105	364274	4.962	ppbV	95
69) Bromobenzene	18.092	77	182354	4.784	ppbV	95
70) 4-ethyl toluene	18.567	105	422803	5.314	ppbV	97
71) 1,3,5-trimethylbenzene	18.633	105	356217	5.351	ppbV	91
72) tert-butylbenzene	18.967	119	332849	5.264	ppbV	94
73) 1,2,4-trimethylbenzene	18.975	105	356919	5.718	ppbV #	84
74) Benzyl Chloride	19.092	91	239385	5.689	ppbV	96
75) 1,3-dichlorobenzene	19.108	146	201583	5.666	ppbV	97
76) 1,4-dichlorobenzene	19.158	146	195425M3	5.572	ppbV	
77) sec-butylbenzene	19.192	105	466031	4.952	ppbV	97
78) p-isopropyltoluene	19.325	119	372727M3	4.972	ppbV	
79) 1,2-dichlorobenzene	19.450	146	193923	5.715	ppbV	98
80) n-butylbenzene	19.675	91	329248	5.200	ppbV	98
81) 1,2,4-trichlorobenzene	20.925	180	148018	7.668	ppbV	98
82) naphthalene	21.042	128	369222	5.601	ppbV	97
83) 1,2,3-trichlorobenzene	21.292	180	137269	6.146	ppbV	95
84) hexachlorobutadiene	21.358	225	163935	6.359	ppbV	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : Default - All compounds listed20\03\200312SIM_I\r38595_Ev2.D

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\

Data File : r38603_Ev2.D

Acq On : 13 Mar 2020 12:45 AM

Operator : AIRPIANO3:AR

Sample : CT015-SIMSTD5.0

Misc : WG1350409

ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 13 04:55:58 2020

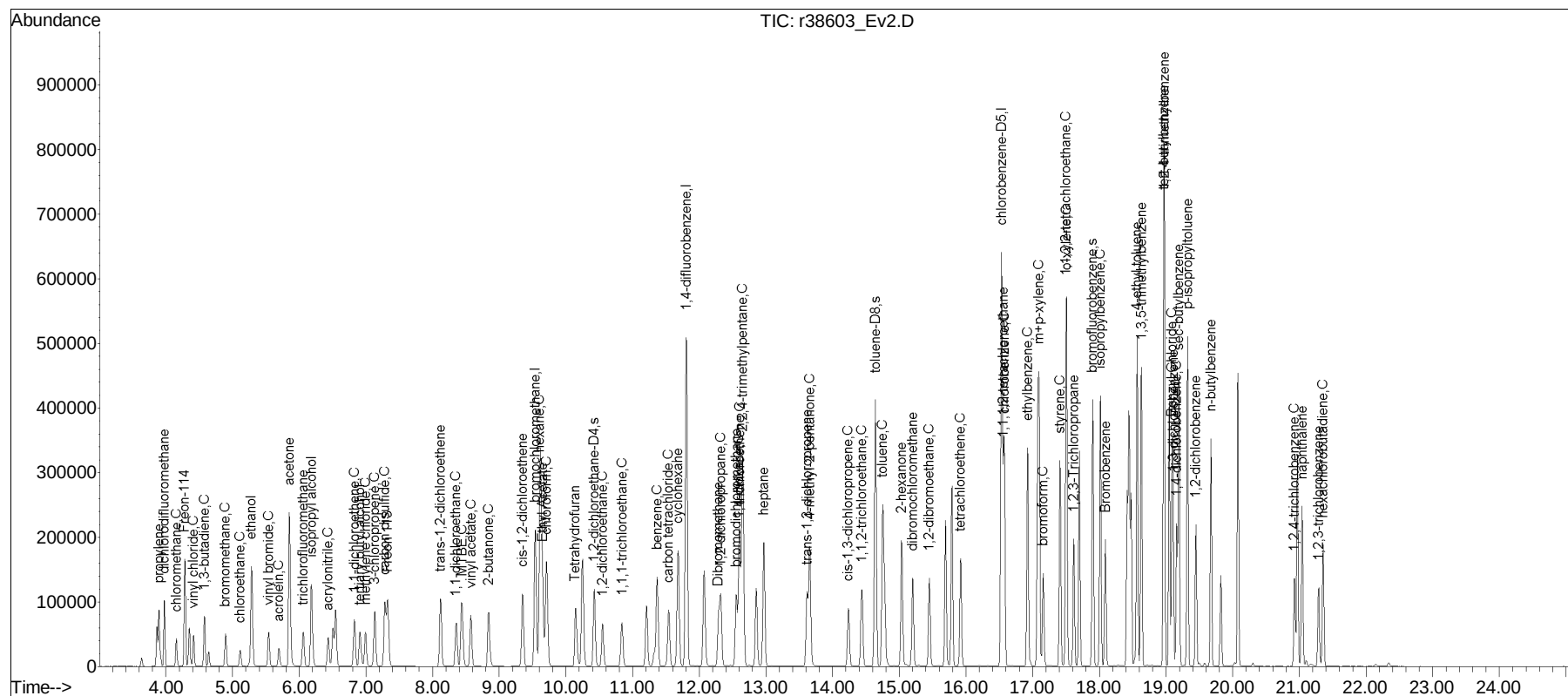
Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200312SIM_I\TSIM3_200312

..M

Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis

QLast Update : Thu Mar 12 16:48:11 2020

Response via : Initial Calibration



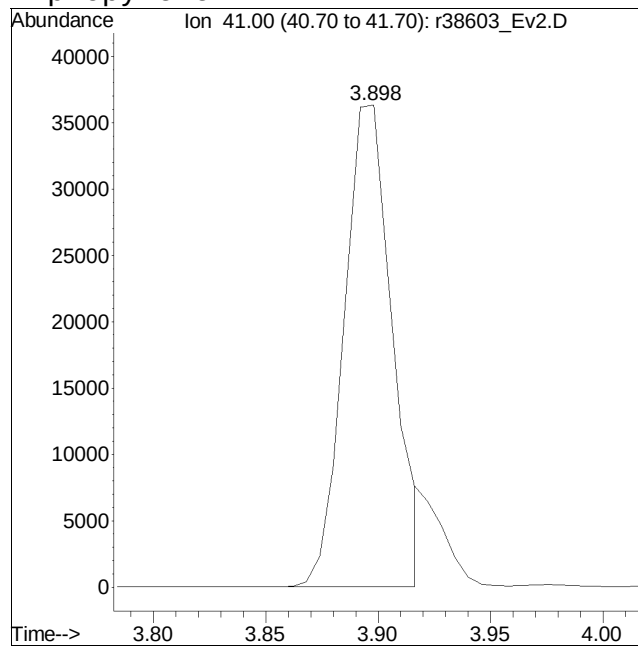
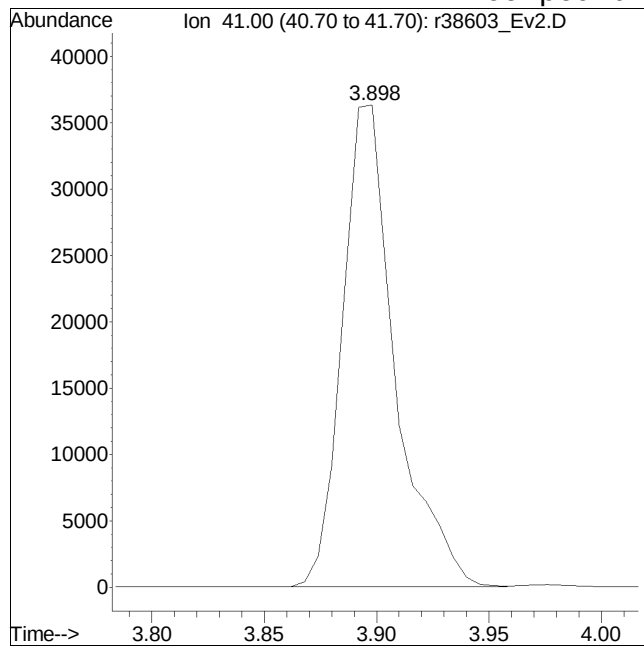
TSIM3_200312.M Fri Mar 13 05:05:51 2020

Page: 4

Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
Data File : r38603_Ev2.D Operator : AIRPIAN03:AR
Date Inj'd : 3/13/2020 0:2: 5 Instrument :
Sample : CT015-SIMSTD5.0 Quant Date : 3/13/2020 4:43 am

Compound #2: propylene



Original Peak Response = 59434

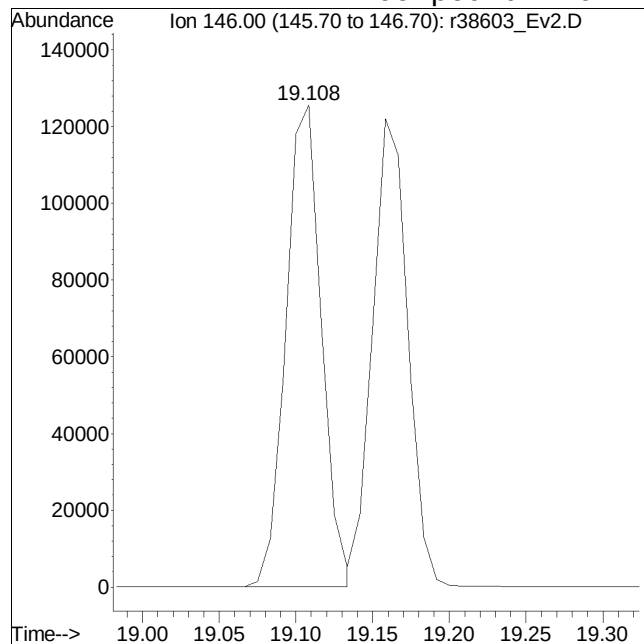
Manual Peak Response = 54443 M4

M4 = Poor automated baseline construction.

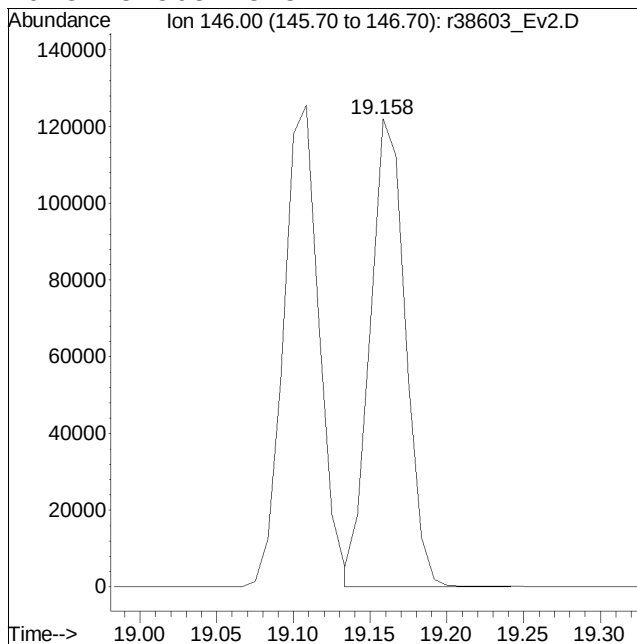
Manual Integration/Negative Proof Report

Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
 Data File : r38603_Ev2.D Operator : AIRPIAN03:AR
 Date Inj'd : 3/13/2020 0:2: 5 Instrument :
 Sample : CT015-SIMSTD5.0 Quant Date : 3/13/2020 4:43 am

Compound #76: 1,4-dichlorobenzene



Original Peak Response = 201583



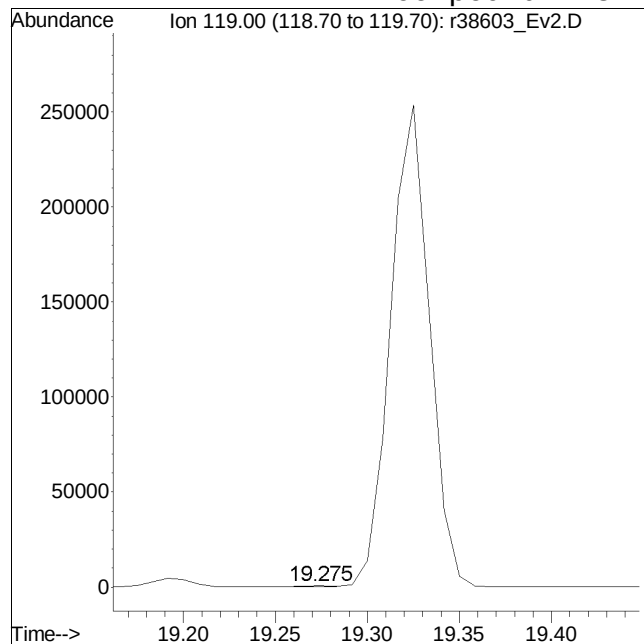
Manual Peak Response = 195425 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

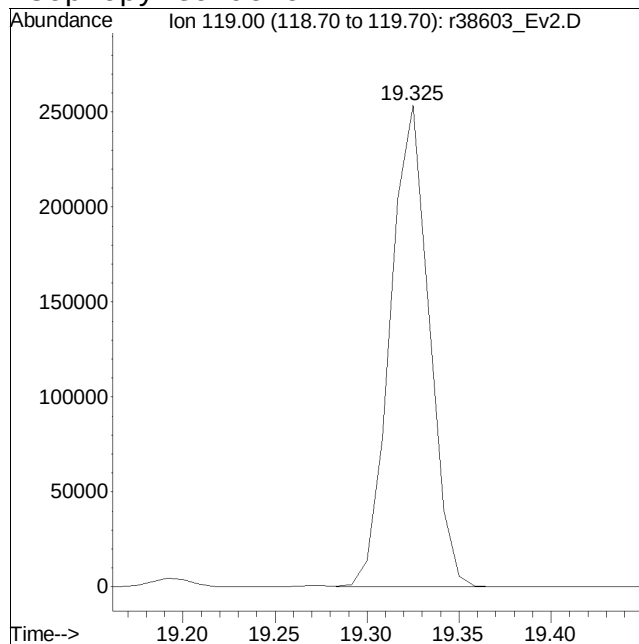
Data Path : 0:\Forensics\Data\Airpiano3QMethod : TSIM3_200312.M
Data File : r38603_Ev2.D Operator : AIRPIAN03:AR
Date Inj'd : 3/13/2020 0:2: 5 Instrument :
Sample : CT015-SIMSTD5.0 Quant Date : 3/13/2020 4:43 am

Compound #78: p-isopropyltoluene



Original Peak Response = 973

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.



Manual Peak Response = 372727 M3

Continuing Calibration

Calibration Verification Summary

Form 7

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRPIANO3
 Lab File ID : R38755_EV2
 Sample No : WG1353543-2
 Channel :

Lab Number : L2011723
 Project Number : MHD1801
 Calibration Date : 03/20/20 14:11
 Init. Calib. Date(s) : 03/12/20 03/12/20
 Init. Calib. Times : 10:28 16:20

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
bromochloromethane	1	1	-	0	30	99	.03
propylene	0.471	0.565	-	-20	30	119	.02
dichlorodifluoromethane	0.971	0.985	-	-1.4	30	100	.02
chloromethane	0.433	0.5	-	-15.5	30	116	.02
Freon-114	1.246	1.347	-	-8.1	30	110	.02
vinyl chloride	0.533	0.564	-	-5.8	30	114	.02
1,3-butadiene	0.515	0.522	-	-1.4	30	105	.03
bromomethane	0.452	0.512	-	-13.3	30	121	.03
chloroethane	0.264	0.303	-	-14.8	30	122	.03
ethanol	0.421	0.41	-	2.6	30	99	.03
vinyl bromide	0.513	0.603	-	-17.5	30	120	.03
acrolein	0.255	0.225	-	11.8	30	92	.03
acetone	0.682	0.79	-	-15.8	30	111	.03
trichlorofluoromethane	0.784	0.929	-	-18.5	30	124	.03
isopropyl alcohol	0.886	1.093	-	-23.4	30	122	.03
acrylonitrile	0.453	0.447	-	1.3	30	99	.03
1,1-dichloroethene	0.701	0.734	-	-4.7	30	114	.03
tertiary butyl alcohol	1.008	0.945	-	6.3	30	101	.03
methylene chloride	0.638	0.696	-	-9.1	30	114	.03
3-chloropropene	0.83	1.024	-	-23.4	30	125	.03
carbon disulfide	1.898	1.741	-	8.3	30	92	.04
Freon 113	1.047	1.08	-	-3.2	30	106	.03
trans-1,2-dichloroethene	0.829	0.845	-	-1.9	30	105	.03
1,1-dichloroethane	0.956	1.065	-	-11.4	30	115	.04
MTBE	1.691	1.678	-	0.8	30	100	.03
vinyl acetate	1.379	1.584	-	-14.9	30	113	.03
2-butanone	1.28	1.462	-	-14.2	30	115	.03
cis-1,2-dichloroethene	0.727	0.772	-	-6.2	30	112	.03
Ethyl Acetate	0.209	0.241	-	-15.3	30	118	.03
chloroform	1.051	0.998	-	5	30	99	.03
Tetrahydrofuran	0.782	0.886	-	-13.3	30	113	.04
1,2-dichloroethane	0.603	0.598	-	0.8	30	106	.03
1,4-difluorobenzene	1	1	-	0	30	97	.03
hexane	0.36	0.364	-	-1.1	30	100	.04
1,1,1-trichloroethane	0.305	0.311	-	-2	30	105	.03
benzene	0.755	0.674	-	10.7	30	94	.04
carbon tetrachloride	0.295	0.276	-	6.4	30	94	.04
cyclohexane	0.393	0.378	-	3.8	30	95	.04
Dibromomethane	0.206	0.188	-	8.7	30	97	.04
1,2-dichloropropane	0.233	0.257	-	-10.3	30	116	.04
bromodichloromethane	0.407	0.372	-	8.6	30	92	.03
1,4-dioxane	0.169	0.179	-	-5.9	30	105	.04
trichloroethene	0.285	0.317	-	-11.2	30	112	.03

* Value outside of QC limits.



Calibration Verification Summary

Form 7

Air Volatiles

Client : P. W. Grosser
 Project Name : MHD1801
 Instrument ID : AIRPIANO3
 Lab File ID : R38755_EV2
 Sample No : WG1353543-2
 Channel :

Lab Number : L2011723
 Project Number : MHD1801
 Calibration Date : 03/20/20 14:11
 Init. Calib. Date(s) : 03/12/20 03/12/20
 Init. Calib. Times : 10:28 16:20

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
2,2,4-trimethylpentane	1.166	1.184	-	-1.5	30	99	.03
heptane	0.465	0.54	-	-16.1	30	112	.04
cis-1,3-dichloropropene	0.325	0.293	-	9.8	30	88	.03
4-methyl-2-pentanone	0.52	0.629	-	-21	30	115	.04
trans-1,3-dichloropropene	0.348	0.366	-	-5.2	30	103	.03
1,1,2-trichloroethane	0.254	0.267	-	-5.1	30	109	.03
chlorobenzene-D5	1	1	-	0	30	92	.02
toluene	5.549	6.047	-	-9	30	109	.03
2-hexanone	3.151	3.9	-	-23.8	30	109	.03
dibromochloromethane	2.302	2.814	-	-22.2	30	111	.03
1,2-dibromoethane	2.672	2.65	-	0.8	30	98	.03
tetrachloroethene	2.264	2.436	-	-7.6	30	106	.03
1,1,1,2-tetrachloroethane	1.795	1.881	-	-4.8	30	99	.03
chlorobenzene	4.397	4.541	-	-3.3	30	100	.03
ethylbenzene	6.525	7.218	-	-10.6	30	107	.02
m+p-xylene	5.468	6.022	-	-10.1	30	107	.03
bromoform	1.999	2.249	-	-12.5	30	101	.02
styrene	4.744	4.852	-	-2.3	30	97	.03
1,1,2,2-tetrachloroethane	3.687	4.148	-	-12.5	30	106	.03
o-xylene	5.416	6.171	-	-13.9	30	109	.03
1,2,3-Trichloropropane	3.023	2.824	-	6.6	30	86	.02
isopropylbenzene	7.621	7.346	-	3.6	30	89	.03
Bromobenzene	3.957	3.613	-	8.7	30	84	.03
4-ethyl toluene	8.259	8.605	-	-4.2	30	93	.02
1,3,5-trimethylbenzene	6.911	7.442	-	-7.7	30	99	.02
tert-butylbenzene	6.564	6.792	-	-3.5	30	93	.04
1,2,4-trimethylbenzene	6.479	7.228	-	-11.6	30	100	.04
Benzyl Chloride	4.368	4.689	-	-7.3	30	92	.05
1,3-dichlorobenzene	3.694	3.963	-	-7.3	30	96	.04
1,4-dichlorobenzene	3.641	3.707	-	-1.8	30	94	.05
sec-butylbenzene	9.769	9.185	-	6	30	84	.05
p-isopropyltoluene	7.782	7.467	-	4	30	84	.06
1,2-dichlorobenzene	3.522	3.781	-	-7.4	30	97	.07
n-butylbenzene	6.573	7.026	-	-6.9	30	93	.07
1,2,4-trichlorobenzene	2.004	2.44	-	-21.8	30	98	.07
naphthalene	6.843	7.119	-	-4	30	87	.08
1,2,3-trichlorobenzene	2.319	2.489	-	-7.3	30	83	.08
hexachlorobutadiene	2.676	3.69	-	-37.9*	30	123	.07

* Value outside of QC limits.



Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\
 Data File : r38755_Ev2.D
 Acq On : 20 Mar 2020 2:11 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353543-2,3,250,250
 Misc : WG1353543,ICAL16593
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:47:03 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:48:11 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	bromochloromethane	1.000	1.000	0.0	99	0.03
2	propylene	0.471	0.565	-20.0	119	0.02
3	dichlorodifluoromethane	0.971	0.985	-1.4	100	0.02
4 C	chloromethane	0.433	0.500	-15.5	116	0.02
5	Freon-114	1.246	1.347	-8.1	110	0.02
6 C	vinyl chloride	0.533	0.564	-5.8	114	0.02
7 C	1,3-butadiene	0.515	0.522	-1.4	105	0.03
8 C	bromomethane	0.452	0.512	-13.3	121	0.03
9 C	chloroethane	0.264	0.303	-14.8	122	0.03
10	ethanol	0.421	0.410	2.6	99	0.03
11 C	vinyl bromide	0.513	0.603	-17.5	120	0.03
12 C	acrolein	0.255	0.225	11.8	92	0.03
13	acetone	0.682	0.790	-15.8	111	0.03
14	trichlorofluoromethane	0.784	0.929	-18.5	124	0.03
15	isopropyl alcohol	0.886	1.093	-23.4	122	0.03
16 C	acrylonitrile	0.453	0.447	1.3	99	0.03
17 C	1,1-dichloroethene	0.701	0.734	-4.7	114	0.03
18	tertiary butyl alcohol	1.008	0.945	6.3	101	0.03
19 C	methylene chloride	0.638	0.696	-9.1	114	0.03
20 C	3-chloropropene	0.830	1.024	-23.4	125	0.03
21 C	carbon disulfide	1.898	1.741	8.3	92	0.04
22	Freon 113	1.047	1.080	-3.2	106	0.03
23	trans-1,2-dichloroethene	0.829	0.845	-1.9	105	0.03
24 C	1,1-dichloroethane	0.956	1.065	-11.4	115	0.04
25 C	MTBE	1.691	1.678	0.8	100	0.03
26 C	vinyl acetate	1.379	1.584	-14.9	113	0.03
27 C	2-butanone	1.280	1.462	-14.2	115	0.03
28	cis-1,2-dichloroethene	0.727	0.772	-6.2	112	0.03
29	Ethyl Acetate	0.209	0.241	-15.3	118	0.03
30 C	chloroform	1.051	0.998	5.0	99	0.03
31	Tetrahydrofuran	0.782	0.886	-13.3	113	0.04
32 C	1,2-dichloroethane	0.603	0.598	0.8	106	0.03
33 I	1,4-difluorobenzene	1.000	1.000	0.0	97	0.03
34 C	hexane	0.360	0.364	-1.1	100	0.04
36 C	1,1,1-trichloroethane	0.305	0.311	-2.0	105	0.03
37 C	benzene	0.755	0.674	10.7	94	0.04
38 C	carbon tetrachloride	0.295	0.276	6.4	94	0.04
39	cyclohexane	0.393	0.378	3.8	95	0.04

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\
 Data File : r38755_Ev2.D
 Acq On : 20 Mar 2020 2:11 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353543-2,3,250,250
 Misc : WG1353543,ICAL16593
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:47:03 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:48:11 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	Dibromomethane	0.206	0.188	8.7	97	0.04
41 C	1,2-dichloropropane	0.233	0.257	-10.3	116	0.04
42	bromodichloromethane	0.407	0.372	8.6	92	0.03
43 C	1,4-dioxane	0.169	0.179	-5.9	105	0.04
44 C	trichloroethene	0.285	0.317	-11.2	112	0.03
45 C	2,2,4-trimethylpentane	1.166	1.184	-1.5	99	0.03
46	heptane	0.465	0.540	-16.1	112	0.04
47 C	cis-1,3-dichloropropene	0.325	0.293	9.8	88	0.03
48 C	4-methyl-2-pentanone	0.520	0.629	-21.0	115	0.04
49	trans-1,3-dichloropropene	0.348	0.366	-5.2	103	0.03
50 C	1,1,2-trichloroethane	0.254	0.267	-5.1	109	0.03
51 I	chlorobenzene-D5	1.000	1.000	0.0	92	0.02
52 C	toluene	5.549	6.047	-9.0	109	0.03
54	2-hexanone	3.151	3.900	-23.8	109	0.03
55	dibromochloromethane	2.302	2.814	-22.2	111	0.03
56 C	1,2-dibromoethane	2.672	2.650	0.8	98	0.03
57 C	tetrachloroethene	2.264	2.436	-7.6	106	0.03
58	1,1,1,2-tetrachloroethane	1.795	1.881	-4.8	99	0.03
59 C	chlorobenzene	4.397	4.541	-3.3	100	0.03
60 C	ethylbenzene	6.525	7.218	-10.6	107	0.02
61 C	m+p-xylene	5.468	6.022	-10.1	107	0.03
62 C	bromofom	1.999	2.249	-12.5	101	0.02
63 C	styrene	4.744	4.852	-2.3	97	0.03
64 C	1,1,2,2-tetrachloroethane	3.687	4.148	-12.5	106	0.03
65 C	o-xylene	5.416	6.171	-13.9	109	0.03
66	1,2,3-Trichloropropane	3.023	2.824	6.6	86	0.02
68 C	isopropylbenzene	7.621	7.346	3.6	89	0.03
69	Bromobenzene	3.957	3.613	8.7	84	0.03
70	4-ethyl toluene	8.259	8.605	-4.2	93	0.02
71	1,3,5-trimethylbenzene	6.911	7.442	-7.7	99	0.02
72	tert-butylbenzene	6.564	6.792	-3.5	93	0.04
73	1,2,4-trimethylbenzene	6.479	7.228	-11.6	100	0.04
74 C	Benzyl Chloride	4.368	4.689	-7.3	92	0.05
75	1,3-dichlorobenzene	3.694	3.963	-7.3	96	0.04
76 C	1,4-dichlorobenzene	3.641	3.707	-1.8	94	0.05
77	sec-butylbenzene	9.769	9.185	6.0	84	0.05
78	p-isopropyltoluene	7.782	7.467	4.0	84	0.06
79	1,2-dichlorobenzene	3.522	3.781	-7.4	97	0.07

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\
 Data File : r38755_Ev2.D
 Acq On : 20 Mar 2020 2:11 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353543-2,3,250,250
 Misc : WG1353543,ICAL16593
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:47:03 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M
 Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:48:11 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
80	n-butylbenzene	6.573	7.026	-6.9	93	0.07
81 C	1,2,4-trichlorobenzene	2.004	2.440	-21.8	98	0.07
82	naphthalene	6.843	7.119	-4.0	87	0.08
83	1,2,3-trichlorobenzene	2.319	2.489	-7.3	83	0.08
84 C	hexachlorobutadiene	2.676	3.690	-37.9#	123	0.07

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\
 Data File : r38755_Ev2.D
 Acq On : 20 Mar 2020 2:11 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353543-2,3,250,250
 Misc : WG1353543,ICAL16593
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:47:03 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:48:11 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\r38755_Ev2.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.575	49	225089	10.000	ppbV	0.03
Standard Area =	225089		Recovery	=	100.00%	
33) 1,4-difluorobenzene	11.840	114	642201	10.000	ppbV	0.03
Standard Area =	642201		Recovery	=	100.00%	
51) chlorobenzene-D5	16.558	54	90362	10.000	ppbV	0.02
Standard Area =	90362		Recovery	=	100.00%	

System Monitoring Compounds

Target Compounds					Qvalue
2) propylene	3.916	41	63642M3	6.009	ppbV
3) dichlorodifluoromethane	4.000	85	110906	5.074	ppbV 100
4) chloromethane	4.180	50	56254	5.775	ppbV 97
5) Freon-114	4.306	85	151546	5.405	ppbV 96
6) vinyl chloride	4.438	62	63452	5.291	ppbV 97
7) 1,3-butadiene	4.606	54	58756	5.064	ppbV 89
8) bromomethane	4.924	94	57609	5.657	ppbV 97
9) chloroethane	5.140	64	34089	5.740	ppbV 99
10) ethanol	5.314	31	230943	24.383	ppbV # 80
11) vinyl bromide	5.570	106	67920	5.881	ppbV 96
12) acrolein	5.723	56	25321	4.404	ppbV 98
13) acetone	5.880	43	444584	28.982	ppbV # 86
14) trichlorofluoromethane	6.090	101	104542	5.922	ppbV 99
15) isopropyl alcohol	6.213	45	307571	15.415	ppbV # 97
16) acrylonitrile	6.463	53	50299	4.931	ppbV 99
17) 1,1-dichloroethene	6.858	61	82575	5.233	ppbV 92
18) tertiary butyl alcohol	6.942	59	106381	4.689	ppbV # 91
19) methylene chloride	7.026	49	78289	5.447	ppbV 95
20) 3-chloropropene	7.164	41	115197	6.163	ppbV 93
21) carbon disulfide	7.320	76	195931	4.587	ppbV 97
22) Freon 113	7.356	101	121565	5.159	ppbV 97
23) trans-1,2-dichloroethene	8.150	61	95125	5.096	ppbV 96
24) 1,1-dichloroethane	8.392	63	119835	5.570	ppbV 99
25) MTBE	8.475	73	188897	4.963	ppbV 98
26) vinyl acetate	8.608	43	178232	5.740	ppbV 97
27) 2-butanone	8.875	43	164588	5.713	ppbV 95
28) cis-1,2-dichloroethene	9.383	61	86846	5.306	ppbV 95
29) Ethyl Acetate	9.683	61	27170	5.778	ppbV 96
30) chloroform	9.742	83	112286	4.748	ppbV 98

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\
 Data File : r38755_Ev2.D
 Acq On : 20 Mar 2020 2:11 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353543-2,3,250,250
 Misc : WG1353543,ICAL16593
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:47:03 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:48:11 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\r38755_Ev2.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
31) Tetrahydrofuran	10.183	42	99666	5.659	ppbV	97
32) 1,2-dichloroethane	10.583	62	67285	4.957	ppbV	96
34) hexane	9.650	57	116903	5.058	ppbV #	75
36) 1,1,1-trichloroethane	10.875	97	99987	5.108	ppbV	98
37) benzene	11.407	78	216404	4.461	ppbV	99
38) carbon tetrachloride	11.580	117	88773	4.693	ppbV	96
39) cyclohexane	11.720	56	121299	4.808	ppbV	94
40) Dibromomethane	12.327	93	60448	4.567	ppbV #	99
41) 1,2-dichloropropane	12.360	63	82656	5.519	ppbV	98
42) bromodichloromethane	12.587	83	119289	4.563	ppbV	97
43) 1,4-dioxane	12.633	88	57429	5.285	ppbV	99
44) trichloroethene	12.640	130	101823	5.556	ppbV	97
45) 2,2,4-trimethylpentane	12.687	57	380326	5.081	ppbV	95
46) heptane	13.007	43	173322	5.801	ppbV	95
47) cis-1,3-dichloropropene	14.275	75	94097	4.510	ppbV	94
48) 4-methyl-2-pentanone	13.692	43	202120	6.052	ppbV	96
49) trans-1,3-dichloropropene	13.650	75	117462	5.261	ppbV	95
50) 1,1,2-trichloroethane	14.475	97	85676	5.261	ppbV	95
52) toluene	14.783	91	273195	5.449	ppbV	99
54) 2-hexanone	15.067	43	176211M3	6.189	ppbV	
55) dibromochloromethane	15.233	129	127132	6.110	ppbV	99
56) 1,2-dibromoethane	15.483	107	119726	4.959	ppbV	99
57) tetrachloroethene	15.950	166	110055	5.379	ppbV	96
58) 1,1,1,2-tetrachloroethane	16.592	131	84972	5.238	ppbV	98
59) chlorobenzene	16.600	112	205179	5.165	ppbV	99
60) ethylbenzene	16.950	91	326127	5.531	ppbV	93
61) m+p-xylene	17.117	91	544182	11.013	ppbV	92
62) bromoform	17.183	173	101633	5.626	ppbV	99
63) styrene	17.442	104	219225	5.114	ppbV	97
64) 1,1,2,2-tetrachloroethane	17.533	83	187395	5.624	ppbV	96
65) o-xylene	17.533	91	278826	5.697	ppbV	96
66) 1,2,3-Trichloropropane	17.642	75	127598	4.671	ppbV	98
68) isopropylbenzene	18.042	105	331890	4.819	ppbV	94
69) Bromobenzene	18.117	77	163260	4.566	ppbV	95
70) 4-ethyl toluene	18.592	105	388797	5.210	ppbV	97
71) 1,3,5-trimethylbenzene	18.650	105	336219	5.384	ppbV	96
72) tert-butylbenzene	18.992	119	306891	5.174	ppbV	99
73) 1,2,4-trimethylbenzene	18.992	105	326577	5.578	ppbV	95
74) Benzyl Chloride	19.117	91	211852	5.368	ppbV	95
75) 1,3-dichlorobenzene	19.125	146	179072	5.365	ppbV	93

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\
 Data File : r38755_Ev2.D
 Acq On : 20 Mar 2020 2:11 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353543-2,3,250,250
 Misc : WG1353543,ICAL16593
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:47:03 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:48:11 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\r38755_Ev2.D
 Sub List : Default-LCS-AP2 - All compounds listed

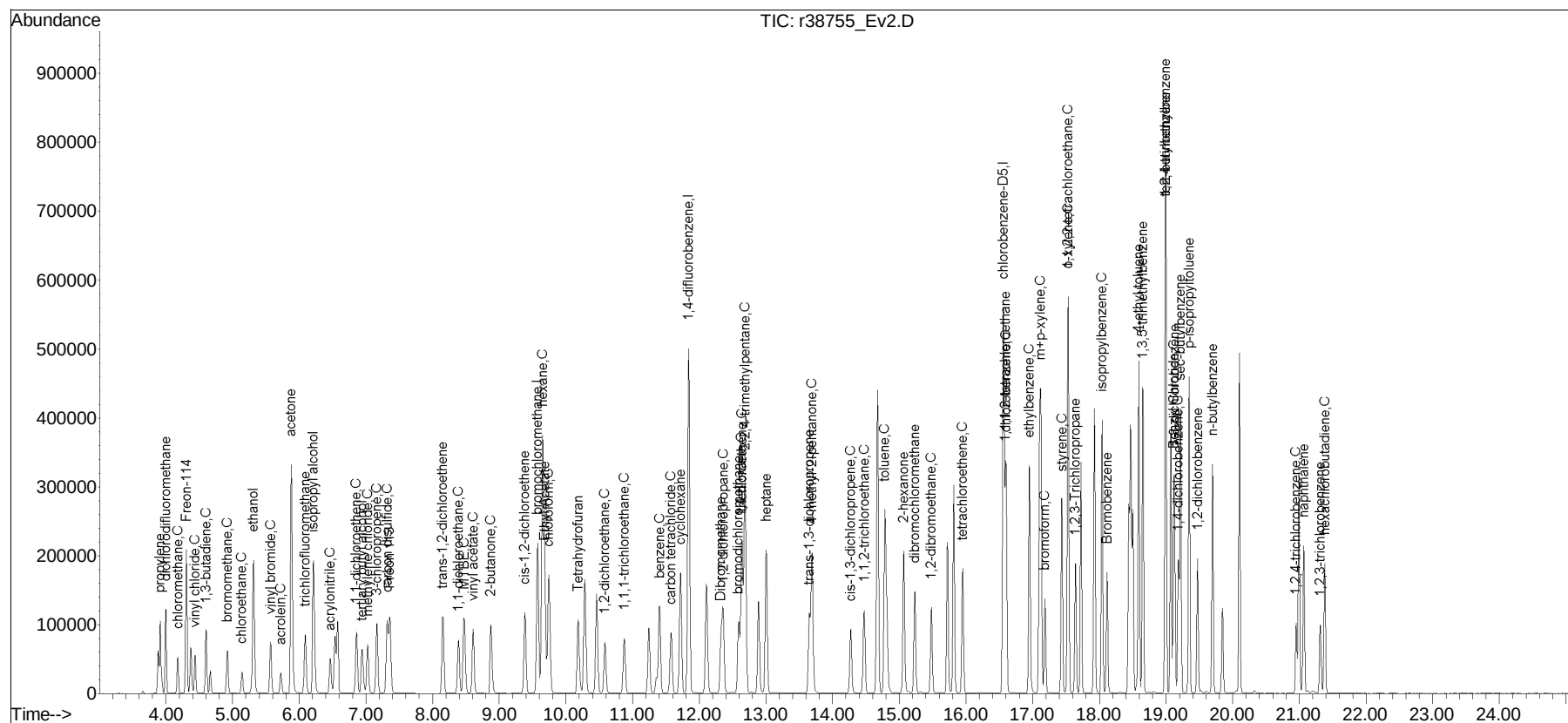
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

76)	1,4-dichlorobenzene	19.183	146	167502M3	5.091	ppbV	
77)	sec-butylbenzene	19.217	105	414986	4.701	ppbV	98
78)	p-isopropyltoluene	19.350	119	337362	4.798	ppbV	96
79)	1,2-dichlorobenzene	19.475	146	170811	5.367	ppbV	99
80)	n-butylbenzene	19.700	91	317462	5.345	ppbV	99
81)	1,2,4-trichlorobenzene	20.950	180	110259M4	6.089	ppbV	
82)	naphthalene	21.067	128	321628	5.202	ppbV	98
83)	1,2,3-trichlorobenzene	21.317	180	112457	5.368	ppbV	94
84)	hexachlorobutadiene	21.383	225	166698M4	6.893	ppbV	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Data Path   : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\
Data File  : r38755_Ev2.D
Acq On     : 20 Mar 2020    2:11 PM
Operator   : AIRPIANO3:EW
Sample     : WG1353543-2,3,250,250
Misc       : WG1353543,ICAL16593
ALS Vial   : 0    Sample Multiplier: 1
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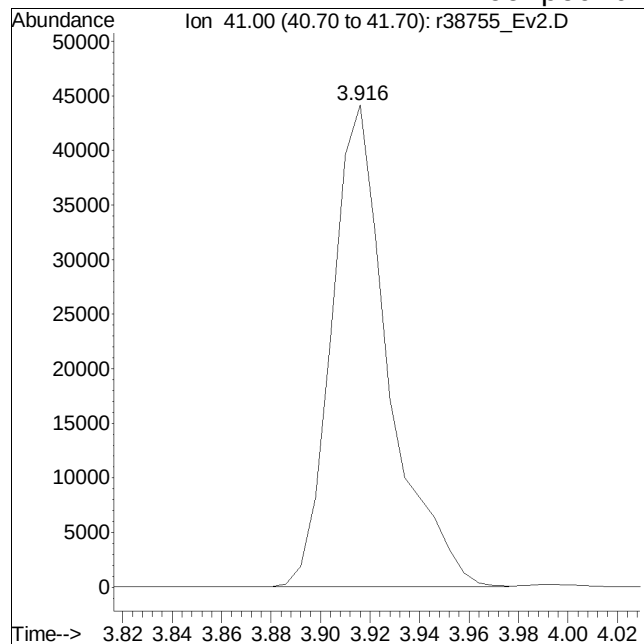
Quant Time: Mar 20 14:47:03 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Mar 12 16:48:11 2020
Response via : Initial Calibration



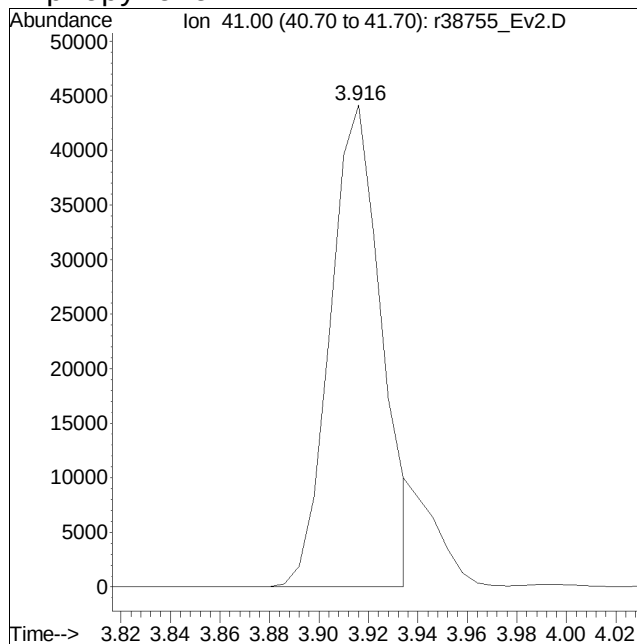
Manual Integration Report

Data Path : 0:\Forensics\Data\AirpianoQMethod : TSIM3_200312.M
Data File : r38755_Ev2.D Operator : AIRPIAN03:EW
Date Inj'd : 3/20/2020 0:2: 1 Instrument :
Sample : WG1353543-2,3,250,250 Quant Date : 3/20/2020 2:44 pm

Compound #2: propylene



Original Peak Response = 70756



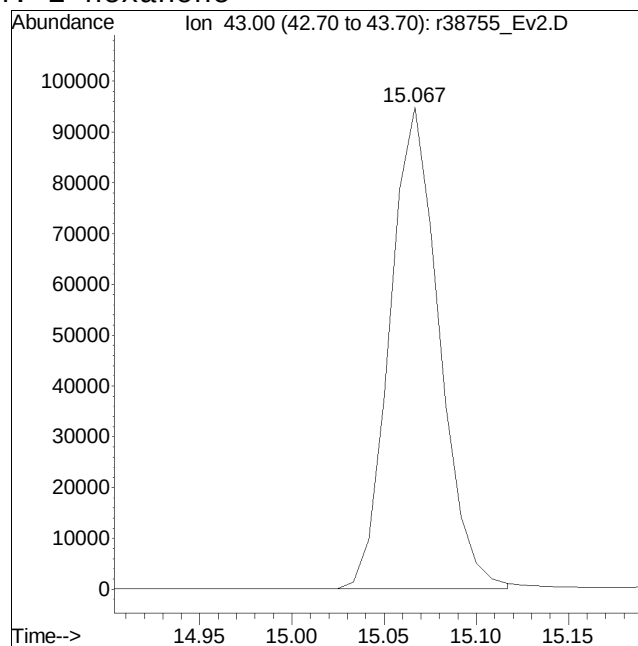
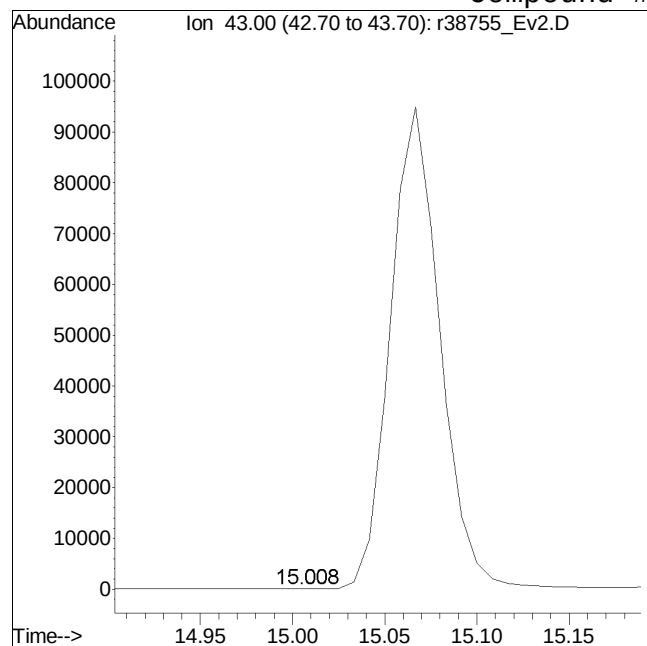
Manual Peak Response = 63642 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : 0:\Forensics\Data\AirpianoQMethod : TSIM3_200312.M
Data File : r38755_Ev2.D Operator : AIRPIAN03:EW
Date Inj'd : 3/20/2020 0:2: 1 Instrument :
Sample : WG1353543-2,3,250,250 Quant Date : 3/20/2020 2:44 pm

Compound #54: 2-hexanone



Original Peak Response = 69

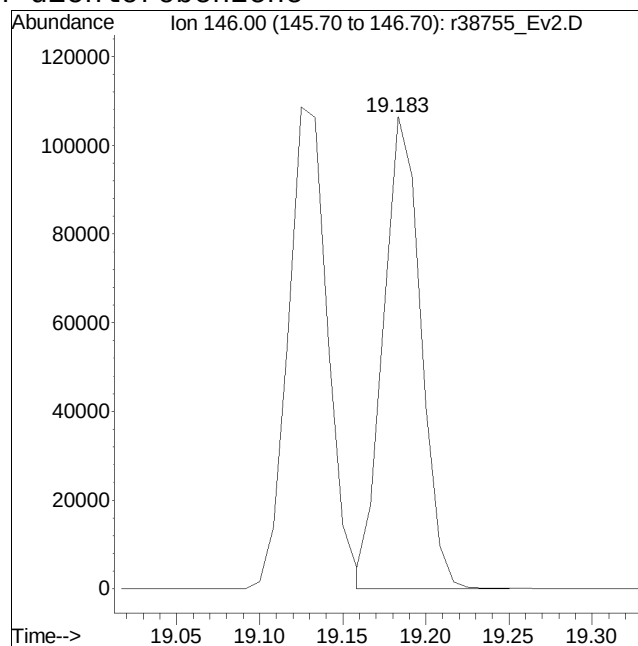
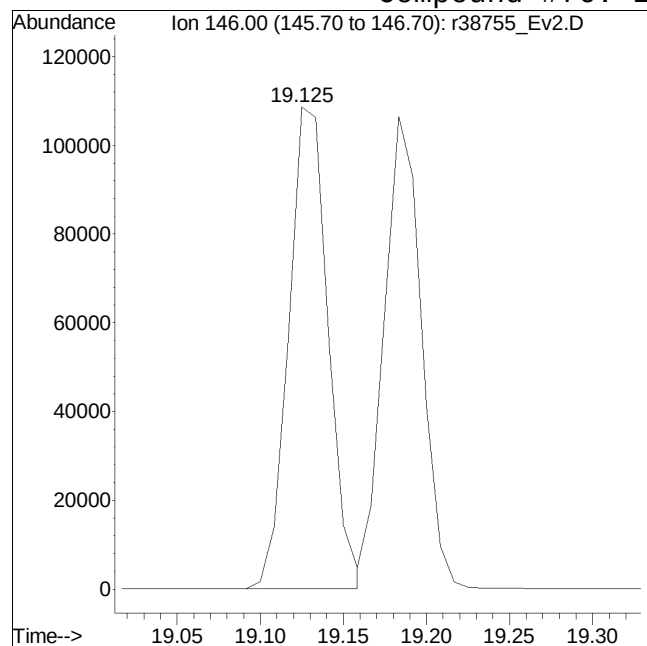
Manual Peak Response = 176211 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : 0:\Forensics\Data\AirpianoQMethod : TSIM3_200312.M
Data File : r38755_Ev2.D Operator : AIRPIAN03:EW
Date Inj'd : 3/20/2020 0:2: 1 Instrument :
Sample : WG1353543-2,3,250,250 Quant Date : 3/20/2020 2:44 pm

Compound #76: 1,4-dichlorobenzene



Original Peak Response = 179072

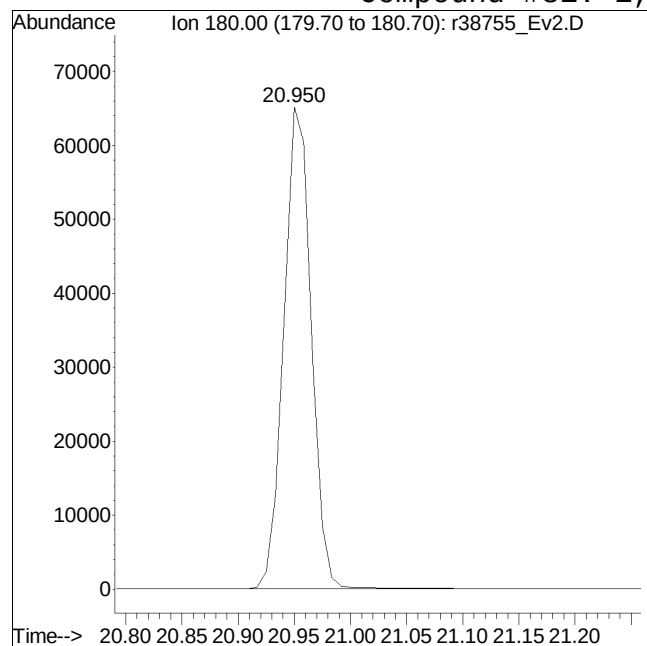
Manual Peak Response = 167502 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

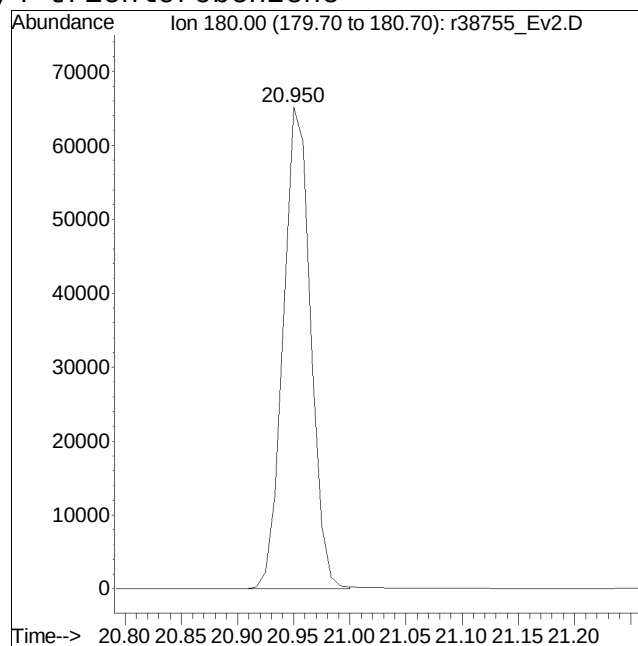
Data Path : 0:\Forensics\Data\AirpianoQMethod : TSIM3_200312.M
Data File : r38755_Ev2.D Operator : AIRPIAN03:EW
Date Inj'd : 3/20/2020 0:2: 1 Instrument :
Sample : WG1353543-2,3,250,250 Quant Date : 3/20/2020 2:44 pm

Compound #81: 1,2,4-trichlorobenzene



Original Peak Response = 110814

M4 = Poor automated baseline construction.

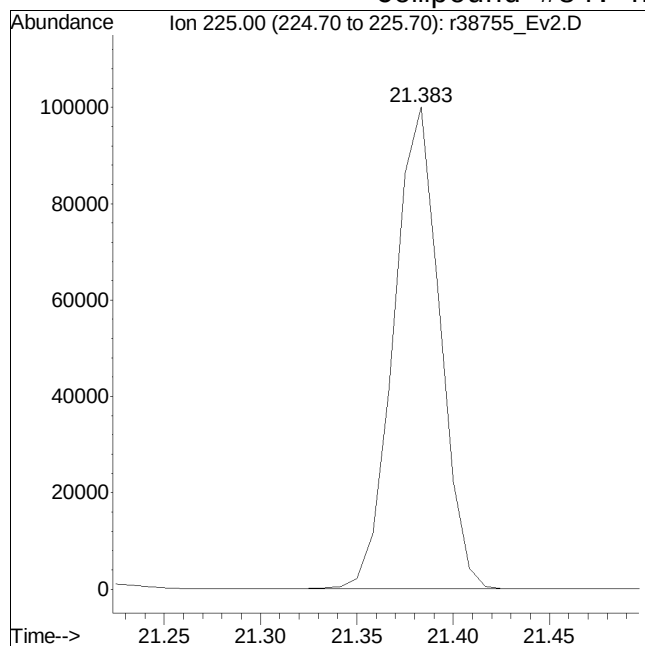


Manual Peak Response = 110259 M4

Manual Integration Report

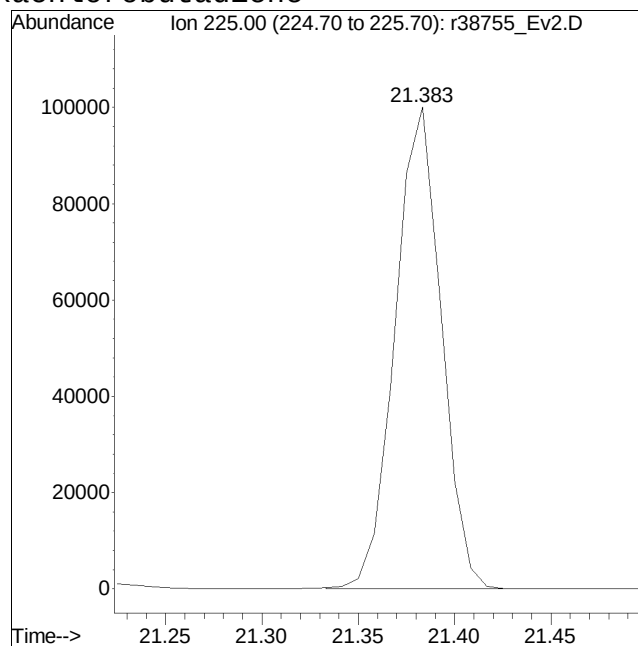
Data Path : 0:\Forensics\Data\AirpianoQMethod : TSIM3_200312.M
Data File : r38755_Ev2.D Operator : AIRPIAN03:EW
Date Inj'd : 3/20/2020 0:2: 1 Instrument :
Sample : WG1353543-2,3,250,250 Quant Date : 3/20/2020 2:44 pm

Compound #84: hexachlorobutadiene



Original Peak Response = 166692

M4 = Poor automated baseline construction.



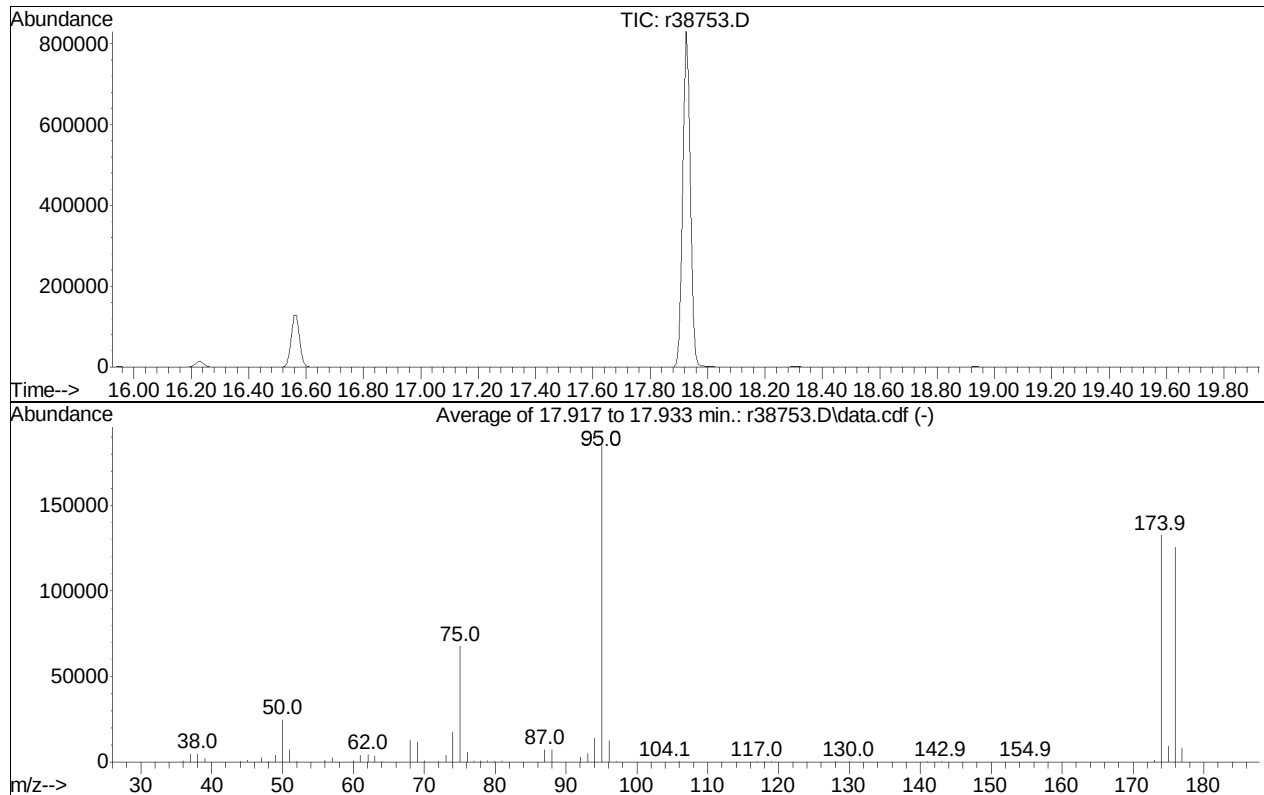
Manual Peak Response = 166698 M4

BFB

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\
 Data File : r38753.D
 Acq On : 20 Mar 2020 12:51 PM
 Operator : AIRPIANO3:EW
 Sample : WG1353543-1,3,250,250
 Misc : WG1353543,ICAL16593
 ALS Vial : 0 Sample Multiplier: 1

Integration File: rteint.p

Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M
 Title : T0-14A/T0-15 SIM/Full Scan Analysis
 Last Update : Thu Mar 12 16:48:11 2020



AutoFind: Scans 2216, 2217, 2218; Background Corrected with Scan 2210

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	13.2	24646	PASS
75	95	30	66	36.4	67891	PASS
95	95	100	100	100.0	186762	PASS
96	95	5	9	6.8	12641	PASS
173	174	0.00	2	0.9	1150	PASS
174	95	50	120	71.1	132732	PASS
175	174	4	9	7.1	9417	PASS
176	174	93	101	94.6	125608	PASS
177	176	5	9	6.7	8448	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\
 Data File : r38757_Ev2.D
 Acq On : 20 Mar 2020 4:20 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353543-4,3,250,250
 Misc : WG1353543,ICAL16593
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 17:02:13 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:48:11 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\r38755_Ev2.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.575	49	211260	10.000	ppbV	0.03
Standard Area = 225089			Recovery =		93.86%	
33) 1,4-difluorobenzene	11.847	114	605199	10.000	ppbV	0.04
Standard Area = 642201			Recovery =		94.24%	
51) chlorobenzene-D5	16.525	54	75324	10.000	ppbV	0.00
Standard Area = 90362			Recovery =		83.36%	

System Monitoring Compounds

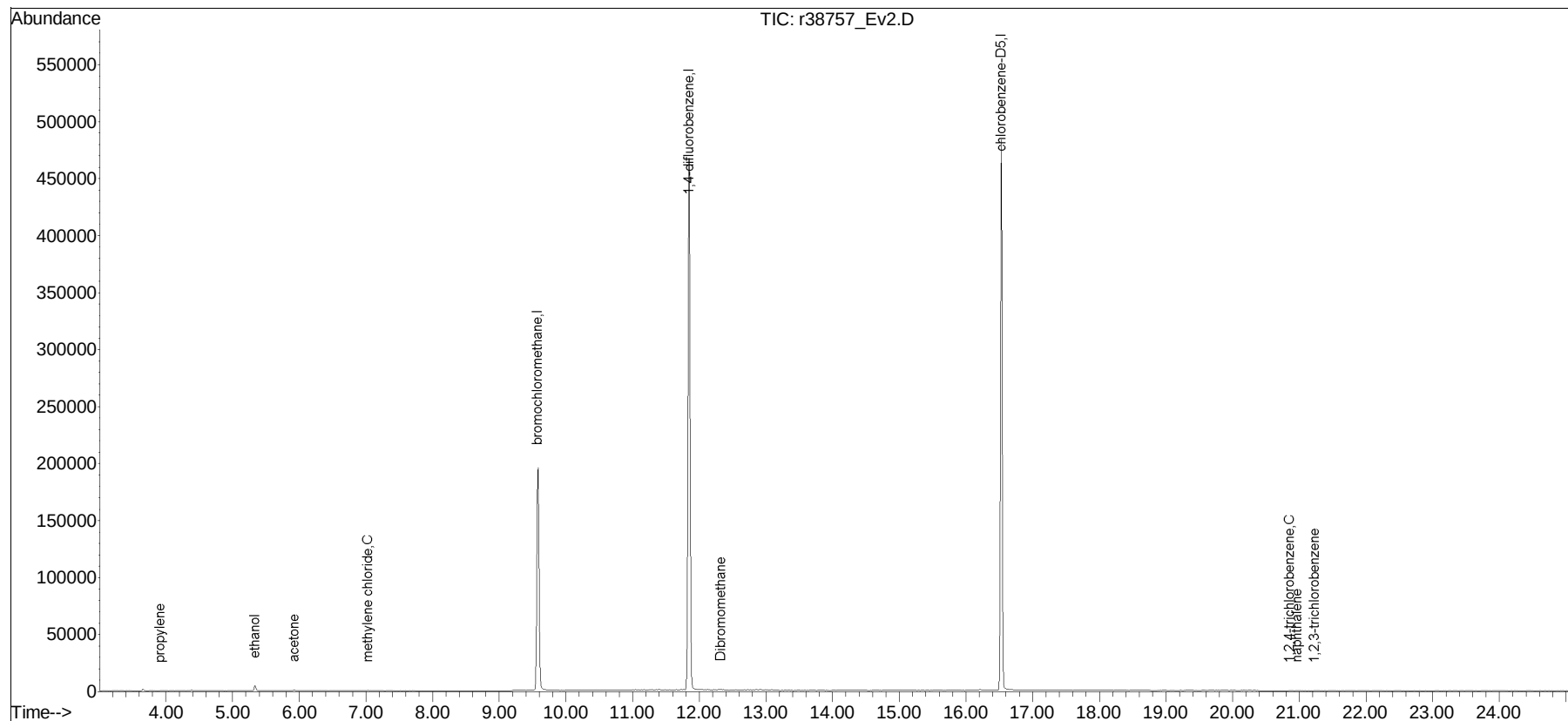
Target Compounds			Qvalue
6) vinyl chloride	0.000	0	N.D.
17) 1,1-dichloroethene	0.000	0	N.D.
28) cis-1,2-dichloroethene	0.000	0	N.D.
36) 1,1,1-trichloroethane	0.000	0	N.D.
38) carbon tetrachloride	11.553	0	N.D.
44) trichloroethene	12.640	0	N.D.
57) tetrachloroethene	15.792	0	N.D.

 (#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : Default-LCS-AP2 - All compounds listed0320SIM\r38755_Ev2.D

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\
Data File : r38757_Ev2.D
Acq On : 20 Mar 2020 4:20 PM
Operator : AIRPIANO3:EW
Sample : WG1353543-4,3,250,250
Misc : WG1353543,ICAL16593
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 17:02:13 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Mar 12 16:48:11 2020
Response via : Initial Calibration



Manual Integration Report

Data Path : 0:\Forensics\Data\AirpianoQMethod : TSIM3_200312.M
Data File : r38757_Ev2.D Operator : AIRPIAN03:EW
Date Inj'd : 3/20/2020 0:4: 0 Instrument :
Sample : WG1353543-4,3,250,250 Quant Date : 3/20/2020 5:01 pm

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\
 Data File : r38755_Ev2.D
 Acq On : 20 Mar 2020 2:11 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353543-3,3,250,250
 Misc : WG1353543,ICAL16593
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:47:03 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:48:11 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	bromochloromethane	10.000	10.000	0.0	99	0.03
2	propylene	5.000	6.009	-20.2	119	0.02
3	dichlorodifluoromethane	5.000	5.074	-1.5	100	0.02
4 C	chloromethane	5.000	5.775	-15.5	116	0.02
5	Freon-114	5.000	5.405	-8.1	110	0.02
6 C	vinyl chloride	5.000	5.291	-5.8	114	0.02
7 C	1,3-butadiene	5.000	5.064	-1.3	105	0.03
8 C	bromomethane	5.000	5.657	-13.1	121	0.03
9 C	chloroethane	5.000	5.740	-14.8	122	0.03
10	ethanol	25.000	24.383	2.5	99	0.03
11 C	vinyl bromide	5.000	5.881	-17.6	120	0.03
12 C	acrolein	5.000	4.404	11.9	92	0.03
13	acetone	25.000	28.982	-15.9	111	0.03
14	trichlorofluoromethane	5.000	5.922	-18.4	124	0.03
15	isopropyl alcohol	12.500	15.415	-23.3	122	0.03
16 C	acrylonitrile	5.000	4.931	1.4	99	0.03
17 C	1,1-dichloroethene	5.000	5.233	-4.7	114	0.03
18	tertiary butyl alcohol	5.000	4.689	6.2	101	0.03
19 C	methylene chloride	5.000	5.447	-8.9	114	0.03
20 C	3-chloropropene	5.000	6.163	-23.3	125	0.03
21 C	carbon disulfide	5.000	4.587	8.3	92	0.04
22	Freon 113	5.000	5.159	-3.2	106	0.03
23	trans-1,2-dichloroethene	5.000	5.096	-1.9	105	0.03
24 C	1,1-dichloroethane	5.000	5.570	-11.4	115	0.04
25 C	MTBE	5.000	4.963	0.7	100	0.03
26 C	vinyl acetate	5.000	5.740	-14.8	113	0.03
27 C	2-butanone	5.000	5.713	-14.3	115	0.03
28	cis-1,2-dichloroethene	5.000	5.306	-6.1	112	0.03
29	Ethyl Acetate	5.000	5.778	-15.6	118	0.03
30 C	chloroform	5.000	4.748	5.0	99	0.03
31	Tetrahydrofuran	5.000	5.659	-13.2	113	0.04
32 C	1,2-dichloroethane	5.000	4.957	0.9	106	0.03
33 I	1,4-difluorobenzene	10.000	10.000	0.0	97	0.03
34 C	hexane	5.000	5.058	-1.2	100	0.04
36 C	1,1,1-trichloroethane	5.000	5.108	-2.2	105	0.03
37 C	benzene	5.000	4.461	10.8	94	0.04
38 C	carbon tetrachloride	5.000	4.693	6.1	94	0.04
39	cyclohexane	5.000	4.808	3.8	95	0.04

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\
 Data File : r38755_Ev2.D
 Acq On : 20 Mar 2020 2:11 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353543-3,3,250,250
 Misc : WG1353543,ICAL16593
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:47:03 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:48:11 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40	Dibromomethane	5.000	4.567	8.7	97	0.04
41 C	1,2-dichloropropane	5.000	5.519	-10.4	116	0.04
42	bromodichloromethane	5.000	4.563	8.7	92	0.03
43 C	1,4-dioxane	5.000	5.285	-5.7	105	0.04
44 C	trichloroethene	5.000	5.556	-11.1	112	0.03
45 C	2,2,4-trimethylpentane	5.000	5.081	-1.6	99	0.03
46	heptane	5.000	5.801	-16.0	112	0.04
47 C	cis-1,3-dichloropropene	5.000	4.510	9.8	88	0.03
48 C	4-methyl-2-pentanone	5.000	6.052	-21.0	115	0.04
49	trans-1,3-dichloropropene	5.000	5.261	-5.2	103	0.03
50 C	1,1,2-trichloroethane	5.000	5.261	-5.2	109	0.03
51 I	chlorobenzene-D5	10.000	10.000	0.0	92	0.02
52 C	toluene	5.000	5.449	-9.0	109	0.03
54	2-hexanone	5.000	6.189	-23.8	109	0.03
55	dibromochloromethane	5.000	6.110	-22.2	111	0.03
56 C	1,2-dibromoethane	5.000	4.959	0.8	98	0.03
57 C	tetrachloroethene	5.000	5.379	-7.6	106	0.03
58	1,1,1,2-tetrachloroethane	5.000	5.238	-4.8	99	0.03
59 C	chlorobenzene	5.000	5.165	-3.3	100	0.03
60 C	ethylbenzene	5.000	5.531	-10.6	107	0.02
61 C	m+p-xylene	10.000	11.013	-10.1	107	0.03
62 C	bromoform	5.000	5.626	-12.5	101	0.02
63 C	styrene	5.000	5.114	-2.3	97	0.03
64 C	1,1,2,2-tetrachloroethane	5.000	5.624	-12.5	106	0.03
65 C	o-xylene	5.000	5.697	-13.9	109	0.03
66	1,2,3-Trichloropropane	5.000	4.671	6.6	86	0.02
68 C	isopropylbenzene	5.000	4.819	3.6	89	0.03
69	Bromobenzene	5.000	4.566	8.7	84	0.03
70	4-ethyl toluene	5.000	5.210	-4.2	93	0.02
71	1,3,5-trimethylbenzene	5.000	5.384	-7.7	99	0.02
72	tert-butylbenzene	5.000	5.174	-3.5	93	0.04
73	1,2,4-trimethylbenzene	5.000	5.578	-11.6	100	0.04
74 C	Benzyl Chloride	5.000	5.368	-7.4	92	0.05
75	1,3-dichlorobenzene	5.000	5.365	-7.3	96	0.04
76 C	1,4-dichlorobenzene	5.000	5.091	-1.8	94	0.05
77	sec-butylbenzene	5.000	4.701	6.0	84	0.05
78	p-isopropyltoluene	5.000	4.798	4.0	84	0.06
79	1,2-dichlorobenzene	5.000	5.367	-7.3	97	0.07

Evaluate Continuing Calibration Report

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\
 Data File : r38755_Ev2.D
 Acq On : 20 Mar 2020 2:11 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353543-3,3,250,250
 Misc : WG1353543,ICAL16593
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:47:03 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:48:11 2020
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
80	n-butylbenzene	5.000	5.345	-6.9	93	0.07
81 C	1,2,4-trichlorobenzene	5.000	6.089	-21.8	98	0.07
82	naphthalene	5.000	5.202	-4.0	87	0.08
83	1,2,3-trichlorobenzene	5.000	5.368	-7.4	83	0.08
84 C	hexachlorobutadiene	5.000	6.893	-37.9#	123	0.07

* Evaluation of CC level amount vs concentration.
 (#) = Out of Range SPCC's out = 0 CCC's out = 1

Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\
 Data File : r38755_Ev2.D
 Acq On : 20 Mar 2020 2:11 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353543-3,3,250,250
 Misc : WG1353543,ICAL16593
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 20 14:47:03 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:48:11 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\r38755_Ev2.D
 Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.575	49	225089	10.000	ppbV	0.03
Standard Area =	225089		Recovery =	100.00%		
33) 1,4-difluorobenzene	11.840	114	642201	10.000	ppbV	0.03
Standard Area =	642201		Recovery =	100.00%		
51) chlorobenzene-D5	16.558	54	90362	10.000	ppbV	0.02
Standard Area =	90362		Recovery =	100.00%		

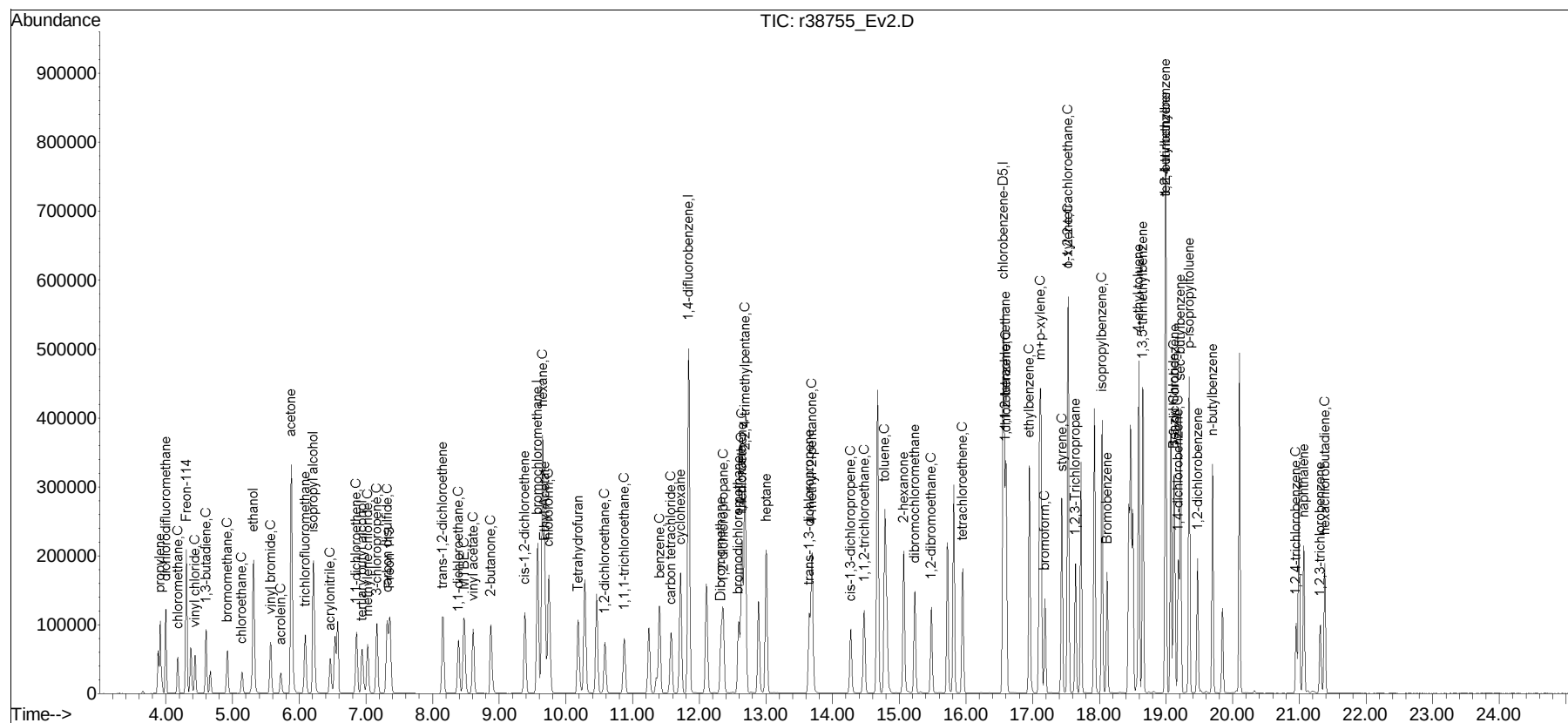
System Monitoring Compounds

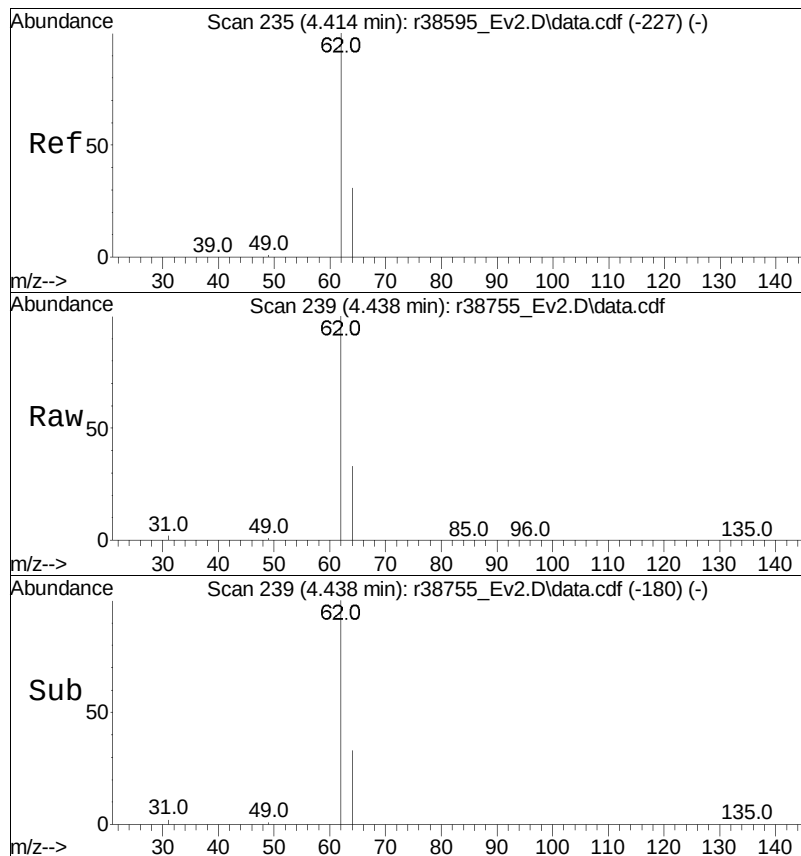
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
6) vinyl chloride	4.438	62	63452	5.291	ppbV	97
17) 1,1-dichloroethene	6.858	61	82575	5.233	ppbV	92
28) cis-1,2-dichloroethene	9.383	61	86846	5.306	ppbV	95
36) 1,1,1-trichloroethane	10.875	97	99987	5.108	ppbV	98
38) carbon tetrachloride	11.580	117	88773	4.693	ppbV	96
44) trichloroethene	12.640	130	101823	5.556	ppbV	97
57) tetrachloroethene	15.950	166	110055	5.379	ppbV	96

 (#) = qualifier out of range (m) = manual integration (+) = signals summed

```
Data Path   : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\
Data File  : r38755_Ev2.D
Acq On     : 20 Mar 2020    2:11 PM
Operator   : AIRPIANO3:EW
Sample     : WG1353543-3,3,250,250
Misc       : WG1353543,ICAL16593
ALS Vial   : 0    Sample Multiplier: 1
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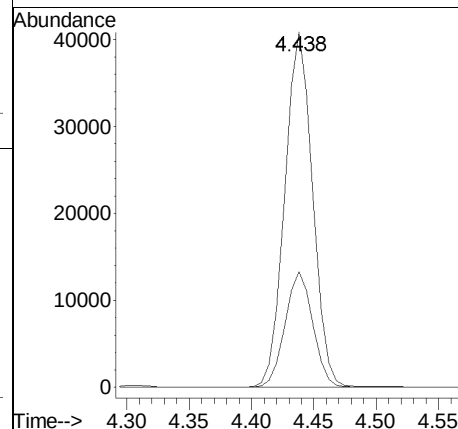
Quant Time: Mar 20 14:47:03 2020
Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M
Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis
QLast Update : Thu Mar 12 16:48:11 2020
Response via : Initial Calibration

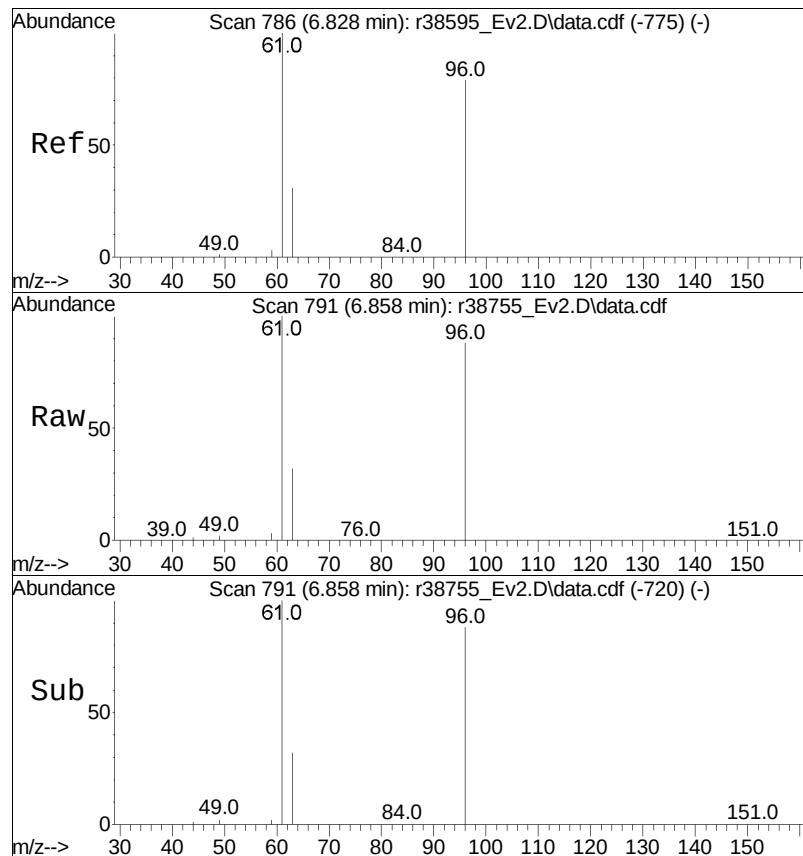




#6
 vinyl chloride
 Concen: 5.29 ppbV
 RT: 4.438 min Scan# 239
 Delta R.T. 0.024 min
 Lab File: r38755_Ev2.D
 Acq: 20 Mar 2020 2:11 PM

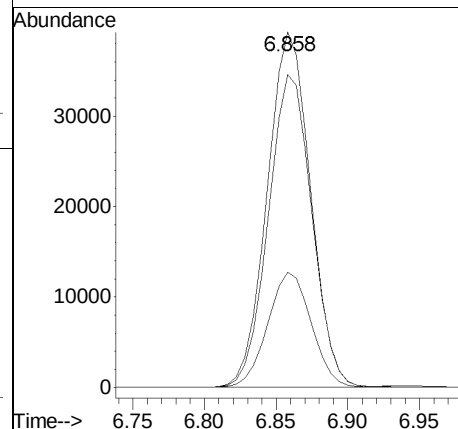
Tgt Ion	Ratio	Lower	Upper
62	100		
64	32.6	24.7	37.1

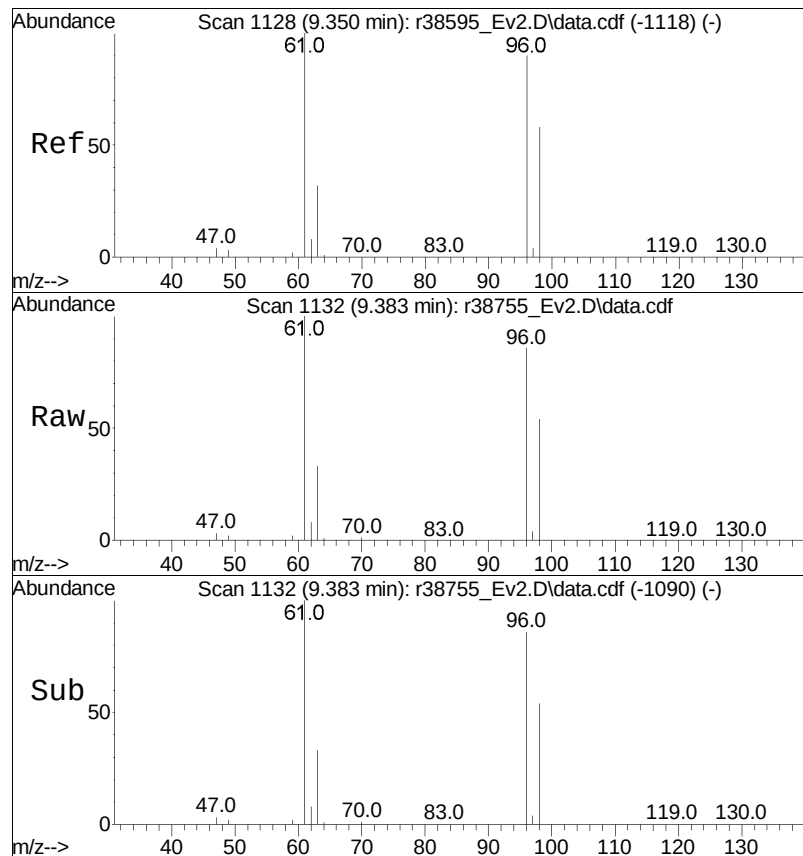




#17
 1,1-dichloroethene
 Concen: 5.23 ppbV
 RT: 6.858 min Scan# 791
 Delta R.T. 0.030 min
 Lab File: r38755_Ev2.D
 Acq: 20 Mar 2020 2:11 PM

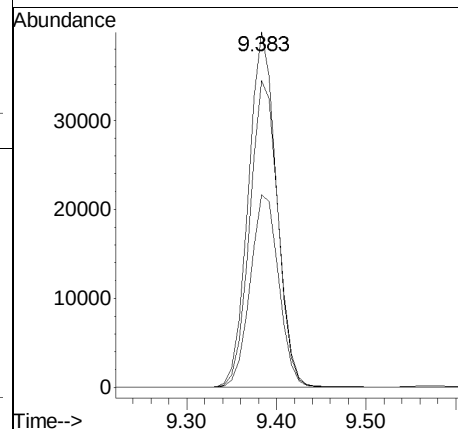
Tgt Ion:	61	Resp:	82575
Ion Ratio	Lower	Upper	
61	100		
96	88.0	63.5	95.3
63	32.5	24.6	36.8

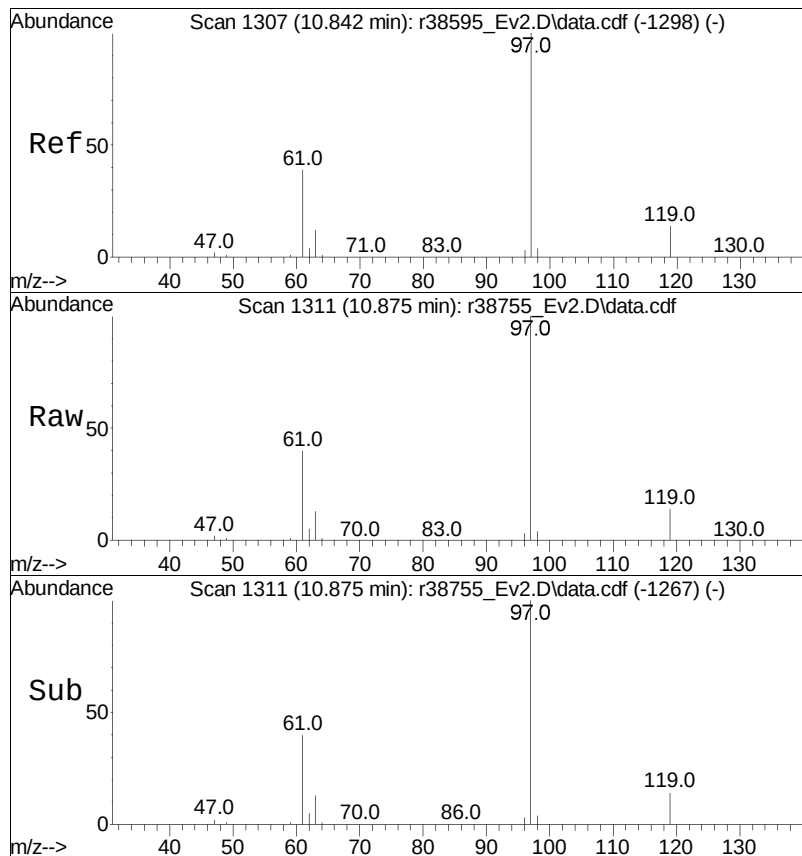




#28
 cis-1,2-dichloroethene
 Concen: 5.31 ppbV
 RT: 9.383 min Scan# 1132
 Delta R.T. 0.033 min
 Lab File: r38755_Ev2.D
 Acq: 20 Mar 2020 2:11 PM

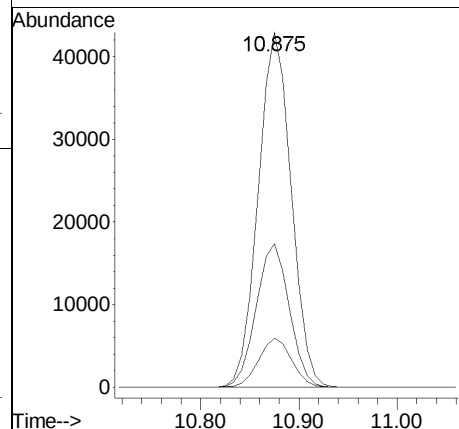
Tgt Ion:	61	Resp:	86846
Ion Ratio	Lower	Upper	
61	100		
96	86.3	72.2	108.4
98	54.2	46.3	69.5

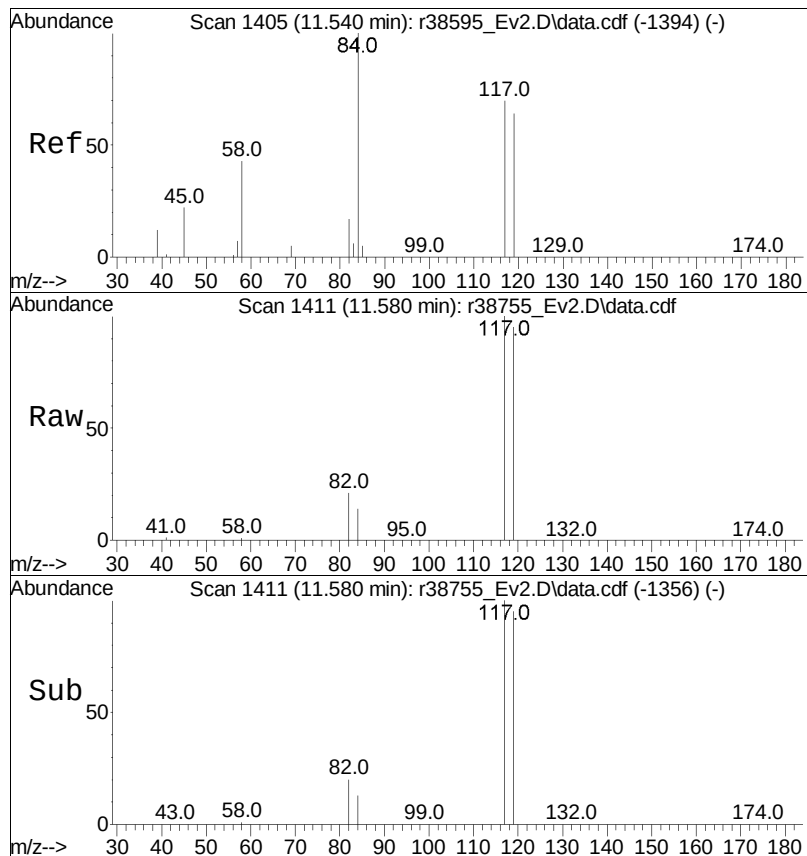




#36
 1,1,1-trichloroethane
 Concen: 5.11 ppbV
 RT: 10.875 min Scan# 1311
 Delta R.T. 0.033 min
 Lab File: r38755_Ev2.D
 Acq: 20 Mar 2020 2:11 PM

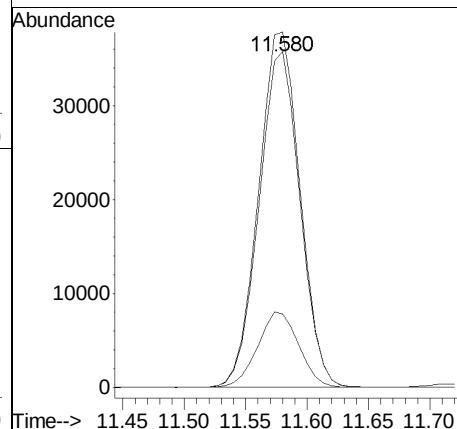
Tgt Ion	Ratio	Resp	Lower	Upper
97	100	99987		
61	40.4		31.0	46.4
119	13.9		11.7	17.5

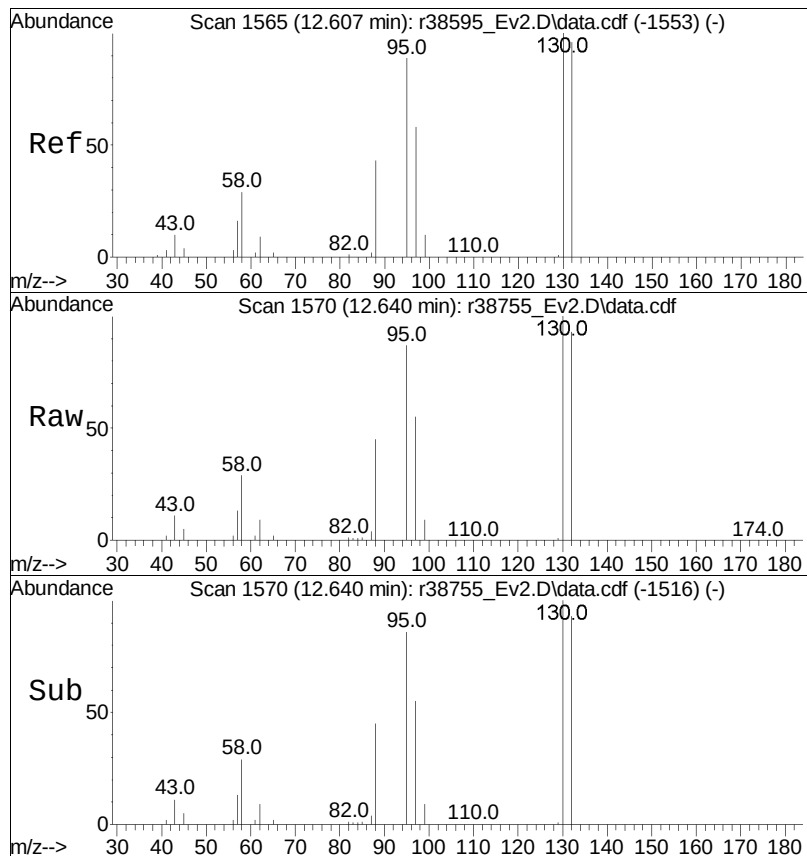




#38
 carbon tetrachloride
 Concen: 4.69 ppbV
 RT: 11.580 min Scan# 1411
 Delta R.T. 0.040 min
 Lab File: r38755_Ev2.D
 Acq: 20 Mar 2020 2:11 PM

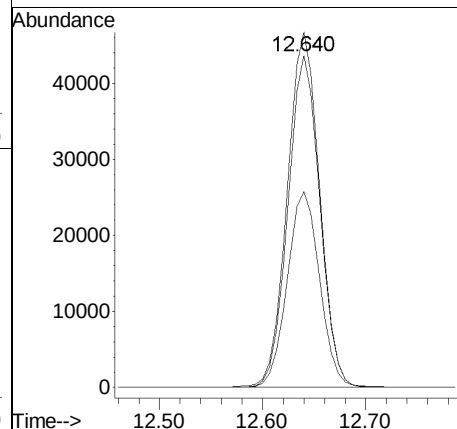
Tgt Ion:	117	Resp:	88773
Ion Ratio	Lower	Upper	
117	100		
119	94.5	73.0	109.4
82	20.7	19.1	28.7

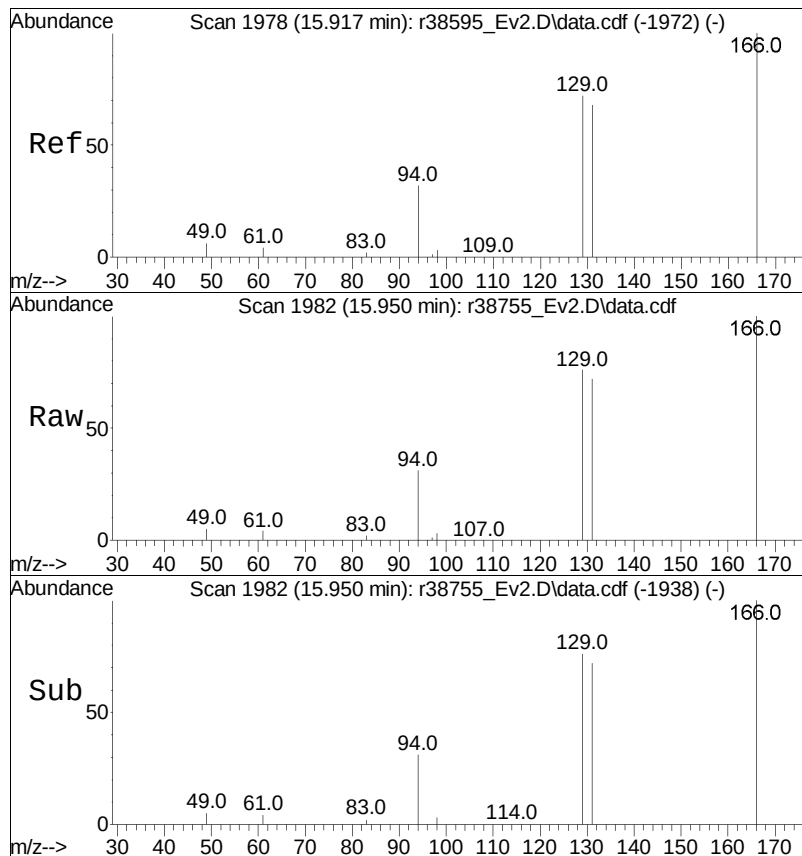




#44
trichloroethene
Concen: 5.56 ppbV
RT: 12.640 min Scan# 1570
Delta R.T. 0.033 min
Lab File: r38755_Ev2.D
Acq: 20 Mar 2020 2:11 PM

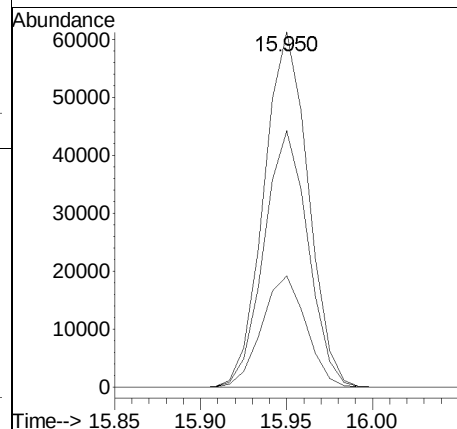
Tgt Ion	Ratio	Resp	Lower	Upper
130	100	101823		
132	93.4	76.5	114.7	
97	55.1	46.2	69.4	





#57
 tetrachloroethene
 Concen: 5.38 ppbV
 RT: 15.950 min Scan# 1982
 Delta R.T. 0.033 min
 Lab File: r38755_Ev2.D
 Acq: 20 Mar 2020 2:11 PM

Tgt Ion:	166	Resp:	110055
Ion Ratio	Lower	Upper	
166	100		
131	72.2	54.6	82.0
94	31.4	25.7	38.5



Quantitation Report (QT Reviewed)

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\
 Data File : r38760_Ev2.D
 Acq On : 20 Mar 2020 7:03 PM
 Operator : AIRPIAN03:EW
 Sample : WG1353543-5,3,250,250
 Misc : WG1353543,ICAL16593
 ALS Vial : 0 Sample Multiplier: 1

Quant Time: Mar 21 19:11:23 2020
 Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M
 Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
 QLast Update : Thu Mar 12 16:48:11 2020
 Response via : Initial Calibration

CCAL FILE : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\r38755_Ev2.D
 Sub List : 7-NY-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) bromochloromethane	9.575	49	238534	10.000	ppbV	0.03
Standard Area = 225089			Recovery = 105.97%			
33) 1,4-difluorobenzene	11.847	114	652384	10.000	ppbV	0.04
Standard Area = 642201			Recovery = 101.59%			
51) chlorobenzene-D5	16.567	54	86728	10.000	ppbV	0.03
Standard Area = 90362			Recovery = 95.98%			

System Monitoring Compounds

Target Compounds					Qvalue
6) vinyl chloride	0.000		0	N.D.	
17) 1,1-dichloroethene	0.000		0	N.D.	d
28) cis-1,2-dichloroethene	0.000		0	N.D.	
36) 1,1,1-trichloroethane	0.000		0	N.D.	d
38) carbon tetrachloride	11.580	117	1044	0.054	ppbV 96
44) trichloroethene	0.000		0	N.D.	d
57) tetrachloroethene	15.950	166	4639	0.236	ppbV 97

 (#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : 7-NY-SIM - .\Data\Airpiano3\2020\03\200320SIM\r38755_Ev2.D

Data Path : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\

Data File : r38760_Ev2.D

Acq On : 20 Mar 2020 7:03 PM

Operator : AIRPIANO3:EW

Sample : WG1353543-5,3,250,250

Misc : WG1353543,ICAL16593

ALS Vial : 0 Sample Multiplier: 1

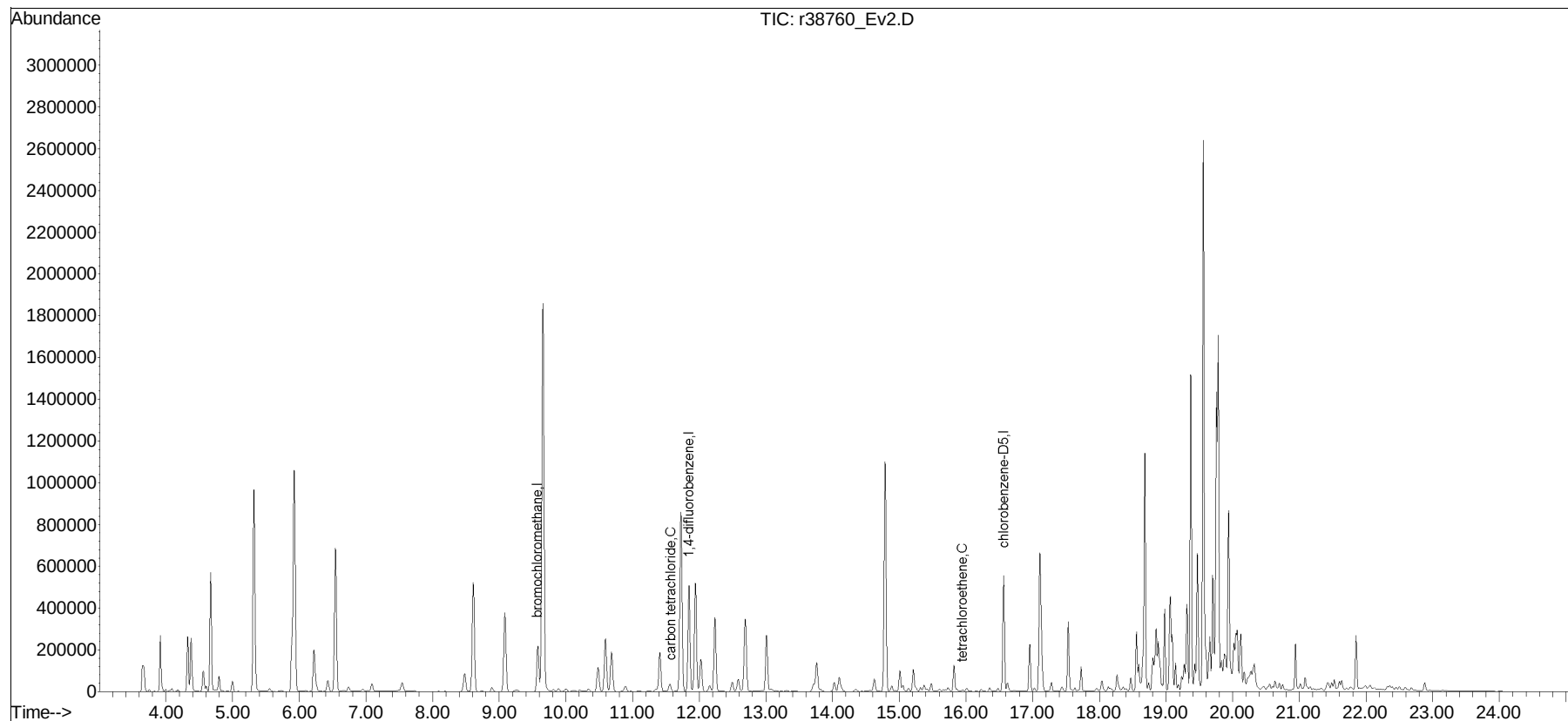
Quant Time: Mar 21 19:11:23 2020

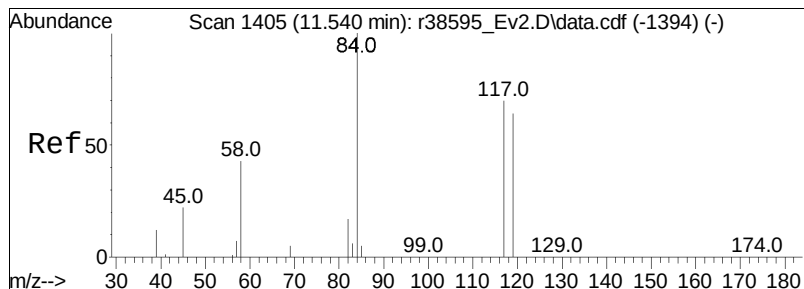
Quant Method : 0:\Forensics\Data\Airpiano3\2020\03\200320SIM\TSIM3_200312.M

Quant Title : T0-14A/T0-15 SIM/Full Scan Analysis

QLast Update : Thu Mar 12 16:48:11 2020

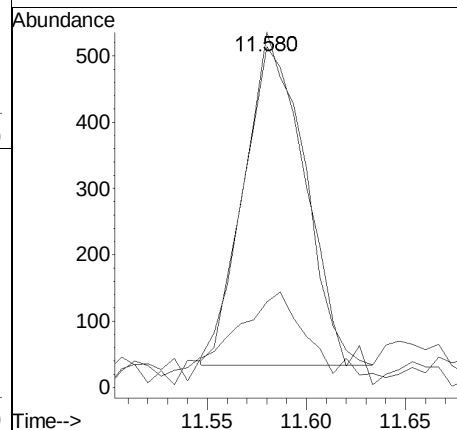
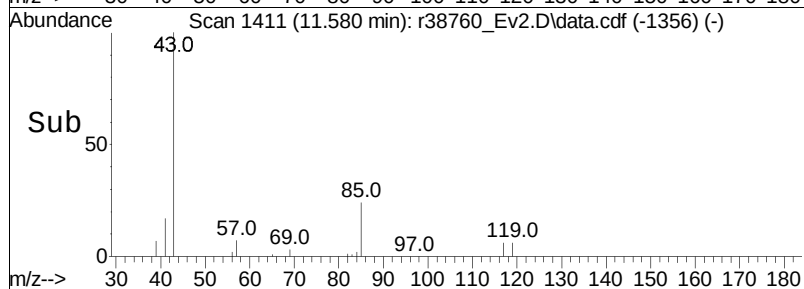
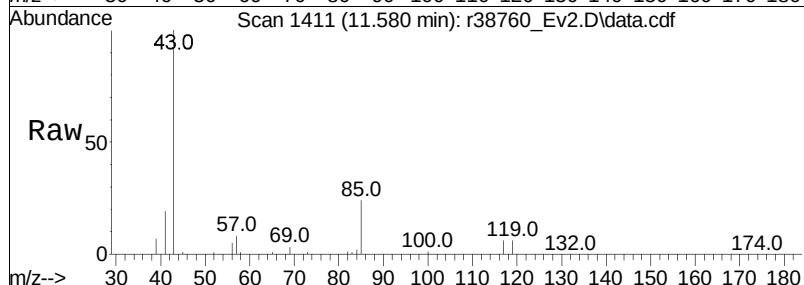
Response via : Initial Calibration

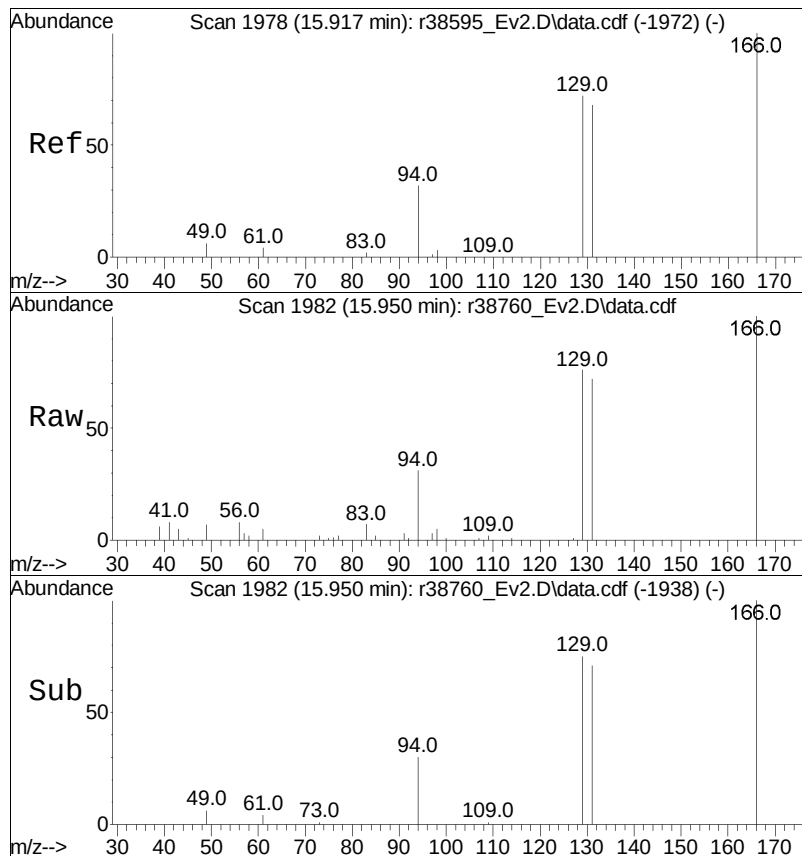




#38
 carbon tetrachloride
 Concen: 0.05 ppbV
 RT: 11.580 min Scan# 1411
 Delta R.T. 0.040 min
 Lab File: r38760_Ev2.D
 Acq: 20 Mar 2020 7:03 PM

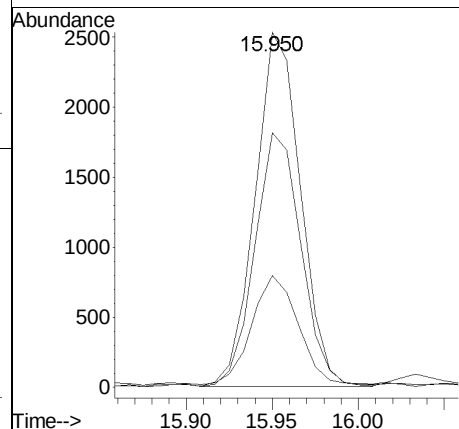
Tgt Ion:	117	Resp:	1044
Ion Ratio	Lower	Upper	
117	100		
119	95.9	73.0	109.4
82	24.1	19.1	28.7





#57
 tetrachloroethene
 Concen: 0.24 ppbV
 RT: 15.950 min Scan# 1982
 Delta R.T. 0.033 min
 Lab File: r38760_Ev2.D
 Acq: 20 Mar 2020 7:03 PM

Tgt Ion:	166	Resp:	4639
Ion Ratio	Lower	Upper	
166	100		
131	71.6	54.6	82.0
94	31.5	25.7	38.5



Manual Integration Report

Data Path : 0:\Forensics\Data\AirpianoQMethod : TSIM3_200312.M
Data File : r38760_Ev2.D Operator : AIRPIAN03:EW
Date Inj'd : 3/20/2020 0:7: 3 Instrument :
Sample : WG1353543-5,3,250,250 Quant Date : 3/21/2020 7:09 pm

There are no manual integrations or false positives in this file.

Calculation of Volatile Organic Compounds in Air

The instrument will calculate the concentration (ppbv). If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

$$\text{Result, ppbv} = C_s \times \text{DF}$$

Where:

C_s = Concentration of sample (ppbv)

DF = Dilution Factor

Calculation of Instrument Dilution Factor

For dilutions, smaller sample volumes (< 250mL) are analyzed. The smallest volume that can be analyzed with accuracy is 10 mL.

Samples that arrive at the laboratory with pressures below -15 inches Hg must be pressurized with zero air to greater than -15 inches Hg. This pressurization results in a dilution factor.

Calculation of Dilution Factor

$$\text{DF} = V_{\text{cf}} / V_{\text{ci}}$$

Where:

V_{ci} = volume of air in canister prior to pressurization, L

P =

Conversion of ppbv to $\mu\text{g}/\text{m}^3$

$$\mu\text{g}/\text{m}^3 = (\text{ppbv}) \times \text{MW} / 24.47$$

Where:

24.47 = molar gas constant (g/g-mole)

MW = molecular weight of the compound of interest

Dilution Factor for Pressurization of Subatmospheric Samples: Three Steps

Step 1: Calculate the volume in the canister prior to pressurization (Assume a 2.7 liter canister is used).

Dilution Factor for Pressurization of Subatmospheric Samples: Three Steps

Step 1: Calculate the volume in the canister prior to pressurization (Assume a 2.7 liter canister is used).

$$V_{ci} = 2.7 * PI / 14.696$$

Step 2: Calculate the volume in the canister after pressurization.

$$V_{cf} = 2.7 * PF / 14.696$$

Step 3: Calculate the dilution factor.

$$DF = V_{cf} / V_{ci}$$

Where:

V_{ci} = volume of air in canister prior to pressurization, L

PI = pressure reading of canister prior to pressurization (psia)

V_{cf} = volume of air in canister after pressurization, L

PF = pressure reading of canister after pressurization (psia)

DF = dilution factor

14.696 = atmospheric pressure (psia)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Mar 27 2020, 03:40 pm

Work Group: WG1353543 for Department: 3 GC/MS

Created: 20-MAR-20 Due: Operator: EW

Sample	Client ID	C Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2011723-05	0A001	S T015-SIM	AIR	DONE	U	0412	0323	S0	Can-2.7
L2011723-06	IA001	S T015-SIM	AIR	DONE	U	0412	0323	S0	Can-2.7
L2012074-01	IA-8	S T015-SIM	AIR	DONE	U	0416	0323	S0	Can-2.7
L2012074-02	IA-7	S T015-SIM	AIR	DONE	U	0416	0323	S0	Can-2.7
L2012074-03	IA-10	S T015-SIM	AIR	DONE	U	0416	0323	S0	Can-2.7
L2012074-04	IA-6	S T015-SIM	AIR	DONE	U	0416	0323	S0	Can-2.7
L2012074-05	IA-9	S T015-SIM	AIR	DONE	U	0416	0323	S0	Can-2.7
WG1353543-1	MS BFB Tune Standard	S T015-SIM	AIR	DONE	U				
WG1353543-2	Continuing Calibrati	S T015-SIM	AIR	DONE	U				
WG1353543-3	Laboratory Control S	S T015-SIM	AIR	DONE	U				
WG1353543-4	Laboratory Method Bl	S T015-SIM	AIR	DONE	U				
WG1353543-5	Duplicate Sample	S T015-SIM	AIR	DONE	U				
Comments:									
WG1353543-5	L2011723-06								

Alpha Analytical Air Lab Instrument Run Log

Instrument ID: Airpiano3

Internal Standard/Surrogate IDs: SS20-009 / SS19-022

Date: 03/12/20

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: TS

Sequence File Name: 200312.S

SIM ICAL#		Full Scan ICAL#		APH ICAL#			
AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/sublist	Leak Check Pass ? Y/N
1	BA3031201	TO15_SFS.qgm	R38585.qgd	250 mL			NA
1	BA3031202	TO15_SFS.qgm	R38586.qgd	250 mL			NA
1	BA3031203	TO15_SFS.qgm	R38587.qgd	250 mL			NA
1	TA3031201	TO15_SFS.qgm	R38588.qgd	250 mL	TUNE		NA
5	ITO15-SIMSTD0.02	TO15_SFS.qgm	R38589.qgd	50 mL SS20-003D	SIM ONLY		NA
5	ITO15-SIMSTD0.05	TO15_SFS.qgm	R38590.qgd	125 mL SS20-003D	SIM ONLY		NA
5	ITO15-SIMSTD0.1	TO15_SFS.qgm	R38591.qgd	250 mL SS20-003D	SIM ONLY		NA
6	ITO15-SIMSTD0.2	TO15_SFS.qgm	R38592.qgd	50 mL SS20-003C			NA
6	ITO15-SIMSTD0.5	TO15_SFS.qgm	R38593.qgd	125 mL SS20-003C			NA
6	ITO15-SIMSTD1.0	TO15_SFS.qgm	R38594.qgd	250 mL SS20-003C			NA
7	ITO15-SIMSTD5.0	TO15_SFS.qgm	R38595.qgd	125 mL SS20-003B1			NA
7	ITO15-SIMSTD010	TO15_SFS.qgm	R38596.qgd	250 mL SS20-003B1			NA
8	ITO15-SIMSTD020	TO15_SFS.qgm	R38597.qgd	50 mL SS20-003A			NA
8	ITO15-SIMSTD050	TO15_SFS.qgm	R38598.qgd	125 mL SS20-003A			NA
8	ITO15-LLSTD100	TO15_SFS.qgm	R38599.qgd	250 mL SS20-003A	LL ONLY		NA
1	BA3031201	TO15_SFS.qgm	R38600.qgd	250 mL			NA
1	BA3031202	TO15_SFS.qgm	R38601.qgd	250 mL			NA
2	CTO15-LLSTD010	TO15_SFS.qgm	R38602.qgd	250 mL SS20-006B	LL ICV		NA
2	CTO15-SIMSTD5.0	TO15_SFS.qgm	R38603.qgd	125 mL SS20-006B	SIM ICV		NA

Alpha Analytical Air Lab Instrument Run Log

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,250 { Lab sample ID, dept #, actual
volume analyzed (mL), nominal
volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume
analyzed

Alpha Analytical Air Lab Instrument Run Log

Instrument ID: Airpiano3

Internal Standard/Surrogate IDs: SS20-009 / SS19-022

Date: 03/20/20

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: EW

Sequence File Name: 200320.S

SIM ICAL# 16593		Full Scan ICAL# 16594		APH ICAL#16592			
AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/sublist	Leak Check Pass ? Y/N
1	TA3032001	TO15_SFS.qgm	R38753.qgd	250 mL	TUNE		NA
3	CTO15-LLSTD010	TO15_SFS.qgm	R38754.qgd	250 mL SS20-006B	LL LCS		NA
3	CTO15-SIMSTD5.0	TO15_SFS.qgm	R38755.qgd	125 mL SS20-006B	SIM LCS		NA
1	BA3032001	TO15_SFS.qgm	R38756.qgd	250 mL	BLANK FAILED		NA
1	BA3032002	TO15_SFS.qgm	R38757.qgd	250 mL	BLANK		NA
1	L2011723-05,3,250,250	TO15_SFS.qgm	R38758.qgd	WG1353541,ICAL16594		NY / 7-SIM	Y
2	L2011723-06,3,250,250	TO15_SFS.qgm	R38759.qgd	WG1353541,ICAL16594		NY / 7-SIM	Y
2	L2011723-06DUP,3,250,250	TO15_SFS.qgm	R38760.qgd	WG1353541,ICAL16594	LL / SIM DUP	NY / 7-SIM	Y
3	L2012074-01,3,250,250	TO15_SFS.qgm	R38761.qgd	WG1353541,ICAL16594		NY / 7-SIM	Y
4	L2012074-02,3,250,250	TO15_SFS.qgm	R38762.qgd	WG1353541,ICAL16594		NY / 7-SIM	Y
5	L2012074-03,3,250,250	TO15_SFS.qgm	R38763.qgd	WG1353541,ICAL16594		NY / 7-SIM	Y
6	L2012074-04,3,250,250	TO15_SFS.qgm	R38764.qgd	WG1353541,ICAL16594		NY / 7-SIM	Y
7	L2012074-05,3,250,250	TO15_SFS.qgm	R38765.qgd	WG1353541,ICAL16594		NY / 7-SIM	Y
8	L2011818-01,3,250,250	TO15_SFS.qgm	R38766.qgd	WG1353541,ICAL16594		NY	Y
9	L2011818-02,3,250,250	TO15_SFS.qgm	R38767.qgd	WG1353541,ICAL16594		NY	Y
10	L2011818-03,3,250,250	TO15_SFS.qgm	R38768.qgd	WG1353541,ICAL16594		NY	Y
11	L2011818-04,3,250,250	TO15_SFS.qgm	R38769.qgd	WG1353541,ICAL16594		NY	Y
12	L2011818-05,3,250,250	TO15_SFS.qgm	R38770.qgd	WG1353541,ICAL16594		NY	Y
13	L2011818-06,3,250,250	TO15_SFS.qgm	R38771.qgd	WG1353541,ICAL16594	IPA OVERCAL	NY	Y
14	L2011818-07D,3,215,250	TO15_SFS.qgm	R38772.qgd	WG1353541,ICAL16594		NY	Y
15	L2011546-02,3,250,250	TO15_SFS.qgm	R38773.qgd	WG1353539,ICAL16594		MCP	Y

Alpha Analytical Air Lab

Instrument Run Log

[illegible]

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

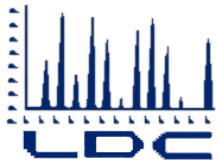
Sample ID information:	L1301234-01,3,250,250	{ Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL)}

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed



APPENDIX D

Data Usability Summary Report



LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

P.W. Grosser Consulting
630 Johnson Ave, Suite 7
Bohemia, NY 11716
ATTN: Ms. Jennifer Lewis
jenniferl@pwgrosser.com

April 27, 2020

SUBJECT: 233-20 Braddock Ave, Jamaica, NY, Data Usability Summary Report

Dear Ms. Lewis,

Enclosed is the final validation report for the fraction listed below. This SDG was received on April 2, 2020. Attachment 1 is a summary of the samples that were reviewed for analysis.

LDC Project #47705:

SDG #

Fraction

L2011723

Volatiles

The data validation was performed under Category B guidelines using quality control summaries provided by the laboratory. The analyses were validated using the following documents, as applicable to each method:

- USEPA Region 2 Analysis of Volatile Organic Compounds in Air Contained Canisters, SOP HW-31, Revision 6; September 2016
- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, EPA 540-R-2017-002; January 2017

Please feel free to contact us if you have any questions.

Sincerely,

Christina Rink
crink@lab-data.com
Project Manager/Senior Chemist

[illegible]

Site: 233-20 Braddock Ave, Jamaica, NY
Laboratory: Alpha Analytical, Inc.
Report No.: L2011723
Reviewer: Felomina Tanguilig and Christina Rink/Laboratory Data Consultants for P.W. Grosser Consulting
Date: April 24, 2020

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SS001	L2011723-01	VOC
SV001	L2011723-02	VOC
SV002	L2011723-03	VOC
SV003	L2011723-04	VOC
OA001	L2011723-05	VOC, VOC-SIM
IA001	L2011723-06	VOC, VOC-SIM
IA001DUP	L2011723-06DUP	VOC, VOC-SIM

Associated QC Samples(s):

Field/Trip Blanks: None Associated

Field Duplicate pair: None Associated

The above-listed air samples were collected on March 13, 2020 and were analyzed for volatile organic compounds (VOCs) by TO-15 and TO15 in selected ion monitoring (SIM) mode. The data validation was performed in accordance with the USEPA Region 2 *Analysis of Volatile Organic Compounds in Air Contained Canisters*, SOP HW-31, Revision 6 (September 2016) and the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, EPA 540-R-2017-002 (January 2017), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Laboratory Duplicate Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

VOC

Initial calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	ICV %D	Associated Samples		Validation Action
03/13/20	ICV	1,2,4-Trichlorobenzene	50.9	OA001 IA001	SS	UJ nondetects

- X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The 1,2,4-trichlorobenzene results were estimated due to second source calibration exceedance. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Continuing calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	CC %D	Associated Samples		Validation Action
03/20/20	CCV	2-Hexanone	40.3	OA001 IA001	XX	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.

XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.

SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.

+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The 2-hexanone results were estimated due to continuing calibration exceedance. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

VOC-SIM

All criteria were met.

Blanks

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

Laboratory Duplicate Results

Laboratory duplicates were performed on sample IA001 for VOC and VOC-SIM analyses. All criteria were met.

LCS Results

VOC

The following table lists the LCS percent recoveries (%R) outside of control limits in the VOC analysis and the resulting validation actions.

LCS ID	Compound	LCS %R (Limits)	Affected Sample	Validation Action
WG1353541-3LCS	2-Hexanone	140 (70-130)	OA001	None
	1,2,4-Trichlorobenzene	138 (70-130)	IA001	None
	Hexachlorobutadiene	146 (70-130)		None

Validation action was not required for 2-hexanone, 1,2,4-trichlorobenzene, and hexachlorobutadiene due to high LCS/LCSD percent recoveries as positive results only are affected and these compounds were not detected in the associated samples.

VOC-SIM

All criteria were met.

Internal Standards

All criteria were met.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the VOC and VOC-SIM analyses.

Due to high target compound levels or difficult sample matrix, select samples were analyzed at dilutions. The following table lists the sample dilutions which were performed and the results reported. RLs were elevated accordingly.

Sample	VOC Analysis Reported
SV001	3.333-fold dilution due to nature of sample matrix
SV002	6.25-fold dilution due to nature of sample matrix
SV003	2.5-fold dilution due to nature of sample matrix

Dilutions were not required for VOC-SIM analysis.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

- U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.
- J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified “J” data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The ‘J’ data may be biased high or low or the direction of the bias may be indeterminable.
- UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified “UJ” data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The ‘UJ’ data may be biased low.
- JN - The analysis indicates the presence of a compound that has been “tentatively identified” (N) and the associated numerical value represents its approximate (J) concentration.
- R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

Results Summary Form 1 Volatile Organics in Air

Client : P. W. Grosser
Project Name : MHD1801
Lab ID : L2011723-01
Client ID : SS001
Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
Sample Matrix : SOIL_VAPOR
Analytical Method : 48,TO-15
Lab File ID : R193208
Sample Amount : 250 ml

Lab Number : L2011723
Project Number : MHD1801
Date Collected : 03/13/20 16:25
Date Received : 03/16/20
Date Analyzed : 03/21/20 01:52
Dilution Factor : 1
Analyst : EW
Instrument ID : AIRLAB19
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.409	0.200	--	2.02	0.989	--	
74-87-3	Chloromethane	0.259	0.200	--	0.535	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U U
106-99-0	1,3-Butadiene	0.830	0.200	--	1.84	0.442	--	
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U U
64-17-5	Ethanol	10.8	5.00	--	20.3	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U U
67-64-1	Acetone	39.9	1.00	--	94.8	2.38	--	
75-69-4	Trichlorofluoromethane	0.208	0.200	--	1.17	1.12	--	
67-63-0	Isopropanol	1.64	0.500	--	4.03	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U U
75-65-0	Tertiary butyl Alcohol	2.04	0.500	--	6.18	1.52	--	
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U U
75-15-0	Carbon disulfide	1.44	0.200	--	4.48	0.623	--	
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U U
78-93-3	2-Butanone	5.11	0.500	--	15.1	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U U
67-66-3	Chloroform	69.2	0.200	--	338	0.977	--	
109-99-9	Tetrahydrofuran	3.06	0.500	--	9.02	1.47	--	

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Initials: ER

Results Summary Form 1 Volatile Organics in Air

Client : P. W. Grosser
Project Name : MHD1801
Lab ID : L2011723-01
Client ID : SS001
Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
Sample Matrix : SOIL_VAPOR
Analytical Method : 48,TO-15
Lab File ID : R193208
Sample Amount : 250 ml

Lab Number : L2011723
Project Number : MHD1801
Date Collected : 03/13/20 16:25
Date Received : 03/16/20
Date Analyzed : 03/21/20 01:52
Dilution Factor : 1
Analyst : EW
Instrument ID : AIRLAB19
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier	
		Results	RL	MDL	Results	RL	MDL		
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U	✓
110-54-3	n-Hexane	32.4	0.200	--	114	0.705	--		
71-55-6	1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	U	✓
71-43-2	Benzene	3.34	0.200	--	10.7	0.639	--		
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U	✓
110-82-7	Cyclohexane	14.5	0.200	--	49.9	0.688	--		
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U	✓
75-27-4	Bromodichloromethane	5.24	0.200	--	35.1	1.34	--		
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U	✓
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U	✓
540-84-1	2,2,4-Trimethylpentane	5.24	0.200	--	24.5	0.934	--		
142-82-5	Heptane	5.29	0.200	--	21.7	0.820	--		
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U	✓
108-10-1	4-Methyl-2-pentanone	0.590	0.500	--	2.42	2.05	--		
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U	✓
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U	✓
108-88-3	Toluene	18.7	0.200	--	70.5	0.754	--		
591-78-6	2-Hexanone	2.89	0.200	--	11.8	0.820	--		
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U	✓
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U	✓
127-18-4	Tetrachloroethene	45.3	0.200	--	307	1.36	--		
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U	✓
100-41-4	Ethylbenzene	3.82	0.200	--	16.6	0.869	--		
179601-23-1	p/m-Xylene	10.2	0.400	--	44.3	1.74	--		
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U	✓
100-42-5	Styrene	0.203	0.200	--	0.864	0.852	--		

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Initials: ER



Results Summary Form 1 Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-01
 Client ID : SS001
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R193208
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:25
 Date Received : 03/16/20
 Date Analyzed : 03/21/20 01:52
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U ✓
95-47-6	o-Xylene	4.43	0.200	--	19.2	0.869	--	
622-96-8	4-Ethyltoluene	0.737	0.200	--	3.62	0.983	--	
108-67-8	1,3,5-Trimethylbenzene	0.770	0.200	--	3.79	0.983	--	
95-63-6	1,2,4-Trimethylbenzene	2.23	0.200	--	11.0	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U ↓
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U ↓
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U ↓
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U ↓
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U ↓
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U ↓

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Initials: *CR*



Results Summary Form 1 Volatile Organics in Air

Client : P. W. Grosser
Project Name : MHD1801
Lab ID : L2011723-02D
Client ID : SV001
Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
Sample Matrix : SOIL_VAPOR
Analytical Method : 48,TO-15
Lab File ID : R193209
Sample Amount : 75.0 ml

Lab Number : L2011723
Project Number : MHD1801
Date Collected : 03/13/20 16:26
Date Received : 03/16/20
Date Analyzed : 03/21/20 02:28
Dilution Factor : 3.333
Analyst : EW
Instrument ID : AIRLAB19
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	ND	0.667	--	ND	3.30	--	U
74-87-3	Chloromethane	ND	0.667	--	ND	1.38	--	U
76-14-2	Freon-114	ND	0.667	--	ND	4.66	--	U
75-01-4	Vinyl chloride	ND	0.667	--	ND	1.71	--	U
106-99-0	1,3-Butadiene	ND	0.667	--	ND	1.48	--	U
74-83-9	Bromomethane	ND	0.667	--	ND	2.59	--	U
75-00-3	Chloroethane	ND	0.667	--	ND	1.76	--	U
64-17-5	Ethanol	ND	16.7	--	ND	31.5	--	U
593-60-2	Vinyl bromide	ND	0.667	--	ND	2.92	--	U
67-64-1	Acetone	793	3.33	--	1880	7.91	--	
75-69-4	Trichlorofluoromethane	ND	0.667	--	ND	3.75	--	U
67-63-0	Isopropanol	13.4	1.67	--	32.9	4.10	--	
75-35-4	1,1-Dichloroethene	ND	0.667	--	ND	2.64	--	U
75-65-0	Tertiary butyl Alcohol	8.96	1.67	--	27.2	5.06	--	
75-09-2	Methylene chloride	ND	1.67	--	ND	5.80	--	U
107-05-1	3-Chloropropene	ND	0.667	--	ND	2.09	--	U
75-15-0	Carbon disulfide	0.820	0.667	--	2.55	2.08	--	
76-13-1	Freon-113	ND	0.667	--	ND	5.11	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.667	--	ND	2.64	--	U
75-34-3	1,1-Dichloroethane	ND	0.667	--	ND	2.70	--	U
1634-04-4	Methyl tert butyl ether	ND	0.667	--	ND	2.40	--	U
78-93-3	2-Butanone	47.1	1.67	--	139	4.93	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.667	--	ND	2.64	--	U
141-78-6	Ethyl Acetate	ND	1.67	--	ND	6.02	--	U
67-66-3	Chloroform	ND	0.667	--	ND	3.26	--	U
109-99-9	Tetrahydrofuran	7.82	1.67	--	23.1	4.93	--	

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Initials: ER

Results Summary Form 1 Volatile Organics in Air

Client : P. W. Grosser
Project Name : MHD1801
Lab ID : L2011723-02D
Client ID : SV001
Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
Sample Matrix : SOIL_VAPOR
Analytical Method : 48,TO-15
Lab File ID : R193209
Sample Amount : 75.0 ml

Lab Number : L2011723
Project Number : MHD1801
Date Collected : 03/13/20 16:26
Date Received : 03/16/20
Date Analyzed : 03/21/20 02:28
Dilution Factor : 3.333
Analyst : EW
Instrument ID : AIRLAB19
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.667	--	ND	2.70	--	U ✓
110-54-3	n-Hexane	3.20	0.667	--	11.3	2.35	--	
71-55-6	1,1,1-Trichloroethane	ND	0.667	--	ND	3.64	--	U ✓
71-43-2	Benzene	1.26	0.667	--	4.03	2.13	--	
56-23-5	Carbon tetrachloride	ND	0.667	--	ND	4.20	--	U ✓
110-82-7	Cyclohexane	1.71	0.667	--	5.89	2.30	--	
78-87-5	1,2-Dichloropropane	ND	0.667	--	ND	3.08	--	U ✓
75-27-4	Bromodichloromethane	ND	0.667	--	ND	4.47	--	U ✓
123-91-1	1,4-Dioxane	ND	0.667	--	ND	2.40	--	U ✓
79-01-6	Trichloroethene	ND	0.667	--	ND	3.58	--	U ✓
540-84-1	2,2,4-Trimethylpentane	ND	0.667	--	ND	3.12	--	U ✓
142-82-5	Heptane	11.0	0.667	--	45.1	2.73	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.667	--	ND	3.03	--	U ✓
108-10-1	4-Methyl-2-pentanone	2.26	1.67	--	9.26	6.84	--	
10061-02-6	trans-1,3-Dichloropropene	ND	0.667	--	ND	3.03	--	U ✓
79-00-5	1,1,2-Trichloroethane	ND	0.667	--	ND	3.64	--	U ✓
108-88-3	Toluene	13.6	0.667	--	51.3	2.51	--	
591-78-6	2-Hexanone	8.08	0.667	--	33.1	2.73	--	
124-48-1	Dibromochloromethane	ND	0.667	--	ND	5.68	--	U ✓
106-93-4	1,2-Dibromoethane	ND	0.667	--	ND	5.13	--	U ✓
127-18-4	Tetrachloroethene	11.6	0.667	--	78.7	4.52	--	
108-90-7	Chlorobenzene	ND	0.667	--	ND	3.07	--	U ✓
100-41-4	Ethylbenzene	1.66	0.667	--	7.21	2.90	--	
179601-23-1	p/m-Xylene	6.72	1.33	--	29.2	5.78	--	
75-25-2	Bromoform	ND	0.667	--	ND	6.90	--	U ✓
100-42-5	Styrene	ND	0.667	--	ND	2.84	--	U ✓

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Results Summary Form 1 Volatile Organics in Air

Client : P. W. Grosser
Project Name : MHD1801
Lab ID : L2011723-02D
Client ID : SV001
Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
Sample Matrix : SOIL_VAPOR
Analytical Method : 48,TO-15
Lab File ID : R193209
Sample Amount : 75.0 ml

Lab Number : L2011723
Project Number : MHD1801
Date Collected : 03/13/20 16:26
Date Received : 03/16/20
Date Analyzed : 03/21/20 02:28
Dilution Factor : 3.333
Analyst : EW
Instrument ID : AIRLAB19
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.667	--	ND	4.58	--	U ✓
95-47-6	o-Xylene	2.44	0.667	--	10.6	2.90	--	
622-96-8	4-Ethyltoluene	ND	0.667	--	ND	3.28	--	U ✓
108-67-8	1,3,5-Trimethylbenzene	0.783	0.667	--	3.85	3.28	--	
95-63-6	1,2,4-Trimethylbenzene	2.97	0.667	--	14.6	3.28	--	
100-44-7	Benzyl chloride	ND	0.667	--	ND	3.45	--	U ✓
541-73-1	1,3-Dichlorobenzene	ND	0.667	--	ND	4.01	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.667	--	ND	4.01	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.667	--	ND	4.01	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.667	--	ND	4.95	--	U
87-68-3	Hexachlorobutadiene	ND	0.667	--	ND	7.11	--	U ↓

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Initials: *ER*



Results Summary Form 1 Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-03D
 Client ID : SV002
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R193210
 Sample Amount : 40.0 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:27
 Date Received : 03/16/20
 Date Analyzed : 03/21/20 03:04
 Dilution Factor : 6.25
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	ND	1.25	--	ND	6.18	--	U
74-87-3	Chloromethane	ND	1.25	--	ND	2.58	--	U
76-14-2	Freon-114	ND	1.25	--	ND	8.74	--	U
75-01-4	Vinyl chloride	ND	1.25	--	ND	3.20	--	U
106-99-0	1,3-Butadiene	ND	1.25	--	ND	2.77	--	U
74-83-9	Bromomethane	ND	1.25	--	ND	4.85	--	U
75-00-3	Chloroethane	ND	1.25	--	ND	3.30	--	U
64-17-5	Ethanol	ND	31.2	--	ND	58.8	--	U
593-60-2	Vinyl bromide	ND	1.25	--	ND	5.47	--	U
67-64-1	Acetone	428	6.25	--	1020	14.8	--	
75-69-4	Trichlorofluoromethane	ND	1.25	--	ND	7.02	--	U
67-63-0	Isopropanol	6.52	3.12	--	16.0	7.67	--	
75-35-4	1,1-Dichloroethene	ND	1.25	--	ND	4.96	--	U
75-65-0	Tertiary butyl Alcohol	4.80	3.12	--	14.6	9.46	--	
75-09-2	Methylene chloride	ND	3.12	--	ND	10.8	--	U
107-05-1	3-Chloropropene	ND	1.25	--	ND	3.91	--	U
75-15-0	Carbon disulfide	ND	1.25	--	ND	3.89	--	U
76-13-1	Freon-113	ND	1.25	--	ND	9.58	--	U
156-60-5	trans-1,2-Dichloroethene	ND	1.25	--	ND	4.96	--	U
75-34-3	1,1-Dichloroethane	ND	1.25	--	ND	5.06	--	U
1634-04-4	Methyl tert butyl ether	ND	1.25	--	ND	4.51	--	U
78-93-3	2-Butanone	28.0	3.12	--	82.6	9.20	--	
156-59-2	cis-1,2-Dichloroethene	60.0	1.25	--	238	4.96	--	
141-78-6	Ethyl Acetate	ND	3.12	--	ND	11.2	--	U
67-66-3	Chloroform	10.4	1.25	--	50.8	6.10	--	
109-99-9	Tetrahydrofuran	4.63	3.12	--	13.7	9.20	--	

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Results Summary

Form 1

Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-03D
 Client ID : SV002
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R193210
 Sample Amount : 40.0 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:27
 Date Received : 03/16/20
 Date Analyzed : 03/21/20 03:04
 Dilution Factor : 6.25
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	1.25	--	ND	5.06	--	U
110-54-3	n-Hexane	ND	1.25	--	ND	4.41	--	U
71-55-6	1,1,1-Trichloroethane	ND	1.25	--	ND	6.82	--	U
71-43-2	Benzene	ND	1.25	--	ND	3.99	--	U
56-23-5	Carbon tetrachloride	ND	1.25	--	ND	7.86	--	U
110-82-7	Cyclohexane	ND	1.25	--	ND	4.30	--	U
78-87-5	1,2-Dichloropropane	ND	1.25	--	ND	5.78	--	U
75-27-4	Bromodichloromethane	ND	1.25	--	ND	8.37	--	U
123-91-1	1,4-Dioxane	ND	1.25	--	ND	4.50	--	U
79-01-6	Trichloroethene	13.5	1.25	--	72.6	6.72	--	
540-84-1	2,2,4-Trimethylpentane	ND	1.25	--	ND	5.84	--	U
142-82-5	Heptane	2.52	1.25	--	10.3	5.12	--	
10061-01-5	cis-1,3-Dichloropropene	ND	1.25	--	ND	5.67	--	U
108-10-1	4-Methyl-2-pentanone	ND	3.12	--	ND	12.8	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	1.25	--	ND	5.67	--	U
79-00-5	1,1,2-Trichloroethane	ND	1.25	--	ND	6.82	--	U
108-88-3	Toluene	9.82	1.25	--	37.0	4.71	--	
591-78-6	2-Hexanone	8.93	1.25	--	36.6	5.12	--	
124-48-1	Dibromochloromethane	ND	1.25	--	ND	10.6	--	U
106-93-4	1,2-Dibromoethane	ND	1.25	--	ND	9.61	--	U
127-18-4	Tetrachloroethene	320	1.25	--	2170	8.48	--	
108-90-7	Chlorobenzene	ND	1.25	--	ND	5.76	--	U
100-41-4	Ethylbenzene	2.88	1.25	--	12.5	5.43	--	
179601-23-1	p/m-Xylene	9.51	2.50	--	41.3	10.9	--	
75-25-2	Bromoform	ND	1.25	--	ND	12.9	--	U
100-42-5	Styrene	ND	1.25	--	ND	5.32	--	U

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Initials: ER

Results Summary Form 1 Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-03D
 Client ID : SV002
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R193210
 Sample Amount : 40.0 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:27
 Date Received : 03/16/20
 Date Analyzed : 03/21/20 03:04
 Dilution Factor : 6.25
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.25	--	ND	8.58	--	U U
95-47-6	o-Xylene	3.24	1.25	--	14.1	5.43	--	
622-96-8	4-Ethyltoluene	ND	1.25	--	ND	6.15	--	U U
108-67-8	1,3,5-Trimethylbenzene	ND	1.25	--	ND	6.15	--	U U
95-63-6	1,2,4-Trimethylbenzene	1.81	1.25	--	8.90	6.15	--	
100-44-7	Benzyl chloride	ND	1.25	--	ND	6.47	--	U U
541-73-1	1,3-Dichlorobenzene	ND	1.25	--	ND	7.52	--	U U
106-46-7	1,4-Dichlorobenzene	ND	1.25	--	ND	7.52	--	U U
95-50-1	1,2-Dichlorobenzene	ND	1.25	--	ND	7.52	--	U U
120-82-1	1,2,4-Trichlorobenzene	ND	1.25	--	ND	9.28	--	U U
87-68-3	Hexachlorobutadiene	ND	1.25	--	ND	13.3	--	U U

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Initials: *ER*



Results Summary Form 1 Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-04D
 Client ID : SV003
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R193211
 Sample Amount : 100 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:28
 Date Received : 03/16/20
 Date Analyzed : 03/21/20 03:40
 Dilution Factor : 2.5
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	ND	0.500	--	ND	2.47	--	U
74-87-3	Chloromethane	ND	0.500	--	ND	1.03	--	U
76-14-2	Freon-114	ND	0.500	--	ND	3.49	--	U
75-01-4	Vinyl chloride	ND	0.500	--	ND	1.28	--	U
106-99-0	1,3-Butadiene	4.51	0.500	--	9.98	1.11	--	
74-83-9	Bromomethane	ND	0.500	--	ND	1.94	--	U
75-00-3	Chloroethane	ND	0.500	--	ND	1.32	--	U
64-17-5	Ethanol	15.3	12.5	--	28.8	23.6	--	
593-60-2	Vinyl bromide	ND	0.500	--	ND	2.19	--	U
67-64-1	Acetone	745	2.50	--	1770	5.94	--	
75-69-4	Trichlorofluoromethane	ND	0.500	--	ND	2.81	--	U
67-63-0	Isopropanol	9.00	1.25	--	22.1	3.07	--	
75-35-4	1,1-Dichloroethene	ND	0.500	--	ND	1.98	--	U
75-65-0	Tertiary butyl Alcohol	8.52	1.25	--	25.8	3.79	--	
75-09-2	Methylene chloride	ND	1.25	--	ND	4.34	--	U
107-05-1	3-Chloropropene	ND	0.500	--	ND	1.57	--	U
75-15-0	Carbon disulfide	ND	0.500	--	ND	1.56	--	U
76-13-1	Freon-113	ND	0.500	--	ND	3.83	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.500	--	ND	1.98	--	U
75-34-3	1,1-Dichloroethane	ND	0.500	--	ND	2.02	--	U
1634-04-4	Methyl tert butyl ether	ND	0.500	--	ND	1.80	--	U
78-93-3	2-Butanone	63.6	1.25	--	188	3.69	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.500	--	ND	1.98	--	U
141-78-6	Ethyl Acetate	ND	1.25	--	ND	4.50	--	U
67-66-3	Chloroform	0.512	0.500	--	2.50	2.44	--	
109-99-9	Tetrahydrofuran	7.13	1.25	--	21.0	3.69	--	

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Results Summary Form 1 Volatile Organics in Air

Client : P. W. Grosser
Project Name : MHD1801
Lab ID : L2011723-04D
Client ID : SV003
Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
Sample Matrix : SOIL_VAPOR
Analytical Method : 48,TO-15
Lab File ID : R193211
Sample Amount : 100 ml

Lab Number : L2011723
Project Number : MHD1801
Date Collected : 03/13/20 16:28
Date Received : 03/16/20
Date Analyzed : 03/21/20 03:40
Dilution Factor : 2.5
Analyst : EW
Instrument ID : AIRLAB19
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.500	--	ND	2.02	--	U ✓
110-54-3	n-Hexane	1.49	0.500	--	5.25	1.76	--	
71-55-6	1,1,1-Trichloroethane	ND	0.500	--	ND	2.73	--	U ✓
71-43-2	Benzene	1.06	0.500	--	3.39	1.60	--	
56-23-5	Carbon tetrachloride	ND	0.500	--	ND	3.15	--	U ✓
110-82-7	Cyclohexane	ND	0.500	--	ND	1.72	--	U
78-87-5	1,2-Dichloropropane	ND	0.500	--	ND	2.31	--	U
75-27-4	Bromodichloromethane	ND	0.500	--	ND	3.35	--	U
123-91-1	1,4-Dioxane	ND	0.500	--	ND	1.80	--	U
79-01-6	Trichloroethene	ND	0.500	--	ND	2.69	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.500	--	ND	2.34	--	U
142-82-5	Heptane	2.36	0.500	--	9.67	2.05	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.500	--	ND	2.27	--	U
108-10-1	4-Methyl-2-pentanone	ND	1.25	--	ND	5.12	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.500	--	ND	2.27	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.500	--	ND	2.73	--	U
108-88-3	Toluene	6.96	0.500	--	26.2	1.88	--	
591-78-6	2-Hexanone	14.3	0.500	--	58.6	2.05	--	
124-48-1	Dibromochloromethane	ND	0.500	--	ND	4.26	--	U ✓
106-93-4	1,2-Dibromoethane	ND	0.500	--	ND	3.84	--	U ✓
127-18-4	Tetrachloroethene	34.0	0.500	--	231	3.39	--	
108-90-7	Chlorobenzene	ND	0.500	--	ND	2.30	--	U ✓
100-41-4	Ethylbenzene	0.905	0.500	--	3.93	2.17	--	
179601-23-1	p/m-Xylene	2.78	1.00	--	12.1	4.34	--	
75-25-2	Bromoform	ND	0.500	--	ND	5.17	--	U ✓
100-42-5	Styrene	ND	0.500	--	ND	2.13	--	U ✓

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Results Summary Form 1 Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-04D
 Client ID : SV003
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R193211
 Sample Amount : 100 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:28
 Date Received : 03/16/20
 Date Analyzed : 03/21/20 03:40
 Dilution Factor : 2.5
 Analyst : EW
 Instrument ID : AIRLAB19
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.500	--	ND	3.43	--	U
95-47-6	o-Xylene	0.900	0.500	--	3.91	2.17	--	
622-96-8	4-Ethyltoluene	ND	0.500	--	ND	2.46	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.500	--	ND	2.46	--	U
95-63-6	1,2,4-Trimethylbenzene	0.768	0.500	--	3.78	2.46	--	
100-44-7	Benzyl chloride	ND	0.500	--	ND	2.59	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.500	--	ND	3.01	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.500	--	ND	3.01	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.500	--	ND	3.01	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.500	--	ND	3.71	--	U
87-68-3	Hexachlorobutadiene	ND	0.500	--	ND	5.33	--	U

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Initials: ER



Results Summary Form 1 Volatile Organics in Air

Client : P. W. Grosser
Project Name : MHD1801
Lab ID : L2011723-05
Client ID : OA001
Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
Sample Matrix : AIR
Analytical Method : 48,TO-15
Lab File ID : R38758
Sample Amount : 250 ml

Lab Number : L2011723
Project Number : MHD1801
Date Collected : 03/13/20 16:29
Date Received : 03/16/20
Date Analyzed : 03/20/20 17:35
Dilution Factor : 1
Analyst : EW
Instrument ID : AIRPIANO3
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.467	0.200	--	2.31	0.989	--	
74-87-3	Chloromethane	0.648	0.200	--	1.34	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	16.5	5.00	--	31.1	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	5.09	1.00	--	12.1	2.38	--	
75-69-4	Trichlorofluoromethane	0.238	0.200	--	1.34	1.12	--	
67-63-0	Isopropanol	3.28	0.500	--	8.06	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	2.89	0.200	--	10.2	0.705	--	
71-43-2	Benzene	0.421	0.200	--	1.34	0.639	--	

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Initials: ER

Results Summary Form 1 Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-05
 Client ID : OA001
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R38758
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:29
 Date Received : 03/16/20
 Date Analyzed : 03/20/20 17:35
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
110-82-7	Cyclohexane	1.24	0.200	--	4.27	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U ✓
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U ↓
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U ↓
540-84-1	2,2,4-Trimethylpentane	0.368	0.200	--	1.72	0.934	--	
142-82-5	Heptane	0.619	0.200	--	2.54	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U ✓
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U ↓
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U ↓
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	2.16	0.200	--	8.14	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U W
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U ✓
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U ↓
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U ↓
100-41-4	Ethylbenzene	0.269	0.200	--	1.17	0.869	--	
179601-23-1	p/m-Xylene	0.974	0.400	--	4.23	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U ✓
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U ↓
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U ↓
95-47-6	o-Xylene	0.345	0.200	--	1.50	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U U
95-63-6	1,2,4-Trimethylbenzene	0.249	0.200	--	1.22	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U y
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

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Results Summary Form 1 Volatile Organics in Air

Client : P. W. Grosser
Project Name : MHD1801
Lab ID : L2011723-05
Client ID : OA001
Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
Sample Matrix : AIR
Analytical Method : 48,TO-15
Lab File ID : R38758
Sample Amount : 250 ml

Lab Number : L2011723
Project Number : MHD1801
Date Collected : 03/13/20 16:29
Date Received : 03/16/20
Date Analyzed : 03/20/20 17:35
Dilution Factor : 1
Analyst : EW
Instrument ID : AIRPIANO3
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U <i>U</i>
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U <i>U</i>
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U <i>JS</i>
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U <i>U</i>

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Initials: *CR*

Results Summary Form 1 Volatile Organics in Air

Client : P. W. Grosser
Project Name : MHD1801
Lab ID : L2011723-06
Client ID : IA001
Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
Sample Matrix : AIR
Analytical Method : 48,TO-15
Lab File ID : R38759
Sample Amount : 250 ml

Lab Number : L2011723
Project Number : MHD1801
Date Collected : 03/13/20 16:30
Date Received : 03/16/20
Date Analyzed : 03/20/20 18:16
Dilution Factor : 1
Analyst : EW
Instrument ID : AIRPIANO3
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.469	0.200	--	2.32	0.989	--	
74-87-3	Chloromethane	0.808	0.200	--	1.67	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	1.48	0.200	--	3.27	0.442	--	
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	121	5.00	--	228	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	15.8	1.00	--	37.5	2.38	--	
75-69-4	Trichlorofluoromethane	0.237	0.200	--	1.33	1.12	--	
67-63-0	Isopropanol	17.3	0.500	--	42.5	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	1.12	0.500	--	3.30	1.47	--	
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	57.7	0.200	--	203	0.705	--	
71-43-2	Benzene	6.72	0.200	--	21.5	0.639	--	

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Initials: CR

Results Summary Form 1 Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-06
 Client ID : IA001
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R38759
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:30
 Date Received : 03/16/20
 Date Analyzed : 03/20/20 18:16
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
110-82-7	Cyclohexane	24.8	0.200	--	85.4	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	5.34	0.200	--	24.9	0.934	--	
142-82-5	Heptane	7.98	0.200	--	32.7	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	0.686	0.500	--	2.81	2.05	--	
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	26.1	0.200	--	98.4	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	4.35	0.200	--	18.9	0.869	--	
179601-23-1	p/m-Xylene	15.7	0.400	--	68.2	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	0.315	0.200	--	1.34	0.852	--	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	6.09	0.200	--	26.5	0.869	--	
622-96-8	4-Ethyltoluene	1.06	0.200	--	5.21	0.983	--	
108-67-8	1,3,5-Trimethylbenzene	1.40	0.200	--	6.88	0.983	--	
95-63-6	1,2,4-Trimethylbenzene	5.34	0.200	--	26.3	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U

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Results Summary Form 1 Volatile Organics in Air

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-06
 Client ID : IA001
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R38759
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:30
 Date Received : 03/16/20
 Date Analyzed : 03/20/20 18:16
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U ✓
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U ✓
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U UJ
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U ✓

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Initials: CR



Results Summary Form 1 Volatile Organics in Air by SIM

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-05
 Client ID : OA001
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R38758_EV2
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:29
 Date Received : 03/16/20
 Date Analyzed : 03/20/20 17:35
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.062	0.020	--	0.390	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U U
127-18-4	Tetrachloroethene	0.041	0.020	--	0.278	0.136	--	

APR 27 2020

Initials: CR



Results Summary Form 1 Volatile Organics in Air by SIM

Client : P. W. Grosser
 Project Name : MHD1801
 Lab ID : L2011723-06
 Client ID : IA001
 Sample Location : 223-20 BRADDOCK AVE, JAMAICA, NY
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R38759_EV2
 Sample Amount : 250 ml

Lab Number : L2011723
 Project Number : MHD1801
 Date Collected : 03/13/20 16:30
 Date Received : 03/16/20
 Date Analyzed : 03/20/20 18:16
 Dilution Factor : 1
 Analyst : EW
 Instrument ID : AIRPIANO3
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.061	0.020	--	0.384	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U U
127-18-4	Tetrachloroethene	0.239	0.020	--	1.62	0.136	--	

APR 27 2020

Initials: ER



LDC #: 47705A48a

VALIDATION COMPLETENESS WORKSHEET

SDG #: L2011723

Category B

Laboratory: Alpha Analytical, Inc.

Date: 4/22/20

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

METHOD: GC/MS Volatiles (EPA Method TO-15)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	Δ / SW	% PSD / ICV ≤ 30
IV.	Continuing calibration	SW	CCV ≤ 30
V.	Laboratory Blanks / canister check per batch	A	
VI.	Field blanks	N	
VII.	Surrogate spikes	N	
VIII.	Matrix spike/Matrix spike duplicates / dup	N / A	
IX.	Laboratory control samples	SW	ICV
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	A	No Results < RL > MDL
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Leak Check Compounds	N	not performed
XVI.	Overall assessment of data	A	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB = Source blank
OTHER:

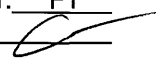
	Client ID	Lab ID	Matrix	Date
1	SS001	L2011723-01	Air	03/13/20
2	SV001 3.333X	L2011723-02	Air	03/13/20
3	SV002 6.25X	L2011723-03	Air	03/13/20
4	SV003 2.5X	L2011723-04	Air	03/13/20
5	OA001	L2011723-05	Air	03/13/20
6	IA001	L2011723-06	Air	03/13/20
7	IA001DUP	L2011723-06DUP	Air	03/13/20
8				
9				

Notes:

1	WG1353556-4 MB				
2	WG1353541-4 MB				

LDC #: 47705A48a

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer: 

Method: Volatiles (EPA Method TO-15)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	☒	☐	☐	
Was canister pressure criteria met?	☒	☐	☐	
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	☒	☐	☐	
Were all samples analyzed within the 24 hour clock criteria?	☒	☐	☐	
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	☒	☐	☐	
Were all percent relative standard deviations (%RSD) $\leq$ 30%?	☒	☐	☐	
IIIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after every ICAL for each instrument?	☒	☐	☐	
Were all percent differences (%D) $\leq$ 30%?	☐	☒	☐	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 24 hours for each instrument?	☒	☐	☐	
Were all percent differences (%D) $\leq$ 30%?	☐	☒	☐	
V. Laboratory Blanks/Canister Blanks				
Was a laboratory blank associated with every sample in this SDG?	☒	☐	☐	
Was a laboratory blank analyzed at least once every 24 hours for each matrix and concentration?	☒	☐	☐	
Was there contamination in the laboratory blanks?	☐	☒	☐	
Was a canister blank analyzed for every canister?	☒	☐	☐	
Was there contamination in the canister blanks?	☐	☒	☐	
VI. Field Blanks				
Were field blanks identified in this SDG?	☐	☒	☐	
Were target compounds detected in the field blanks?	☐	☐	☒	
VII. Surrogate spikes (Optional)				
Were all surrogate percent recoveries (%R) within QC limits?	☐	☐	☒	
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?	☐	☐	☒	
VIII. Laboratory Duplicate				
Was a laboratory duplicate analyzed for this SDG?	☒	☐	☐	
Were the relative percent differences (RPD) within the QC limits?	☒	☐	☐	

LDC #: 47705 A48a**VALIDATION FINDINGS CHECKLIST**Page: 1 of 2
Reviewer: FT
2nd Reviewer: ✓

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch for this SDG?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		✓		
Were target compounds detected in the field duplicates?			✓	
XI. Internal standards				
Were internal standard area counts within $\pm 40\%$ from the associated calibration standard?	✓			
Were retention times within ± 20.0 seconds from the associated calibration standard?	✓			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and RLs adjusted to reflect all sample dilutions applicable to level IV validation?	✓			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Leak check compounds				
Was a leak check compound used to evaluate sample integrity and included in the laboratory analyte list?	✓			
Was the leak check compound detected in the samples? If yes, please see leak check validation findings worksheet.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl chloride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO. 1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3-Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methylcyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC #: 47765A48

VALIDATION FINDINGS WORKSHEET

Initial Calibration Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [Signature]

METHOD: GC/MS VOA (EPA SW 846 Method ~~8260C~~) **TO 15**

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was an initial calibration verification standard analyzed after each ICAL for each instrument?

Y	N	N/A	Were all %D within the validation criteria of ≤ 20 %D?

[illegible]

LDC #: 47705A48a

VALIDATION FINDINGS WORKSHEET

Continuing Calibration

Page: 7 of 7

Reviewer: FT

2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260G) TO 15

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y	N	N/A	Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?

Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y N N/A Were all %D and RRFs within the validation criteria of $\leq 20\%$ %D and ≥ 0.05 RRF ?

[illegible]

LDC #: 47705A48a

VALIDATION FINDINGS WORKSHEET **Initial Calibration Calculation Verification**

Page: 1 of 1
 Reviewer: FT
 2nd Reviewer:

METHOD: GC/MS VOA (TO15)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$$RRF = (A_x)(C_{is}) / (A_{is})(C_x)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

 A_x = Area of compound, C_x = Concentration of compound, S = Standard deviation of the RRFs X = Mean of the RRFs A_{is} = Area of associated internal standard C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				RRF (10 std)	RRF (10 std)	Average RRF (initial)	Average RRF (initial)	%RSD	%RSD
1	ICAL AIRLAB19	2/25/20	C	0.411	0.411	0.4449	0.4449	11.53	11.53
			V	0.713	0.713	0.7231	0.7231	13.82	13.82
			AA	4.143	4.143	3.9723	3.9723	22.14	22.14
2	ICAL AIRPIANO3	3/12/20	C	0.468	0.468	0.4844	0.4844	10.58	10.58
			V	0.710	0.710	0.7241	0.7241	12.51	12.51
			AA	2.193	2.193	2.2300	2.2300	11.00	11.00
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 47705A48a

VALIDATION FINDINGS WORKSHEET **Continuing Calibration Results Verification**

Page: 1 of 1
 Reviewer: F1
 2nd Reviewer:

METHOD: GC/MS VOA (TO15)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$

$$\text{RRF} = (A_x)(C_{is}) / (A_{is})(C_x)$$

Where: ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

 A_x = Area of compound, A_{is} = Area of associated internal standard C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV	3/20/20	C	0.4449	0.440	0.440	1.1	1.1
	AIRLAB19		V	0.7231	0.700	0.700	3.2	3.2
	1208		AD	3.9123	2.957	2.957	10.5	10.5
2	CCV	3/20/20	C	0.4844	0.558	0.558	15.3	15.3
	AIRPIANO		V	0.7241	0.705	0.705	2.6	2.6
	0132		AA	2.2300	2.569	2.569	15.2	15.2
3								
4								
5								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 47705A48a

VALIDATION FINDINGS WORKSHEET **Laboratory Control Sample Results Verification**

Page: 1 of 1Reviewer: F72nd Reviewer: Q**METHOD:** GC/MS VOA (EPA Method TO-15)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = $100 * SSC/SA$

Where: SSC = Spiked sample concentration
 SA = Spike added

RPD = $|LCS - LCSD| * 2 / (LCS + LCSD)$

LCS = Laboratory control sample concentration LCSD = Laboratory control sample duplicate concentration

LCS ID: W91353556-3 (LC)

Compound	Spike Added (ppbv)		Spiked Sample Concentration (ppbv)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
1,1-Dichloroethene	10	NA	10.9	NA	109	109				
Trichloroethene	↓		9.60		96	96				
Benzene	↓		9.60		96	96				
Toluene	↓		10.8		108	108				
Chlorobenzene	↓		11.8		118	118				

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 47705A48a

VALIDATION FINDINGS WORKSHEET

Sample Calculation Verification

Page: 1 of 1

Reviewer: F7
2nd reviewer: /

METHOD: GC/MS VOA (EPA Method TO-15)

(Y)N N/A

Were all reported results recalculated and verified for all level IV samples?

Y	N	N/A

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_y)(I_s)(DF)}{(A_s)(RRF)(V_o)(\%S)}$$

Example:

Sample I.D. H1, V:

$$\text{Conc.} = \frac{(257634)(10.0)}{(1066245)(6.7231)}$$

11

334 ppbv

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

[illegible]

LDC #: 47705A48b

VALIDATION COMPLETENESS WORKSHEET

SDG #: L2011723

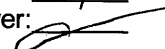
Category B

Laboratory: Alpha Analytical, Inc.

Date: 4/22/20

Page: 1 of 1

Reviewer: F7

2nd Reviewer: **METHOD:** GC/MS Volatiles (EPA Method TO-15-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	A/A	% PSD / ICV ≤ 30
IV.	Continuing calibration	A	CCV ≤ 30
V.	Laboratory Blanks / canister check per batch	A/A	
VI.	Field blanks	N	
VII.	Surrogate spikes	N	
VIII.	Matrix spike/Matrix spike duplicates / DUP	N/A	
IX.	Laboratory control samples	A	LC5
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	A	No Results < RL > MDL
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Leak Check Compounds	N	not performed
XVI.	Overall assessment of data	A	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

SB=Source blank
OTHER:

	Client ID	Lab ID	Matrix	Date
1	OA001	L2011723-05	Air	03/13/20
2	IA001	L2011723-06	Air	03/13/20
3	IA001DUP	L2011723-06DUP	Air	03/13/20
4				
5				
6				
7				
8				

Notes:

WG1353543-4 MB				

LDC #: 47705 A48b

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer: [Signature]**Method: Volatiles (EPA Method TO-15)**

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	☒	☐	☐	
Was canister pressure criteria met?	☒	☐	☐	
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	☒	☐	☐	
Were all samples analyzed within the 24 hour clock criteria?	☒	☐	☐	
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	☒	☐	☐	
Were all percent relative standard deviations (%RSD) $\leq$ 30%?	☒	☐	☐	
IIIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after every ICAL for each instrument?	☒	☐	☐	
Were all percent differences (%D) $\leq$ 30%?	☒	☐	☐	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 24 hours for each instrument?	☒	☐	☐	
Were all percent differences (%D) $\leq$ 30%?	☒	☐	☐	
V. Laboratory Blanks/Canister Blanks				
Was a laboratory blank associated with every sample in this SDG?	☒	☐	☐	
Was a laboratory blank analyzed at least once every 24 hours for each matrix and concentration?	☒	☐	☐	
Was there contamination in the laboratory blanks?	☐	☒	☐	
Was a canister blank analyzed for every canister?	☒	☐	☐	
Was there contamination in the canister blanks?	☐	☒	☐	
VI. Field Blanks				
Were field blanks identified in this SDG?	☐	☒	☐	
Were target compounds detected in the field blanks?	☐	☐	☒	
VII. Surrogate spikes (Optional)				
Were all surrogate percent recoveries (%R) within QC limits?	☐	☐	☒	
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?	☐	☐	☒	
VIII. Laboratory Duplicate				
Was a laboratory duplicate analyzed for this SDG?	☒	☐	☐	
Were the relative percent differences (RPD) within the QC limits?	☒	☐	☐	

LDC #: 47705 A48b

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer: [Signature]

Validation Area	Yes	No	NA	Findings/Comments
IX. Laboratory control samples				
Was an LCS analyzed per analytical batch for this SDG?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	/			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		/		
Were target compounds detected in the field duplicates?			/	
XI. Internal standards				
Were internal standard area counts within $\pm 40\%$ from the associated calibration standard?	/			
Were retention times within ± 20.0 seconds from the associated calibration standard?	/			
XII. Compound quantitation				
Did the laboratory LOQs/RLs meet the QAPP LOQs/RLs?	/			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	/			
Were compound quantitation and RLs adjusted to reflect all sample dilutions applicable to level IV validation?	/			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	/			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	/			
Were chromatogram peaks verified and accounted for?	/			
XIV. System performance				
System performance was found to be acceptable.	/			
XV. Leak check compounds				
Was a leak check compound used to evaluate sample integrity and included in the laboratory analyte list?	/			
Was the leak check compound detected in the samples? If yes, please see leak check validation findings worksheet.	/			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	/			

TARGET COMPOUND WORKSHEET

METHOD: VOA

A. Chloromethane	AA. Tetrachloroethene	AAA. 1,3,5-Trimethylbenzene	AAAA. Ethyl tert-butyl ether	A1. 1,3-Butadiene
B. Bromomethane	BB. 1,1,2,2-Tetrachloroethane	BBB. 4-Chlorotoluene	BBBB. tert-Amyl methyl ether	B1. Hexane
C. Vinyl chloride	CC. Toluene	CCC. tert-Butylbenzene	CCCC. 1-Chlorohexane	C1. Heptane
D. Chloroethane	DD. Chlorobenzene	DDD. 1,2,4-Trimethylbenzene	DDDD. Isopropyl alcohol	D1. Propylene
E. Methylene chloride	EE. Ethylbenzene	EEE. sec-Butylbenzene	EEEE. Acetonitrile	E1. Freon 11
F. Acetone	FF. Styrene	FFF. 1,3-Dichlorobenzene	FFFF. Acrolein	F1. Freon 12
G. Carbon disulfide	GG. Xylenes, total	GGG. p-Isopropyltoluene	GGGG. Acrylonitrile	G1. Freon 113
H. 1,1-Dichloroethene	HH. Vinyl acetate	HHH. 1,4-Dichlorobenzene	HHHH. 1,4-Dioxane	H1. Freon 114
I. 1,1-Dichloroethane	II. 2-Chloroethylvinyl ether	III. n-Butylbenzene	IIII. Isobutyl alcohol	I1. 2-Nitropropane
J. 1,2-Dichloroethene, total	JJ. Dichlorodifluoromethane	JJJ. 1,2-Dichlorobenzene	JJJJ. Methacrylonitrile	J1. Dimethyl disulfide
K. Chloroform	KK. Trichlorofluoromethane	KKK. 1,2,4-Trichlorobenzene	KKKK. Propionitrile	K1. 2,3-Dimethyl pentane
L. 1,2-Dichloroethane	LL. Methyl-tert-butyl ether	LLL. Hexachlorobutadiene	LLLL. Ethyl ether	L1. 2,4-Dimethyl pentane
M. 2-Butanone	MM. 1,2-Dibromo-3-chloropropane	MMM. Naphthalene	MMMM. Benzyl chloride	M1. 3,3-Dimethyl pentane
N. 1,1,1-Trichloroethane	NN. Methyl ethyl ketone	NNN. 1,2,3-Trichlorobenzene	NNNN. Iodomethane	N1. 2-Methylpentane
O. Carbon tetrachloride	OO. 2,2-Dichloropropane	OOO. 1,3,5-Trichlorobenzene	OOOO. 1,1-Difluoroethane	O1. 3-Methylpentane
P. Bromodichloromethane	PP. Bromochloromethane	PPP. trans-1,2-Dichloroethene	PPPP. Tetrahydrofuran	P1. 3-Ethylpentane
Q. 1,2-Dichloropropane	QQ. 1,1-Dichloropropene	QQQ. cis-1,2-Dichloroethene	QQQQ. Methyl acetate	Q1. 2,2-Dimethylpentane
R. cis-1,3-Dichloropropene	RR. Dibromomethane	RRR. m,p-Xylenes	RRRR. Ethyl acetate	R1. 2,2,3-Trimethylbutane
S. Trichloroethene	SS. 1,3-Dichloropropane	SSS. o-Xylene	SSSS. Cyclohexane	S1. 2,2,4-Trimethylpentane
T. Dibromochloromethane	TT. 1,2-Dibromoethane	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	TTTT. Methylcyclohexane	T1. 2-Methylhexane
U. 1,1,2-Trichloroethane	UU. 1,1,1,2-Tetrachloroethane	UUU. 1,2-Dichlorotetrafluoroethane	UUUU. Allyl chloride	U1. Nonanal
V. Benzene	VV. Isopropylbenzene	VVV. 4-Ethyltoluene	VVVV. Methyl methacrylate	V1. 2-Methylnaphthalene
W. trans-1,3-Dichloropropene	WW. Bromobenzene	WWW. Ethanol	WWWW. Ethyl methacrylate	W1. Methanol
X. Bromoform	XX. 1,2,3-Trichloropropane	XXX. Di-isopropyl ether	XXXX. cis-1,4-Dichloro-2-butene	X1. 1,2,3-Trimethylbenzene
Y. 4-Methyl-2-pentanone	YY. n-Propylbenzene	YYY. tert-Butanol	YYYY. trans-1,4-Dichloro-2-butene	Y1. 2-Propanol
Z. 2-Hexanone	ZZ. 2-Chlorotoluene	ZZZ. tert-Butyl alcohol	ZZZZ. Pentachloroethane	Z1.

LDC #: 47705 A486

VALIDATION FINDINGS WORKSHEET **Initial Calibration Calculation Verification**

Page: 1 of 1
 Reviewer: FD
 2nd Reviewer: [Signature]

METHOD: GC/MS VOA (EPA Method TO-15)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$$RRF = (A_x)(C_{is}) / (A_{is})(C_x)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

 A_x = Area of compound, C_x = Concentration of compound,

S = Standard deviation of the RRFs

X = Mean of the RRFs

 A_{is} = Area of associated internal standard C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				RRF std) 1.0 ppb	RRF std) 1.0 ppb	Average RRF (initial)	Average RRF (initial)	%RSD	%RSD
1	ICAL AIR PLANO	3/12/20	C	0.541	0.541	0.5328	0.5328	12.52	12.52
			B	0.306	0.306	0.2946	0.2946	11.0	11.0
			AA	2.352	2.352	2.2644	2.2644	6.9	6.9
2									
3									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 47705A48b

VALIDATION FINDINGS WORKSHEET **Continuing Calibration Results Verification**

Page: 1 of 1
 Reviewer: F7
 2nd Reviewer: _____

METHOD: GC/MS VOA (EPA TO-15)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$

$$\text{RRF} = (A_x)(C_{is}) / (A_{is})(C_x)$$

Where: ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

 A_x = Area of compound, A_{is} = Area of associated internal standard C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported	Recalculated	Reported	Recalculated
					RRF (CC)	RRF (CC)	%D	%D
1	CCV 1411	3/20/20	C	0.5328	0.564	0.564	5.8	5.8
			B	0.2946	0.276	0.276	6.4	6.4
			AD	2.2644	2.436	2.436	7.6	7.6
2								
3								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 47705A48b

VALIDATION FINDINGS WORKSHEET **Laboratory Control Sample Results Verification**

Page: 1 of 1

Reviewer: _____

2nd Reviewer: C**METHOD:** GC/MS VOA (EPA Method TO-15)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = $100 * SSC/SA$

Where: SSC = Spiked sample concentration
 SA = Spike added

RPD = $|LCSC - LCSDC| * 2 / (LCSC + LCSDC)$

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: W41393943-3 W5

Compound	Spike Added (ppb)		Spiked Sample Concentration (ppb)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
1,1-Dichloroethene	5.0	NA	5.23	NA	105	105				
Trichloroethene	5.0	↓	5.56	↓	111	111	NA			
Benzene										
Toluene										
Chlorobenzene										

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 47705A48b

VALIDATION FINDINGS WORKSHEET

Sample Calculation Verification

Page: 1 of 1

Reviewer: F7

2nd reviewer: 

METHOD: GC/MS VOA (EPA Method TO-15)

Y N N/A

Were all reported results recalculated and verified for all level IV samples?

Y	N	N/A

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_v)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$$

Example:

Sample I.D. #1, 0:

$$\text{Conc.} = \frac{(1085)(10)}{(596473)(0.2946)}$$

=

0.0617 ppbv

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

[illegible]